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30 *1 Touching Lives Title*

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32 **ARO-HEALING REVISED COMPLEMENTARY**

**THERAPY (ARC)**

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THERAPY

AS A

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The advice and insight offered in this book, although based on the Author's extensive experience, are not intended to be a substitute for the advice of your physician or other suitably qualified person.

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from a suitably qualified practitioner about the treatment of your specific condition before

changing or ceasing any recommended or

prescribed medication or other treatment

programme.

You are also advised to seek medical

advice from a suitably qualified practitioner

before adopting any other treatment programme.

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Once I was questioned by a market researcher. It was an experience!

I had to sit in front of a laptop and watch three ads. The object of the research was to examine what ads do to us.

Does a specific ad allow you to frown, smile, etc. Or do you do nothing?

Usually how they advertise the product has basically nothing in common with the product. You reckon? It has everything to do with the product! On a psychological level – yes!

Ads usually come and go. You would think the whole subject about ads is stupid, but let me tell you this. Ads impose on your subliminal reasoning. Unconsciously.

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**Volume 2 can be classified into 4 sections and 10 Chapters for ARC:**

## **VOLUME TWO**

### PART 1 THE INTRODUCTION OF HERBOLOGY

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### PART 2 OTHER WHOLE MEDICAL SYSTEMS

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### PART 3 MASSAGE HEALTH THERAPY

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**Category talk: Alternative medical systems**

[http://en.wikipedia.org/wiki/Category\\_talk:Alternative\\_medical\\_systems](http://en.wikipedia.org/wiki/Category_talk:Alternative_medical_systems)

**Terms and concepts in alternative medicine**

*The NCCAM name for this category is "whole medical systems."*

Some people practice this category as Complementary therapies, for example, they include mainstream

medicine; they are not recognized as complete systems

of health by the mainstream.

The use of the word 'whole' in this context refers to the ability of a medical system to treat every condition that it considers 'pertaining to one's health', not to whether or not it addresses psycho-social-spiritual conditions).

The first sentence in this article is incorrect as it refers to the NCCAM definition of a subcategory of CAM,

namely whole medical systems.

NCCAM defines alternative medicine as:

"NCCAM defines CAM as a group of diverse medical

and health care systems, practices, and products that are

not generally considered part of conventional medicine." Some CAMs are



103 *Glossary of alternative medicine*

104 [http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

107 **A**

108 *Acupuncture* is the practice of inserting very thin needles into specific acupuncture points or combinations of points on the body.

109 *Alternative Medical Systems* is a NCCAM classification for alternative medicine that are built upon a complete system of ideas and practice. *It can include:*

110 Naturopathic medicine

Homeopathy

Ayurveda

Chiropractic

Osteopathy

Traditional Chinese medicine

111

*Anthroposophical medicine* is a holistic approach to healing developed in the early twentieth century by Rudolf Steiner and Ita Wegman. Practitioners supplement the uniquely anthroposophical approach with conventional and homeopathic therapies and remedies.

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*Anthroposophical doctors* must have a recognized medical degree (M.D., D.O., or equivalent).

Anthroposophic Pharmacy is the discipline related to conceiving, developing and producing medicinal products according to the anthroposophic understanding of man, nature, substance and pharmaceutical processing. Anthroposophic medicinal products are used within anthroposophic medicine but not only.

113                    *Aromatherapy* is the use of essential oils and other aromatic compounds from plants to affect someone's mood or health.

114                    *Attachment therapy* is a form of therapy aimed at children with alleged 'attachment disorders', usually fostered or adopted children. It is substantially based on outdated notions of suppressed rage due to early adverse experiences. Traditionally it uses a variety of confrontational and physically coercive techniques of which the most common form is holding therapy, accompanied by parenting methods which emphasize obedience.

115 Following implication in a number of child death and maltreatment cases in the USA there has been a recent move away from coercion by some leading theorists and practitioners. It is largely unvalidated.

118 **B**

119 *Bates method* – an alternative approach to eyesight improvement and maintenance. It is based on the belief that errors in visual accommodation are due to mental strain, and that vision may be improved by appropriate relaxation techniques.

*"Biologically based therapies", is the precise name of a NCCAM classification, for alternative treatments that use substances found in nature and/or some other natural therapy. It can include"*

*Chinese food therapy*

Naturopathy

Natural health

Natural therapy

Diet and Food

Exercise

Herbal therapy

Orthomolecular medicine

Fasting

Macrobiotic lifestyle

Dietary supplements

Urine therapy

*The Biomedical model* of health is a conceptual model of illness that excludes psychological and social factors and includes only biological factors in an attempt to understand a person's illness. According to this model, health constitutes the freedom from disease, pain, or defect, thus making the normal human condition health. The model's focus on the physical processes, such as the pathology, the biochemistry and the physiology of a disease, does not take into account the role of social factors or individual subjectivity. The model also overlooks the fact that the diagnosis (that will affect treatment of the patient) is a result of negotiation between doctor and patient.

*Body work is any therapeutic, healing, or personal development work that involves some form of energetic work, touching, or the physical manipulation of a practically oriented physical and somatic understanding of the body.*[citation needed]

## C

CAM is for complementary and alternative medicine, treatments and theories on the nature of health and illness, many of them unrelated, which have in common that they are not employed by the conventional medical establishment.

While in conventional medicine, *chelation therapy* is used only to treat heavy metal poisoning. Some alternative practitioners advocate the use of chelation therapy to treat coronary artery disease.

*Chinese medicine* – the group of philosophies embodied by Chinese medicine are, more accurately, referred to as Oriental Medicine with roots in many different Asian countries. This millennia-old Asian medical tradition works to bring balance to the body through acupuncture, massage, Eastern herbalism, diet; and lifestyle changes such as martial arts and meditation.

The practice of *Chiropractic* is a manual therapy involving the manipulation of the vertebral subluxation to restore proper motion, biomechanics, and nerve flow from the brain to the body.

*Christian Science* is a denomination that teaches that Christian healing as practiced by Jesus of Nazareth and his followers for several centuries, was in fact not a short-term dispensation to induce faith, but had an underlying principle (specifically God) and method. While its practice is regarded within the denomination as incompatible with medical care, it also respects the philanthropy of the medical faculty and is non-compulsory. Resort to Christian Science may be private or involve the care of a Christian Science practitioner.

*Colorpuncture* is an alternative medicine practice asserting that light can be used to stimulate acupuncture points for the purpose of balancing energy in the body to promote healing and health. It is also known as color light acupuncture in North America. It is a form of color therapy.

Complementary medicine is treatments that are used alongside ("complementary to") conventional medicine.

## **D**

*Diet-based therapy* uses a variety of diets:

to improve health and longevity,

to control weight, and

to treat specific health conditions such as high cholesterol.

Breatharian

Fruitarianism

List of diets

Living foods diet

Macrobiotic lifestyle

Okinawa diet

Ovo-lacto vegetarian

Raw foodist

Vegan

Vegetarianism

Low-fat diet

Low-carb diet (Zone diet, Atkins diet)

*The Doctrine of signatures* was developed around 1500 and claims that a plant's physical appearance reveals its medical value. The Doctrine of Signatures is often associated with Western herbalism.

## **E**

*Eclectic medicine* was a nineteenth-century system of medicine used in North America that treated diseases by the application of single herbal remedies to effect specific cures of certain signs and symptoms.

*Energy medicine* is a NCCAM classification for alternative treatments that involve the use of veritable (i.e., that which can be measured) and putative (i.e., that which have yet to be measured) energy fields. It can include:

Magnet therapy

Reiki

Shiatsu

Therapeutic Touch

Eden Energy Medicine – approach developed by Donna Eden

*Exercise-based therapy* uses a variety of traditional physical movement

to improve health and longevity,

to increase, lengthen & tone muscle mass,

gain flexibility,

treat specific health conditions and

relieve stress. It can include:

Aerobic exercise

Aerobics

Bodybuilding

Feldenkrais method

Martial arts

Physical Culture

Pilates

PNF stretching

Stretching

Some forms of Qigong

T'ai chi

Walking

Weight training

Yoga

## **F**

*Feldenkrais Method* is an educational system centered on movement, and aim to expand and refine the use of the self through awareness.

*Flower essence therapy* is regarded by some as a sub-category of homeopathy (which uses homeopathic dilutions of flowers). This practice was begun by Edward Bach with the Bach flower remedies, but is now practiced more widely.

*Folk medicine* is the collection of procedures traditionally used for treatment of illness and injury, aid to childbirth, and maintenance of wellness.

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## **G**

Grahamism, named for Sylvester Graham, recommended hard mattresses, open bedroom windows, chastity, cold showers, loose clothing, pure water and vigorous exercise.[citation needed]

## **H**

Herbalism is the practice of making or prescribing herbal remedies for medical conditions.

Heroic medicine is any medicine or method of treatment that is aggressive or daring in a dangerously ill patient. It generally includes the pre-scientific treatments of 18th-century doctors, such as bloodletting.

Holism is the study of wholeness in health, science, politics, or any other area of life.

Hydrotherapy is the external use of water in the medical treatment of disease, such as the use of baths, the application of hot and cold compresses or sheet packs, and shower sprays. These applications use water as a medium for delivery of heat and cold to the body, capitalising on the thermoregulatory properties of the body for therapeutic effect.

Homeopathy -

I

[http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

Integrative medicine as defined by National Center for Complementary and Alternative Medicine combines conventional medical treatments and CAM treatments for which there is some claimed scientific evidence of their safety and effectiveness. Integrative medicine also adopts the term "integrative health" which incorporates mental, spiritual and community wellness with personal health.

Iridology (known as iridodiagnosis) is an alternative medicine technique whose proponents believe that patterns, colors, and other characteristics of the iris can be examined to determine information about a patient's systemic health. Practitioners match their observations to iris charts which divide the iris into zones corresponding to specific parts of the human body.

## **L**

Life extension is a movement the goal of which is to live longer through intervention, and to increase maximum lifespan or average lifespan, especially in mammals. Researchers of life extension are a subclass of biogerontologists known as "biomedical gerontologists".

List of life extension related topics.

Lifestyle is the particular attitudes, habits, or behaviors associated with an individual.

Lifestyle diseases are diseases that increase in frequency as countries become more industrialized and people live longer.

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## M

Manipulative and body-based methods, is the precise name of a NCCAM classification, for alternative treatments that are based on manipulation and/or movement of one or more parts of the body.

It can include:

Acupressure

Alexander Technique

Body work

Bowen Technique

Chiropractic

Feldenkrais Method

Manipulative therapy

Massage therapy

Medical acupuncture

Metamorphic Technique

Myofascial Release

Naprapathy

Osteopathy

Rolfing

Shiatsu

Somatics  
Taijiquan  
Trager Approach

Tui na  
Zero Balancing

Manual Lymphatic Drainage (MLD) is a type of gentle massage which encourages the natural circulation of the lymph through the body.

The mind-body connection idea says that the causes, development, and outcomes of an illness are determined as much from the interaction of psychological and social factors as they are due to the biological factors of health. Many mind-body therapists take the definition of "mind-body connection" further and state that the root cause of illness is actually in the mind and spirit, and that for complete and permanent eradication of an illness, the cause must be addressed and cure focused there.

Mind-Body Intervention is the name of a NCCAM classification, that covers a variety of techniques designed to enhance the mind's capacity to affect bodily function and symptoms.

*It can include:*

Aromatherapy  
Art Therapy  
Autosuggestion  
Bach Flower Therapy  
Buteyko method  
Eutony  
Feldenkrais method  
Hatha yoga  
Hypnotherapy  
Metamorphic Technique  
Journaling

Meditation

Music Therapy

Nia technique

Reiki

Self-hypnosis

Support groups

Taijiquan

Trager Approach

Visualization

Vivation

Yoga

**N**

"Nature cure" is the progenitor of naturopathy in Europe. It postulates that all disease is due to violations of nature's laws, and that true healing consists in a return to natural habits.

Natural health is an eclectic self-care system of natural therapies that purports to build and restore health by working with the natural recuperative powers of the human body.

Naturopathy is the eclectic practice of Naturopathic Doctors (N.D.) using many different natural therapies as treatment. The original method of treatment of Naturopathy was the water cure.

Natural therapy is the treatment method used by advocates of natural health.

NCCAM classifications – The National Center for Complementary and Alternative Medicine, or NCCAM, has classified complementary and alternative therapies into five different categories, or domains:

Whole Medical Systems

Mind-Body Intervention

Biologically Based Therapy

Manipulative and body-based methods

Energy Therapy

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## **Q**

Qigong is an exercise aspect of Chinese medicine. Qigong is mostly taught for health maintenance purposes, but there are also some who teach it, especially in China, for therapeutic interventions. There are hundreds of different schools, and it is also an adjunct training of many East Asian

## **R**

Reflexology

Reiki is a form of treatment developed by Mikao Usui in Japan around 1922. Practitioners use their hands on or above the patient to control, increase or open up a postulated energy, "ki", in the body. Training is usually through short courses, after which one can become certified as a "Reiki master".

## **T**

Thalassotherapy – the use of seawater as a form of therapy. Thalassotherapy was popular in England during the second half of the eighteenth century, with Doctor Richard Russell credited as playing a significant role in its

Therapeutic music – music played live at the bedside of persons who are faced with physical, emotional, and spiritual challenges, generally in the person's home, a hospice or in a clinical setting.[citation needed]

Traditional Chinese medicine (TCM) is a system of health care which is based on the Chinese notion of harmony and balance inside the human body as well as harmony between the body and its outside environment.

TCM can include the following components:

Acupressure

Acupuncture

Chinese martial arts

Chinese pulse diagnosis

Coin rubbing

Cupping

Five Elements

Food therapy

Herbology

Jing

Meridian

Moxibustion

Neigong

Qigong

San Jiao

Shen

Tao Yin

TCM model of the body

Trigger point

Tui na

Yin and yang

Zang Fu theory

History of traditional Chinese medicine

Traditional Japanese medicine – Pre-Western Japanese medicine was strongly influenced by traditional Chinese medicine and is often seen as a sub-category of TCM.

It includes the following practices:

Shiatsu

Japanese martial arts

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**U**

Unani

Uropathy is a specialized branch of alternative medicine, including any sort of oral or external application of urine for medicinal or cosmetic purposes.

*See urine therapy.*

**W**

Water cure (therapy) in the therapeutic sense is medical treatment by hydrotherapy. In the nineteenth century, the term "Water Cure" was used synonymously with "hydropathy", which itself is the 19th century term for hydrotherapy. Water cures include a broad range of practices – essentially any therapeutic uses of water.

*See Water cure (therapy) and Hydrotherapy for further discussion and*  
*.....*

Wellness has been used in CAM contexts since Halbert L. Dunn began using the phrase "high level wellness" in the 1950s, based on a series of lectures at a Unitarian Universalist Church in Arlington, VA. Wellness is generally used to mean a healthy balance of the mind-body and spirit that results in an overall feeling of well-being.

## Y

Yoga is a diverse and ancient East Indian practise. There are many different styles and schools of yoga. It is generally a combination of breathing exercises, physical postures, and meditation, that calms the nervous system and balances body, mind, and spirit. It is thought to prevent specific diseases and maladies by relaxing the body, deepening respiration and calming the mind. Yoga has been used to lower blood pressure, reduce stress, and improve flexibility, concentration, sleep, and digestion. It has also been used as supplementary therapy for such diverse conditions as cancer, diabetes, asthma, and AIDS.

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[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

## **Alternative medicine**

### *Alternative medical systems*

Alternative medicine is any practice that has the healing effect of medicine, but is not based on evidence gathered with the scientific method.

Often not part of conventional treatment, alternative medicine is usually based on tradition, belief in supernatural energies, pseudoscience, errors in

Alternative therapies lack scientific validation, and their effectiveness is either unproved or disproved.

More broadly, they have also been defined as the treatments that are not part of the conventional, science based healthcare system.

Alternative medicine is sometimes grouped with complementary medicine which, in general, refers to the same interventions when used in conjunction with mainstream techniques, under the umbrella term complementary and

Integrative medicine (integrative health) is the combination of the practices and methods of alternative medicine with evidence based medicine.

Critics maintain that the terms "complementary" and "alternative medicine" are deceptive euphemisms meant to give an impression of medical authority.

Alternative medicine methods are diverse in their foundations and methodologies. Methods may incorporate or base themselves on traditional medicine, folk knowledge, spiritual beliefs, or newly conceived approaches

Many of the claims regarding the efficacy of alternative medicines are controversial. Research on alternative medicine is frequently of low quality

The safety of alternative medicine is also controversial. Some alternative treatments have been associated with unexpected side effects, which can be

Alternative treatments are used in place of conventional science based medicines, but even with the very safest alternative medicines, where they are ineffective, delays and absences of conventional science based medicine

Some voluntary health agencies focused upon health fraud, misinformation, and quackery as public health problems, have been highly critical of alternative medicine generally or more specifically.

### **Terminology**

"Alternative medicine" refers to any practice that is put forward as having the healing effects of medicine, but is not based on evidence gathered with the scientific method, when used independently or in place of medicine based on science. Alternative medical systems can only exist when there is a identifiable, regularized and authoritative medical orthodoxy, such as arose

"Complementary medicine" refers to use of alternative medicine alongside conventional science based medicine, in the belief that it increases the effectiveness. An example of "complementary medicine" is use of the alternative medicine called acupuncture (sticking needles in the body to influence the flow of a supernatural energy), along with using medicine based on science, in the belief that the alternative medicine increases the effectiveness of the medicine based only on science, which does not address "CAM" is an abbreviation for "complementary and alternative medicine".

The term "Integrative medicine" ("integrated medicine") is used in two different ways. One use refers to a belief that medicine based on science can be "integrated" with practices that are not. Another use refers only to a combination of alternative medical treatments with conventional science based treatments that have some scientific proof of efficacy, in which case it is identical with CAM. Some well known advocates of integrative medicine claim that it also addresses alleged problems with medicine based on science, which are not addressed by CAM. For example, Ralph Snyderman and Andrew Weil state that "integrative medicine is not synonymous with complementary and alternative medicine. It has a far larger meaning and "Whole medical systems" is used in two different ways.

One refers to a spiritual belief, that "spiritual wholeness" is the root of physiological and physical well-being. Ayurveda, Chinese medicine, Another use is that of the National Institute of Health's National Center for Complementary and Alternative Medicine (NCCAM), to differentiate widely comprehensive systems of practice, from specific components of the system, or from practices that claim to heal only a limited kind of specific medical conditions. An example is Ayurvedic medicine (a traditional medicine of India based in part on religious beliefs and in part on traditional use of herbs), which includes many practices and claims to treat many conditions, Alternative medicine often relies on using loose language to give the appearance of effectiveness or to suggest that a dichotomy exists when it does not. One example of this is the use of "Western medicine" and "Eastern medicine" to suggest that the difference is not between evidence based medicine and treatments which don't work, but a cultural difference between

### **Characterization**

There is no clear and consistent definition for either alternative or

#### *Self-characterization*

The US National Center for Complementary and Alternative Medicine (NCCAM) defines CAM as "a group of diverse medical and healthcare systems, practices, and products, that are not currently part of conventional medicine", in a context where conventional medicine is that which is scientifically proven. This definition of CAM is widely known and used and

The Danish Knowledge and Research Center for Alternative Medicine an independent institution under the Danish Ministry of the Interior and Health (Danish abbreviation: ViFAB) uses the term "alternative medicine" for: Treatments performed by therapists that are not authorized healthcare Treatments performed by authorized healthcare professionals, but those based on methods otherwise used mainly outside the healthcare system. People without a healthcare authorisation must be able to perform the

#### *Institutions*

The World Health Organization defines complementary and alternative medicine as a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care In a consensus report released in 2005, entitled Complementary and Alternative Medicine in the United States, the Institute of Medicine (IOM) defined complementary and alternative medicine (CAM) as the non-dominant approach to medicine in a given culture and historical period. A similar definition has been adopted by the Cochrane Collaboration, and official government bodies such as the UK Department of Health. The Cochrane Collaboration Complementary Medicine Field finds that what is considered complementary or alternative practices in one country may be considered conventional medical practices in another. Their definition is, therefore, general: "complementary medicine includes all such practices and ideas that are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness, or promoting health and well-being." As an example biofeedback is commonly used within the Physical Medicine & Rehabilitation community but is

Proponents of evidence-based medicine, such as the Cochrane Collaboration, use the term alternative medicine but agree that all treatments, whether "mainstream" or "alternative", ought to be held to the

The United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using

### *Scientists*

Numerous mainstream scientists and physicians have commented on and criticised alternative medicine.

A clinical review published in the British Medical Journal defined complementary and alternative medicine as "group of therapeutic and diagnostic disciplines that exist largely outside the institutions where There is a debate among medical researchers over whether any therapy may be properly classified as 'alternative medicine'. Some claim that there is only medicine that has been adequately tested and that which has not. They feel that healthcare practices should be classified based solely on scientific evidence. If a treatment has been rigorously tested and found safe and effective, traditional medicine will adopt it regardless of whether it was considered "alternative" to begin with. It is thus possible for a method to change categories (proven vs. unproven), based on increased knowledge of its effectiveness or lack thereof. Prominent supporters of this position

David M. Eisenberg, an integrative medicine researcher, defines it as "medical interventions not taught widely at US medical schools or generally available at US hospitals," NCCAM states that formerly unproven remedies may be incorporated into conventional medicine if they are shown to be safe and effective. Barrie R. Cassileth, a researcher of complementary and alternative medicine, has summed up the situation as "not all mainstream physicians are pleased with CAM, with current efforts to integrate CAM into Stephen Barrett, founder and operator of Quackwatch, argues that practices labeled "alternative" should be reclassified as either genuine, experimental, or questionable. Here he defines genuine as being methods that have sound evidence for safety and effectiveness, experimental as being unproven but with a plausible rationale for effectiveness, and questionable as groundless without a scientifically plausible rationale. He has concerns that just because some "alternatives" have merit, there is the impression that the rest deserve equal consideration and respect even though most are worthless. He says Edzard Ernst, professor of complementary medicine, characterizes the evidence for many alternative techniques as weak, nonexistent, or negative, but states that evidence exists for others, in particular certain herbs and acupuncture. Ernst has concluded that 95% of the alternative treatments he and his team have studied, including acupuncture, herbal medicine, homeopathy, and reflexology, are, according to The Economist, "statistically

Richard Dawkins, an evolutionary biologist, defines alternative medicine as a "set of practices that cannot be tested, refuse to be tested, or consistently fail tests." He also states that "there is no alternative medicine. There is only medicine that works and medicine that doesn't work." He says that if a technique is demonstrated effective in properly performed trials, it ceases to be alternative and simply becomes medicine. A letter by four Nobel Laureates and other prominent scientists deplored the lack of critical thinking and scientific rigor in National Institutes of Health supported alternative medicine research. In 2009 a group of scientists made a proposal to shut down the National Center for Complementary and Alternative Medicine. They argued that the vast majority of studies were based on unconventional understandings of physiology and disease and have shown little or no effect. Further, they argue that the field's more-plausible interventions such as diet, relaxation, yoga and botanical remedies can be studied just as well in other parts of NIH, where they would need to compete. These concerns are supported by negative results in almost all studies conducted over ten years at a cost of \$2.5 billion by the NCCAM. R. Barker Bausell, a research methods expert and author of "Snake Oil Science" states There are concerns that just having NIH support is being used to give unfounded "legitimacy to treatments that are not legitimate."

Wallace Sampson, an editor of *Scientific Review of Alternative Medicine* and a Stanford University professor of medicine write that CAM is the "propagation of the absurd" based on the example that alternative and complementary have been substituted for quackery, dubious and implausible and concerns that CAM tolerates contradiction without thorough reason and

#### *Popular press*

The Washington Post reports that a growing number of traditionally trained physicians practice integrative medicine, which it defines as "conventional medical care that incorporates strategies such as acupuncture, reiki and An editorial in the *Economist* characterized alternative medicine as mostly "quackery" and described the vast majority as offering nothing more than the placebo effect. It suggested that, "Virtually all alternative medicine is

#### **Classifications**

NCCAM has developed one of the most widely used classification systems for the branches of complementary and alternative medicine. It classifies complementary and alternative therapies into five major groups, which have

Whole medical systems: cut across more than one of the other groups; examples include Traditional Chinese medicine, Naturopathy, Homeopathy,

Mind-body medicine: takes a holistic approach to health that explores the interconnection between the mind, body, and spirit. It works under the premise that the mind can affect "bodily functions and symptoms"

Biology-based practices: use substances found in nature such as herbs, foods, vitamins, and other natural substances

Manipulative and body-based practices: feature manipulation or movement of body parts, such as is done in chiropractic and osteopathic manipulation

Energy medicine: is a domain that deals with putative and verifiable energy

Biofield therapies are intended to influence energy fields that, it is purported, surround and penetrate the body. No empirical evidence has been found to support the existence of the putative energy fields on which these

Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current, or direct-current fields in an

#### **Usage**

*Further information: List of branches of alternative medicine*

Age-adjusted percent of adults who have used complementary and alternative medicine: United States, 2002

A 2011 multi-National systematic review concluded that about 40% of cancer patients use some form of complementary and alternative medicine. Alternative medicine varies from country to country. Jurisdictions where alternative medical practices are sufficiently widespread may license and regulate them. Edzard Ernst has said that in Austria and Germany complementary and alternative medicine is mainly in the hands of physicians, while some estimates suggest that at least half

of American alternative practitioners are physicians. In Germany herbs are tightly regulated: half are prescribed by doctors and covered by health insurance based on their Commission E legislation.

Many people utilize mainstream medicine for diagnosis and basic information, while turning to alternatives for therapy or health-enhancing measures. Studies indicate that alternative approaches are often used in conjunction with conventional medicine. This is referred to by NCCAM as integrative (or integrated) medicine because it "combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness." According to Andrew T. Weil M.D., a leading proponent of integrative medicine, the principles of integrative medicine include: appropriate use of conventional and CAM methods; patient participation; promotion of health as well as treatment of disease.

A 1997 survey found that 13.7% of respondents in the United States had sought the services of both a medical doctor and an alternative medicine practitioner. The same survey found that 96% of respondents who sought the services of an alternative medicine practitioner also sought the services of a medical doctor in the past 12 months. Medical doctors are often unaware of their patient's use of alternative medical treatments as only 38.5% of the

Edzard Ernst, Professor of Complementary Medicine at the University of Exeter, wrote in the *Medical Journal of Australia* that "about half the general population in developed countries use complementary and alternative medicine (CAM)." Survey results released in May 2004 by the National Center for Complementary and Alternative Medicine, part of the United States National Institutes of Health, found that in 2002 62.1% of adults in the country had used some form of CAM in the past 12 months and 75% across lifespan (though these figure drop to 36.0% and 50% if prayer

A British telephone survey by the BBC of 1209 adults in 1998 shows that around 20% of adults in Britain had used alternative medicine in the past 12 months. Ernst has been active politically on this issue as well, publicly requesting that Prince Charles recall two guides to alternative medicine published by the Foundation for Integrated Health, on the grounds that "[t]hey both contain numerous misleading and inaccurate claims concerning the supposed benefits of alternative medicine" and that "[t]he nation cannot be served by promoting ineffective and sometimes dangerous alternative

The use of alternative medicine in developed countries appears to be increasing. A 1998 study showed that the use of alternative medicine had risen from 33.8% in 1990 to 42.1% in 1997. In the United Kingdom, a 2000 report ordered by the House of Lords suggested that "...limited data seem to support the idea that CAM use in the United Kingdom is high and is increasing." In developing nations, access to essential medicines is severely restricted by lack of resources and poverty. Traditional remedies, often closely resembling or forming the basis for alternative remedies, may comprise primary healthcare or be integrated into the healthcare system. In

*page 10*

Advocates of alternative medicine hold that the various alternative treatment methods are effective in treating a wide range of major and minor medical conditions, and that recently published research (such as Michalsen, 2003, Gonsalkorale 2003, and Berga 2003) proves the effectiveness of specific alternative treatments. They assert that a PubMed search revealed over 370,000 research papers classified as alternative medicine published in Medline-recognized journals since 1966 in the National Library of Medicine

Complementary therapies are often used in palliative care or by practitioners attempting to manage chronic pain in patients. Complementary medicine is considered more acceptable in the interdisciplinary approach used in palliative care than in other areas of medicine. "From its early experiences of care for the dying, palliative care took for granted the necessity of placing patient values and lifestyle habits at the core of any design and delivery of quality care at the end of life. If the patient desired complementary therapies, and as long as such treatments provided additional support and did not endanger the patient, they were considered acceptable." The non-pharmacologic interventions of complementary medicine can employ mind

Physicians who practice complementary medicine usually discuss and advise patients as to available complementary therapies. Patients often express interest in mind-body complementary therapies because they offer a non-drug approach to treating some health conditions. Some mind-body techniques, such as cognitive-behavioral therapy, were once considered complementary medicine, but are now a part of conventional medicine in the United States. "Complementary medicine treatments used for pain include: acupuncture, low-level laser therapy, meditation, aroma therapy, Chinese

In defining complementary medicine in the UK, the House of Lords Select Committee determined that the following therapies were the most often used to complement conventional medicine: Alexander technique, Aromatherapy, Bach and other flower remedies, Body work therapies including massage, Counselling stress therapies, hypnotherapy, Meditation, Reflexology,

### **United States**

A botánica, such as this one, caters to the Latino community and sells folk medicine alongside statues of saints, candles decorated with prayers, and A 2002 survey of US adults 18 years and older conducted by the National Center for Health Statistics (CDC) and the National Center for

74.6% had used some form of complementary and alternative medicine (CAM)  
62.1% had done so within the preceding twelve months.

When prayer specifically for health reasons is excluded, these figures fall to 49.8% and 36.0%, respectively.

45.2% had in the last twelve months used prayer for health reasons, either through praying for their own health or through others praying for them.

54.9% used CAM in conjunction with conventional medicine.

14.8% "sought care from a licensed or certified" practitioner, suggesting that "most individuals who use CAM prefer to treat themselves."

The Dietary Supplement Industry is expected to be \$250 Billion by 2016

Most people used CAM to treat and/or prevent musculoskeletal conditions or other conditions associated with chronic or recurring pain.

"Women were more likely than men to use CAM. The largest sex differential is seen in the use of mind-body therapies including prayer specifically for "Except for the groups of therapies that included prayer specifically for health reasons, use of CAM increased as education levels increased".

The most common CAM therapies used in the US in 2002 were prayer (45.2%), herbalism (18.9%), breathing meditation (11.6%), meditation (7.6%), chiropractic medicine (7.5%), yoga (5.1%), body work (5.0%), diet-based therapy (3.5%), progressive relaxation (3.0%), mega-vitamin therapy

In 2004, a survey of nearly 1,400 U.S. hospitals found that more than one in four offered alternative and complementary therapies such as acupuncture,

A 2008 survey of US hospitals by Health Forum, a subsidiary of the American Hospital Association, found that more than 37 percent of responding hospitals indicated they offer one or more alternative medicine therapies, up from 26.5 percent in 2005. Additionally, hospitals in the southern Atlantic states were most likely to include CAM, followed by east north central states and those in the middle Atlantic. More than 70% of the

In 2011 the Millennium Cohort Study (United States) found that 39% of the then currently enrolled 44,287 cohort members reported using at least one

The National Science Foundation has also conducted surveys of the popularity of alternative medicine. After describing the negative impact science fiction in the media has on public attitudes and understandings of pseudoscience, and defining alternative medicine as all treatments that have not been proven effective using scientific methods, as well as mentioning the concerns of individual scientists, organizations, and members of the science reforming community, it commented that "nevertheless, the popularity of In the state of Texas, physicians may be partially protected from charges of unprofessional conduct or failure to practice medicine in an acceptable manner, and thus from disciplinary action, when they prescribe alternative medicine in a complementary manner, if board specific practice requirements are satisfied and the therapies utilized do not present "a safety risk for the patient that is unreasonably greater than the conventional

### *Denmark*

45.2% of the Danish population aged 16 or above had in 2005 used alternative medicine at some point in life. 22.5% had used alternative The most popular types of therapies within the previous year (2005) are:

Massage, osteopathy or other manipulative techniques (13.2 percent)

Reflexology (6.1 percent)

Acupuncture (5.4 percent)

More results of statistical surveys on alternative medicine in Denmark is available on ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the pages on Statistics:

#### *Use among medical students*

68% of the medical students in Denmark were in 2008 using or had used alternative therapy. The *most commonly used types of alternative medicine* Herbal medicines and Dietary supplements (50 percent)

Acupuncture (18 percent)

Reflexology (18 percent).

#### *Education*

The examples and perspective in this section may not represent a worldwide view of the subject. Please improve this article and discuss the issue on the

In the United States, increasing numbers of medical colleges have started offering courses in alternative and complementary medicine. A 1998 study reported "There is tremendous heterogeneity and diversity in content, format, and requirements among courses in complementary and alternative medicine at US medical schools". Common topics included chiropractic, acupuncture, homeopathy, herbal therapies, and mind-body techniques. In three separate research surveys that surveyed 729 schools (125 medical schools offering a Doctor of Medicine degree (M.D.), 25 medical schools offering a Doctor of Osteopathic Medicine degree (D.O.), and 585 schools offering a nursing degree), 60% of the medical schools, 95% of osteopathic medical schools and 84.8% of the nursing schools teach some form of CAM. The University of Arizona College of Medicine offers a program in Integrative Medicine under the leadership of Andrew Weil that trains physicians in various branches of alternative medicine that "...neither rejects conventional medicine nor embraces alternative practices uncritically." The Florida Institute for Complementary and Alternative Medicine is the only state accredited school which can confer an Alternative Medicine A 2001 survey of European universities found that unconventional medicine courses are widely represented at European universities. They cover a wide range of therapies and many of them are used clinically. Research work is underway at several faculties. A 2006 survey showed that 40% of the Universities in the United Kingdom have been dropping their degree courses in alternative medicine, and as of 2012, no more degrees will be offered in such courses as homeopathy, naturopathy, and reflexology.

#### *Regulation*

Because of the uncertain nature of various alternative therapies and the wide variety of claims different practitioners make, alternative medicine has been a source of vigorous debate, even over the definition of alternative medicine. Dietary supplements, their ingredients, safety, and claims, are a continual source of controversy. In some cases, political issues, mainstream medicine and alternative medicine all collide, such as in cases where synthetic drugs In other cases, controversy over mainstream medicine causes questions about the nature of a treatment, such as water fluoridation. Alternative medicine and mainstream medicine debates can also spill over into freedom of religion discussions, such as the right to decline lifesaving treatment for one's children because of religious beliefs. Government regulators continue Jurisdiction differs concerning which branches of alternative medicine are legal, which are regulated, and

which (if any) are provided by a government-controlled health service or reimbursed by a private health medical insurance company. The United Nations Committee on Economic, Social and Cultural Rights – article 34 (Specific legal obligations) of the General Comment No. 14 (2000) on The right to the highest attainable standard of health states that

Furthermore, obligations to respect include a State's obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines, from marketing unsafe drugs and from applying coercive medical treatments, unless on an exceptional basis for the treatment of

Specific implementations of this article are left to member states.

A number of alternative medicine advocates disagree with the restrictions of government agencies that approve medical treatments. In the United States, for example, critics say that the Food and Drug Administration's criteria for experimental evaluation methods impedes those seeking to bring useful and effective treatments and approaches to the public, and that their contributions and discoveries are unfairly dismissed, overlooked or suppressed. Alternative medicine providers recognize that health fraud occurs, and argue that it should be dealt with appropriately when it does, but

In New Zealand, alternative medicine products are classified as food products, so there are no regulations or safety standards in place.

In Australia, the topic is termed as complementary medicine and the Therapeutic Goods Administration has issued various guidances and standards. Australian regulatory guidelines for complementary medicines (ARGCM) demands that the pesticides, fumigants, toxic metals, microbial toxins, radionuclides, and microbial contaminations present in herbal substances should be monitored, although the guidance does not request for the evidences of these traits. However, for the herbal substances in

The production of modern pharmaceuticals is strictly regulated to ensure that medicines contain a standardized quantity of active ingredients and are free from contamination. Alternative medicine products are not subject to the same governmental quality control standards, and consistency between doses can vary. This leads to uncertainty in the chemical content and biological activity of individual doses. This lack of oversight means that alternative health products are vulnerable to adulteration and contamination. This problem is magnified by international commerce, since different countries

*Denmark:* Herbal and dietary supplements is the designation of a range of products, which have in common their status as medicine belonging under the Danish Medicines Act. In the Danish Medicines Act there exist four types of herbal and dietary supplements: Herbal medicinal products, Strong vitamin and mineral preparations, Traditional botanical medicinal products and Homeopathic medicinal products. Some dietary supplements fall within a special category of products, which differ from the above in that they are not authorized medicinal products. Dietary supplements are regulated under the Food Act and are registered by the Danish Veterinary and Food

#### *Alternative therapists*

Denmark has a registration system for alternative therapy practitioners, RAB.

#### *Criticism*

The NCCAM budget has been criticized because, despite the duration and intensity of studies to measure the efficacy of alternative medicine, there had been no effective CAM treatments supported by scientific evidence as of 2002 according to the QuackWatch website. Despite this, the National Center for Complementary and Alternative Medicine budget has been on a sharp sustained rise to support complementary medicine. In fact, the whole "There really is no such thing as alternative medicine--only medicine that has been proved to work and medicine that has not." Arnold Relman, editor in chief emeritus of The New England Journal of Medicine. [full citation needed] Speaking of government funding studies of integrating alternative medicine techniques into the mainstream, Steven Novella, a neurologist at Yale School of Medicine wrote that it "is used to lend an appearance of legitimacy to treatments that are not legitimate." Marcia Angell, former Speaking of ethics, in November 2011 Edzard Ernst stated that the "level of misinformation about alternative medicine has now reached the point where it has become dangerous and unethical. So far, alternative medicine has remained an ethics-free zone. It is time to change this."

## Alternative and evidence-based medicine

### *Efficacy*

Many alternative therapies have been tested and certain CAM interventions do have evidence. In 2003, a project funded by the CDC identified 208 condition-treatment pairs, of which 58% had been studied by at least one randomized controlled trial (RCT), and 23% had been assessed with a meta-analysis. According to a 2005 book by a US Institute of Medicine panel, the number of RCTs focused on CAM has risen dramatically. The book cites Vickers (1998), who found that many of the CAM-related RCTs are in the

As of 2005, the Cochrane Library had 145 CAM-related Cochrane systematic reviews and 340 non-Cochrane systematic reviews. An analysis of the conclusions of only the 145 Cochrane reviews was done by two readers. In 83% of the cases, the readers agreed. In the 17% in which they disagreed, a third reader agreed with one of the initial readers to set a rating. These studies found that, for CAM, 38.4% concluded positive effect or possibly positive (12.4%) effect, 4.8% concluded no effect, 0.69% concluded harmful effect, and 56.6% concluded insufficient evidence. An assessment of conventional treatments found that 41.3% concluded positive or possibly positive effect, 20% concluded no effect, 8.1% concluded net harmful effects, and 21.3% concluded insufficient evidence. However the Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (updated monthly) are made available at ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the lists here:

Most alternative medical treatments are not patentable, which may lead to less research funding from the private sector. In addition, in most countries, alternative treatments (in contrast to pharmaceuticals) can be marketed without any proof of efficacy—also a disincentive for manufacturers to fund scientific research. Some have proposed adopting a prize system to reward medical research. However, public funding for research exists. Increasing the funding for research on alternative medicine techniques is the purpose of the US National Center for Complementary and Alternative Medicine. NCCAM and its predecessor, the Office of Alternative Medicine, have spent

Some skeptics of alternative practices say that a person may attribute symptomatic relief to an otherwise-ineffective therapy due to the placebo effect, the natural recovery from or the cyclical nature of an illness (the regression fallacy), or the possibility that the person never originally had a

In the same way as for conventional therapies, drugs, and interventions, it can be difficult to test the efficacy of alternative medicine in clinical trials. In instances where an established, effective, treatment for a condition is already available, the Helsinki Declaration states that withholding such treatment is unethical in most circumstances. Use of standard-of-care

Cancer researcher Andrew J. Vickers has stated:

Contrary to much popular and scientific writing, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have been shown to be ineffective. In this article, clinical trial data on a number of alternative cancer cures including Livingston-Wheeler, Di Bella Multitherapy, antineoplastons, vitamin C, hydrazine sulfate, Laetrile, and psychotherapy are reviewed. The label "unproven" is inappropriate for such

### **Safety**

*See also: List of herbs with known adverse effects*

#### *Adequacy of Regulation and CAM Safety*

One of the commonly voiced concerns about complementary alternative medicine (CAM) is the manner in which it is regulated. There have been significant developments in how CAMs should be assessed prior to re-sale in the United Kingdom and the European Union (EU) in the last 2 years. Despite this, it has been suggested that current regulatory bodies have been ineffective in preventing deception of patients as many companies have re-labelled their drugs to avoid the new laws. There is no general consensus

Advocates of CAM suggest that regulation of the industry will adversely affect patients looking for alternative ways to manage their symptoms, even if many of the benefits may represent the placebo effect. Some contend that alternative medicines should not require any more regulation than over-the-

#### Interactions with conventional pharmaceuticals

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine. Examples include immuno-augmentation therapy, shark cartilage, bioresonance therapy, oxygen and ozone therapies, insulin potentiation therapy. Some herbal remedies can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among other problems. An anecdotal example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly [sic] there's the cynicism and disappointment and depression that some patients get from going on from one alternative medicine to the next, and they find after three months the placebo effect wears off, and they're disappointed and they move on to the next one, and they're disappointed and disillusioned, and that can create depression and make the eventual treatment of the patient with anything effective difficult, because you may

#### Potential side-effects

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing at all. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the appeal to nature fallacy, i.e. "that which is natural cannot be harmful". An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their label concentration may be

#### Treatment delay

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use

#### Unconventional cancer "cures"

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centers and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many

### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

### **Integrative medicine, complementary medicine, fringe medicine**

Integrative medicine is the combination of the practices and methods of alternative/complementary medicine with conventional medicine. It may include preventive medicine and patient-centered medicine. It may also include practices not normally referred to as medicine, such as using prayer, meditation, socializing, and recreation as therapies. Its academic proponents sometimes recommend misleading patients by using known placebo treatments in order to achieve a placebo effect. However, a 2010 survey of family physicians found that 56% of respondents said they had used a placebo in clinical practice as well. Eighty-five percent of respondents believed placebos can have both psychological and physical benefits. A Criticism of integrative medicine includes about proposing to lie to patients about alternative medicines known to be no more than a placebo in order to achieve a placebo effect, and "diverting research time, money, and other resources from more fruitful lines of investigation in order to pursue a theory "Quackademic medicine" is a pejorative term used for "integrative medicine", when considered to be an infiltration of quackery into academic science-based medicine, and was picked up by science-based medicine anti-

### *History*

Fueled by a nationwide survey published in 1993 by David Eisenberg, which revealed that in 1990 approximately 60 million Americans had used one or more complementary or alternative therapies to address health issues. A study published in the November 11, 1998 issue of the Journal of the American Medical Association reported that 42% of Americans had used complementary and alternative therapies, up from 34% in 1990. However, despite the growth in patient demand for complementary medicine, most of

### **Appeal**

A study published in 1998 indicates that a majority of alternative medicine use was in conjunction with standard medical treatments. Approximately 4.4 percent of those studied used alternative medicine as a replacement for conventional medicine. The research found that those having used alternative medicine tended to have higher education or report poorer health status. Dissatisfaction with conventional medicine was not a meaningful factor in the choice, but rather the majority of alternative medicine users appear to be doing so largely because "they find these healthcare alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life." In particular, subjects reported a holistic orientation to health, a transformational experience that changed their worldview, identification with a number of groups committed to environmentalism, feminism, psychology, and/or spirituality and personal Authors have speculated on the socio-cultural and psychological reasons for the appeal of alternative medicines among that minority using them in lieu of conventional medicine. There are several socio-cultural reasons for the interest in these treatments centered on the low level of scientific literacy among the public at large and a concomitant increase in antiscientific attitudes and new age mysticism. Related to this are vigorous marketing of

There is also an increase in conspiracy theories toward conventional medicine and pharmaceutical companies, mistrust of traditional authority figures, such as the physician, and a dislike of the current delivery methods of scientific biomedicine, all of which have led patients to seek out alternative medicine to treat a variety of ailments. Many patients lack access to contemporary medicine, due to a lack of private or public health insurance, which leads them to seek out lower-cost alternative medicine. Medical doctors are also aggressively marketing alternative medicine to In addition to the social-cultural underpinnings of the popularity of alternative medicine, there are several psychological issues that are critical to its growth. One of the most critical is the placebo effect, which is a well-established observation in medicine. Related to it are similar psychological effects such as the will to believe, cognitive biases that help maintain self-

Patients can also be averse to the painful, unpleasant, and sometimes-dangerous side effects of biomedical treatments. Treatments for severe diseases such as cancer and HIV infection have well-known, significant side-effects. Even low-risk medications such as antibiotics can have potential to cause life-threatening anaphylactic reactions in a very few individuals. Also, many medications may cause minor but bothersome symptoms such as cough or upset stomach. In all of these cases, patients may be seeking out Schofield et al., in a systematic review published in 2011, make ten recommendations which they think may increase the effectiveness of consultations in a conventional (here: oncology) setting, such as "Ask questions about CAM use at critical points in the illness trajectory"; "Respond to the person's emotional state"; and "Provide balanced, evidence-based advice". They suggest that this approach may address "... concerns CAM's popularity may be related to other factors which Edzard Ernst mentions in an interview in *The Independent*:

Why is it so popular, then? Ernst blames the providers, customers and the doctors whose neglect, he says, has created the opening into which alternative therapists have stepped. "People are told lies. There are 40 million websites and 39.9 million tell lies, sometimes outrageous lies. They mislead cancer patients, who are encouraged not only to pay their last penny but to be treated with something that shortens their lives. "At the same time, people are gullible. It needs gullibility for the industry to succeed. It doesn't In a paper published in October 2010 entitled *The public's enthusiasm for complementary and alternative medicine amounts to a critique of mainstream medicine*, Ernst describes these views *in greater detail and* [CAM] is popular. An analysis of the reasons why this is so points towards the therapeutic relationship as a key factor. Providers of CAM tend to build better therapeutic relationships than mainstream healthcare professionals. In turn, this implies that much of the popularity of CAM is a poignant criticism of the failure of mainstream healthcare. We should consider it seriously with

**Academic resources**

Cochrane and alternative medicine (full lists of updated reviews found on Knowledge and Research Center for Alternative Medicine)

**See also**

- Alternative cancer treatments
- Health freedom movement
- History of alternative medicine
- List of branches of alternative medicine
- Program for Evaluating Complementary Medicine
- Shakoor v Situ
- Traditional medicine
- Folk medicine

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### **Energy Medicine**

<http://www.integrativemedicine.co.za/energy->

Energy or bio-energetic medicine refers to therapies which use an energy field - electrical, magnetic, sonic or acoustic - to screen for or treat health conditions by detecting imbalances in the body's energy fields and then

The earliest recorded use of electricity for healing purposes dates from 2750BC, when sick people were exposed to the shocks of electric eels. Magnetite or loadstone was used for healing by the ancient Egyptians,

The Bible and other spiritual texts describe healing such as the laying on of hands (which is still practised today in some churches). Therapeutic touch, Quantum touch and Reiki are some of the modern versions of this technique. Mesmer began using magnets for healing in 1773, but then progressed to

Medical electricity had its golden era between the late 1700's and early 1900's. During that period a wide variety of healing devices were developed for treating a range of ailments. In 1867 Duchenne published his classical studies of muscle points, which gave rise to the modern field of medical electromyography. By the turn of the 20th century a wide variety of electromagnetic devices for healing were available, providing therapies for Modern medicine has been using a form of energy medicine since the discovery of Xrays by Roentgen. Electrocardiographs (ECG's), Electroencephalograms (EEG's), Xrays, Computerised tomography (CT) and

Over the last few decades scientists have developed methods to measure the subtle but important energy fields within and around the human body. These fields were once considered non-existent by mainstream medicine.

Bio-energetic/energy medicine has the potential to improve the treatment of diseases which do not respond to conventional clinical treatment.

Integrative medical practitioners are currently using one or more of the following energy medicine modalities (each of which will have a detailed

Acupuncture (AP)

Homeopathy

Anthroposophical medicine

Homotoxicology (which utilises homeopathic principles)

Biopuncture (injecting homeopathics into AP points)

Flower essences

Rife resonator therapy

Pulsed electromagnetic field therapy (PEFT) - Bemer

QX/Scio/Indigo biofeedback  
EAV devices - Vegatest  
Low energy laser treatment  
Cranio-electrical stimulation  
Polarised light therapy - Bioptron  
Neurofeedback (also known as EEG biofeedback or Neurotherapy)  
Sound - Voicebio

Information provided by Dr. Les Emdin

[www.integrativemedicalcentre.co.za](http://www.integrativemedicalcentre.co.za)

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*850 Category talk Medicinal plants ...*

**Category talk:Medicinal plants**

[http://en.wikipedia.org/wiki/Category\\_talk:Medicinal](http://en.wikipedia.org/wiki/Category_talk:Medicinal_plants)

About the suggestion of merging the categories: 'Medicinal Plants' and 'Medicinal Herbs and Fungi' -

- 1) I think this would be a very sensible move. 'Herbs' is a relatively loose term
- 2) All herbs are plants, not all plants are herbs. Someone looking under 'herb' might easily miss an entry.
- 3) The broader category would mean less chance of someone missing an entry by using the narrower search term 'herb'.
- 4) If there is strong feeling about it, a subcategory of 'medicinal herbs' could be set up within plants?

Kitb 19:57, 25 September 2006 (UTC)

We're talking about merging herbs+fungi into plants, right? I think that is quite a sensible idea. I'm not sure why plants is currently a subcat of herbs+fungi... well, except that fungi aren't technically plants. But not all plants are herbs. Perhaps "Medicinal plants and fungi"? Also, what about the

Agree - merge these two into Medicinal plants and fungi - no capitalisation, and plants and herbs are much more defined than "herbs". If no one objects in the next couple of days - I will get to it. Lethaniol 16:18, 5 December

The sensible way to deal with these two would be to split them into Category:Medicinal plants and Category:Medicinal fungi. That would avoid the logical problem noted by Alynna above that fungi should not be categorised under plants (or vice versa). --Stemonitis 14:21, 30 December

I agree with Stemonitis. Axl 12:35, 18 January 2007 (UTC)

Sounds good. All then that needs to be done is 1) Creating Category:Medicinal fungi and 2) Sorting pages at Category:Medicinal herbs

And then, I guess, a discussion could be started about renaming Category:Medicinal herbs and fungi to Category:Medicinal plants and fungi. But that takes more work ;) --Alynna 19:28, 18 January 2007 (UTC)

I've been bold and performed step (1), and started on step (2). --Alynna 19:32, 18 January 2007 (UTC)

#### *Medicinal vs Herbalism*

I think we ought to distinguish between plants (and fungi) for which well researched, confirmed medical uses have been found and other plants which may be used as part of "holistic" traditions (e.g. herbalism or traditional Chinese Medicine). --Salimfadhley (talk) 16:36, 10 February 2010 (UTC)

*Few plants or their phytochemical constituents have been proven to have medicinal effects by rigorous science.*

This sentence is absolutely false: "Medicinal plants are various plants used in herbalism and thought by some to have medicinal properties. Few plants or their phytochemical constituents have been proven to have medicinal effects by rigorous science or have been approved by regulatory agencies such as the United States Food and Drug Administration or European Food Safety Authority." Plants have been used as medicine for thousands upon thousands of years and continue to be used by the majority (80%) of the world's population. The German E Commission is a book full of all the plants that are legal in Germany. This paper, whose data was taken directly from the FDA, states that of the 500 million prescriptions in the USA every year, 125 million involve a preparation from a leafy plant: Newman DJ, Cragg GM, Snader KM (2003) Natural products of new drugs over the period 1981–2002. *J Nat Prod* 66: 1022–1037. I tried to edit this ridiculous

Categories: Category-Class plant articlesNA-importance plant articlesCategory-Class Alternative medicine articlesNA-Class pharmacology

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*761 Nineteenth-century non-conventional medicine ...*

### **Nineteenth-century non-conventional medicine**

[http://en.wikipedia.org/wiki/History\\_of\\_alternative](http://en.wikipedia.org/wiki/History_of_alternative)

From the late eighteenth century and more robustly from the mid-nineteenth century a number of non-conventional medical systems developed in the West which proposed oppositional medical systems, criticised orthodox medical practitioners, emphasised patient-centredness, and offered

While neither the medical marketplace nor irregular practitioners disappeared during the nineteenth century, the proponents of alternative medical systems largely differed from the entrepreneurial quacks of the previous century in eschewing showy self-promotion and instead adopting a more sober and serious self-presentation. The relationship between medical orthodoxy and heterodoxy was complex, both categories contained considerably variety, were subject to substantial change throughout the period, and the divisions between the two were frequently blurred. The variety of alternative medical systems which developed during this period

*These were:*

those employing spiritual or psychological therapies, such as hypnosis (mesmerism); nutritional therapies based upon special diets, such as medical botanism; drug and biological therapies such as homeopathy and hydrotherapy; and, manipulative physical therapies such as osteopathy and chiropractic massage. Non-conventional medicine might define health in terms of concepts of balance and harmony or espouse vitalistic doctrines of the body. Illness could be understood as due to the accretion of bodily toxins and impurities, to result from magical, spiritual, or supernatural causes, or as arising from energy blockages in the body such that healing actions might

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*762 Mesmerism ...*

### **Mesmerism**

*Main articles: Franz Mesmer and Animal magnetism*

[http://en.wikipedia.org/wiki/History\\_of\\_alternative](http://en.wikipedia.org/wiki/History_of_alternative)

Mesmerism was the eponymous medical system proposed by the Viennese-trained physician, Franz Anton Mesmer, (1734-1815) in the late eighteenth century. The basis of this doctrine was Mesmer's claimed discovery of a new aetherial fluid, animal magnetism, which, he contended, permeated the universe and the bodies of all animate beings and whose proper balance was fundamental to health and disease. Animal magnetism was but one of series of postulated subtle fluids and substances, such as caloric, phlogiston, magnetism, and electricity, which then suffused the scientific literature. It also reflected Mesmer's doctoral thesis, *De Planatarum Influxu* ("On the Influence of the Planets"), which had investigated the impact of the gravitational effect of planetary movements on fluid-filled bodily tissues. His focus on magnetism and the therapeutic potential of magnets was derived from his reading of Paracelsus, Athanasius Kircher and Johannes Baptista van Helmont. The immediate impetus for his medical speculation, however, derived from his treatment of a patient, Franzisca Oesterlin, who suffered from episodic seizures and convulsions which induced vomiting. According to Mesmer, the logic of this cure suggested that health was dependent upon the uninterrupted flow of a putative magnetic fluid and that ill health was consequent to its blockage. His treatment methods claimed to resolve this by either directly transferring his own superabundant and naturally occurring animal magnetism to his patients by touch or through the

By 1775 Mesmer's Austrian practice was prospering and he published the text *Schrieben über die Magnetkur an einen auswärtigen Arzt* which first outlined his thesis of animal magnetism. In 1778, however, he became embroiled in a scandal resulting from his treatment of a young, blind patient who was connected to the Viennese court and relocated to Paris where he established a medical salon, "The Society of Harmonic" for the treatment of patients. Recruiting from a client-base drawn predominantly from society women of the middle- and upper-classes, Mesmer held group séances at his salubrious salon-clinic which was physically dominated by a large, lidded, wooden tank, known as the baquet, containing iron, glass and other material that Mesmer had magnetized and which was filled with "magnetized water". At these sessions patients were enjoined to take hold of the metal rods emanating from the tub which acted as a reservoir for the animal magnetism derived from Mesmer and his clients. Mesmer, through the assisted by an intense gaze or the administration of his wand – would then direct these energies into the afflicted bodies of his patients seeking to provoke either a "crisis" or a trance-like state; outcomes which he believed essential for healing to occur. Patient proclamations of cure ensured that Mesmer enjoyed considerable and fashionable success in late-eighteenth-

Popular caricature of mesmerism emphasised the eroticised nature of the treatment as spectacle: "Here the physician in a coat of lilac or purple, on which the most brilliant flowers have been painted in needlework, speaks most consolingly to his patients: his arms softly enfolding her sustain her in tenderness and his hands tremble in sympathy with her desire to be cured." Responding chiefly to the hint of sexual impropriety and political radicalism imbuing these séances, in 1784 mesmerism was subject to a commission of inquiry by a royal-appointed scientific panel of the prestigious French Académie de Médecine.[n 4] Its findings were that animal magnetism had no basis in fact and that Mesmer's cures had been achieved through the power of suggestion. The commission's report, if damaging to the personal status of Mesmer and to the professional ambitions of those faculty physicians who

*1843 Punch magazine caricature depicting John Elliotson "playing the brain" of a working-class, mesmerised woman*

In England mesmerism was championed by John Elliotson, Professor of Practical Medicine at University College London and the founder and president of the London Phrenological Society. A prominent and progressive orthodox physician, he was President of the Medico-Chirurgical Society of London and an early adopter of the stethoscope in English medical practice. He had been introduced to mesmerism in the summer of 1837 by the French physician and former student of Mesmer, Dupotet, who is credited as the

cross-channel influence on the development of mesmerism in England. Elliotson believed that animal magnetism provided the basis for a consideration of the mind and will in material terms thus allowing for their study as medical objects. Initially supported by the *Lancet*, a reformist medical journal, he contrived to demonstrate the scientific properties of animal magnetism as a physiological process on the predominantly female charity patients under his care in the University College Hospital. Working-class patients were preferred as experimental subjects to exhibit the physical properties of mesmerism on the nervous system as, being purportedly more animalistic and machine-like than their social superiors, their personal characteristics were deemed less likely to interfere with the experimental process. He sought to reduce his subjects to the status of mechanical automata claiming that he could, through the properties of animal

Two Irish-born charity patients, the adolescent O'Key sisters, emerged as particularly important to Elliotson's increasingly popular and public demonstrations of mesmeric treatment. Initially, his magnetising practices were used to treat the sisters' shared diagnosis of hysteria and epilepsy in controlling or curtailing their convulsive episodes. By the autumn of 1837 Elliotson had ceased to treat the O'Keys merely as suitable objects for cure and instead sought to mobilise them as diagnostic instruments. When in states of mesmeric entrancement the O'Key sisters, due to the apparent increased sensitization of their nervous system and sensory apparatus, behaved as if they had the ability to see through solid objects, including the human body, and thus aid in medical diagnosis. As their fame rivalled that of Elliotson, however, the O'Keys behaved less like human diagnostic machines and became increasingly intransigent to medical authority and medical mastery in the form of a pair of working-class, teenage girls without medical training aroused general disquiet amongst the medical establishment and cost Elliotson one of his early and influential supporters, the leading proponent of medical reform, Thomas Wakley. Wakley, the editor of the *Lancet*, had initially hoped that Elliotson's scientific experiments with animal magnetism might further the agenda of medical reform in bolstering the authority of the profession through the production of scientific truth and, equally importantly in a period when the power-relations between doctors and patients were being redefined, quiescent patient bodies. Perturbed by the O'Key's provocative displays, Wakley convinced Elliotson to submit his mesmeric practice to a trial in August 1838 before a jury of ten gentlemen during which he accused the sisters of fraud and his colleague of gullibility. Following a series of complaints issued to the Medical Committee of

This setback, while excluding Elliotson from the medical establishment, ended neither his mesmeric career nor the career of mesmerism in England. From 1842 he became an advocate of phreno-mesmerism – an approach that amalgamated the tenets of phrenology with animal magnetism and that led to a split in the Phrenological Society. The following year he founded, together with the physician and then President of the Phrenological Society, W.C. Engledue, the principal journal on animal magnetism entitled the *Zoist: A Journal of Cerebral Physiology and Mesmerism and their Application to Human Welfare* which remained in print until 1856. Mesmeric societies, frequently patronised by those among the scientific and social elite were established in many major population centres in Britain from the 1840s onwards. Some sufficiently endowed societies, such as those in London, Bristol and Dublin, Ireland, supported mesmeric infirmaries with permanent mesmeric practitioners in their employ. Due to the competing rise

*The First Operation under Ether, painted by Robert Hinckley 1881-96.*  
*This operation on the jaw of a female patient took place in Boston on 19 October 1846. William Morton acted as the anaesthetist and John Morrow*

The 1840s in Britain also witnessed a deluge of travelling magnetisers who put on public shows for paying audiences to demonstrate their craft. These mesmeric theatres, intended in part as a means of soliciting profitable private clientele, functioned as public fora for debate between skeptics and believers as to whether the performances were genuine or constituted fraud. In order to establish that the loss of sensation under mesmeric trance was real, these itinerant mesmerists indulged in often quite violent methods – including discharging firearms close to the ears of mesmerised subjects,

Such displays of the anaesthetic qualities of mesmerism inspired some medical practitioners to attempt surgery on subjects under the spell of magnetism. In France, the first major operation of this kind had been trialled, apparently successfully, as early as 1828 during a mastectomy procedure. In Britain the first significant surgical procedure undertaken on a patient while mesmerised occurred in 1842 when James Wombell, a labourer from Nottingham, had his leg amputated. Having been mesmerised for several days prior to the operation by a barrister named William Topham, Wombell exhibited no signs of pain during the operation and reported afterwards that the surgery had been painless. This account was disputed by many in the medical establishment who held that Wombell had fraudulently concealed the pain of the amputation both during and after the procedure. Undeterred, in 1843 Elliotson continued to advocate for the use of animal magnetism in surgery publishing *Numerous Cases of Surgical Operation without Pain in the Mesmeric State*. This marked the beginning of a campaign by London mesmerists to gain a foothold for the practice within British hospitals by convincing both doctors and the general public of the value of surgical mesmerism. Mesmeric surgery enjoyed considerable success in the years from 1842 to 1846 and colonial India emerged as a particular stronghold of the practice; word of its success was propagated in

Although a few surgeons and dentists had undertaken fitful experiments with anaesthetic substances in the preceding years, it was only in 1846 that use of ether in surgery was popularised amongst orthodox medical practitioners. This was despite the fact that the desensitising effects of widely available chemicals like ether and nitrous oxide were commonly known and had formed part of public and scientific displays over the previous half-century.

A feature of the dissemination of magnetism in the New World was its increasing association with spiritualism. By the 1830s mesmerism was making headway in the United States amongst figures like the intellectual progenitor of the New Thought movement, Phineas Parkhurst Quimby, whose treatment combined verbal suggestion with touch. Quimby's most celebrated "disciple", Mary Baker Eddy would go on to found the "medico-religious hybrid", Christian Science, in the latter half of the nineteenth century. In the 1840s the American spiritualist Andrew Jackson Davis sought to combine animal magnetism with spiritual beliefs and postulated that bodily health was dependent upon the unobstructed movement of the

Hydropathy

Main article: Hydrotherapy

Medical Botany

Main article: Samuel Thomson

Homeopathy

Main article: Homeopathy

**Osteopathy and chiropractic manipulation**

Deriving from the tradition of 'bone-setting', both osteopathy and chiropractic developed in the USA in the late 19th century. The British School of Osteopathy was established in 1917 but it was the 1960s before the first chiropractic college was established in the UK. While chiropractic theories and methods (which are concerned with subluxations or small displacements of the spine and other joints) do not accord with orthodox medicine's current knowledge of the biomechanics of the spine, osteopathy has been largely subsumed into conventional medicine in the USA. The Osteopaths Act (1993) and the Chiropractors Act (1994), however, created for the first time autonomous statutory regulation for two CAM therapies in

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*759 Medical professionalisation ...*

#### **Medical professionalisation**

[http://en.wikipedia.org/wiki/History\\_of\\_alternative](http://en.wikipedia.org/wiki/History_of_alternative)

In the late eighteenth and nineteenth centuries regular and irregular medical practitioners became more clearly differentiated throughout much of Europe. In part, this was achieved through processes of state-sanctioned medical regulation. The different types of regulatory medical markets created across nineteenth-century Europe and America reflected differing historical patterns of state formation. Where states had traditionally enjoyed strong, centralised power, such as in the German states, government more easily assumed control of the medical regulation. In states that had exercised weaker central power and adopted a free-market model, such as in Britain, government gradually assumed greater control over medical regulation as part of increasing state focus on issues of public health. This process was significantly complicated in Britain by the enduring existence of the historical medical colleges. A similar process is observable in America from the 1870s but this was facilitated by the absence of medical corporations. Throughout the nineteenth century, however, most Western states converged in the creation of legally delimited and semi-protected medical markets. It is at this point that an "official" medicine, created in cooperation with the state

France provides perhaps one of the earliest examples of the emergence of a state-sanctioned medical orthodoxy – and hence also of the conditions for the development of forms of alternative medicine – the beginnings of which can be traced to the late eighteenth century. In addition to the traditional French medical faculties and the complex hierarchies of practitioners over which they presided, the state increasingly supported new institutions, such as the Société Royale de Médecine (Royal Society of Medicine) which received its royal charter in 1778, that played a role in policing medical practice and the sale of medical nostrums. This system was radically transformed during the early phases of the French Revolution when both the traditional faculties and the new institutions under royal sponsorship were removed and an entirely unregulated medical market was created. This anarchic situation was reformed under the exigencies of war when in 1793 the state established national control over medical education; under Napoleon in 1803 state-control was extended over the licensing of medical practitioners. This latter reform introduced a new hierarchical division between practitioners in the creation of a medical élite of graduate restricted in where they could practice. This national system of medical regulation under state-control, exported to regions of Napoleonic conquest such as Italy, the Rhineland and the Netherlands, became paradigmatic in the West and in countries adopting western medical systems. While offering state protection to licensed doctors and establishing a medical monopoly in

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**TCCUAIA:**

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### **Alternative and evidence-based medicine**

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### **843 Classifications - Alternative medicine**

*1 Classifications*

#### **Classifications**

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

NCCAM has developed one of the most widely used classification systems for the branches of complementary and alternative medicine. It classifies complementary and alternative therapies into five major groups, which have

*Whole medical systems:* cut across more than one of the other groups; examples include Traditional Chinese medicine, Naturopathy, Homeopathy,

*Mind-body medicine:* takes a holistic approach to health that explores the interconnection between the mind, body, and spirit. It works on the idea that the mind can affect "bodily functions and symptoms"

*Biology-based practices:* use substances found in nature such as herbs, foods, vitamins, and other natural substances

*Manipulative and body-based practices:* feature manipulation or movement of body parts, such as in chiropractic and osteopathic manipulation

*Energy medicine:* is a domain that deals with putative and verifiable energy fields.

Biofield therapies are intended to influence energy fields that, it is purported, surround and penetrate the body. No empirical evidence has been found to support the existence of the putative energy fields on which these

Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current, or direct-current fields in an

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## 2 Terminology

"Alternative medicine" refers to any practice that is put forward as having the healing effects of medicine, but is not based on evidence gathered with the scientific method, when used independently or in place of medicine based on science. Alternative medical systems can only exist when there is a identifiable, regularized and authoritative medical orthodoxy, such as arose in the west during the nineteenth century, to which they are functionally equivalent. "Complementary medicine" refers to use of alternative medicine alongside conventional science based medicine, in the belief that it increases the effectiveness. An example of "complementary medicine" is use of the alternative medicine called acupuncture (sticking needles in the body to influence the flow of a supernatural energy), along with using medicine based on science, in the belief that the alternative medicine increases the effectiveness of the medicine based only on science, which does not address the supernatural energy. "CAM" is an abbreviation for "complementary and alternative medicine".

The term "Integrative medicine" ("integrated medicine") is used in two different ways. One use refers to a belief that medicine based on science can be "integrated" with practices that are not. Another use refers only to a combination of alternative medical treatments with conventional science based treatments that have some scientific proof of efficacy, in which case it is identical with CAM. Some well known advocates of integrative medicine claim that it also addresses alleged problems with medicine based on science, which are not addressed by CAM. For example, Ralph Snyderman and Andrew Weil state that "integrative medicine is not synonymous with complementary and alternative medicine. It has a far larger meaning and scope." "Whole medical systems" is used in two different ways.

One refers to a spiritual belief, that "spiritual wholeness" is the root of physiological and physical well-being. Ayurveda, Chinese medicine, and others are examples. Another use is that of the National Institute of Health's National Center for Complementary and Alternative Medicine (NCCAM), to differentiate widely comprehensive systems of practice, from specific components of the system, or from practices that claim to heal only a limited kind of specific medical conditions. An example is Ayurvedic medicine (a traditional medicine of India based in part on religious beliefs and in part on traditional use of herbs), which includes many practices and claims to treat many conditions. Alternative medicine often relies on using loose language to give the appearance of effectiveness or to suggest that a dichotomy exists when it does not. One example of this is the use of "Western medicine" and "Eastern medicine" to suggest that the difference is not between evidence based medicine and treatments which don't work, but a cultural difference between the United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using

*Scientists*

Numerous mainstream scientists and physicians have commented on and criticised alternative medicine.

A clinical review published in the British Medical Journal defined complementary and alternative medicine as "group of therapeutic and diagnostic disciplines that exist largely outside the institutions where

There is a debate among medical researchers over whether any therapy may be properly classified as 'alternative medicine'. Some claim that there is only medicine that has been adequately tested and that which has not. They feel that healthcare practices should be classified based solely on scientific evidence. If a treatment has been rigorously tested and found safe and effective, traditional medicine will adopt it regardless of whether it was considered "alternative" to begin with. It is thus possible for a method to change categories (proven vs. unproven), based on increased knowledge of David M. Eisenberg, an integrative medicine researcher, defines it as "medical interventions not taught widely at US medical schools or generally available at US hospitals," NCCAM states that formerly unproven remedies may be incorporated into conventional medicine if they are safe and effective. Barrie R. Cassileth, a researcher of complementary and alternative medicine, summed up the situation as "not all mainstream physicians are pleased with CAM, with current efforts to integrate CAM into mainstream Stephen Barrett, founder and operator of Quackwatch, argues that practices labeled "alternative" should be reclassified as either genuine, experimental, or questionable. He defines genuine as methods that have sound evidence for safety and effectiveness, experimental as unproven but with a plausible rationale for effectiveness, and questionable as groundless without a scientifically plausible rationale. He has concerns that because some "alternatives" have merit, there is an impression that the rest deserve equal consideration and respect even though most are worthless. He mentioned a Edzard Ernst, professor of complementary medicine, characterizes the evidence for many alternative techniques as weak, nonexistent, or negative, but states that evidence exists for others, in particular certain herbs and acupuncture. Ernst concluded that 95% of the alternative treatments he and his team studied, including acupuncture, herbal medicine, homeopathy, and reflexology, are, according to The Economist, "statistically indistinguishable Richard Dawkins, an evolutionary biologist, defines alternative medicine as a "set of practices that cannot be tested, refuse to be tested, or consistently fail tests." He also states that "there is no alternative medicine. There is only medicine that works and medicine that doesn't work." He says that if a technique is demonstrated effective in properly performed trials, it ceases to be alternative and becomes medicine.

A letter by four Nobel Laureates and other prominent scientists deplored the lack of critical thinking and scientific rigor in National Institutes of Health supported alternative medicine research. In 2009 a group of scientists put forward a proposal to shut down the National Center for Complementary and Alternative Medicine. They argued that the vast majority of studies were based on unconventional understandings of physiology and disease and showed little or no effect. Further, they argued that the field's more-plausible interventions such as diet, relaxation, yoga and botanical remedies can be studied just as well in other parts of NIH, where they would need to compete. These concerns are supported by negative results in almost all studies conducted over ten years at a cost of \$2.5 billion by the NCCAM. R. Barker Bausell, a research methods expert and author of "Snake Oil Science" states There are concerns that merely having NIH support is used to give unfounded "legitimacy to treatments that are not legitimate."

Wallace Sampson, an editor of Scientific Review of Alternative Medicine and a Stanford University professor of medicine wrote that CAM is the "propagation of the absurd" based on the example that alternative and complementary have been substituted for quackery, dubious and implausible and concerns that CAM tolerates contradiction without thorough reason and

#### *Popular press*

The Washington Post reports that a growing number of traditionally trained physicians practice integrative medicine, which it defines as "conventional medical care that incorporates strategies such as acupuncture, reiki and

An editorial in the Economist characterized alternative medicine as mostly "quackery" and described the vast majority as offering nothing more than the placebo effect. It suggested that, "Virtually all alternative medicine is

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## 842 Characterization - Alternative medicine

### 3 Characterization

#### Characterization

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

There is no consistent or clear definition for either alternative or complementary medicine

#### Self-characterization

The US National Centre for Complementary and Alternative Medicine (NCCAM) defines CAM as "a group of diverse medical and healthcare systems, practices, and products, that are not currently part of conventional medicine", in a context where conventional medicine is that which is scientifically proven. This definition of CAM is widely known and used and includes many different types of therapies and products. The Danish Knowledge and Research Centre for Alternative Medicine an independent institution under the Danish Ministry of the Interior and Health (ViFAB) uses the term "alternative medicine" for:

Treatments performed by therapists that are not authorized healthcare professionals  
Treatments performed by authorized healthcare professionals, but those based on methods used mainly outside the healthcare system. People without a healthcare authorisation must be able to perform the treatments.

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#### Institutions

The World Health Organization defines complementary and alternative medicine as a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care

In a consensus report released in 2005, entitled Complementary and Alternative Medicine in the United States, the Institute of Medicine (IOM) defined complementary and alternative medicine (CAM) as the non-dominant approach to medicine in a given culture and historical period. A similar definition has been adopted by the Cochrane Collaboration, and official government bodies such as the UK Department of Health. The Cochrane Collaboration Complementary Medicine Field finds that what is considered complementary or alternative practices in one country may be "complementary medicine includes all such practices and ideas that are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness, or promoting health and well-being." For example biofeedback is widely used within the Physical Medicine & Rehabilitation community, but is considered alternative within the medical community as a whole. While some herbal therapies are

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Proponents of evidence-based medicine, such as the Cochrane Collaboration, use the term alternative medicine but agree that all treatments, whether "mainstream" or "alternative", ought to be held to the

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The United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using

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## 845 Interactions with conventional pharmaceuticals - Alternative medicine

### Interactions with conventional pharmaceuticals

<http://www.vifab.dk/uk/cochrane+and+alternative+>

Some forms of alternative medicine, that are biologically active, can be dangerous. Even when used in conjunction with conventional medicine.

Examples include:

- 1 immuno-augmentation therapy
- 2 shark cartilage
- 3 bioresonance therapy
- 4 oxygen and ozone therapies
- 5 insulin potentiation therapy

There are even herbal remedies that can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among

An example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention that she had been taking "natural" potions to "build up her strength" before the

To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly [sic] there's the cynicism, disappointment and depression that some patients get from going on from one alternative medicine to the next. They find after three months the placebo effect wears off. They're disappointed and disillusioned and move on to the next. The patient's disappointment can create depression and make the eventual treatment with anything effective difficult. This is due to the fact that the therapist or doctor

#### *Potential side-effects*

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing at all. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the *appeal to nature fallacy*, i.e. "that which is natural cannot be harmful". An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be

#### *Treatment delay*

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the opportunity to obtain treatments that could be more helpful. In short, even

Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use

#### *Unconventional cancer "cures"*

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centers and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many

#### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

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#### **846 Integrative medicine, complementary medicine, fringe medicine (Alternative medicine)**

Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (and updated monthly) are made available at ViFABs (Knowledge and Research Centre for Alternative Medicines) home page, see the lists here:

#### *8 Integrative medicine, complementary medicine, fringe medicine*

##### **Integrative medicine, complementary medicine, fringe medicine**

<http://www.vifab.dk/uk/cochrane+and+alternative+>

Integrative medicine is the combination of the practices and methods of alternative/complementary medicine with conventional medicine. It may include preventive medicine and patient-centred medicine. It may also include practices not normally referred to as medicine, such as using prayer, meditation, socializing, and recreation as therapies. Its academic proponents sometimes recommend misleading patients by using known placebo treatments in order to achieve a placebo effect. However, a 2010 survey of family physicians found that 56% of respondents said they had used a placebo in clinical practice as well. Eighty-five percent of respondents believed placebos can have both psychological and physical benefits. A criticism of integrative medicine includes about proposing to lie to patients about alternative medicines known to be no more than a placebo in order to achieve a placebo effect, and "diverting research time, money, and other resources from more fruitful lines of investigation in order to pursue a theory that has not been tested." "Quackademic medicine" is a pejorative term used for "integrative medicine", when considered to be an infiltration of quackery into academic science-based medicine, and was picked up by science-based medicine anti-

#### *History*

Fueled by a nationwide survey published in 1993 by David Eisenberg, which revealed that in 1990 approximately 60 million Americans had used one or more complementary or alternative therapy to address health issues. A study published in the November 11, 1998 issue of the Journal of the American Medical Association reported that 42% of Americans had used complementary and alternative therapies, up from 34% in 1990. However, despite the growth in patient demand for complementary medicine, most of

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## Appeal

A study published in 1998 indicates that a majority of alternative medicine use was in conjunction with standard medical treatments. Approximately 4.4 percent of those studied used alternative medicine as a replacement for conventional medicine. The research found that those having used alternative medicine tended to have higher education or report poorer health status. Dissatisfaction with conventional medicine was not a meaningful factor in the choice, but rather the majority of alternative medicine users appear to do so because "they find these healthcare alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life." In particular, subjects reported a holistic orientation to health, a transformational experience that changed their worldview, identification with a number of groups committed to environmentalism, feminism, psychology, and/or spirituality and personal growth, or that they

Authors have speculated on the socio-cultural and psychological reasons for the appeal of alternative medicines among that minority using them in lieu of conventional medicine. There are several socio-cultural reasons for the interest in these treatments centered on the low level of scientific literacy among the public at large and a concomitant increase in antiscientific attitudes and new age mysticism. Related to this are vigorous marketing of

There is also an increase in conspiracy theories toward conventional medicine and pharmaceutical companies, mistrust of traditional authority figures, such as the physician, and a dislike of the current delivery methods of scientific biomedicine, all of which have led patients to seek out alternative medicine to treat a variety of ailments. Many patients lack access to contemporary medicine, due to a lack of private or public health insurance, which leads them to seek out lower-cost alternative medicine.

Medical doctors are also aggressively marketing alternative medicine to In addition to the social-cultural underpinnings of the popularity of alternative medicine, there are several psychological issues that are critical to its growth. One of the most critical is the placebo effect, which is a well-established observation in medicine. Related to it are similar psychological effects such as the will to believe, cognitive biases that help maintain self-

Patients can also be averse to the painful, unpleasant, and sometimes-dangerous side effects of biomedical treatments. Treatments for severe diseases such as cancer and HIV infection have well-known, significant side-effects. Even low-risk medications such as antibiotics can have potential to cause life-threatening anaphylactic reactions in a very few individuals. Also, many medications may cause minor but bothersome symptoms such as cough or upset stomach. In all of these cases, patients may be seeking out

Schofield et al., in a systematic review published in 2011, make ten recommendations which they think may increase the effectiveness of consultations in a conventional (here: oncology) setting, such as "Ask questions about CAM use at critical points in the illness trajectory"; "Respond to the person's emotional state"; and "Provide balanced, evidence-based advice". They suggest that this approach may address "... concerns

CAM's popularity may be related to other factors which Edzard Ernst mentions in an interview in *The Independent*:

Why is it so popular, then? Ernst blames the providers, customers and the doctors whose neglect, he says, has created the opening into which alternative therapists have stepped. "People are told lies. There are 40 million websites and 39.9 million tell lies, sometimes outrageous lies. They mislead cancer patients, who are encouraged not only to pay their last penny but to be treated with something that shortens their lives." At the same time, people are gullible. It needs gullibility for the industry to succeed. It doesn't

In a paper published in October 2010 entitled *The public's enthusiasm for complementary and alternative medicine amounts to a critique of mainstream medicine*, Ernst describes these views *in greater detail and*

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### Academic resources

Cochrane and alternative medicine (full lists of updated reviews found on Knowledge and Research Centre for Alternative Medicine)

### See also

Alternative cancer treatments  
Health freedom movement  
History of alternative medicine  
List of branches of alternative medicine  
Program for Evaluating Complementary Medicine  
Shakoor v Situ  
Traditional medicine  
Folk medicine

48

156 *10 Usage*

157 **Usage**

158 *Further information: List of branches of alternative medicine*

Age-adjusted percent of adults who have used complementary and alternative medicine: United States, 2002

A 2011 multi-National systematic review concluded that about 40% of cancer patients use some form of complementary and alternative medicine. Alternative medicine varies from country to country. Jurisdictions where alternative medical practices are sufficiently widespread may license and regulate them. Edzard Ernst said that in Austria and Germany complementary and alternative medicine is mainly in the hands of physicians, while some estimates suggest that at least half of American alternative practitioners are physicians. In Germany, both are false. Many people utilize mainstream medicine for diagnosis and basic information, while turning to alternatives for therapy or health-enhancing measures. Studies indicate that alternative approaches are often used in conjunction with conventional medicine. This is referred to by NCCAM as integrative (or integrated) medicine because it "combines treatments from conventional medicine and CAM for which there is high-quality evidence of safety and effectiveness." According to Andrew T. Weil M.D., a leading proponent of integrative medicine, the principles of integrative medicine include: appropriate use of conventional and CAM methods; patient participation; promotion of health as well as treatment of disease; and a A 1997 survey found that 13.7% of respondents in the United States sought the services of both a medical doctor and an alternative medicine practitioner. The same survey found that 96% of respondents who sought the services of an alternative medicine practitioner also sought the services of a medical doctor in the past 12 months. Medical doctors are often unaware of their patient's use of alternative medical treatments as only 38.5% of the Edzard Ernst, Professor of Complementary Medicine at the University of Exeter, wrote in the Medical Journal of Australia that "about half the general population in developed countries use complementary and alternative medicine (CAM)." Survey results released in May 2004 by the National Center for Complementary and Alternative Medicine, part of the United States National Institutes of Health, found that in 2002 62.1% of adults in the country had used some form of CAM in the past 12 months and 75% across lifespan (though these figure drop to 36.0% and 50% if prayer

A British telephone survey by the BBC of 1209 adults in 1998 showed that around 20% of adults in Britain used alternative medicine in the past 12 months. Ernst was also active politically on this issue, publicly requesting that Prince Charles recall two guides to alternative medicine published by the Foundation for Integrated Health, on the grounds that "they both contain numerous misleading and inaccurate claims concerning the benefits of alternative medicine" and that "the nation cannot be served by promoting

The use of alternative medicine in developed countries appeared to increase. A 1998 study showed that the use of alternative medicine rose from 33.8% in 1990 to 42.1% in 1997. In the United Kingdom, a 2000 report ordered by the House of Lords suggested that "...limited data seemed to support the idea that CAM use in the United Kingdom was high and on the increase." In developing nations, access to essential medicines was severely restricted by lack of resources and poverty. Traditional remedies, often closely resembling or forming the basis for alternative remedies, may comprise primary healthcare or be integrated into the healthcare system. In Africa, traditional

Advocates of alternative medicine held that the various alternative treatment methods were effective in treating a wide range of major and minor medical conditions, and that published research (such as Michalsen, 2003, Gonsalkorale 2003, and Berga 2003) proved the effectiveness of specific alternative treatments. They asserted that a PubMed search revealed over 370,000 research papers classified as alternative medicine published in *Medline recognized journals since 1966 in the National Library of Medicine*. Complementary therapies were often used in palliative care or by practitioners who attempted to manage chronic pain in patients. Complementary medicine was considered more acceptable in the interdisciplinary approach used in palliative care than in other areas of medicine. "From its early experiences of care for the dying, palliative care took for granted the necessity of placing patient values and lifestyle habits at the core of any design and delivery of quality care at the end of life. If the patient desired complementary therapies, and as long as such treatments provided additional support and did not endanger the patient, they were considered acceptable." *The non-pharmacologic interventions of* Physicians who practice complementary medicine usually discuss and advise patients as to available complementary therapies. Patients often express interest in mind-body complementary therapies because they offer a non-drug approach to treating various health conditions. Some mind-body techniques, such as cognitive-behavioral therapy, were once considered complementary medicine, but are now a part of conventional medicine in the United States. "Complementary medicine treatments used for pain include: Acupuncture, Low-level Laser Therapy, Meditation, Aromatherapy, Chinese Medicine, Dance Therapy, Music Therapy, Massage, Herbalism, Therapeutic

In defining complementary medicine in the UK, the House of Lords Select Committee determined that the following therapies were the most often used to complement conventional medicine: Alexander Technique, Aromatherapy, Bach and other Flower Remedies, Body Work Therapies including Massage, Counsel Stress Therapies, Hypnotherapy, Meditation,

### **United States**

A 2002 survey of US adults 18 years and older conducted by the National Center for Health Statistics (CDC) and the National Center for

74.6% had used some form of complementary and alternative medicine (CAM)

62.1% had done so within the preceding twelve months.

When prayer specifically for health reasons is excluded, these figures fall to 49.8% and 36.0%, respectively.

45.2% had in the last twelve months used prayer for health reasons, either through praying for their own health or through others praying for them.

54.9% used CAM in conjunction with conventional medicine.

14.8% "sought care from a licensed or certified" practitioner, suggesting that "most individuals who use CAM prefer to treat themselves."

The Dietary Supplement Industry is expected to be \$250 Billion by 2016

Most people used CAM to treat and/or prevent musculoskeletal conditions or other conditions associated with chronic or recurring pain.

"Women were more likely than men to use CAM. The largest sex differential is seen in the use of mind-body therapies including prayer specifically for

"Except for the groups of therapies that included prayer specifically for health reasons, use of CAM increased as education levels increased".

The most common CAM therapies used in the US in 2002 were prayer (45.2%), herbalism (18.9%), breathing meditation (11.6%), meditation (7.6%), chiropractic medicine (7.5%), yoga (5.1%), body work (5.0%), diet-based therapy (3.5%), progressive relaxation (3.0%), mega-vitamin therapy

In 2004, a survey of nearly 1,400 U.S. hospitals found that more than one in four offered alternative and complementary therapies such as acupuncture.

A 2008 survey of US hospitals by Health Forum, a subsidiary of the American Hospital Association, found that more than 37 percent of responding hospitals indicated that they offer one or more alternative medicine therapies, up from 26.5 percent in 2005. Additionally, hospitals in the southern Atlantic states were most likely to include CAM, followed by east north central states and those in the middle Atlantic. More than 70% of

In 2011 the Millennium Cohort Study (United States) found that 39% of the then currently enrolled 44,287 cohort members reported using at least one

The National Science Foundation had also conducted surveys of the popularity of alternative medicine. After describing the negative impact that science fiction in the media had on public attitudes and understandings of pseudoscience, and defining alternative medicine as all treatments that have not been proven effective using scientific methods, as well as mentioning the concerns of individual scientists, organizations, and members of the science policymaking community, it commented that "nevertheless, the popularity of

In the state of Texas, physicians may be partially protected from charges of unprofessional conduct or failure to practice medicine in an acceptable manner, and thus from disciplinary action, when they prescribe alternative medicine in a complementary manner, if board specific practice requirements are satisfied and the therapies utilized do not present "a safety risk for the patient that is unreasonably greater than the conventional

#### *Denmark*

45.2% of the Danish population aged 16 or above had in 2005 used alternative medicine at some point in life. 22.5% had used alternative

The most popular types of therapies within the previous year (2005) are:

Massage, osteopathy or other manipulative techniques (13.2 percent)

Reflexology (6.1 percent)

Acupuncture (5.4 percent)

More results of statistical surveys on alternative medicine in Denmark is available on ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the pages on Statistics:

<http://www.vifab.dk/uk/alternative+medicine/statist>

#### *Use among medical students*

68% of the medical students in Denmark were in 2008 using or had used alternative therapies:

The *most commonly used types of alternative medicine were:*

Herbal medicines and Dietary supplements (50 percent)

Acupuncture (18 percent)

Reflexology (18 percent).

### **844 Regulation - Alternative medicine**

#### *4 Regulation*

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

Because of the uncertain nature of various alternative therapies and the wide variety of claims different practitioners make, alternative medicine has been a source of vigorous debate, even over the definition of alternative medicine. Dietary supplements, their ingredients, safety, and claims, are a continual source of controversy. In some cases, political issues, mainstream medicine and alternative medicine all collide, such as in cases where synthetic drugs are legal but the herbal sources of the same active chemical are banned. In other cases, controversy over mainstream medicine causes questions about the nature of a treatment, such as water fluoridation. Alternative medicine and mainstream medicine debates can also spill over into freedom of religion discussions, such as the right to decline lifesaving treatment for one's children because of religious beliefs. Government regulators continue to struggle with the issue. Jurisdiction differs concerning which branches of alternative medicine are legal, which are regulated, and which (if any) are provided by a government-controlled health service or reimbursed by a private health medical insurance company. The United Nations Committee on Economic, Social and Cultural Rights – article 34 (Specific legal obligations) of the General Comment No. 14 (2001) states that states have obligations to respect, protect, and fulfill the right to the highest attainable standard of health. Furthermore, obligations to respect include a State's obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines, from marketing unsafe drugs and from applying coercive medical treatments, unless on an exceptional basis for the treatment of

Specific implementations of this article are left to member states.

A number of alternative medicine advocates disagree with the restrictions of government agencies that approve medical treatments. In the United States, for example, critics say that the Food and Drug Administration's criteria for experimental evaluation methods impedes those seeking to bring useful and effective treatments and approaches to the public, and that their contributions and discoveries are unfairly dismissed, overlooked or suppressed. Alternative medicine providers recognize that health fraud occurs, and argue that it should be dealt with appropriately when it does, but not by restricting access to alternative medicine. In New Zealand, alternative medicine products are classified as food products, so there are no regulations or safety standards in place. In Australia, the topic is termed as complementary medicine and the Therapeutic Goods Administration has issued various guidances and standards. Australian regulatory guidelines for complementary medicines (ARGCM) demands that the pesticides, fumigants, toxic metals, microbial toxins, radionuclides, and microbial contaminations present in herbal substances should be monitored, although the guidance does not request for the evidences of these traits. However, for the herbal substances in New Zealand, the production of modern pharmaceuticals is strictly regulated to ensure that medicines contain a standardized quantity of active ingredients and are free from contamination. Alternative medicine products are not subject to the same governmental quality control standards, and consistency between doses can vary. This leads to uncertainty in the chemical content and biological activity of individual doses. This lack of oversight means that alternative health products are vulnerable to adulteration and contamination. This problem is magnified by international commerce, since different countries have different regulatory standards.

#### *Denmark:*

Herbal and dietary supplements is the designation of a range of products, which have in common their status as medicine belonging under the Danish Medicines Act. In the Danish Medicines Act exists four types of herbal and dietary supplements: Herbal medicinal products, Strong vitamin and mineral preparations, Traditional botanical medicinal products and Homeopathic medicinal products. Some dietary supplements fall within a special category of products, which differ from the above as they are not authorized medicinal products. Dietary supplements are regulated under the Food Act.

*Alternative therapists*

Denmark has a registration system for alternative therapy practitioners, RAB.

#### *5 Education*

*The examples and perspective in this section may not represent a worldwide view of the subject.*

In the United States, increasing numbers of medical colleges started offering courses in alternative and complementary medicine. A 1998 study reported "There is tremendous heterogeneity and diversity in content, format, and requirements among courses in complementary and alternative medicine at US medical schools". Common topics included chiropractic, acupuncture, homeopathy, herbal therapies, and mind-body techniques. In three separate research surveys that surveyed 729 schools (125 medical schools offering a Doctor of Medicine degree (M.D.), 25 medical schools offering a Doctor of Osteopathic Medicine degree (D.O.), and 585 schools offering a nursing degree), 60% of the medical schools, 95% of osteopathic medical schools and 84.8% of the nursing schools teach some form of CAM. The University of Arizona College of Medicine offers a program in Integrative Medicine under the leadership of Andrew Weil that trains physicians in various branches of alternative medicine that "neither rejects conventional (See [Naturopathic medical school in North America](#)).

A 2001 survey of European universities found that unconventional medicine courses are widely represented at European universities. They cover a wide range of therapies and many are used clinically. Research work is underway at several faculties. A 2006 survey showed that 40% of the responding European universities offered some form of CAM training. "Universities in the United Kingdom dropped their degree courses in alternative medicine, and as of 2012, no more degrees were offered in such courses as homeopathy, naturopathy, and reflexology.

## 6 Criticism

The NCCAM budget has been criticized because, despite the duration and intensity of studies to measure the efficacy of alternative medicine, according to the QuackWatch website there has been no effective CAM treatments supported by scientific evidence since 2002. Despite this, the National Center for Complementary and Alternative Medicine budget showed a sharp rise to support complementary medicine. In fact, the whole CAM field has been called the SCAM by critics. Speaking of government funding studies of integrating alternative medicine techniques into the mainstream, Steven Novella, a neurologist at Yale School of Medicine wrote that it "is used to lend an appearance of legitimacy to treatments that are not legitimate." Marcia Angell, former Speaking of ethics, in November 2011 Edzard Ernst stated that the "level of misinformation about alternative medicine has now reached the point where it has become dangerous and unethical. So far, alternative medicine has remained an ethics-free zone. It is time to change this."

## Alternative and evidence-based medicine

### 7 Alternative and evidence-based medicine

#### *Efficacy*

As of 2005, the Cochrane Library had 145 CAM-related Cochrane systematic reviews and 340 non-Cochrane systematic reviews. An analysis of the conclusions of only the 145 Cochrane reviews was done by two readers. In 83% of the cases, the readers agreed. In the 17% in which they disagreed, a third reader agreed with one of the initial readers to set a rating. These studies found that, for CAM, 38.4% concluded positive effect or possibly positive (12.4%) effect, 4.8% concluded no effect, 0.69% concluded harmful effect, and 56.6% concluded insufficient evidence. An assessment of conventional treatments found that 41.3% concluded positive or possibly positive effect, 20% concluded no effect, 8.1% concluded net harmful effects, and 21.3% concluded insufficient evidence. However, the Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (updated monthly) are made available at ViFABs (Knowledge and Research Center for Alternative Medicines)

<http://www.vifab.dk/uk/cochrane+and+alternative+>

Most alternative medical treatments are not patentable, which may lead to less research funding from the private sector. In addition, in most countries, alternative treatments (in contrast to pharmaceuticals) can be marketed without any proof of efficacy—also a disincentive for manufacturers to fund scientific research. Some have proposed adopting a prize system to reward medical research. However, public funding for research exists. Increasing the funding for research on alternative medicine techniques is the purpose of the US National Centre for Complementary and Alternative Medicine. NCCAM and its predecessor, the Office of Alternative Medicine, have spent more than \$2.5 billion on such research since 1992; this research hasn't. Some sceptics of alternative practices say that a person may attribute symptomatic relief to an otherwise-ineffective therapy due to the placebo effect, the natural recovery from or the cyclical nature of an illness (the regression fallacy), or the possibility that the person never originally had a ...

In the same way as for conventional therapies, drugs, and interventions, it can be difficult to test the efficacy of alternative medicine in clinical trials. In instances where an established, effective, treatment for a condition is already available, the Helsinki Declaration states that withholding such treatment is unethical in most circumstances. Use of standard-of-care

Cancer researcher Andrew J. Vickers stated:

Contrary to much popular and scientific writing, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have shown to be ineffective. In this article, clinical trial data on a number of alternative cancer cures including Livingston-Wheeler, Di Bella Multitherapy, antineoplastons, vitamin C, hydrazine sulfate, Laetrile, and psychotherapy are reviewed. The label "unproven" is inappropriate for such

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### **Safety**

*See also: List of herbs with known adverse effects*

#### *Adequacy of Regulation and CAM Safety*

One of the commonly voiced concerns about complementary alternative medicine (CAM) is the manner in which it is regulated. In the last 2 years there have been significant developments in how CAMs should be assessed prior to re-sale in the United Kingdom and the European Union (EU). Despite this, it has been suggested that current regulatory bodies have been ineffective in preventing deception of patients as many companies have re-labelled their drugs to avoid the new laws. There is no general consensus about how to balance consumer protection (from false claims, toxicity, and ...)

Advocates of CAM suggest that regulation of the industry will adversely affect patients looking for alternative ways to manage their symptoms, even if many of the benefits may represent the placebo effect. Some contend that alternative medicines should not require any more regulation than over-the-

#### *Interactions with conventional pharmaceuticals*

<http://www.vifab.dk/uk/cochrane+and+alternative+>

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine. Examples include immuno-augmentation therapy, shark cartilage, bioresonance therapy, oxygen and ozone therapies, insulin potentiation therapy. Some herbal remedies can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among other problems. An anecdotal example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention ...

To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly there's the cynicism and disappointment and depression that some patients get from going on from one alternative medicine to the next, and they find after three months the placebo effect wears off, and they're disappointed and they move on to the next one, and they're disappointed and disillusioned, and that can create depression and make the eventual treatment of the patient with anything effective difficult, because you may

#### *Potential side-effects*

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have the potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the appeal to nature fallacy, i.e. "that which is natural cannot be harmful". An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be

#### *Treatment delay*

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the opportunity to obtain treatments that could be more helpful. In short, even Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use

#### *Unconventional cancer "cures"*

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centres and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many

#### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

#### **Academic resources**

Cochrane and alternative medicine (full lists of updated reviews found on Knowledge and Research Center for Alternative Medicine)

#### **See also**

Alternative cancer treatments

Health freedom movement  
History of alternative medicine  
List of branches of alternative medicine  
Program for Evaluating Complementary Medicine  
Shakoor v Situ  
Traditional medicine  
Folk medicine

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**15** *Some of the alternative therapies studied with grants from NIH*

Some of the alternative therapies studied with grants from NIH

*Acupuncture* to treat depression, attention-deficit hyperactivity disorder, osteoarthritis, and postoperative dental pain.

*Ayurvedic herbs* for Parkinson's disease. (Ayurvedic medicine is a holistic system, based on the belief that herbs, massage, and other stress

*Biofeedback* for diabetes, low back pain, and face and mouth pain caused by jaw disorders. (Biofeedback is the conscious control of biological functions such as those of the heart and blood vessels normally controlled

*Electric currents* to treat tumors.

*Hypnosis* for chronic low back pain and accelerated fracture healing.

*Imagery* for asthma and breast cancer. (With imagery, patients are guided to see themselves in a different physical, emotional or spiritual state. For example, patients might be guided to imagine themselves in a state of

**7** *390 empty*

**See also**

*Alternative cancer treatments*

*Health freedom movement*

*History of alternative medicine*

*List of branches of alternative medicine*

*Program for Evaluating Complementary Medicine*

*Shakoor v Situ*

*Traditional medicine*

*Folk medicine*

**8** *124 empty*

**10** *157 empty*

**Complementary and alternative medicine** By *Mayo Clinic staff*

<http://www.mayoclinic.com/health/alternative->

*Complementary and alternative medicine* has never been more popular. Nearly 40 percent of adults report using complementary and alternative medicine, also called CAM for short. Doctors are embracing CAM therapies, too, often combining them with mainstream medical therapies — spawning the new term "integrative medicine." But what is CAM? This guide explains

*What are some examples of complementary and alternative medicine?*

Exactly what's considered complementary and alternative medicine changes constantly as treatments undergo testing and move into the mainstream. To make sense of the many therapies available, it helps to look at how they're classified by the National Center for Complementary and Alternative Medicine (NCCAM), the agency that funds *scientific research on*

*Whole medical systems*

A system isn't just a single practice or remedy — such as massage — but many practices that center on a philosophy, such as the power of nature or

*Examples of whole medical systems include:*

*Ancient healing systems* . These healing systems arose long before conventional Western medicine and include ayurveda from India and

*Homeopathy* . This approach uses minute doses of a substance that causes symptoms to stimulate the body's self-healing response.

*Naturopathy*. This approach focuses on noninvasive treatments to help your body do its own healing and uses a variety of practices, such as massage, acupuncture, herbal remedies, exercise and lifestyle counseling.

*Mind-body medicine*

*Mind-body techniques*

*Mind-body techniques* strengthen the communication between your mind and your body. Complementary and alternative medicine practitioners say these two systems must be in harmony for you to stay healthy. Examples of mind-body connection techniques include meditation, prayer, and relaxation

*Biologically based practices*

*Examples* include dietary supplements and herbal remedies. These treatments use ingredients found in nature. Examples of herbs include ginseng, ginkgo and echinacea, while examples of other dietary supplements include selenium, glucosamine sulfate and SAME. Herbs and supplements

<http://nihseniorhealth.gov/cam/wholemedicalsyste>

*Complementary and Alternative Medicine (CAM)*

*Whole Medical Systems*

*Whole medical systems* are built upon complete systems of theory and practice. Often, these systems have evolved apart from, and earlier than, the standard medical approach used in the United States. Examples of whole medical systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurvedic medicine. Examples of systems

#### *Traditional Chinese Medicine (TCM)*

*Traditional Chinese medicine, or TCM*, is a healing system that dates back more than 5,000 years. It is based on the concept that disease results from disruption in the flow of vital energy, or qi (pronounced "chee") in the body. The flow of qi is maintained by keeping a balance in the two forces known as yin and yang. TCM uses specific principles to analyze symptoms—such as cold/heat, interior/exterior, excess/deficiency, and yin yang; and the

*TCM* uses a number of therapeutic approaches such as acupuncture and moxibustion, herbs and other natural products, and massage.

#### *Acupuncture, Moxibustion and Herbs*

*Acupuncture* is the stimulation of specific points on the body by a variety of techniques, including the insertion of thin metal needles through the skin. It is intended to remove blockages in the flow of qi and restore and maintain

*Moxibustion* is the application of heat from the burning of a herb (usually mugwort) at the acupuncture point.

*Herbs and other natural products* in TCM are usually used together in formulas to fit a person's specific condition.

#### *Ayurvedic Medicine*

*Ayurveda* (pronounced "i-yer-vay-duh"), which means "the science of life" in Sanskrit, originated in India and evolved there over thousands of years. Its goal is to prevent disease and promote well-being by bringing the body, mind, and spirit into balance. Ayurveda also proposes treatments for specific

*Three types of energy* called doshas are believed to form important characteristics of each person's body constitution and to control bodily activities. Imbalances in the doshas, which can be caused by an unhealthy lifestyle, diet, too little or too much mental or physical exertion, the weather,

*Ayurvedic medicine* relies on therapies such as diet, exercise, meditation, herbs, massage, cleansing, exposure to sunlight, and controlled breathing. The goals of treatment are to eliminate impurities, reduce symptoms, reduce worry, increase harmony in a person's life, and increase resistance to disease.

#### *Homeopathy*

*Homeopathy* originated in Europe and has been practiced in the United States since the early 19th century. Its goal is to help the body heal itself by using very small doses of highly diluted substances that in larger doses would produce illness or symptoms. Most homeopathic remedies are derived

A *homeopathic practitioner* selects treatments based upon a total picture of a person's health and evaluates not only physical symptoms but the emotions, psychological state, body type, genetic and personal health history, and other aspects. In homeopathy, different people with the same

#### *Naturopathy*

Like homeopathy, naturopathy originated in Europe, but it also includes ancient and modern therapies from other traditions. Naturopathy attempts to help the body heal itself, and naturopaths consider a person's physical, emotional, genetic, environmental, and social circumstances when evaluating treatment. The emphasis is on supporting health rather than

*Practitioners of naturopathy* prefer to use treatment approaches that they consider **to be the most** natural and least invasive, relying on methods other than standard medications and surgery. They focus on changes in diet and lifestyle and on preventing disease, together with CAM therapies such as

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### **777 What Is Complementary and Alternative Medicine**

#### **What Is Complementary and Alternative Medicine?**

<http://nccam.nih.gov/health/whatiscam>

#### **Introduction**

This fact sheet presents an overview of CAM, types of CAM, summary information on safety and regulation, the mission of the National Center for Complementary and Alternative Medicine (NCCAM), and additional

#### *Defining CAM*

Defining CAM is difficult, because the field is very broad and constantly changing. NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. Conventional medicine (also called Western or allopathic medicine) is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and registered nurses. The boundaries between CAM and conventional medicine

"*Complementary medicine*" refers to use of CAM together with conventional medicine, such as using acupuncture in addition to usual care to help lessen pain. Most use of CAM by Americans is complementary. "Alternative medicine" refers to use of CAM in place of conventional medicine. "*Integrative medicine*" combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness. It is also called integrated medicine.

CAM practices are often grouped into broad categories, such as natural products, mind and body medicine, and manipulative and body-based practices. Although these categories are not formally defined, they are useful

### *Natural Products*

This area of CAM includes use of a variety of herbal medicines (also known as botanicals), vitamins, minerals, and other "natural products." Many are sold over the counter as dietary supplements. (Some uses of dietary supplements—e.g., taking a multivitamin to meet minimum daily nutritional requirements or taking calcium to promote bone health—are not thought of

CAM "natural products" also include probiotics—live microorganisms (usually bacteria) that are similar to microorganisms normally found in the human digestive tract and that may have beneficial effects. Probiotics are available in foods (e.g., yogurts) or as dietary supplements. They are not the same thing as prebiotics—nondigestible food ingredients that selectively

*Historical note: Herbal or botanical medicines* reflect some of the first attempts to improve the human condition. The personal effects of the mummified prehistoric "ice man" found in the Italian Alps in 1991 included medicinal herbs. By the Middle Ages, thousands of botanical products had

*Current use:* Interest in and use of CAM natural products have grown considerably in the past few decades. The 2007 NHIS found that 17.7 percent of American adults had used a nonvitamin/nonmineral natural product. These products were the most popular form of CAM among both adults and children. The most commonly used product among adults was fish oil/omega 3s (reported by 37.4 percent of all adults who said they used

### *Mind and Body Medicine*

*Mind and body practices* focus on the interactions among the brain, mind, body, and behavior, with the intent to use the mind to affect physical functioning and promote health. Many CAM practices embody this

*Meditation techniques* include specific postures, focused attention, or an open attitude toward distractions. People use meditation to increase calmness and relaxation, improve psychological balance, cope with illness,

The various styles of *yoga* used for health purposes typically combine physical postures, breathing techniques, and meditation or relaxation. People use yoga as part of a general health regimen, and also for a variety of health

*Acupuncture* is a family of procedures involving the stimulation of specific points on the body using a variety of techniques, such as penetrating the skin with needles that are then manipulated by hand or by electrical stimulation. It is one of the key components of traditional Chinese medicine, and is

*Other examples of mind and body practices* include deep-breathing exercises, guided imagery, hypnotherapy, progressive relaxation, qi gong,

*Historical note:* The concept that the mind is important in the treatment of illness is integral to the healing approaches of traditional Chinese medicine and Ayurvedic medicine, dating back more than 2,000 years. Hippocrates also noted the moral and spiritual aspects of healing and believed that treatment could occur only with consideration of attitude, environmental

*Current use:* Several mind and body approaches ranked among the top 10 CAM practices reported by adults in the 2007 NHIS. For example, the survey found that 12.7 percent of adults had used deep-breathing exercises, 9.4 percent had practiced meditation, and 6.1 percent had practiced yoga; use of these three CAM practices had increased significantly since the previous (2002) NHIS. Progressive relaxation and guided imagery were also among the top 10 CAM therapies for adults; deep breathing and yoga ranked

1 *Acupuncture* is considered to be a part of mind and body medicine, but it is also a component of energy medicine, manipulative and body-based

#### *Manipulative and Body-Based Practices*

Manipulative and body-based practices focus primarily on the structures and systems of the body, including the bones and joints, soft tissues, and circulatory and lymphatic systems. *Two commonly used therapies fall*

*Spinal manipulation* is practiced by health care professionals such as chiropractors, osteopathic physicians, naturopathic physicians, physical therapists, and some medical doctors. Practitioners perform spinal manipulation by using their hands or a device to apply a controlled force to a joint of the spine. The amount of force applied depends on the form of manipulation used. The goal of the treatment is to relieve pain and improve physical functioning. Spinal manipulation is among the treatment options used by people with low-back pain—a very common condition that can be The term massage therapy encompasses many different techniques. In general, therapists press, rub, and otherwise manipulate the muscles and other soft tissues of the body. People use massage for a variety of health-related purposes, including to relieve pain, rehabilitate sports injuries,

*Historical note:* Spinal manipulation has been used since the time of the ancient Greeks and was incorporated into chiropractic and osteopathic medicine in the late 19th century. Massage therapy dates back thousands of years. References to massage appear in writings from ancient China, Japan, India, Arabic nations, Egypt, Greece (Hippocrates defined medicine as "the

*Current use:* According to the 2007 NHIS, chiropractic/osteopathic manipulation and massage ranked in the top 10 CAM therapies among both adults and children. The survey found that 8.6 percent of adults and 2.8 percent of children had used chiropractic or osteopathic manipulation, and

#### *Other CAM Practices*

CAM also encompasses movement therapies—a broad range of Eastern and Western movement-based approaches used to promote physical, mental, emotional, and spiritual well-being. Examples include Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration. According to the 2007 NHIS, 1.5 percent of

*Practices of traditional healers* can also be considered a form of CAM. Traditional healers use methods based on indigenous theories, beliefs, and experiences handed down from generation to generation. A familiar example in the United States is the Native American healer/medicine man. The 2007 NHIS found that 0.4 percent of adults and 1.1 percent of children had used a traditional healer (more varied for the seven specific types of healers

Some CAM practices involve *manipulation of various energy fields* to affect health. Such fields may be characterized as veritable (measurable) or putative (yet to be measured). Practices based on veritable forms of energy include those involving electromagnetic fields (e.g., magnet therapy and light therapy). Practices based on putative energy fields (also called biofields) generally reflect the concept that human beings are infused with subtle forms of energy; qi gong, Reiki, and healing touch are examples of such practices. The 2007 NHIS found relatively low use of putative energy therapies. Only 0.5 percent of adults and 0.2 percent of children had used

Finally, whole medical systems, which are complete systems of *theory and practice that have evolved* over time in different cultures and apart from conventional or Western medicine, may be considered CAM. Examples of ancient whole medical systems include Ayurvedic medicine and traditional Chinese medicine. More modern systems that have developed in the past few centuries include homeopathy and naturopathy. The 2007 NHIS asked about the use of Ayurveda, homeopathy, and naturopathy. Although relatively few respondents said they had used Ayurveda or naturopathy, homeopathy ranked 10th in usage among adults (1.8 percent) and 5th among children

#### *A Note About Safety and Effectiveness*

Rigorous, well-designed clinical trials for many CAM therapies are often lacking; therefore, the safety and effectiveness of many CAM therapies are uncertain. NCCAM is sponsoring research designed to fill this knowledge gap by building a scientific evidence base about CAM therapies—whether they are safe; and whether they work for the conditions for which people use

As with any medical treatment, there can be risks with CAM therapies.

*These general precautions can help to minimize risks:*

*Select CAM practitioners with care.* Find out about the practitioner's training and experience

Be aware that some dietary supplements may interact with medications or other supplements, may have side effects of their own, or may contain potentially harmful ingredients not listed on the label. Also keep in mind that most supplements have not been tested in pregnant women, nursing

*Tell all your health care providers about any complementary and alternative practices you use.* Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's

*NCCAM's Role*

NCCAM's mission is to define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care. NCCAM achieves its mission through basic, translational ("bench-to-bedside"), and

*Be an Informed Consumer:* Information

*Resources From NCCAM*

The Health Information page of the NCCAM Web site provides access to a variety of information on CAM, as well as links to other National Institutes of Health (NIH) resources. *Materials include:*

*Fact sheets designed to help you think about the issues involved in deciding whether to use CAM.*

Are You Considering CAM?

CAM Use and Children

Evaluating Web-Based Health Resources

Paying for CAM Treatment

Selecting a CAM Practitioner

Tips for Talking With Your Health Care Providers About CAM

Using Dietary Supplements Wisely

Fact sheets on specific CAM therapies (e.g., Yoga for Health: An Introduction) and on CAM for specific health conditions (e.g., CAM and Hepatitis C: A Focus on Herbal Supplements)—including information on safety, the status of evidence-based research on effectiveness, and points to

*Herbs at a Glance:* Information on more than 40 of the most common herbs in popular dietary supplements. Available in a booklet and in individual fact

*A Note About Government Regulation*

Dietary Supplements

The Federal Government regulates dietary supplements primarily through the U.S. Food and Drug Administration (FDA). The regulations for dietary supplements are not the same as those for prescription or over-the-counter drugs. In general, the regulations for dietary supplements are less strict; for example, a manufacturer does not have to prove the safety and effectiveness of a dietary supplement before it is marketed. Once a dietary supplement is on the market, the FDA monitors safety and product information (label

*Practitioner-Based Therapies*

There is no standardized, national system for credentialing CAM practitioners. The extent and type of credentialing vary widely from state to state and from one CAM profession to another. For example, some CAM professions (e.g., chiropractic) are licensed in all or most states, although specific requirements for training, testing, and continuing education vary;

*For More Information*

NCCAM Clearinghouse



Last Updated:

Jul-11

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**764 What Is Complementary and Alternative Medicine ...**<http://nccam.nih.gov/health/whatiscam>*What Is Complementary and Alternative Medicine?**On this page:*

Defining CAM

Types of CAM

A Note About Safety and Effectiveness

NCCAM's Role

*Be an Informed Consumer:* Information Resources From NCCAM

A Note About Government Regulation

For More Information

Introduction

Many Americans use complementary and alternative medicine (CAM) in pursuit of health and well-being. The 2007 National Health Interview Survey (NHIS), which included a comprehensive survey of CAM use by Americans, showed that approximately 38 percent of adults use CAM. This fact sheet presents an overview of CAM, types of CAM, summary information on safety and regulation, the mission of the National Center for Complementary

*Defining CAM*

Defining CAM is difficult, because the field is very broad and constantly changing. NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. Conventional medicine (also called Western or allopathic medicine) is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and

"Complementary medicine" refers to use of CAM together with conventional medicine, such as using acupuncture in addition to usual care to help lessen pain. Most use of CAM by Americans is complementary. "Alternative medicine" refers to use of CAM in place of conventional medicine.

"Integrative medicine" combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and

*Types of CAM*

CAM practices are often grouped into broad categories, such as natural products, mind and body medicine, and manipulative and body-based practices. Although these categories are not formally defined, they are useful for discussing CAM practices. Some CAM practices may fit into more than

*Natural Products*

This area of CAM includes use of a variety of herbal medicines (also known as botanicals), vitamins, minerals, and other "natural products." Many are sold over the counter as dietary supplements. (Some uses of dietary supplements—e.g., taking a multivitamin to meet minimum daily nutritional requirements or taking calcium to promote bone health—are not thought of

CAM "natural products" also include probiotics—live microorganisms (usually bacteria) that are similar to microorganisms normally found in the human digestive tract and that may have beneficial effects. Probiotics are available in foods (e.g., yogurts) or as dietary supplements. They are not the same thing as prebiotics—nondigestible food ingredients that selectively

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**780 Alternative medicine**

**Alternative medicine**

**Alternative medical systems**

Anthroposophical medicine Ayurveda Chiropractic Herbalism Homeopathy  
 Isopathy Naturopathic medicine Orthomolecular medicine Traditional  
 Chinese medicine Traditional Mongolian medicine Traditional Tibetan  
 Treatments

Mind-body intervention Biologically based therapy Manipulative and body-  
 based methods Energy therapy  
 Public-health issues

Aspartame Dental amalgams Growth hormone Trans fat Vaccines Water  
 Key terms

Alternative medicine Complementary medicine Glossary of alternative  
 Contrary viewpoints

Scientific skepticism Pseudoscience Anti-quackery organizations Evidence-

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**779 Category talk Alternative medical systems**

## Alternative medical systems

[http://en.wikipedia.org/wiki/Template\\_talk:Alternat](http://en.wikipedia.org/wiki/Template_talk:Alternat)

**Category talk:Alternative medical systems**

*Alternative Medicine portal*

This category is within the scope of WikiProject Alternative medicine, a collaborative effort to improve the coverage of Alternative medicine related articles on Wikipedia. If you would like to participate, please visit the project page, where you can join the discussion and see a list of open tasks.

I am glad to see that the Glossary of alternative medicine index/article is the main article for Category: Alternative medical systems rather than Alternative medicine. It should also be the main article for Category:

You would NEVER expect that certain personalities not very long ago actually tried unsuccessfully to delete this KEY index to articles on

I like the Big Blue InfoBox, on these articles. Looks good! -- John Gohde 12:03, 17 September 2006 (UTC)

Not sure exactly what you mean when you say "this article is the main article for Category: Alternative medical systems" - to me it currently looks like Glossary of alternative medicine is the article linked by {{catmore}}. --

"Category:Alternative medical systems

From Wikipedia, the free encyclopedia

Category: Alternative medicine

The main article for this category is Terms and concepts in alternative

-- John Gohde 02:23, 20 September 2006 (UTC)

[edit]Proposal to rename category

It appears that the NCCAM name for this category is actually "whole medical systems"; see this overview, for example. Should this category be Not realizing the overlap, I have created the other category already...they should probably be merged. Hgilbert (talk) 14:26, 7 November 2008 (UTC) The NCCAM may believe these are whole medical systems but a lot of people practice them as Complementary therapies, i.e. they use mainstream medicine too, and they are not recognised as complete systems on which people should rely wholly by the mainstream and consensus. I presume that's why the category was named 'alternative medical systems' (I wasn't there at the time) as they are 'alternative' in terms of the mainstream, mostly not endorsed by normal doctors etc, so they are alternative medical systems and that's what most people would call them. On wikipedia we use a neutral

-actually, this category describes itself as "Alternative medical systems is the precise name of the NCCAM" thingy, which is worded like they've had this discussion before lol. Hopefully someone will come along who can tell us what was decided as the precise name and why. Sticky Parkin 23:21, 7 November 2008 (UTC)

It appears that the terms are used interchangeably -- for example, on the same page that you link to, actually, which has a link labeled 'alternative medical systems' that takes the reader to a page about 'whole medical

I don't think that it is either necessary or important to rename this category, but the two should definitely be merged. My preference is to keep all of it at alternative medical systems, because that term is (1) clearly understandable to the uninformed lay person and (2) clearly excludes mainstream medicine (which is surely a "whole" medical system itself, since the use of the word whole here refers to the ability of the medical system to treat every condition that it considers noxious, not to whether or not it is perceived as addressing

The first sentence in this article is incorrect as it refers to the NCCAM definition of a subcategory of CAM, namely whole medical systems. "NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine." Some CAMs are whole, many are not. We have to

## Contents

- 1 NCCAM classifications
- 2 Dianetics
- 3 NCCAM classifications
- 4 Reorganizing this template slightly
- 5 Acupuncture
- 6 Faith healing
- 7 Anthroposophic medicine
- 8 Please add a template of Academic resources....
- 9 Orthopathy
- 10 template image
- 11 Formatting by hand
- 12 Osteopathy
- 13 NCCAM Classifications

## NCCAM classifications

**{{Alternative medical systems}}** -- Alternative medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of alternative medical systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine. Examples of systems that have developed in non-

**{{Mind-body interventions}}** -- Mind-body medicine uses a variety of techniques designed to enhance the mind's capacity to affect bodily function and symptoms. Some techniques that were considered CAM in the past have become mainstream (for example, patient support groups and cognitive-behavioral therapy). Other mind-body techniques are still considered CAM, including meditation, prayer, mental healing, and therapies that use creative

**{{Biologically based therapy}}** -- Biologically based therapies in CAM use substances found in nature, such as herbs, foods, and vitamins. Some examples include dietary supplements,<sup>3</sup> herbal products, and the use of other so-called natural but as yet scientifically unproven therapies (for example,

**{{Manipulative methods}}** -- Manipulative and body-based methods in CAM are based on manipulation and/or movement of one or more parts of the body. Some examples include chiropractic or osteopathic manipulation,

**{{Energy therapy}}** -- Energy therapies involve the use of energy fields.

-- John Gohde 19:44, 4 December 2007 (UTC)

## Dianetics

Dianetics is an alternative medical system. What is the rationale for viewing it as anything else? ausa ↻ui × 06:53, 24 November 2006 (UTC)

Why is NCCAM regarded as the sole source that is acceptable for determining what is and isn't an alternative medicine? --74.132.180.62

It isn't. There is a vast difference between an alternative medical "system" and a form of alternative medicine. The template must be kept small, and therefore it sticks to the NCCAM system of classification. If you can provide some kind of proof that Dianetics is an alternative medicine form, then it certainly qualifies to be in [[Category:Alternative medicine]]. It does contain some elements of pseudoscience, quackery, fraud, pseudoreligion, and other characteristics of alternative medicine, so it could certainly be in that category. There is room for plenty of articles there, but not in the template. To illustrate, I'll use a corollary. There is a template for continents, and it

*You can see the vast difference here:*

**{{Continents}}{{Countries}}**

I can't activate these templates here, otherwise this talk page would be included, and that wouldn't be too smart! You can copy them to the main sandbox, look at them, and then immediately delete them.

That's why we also have categories.

Hrm. So I guess this is more of an issue of whether dianetics is an important enough AMS to warrant inclusion in the template, then? Do you think it would be reasonable to say that dianetics may be more important than one of the others currently on the template, such as Unani (which, according to its article, is closely linked with Ayurveda)? ausa ↵ ui × 01:11, 28 November  
Unani was influenced by Islam, that is the main difference between it and Ayurveda, which is significant enough to warrant separate articles, and therefore entries in the template. According to the article, Dianetics is "a revolutionary and scientifically developed alternative to conventional psychotherapy and psychiatry", neither of which is considered alternative medicine. Further, "Dianetics is a set of ideas and practices regarding the relationship between mind and body"; I would suggest that if Dianetics is to be considered a form of alternative medicine, it is more of a Mind-body  
Dianetics is pretty much gibberish, but they do assert that they can cure physical disease through their quasi-psychiatric processes. And the article also quotes L. Ron Hubbard that "Dianetics sets forth the non-germ theory of disease, embracing, it has been estimated by competent physicians, the explanation of some seventy percent of man's pathology." ausa ↵ ui ×

### NCCAM classifications

Wikipedia carries a fundamentally world-wide point of view. Relying solely on an American governmental body as a system of classification in the template, especially for systems that are not of U.S. origin, is a violation of this neutral and international stance. VanTucky Talk 23:10, 26 September 2007 (UTC)  
Four out of the eight systems mentioned are "systems that are not of U.S. origin," so what's the problem? The NCCAM recognizes them as such. Keep in mind that all systems get brought to the US and are practiced there. They therefore get assessed by the NCCAM. -- Fyslee / talk 04:38, 27 September 2007 (UTC)  
It's not the systems of alt medicine mentioned (TCM etc.), it was the following NCCAM classification system (which are not medicinal systems in and of themselves) which I have removed. VanTucky Talk 04:53, 27

It is a V & RS of a system of classification that is all-inclusive and has been a consensus part of the template for ages. No need to remove such a valuable resource. Restoring consensus version. -- Fyslee / talk 05:19, 27 September 2007 (UTC)  
First off, a discussion between two users where they disagree is not a consensus. Relying on a previous consensus by default when new issues have been brought up is not okay. Second, the NCCAM is a solely American body, and by including its method of classification (which not a single other regulatory or private body uses) the template fails to represent a world-wide POV. Third, many of the classifications that the NCCAM uses for arts such as qigong, tai chi ch'uan, feldenkrais and yoga are very controversial. They take a stance on the healing mechanism of these practices that is only one

VanTucky Talk 18:56, 27 September 2007 (UTC)

FWIW, I'm in favor of keeping the NCCAM classification. The existence of a longstanding version usually indicates that quite a few editors agree with that version. While a new consensus is always possible, chances are that it will not stick. I also think that an important change like this one should be discussed and a consensus reached before we change a template that is in such wide use. Having said that, I feel that some of your arguments may have merit. The NIH classification is, indeed, US-centric. How about making this explicit (e.g. by adding "(U.S.)" to the text)? I do not think your other complaint (only one view of several) should be solved by removing the NCCAM classification. It would be better to add other notable/well-known. Also FWIW, keep the current template. There are a huge number of editors, myself included, that don't actually believe in "alternative" medicine, we ascribe to scientific analysis and therefore there is medicine as science and there's folklore or faith or something else. Keeping the NCCAM verbiage at least gives a little bit of cover to claiming that these alternative medicine classifications have some meaning. OrangeMarlin Talk • Contributions 00:14,

I'd vote to keep also; the version with NCCAM has been stable and reflects a well-known VRS without endorsing it exclusively. Others could be added, but speaking as an American-trained acupuncturist with a prior career as a research scientist, I see nothing wrong with NCCAM at all, and much to recommend it. *Van Tucky (talk)* 21:02, 28 September 2007 (UTC)

This is an actual consensus I can accept for the time being, even if I still obviously disagree. I sympathize with your point about maintaining a mainstream, scientifically acceptable (at least to some degree, the NCCAM has its notable detractors in the scientific community) system of classification for alt medicine. However, I urge people to keep in mind that this system is not accepted or even well-known among many of the actual systems that fall under the NCCAM's purview. A bit of cultural sensitivity *Van Tucky (talk)* 00:40, 28 September 2007 (UTC)

Well, things like germ theory, the scientific method and avogadro's constant are neither well known nor well accepted by practitioners of the er... systems... listed, but that doesn't, or at least shouldn't, stop us from presenting them in the light of those things. In any case the categories presented are a convenient and logical way of navigating the plethora of cam articles, and even better we have reliable sources to back that up. *Van Tucky (talk)* 00:40, 28 September 2007 (UTC)

Those examples are inappropriate. They're far too generalized. The classification of, for example, mind-body intervention was created expressly and exclusively for categorization of these systems and techniques, so the fact that it is disputed and/or unknown by practitioners is much more *Van Tucky (talk)* 00:40, 28 September 2007 (UTC)

*Comment.* A related discussion is occurring at [Wikipedia:Templates\\_for\\_deletion/Log/2007\\_September\\_22#Template:Mind-body\\_interventions](#). Many of the same arguments apply there. -- Fyslee / talk 04:22, 28 September 2007 (UTC)

*Comment* I see nothing particularly objectionable to the NCCAM classifications. I don't know how useful they are, but it's as good of a way to link to the relevant articles as any. Adam Cuerden talk 17:01, 4 October 2007 (UTC)

*Reorganizing this template slightly*

What do you guys think about moving the Complementary and Alternative Medicine sections, under See also, to the top of this template? It seems like those should receive prominence. II 02:11, 8 July 2008 (UTC)

*Acupuncture*

*Re this change:* normally acupuncture is not considered to be an alternative medical system in its own right: it is a healing practice that is part of traditional Chinese medicine, which is an alternative medical system that is already listed in this template. The relationship between acupuncture and traditional Chinese medicine is akin to the relationship between spinal manipulation and chiropractic. For consistency, we should list traditional Chinese medicine and chiropractic in this template, and we should not list *Van Tucky (talk)* 00:56, 2 November 2007 (UTC)

### *Faith healing*

Re this change, which introduced a wikilink to Faith healing: normally faith healing, like acupuncture, is not considered to be an alternative medical system in its own right: it is a healing practice that is part of a religious system, not a medical system. The NCCAM page on CAM doesn't list faith healing as a medical system, and looking in other sources I don't see anyone claiming that it is a medical system. For now reverted the change. Eubulides (talk) 17:00, 11 December 2008 (UTC)

### *Anthroposophic medicine*

*Re this change:* as Anthroposophic medicine says, anthroposophic medicine is complementary medicine and not alternative medicine. The NCCAM seems to agree with this, so this template is not the right place for a wikilink to Anthroposophic medicine. If there is a template for complementary medicine, that would be a better place for the wikilink; if there is no such template, perhaps one ought to be created. For now, I reverted that change. Eubulides (talk) 21:42, 11 December 2008 (UTC)

There is little (too little) distinction made between complementary and alternative medicine both here and elsewhere. For example, the Wikipedia article on complementary medicine redirects to alternative medicine. Usually they are grouped together; perhaps we should change this template title to "complementary and alternative medicine". hgilbert (talk) 22:22, 4

I checked; NCCAM's category "alternative medical systems" explicitly relates to both complementary and alternative medicine (see their page describing CAM). There seems to be no ground to differentiate them here,

Sorry, I don't follow the above remarks: the source you cite seems to say exactly the opposite of what you're saying. In NCCAM's FAQ, the question "*Are complementary medicine and alternative medicine different from each other?*" is answered "*Yes, they are different.*"

Complementary medicine is used together with conventional medicine. An example of a complementary therapy is using aromatherapy to help lessen a patient's discomfort following surgery.

*Alternative medicine* is used in place of conventional medicine. An example of an alternative therapy is using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by conventional medicine. Eubulides (talk) 01:22, 5 December 2008 (UTC)

Pretty late comment here,... but we have discussed this to death prior to the merging of the various CAM articles. That NCCAM quote is rather misleading when read superficially. Actually it doesn't propose a real difference in the methods used, only a difference in how identical methods are used in different settings. It is the setting that is different, IOW any imaginable alternative medical method or technique is considered "complementary" if used in conjunction with mainstream medicines and techniques. One will find even the most absurd and non-evidence-based alternative methods identified as "complementary" because of this definitional distinction, which is therefore pretty useless most of the time. In Britain the situation is even worse, where "complementary" is used pretty synonymously with "alternative" much of the time. That's simply because the alternative medicine movement in Britain (likely because of support from HPE, the Prince of Wales) has been more successful at affecting definitions. Anthroposophy is considered an alternative medical system: see Holistic Nursing and Annex 1 of these Model Guidelines for the EU. hgilbert (talk) 02:22, 5 December 2008 (UTC)

I think we need to be careful of using such promotional, self-published, publications and guidelines from the groups themselves. We need

We also need to avoid link bloat in such a template. Only old, large, and very well-established systems that have long promoted themselves as complete systems for dealing with all health care needs (truly "alternative" to mainstream care) should be included. This needs paring down. Especially Neural therapy hardly deserves mention in the template (and its article Good point about Neural therapy; I removed it. *Any others?* Eubulides (talk) 06:38, 1 March 2009 (UTC))

*Please add a template of Academic resources...*

or the one of academic journal--222.64.29.57 (talk) 02:03, 17 May 2009 (UTC)

As far as I know, there are no reliable sources for alternative medicine. SciMedKnowledge (talk) 02:15, 17 May 2009 (UTC)

In a certain sense that is true. The promotional ones are rarely RS, and the mainstream ones that discuss alternative medicine are usually critical, and Alternative medicine critics

-- Brangifer (talk) 05:57, 17 May 2009 (UTC)

I agree that peer reviewed journals are highly critical. But almost any medical or scientific journal that is peer reviewed and also has a high impact factor have published critiques of alt med, so it's almost like the list could be huge. Oh well, I don't think it's a big issue. SciMedKnowledge (talk) 06:16, NEJM devoted a whole issue to it, and its editors had incisive comments. I think this is the editorial from that issue.

*This is another noted editor who doesn't hide his views:*

Gerald Weissmann, Editor-in-Chief, The FASEB Journal. The Federation of American Societies for Experimental Biology, abbreviated FASEB, is a non-profit organization that is the principal umbrella organization of U.S. societies in the field of biological and medical research. FASEB organizes  
-- Brangifer (talk) 07:51, 17 May 2009 (UTC)

### *Orthopathy*

Zanze123 (talk · contribs) has twice added Orthopathy to this template, claiming that it's an alternative medical system of note. I see no evidence that it's of any note. It's not listed at NCCAM, and it's not listed in mainstream sources. Google searches for the term show that it's more often used in a religious sense that has nothing to do with medicine (it means "right-heartedness", as opposed to orthodoxy which means "right-mindedness"). This template does not have room for every medical theory that might have a few adherents. I don't see any way that orthopathy can  
Eubulides (talk · contribs) has twiced removed Orthopathy before providing any discussion on the subject. OK, orthopathy is not an alternative medical system, it's not of note because Eubulides can't find information on it, NCCAM is gospel even though it only covers subjects where there are published papers and published papers are only published when publishers deem published papers 'relevant' to the journal's audience (publishers can  
Orthopathy has nothing to do with alternative medicine because Eubulides says so according to one definition of what it means. Zanze123 (talk) 22:28, 13 November 2009 (UTC)

*Eubulides is correct.* He followed the WP:BRD cycle, while you began edit warring by restoring it, instead of following the BRD cycle by discussing the problem here. This template is only for large systems with a significant following. They must be very notable. We can't list every single possible alternative medical practice with a few followers. Keep in mind this is a template, not an article or list. Don't restore it without a solid consensus. --

*There is no consensus on Wikipedia,* only warring factions. I did not begin edit warring. I made a change, which was then reversed WITHOUT discussion. OK orthopathy is not a large system with a significant following. Lol. As for what is notable. to what extent is NCCAM notable given that it is

whether the papers are of interest to their audience before bothering to send papers for peer review, giving them freedom to not publish anything they don't want to. Zanze123 (talk) 14:43, 14 November 2009 (UTC)

The previous comment seems to be arguing against two Wikipedia policies (Wikipedia:Consensus and Wikipedia:Verifiability) at the same time. Wikipedia policies are sometimes wrong and can be changed, but that should be taken up on the policies' talk pages, not here. Eubulides (talk)

### template image

I do think the template needs some kind of image - it's pretty ugly as is. can we find something that works? --Ludwigs2 20:07, 21 January 2010 (UTC)

Do other templates of this type have an image? If we're going to use an image, I suggest the one used on the template at the top of the page:

<http://en.wikipedia.org/wiki/File:Outline-body-Brangifer> (talk) 22:05, 24 January 2010 (UTC)

eh, I added the template image option mostly because I think the template looks bare an ugly without one. The default is currently blank, but the image can be added on a page-by-page basis. Which page are you talking about for Make it the default image for all uses. Allowing different images on each article is an open invitation to POV pushing and myriad edit wars. This image has been accepted by the community for some time now. It was User:Levine2112. -- Brangifer (talk) 01:27, 25 January 2010 (UTC)

Alt Med is such a widely ranging topic that I think individual page specifications are almost mandatory. besides, I've already run into opposition to using any kind of generic default image. I think it's best to just leave it blank and let pages specify. I mean, we can start a discussion about using a generic image - maybe we could create an animated gif to run through various appropriate images? but currently there's no consensus for it. Where have you run into opposition? Currently there is no consensus for anything, much less an image. The template's been functioning fine without it. -- Brangifer (talk) 02:35, 25 January 2010 (UTC)

I think we're talking past each other. I added an image originally, which Eubulides reverted. so I added it as an option with a default image, and Eubulides removed the default. both perfectly fine actions, but making it clear that there's no consensus for having a common image on the template. the functionality for a page-dependent images is still in there, and is used on a couple of pages (where I've added it). I think the template looks much better with an image of some sort rather than without, which is why I started this whole process. you can disagree with that, but I think at this point the best thing to do is work with it on a page-by-page basis. I don't think we need to do anything more with the template - the parameter can stay in place

The default image wasn't appropriate for Chiropractic, and I think it unlikely that any single image will work that well in all the places this template is

**File:Outline-body-**

**aura.png** might be appropriate for energy therapies but it's not right for herbalism (or for chiropractic, f or that matter). Eubulides (talk) 04:24, 25 January 2010

Note that it was created by one of the strongest pushers of chiropractic opinion around. It does fit for chiropractic because of the mystical and vitalistic roots of the profession, even today, since they still haven't (and can't) divorced themselves from non-existent vertebral subluxations per the last official statement from the school leaders. Since alternative medicine is by definition largely based on non-scientific methods and/or is non-EBM, the image works pretty well, which is probably why even the supporters of alternative medicine have accepted it. -- Brangifer (talk) 05:20, 25

Brangifer: Eub was talking about the default image I used (spanish herbal market) not the aural image you're referring to. I don't know anything about chiropractic, I don't know who pushes for it or who pushes against it, and I'd rather not hear about that anyway. --Ludwigs2 06:15, 25 January 2010 (UTC)

My, this is getting confusing! I originally was talking about the Spanish herbal market, but my most recent comment also discussed the aura image. Eubulides (talk) 06:35, 25 January 2010 (UTC)

lol - well, does anyone have any objections to the current arrangement? -- Ludwigs2 06:49, 25 January 2010 (UTC)

My main concern is that we limit edit warring, and different images on each article are potential edit war magnets. Either use no image or use a neutral one that has been accepted widely without any opposition. -- Brangifer (talk)

(outdent) I don't think that's a reasonable request. what image would work on topics as diverse as chiropractic, Chinese traditional medicine, and ayurveda (not to mention more arcane topics)? I can't see opposing the possibility of an image just because of the potential for edit wars, nor can I see the value on insisting on a common image when it will obviously be unsatisfactory on some topics and will certainly cause stressful debates. That's why no image has worked just fine. The image I suggested has already been working with no objections, but I'm not insisting on an image, since having no image has also worked just fine. Other templates have no image. While improvement always involves change, there can be lots of change without improvement. Sometimes it's best to follow the old adage: "If it isn't broken, don't fix it." -- Eubulides (talk) 16:02, 25 January 2010 (UTC)

#### *Formatting by hand*

A recent edit replaced the old version 1, which used `{{Infobox}}`, with a new version 2 that uses `{{Sidebar with heading backgrounds}}` and formatted the sidebar by hand using `<br/>`. I redid it to version 3, which lets the browser do the layout, but this was reverted with the edit summary `_____`. However, version 3 doesn't make the sidebar too narrow: the width looks just fine when the sidebar stands alone. Version 2 results in very bad layout when browsers are configured to use large fonts (a common practice among visually impaired readers), as the sidebar becomes way too wide and doesn't even fit within the screen. If width is an issue in some contexts (perhaps because of neighboring images or other sidebars), we can add a `|style=`

Also, there's nothing wrong with version 3's putting the `"` at the end of the lines when this separates items; this clearly and consistently indicates the reader the boundary between two items, and is less confusing than the version 2 approach, which occasionally breaks an item across line boundaries and for which a line boundary therefore is visually ambiguous (sometimes it's a separator between items, sometimes not). Consistent use of `"`

While we're on the subject, what's the point of using `{{Sidebar with heading backgrounds}}` at all? What's wrong with `{{Infobox}}`? If we can't come up with a good approach with `{{Sidebar with heading backgrounds}}` perhaps

Anyway, I've made this further edit to version 3, which adds a `|style=` parameter as discussed above. Further comments are welcome. Eubulides

Ah, I see your point. Sorry! Gabbe (talk) 22:25, 21 February 2010 (UTC)

#### *Osteopathy*

What was the reason for inclusion osteopathy in this template? That's a traditional medicine, is not it? Biophys (talk) 18:40, 17 January 2011 (UTC)

Not to my knowledge - the article says late 19th century, whereas traditional medicine usually means practiced since time immemorial or something along those lines. My guess is that non-US osteopathy is the intended target (the holistic kind rather than the roughly-equivalent-to-an-MD kind).

Osteopathy talks about the differences a fair bit, and seems to be the main article for the alternative medicine; Osteopathic manipulative medicine is hat-linked from there, and I am not sure how we could really make the ~~difference in this template~~ `_____` I mean "modern" or "mainstream" medicine (it seems that Traditional medicine actually refer to "alternative medicine", sorry, I did not realized that). The point is very simple. The vast majority of people with DO degrees come from the US and work in the field of "mainstream medicine", legally and based on their education and qualification. Hence placing this area to "alternative medicine" (as something opposed to "mainstream medicine") is `_____`

Meaning that free of the context at that article, it is misleading simply to say osteopathy? I can buy that. I think that this template is intended as a representative rather than comprehensive list, so go ahead and remove it if nobody else objects. The template still renders fine on my display without it, so I do not think we need to worry overmuch about replacing it. - 2/0 (cont.)

As 2/0 says, there is a difference. The original form of osteopathy as started by Andrew Taylor Still (a spiritualist like D. D. Palmer, the founder of chiropractic), was a form of alternative medicine with metaphysical and unscientific roots, but unlike Palmer, Still was an MD to begin with and had quite a bit more knowledge, although at the time that was quite limited. In contrast to chiropractic, osteopaths officially and in writing distanced themselves from their unscientific roots and gradually updated their educational standards to something nearing, but still not quite, that of MDs. (Chiropractic has yet to make such an official declaration, but hopes to modernize under the radar so they don't have to admit they've been treating a fictive lesion all along, IOW operating a scam all along.) These DOs are legally considered on a par with MDs. It is these DOs who are referred to as Doctor of Osteopathic Medicine, yet in common parlance they are still often called Osteopaths, which makes the matter confusing. To distinguish the scientific ones from those who practice according to the old unscientific manner, especially in countries outside the USA where they do not receive the same degree of education and are educated in the old manner, we have Osteopathic Medicine will include old-fashioned quackery in his practice, like Joseph Mercola does. To be fair, there are also MDs who include unscientific ideas and methods in their practices (think Andrew Weil and Dr. Oz). Quackery knows no boundaries. -- Brangifer (talk) 03:54, 18

I got a bit sidetracked in my long homily, but our osteopathy article covers the whole thing and describes both the alternative aspects and links to the scientific Doctor of Osteopathic Medicine article, but because the template uses the system of classification set up by NCCAM, we shouldn't have it under "alternative....". They classify it as "conventional" like MDs, PTs, etc., and not "alternative". We can just leave it up to the article to make the distinctions because of local applications in other countries. So I vote for removing it from this template. -- Brangifer (talk) 04:11, 18 January 2011

A part of the confusion comes from the existence of two separate articles, Osteopathic manipulative medicine (history/philosophical issues) and Soft tissue technique (that is what osteopathic physicians actually do). The latter is just a standard/mainstream medical technique to relax muscles and restore blood circulation. Curiously enough, it was even taught in Russian medical schools. The latter of which is a much better written and informative article. Anyone feel up to upgrading or maybe merging? Anyway, consensus seems good enough here that I just removed Osteopathy from the template. Spot-checking a few of the articles where the template is used, this does not seem to have borked anything, but a few more eyes viewing at different screen widths would not go amiss (also keep in mind that the width of the template

*Thank you!* I will probably look at some articles in this area later. Biophys (talk) 05:18, 20 January 2011 (UTC)

Despite of consensus here, someone placed Osteopathy back without discussion. I am going to remove it. My very best wishes (talk) 04:05, 6

#### *NCCAM Classifications*

Maybe the original editor used information that is not currently on the NCCAM website. In any case, *NCCAM offers the following classifications*

Natural Products

Mind-Body Medicine

Manipulative and Body-Based Practices

Movement Therapies

Traditional Healers

Energy Fields

Whole Medical Systems

If this is how NCCAM classifies this field, and we say that we are using NCCAM classification then the two should match up. If Wiki articles have different names, then the NCCAM name should be used in the template and redirected to the appropriate article. Desoto10 (talk) 22:48, 16 March 2011 (UTC)

Well, according to their definition [2], the conventional medicine is something that certified doctors and nurses do ("Conventional medicine is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and registered nurses."). That sounds logical. Other than that, their classification is a strange combination of an outright pseudoscience (like Magnet therapy) and something that obviously

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### 758 History of alternative medicine ...

#### Definition of Alternative medical system

<http://www.medterms.com/script/main/art.asp?artic>

*Alternative medical system:*

An umbrella term for a number of practices beyond the scope of conventional medicine. These forms of alternative medicine are built upon a complete system of ideas and practice and may have evolved in Western or non-Western cultures. Examples include Ayurveda, Chiropractic,

#### History of alternative medicine

[http://en.wikipedia.org/wiki/History\\_of\\_alternative](http://en.wikipedia.org/wiki/History_of_alternative)

This article or section is in the process of an expansion or major restructuring. You are welcome to assist in its construction by editing it as well. If this article or section has not been edited in several days, please

This article was last edited by FiachraByrne (talk | contribs) 1 second ago.

"Disease Can Not Exist", October 1899 advertisement in the People's Home Journal for Weltmerism, a form of "magnetic healing"

The term alternative medicine refers to systems of medical thought and practice which function as alternatives to or subsist outside of conventional, mainstream medicine. Alternative medicine cannot exist absent an established, authoritative and stable medical orthodoxy to which it can function as an alternative. Such orthodoxy was only established in the West during the nineteenth century through processes of regulation, association,

#### Contents

- 1 Alternative medicine?
- 2 Before the "fringe"
- 3 Medical professionalisation
- 4 Nineteenth-century non-conventional medicine
- 5 Cross-cultural medical exchange
- 6 Alternative medicine since the 1970s

#### Alternative medicine?

The concept of alternative medicine is problematic as it cannot exist autonomously as an object of study in its own right but must always be defined in relation to a non-static and transient medical orthodoxy. It also divides medicine into two realms, a medical mainstream and fringe, which, in privileging orthodoxy, presents difficulties in constructing an historical analysis independent of the often biased and polemical views of regular medical practitioners. The description of non-conventional medicine as alternative reinforces both its marginality and the centrality of official medicine. Although more neutral than either pejorative or promotional designations such as "quackery" or "natural medicine", cognate terms like "unconventional", "heterodox", "unofficial", "irregular", "folk", "popular", "marginal", "complementary", "integrative" or "unorthodox" define their object against the standard of conventional biomedicine, entail particular perspectives and judgements, often carry moral overtones, and can be inaccurate. Conventional medical practitioners in the West have, since the nineteenth century, used some of these and similar terms as a means of defining the boundary of "legitimate" medicine, marking the division between that which is scientific and that which is not. The definition of mainstream medicine, generally understood to refer to a system of licensed medicine which enjoys state and legal protection in a jurisdiction,[n 1] is also highly specific to time and place. In countries such as India and China traditional systems of medicine, in conjunction with Western biomedical science, may be considered conventional and mainstream. The shifting

### **Before the "fringe"**

"Marriage à la Mode, Plate 3, (The Scene with the Quack)" by William Hogarth, 1745

Prior to the nineteenth century European medical training and practice was ostensibly self-regulated through a variety of antique corporations, guilds or colleges. Among regular practitioners, university trained physicians formed a medical elite while provincial surgeons and apothecaries, who learnt their art through apprenticeship, made up the lesser ranks. In Old Regime France, licenses for medical practitioners were granted by the medical faculties of the major universities, such as the Paris Faculty of Medicine. Access was restricted and successful candidates, amongst other requirements, had to pass examinations and pay regular fees. In the Austrian Empire medical licences were granted by the Universities of Prague and Vienna. Amongst the German states the top physicians were academically qualified and

Outside of these formal medical structures there were myriad other medical practitioners, often termed irregulars, plying a range of services and goods. The eighteenth-century medical marketplace, a period often referred to as the "Golden Age of quackery", [n 3] was a highly pluralistic one that lacked a well-defined and policed division between "conventional" and "unconventional" medical practitioners. In much of continental Europe legal remedies served to control at least the most egregious forms of "irregular" medical practice but the medical market in both Britain and American was less restrained through regulation. Quackery in the period prior to modern medical professionalisation should not be considered equivalent to alternative medicine as those commonly deemed quacks were not peripheral figures by default nor did they necessarily promote oppositional and alternative medical systems. Indeed, the charge, which might allege medical incompetence, avarice or fraud, was levelled quite indiscriminately across the varied classes of medical practitioners be they regular medics, such as however, quackery was associated with a growing medical entrepreneurship amongst both regular and irregular practitioners in the provision of goods and services along with associated techniques of advertisement and self-promotion in the medical marketplace. The constituent features of the medical marketplace during the eighteenth century were the development of medical consumerism and a high degree of patient power and choice in the selection of treatments, the limited efficacy of available medical therapies,

*125 empty*

### *NCCAM's Role*

NCCAM's mission is to define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care. NCCAM achieves its mission through basic, translational ("bench-to-bedside"), and

### *Be an Informed Consumer: Information Resources From NCCAM*

The Health Information page of the NCCAM Web site provides access to a variety of information on CAM, as well as links to other National Institutes of Health (NIH) resources. *Materials include:*

*Fact sheets designed to help you think about the issues involved in*

*Deciding whether to use CAM.*

Are You Considering CAM?

CAM Use and Children

Evaluating Web-Based Health Resources

Paying for CAM Treatment

Selecting a CAM Practitioner

Tips for Talking With Your Health Care Providers About CAM

Using Dietary Supplements Wisely

Fact sheets on specific CAM therapies (e.g., Yoga for Health: An Introduction) and on CAM for specific health conditions (e.g., CAM and Hepatitis C: A Focus on Herbal Supplements)—including information on safety, the status of evidence-based research on effectiveness, and points to Herbs at a Glance: Information on more than 40 of the most common herbs in popular dietary supplements. Available in a booklet and in individual fact A Note About Government Regulation

Dietary Supplements

The Federal Government regulates dietary supplements primarily through the U.S. Food and Drug Administration (FDA). The regulations for dietary supplements are not the same as those for prescription or over-the-counter drugs. In general, the regulations for dietary supplements are less strict; for example, a manufacturer does not have to prove the safety and effectiveness of a dietary supplement before it is marketed. Once a dietary supplement is on the market, the FDA monitors safety and product information (label

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**772 NCCAM classifications ...**

### **NCCAM classifications**

[http://en.wikipedia.org/wiki/Template\\_talk:Alternat](http://en.wikipedia.org/wiki/Template_talk:Alternat)

Wikipedia carries a fundamentally world-wide point of view. Relying solely on an American governmental body as a system of classification in the template, especially for systems that are not of U.S. origin, is a violation of this neutral and international stance. VanTucky Talk 23:10, 26 September 2007 (UTC)

Four out of the eight systems mentioned are "systems that are not of U.S. origin," so what's the problem? The NCCAM recognizes them as such. Keep in mind that all systems get brought to the US and are practiced there. They therefore get assessed by the NCCAM. -- Fyslee / talk 04:38, 27 September 2007 (UTC)

It's not the systems of alt medicine mentioned (TCM etc.), it was the following NCCAM classification system (which are not medicinal systems in and of themselves) which I have removed. VanTucky Talk 04:53, 27

It is a V & RS of a system of classification that is all-inclusive and has been a consensus part of the template for ages. No need to remove such a valuable resource. Restoring consensus version. -- Fyslee / talk 05:19, 27 September 2007 (UTC)

First off, a discussion between two users where they disagree is not a consensus. Relying on a previous consensus by default when new issues have been brought up is not okay. Second, the NCCAM is a solely American body, and by including its method of classification (which not a single other regulatory or private body uses) the template fails to represent a world-wide POV. Third, many of the classifications that the NCCAM uses for arts such as qigong, t'ai chi ch'uan, feldenkrais and yoga are very controversial. They take a stance on the healing mechanism of these practices that is only one significant view, and thus including only NCCAM on the template, and presenting it as if it was widely accepted, is a violation of NPOV. FWIW, I'm in favor of keeping the NCCAM classification. The existence of a longstanding version usually indicates that quite a few editors agree with that version. While a new consensus is always possible, chances are that it will not stick. I also think that an important change like this one should be discussed and a consensus reached before we change a template that is in such wide use. Having said that, I feel that some of your arguments may have merit. The NIH classification is, indeed, US-centric. How about making this explicit (e.g. by adding "(U.S.)" to the text)? I do not think your other complaint (only one view of several) should be solved by removing the NCCAM classification. Also FWIW, keep the current template. There are a huge number of editors, myself included, that don't actually believe in "alternative" medicine, we ascribe to scientific analysis and therefore there is medicine as science and there's folklore or faith or something else. Keeping the NCCAM verbiage at least gives a little bit of cover to claiming that these alternative medicine classifications have some meaning. OrangeMarlin Talk• Contributions 00:14,

I'd vote to keep also; the version with NCCAM has been stable and reflects a well-known VRS without endorsing it exclusively. Others could be added, but speaking as an American-trained acupuncturist with a prior career as a research scientist, I see nothing wrong with NCCAM at all, and much to recommend it. This is an actual consensus I can accept for the time being, even if I still obviously disagree. I sympathize with your point about maintaining a mainstream, scientifically acceptable (at least to some degree, the NCCAM has its notable detractors in the scientific community) system of classification for alt medicine. However, I urge people to keep in mind that this system is not accepted or even well-known among many of the actual systems that fall under the NCCAM's purview. A bit of cultural sensitivity

Well, things like germ theory, the scientific method and avogadro's constant are neither well known nor well accepted by practitioners of the er... systems... listed, but that doesn't, or at least shouldn't, stop us from presenting them in the light of those things. In any case the categories presented are a convenient and logical way of navigating the plethora of cam

*Those examples are inappropriate.*

They're far too generalized. The classification of, for example, mind-body intervention was created expressly and exclusively for categorization of these systems and techniques, so the fact that it is disputed and/or unknown by practitioners is much more indicative. VanTucky Talk 01:09, 28

*Comment.*

A related discussion is occurring at Wikipedia:Templates\_for\_deletion/Log/2007\_September\_22#Template:Mind-body\_interventions. Many of the same arguments apply there. -- Fyslee / talk 04:22, 28 September 2007 (UTC)

Comment I see nothing particularly objectionable to the NCCAM classifications. I don't know how useful they are, but it's as good of a way to link to the relevant articles as any. Adam Cuerden talk 17:01, 4 October

*Reorganizing this template slightly*

What do you guys think about moving the Complementary and Alternative Medicine sections, under See also, to the top of this template? It seems like those should receive prominence. II 02:11, 8 July 2008 (UTC)

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### **769 Practitioner-Based Therapies**

#### *Practitioner-Based Therapies*

There is no standardized, national system for credentialing CAM practitioners. The extent and type of credentialing vary widely from state to state and from one CAM profession to another. For example, some CAM professions (e.g., chiropractic) are licensed in all or most states, although specific requirements for training, testing, and continuing education vary;

#### *A Note About Safety and Effectiveness*

Rigorous, well-designed clinical trials for many CAM therapies are often lacking; therefore, the safety and effectiveness of many CAM therapies are uncertain. NCCAM is sponsoring research designed to fill this knowledge gap by building a scientific evidence base about CAM therapies—whether they are safe; and whether they work for the conditions for which people use them. As with any medical treatment, there can be risks with CAM therapies.

*These general precautions can help to minimize risks:*

*Select CAM practitioners with care.* Find out about the practitioner's training and experience.

Be aware that some dietary supplements may interact with medications or other supplements, may have side effects of their own, or may contain potentially harmful ingredients not listed on the label. Also keep in mind that most supplements have not been tested in pregnant women, nursing women, or children.

Tell all your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's Time to Talk.

ODS seeks to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, supporting research, sharing research results, and educating the public. *Its resources include publications (such as *Dietary Supplements: What You Need to Know*), fact sheets on a variety of specific supplement ingredients and products (such as vitamin D and multivitamin/mineral supplements), and the PubMed® Dietary Supplement Subset.*

*Web site:*

[ods.od.nih.gov](http://ods.od.nih.gov)

U.S. Food and Drug Administration (FDA)

The FDA oversees the safety of many products, such as foods, medicines, dietary supplements, medical devices, and cosmetics.

*Toll-free in the U.S.:*

1-888-463-6332

*Web site:*

[www.fda.gov](http://www.fda.gov)

Center for Food Safety and Applied Nutrition (CFSAN)

CFSAN, a center within FDA, oversees the safety and labeling of supplements, foods, and cosmetics. *It has information on dietary supplements, foods, and cosmetics.*

*Toll-free in the U.S.:*

1-888-723-3366

*Web site:*

[www.fda.gov/AboutFDA/CentersOffices/OfficeofF](http://www.fda.gov/AboutFDA/CentersOffices/OfficeofF)

PubMed®

A service of the National Library of Medicine (NLM), PubMed® contains publication information and (in most cases) brief summaries of articles from *Web site:*

[www.ncbi.nlm.nih.gov/sites/entrez](http://www.ncbi.nlm.nih.gov/sites/entrez)

NIH National Library of Medicine's MedlinePlus

To provide resources that help answer health questions, MedlinePlus brings together authoritative information from the National Institutes of Health as well as other Government agencies and health-related organizations.

*Web site: www.medlineplus.gov*

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NCCAM has provided this material for your information. It is not intended to substitute for the medical expertise and advice of your primary health care provider. We encourage you to discuss any decisions about treatment or care with your health care provider. The mention of any product, service, or

\* *Note:* PDF files require a viewer such as the free Adobe Reader.

*NCCAM Pub No.:*

D347

*Date Created:*

Oct-08

Last Updated:

Jul-11

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**767 Other CAM Practices ...**

*Other CAM Practices*

CAM also encompasses movement therapies—a broad range of Eastern and Western movement-based approaches used to promote physical, mental, emotional, and spiritual well-being. Examples include Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration. According to the 2007 NHIS, 1.5 percent of

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*Practices of traditional healers* can also be considered a form of CAM. Traditional healers use methods based on indigenous theories, beliefs, and experiences handed down from generation to generation. A familiar example in the United States is the Native American healer/medicine man. The 2007 NHIS found that 0.4 percent of adults and 1.1 percent of children had used a traditional healer (see *Appendix A* for the seven specific types of healers).

Some CAM practices involve *manipulation of various energy fields* to affect health. Such fields may be characterized as veritable (measurable) or putative (yet to be measured). Practices based on veritable forms of energy include those involving electromagnetic fields (e.g., magnet therapy and light therapy). Practices based on putative energy fields (also called biofields) generally reflect the concept that human beings are infused with subtle forms of energy; qi gong, Reiki, and healing touch are examples of such practices. The 2007 NHIS found relatively low use of putative energy therapies. Only 0.5 percent of adults and 0.2 percent of children had used

Finally, whole medical systems, which are complete systems of theory and practice that have evolved over time in different cultures and apart from conventional or Western medicine, may be considered CAM. Examples of ancient whole medical systems include Ayurvedic medicine and traditional Chinese medicine. More modern systems that have developed in the past few centuries include homeopathy and naturopathy. The 2007 NHIS asked about the use of Ayurveda, homeopathy, and naturopathy. Although relatively few respondents said they had used Ayurveda or naturopathy, homeopathy reached 10th in usage among adults (1.8 percent) and 5th among children

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*391 empty*

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189 **108 Whole Medical Systems**

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191 [http://en.wikipedia.org/wiki/Category:Whole\\_medi](http://en.wikipedia.org/wiki/Category:Whole_medi)

*Alternative medicine*

*Alternative medical systems*

*Anthroposophical medicine Ayurveda Chiropractic Herbalism Homeopathy*

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*Treatments*

*Mind-body intervention Biologically based therapy Manipulative and body-based methods Energy therapy*

*Public-health issues*

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*Complementary and Alternative Medicine (CAM)*

*Whole Medical Systems*

Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from, and earlier than, the standard medical approach used in the United States. Examples of whole medical systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurvedic medicine. Examples of systems

*Traditional Chinese Medicine (TCM)*

Traditional Chinese medicine, or TCM, is a healing system that dates back more than 5,000 years. It is based on the concept that disease results from disruption in the flow of vital energy, or qi (pronounced "chee") in the body. The flow of qi is maintained by keeping a balance in the two forces known as yin and yang. TCM uses specific principles to analyze symptoms—such as cold/heat, interior/exterior, excess/deficiency, and yin yang; and the

TCM uses a number of therapeutic approaches such as acupuncture and moxibustion, herbs and other natural products, and massage.

#### *Acupuncture, Moxibustion and Herbs*

Acupuncture is the stimulation of specific points on the body by a variety of techniques, including the insertion of thin metal needles through the skin. It is intended to remove blockages in the flow of qi and restore and maintain

Moxibustion is the application of heat from the burning of an herb (usually mugwort) at the acupuncture point.

#### *What Happens during an Acupuncture Session?*

Video length: 2 min 43 sec

[Click to watch this video](#)

Herbs and other natural products in TCM are usually used together in formulas to fit a person's specific condition.

#### *Ayurvedic Medicine*

Ayurveda (pronounced "i-yer-vay-duh"), which means "the science of life" in Sanskrit, originated in India and evolved there over thousands of years. Its goal is to prevent disease and promote well-being by bringing the body, mind, and spirit into balance. Ayurveda also proposes treatments for specific

Three types of energy called doshas are believed to form important characteristics of each person's body constitution and to control bodily activities. Imbalances in the doshas, which can be caused by an unhealthy lifestyle, diet, too little or too much mental or physical exertion, the weather,

Ayurvedic medicine relies on therapies such as diet, exercise, meditation, herbs, massage, cleansing, exposure to sunlight, and controlled breathing. The goals of treatment are to eliminate impurities, reduce symptoms, reduce worry, increase harmony in a person's life, and increase resistance to disease.

#### *Homeopathy*

Homeopathy originated in Europe and has been practiced in the United States since the early 19th century. Its goal is to help the body heal itself by using very small doses of highly diluted substances that in larger doses would produce illness or symptoms. Most homeopathic remedies are derived

A homeopathic practitioner selects treatments based upon a total picture of a person's health and evaluates not only physical symptoms but the emotions, psychological state, body type, genetic and personal health history, and other aspects. In homeopathy, different people with the same symptoms may

#### *Naturopathy*

Like homeopathy, naturopathy originated in Europe, but it also includes ancient and modern therapies from other traditions. Naturopathy attempts to help the body heal itself, and naturopaths consider a person's physical, emotional, genetic, environmental, and social circumstances when evaluating treatment. The emphasis is on supporting health rather than

Practitioners of naturopathy prefer to use treatment approaches that they consider to be the most natural and least invasive, relying on methods other than standard medications and surgery. They focus on changes in diet and lifestyle and on preventing disease, together with CAM therapies such as

194 66

195 *754 Whole Medical Systems*

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197 *109 empty*

198 68

199 *755 Whole Medical Systems*

#### **Whole Medical Systems**

<http://www.accessmedicine.ca/content.aspx?aID=7839867&searchStr=holistic+health>

Whole medical systems broadly constitute approaches to diagnostic and therapeutic applications that are based on paradigms conceptually distinct from allopathic medicine. By and large, whole medical systems are ancient and culturally based and are notable for their holistic character.

Typically the allopathic fixation on mechanical processes or selected organ systems is viewed as an "undersampling error" by whole medical systems. In traditional Chinese medicine, for instance, cardiovascular disorders are simply one feature of symptom complexes characterized across four relative states of yin deficiency or excess combined with yang deficiency or excess, where both yin and yang energies are associated with a broad range of

In Ayurvedic medical systems, the body is essentially referenced across five inorganic elements constituting the material universe—earth, water, fire, air, and ether. The body itself is envisioned as coarse material, or maya, that is structurally configured by vibrational energy conveyed from a collective or cosmic source. This coarse material structure rendered by vibrational influences of life energy could be conceptually compared, in a different metaphor, to the...

<http://nihseniorhealth.gov/cam/wholemedicalsyste>

#### **Complementary and Alternative Medicine (CAM)**

##### **Whole medical systems**

Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from, and earlier than, the standard medical approach used in the United States.

Examples of whole medical systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurvedic medicine.

Examples of systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine.

##### **Traditional Chinese Medicine (TCM)**

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TCM uses specific principles to analyze symptoms—such as cold/heat, interior/exterior, excess/deficiency, and yin yang; and the theory of five elements—fire, earth, metal, water, and wood—to explain how the body

TCM uses a number of therapeutic approaches such as acupuncture and moxibustion, herbs and other natural products, and massage.

### **Acupuncture, Moxibustion and Herbs**

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*51 Category Biologically based therapies ...*

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### **Biologically based practices**

Examples include dietary supplements and herbal remedies. These treatments use ingredients found in nature. Examples of herbs include ginseng, ginkgo and echinacea, while examples of other dietary supplements include selenium, glucosamine sulfate and SAMe. Herbs and supplements

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### **852 Category Energy therapies ...**

[http://en.wikipedia.org/wiki/Category:Energy\\_therapies](http://en.wikipedia.org/wiki/Category:Energy_therapies)

The main article for this category is Energy medicine.

Alternative therapies that involve the use of purported energy fields. There

Category:Biofield therapies, and

Category:Bioelectromagnetic-based therapies

#### Subcategories

Bioelectromagnetic-based therapies (11 P)

Biofield therapies (7 P)

Energy medicine

Acupuncture

Anatomy of the Spirit

Attunement

Australian bush flower essences

Bach flower remedies

BDORT

Bioenergetic analysis

Breathwork

Chromotherapy

Crystal healing

C cont.

Cymatic therapy

Electroacupuncture according to Voll

Electromagnetic therapy (alternative medicine)

Emotional Freedom Techniques

Energy (esotericism)

Energy field disturbance

Hologram bracelet

Holotropic Breathwork

Ionized jewelry

Magnet therapy

Meridian Therapy

Nambudripad's Allergy Elimination Techniques

Nishi Shiki

Pranic healing

QT Inc.

Radionics

Seitai

Tapas Acupressure Technique

Therapeutic touch

Thought Field Therapy

Zero Balancing

Categories: Alternative medicineTherapy

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*853 Category Manipulative therapy ...*

<http://en.wikipedia.org/wiki/Category:Manipulative>

The main article for this category is Manipulative therapy.

Alternative therapy that is based upon manipulation and/or movement of one or more parts of the human body.It is done by physical therapists and is one of the physical therapy techniques they apply.

Subcategories

Chiropractic (5 C, 47 P)

Massage (4 C, 29 P)

Massage therapy (63 P)

Osteopathy (2 C, 12 P)

Shiatsu (4 P)

Manual therapy

Acupressure

Apex effect

Authentic Movement

Bates method

Body psychotherapy

Bodywork (alternative medicine)

Bowen technique

Breathwork

Breema

Cervical manipulation

Chiropractic

Chiropractic controversy and criticism

Counterstrain

Craniosacral therapy

Effleurage

Emotional Freedom Techniques

Foam rolling

Graston Technique

Holotropic Breathwork

Jin Shin Do

Joint manipulation

Joint mobilization

Kinesis Myofascial Integration

Kinetic Awareness

Manipulation under anesthesia

Massage

Mechanotherapy

Metamorphic Technique

Movement studies

Muscle energy technique

Myofascial release

Myotherapy

Naprapathy

Neo-Reichian massage

Nishi Shiki

Orgasmatron (massage device)

Osteomyology

Osteopathic medicine in the United States

Petrissage

McKenzie method

Physical therapy

Postural Integration

Psychotherapeutic Postural Integration

Pulsing (bodywork)

Reflexology

Rolfing

Rosen Method Bodywork

Seitai

Soft tissue technique

Soft tissue therapy  
 Somatic dysfunction  
 Somatics  
 Sotai  
 Spinal adjustment  
 Spinal manipulation  
 Spinal mobilization  
 Stone massage  
 Strain and counterstrain  
 Structural Integration  
  
 Tapas Acupressure Technique  
 Tapotement  
 Thai massage  
 Tui na  
  
 Waterdance  
  
 Yakchim  
  
 Zero Balancing

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209	<i>766 Manipulative and Body-Based Practices ...</i>	
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211	<i>854 Category Mind-body interventions</i>	
	<a href="http://en.wikipedia.org/wiki/Category:Mind-">http://en.wikipedia.org/wiki/Category:Mind-</a>	
212		75
213	<i>765 Mind and Body Medicine ...</i>	
214		76
	<b>Mind-body medicine</b>	
215	Mind-body techniques strengthen the communication between your mind and your body. Complementary and alternative medicine practitioners say these two systems must be in harmony for you to stay healthy. Examples of mind-body connection techniques include meditation, prayer, and relaxation	
	<i>376 empty</i>	
	<i>126 empty</i>	
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225	<b>600 PHARMACOGNOSY</b>	
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227	<b>604 Pharmacognosy</b>	
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## Pharmacognosy

<http://en.wikipedia.org/wiki/Pharmacognosy>

*Dioscorides' Materia Medica, c. 1334 copy in Arabic, describes medicinal features of various plants.*

Pharmacognosy is the study of medicines derived from natural sources. The American Society of Pharmacognosy defines pharmacognosy as "the study of the physical, chemical, biochemical and biological properties of drugs, drug substances or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources." It is also defined as

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- 1 Introduction
- 2 Issues in phytotherapy
- 3 Acceptance in the United States

### Introduction

The word "pharmacognosy" is derived from the Greek words φάρμακον (pharmakon) (drug), and γνῶσις (gnosis) (knowledge). The term "pharmacognosy" was used for the first time by the Austrian physician Schmidt in 1811 and 1815 by Crr. Anotheus Seydler in a work titled *Applied Pharmacognosy*. Originally—during the 19th century and the beginning of the 20th century—"pharmacognosy" was used to define the branch of medicine or commodity sciences (Warenkunde in German) which deals with drugs in their crude, or unprepared, form. Crude drugs are the dried, unprepared material of plant, animal or mineral origin, used for medicine. The study of these materials under the name pharmakognosie was first developed in German-speaking areas of Europe, while other language areas often used the

As late as the beginning of the 20th century, the subject had developed mainly on the botanical side, being particularly concerned with the description and identification of drugs both in their whole state and in powder form. Such branches of pharmacognosy are still of fundamental importance, particularly for pharmacopoeial identification and quality

Although most pharmacognostic studies focus on plants and medicines derived from plants, other types of organisms are also regarded as pharmacognostically interesting, in particular, various types of microbes

According to the American Society of Pharmacognosy, pharmacognosy is "the study of natural product molecules (typically secondary metabolites) that are useful for their medicinal, ecological, gustatory, or other functional properties." Other definitions are more encompassing, drawing on a broad spectrum of biological subjects, including botany, ethnobotany, medical anthropology, marine biology, microbiology, herbal medicine, chemistry,

The contemporary study of pharmacognosy can be divided into the fields of  
medical ethnobotany: the study of the traditional use of plants for medicinal  
ethnopharmacology: the study of the pharmacological qualities of traditional medicinal substances;  
the study of phytotherapy (the medicinal use of plant extracts); and  
phytochemistry, the study of chemicals derived from plants (including the identification of new drug candidates derived from plant sources).  
zoopharmacognosy, the process by which animals self-medicate, by selecting and using plants, soils, and insects to treat and prevent disease.  
marine pharmacognosy, the study of chemicals derived from marine

At the 9th congress of Italian society of pharmacognosy it was stated that current return of phyto-therapy was clearly reflected by the increased market of such products. In 1998 the latest figures available for Europe, the total OTC market for herbal medicinal products reached a figure of \$6 billion, with consumption for Germany of \$2.5 billion, France \$1.6 billion and Italy \$600 million. In the US, where the use of herbal products has never been as prevalent as in continental Europe, the market for all herb sales reached a

The plant kingdom still holds many species of plants containing substances of medicinal value which have yet to be discovered. Large numbers of plants are constantly being screened for their possible pharmacological value.

### **Issues in phytotherapy**

The part of pharmacognosy focusing on use of crude extracts or semi-pure mixtures originating from nature, namely phytotherapy, is probably the best known and also the most debated area in pharmacognosy. Although phytotherapy is sometimes considered as alternative medicine, when critically conducted, it can be considered the scientific study on the effects

#### *Constituents and drug synergism*

One characteristic of crude drug material is that constituents may have an opposite, moderating or enhancing effect. Hence, the final effect of any crude drug material will be a product of the interactions between the constituents and the effect of each constituent on its own. To effectively study the existence and affect of such interactions, scientific studies must examine the effect that multiple constituents, given concurrently, have on the system. Herbalists assert that as phytopharmaceuticals rely upon synergy for their activities, plants with high levels of active constituents like ginsenosides or hypericin may not correlate with the strength of the herbs. In phytopharmaceutical or herbal medicine, the therapeutic effects of herbs cannot be determined unless its active ingredient or cofactors are identified or the herb is administered as a whole. One way to indicate strength is standardization to one or several marker compound that are believed to be

#### *Herb and drug interactions*

A study of herb drug interactions indicated that the vast majority of drug interactions occurred in four classes of drugs, the chief class being blood thinners, but also including protease inhibitors, cardiac glycosides and the

#### *Natural products chemistry*

Most bioactive compounds of natural origin are secondary metabolites, i.e., species-specific chemical agents that can be grouped into various categories

A typical protocol to isolate a pure chemical agent from natural origin is bioassay-guided fractionation, meaning step-by-step separation of extracted components based on differences in their physicochemical properties, and assessing the biological activity, followed by next round of separation and assaying. Typically, such work is initiated after a given crude drug formulation (typically prepared by solvent extraction of the natural material) is deemed "active" in a particular *in vitro* assay. If the end-goal of the work is to identify the active component(s), *the path to that end is fairly straightforward:*

1. fractionate the crude extract, e.g. by solvent partitioning or chromatography.
2. test the fractions thereby generated with *in vitro* assay.
3. repeat steps 1) and 2) until pure, active compounds are obtained.
4. determine structure(s) of active compound(s), typically by using spectroscopic methods. *In vitro* activity does not necessarily translate to *in vivo* activity.

The most common means for fractionation are solvent-solvent partitioning and chromatographic techniques such as high-performance liquid chromatography (HPLC), medium-pressure liquid chromatography, "flash" chromatography, open-column chromatography, vacuum-liquid chromatography (VLC), thin-layer chromatography (TLC), with each technique being most appropriate for a given amount of starting material. Countercurrent chromatography (CCC) is particularly well-suited for bioassay-guided fractionation because, as an all-liquid separation technique, concern about irreversible loss or denaturation of active sample components is minimized. After isolation of a pure substance, the task of elucidating its chemical structure can be addressed. For this purpose, the most powerful methodologies available are nuclear magnetic resonance spectroscopy (NMR) and mass spectrometry (MS)[*citation needed*]. In the case of drug discovery efforts, structure elucidation of all components that are active *in vitro* is typically the end goal. In the case of phytotherapy research, the investigator may use *in vitro* BAGF as a tool to identify pharmacologically interesting or important components of the crude drug. The work does not stop after structural identification of *in vitro* actives, however. The task of "dissecting and reassembling" the crude drug one active component at a time, in order to achieve a mechanistic understanding of how it works in phytotherapy, is quite daunting. This is because it is simply too difficult, from cost, time, regulatory, and even scientific perspectives, to study

#### *Loss of biodiversity*

Farnsworth for example, has found that 25% of all prescriptions dispensed from community pharmacies in the United States from 1959 to 1980 contained active ingredients extracted from higher plants. In some countries in Asia and Africa 80% of the population relies on traditional medicine (including herbal medicine) for primary health care. Constituents of substances used by traditional healers, have rarely been incorporated into modern medicine. Quinine, physostigmine, d-tubocurarine, pilocarpine and ephedrine, have been demonstrated to have active effects. Knowledge of traditional medicinal practices is fast disappearing(?), particularly in the Amazon, as native healers die out and are replaced by more modern medical practitioners. Botanists and pharmacologists are racing to learn these ancient secrets. An explanation for some species loss is habitat lost due to invasive species introduction. Herbalist David Winston has suggested that a high proportion of nonnative species seen as invasive (kudzu, Japanese knotweed, mimosa, *Lonicera*, *St. Johnswort* and purple loosestrife) may be harvested for the

Species extinction is not only due to habitat loss. Overharvesting of medicinal species of plants and animals also contributes to species loss. This is particularly notable in the matter of Traditional Chinese Medicine where crude drugs of plant and animal origin are used with increasing demand. People with a stake in TCM often seek chemical and biological alternatives to endangered species because they realize that plants and animals lost from the wild are also lost to medicine forever but different cultural attitudes bedevil conservation efforts[citation needed]. Still conservation is not a new idea: Chinese advice against overexploitation of natural medicinal species

Cooperation between Western conservationists and practitioners have been beset by cultural difficulties. Westerners may emphasise urgency in matters of conservation, while Chinese may wish for the products used in TCM to remain publicly available. One repeated fallacy[citation needed] is that rhinoceros horn is used as an aphrodisiac in TCM. It is, in fact, prescribed for fevers and convulsions by TCM practitioners. There are no peer-reviewed studies showing that this treatment is effective. In 1995 representatives of the oriental medicine communities in Asia met with conservationists at a symposium in Hong Kong, organized by TRAFFIC. The two groups established a clear willingness to cooperate through dialogue and mutual understanding. This has led to several meetings, including the 1997 First International Symposium on Endangered Species Used in Traditional East Asian Medicine where China was among 136 nations to sign a formal resolution recognizing that the uncontrolled use of wild species in traditional medicine threatens their survival and the continuation of these

#### *Sustainable sources of plant and animal drugs*

As species face loss of habitat or overharvesting, there have been new issues to deal with in sourcing crude drugs. These include changes to the herb from farming practices, substitution of species or other plants altogether, adulteration and cross-pollination issues[citation needed]. For instance, ginseng which is field farmed may have significant problems with fungus, making contamination with fungicides an issue.[citation needed] This may

The wildcrafted echinacea, black cohosh and American ginseng often rely upon old growth root, often in excess of 50 years of age and it is not clear that younger stock will have the same pharmaceutical effect. Black cohosh may be adulterated with the related Chinese actea species, which is not the same. Ginseng may be replaced by ginseniodes from Jiaogulan which has

The problem may be exacerbated by the growth of pills and capsules as the preferred method of ingesting medication as they are cheaper and more available than traditional, individually tailored prescriptions of raw medicinals but the contents are harder to track.[citation needed] Seahorses are a case in point: Seahorses once had to be of a certain size and quality before they were accepted by practitioners and consumers.[citation needed] But declining availability of the preferred large, pale and smooth seahorses has been offset by the shift towards prepackaged medicines, which make it

Today almost a third of the seahorses sold in China are prepackaged.

The farming of plant or animal species for medicinal purposes has caused

*Rob Parry Jones and Amanda Vincent write:*

One solution is to farm medicinal animals and plants. Chinese officials have promoted this as a way of guaranteeing supplies as well as protecting endangered species. And there have been some successes—notably with plant species, such as American ginseng—which is used as a general tonic and for chronic coughs. Red deer, too, have for centuries been farmed for their antlers, which are used to treat impotence and general fatigue. But growing your own is not a universal panacea. Some plants grow so slowly that cultivation is not economically viable. Animals such as musk deer may be difficult to farm, and so generate little profit. Seahorses are difficult to feed and plagued by disease in captivity. Other species cannot be cultivated

Overall, cultivated TCM plants in China supply less than 20 per cent of the required 1.6 million tonnes per annum. Similarly, China's demand for animal products such as musk and pangolin scales far exceeds supply from farming alone can never resolve conservation concerns, as government authorities and those who use Chinese medicine realise. For a start, consumers often prefer ingredients taken from the wild, believing them to be more potent. This is reflected in the price, with wild oriental ginseng fetching up to 32 times as much as cultivated plants. Then there are welfare concerns. Bear farming in China is particularly controversial. Around 7600 captive bears have their bile "milked" through tubes inserted into their gall bladders. The World Society for the Protection of Animals states that bear farming is surrounded by "appalling levels of cruelty and neglect". Chinese officials state that 10,000 wild bears would need to be killed each year to produce as much bile, making bear farming the more desirable option. The World Society for the Protection of Animals, however, states that "it is commonly believed in China that the bile from a wild bear is the most

One alternative to farming involves replacing medical ingredients from threatened species with manufactured chemical compounds. In general, this sort of substitution is difficult to achieve because the active ingredient is often not known. In addition, most TCM users believe that TCM compounds may act synergistically so several ingredients may interact to give the required effect. Thus TCM users often prefer the wild source. Tauro ursodeoxycholic acid, the active ingredient of bear bile, can be synthesised and is used by some Western doctors to treat gallstones, but many TCM

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*605 American Society of Pharmacognosy*

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#### **American Society of Pharmacognosy**

[http://en.wikipedia.org/wiki/American\\_Society\\_of\\_](http://en.wikipedia.org/wiki/American_Society_of_)

The American Society of Pharmacognosy (ASP) is a scientific society that promotes the growth and development of pharmacognosy through presentation of research achievements and publication of meritorious

ASP was founded in 1959 as an outgrowth of the Plant Science Seminar established in 1923. ASP currently has over 1,100 active and associate members. Approximately 40 percent of the active members reside outside

Pharmacognosy includes the study of the physical, chemical, biochemical and biological properties of drugs, drug substances, or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources. Research problems in pharmacognosy include studies in the areas of phytochemistry, microbial chemistry, biosynthesis, biotransformation, chemotaxonomy, and other biological and chemical ASP publishes the quarterly ASP Newsletter and co-publishes the Journal of Natural Products with the American Chemical Society. Honorary members included [[Albert Hoffman](1906-2008)].[citation needed]

#### **External links**

American Society of Pharmacognosy website

Journal of Natural Products website

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#### **European Food Safety Authority**

[http://en.wikipedia.org/wiki/European\\_Food\\_Safet](http://en.wikipedia.org/wiki/European_Food_Safet)

Motto Committed to ensuring that Europe's food is safe

Formation January 2002 (established)

Location Parma, Italy

Director Catherine Geslain-Lanéelle

Website [efsa.europa.eu](http://efsa.europa.eu)

The European Food Safety Authority (EFSA) is an agency of the European Union that provides independent scientific advice and communication on existing and emerging risks associated with the food chain, created by

The Authority's work covers all matters with a direct or indirect impact on food and feed safety, including animal health and welfare, plant protection  
EFSA supports the European Commission, European Parliament and EU member states in taking effective and timely risk management decisions that ensure the protection of the health of the European consumers and the safety

The Authority communicates to the public in an open and transparent way on all matters within its remit.

EFSA was set up in January 2002 and is based in Parma, Italy.

#### **Structure**

*EFSA is composed of four bodies:*

The Management Board sets the budget, approves the annual work programme, and is responsible for ensuring that EFSA co-operates successfully with partner organisations across the EU and beyond. The Executive Director is the legal representative of the Authority, and is responsible for operational matters, staffing issues and drawing up the annual programme in consultation with the European Commission. The Executive Director is assisted by an Advisory Forum composed of representatives of national bodies responsible for risk assessment in the Member States, with observers from Norway, Iceland, Switzerland and the

EFSA's scientific opinions and advice are provided by the Scientific Committee (SC) and Scientific Panels, each within their own sphere of competence. EFSA's Scientific Committee and Panels are composed of

#### **Funding EFSA activities**

EFSA is an independent European agency funded by the EU budget that operates separately from the European Commission, European Parliament and EU Member States. Its budget for 2008 was €65.9 million.

## Criticism

EFSA has been continuously criticised for their alleged overregulation, failure to comply with scientific studies and frequent promotion of conflict of interest. For example, Corporate Europe Observatory and Earth Open Source have documented cases where EFSA has used industry scientists and information in risk assessments used by EU institutions and national governments, accusing the agency of basing their decisions on industry data rather than independent science. They also claim that many EFSA panel members have ties with industry. Food & Environmental Movement Centre also

## See also

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## Food and Drug Administration

[http://en.wikipedia.org/wiki/Food\\_and\\_Drug\\_Administration](http://en.wikipedia.org/wiki/Food_and_Drug_Administration)

Agency overview

Formed 1906

Preceding agencies Food, Drug, and Insecticide Administration (July 1927

through July 1927)  
Bureau of Chemistry, USDA (July 1901 through July 1927)

Division of Chemistry, USDA (established 1862)

Jurisdiction Federal government of the United States

Headquarters White Oak Campus, 10903 New Hampshire Avenue, Silver

Spring, Maryland  
Coordinates: 39°02′07″N 76°58′59″W﻿ / ﻿39.035278°N 76.983056°W﻿ / 39.035278; -76.983056

Employees 9,300 (2008)

Annual budget \$4.36 billion (2012)

Agency executive Margaret Hamburg, Commissioner of Food and Drugs

Parent Agency Department of Health and Human Services

Child agencies Center for Biologics Evaluation and Research

Center for Devices and Radiological Health

Center for Drug Evaluation and Research

Center for Food Safety and Applied Nutrition

Center for Tobacco Products

Center for Veterinary Medicine

National Center for Toxicological Research

Office of Criminal Investigations

Office of Regulatory Affairs

Website

U.S. Food and Drug Administration – Homepage

The Food and Drug Administration (FDA or USFDA) is an agency of the United States Department of Health and Human Services, one of the United States federal executive departments. The FDA is responsible for protecting and promoting public health through the regulation and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), and veterinary products. The FDA also enforces other laws, notably Section 361 of the Public Health Service Act and associated regulations, many of which are not directly related to food or drugs. These include sanitation requirements on interstate travel and control of disease on

The FDA is led by the Commissioner of Food and Drugs, appointed by the President with the advice and consent of the Senate. The Commissioner reports to the Secretary of Health and Human Services. The 21st and current Commissioner is Dr. Margaret A. Hamburg. She has served as

The FDA has its headquarters in Silver Spring, Maryland. The agency also has 223 field offices and 13 laboratories located throughout the 50 states, the United States Virgin Islands, and Puerto Rico. In 2008, the FDA started opening offices in foreign countries, including China, India, Costa Rica,

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## **Organization**

The FDA comprises several offices and centers. There is

Office of the Commissioner

Center for Biologics Evaluation and Research

Center for Devices and Radiological Health (CDRH)

Office of the Center Director

Office of Communication, Education, and Radiation Programs  
Office of Compliance  
Office of Device Evaluation  
Office of In Vitro Diagnostic Device Evaluation and Safety  
Office of Management Operations  
Office of Science and Engineering Laboratories  
Office of Surveillance and Biometrics  
Center for Drug Evaluation and Research (CDER)  
Office of the Center Director  
Advisory Committee Staff  
Controlled Substance Staff  
Office of Compliance  
Division of Compliance Risk Management and Surveillance  
Division of Manufacturing and Product Quality  
Division of New Drugs and Labeling Compliance  
Division of Scientific Investigations  
Office of Medical Policy  
Office of Prescription Drug Promotion  
Office of New Drugs  
Office of Nonprescription Products  
Office of Oncology Drug Products  
Radioactive Drug Research Committee (RDRC) Program  
Office of Pharmaceutical Science  
Office of Biotechnology Products  
Office of Generic Drugs  
Office of New Drugs Quality Assessment  
Office of Testing and Research  
Division of Applied Pharmacology Research  
Division of Pharmaceutical Analysis  
Division of Product Quality Research  
Informatics and Computational Safety Analysis Staff (ICSAS)  
Office of Surveillance and Epidemiology (formerly Office of Drug Safety)  
Office of Translational Sciences  
Office of Biostatistics  
Office of Clinical Pharmacology  
Pharmacometrics Staff  
Division of Drug Information  
FDA Pharmacy Student Experiential Program  
Botanical Review Team  
Maternal Health Team  
Center for Food Safety and Applied Nutrition  
Center for Tobacco Products  
Center for Veterinary Medicine  
National Center for Toxicological Research  
Office of Regulatory Affairs

In recent years, the agency began undertaking a large-scale effort to consolidate its operations in the Washington Metropolitan Area from its main headquarters in Rockville and several fragmented office buildings in the vicinity to the former site of the Naval Ordnance Laboratory in the White Oak area of Silver Spring, Maryland.[4][6] When the FDA arrived, the site was renamed from the White Oak Naval Surface Warfare Center to the Federal Research Center at White Oak. The first building, the Life Sciences

While most of the Centers are located around the Washington, D.C., area as part of the Headquarters divisions, two offices – the Office of Regulatory Affairs (ORA) and the Office of Criminal Investigations (OCI) – are primarily field offices with a workforce spread across the country.

The Office of Regulatory Affairs is considered the "eyes and ears" of the agency, conducting the vast majority of the FDA's work in the field. Consumer Safety Officers, more commonly called Investigators, are the individuals who inspect production and warehousing facilities, investigate complaints, illnesses, or outbreaks, and review documentation in the case of medical devices, drugs, biological products, and other items where it may be difficult to conduct a physical examination or take a physical sample of the product. The Office of Regulatory Affairs is divided into five regions, which are further divided into 13 districts. Districts are based roughly on the geographic divisions of the federal court system. Each district comprises a main district office, and a number of Resident Posts, which are FDA offices located away from the district office to serve a particular geographic area. ORA also includes the Agency's network of laboratories, which analyze any

The Office of Criminal Investigations was established in 1991 to investigate criminal cases. Unlike ORA Investigators, OCI Special Agents are armed, and are not focused on the technical aspects of the regulated industries. OCI agents pursue and develop cases where criminal actions have occurred, such as fraudulent claims, or knowingly and willfully shipping known adulterated goods in interstate commerce. In many cases, OCI will pursue cases where Title 18 violations have occurred (e.g. conspiracy, false statements, wire fraud, mail fraud), in addition to prohibited acts as defined in Chapter III of the FD&C Act. OCI Special Agents often come from other criminal investigations backgrounds, and work closely with the Federal Bureau of Investigation, Assistant Attorney General, and even Interpol. OCI will receive cases from a variety of sources, including ORA, local agencies, and the FBI, and will work with ORA investigators to help develop the technical

The FDA frequently works in conjunction with other federal agencies including the Department of Agriculture, Drug Enforcement Administration, Customs and Border Protection, and Consumer Product Safety Commission. Often local and state government agencies also work in cooperation with the

### **Scope and funding**

The FDA regulates more than \$1 trillion worth of consumer goods, about 25% of consumer expenditures in the United States. This includes \$466 billion in food sales, \$275 billion in drugs, \$60 billion in cosmetics and \$18 billion in vitamin supplements. Much of the expenditures is for goods imported into the United States; the FDA is responsible for monitoring a The FDA's federal budget request for fiscal year (FY) 2012 totaled \$4.36 billion. About \$2 billion of this budget is generated by user fees.

Pharmaceutical firms pay the majority of these fees, which are used to expedite drug reviews. The FDA's federal budget request for fiscal year (FY) 2008 (October 2007 through September 2008) totaled \$2.1 billion, a \$105.8 million increase from what it received for fiscal year 2007. In February 2008, the FDA announced that the Bush Administration's FY 2009 budget request for the agency was just under \$2.4 billion: \$1.77 billion in budget authority (federal funding) and \$628 million in user fees. The requested budget authority was an increase of \$50.7 million more than the FY 2008 funding – about a three percent increase. In June 2008, Congress gave the

Most federal laws concerning the FDA are part of the Food, Drug and Cosmetic Act, (first passed in 1938 and extensively amended since) and are codified in Title 21, Chapter 9 of the United States Code. Other significant laws enforced by the FDA include the Public Health Service Act, parts of the Controlled Substances Act, the Federal Anti-Tampering Act, as well as many

## **Regulatory programs**

Regulation of therapeutic goods in the United States

Prescription drugs

Over-the-counter drugs

Law[show]

Government agencies[show]

Process[show]

International coordination[show]

Non-governmental organizations[show]

The programs for safety regulation vary widely by the type of product, its potential risks, and the regulatory powers granted to the agency. For example, the FDA regulates almost every facet of prescription drugs, including testing, manufacturing, labeling, advertising, marketing, efficacy and safety, yet FDA regulation of cosmetics is focused primarily on labeling and safety. The FDA regulates most products with a set of published standards enforced by a modest number of facility inspections. Inspection

### *Food and dietary supplements*

*Main article:* Regulation of food and dietary supplements by the U.S. Food and Drug Administration

The Center for Food Safety and Applied Nutrition is the branch of the FDA that is responsible for ensuring the safety and accurate labeling of nearly all food products in the United States. One exception is meat products derived from traditional domesticated animals, such as cattle and chickens, which fall under the jurisdiction of the United States Department of Agriculture Food Safety and Inspection Service. Products that contain minimal amounts of meat are regulated by FDA, and the exact boundaries are listed in a memorandum of understanding between the two agencies. However, medicines and other products given to all domesticated animals are regulated by the FDA through a different branch, the Center for Veterinary Medicine. Other consumables that are not regulated by the FDA include beverages containing more than 7% alcohol (regulated by the Bureau of Alcohol, Tobacco, Firearms and Explosives in the Department of Justice) and non

CFSAN's activities include establishing and maintaining food standards, such as standards of identity (for example, what the requirements are for a product to be labeled, "yogurt") and standards of maximum acceptable contamination. CFSAN also sets the requirements for nutrition labeling of most foods. Both food standards and nutrition labeling requirements are part

The Dietary Supplement Health and Education Act of 1994 mandated that the FDA regulate dietary supplements as foods, rather than as drugs. Therefore, dietary supplements are not subject to safety and efficacy testing and there are no approval requirements. The FDA can take action against dietary supplements only after they are proven to be unsafe. Manufacturers of dietary supplements are permitted to make specific claims of health benefits, referred to as "structure or function claims" on the labels of these

Bottled water is regulated in America by the FDA. State governments also regulate bottled water. Tap water is regulated by state and local regulations, as well as the United States EPA. FDA regulations of bottled water generally follow the guidelines established by the EPA, and new EPA rules automatically apply to bottled water if the FDA does not release an explicit new rule. Federal bottled water regulations have been criticized as weaker

### *Drugs*

The Center for Drug Evaluation and Research has different requirements for the three main types of drug products: new drugs, generic drugs and over-the-counter drugs. A drug is considered "new" if it is made by a different manufacturer, uses different excipients or inactive ingredients, is used for a different purpose, or undergoes any substantial change. The most rigorous

### *New drugs*

New drugs receive extensive scrutiny before FDA approval in a process called a New Drug Application or NDA. New drugs are available only by prescription by default. A change to over-the-counter (OTC) status is a separate process, and the drug must be approved through an NDA first. A

*Advertising and promotion*

The FDA's Office of Prescription Drug Promotion reviews and regulates prescription drug advertising and promotion through surveillance activities and issuance of enforcement letters to pharmaceutical manufacturers. Advertising and promotion for over-the-counter drugs is regulated by the

The drug advertising regulation contains two broad requirements: (1) a company may advertise or promote a drug only for the specific indication or medical use for which it was approved by FDA. Also, an advertisement must contain a "fair balance" between the benefits and the risks (side effects) of a

The term off-label refers to drug usage for indications other than those

### *Postmarket safety surveillance*

After approval of an NDA, the sponsor must review and report to the FDA every patient adverse drug experience of which it learns. Unexpected serious and fatal adverse drug events must be reported within 15 days, and other events on a quarterly basis. The FDA also receives directly adverse drug event reports through its MedWatch program. These reports are called "spontaneous reports" because reporting by consumers and health professionals is voluntary. While this remains the primary tool of postmarket safety surveillance, FDA requirements for postmarketing risk management are increasing. As a condition of approval, a sponsor may be required to conduct additional clinical trials, called Phase IV trials. In some cases, the FDA requires risk management plans for some drugs that may provide for

### *Generic drugs*

Generic drugs are chemical equivalents of name-brand drugs whose patents have expired. In general, they are less expensive than their name brand counterparts, are manufactured and marketed by other companies and, in the 1990s, accounted for about a third of all prescriptions written in the United States. For approval of a generic drug, the U.S. Food and Drug Administration (FDA) requires scientific evidence that the generic drug is interchangeable with or therapeutically equivalent to the originally approved

### *Generic drug scandal*

In 1989, a major scandal erupted involving the procedures used by the FDA to approve generic drugs for sale to the public. Charges of corruption in generic drug approval first emerged in 1988, in the course of an extensive congressional investigation into the FDA. The oversight subcommittee of the United States House Energy and Commerce Committee resulted from a complaint brought against the FDA by Mylan Laboratories Inc. of Pittsburgh. When its application to manufacture generics were subjected to repeated delays by the FDA, Mylan, convinced that it was being discriminated against, soon began its own private investigation of the agency in 1987. Mylan eventually filed suit against two former FDA employees and four drug-manufacturing companies, charging that corruption within the federal agency resulted in racketeering and in violations of antitrust law. "The order in which new generic drugs were approved was set by the FDA employees even before drug manufacturers submitted applications" and, according to Mylan, this illegal procedure was followed to give preferential treatment to certain companies. During the summer of 1989, three FDA officials (Charles Y. Chang, David J. Brancato, Walter Kletch) pleaded guilty to criminal charges of accepting bribes from generic drugs makers, and two companies (Par Pharmaceutical and its subsidiary Quad Pharmaceuticals) pleaded guilty to giving bribes. Furthermore, it was discovered that several manufacturers had falsified data submitted in seeking FDA authorization to market certain generic drugs. Vitarine Pharmaceuticals of New York, which sought approval of a generic version of the drug Dyazide, a medication for high blood pressure, submitted Dyazide, rather than its generic version, for the FDA tests. In April 1989, the

#### *Over-the-counter drugs*

Over-the-counter (OTC) drugs are drugs and combinations that do not require a doctor's prescription. The FDA has a list of approximately 800 approved ingredients that are combined in various ways to create more than 100,000 OTC drug products. Many OTC drug ingredients had been previously approved prescription drugs now deemed safe enough for use

#### *Vaccines, blood and tissue products, and biotechnology*

The Center for Biologics Evaluation and Research is the branch of the FDA responsible for ensuring the safety and efficacy of biological therapeutic agents. These include blood and blood products, vaccines, allergenics, cell and tissue-based products, and gene therapy products. New biologics are required to go through a premarket approval process similar to that for drugs. The original authority for government regulation of biological products was established by the 1902 Biologics Control Act, with additional authority established by the 1944 Public Health Service Act. Along with these Acts, the Federal Food, Drug, and Cosmetic Act applies to all biologic products, as well. Originally, the entity responsible for regulation of

#### *Medical and radiation-emitting devices*

The Center for Devices and Radiological Health (CDRH) is the branch of the FDA responsible for the premarket approval of all medical devices, as well as overseeing the manufacturing, performance and safety of these devices. The definition of a medical device is given in the FD&C Act, and it includes products from the simple toothbrush to complex devices such as implantable brain pacemakers. CDRH also oversees the safety performance of non-medical devices that emit certain types of electromagnetic radiation. Examples of CDRH-regulated devices include cellular phones, airport baggage screening equipment, television receivers, microwave ovens,

CDRH regulatory powers include the authority to require certain technical reports from the manufacturers or importers of regulated products, to require that radiation-emitting products meet mandatory safety performance standards, to declare regulated products defective, and to order the recall of defective or noncompliant products. CDRH also conducts limited amounts

#### *FDA-Cleared vs FDA-Approved*

Clearance requests are for medical devices that prove they are "substantially equivalent" to the predicate devices already on the market. Approved requests are for items that are new or substantially different and need to demonstrate "safety and efficacy", for example it may be inspected for safety in case of new toxic hazards. Both aspects need to be proved or provided by

### *Cosmetics*

Cosmetics are regulated by the Center for Food Safety and Applied Nutrition, the same branch of the FDA that regulates food. Cosmetic products are not in general subject to premarket approval by the FDA unless they make "structure or function claims", which make them into drugs (see Cosmeceutical). However, all color additives must be specifically approved by the FDA before they can be included in cosmetic products sold in the U.S. The labelling of cosmetics is regulated by the FDA, and cosmetics that

### *Cosmetic products*

Though the cosmetic industry is predominantly responsible in ensuring the safety of its products, the FDA also has the power to intervene when necessary to protect the public but in general does not require pre-market

Companies are required to place a warning note on their products if they have not been tested. Experts in cosmetic ingredient reviews also play a role in monitoring safety through influence on the use of ingredients, but also

Overall the organization has reviewed about 1,200 ingredients and has suggested that several hundred be restricted, but there is no standard or systemic method for reviewing chemicals for safety and a clear definition of what is meant by 'safety' so that all chemicals are tested on the same basis.

### **Veterinary products**

The Center for Veterinary Medicine (CVM) is the branch of the FDA that regulates food, food additives, and drugs that are given to animals, including food animals and pets. CVM does not regulate vaccines for animals; these CVM's primary focus is on medications that are used in food animals and ensuring that they do not affect the human food supply. The FDA's requirements to prevent the spread of bovine spongiform encephalopathy are also administered by CVM through inspections of feed manufacturers.

### **Tobacco products**

Since the Family Smoking Prevention and Tobacco Control Act became law in 2009, the FDA also has had the authority to regulate tobacco products.

In 2009, Congress passed a law requiring color warnings on cigarette packages and on printed advertising, in addition to text warnings from the

The nine new graphic warning labels were announced by the FDA in June 2011 and were scheduled to be required to appear on packaging by September 2012. The implementation date is uncertain, due to ongoing proceedings in the case of R.J. Reynolds Tobacco Co. v. U.S. Food and

R.J. Reynolds, Lorillard, Commonwealth Brands Inc., Liggett Group LLC and Santa Fe Natural Tobacco Company Inc. have filed suit in Washington, D.C. federal court claiming that the graphic labels are an unconstitutional way of forcing tobacco companies to engage in anti-smoking advocacy on the government's behalf. A First Amendment lawyer, Floyd Abrams, is representing the tobacco companies in the case, contending requiring graphic warning labels on a lawful product cannot withstand constitutional scrutiny. The Association of National Advertisers and the American Advertising Federation have also filed a brief in the suit, arguing that the labels infringe on commercial free speech and could lead to further government intrusion if left unchallenged. In November 2011, Federal judge Richard Leon of the U.S. District Court for the District of Columbia

#### *Regulation of living organisms*

With acceptance of premarket notification 510(k) k033391 in January 2004, the FDA granted Dr. Ronald Sherman permission to produce and market medical maggots for use in humans or other animals as a prescription medical device. Medical maggots represent the first living organism allowed by the Food and Drug Administration for production and marketing as a ~~prescription medical device~~. In June 2004, the FDA cleared *Hirudo medicinalis* (medicinal leeches) as the second living organism to be used as a medical devices.

#### **Science and research programs**

In addition to its regulatory functions, the FDA carries out research and development activities to develop technology and standards that support its regulatory role, with the objective of resolving scientific and technical challenges before they become impediments. The FDA's research efforts include the areas of biologics, medical devices, drugs, women's health,

#### **History**

Main article: History of the Food and Drug Administration

Up until the 20th century, there were few federal laws regulating the contents and sale of domestically produced food and pharmaceuticals, with one exception being the short-lived Vaccine Act of 1813. The history of the FDA can be traced to the latter part of the 19th century and the U.S. Department of Agriculture's Division of Chemistry (later Bureau of Chemistry). Under Harvey Washington Wiley, appointed chief chemist in 1883, the Division began conducting research into the adulteration and misbranding of food and drugs on the American market. Wiley's advocacy came at a time when the public had become aroused to hazards in the marketplace by muckraking journalists like Upton Sinclair, and became part of a general trend for increased federal regulations in matters pertinent to public safety during the Progressive Era. The 1902 Biologics Control Act

In June 1906, President Theodore Roosevelt signed into law the Food and Drug Act, also known as the "Wiley Act" after its chief advocate. The Act prohibited, under penalty of seizure of goods, the interstate transport of food that had been "adulterated". The act applied similar penalties to the interstate marketing of "adulterated" drugs, in which the "standard of strength, quality, or purity" of the active ingredient was not either stated clearly on the label or listed in the United States Pharmacopoeia or the National Formulary. The responsibility for examining food and drugs for such "adulteration" or "misbranding" was given to Wiley's USDA Bureau of Chemistry. Wiley used these new regulatory powers to pursue an aggressive campaign against the manufacturers of foods with chemical additives, but the Chemistry Bureau's authority was soon checked by judicial decisions, which narrowly defined the bureau's powers and set high standards for proof of fraudulent intent. In 1927 the Bureau of Chemistry's regulatory powers were

By the 1930s, muckraking journalists, consumer protection organizations, and federal regulators began mounting a campaign for stronger regulatory authority by publicizing a list of injurious products that had been ruled permissible under the 1906 law, including radioactive beverages, the mascara Lash lure, which caused blindness, and worthless "cures" for diabetes and tuberculosis. The resulting proposed law was unable to get through the Congress of the United States for five years, but was rapidly enacted into law following the public outcry over the 1937 Elixir Sulfanilamide tragedy, in which over 100 people died after using a drug formulated with a toxic, untested solvent. President Franklin Delano Roosevelt signed the new Food, Drug, and Cosmetic Act (FD&C Act) into law on June 24, 1938. The new law significantly increased federal regulatory authority over drugs by mandating a pre-market review of the safety of all new drugs, as well as banning false therapeutic claims in drug labeling without requiring that the FDA prove fraudulent intent. Soon after passage of the 1938 Act, the FDA began to designate certain drugs as safe for use only under the supervision of a medical professional and the category of

In 1959, the thalidomide tragedy, in which thousands of European babies were born deformed after their mothers took that drug – marketed for treatment of nausea – during their pregnancies, led to the 1962 Kefauver-Harris Amendment to the FD&C Act, which represented a "revolution" in FDA regulatory authority. The most important change was the requirement that all new drug applications demonstrate "substantial evidence" of the drug's efficacy for a marketed indication, in addition to the existing

These reforms had the effect of increasing the time required to bring a drug to market. One of the most important statutes in establishing the modern American pharmaceutical market was the 1984 Drug Price Competition and Patent Term Restoration Act, more commonly known as the "Hatch-Waxman Act" after its chief sponsors. The act extended the patent exclusivity terms of new drugs, and tied those extensions, in part, to the length of the FDA approval process for each individual drug. For generic manufacturers, the Act created a new approval mechanism, the Abbreviated New Drug Application (ANDA), in which the generic drug manufacturer need only demonstrate that their generic formulation has the same active ingredient, route of administration, dosage form, strength, and

Concerns about the length of the drug approval process were brought to the fore early in the AIDS epidemic. In the mid- and late 1980s, ACT-UP and other HIV activist organizations accused the FDA of unnecessarily delaying the approval of medications to fight HIV and opportunistic infections. Partly in response to these criticisms, the FDA issued new rules to expedite approval of drugs for life threatening diseases, and expanded pre-approval access to drugs for patients with limited treatment options. All of the initial

In two instances, state governments have sought to legalize drugs that have not been approved by the FDA. Because federal law passed pursuant to Constitutional authority overrules conflicting state laws[citation needed], federal authorities still claim the authority to seize, arrest, and prosecute for possession and sales of these substances, even in states where they are legal under state law. The first wave was the legalization by 27 states of laetrile in the late 1970s. This drug was used as a treatment for cancer, but scientific studies both before and after this legislative trend found it to be ineffective. The second wave concerned medical marijuana in the 1990s and 2000s (decade). Though Virginia passed a law with limited effect in 1970, a more

## Recent and ongoing reforms

### *Critical Path Initiative*

The Critical Path Initiative is FDA's effort to stimulate and facilitate a national effort to modernize the sciences through which FDA-regulated products are developed, evaluated, and manufactured. The Initiative was launched in March 2004, with the release of a report entitled

### *Patients' rights to access unapproved drugs*

A 2006 court case, *Abigail Alliance v. von Eschenbach*, would have forced radical changes in FDA regulation of unapproved drugs. The Abigail Alliance argued that the FDA must license drugs for use by terminally ill patients with "desperate diagnoses," after they have completed Phase I testing. The case won an initial appeal in May 2006, but that decision was reversed by a March 2007 rehearing. The US Supreme Court declined to hear the case, and the final decision denied the existence of a right to access unapproved drugs. Critics of the FDA's regulatory power argue that the FDA takes too long to approve drugs that might ease pain and human suffering faster if brought to market sooner. The AIDS crisis created some political efforts to streamline the approval process. However, these limited reforms were targeted for AIDS drugs, not for the broader market. This has led to the call for more robust and enduring reforms that would allow patients, under the care of their

### *Post-marketing drug safety monitoring*

The widely publicized recall of Vioxx, a non-steroidal anti-inflammatory drug now estimated to have contributed to fatal heart attacks in thousands of Americans, played a strong role in driving a new wave of safety reforms at both the FDA rulemaking and statutory levels. Vioxx was approved by the FDA in 1999, and was initially hoped to be safer than previous NSAIDs, due to its reduced risk of intestinal tract bleeding. However, a number of pre- and post-marketing studies suggested that Vioxx might increase the risk of myocardial infarction, and this was conclusively demonstrated by results from the APPROVe trial in 2004. Faced with numerous lawsuits, the manufacturer voluntarily withdrew it from the market. The example of Vioxx has been prominent in an ongoing debate over whether new drugs should be evaluated on the basis of their absolute safety, or their safety relative to existing treatments for a given condition. In the wake of the Vioxx recall there were widespread calls by major newspapers, medical

In 2006, a congressionally requested committee was appointed by the Institute of Medicine to review pharmaceutical safety regulation in the U.S. and to issue recommendations for improvements. The committee was composed of 16 experts, including leaders in clinical medicine, medical research, economics, biostatistics, law, public policy, public health, and the allied health professions, as well as current and former executives from the pharmaceutical, hospital, and health insurance industries. The authors found major deficiencies in the current FDA system for ensuring the safety of drugs on the American market. Overall, the authors called for an increase in the regulatory powers, funding, and independence of the FDA. Some of the committee's recommendations have been incorporated into drafts of the

### *Pediatric drug testing*

Prior to the 1990s, only 20% of all drugs prescribed for children in the United States were tested for safety or efficacy in a pediatric population. This became a major concern of pediatricians as evidence accumulated that the physiological response of children to many drugs differed significantly from those drugs' effects on adults. There were several reasons that not many medical trials were done with children. For many drugs, children represented such a small proportion of the potential market, that drug manufacturers did not see such testing as cost-effective. Also, because children were thought to be ethically restricted in their ability to give informed consent, there were increased governmental and institutional hurdles to approval of these clinical trials, as well as greater concerns about legal liability. Thus, for decades, most medicines prescribed to children in the U.S. were done so in a non-FDA approved "off label" manner, with dosage "extrapolated" from adult

An initial attempt by the FDA to address this issue was the 1994 FDA Final Rule on Pediatric Labeling and Extrapolation, which allowed manufacturers to add pediatric labeling information, but required drugs that had not been tested for pediatric safety and efficacy to bear a disclaimer to that effect. However, this rule failed to motivate many drug companies to conduct additional pediatric drug trials. In 1997, the FDA proposed a rule to require pediatric drug trials from the sponsors of New Drug Applications. However, this new rule was successfully preempted in federal court as exceeding the FDA's statutory authority. While this debate was unfolding, Congress used the 1997 Food and Drug Administration Modernization Act to pass incentives that gave pharmaceutical manufacturers a six-month patent term extension on new drugs submitted with pediatric trial data. The act reauthorizing these provisions, the 2002 Best Pharmaceuticals for Children Act, allowed the FDA to request NIH-sponsored testing for pediatric drug testing, although these requests are subject to NIH funding constraints. Most recently in the Pediatric Research Equity Act of 2003 Congress codified

#### *Rules for generic biologics*

Since the 1990s, many successful new drugs for the treatment of cancer, autoimmune diseases, and other conditions have been protein-based biotechnology drugs, regulated by the Center for Biologics Evaluation and Research. Many of these drugs are extremely expensive; for example, the anti-cancer drug Avastin costs \$55,000 for a year of treatment, while the enzyme replacement therapy drug Cerezyme costs \$200,000 per year, and must be taken by Gaucher's Disease patients for life. Biotechnology drugs do not have the simple, readily verifiable chemical structures of conventional drugs, and are produced through complex, often proprietary techniques, such as transgenic mammalian cell cultures. Because of these complexities, the 1984 Hatch-Waxman Act did not include biologics in the Abbreviated New Drug Application (ANDA) process, in essence precluding the possibility of generic drug competition for biotechnology drugs. In February 2007

#### **Criticisms**

Main article: Criticism of the Food and Drug Administration

Wikinews has related news: Obama calls food safety system a 'hazard to

The FDA currently has regulatory oversight over a large array of products that affect the health and life of American citizens. As a result, the FDA's powers and decisions are carefully monitored by several governmental and non-governmental organizations. A \$1.8 million 2006 Institute of Medicine report on pharmaceutical regulation in the U.S. found major deficiencies in the current FDA system for ensuring the safety of drugs on the American

**Nine** FDA scientists appealed to then president-elect Barack Obama over pressures from management, experienced during the George W. Bush presidency, to manipulate data, including in relation to the review process for medical devices. Characterized as "corrupted and distorted by current FDA managers, thereby placing the American people at risk," these concerns

The FDA has also been criticized from the opposite viewpoint, as being too tough on industry. According to an analysis published on the website of the libertarian Mercatus Center as well as published statements by economists, medical practitioners, and concerned consumers, many feel the FDA oversteps its regulatory powers and undermines small business and small farms in favor of large corporations. Three of the FDA restrictions under analysis are the permitting of new drugs and devices, the control of manufacturer speech, and the imposition of prescription requirements. The authors argue that in the increasingly complex and diverse food marketplace

However, in an indicator that the FDA may be too lax in their approval process, in particular for medical devices, a 2011 study by Dr. Diana Zuckerman and Paul Brown of the National Research Center for Women and Families, and Dr. Steven Nissen of the Cleveland Clinic, published in the Archives of Internal Medicine, showed that most medical devices recalled in the last five years for "serious health problems or death" had been previously approved by the FDA using the less stringent, and cheaper, 510(k) process. In a few cases the devices had been deemed so low-risk that they did not need FDA regulation. Of the 112 devices recalled, 25 were for

In 1956 the FDA had moved for the burning of William Reich's books and research materials, which is seen as one of the worst examples of censorship

**See also**

Food portal

Government of the United States portal

Health and fitness portal

Law portal

Medicine portal

100,000,000 Guinea Pigs: Dangers in Everyday Foods, Drugs, and Cosmetics (book)

Bad Pharma (2012) by Ben Goldacre

Criticism of the Food and Drug Administration

Drug Efficacy Study Implementation

European Medicines Agency

FDA Food Safety Modernization Act

Food Administration

Food and Drug Administration Amendments Act of 2007

International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH)

Inverse benefit law

Investigational Device Exemption

Kefauver Harris Amendment

Medicines and Healthcare products Regulatory Agency (UK)

Pharmaceutical company

The Food Defect Action Levels, an FDA publication

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*612 Products not evaluated by the Food and Drug Administration*

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<http://www.amritaveda.com/learning/articles/ginger>

Products found herein have not been evaluated by the Food and Drug

Administration

Such products are not intended to diagnose, treat or prevent any disease.

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Ginkgo biloba

Liverwort

Ginseng

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Melatonin

40 Glucosamine

Lobelia

Horse Chestnut

Mexican Wild Yam

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Horsetail

Nettle

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Whey Isolate

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Royal Jelly

Saw palmetto

Sea Buckthorn

Red clover

Scilla

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Collagen

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St. John's Wort  
Tarragon

<http://www.herbwisdom.com/herb-cinnamon.html>

**Cinnamon (Cinnamomum zeylanicum)**

**Cinnamon Benefits**

**Contents**

Cinnamon benefits  
Notes / side effects  
Where to buy Cinnamon  
Cinnamon reviews

### ***Cinnamon***

*Cinnamon* is a herb traditionally used by many ancient cultures. It is indicated for a variety of ailments including gastrointestinal problems, urinary infections, relieving symptoms of colds and flu and has remarkable anti-fungal and anti-bacterial properties. Some studies have shown that True cinnamon, or *Cinnamomum Zeylanicum*, is the inner bark of a small evergreen tree native to Sri Lanka and was used in ancient Egypt for embalming. It was also added to food to prevent spoiling. During the Bubonic Plague, sponges were soaked in cinnamon and cloves and placed in sick rooms. Cinnamon was the most sought after spice during explorations. Most therapeutic uses of *Chinese cinnamon bark* are rooted in its historical use as a traditional medicine and on laboratory and animal studies. Test-tube or animal research does not guarantee safety or effectiveness in humans, but German health authorities (Commission E) do approve of cinnamon bark for use. It is used in flatulent dyspepsia, dyspepsia with nausea, intestinal colic and digestive atony associated with cold & debilitated conditions. It is known to relieve nausea and vomiting, and because of its mild astringency it is *Cinnamon* warms and stimulates the digestive system, useful in weak digestion, colic, griping, diarrhea, nausea and vomiting, wind and distension. The tannins have an astringent action, stemming bleeding in

#### ***Cinnamon may help to:***

##### ***Soothe an upset stomach:***

Cinnamon extracts have been used medically to treat gastrointestinal problems and to help calm the stomach. Cinnamon is a carminative, an agent that helps break up intestinal gas that has traditionally been used to combat diarrhea and morning sickness. Both test-tube and some animal studies have found that cinnamon may help to relieve mild abdominal

##### ***Clear up urinary-tract infections:***

One German study showed that Cinnamon "suppresses completely" the cause of most urinary-tract infections (Escherichia coli bacteria) and the fungus responsible for vaginal yeast infections (Candida albicans).

##### ***Allow diabetics to use less insulin:***

Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better. In adult-onset (Type II) diabetes, the pancreas produces insulin, but the body can't use it efficiently to break down blood

Richard Anderson at the US Department of Agriculture's Human Nutrition Research Center in Beltsville, Maryland found that Cinnamon enhances the ability of insulin to metabolise glucose, helping to control blood sugar levels. Cinnamon contains the anti-oxidant glutathione and a type of flavonoid called MHCP (methylhydroxy chalcone polymer). It is believed that cinnamon makes fat cells much more responsive to insulin, the hormone that "One-eighth of a teaspoon of cinnamon triples insulin efficiency," say James A. Duke, Ph.D., a botanist retired from the U.S. Department of Agriculture and author of *The CRC Handbook of Medicinal Herbs*. Dr. Duke suggest that people with adult-onset diabetes discuss Cinnamon's benefits with their doctor. Taking ½ to ¾ teaspoon of ground Cinnamon with each meal

#### *Aid digestion:*

Cinnamon contains compounds called catechins, which help relieve nausea. The volatile oil in cinnamon bark may also help the body to process food by

#### *Kill many disease-causing fungi and viruses:*

Preliminary results from test tube and animal studies suggest that cinnamon oil and cinnamon extract have anti-fungal, anti-bacterial, and anti-parasitic properties. For example, cinnamon has been found to be active against *Candida albicans*, the fungus responsible for vaginal yeast infections and thrush (oral yeast infection), *Helicobacter pylori* (the bacteria that causes An incredible experiment in the journal of Food Science for 1974 demonstrated the power of cinnamon over most yeasts and fungi. Slices of white, raisin, rye and whole wheat breads, manufactured without the usual mold inhibitors, were subjected to various aflatoxins, a group of toxic molds so dangerous that they can cause liver cancer and kill humans and animals alike and often occur in food. The toxic molds grew vigorously on all of the other breads, except for the raisin bread where growth was described as being "scant or not visible at all." In trying to identify whether it was the raisins or cinnamon responsible for this, food scientists discovered that as little as 2% or 20 mg. of the spice normal of a yeast extract and average breath

#### *Relieve Pain:*

Cinnamon is considered a pain-killer due to its prostaglandin-inhibiting

#### *Relieve Colds and Flu:*

In both India and Europe, cinnamon has been traditionally taken as a warming herb for "cold" conditions, often in combination with ginger (*Zingiber officinale*). The herb stimulates the circulation, especially to the fingers and toes and has been used for arthritis. Cinnamon is also a traditional remedy for aching muscles and other symptoms of viral

### ***Ginger***

<http://foodmatters.tv/articles-1/10-healing-benefits->

Ayurveda gives ginger the status of a virtual medicine chest. That's because this wonder spice has time-tested digestion-friendly properties, in addition to its numerous other health benefits. In India, ginger is liberally used in daily life. Ginger-infused chai is a household favorite, and it's grandma's antidote On millions of dining tables in India, you'll see matchsticks of fresh ginger that have turned a soft pink from being soaked in lemon juice and salt: a

#### ***10 Terrific Benefits of Ginger***

1. Haven't been feeling hungry? Eat fresh ginger just before lunch to stoke a dull appetite and fire up the digestive juices.

2. Ginger improves the absorption and assimilation of essential nutrients in . . . .
3. Ginger clears the ‘microcirculatory channels’ of the body, including the pesky sinuses that tend to flare up from time to time.
4. Feeling airsick or nauseous? Chew on ginger, preferably tossed in a little . . . .
5. Can’t stop the toot-a-thon? Gas—oops—guess what?! Ginger helps . . . . .
6. Tummy moaning and groaning under cramps? Munch on ginger.
7. Reeling under joint pain? Ginger, with its anti-inflammatory properties—can bring relief. Float some ginger essential oil into your bath to . . . . .
8. Got a surgery done? Chewing ginger post-operation can help overcome . . . . .
9. Stir up some ginger tea to get rid of throat and nose congestion. And when there’s a nip in the air, the warming benefits of this tasty tea are even greater!
10. Bedroom blues? Try adding a gingery punch to a bowl of soup. (Pss...the Ayurvedic texts credit ginger with aphrodisiac properties)

### **3 Ways to Use Ginger**

#### *1. Ginger & Herb Rice*

Cook basmati rice. When you take the lid off the pan, quickly stir in finely chopped garlic, ginger, green chillies and fresh cilantro leaves—the burst of flavor and fragrance will drive your senses crazy with desire!

#### *2. Ginger In Your Juice*

‘Grate’ idea: grate some ginger root and put it in your juicer, along with carrots and apples and a little lemon juice. Totally yummy, and of course, so

#### *3. Gingery Dessert*

Even a smidgen of grated ginger on your vanilla pana cotta or strawberry sorbet can wake up the flavor!

<http://en.wikipedia.org/wiki/Ginger>

From Wikipedia, the free encyclopedia

### **Ginger**

Color plate from Köhler's Medicinal Plants

Scientific classification

Kingdom: Plantae

Clade: Angiosperms

Clade: Monocots

Clade: Commelinids

Order: Zingiberales

Family: Zingiberaceae

Genus: Zingiber

Species: *Z. officinale*

Binomial name

*Zingiber officinale*

Ginger or ginger root is the rhizome of the plant *Zingiber officinale*, consumed as a delicacy, medicine, or spice. It lends its name to its genus and family (Zingiberaceae). Other notable members of this plant family are Ginger cultivation began in South Asia and has since spread to East Africa

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## Etymology

The English name ginger comes from French: *gingembre*, Old English: *gingifere*, Medieval Latin: *ginginer*, Greek: *zingiberis* (  ). Ultimately the origin is from Tamil word 'inji ver' (இஞ்ச வேர்) or Malayalam word 'inji veru' (ഇഞ്ച വേര്). The botanical term for root in

## Horticulture

*Ginger Plant with Flower* - South India

Ginger produces clusters of white and pink flower buds that bloom into yellow flowers. Because of its aesthetic appeal and the adaptation of the plant to warm climates, ginger is often used as landscaping around subtropical homes. It is a perennial reed-like plant with annual leafy stems, about a meter (3 to 4 feet) tall. Traditionally, the rhizome is gathered when the stalk withers; it is immediately scalded, or washed and scraped, to kill it

## Uses

### Gari (ginger)

Ginger produces a hot, fragrant kitchen spice.

Young ginger rhizomes are juicy and fleshy with a very mild taste. They are often pickled in vinegar or sherry as a snack or just cooked as an ingredient in many dishes. They can also be steeped in boiling water to make ginger tea, to which honey is often added; sliced orange or lemon fruit may also be added. Ginger can also be made into candy, or ginger wine which has been

Mature ginger rhizomes are fibrous and nearly dry. The juice from old ginger roots is extremely potent<sup>[6]</sup> and is often used as a spice in Indian recipes, and is a quintessential ingredient of Chinese, Korean, Japanese and many South Asian cuisines for flavoring dishes such as seafood or goat meat. Ginger acts as a useful food preservative.

Fresh ginger can be substituted for ground ginger at a ratio of 6 to 1, although the flavors of fresh and dried ginger are somewhat different. Powdered dry ginger root is typically used as a flavoring for recipes such as

Candied ginger is the root cooked in sugar until soft, and is a type of  
Fresh ginger may be peeled before eating. For longer-term storage, the  
ginger can be placed in a plastic bag and refrigerated or frozen.

### Regional use

In Western cuisine, ginger is traditionally used mainly in sweet foods such  
as ginger ale, gingerbread, ginger snaps, parkin, ginger biscuits and  
speculaas. A ginger-flavored liqueur called Canton is produced in Jarnac,  
France. Green ginger wine is a ginger-flavored wine produced in the United  
Kingdom, traditionally sold in a green glass bottle. Ginger is also used as a

Ginger field

Fresh ginger rhizome.

In India and Pakistan, ginger is called adrak in Hindi, Punjabi and Urdu, aad  
in Maithili, aadi in Bhojpuri, aada in Bengali, Adu in Gujarati, hashi shunti  
(ಹೆಸಿ ಶುಂಟಿ) in the Kannada, allam (ಅಲ್ಲಂ) in Telugu, inji (இஞ்சி) in Tamil  
and Malayalam, inguru (ಇಂಗುರು) in Sinhalese, alay in Marathi, and  
aduwa(अदुवा) in Nepali. Fresh ginger is one of the main spices used for  
making pulse and lentil curries and other vegetable preparations. Fresh, as  
well as dried, ginger is used to spice tea and coffee, especially in winter.  
Ginger powder is also used in certain food preparations, particularly for  
pregnant or nursing women, the most popular one being katlu which is a  
mixture of gum resin, ghee, nuts, and sugar. Ginger is also consumed in  
candied and pickled form. In Bangladesh, ginger is finely chopped or ground.  
In Burma, ginger is called gyin. It is widely used in cooking and as a main  
ingredient in traditional medicines. It is also consumed as a salad dish called  
gyin-thot, which consists of shredded ginger preserved in oil, and a variety  
of nuts and seeds. In Indonesia, a beverage called wedang jahe is made from  
ginger and palm sugar. Indonesians also use ground ginger root, called jahe,  
as a common ingredient in local recipes. In Malaysia, ginger is called halia  
and used in many kinds of dishes, especially a soup. In the Philippines it is  
brewed into a tea called salabat. In Vietnam, the fresh leaves, finely  
chopped, can also be added to chicken and beef soups (chè hẹ chim) or  
In China, sliced or whole ginger root is often paired with savory dishes such  
as fish, and chopped ginger root is commonly paired with meat, when it is  
cooked. However, candied ginger is sometimes a component of Chinese

In Japan, ginger is pickled to make beni shoga and gari or grated and used  
raw on tofu or noodles. It is also made into a candy called shoga no sato  
zuke. In the traditional Korean kimchi, ginger is either finely minced or just  
juiced in order to avoid the fibrous texture and added to the ingredients of  
In the Caribbean, ginger is a popular spice for cooking, and making drinks  
such as sorrel, a seasonal drink made during the Christmas season.

Jamaicans make ginger beer both as a carbonated beverage and also fresh in  
their homes. Ginger tea is often made from fresh ginger, as well as the

Two varieties of ginger as sold in Haikou, Hainan, China

On the island of Corfu, Greece, a traditional drink called μ  
(tsitsibira), a type of ginger beer, is made. The people of Corfu and the rest  
of the Ionian islands adopted the drink from the British, during the period of

In Arabic, ginger is called zanjabil, and in some parts of the Middle East,  
ginger powder is used as a spice for coffee and for milk. In Somaliland,  
ginger is called sinjibil, and is served in coffee shops in Egypt. In Côte  
d'Ivoire, ginger is ground and mixed with orange, pineapple and lemon to  
produce a juice called nyamanku. Ginger powder is a component in hawaii,

### Ginger tea

*A glass of ginger tea*

Ginger tea is a beverage in many countries, made from ginger root. In China, the tea is made by boiling peeled and sliced ginger to which brown sugar is often added. Sliced orange or lemon fruit may also be added to give a flavor, and it may be consumed both hot or cold. In Korean cuisine, ginger tea is called saenggang cha (생강차). It can be made either by boiling the ginger or by mixing hot water and preserved sweetened ginger. For the latter, sliced ginger root is stored with honey for a few weeks like jam. In Japanese cuisine it is called shogay (生姜湯). In Philippine cuisine it is called salabat and served in the relatively cold month of December. From its main

#### *Preliminary research*

- 1 Preliminary research indicates that nine compounds found in ginger may bind to human serotonin receptors which may influence gastrointestinal
- 2 Research conducted in vitro tests show that ginger extract might control the quantity of free radicals and the peroxidation of lipids.
- 3 In a 2010 study, daily consumption of ginger was shown to help ease muscle pain associated with exercise by 25%.
- 4 Ginger root supplement has been identified in one study to help reduce colon inflammation markers such as PGE2, thus indicating a measure that
- 5 In limited studies, ginger was found to be more effective than placebo for treating nausea caused by seasickness, morning sickness and chemotherapy, although ginger was not found superior to placebo for pre-emptively treating
- 6 Data suggests that ginger is mutagenic, and studies warn against taking it during pregnancy, though antimutagenic effects have also been reported.

7

- 8 Other preliminary studies showed that ginger may affect arthritis pain or have blood thinning and cholesterol lowering properties, but these effects
- 9 Advanced glycation end-products are possibly associated in the development of diabetic cataract for which ginger was effective in preliminary studies, apparently by acting through antiglycating mechanisms.
- 10 Zingerone may have activity against enterotoxigenic Escherichia coli in enterotoxin-induced diarrhea.

## **Chemistry**

### **Ginger section**

The characteristic odor and flavor of ginger is caused by a mixture of zingerone, shogaols and gingerols, volatile oils that compose one to three

In laboratory animals, the gingerols increase the motility of the gastrointestinal tract and have analgesic, sedative, antipyretic and

Ginger oil has been shown to prevent skin cancer in mice and a study at the University of Michigan demonstrated that gingerols can kill ovarian cancer

[6]-gingerol (1-[4'-hydroxy-3'-methoxyphenyl]-5-hydroxy-3-decanone) is the major pungent principle of ginger. The chemopreventive potentials of [6]-gingerol present a promising future alternative to expensive and toxic

Ginger contains up to three percent of a fragrant essential oil whose main constituents are sesquiterpenoids, with (-)-zingiberene as the main component. Smaller amounts of other sesquiterpenoids ( - sesquiphellandrene, bisabolene and farnesene) and a small monoterpenoid

The pungent taste of ginger is due to nonvolatile phenylpropanoid-derived compounds, particularly gingerols and shogaols, which form from gingerols

Zingerone is also produced from gingerols during this process; this compound is less pungent and has a spicy-sweet aroma.

Ginger is also a minor chemical irritant, and because of this was used as a horse suppository by pre-World War I mounted regiments for feaguing.

Ginger has a sialagogue action, stimulating the production of saliva, which makes swallowing easier.[citation needed]

## **Folk medicine**

*A packet of ginger powder from the Philippines used in brewing salabat*

*Ginger house rum, Madagascar*

The traditional medical form of ginger historically was called Jamaica ginger; it was classified as a stimulant and carminative and used frequently for dyspepsia, gastroparesis, slow motility symptoms, constipation, and It was also frequently employed to disguise the taste of medicines.

Some studies indicate ginger may provide short-term relief of pregnancy-related nausea and vomiting.[citation needed]

Studies are inconclusive about effects for other forms of nausea or in treating pain from rheumatoid arthritis, osteoarthritis, or joint and muscle

Side effects, mostly associated with powdered ginger, are gas, bloating,

Tea brewed from ginger is a common folk remedy for colds.

Ginger ale and ginger beer are also drunk as stomach settlers in countries where the beverages are made.

In Burma, ginger and a local sweetener made from palm tree juice (htan nyat) are boiled together and taken to prevent the flu.

In China, ginger is included in several traditional preparations. A drink made with sliced ginger cooked in water with brown sugar or a cola is used

"Ginger eggs" (scrambled eggs with finely diced ginger root) is a common home remedy for coughing.[citation needed]

The Chinese also make a kind of dried ginger candy that is fermented in plum juice and sugared, which is also commonly consumed to suppress

Ginger has also been historically used to treat inflammation, which several scientific studies support, though one arthritis trial showed ginger to be no better than a placebo or ibuprofen for treatment of osteoarthritis.

In Congo, ginger is crushed and mixed with mango tree sap to make tangawisi juice, which is considered a panacea.

In India, ginger is applied as a paste to the temples to relieve headache, and consumed when suffering from the common cold.

Ginger with lemon and black salt is also used for nausea.

In Indonesia, ginger (jahe in Indonesian) is used as a herbal preparation to reduce fatigue, reducing "winds" in the blood, prevent and cure rheumatism and control poor dietary habits.[citation needed]

In Nepal, ginger is called aduwa, अदुवा and is widely grown and used throughout the country as a spice for vegetables, used medically to treat cold

In the Philippines, ginger is known as luya and is used as a throat lozenge in traditional medicine to relieve sore throat. It is also brewed into a tea known

In the United States, ginger is used to prevent motion and morning

It is recognized as safe by the Food and Drug Administration[citation needed] and is sold as an unregulated dietary supplement.

Ginger water is also used to avoid heat cramps.[citation needed]

In Peru, ginger is sliced in hot water as an infusion for stomach aches as

In Japan it is purported to aid blood circulation.

Scientific studies investigating these effects have been inconclusive.

### **Nutritional information**

Ginger root (raw)

Nutritional value per 100 g (3.5 oz)

Energy 333 kJ (80 kcal)

Carbohydrates 17.77 g

- Sugars 1.70 g

- Dietary fiber 2.0 g

Fat 0.75 g

Protein 1.82 g

Vitamin A 0 IU

Vitamin C 5.0 mg (6%)

Phosphorus 34 mg (5%)

Potassium 415 mg (9%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

Ginger root (ground)

Nutritional value per 100 g (3.5 oz)

Energy 1,404 kJ (336 kcal)

Carbohydrates 71.62 g

- Sugars 3.39 g

- Dietary fiber 14.1 g

Fat 4.24 g

Protein 8.98 g

Vitamin A 30 IU

Vitamin C 0.7 mg (1%)

Phosphorus 168 mg (24%)

Potassium 1320 mg (28%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

### **Safety**

Ginger is on the FDA's "generally recognized as safe" list, though it does interact with some medications, including warfarin. Ginger is contraindicated in people suffering from gallstones, as it promotes the

An acute overdose of ginger is usually in excess of about 2 grams of ginger per kilogram of body mass, dependent on level of ginger tolerance, and can result in a state of central nervous system over-stimulation called ginger

Allergic reactions to ginger generally result in a rash, and although generally recognized as safe, ginger can cause heartburn, bloating, gas, belching and nausea, particularly if taken in powdered form.

Unchewed fresh ginger may result in intestinal blockage, and individuals who have had ulcers, inflammatory bowel disease or blocked intestines may react badly to large quantities of fresh ginger. Ginger can also adversely

There are also suggestions that ginger may affect blood pressure, clotting,

Products in Taiwan made from Hebo Natural Products Limited (禾博天然產物有限公司) of China contained ginger contaminated with DIBP, some 80,000 nutritional supplement capsules made with imported ginger powder were seized by the Public Health Department of Taiwan in

### **Similar ingredients**

Myoga (*Zingiber mioga* Roscoe) appears in Japanese cuisine; the flower

Another plant in the Zingiberaceae family, galangal, is used for similar purposes as ginger in Thai cuisine. Galangal is also called Thai ginger. Also referred to as galangal, fingerroot (*Boesenbergia rotunda*), or Chinese ginger

A dicotyledonous native species of eastern North America, *Asarum canadense*, is also known as "wild ginger", and its root has similar aromatic properties, but it is not related to true ginger. The plant also contains

### **Production**

Top ten ginger producers – 11 June 2008

Country Production (tonnes)

India 380,100  
China 331,393  
Indonesia 192,500  
Nepal 174,268  
Thailand 170,125  
Nigeria 152,106  
Bangladesh 72,608  
Japan 52,000  
Philippines 27,415  
Cameroon 12,000  
World 1,615,974

Source: Food And Agricultural Organization of United Nations: Economic And Social Department: The Statistical Division

From 1585, Jamaican ginger was the first oriental spice to be grown in the New World and imported back to Europe.

India, with over 30% of the global share, now leads in global production of ginger, replacing China, which has slipped to the second position (~20.5%), followed by Indonesia (~12.7%), Nepal (~11.5%) and Thailand (~10%).

### **See also**

Bu Zhong Yi Qi Wan – contains ginger material

*Kaempferia galanga*

Xiao Yao Wan – contains ginger material

<http://www.celestialhealing.net/healthintro..htm>

*The Heath Benefits of Ginger* are many. Ginger is one of the world's seven most potent disease-fighting spices. It has been widely regarded for centuries as a natural remedy for a variety of ailments.

<http://www.ageless.co.za/herb-ginger.htm>

**Ginger** (Jamaica ginger)

*Zingiber officinale*, Roscoe

Information on ginger and how it is used as a herb in alternative herbal treatments to treat ailments and problems, such as nausea, indigestion and

Botanical classification of ginger

Description of ginger

Parts used

Properties of ginger

Internal use

External use

Use of essential oil

Safety precautions and warnings

Used in the following products

Herbal Index

Please note that I am not advocating that you stop using your normal medication, but I would like to make you aware that some alternative therapies can be very effective to help treat problems and create a healthier,

Although I believe in the therapeutic and healing properties of herbs, care must be taken in the use thereof, as they are powerful compounds.

Botanical Classification

Family

Zingiberaceae

Genus and specie

Zingiber officinale, Roscoe

Other names

Jamaica ginger and Sheng Jiang.

Description of the herb ginger

Ginger is a deciduous perennial with thick, branching rhizomes and sturdy, upright stems with pointed lance-like leaves. Yellow-green flowers, with a deep purple lip with a yellow marking are produced, followed by the fruits,

#### ***Parts used***

The fresh and dried rhizomes are used and an essential oil is also extracted.

#### ***Properties***

Ginger is a sweet, pungent and aromatic herb that has expectorant properties. The herb increases perspiration, improves digestion and liver function, controls nausea, vomiting and coughing. It stimulates circulation,

The taste of this herb is caused by the numerous gingerols, such as [6]-gingerol, found in the plant and the volatile essential oil also contains monoterpenoids (camphene, b-phellandrene, neral and geranial), diterpene lactones, such as galanolactone, as well as sesquiterpenes (a-zingiberene and

#### **Therapeutic uses**

##### *Internal use*

Ginger is used internally for motion sickness, nausea, morning sickness, indigestion, colic, abdominal chills, colds, coughs, influenza and peripheral

It is a very "warming" herb, and is used in "cold" conditions like frigidity

and impotence. Some hypoglycaemic, cholesterol lowering, immune stimulant and anti-inflammatory properties have been noted.

It has a very beneficial effect on ulcers, and also increases peristalsis and the secretion of bile and gastric juices.

In Chinese medicine, it is used for nausea, vomiting, fever, cold, cough, nasal discharge, blood in the urine, abdominal unease and feeling of fullness

Green ginger (fresh young rhizomes) is juiced, eaten raw, preserved and

##### *External use*

Used externally for spasmodic pain, rheumatism, lumbago, menstrual

### *Aromatherapy and essential oil use*

To warm the body and the mind, ginger essential oil is most effective. It sharpens the senses and memory.

It will also "ground" a person, while stimulating the mind, and is very effective in removing excess moisture in the body - such as catarrh and

Furthermore it boosts the digestive system and is valuable in fighting nausea and motion sickness - be that car or sea.

The circulation boosting properties helps the entire body and its analgesic affect aids with rheumatic and arthritic pain.

On the skin it reduces bruises, sores and carbuncles.

It has analgesic, antisept

<http://www.nlm.nih.gov/medlineplus/druginfo/natu>

### **Ginger**

*What is it?*

*How effective is it?*

*How does it work?*

*Are there safety concerns?*

*Are there interactions with medications?*

*Are there interactions with herbs and supplements?*

*Are there interactions with foods?*

*What dose is used?*

*Other names*

*Methodology*

*References*

*What is it?*

Ginger is a herb. The rhizome (underground stem) is used as a spice and also as a medicine. It can be used fresh, dried and powdered, or as a juice or oil.

Ginger is commonly used to treat various types of "stomach problems," including motion sickness, morning sickness, colic, upset stomach, gas, diarrhea, nausea caused by cancer treatment, nausea and vomiting after

Other uses include pain relief from arthritis or muscle soreness, menstrual pain, upper respiratory tract infections, cough, and bronchitis.

Ginger is also sometimes used for chest pain, low back pain, and stomach

Some people pour the fresh juice on their skin to treat burns.

The oil made from ginger is sometimes applied to the skin to relieve pain.

In foods and beverages, ginger is used as a flavoring agent.

In manufacturing, ginger is used as for fragrance in soaps and cosmetics.

One of the chemicals in ginger is also used as an ingredient in laxative, anti-gas, and antacid medications.

*How effective is it ?*

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective,

*The effectiveness ratings for GINGER are as follows:*

Possibly effective for...

*Nausea and vomiting following surgery.* Most clinical research shows that taking 1 gram of ginger one hour before surgery seems to reduce nausea and vomiting during the first 24 hours after surgery. One study found ginger reduced nausea and vomiting by 38%. However, ginger might not reduce

*Dizziness.* Taking ginger seems to reduce the symptoms of dizziness,

*Menstrual pain.* Some research shows that ginger can reduce symptoms of menstrual pain in some women when taken during menstruation. One study shows that taking a specific ginger extract (Zintoma, Goldaru) 250 mg four times daily for 3 days at the beginning of the menstrual period reduces pain symptoms in as many as 62% of people. It seems to work about as well as

*Arthritis.* Some research shows that taking ginger can modestly reduce pain in some people with a form of arthritis called "osteoarthritis." One study shows that taking a specific ginger extract (Zintona EC) 250 mg four times daily reduced arthritis pain in the knee after 3 months of treatment. Another study shows that using a different ginger extract (Eurovita Extract 77; EV ext-77), which combines a ginger with alpinia also reduces pain upon standing, pain after walking, and stiffness. Some research has compared ginger to medications such as ibuprofen. In one study, a specific ginger extract (Eurovita Extract 33; EV ext-33) did not work as well as taking ibuprofen 400 mg three times daily for reducing arthritis pain. But in another study, taking ginger extract 500 mg twice daily worked about as

*Preventing morning sickness* (discuss the possible risks with your healthcare provider). Ginger seems to reduce nausea and vomiting in some pregnant women. But taking any herb or medication during pregnancy is a big decision. Before taking ginger, be sure to discuss the possible risks with your healthcare provider. Possibly ineffective for...

*Preventing motion sickness and seasickness.* Some people say they feel better after taking ginger before travel. But there is no hard evidence that ginger actually prevents motion sickness or seasickness.

*Insufficient evidence to rate effectiveness for...*

*Rheumatoid arthritis (RA).* There is some preliminary evidence that ginger might be helpful for decreasing joint pain in people with RA.

*Nausea and vomiting due to chemotherapy.* There is contradictory evidence about the effectiveness of ginger for nausea and vomiting caused by

*Muscle pain after exercise.* There is contradictory evidence about whether ginger helps for muscle pain caused by exercise.

*Loss of appetite.*

*Colds.*

*Flu.*

*Migraine headache.*

*Preventing nausea caused by chemotherapy.*

*Other conditions.*

More evidence is needed to rate ginger for these uses.

*How does it work?*

Ginger contains chemicals that may reduce nausea and inflammation.

Researchers believe the chemicals work primarily in the stomach and intestines, but they may also work in the brain and nervous system to control

*Are there safety concerns?*

Ginger is **LIKELY SAFE** for most people.

Some people can have mild side effects including heartburn, diarrhea, and general stomach discomfort.

Some women have reported extra menstrual bleeding while taking ginger.

When ginger is applied to the skin, it may cause irritation.

*Special precautions & warnings:*

*Pregnancy:*

Using ginger during pregnancy is controversial. There is some concern that ginger might affect fetal sex hormones. There is also a report of miscarriage during week 12 of pregnancy in a woman who used ginger for morning sickness. However, studies in pregnant women suggest that ginger can be used safely for morning sickness without harm to the fetus. The risk for major malformations in infants of women taking ginger does not appear to be higher than the usual rate of 1% to 3%. As with any medication given during pregnancy, it's important to weigh the benefits against the risks. Before

*Breast-feeding:*

Not enough is known about the safety of using ginger during breast-feeding. Stay on the safe side and don't use it.

*Bleeding disorders:*

Taking ginger might increase your risk of bleeding. Avoid using it.

*Diabetes:*

Ginger might lower your blood sugar. As a result, your diabetes medications might need to be adjusted by your healthcare provider.

*Heart conditions:*

High doses of ginger might worsen some heart conditions. Don't use ginger if you have a heart condition.

*Are there interactions with medications?*

*Moderate*

*Be cautious with this combination.*

Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)

Ginger might slow blood clotting. Taking ginger along with medications that also slow clotting might increase the chances of bruising and bleeding.

Some medications that slow blood clotting include aspirin, clopidogrel (Plavix), diclofenac (Voltaren, Cataflam, others), ibuprofen (Advil, Motrin, others), naproxen (Anaprox, Naprosyn, others), dalteparin (Fragmin),

*Phenprocoumon*

Phenprocoumon is used in Europe to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with phenprocoumon might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your phenprocoumon might need to be

*Warfarin (Coumadin)*

Warfarin (Coumadin) is used to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with warfarin (Coumadin) might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your warfarin (Coumadin) might need to be

*Minor*

*Be watchful with this combination.*

Medications for diabetes (Antidiabetes drugs)

Ginger might decrease blood sugar. Diabetes medications are also used to lower blood sugar. Taking ginger along with diabetes medications might cause your blood sugar to go too low. Monitor your blood sugar closely. The

Some medications used for diabetes include glimepiride (Amaryl), glyburide (DiaBeta, Glynase PresTab, Micronase), insulin, metformin (Glucophage), pioglitazone (Actos), rosiglitazone (Avandia), and others.

Medications for high blood pressure (Calcium channel blockers)

Ginger might reduce blood pressure in a way that is similar to some medications for blood pressure and heart disease. Taking ginger along with these medications might cause your blood pressure to drop too low or cause

Some medications for high blood pressure and heart disease include nifedipine (Adalat, Procardia), verapamil (Calan, Isoptin, Verelan), diltiazem (Cardizem), isradipine (DynaCirc), felodipine (Plendil),

*Are there interactions with herbs and supplements?*

Herbs and supplements that might slow blood clotting

Using ginger along with herbs that might slow blood clotting could increase the risk of bleeding in some people. These herbs include angelica, clove, danshen, garlic, ginkgo, Panax ginseng, red clover, turmeric, and others.

*Are there interactions with foods?*

There are no known interactions with foods.

*What dose is used?*

*The following doses have been studied in scientific research:*

BY MOUTH:

*For morning sickness:*

250 mg ginger 4 times daily.

*For postoperative nausea and vomiting:*

1-2 grams powdered ginger root one hour before induction of anesthesia.

*For arthritis:*

Many different ginger extract products have been used in studies. The dosing used differs depending on the product taken. One ginger extract (Eurovita Extract 33; EV ext-33) 170 mg three times daily has been used. Another extract (Eurovita Extract 77; EV ext-77), which combines a ginger with an alpinia, 255 mg twice daily has also been used. Another ginger

*Other names*

African Ginger, Amomum Zingiber, Ardraka, Black Ginger, Cochin Ginger, Gan Jiang, Gingembre, Gingembre Africain, Gingembre Cochin, Gingembre Indien, Gingembre Jamaïquain, Gingembre Noir, Ginger Essential Oil, Ginger Root, Huile Essentielle de Gingembre, Imber, Indian Ginger, Jamaica Ginger, Jengibre, Jiang, Kankyo, Kanshokyo, Nagara, Race Ginger, Racine de Gingembre, Rhizoma Zingiberi, Rhizoma Zingiberis, Rhizoma Zingiberis Recens, Shen Jiang, Sheng Jiang, Shoga, Shokyo, Shunthi, Srungavera,

## Methodology

To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.

<http://www.herbwisdom.com/herb-ginger-root.html>

## Ginger Root

### Ginger Root Benefits

#### Contents

Ginger Root benefits

Notes / side effects

Where to buy Ginger Root

How to grow Ginger

Ginger Root reviews

*Ginger root (Zingiber officinale)* is well known as a remedy for travel sickness, nausea and indigestion and is used for wind, colic, irritable bowel, loss of appetite, chills, cold, flu, poor circulation, menstrual cramps, dyspepsia (bloating, heartburn, flatulence), indigestion and gastrointestinal

Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems.

It has also been indicated for arthritis, fevers, headaches, toothaches, coughs, bronchitis, osteoarthritis, rheumatoid arthritis, to ease tendonitis, lower cholesterol and blood-pressure and aid in preventing internal blood clots.

Ginger has been well researched and many of its traditional uses confirmed.

It is well known as a remedy for travel sickness, nausea and indigestion.

It is a warming remedy, ideal for boosting the circulation, lowering high blood pressure and keeping the blood thin in higher doses.

Ginger is anti-viral and makes a warming cold and flu remedy.

Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems.

Ginger root is a medicinal herb used primarily for the treatment of Dyspepsia (discomfort after eating), this includes the symptoms of bloating,

It is also considered helpful as a preventative for motion sickness and as a

Due to its antispasmodic characteristic some people have used it to help

In some traditional systems it is credited with the ability to treat arthritis, fevers, headaches, and toothaches.

Ginger may also be taken orally as a herbal remedy to prevent or relieve nausea resulting from chemotherapy, motion sickness, pregnancy, and

Results of laboratory studies as well as from small studies conducted among seasick sailors or ship passengers, found that ginger generally has more effectiveness for relieving motion sickness than placebo (or sugar pills).

Several comparisons between ginger and prescription or non-prescription drugs have been conducted for relieving the nausea of pregnancy, but results

In some of the studies, similar effectiveness was seen between ginger and the comparator drug, while other studies found less or no effectiveness for

In general, no adverse effects were noted from using ginger, for either the mother or the developing baby.

Ginger has also been used in folk medicine to treat minor gastrointestinal problems such as gas or stomach cramps.

Recent studies may confirm that ginger directly affects the gastrointestinal tract, helping to improve muscle tone and to prevent abnormally rapid and

Results of limited studies in animals with diabetes show that ginger may reduce blood levels of sugar and cholesterol, while also lowering blood pressure. However, no human studies with similar results have been reported.

A few small studies that have been conducted in humans have shown some promise for supplemental ginger in the treatment of both osteoarthritis and If a person has exercised too much or suffers from arthritis or rheumatism, ginger has been known to ease inflammation of the joints and muscle tissue. Due to its tremendous circulation-increasing qualities, ginger is thought to improve the complexion. It has reduced nervousness, eased tendonitis, and helped sore throats return Studies demonstrate that ginger can lower cholesterol levels by reducing cholesterol absorption in the blood and liver. It may also aid in preventing internal blood clots.

***\*\*New Research! \*\****

Ginger root was recently the subject of a startling new research report presented at The American Association for Cancer research conference in In the study, ginger actually suppressed cancer cells suggesting that the herb was able to fuel apoptosis or the death of the cancer cells. Ginger has been shown to work against skin, ovarian, colon and breast But it had not been shown to halt the progression of cancer until now. However, more research is required to confirm this.

This stimulating herb is warming to the system. In her book '10 Essential Herbs' author Lalitha Thomas describes the properties: "The major active ingredients in ginger are terpenes (quite similar to the chemical action of These two, and other active ingredients in ginger, provide antiseptic, lymph-cleansing, circulation-stimulating, and mild constipation relief qualities along with a potent perspiration-inducing action that is quite effective in

<http://www.herbwisdom.com/herb-ginger-root.html>

#### **Ginger Root Herb Notes / Side Effects**

*Latin Name : Zingiber officinale*

*Common Names:*

Black ginger, Canton ginger, Cochin ginger, Common ginger, Garden ginger, Gingembre, Imber, Jamaican ginger

*Properties:*

Anti-emetic, anti-inflammatory, anti-oxidant, antiseptic, antispasmodic, antiviral, carminative, circulation-stimulating, detoxifying, diaphoretic, digestive, lymph-cleansing, mild laxative, perspiration-inducing, warming.

*Uses:*

For nausea and the nausea of pregnancy and travel sickness. For wind, colic and irritable bowel. Chills, cold, flu and poor circulation. Menstrual cramps. Dyspepsia (bloating, heartburn, flatulence). Indigestion. Improves circulation. Gastrointestinal problems such as gas or stomach cramps.

*Indicated for:*

Arthritis, fevers, headaches, and toothaches, lowers blood cholesterol and blood-pressure and aids in preventing internal blood clots. Coughs or bronchitis, osteoarthritis and rheumatoid arthritis, improves the complexion, eases tendonitis. There is some evidence to suggest that it helps to combat

Avoid taking in acute inflammatory conditions. Although there is some evidence that ginger may actually be helpful in gastritis and peptic ulceration, care is needed in these conditions as any spice may exacerbate the problem. Avoid when pregnant or trying to get pregnant (large doses may have abortifacient effects). Avoid therapeutic doses if taking anti-coagulant therapy such as warfarin and seek advice if taking medication for

[http://www.health24.com/dietnfood/Healthy\\_foods/](http://www.health24.com/dietnfood/Healthy_foods/)

### **Ginger Diet & Nutrition**

#### **Ginger**

Nibble on some fresh ginger if you suffer from vertigo or flatulence. Or use it for its myriad of other beneficial qualities.

#### *How much to eat*

The recommended daily intake is 1g of dried ginger or two cups of ginger tea. Eating too much ginger can cause itchiness in the bladder opening.

#### *Nutritional values*

Calories 10

Per 25g fresh ginger

Because ginger is eaten in such small quantities, its contribution to the vitamin, energy and mineral requirements of the body are negligible.

#### *Key benefits*

Ginger can relieve nausea and relieves indigestion and flatulence.

It discourages blood clots, stimulates circulation and may relieve

It also has calming, anti-spasmodic and anti-inflammatory properties.

#### *Maximising the benefits*

It is the oleo-resins and volatile oils that are the key active constituents in

Ginger should be kept in the fridge to stop it from going mouldy.

Dried ginger retains many of its healing properties, but fresh ginger is still

<http://www.gnet.org/ginger-add-a-healthy-zing-to->

### **Ginger: Add a healthy zing to your day!**

From the ancient Chinese and the Romans, to mothers of poor children worldwide, for thousands of years now ginger has been used as a spice and a

Although it is commonly described as a root, it is in fact a rhizome, a stem that grows out from the plant underground, and from which small roots will

Nature's Way Ginger Root

550mg, 180 Caps (Pack of 2)

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Ginger's most well-known medicinal use is as a digestive-aid, to relieve tummy pain, nausea and diarrhoea, as well as morning sickness and travel

This is thought to be because of the spice's high levels of gingerol; a powerful component that gives it its natural zingy flavour, and which acts as

If you're wondering how to use ginger, it's very easy- since it is both fibrous and tough, and full of juice and oils, it is ideal for grating or expressing into just about any food or drink that you feel like.

Even ginger ale and candied ginger have medicinal properties, if you're not sure about using the fresh variety.

Don't like the taste? Don't worry, you can buy it in supplement form too, so you get all the great benefits, without any of the strong flavour!

### **Benefits of Ginger – The Superfood**

*Have a look at what else ginger can do for your health*

The anti-inflammatory properties of ginger are thought to provide pain relief in a number of ways, from halting migraines in their tracks, to easing the

Studies have started showing really exciting results on the effect ginger has

Although more research is needed, it seems that ginger has the ability to eliminate cancerous ovarian cells. It also seems to dramatically slow the progress of bowel cancer; encouraging news indeed!

Were you spoon-fed ginger ale as a child when you had the flu? If you were, Mum had the right idea, as ginger is shown to have a boosting effect on the immune-system, making you better faster.

So ginger is delicious AND nutritious! But let's check there's nothing we

### *Side Effects of Ginger?*

These seem to be minimal!

Some consumer reports have suggested that ginger can cause nausea and stomach-upset rather than prevent it, but these do seem to be rare cases.

Since ginger is an anti-inflammatory, people on any blood-thinning medications should perhaps approach the spice with caution to ensure it doesn't interfere with their condition, although studies on this are not by any

If you have any doubts at all, please consult your doctor.

*Studies say...*

*It helps morning sickness!*

The University of Maryland conducted research into the effect of 1g of ginger on morning sickness and found it to be more effective than a placebo

<http://www.umm.edu/altmed/articles/ginger->

Chimes Original Ginger Chews

5-pound Box

Buy Today \$28.85

*It is a great anti-inflammatory!*

The University of Miami concluded that ginger is an effective anti-inflammatory, and even suggested that ginger extract could one day be used instead of synthetic anti-inflammatory medication!

<http://www.arthritistoday.org/nutrition-and-weight-loss/healthy-eating/good-food/ginger-benefits.php>

*It fights ovarian cancer!*

Studies at the University of Michigan showed that ginger was as effective at destroying cancerous cells as standard platinum-based chemotherapy drugs.

<http://chiefherb.com/proven-health-benefits-of->

*It slows bowel cancer!*

The University of Minnesota carried out studies that showed the growth of colorectal cancerous cells being slowed by treatment with ginger.

<http://www.whfoods.com/genpage.php?tname=foo>

*What the Papers say:*

*BBC News:*

*The Huffington Post:*

*Mens Cosmo:*

*From the web:*

*It Helps My Asthma Pains...*

If my chest hurts and I have sinus issues on top of the chest breathing pain and I take Ginger Capsules or drink Ginger Tea it really helps.

– Graystar

(<http://www.dailystrength.org/>)

*It Works for My Irritable Bowel Syndrome!*

Someone suggested it to help with IBS, and it's working wonders! I take it in table form once a day.

– *ellosteve88*

(<http://www.dailystrength.org/>)

*No More Nausea!*

I'm a chef, and my former sous chef gave me a piece to chew on one shift where I was feeling particularly ill; I felt fine immediately and finished the

– *Neil G.*

(<http://answers.yahoo.com/>)

<http://www.lifehack.org/articles/lifestyle/10-benefits-of-ginger-that-you-didnt-know-about.html>

*11 Benefits of Ginger That You Didn't Know About* by Brian Lee in

### **Lose weight start Juicing**

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*I love the taste of Ginger.*

It's used widely used in many meals that I eat from starters, main meals and even deserts. It's used all over the world in a variety of world cuisines from chili crab, curries to ginger confectionary and ginger biscuits. It's also supposed to hold medicinal health benefits so it's supposed to be good for me to eat... But what are they? I decided to find out what these benefits are

*But why ginger?*

Ginger is grown as a root and is a flexible ingredient that can be consumed in drinks (tea, beer, ale) or in cooking. It can be used to make foods spicy and even as a food preservative. For over 2000 years, Chinese medicine has recommended the use of ginger to help cure and prevent several health problems. It is known to promote energy circulation in the body and increase

Here 's a list of some of the amazing benefits of ginger that you may not aware of. Although some of these are still being debated, you could do your own research if you want to use ginger for medicinal purposes.

### **The Benefits of Ginger**

#### *Maintains Normal Blood Circulation.*

Ginger contains chromium, magnesium and zinc which can help to improve blood flow, as well as help prevent chills, fever, and excessive sweat.

Remedies Motion Sickness. Ginger is a known effective remedy for the nausea associated with motion sickness. The exact reason is unknown, but in a study of naval cadets, those given ginger powder suffered less.

#### *Improves absorption.*

Ginger improves the absorption and stimulation of essential nutrients in the body. It does this by stimulating gastric and pancreatic enzyme secretion.

#### *Cold and Flu Prevention.*

Ginger has been used for thousands of years as a natural treatment for colds and flu around Asia. The University of Maryland Medical Center states that to treat cold and flu symptoms in adults, steep 2 tbsp. of freshly shredded or

#### *Combats Stomach Discomfort.*

Ginger is ideal in assisting digestion, thereby improving food absorption and avoiding possible stomach ache. Ginger appears to reduce inflammation in a

#### *Colon Cancer Prevention.*

A study at the University of Minnesota found that ginger may slow the growth of colorectal cancer cells.

#### *Reduce Pain and Inflammation.*

Ginger contains some of the most potent anti-inflammatory fighting substances known and is a natural powerful painkiller.

#### *Fights Common Respiratory Problems.*

If you're suffering from common respiratory diseases such as a cough, ginger aids in expanding your lungs and loosening up phlegm because it is a natural expectorant that breaks down and removes mucus.. That way you

#### *Ovarian Cancer Treatment.*

Ginger powder induces cell death in ovarian cancer cells.

Strengthens Immunity. Ginger helps improve the immune system. Consuming a little bit ginger a day can help foil potential risk of a stroke by inhibiting fatty deposits from the arteries. It also decreases bacterial

#### *Combats Morning Sickness.*

Ginger has demonstrated a success rate of 75 percent in curing morning

### *How Much?*

These are some of the health benefits to ginger. How it can be taken is up to you, some people will say that 2 tablespoons of shredded ginger in a cup 2-3 times a day is ideal when you are feeling under the weather. A lot of people will mix ginger and honey to help soothe a cold and drink it many times a day. Naturally, it's used in cooking and candy, so it's difficult to measure to you, naturally, how much you should consume. But with all these benefits, and with it so readily available, it's really something we shouldn't even try to avoid. In fact you could even mix it up

<http://www.3fatchicks.com/8-benefits-of-ginger->

### **8 Benefits of Ginger Tea**

Ginger is brown, fleshy, and has a pungent smell and a scorching taste.

It is valued for its wondrous qualities that help cure a number of common

Best consumed as tea, ginger is a perfect source of a number of vitamins and minerals such as vitamin C and magnesium.

Ginger tea is best prepared with honey, lemon juice or peppermint.

With all of the great benefits it offers, you can never go wrong with drinking

*Here are several of the known benefits of ginger tea:*

#### *1. Impedes Motion Sickness*

Ginger tea can soothe nerves and prevent vomiting, as well as eradicate headaches and migraines. It also keeps you from being nauseous during a trip, so drink a cup of ginger tea before setting off on your travels.

#### *2. Combats Stomach Discomfort*

Ginger tea is ideal in assisting digestion, thereby improving food absorption and avoiding possible tummy aches from too much food intake. Unnecessary belching can also be thwarted by ginger tea. What's more, ginger tea enhances your appetite when you're feeling bloated, by helping to

#### *3. Reduces Inflammation*

Ginger tea can ease inflammation of the joints, which is commonly referred to as rheumatoid arthritis. It is also effective in alleviating tired, sore muscles and joints. A warm ginger tea soak can lessen swelling and puffiness. If you have athlete's foot, ginger tea is recommended as a foot

#### *4. Fights Common Respiratory Problems*

Drinking ginger tea is recommended if you're suffering from common respiratory diseases such as cold and cough. Ginger aids in loosening up phlegm and expanding your lungs, so you can recover quickly from difficulty in breathing. It also helps appease allergies and constant sneezing

#### *5. Encourages Normal Blood Circulation*

Consuming a cup of ginger tea can help improve blood flow, as well as help prevent chills, fever and excessive sweating. The active components of ginger, such as minerals and amino acids, help make the blood flow

#### *6. Remedies Menstrual Discomfort*

If you are a woman suffering from menstrual cramps, try placing a hot towel drenched in ginger tea on your uterine area to overcome the pain and relax the muscles. Drinking a cup of ginger tea can also provide a soothing effect.

#### *7. Strengthens Immunity*

Ginger tea has antioxidants that help improve the immune system. Drinking a cup of ginger tea every day can also help foil potential risks of a stroke by inhibiting fatty deposits from clogging the arteries. Ginger has also been proven successful in lowering cholesterol levels and preventing cancer.

#### *8. Relieves Stress*

Taking a whiff of ginger tea can help improve your mood and give you a sunny disposition. It leaves you feeling refreshed and calm, and if you're having a bad day, all those negative vibes will dissipate. Ginger tea is a

256		96
257		
258		97
259	<i>727 Cinnamon (Ch 2 Categories)</i>	
260		98
261	<i>714 Cannabis strains Wiki <a href="#">49 pages</a></i>	
262		99
263	<i>726 Categories</i>	
	Cinnamon	
	Ginger	
	Garlic	
	Cayenne	
	Coriander	
	Honey	
	Bee Propolis	
	Cherries	
	Cocoa Beans	
	10 Coconut Oil	
	Cumin	
	Evening Primrose Oil	
	Radish	
	Thyme	
	Water	
	Wheatgrass	
	Sage	
	Tea Tree Oil	
	Spirulina	
	20 St. John's Wort	
	Fennel	
	Dandelion	
	Fo-ti Root	
	Elderberry	
	Bergamot Orange	
	Chamomile	
	Colloidal Silver	
	Conjugated Linoleic Acid	
	Damiana	
	30 Feverfew	
	Echinacea purpurea	

Geranium  
Holly  
Goldenseal  
Ginkgo biloba  
Liverwort  
Ginseng  
Horny Goats Weed  
Melatonin  
40 Glucosamine  
Lobelia  
Horse Chestnut  
Mexican Wild Yam  
Reishi Mushrooms  
Horsetail  
Nettle  
Maca  
Rosemary  
50 Sasparella  
Saffron  
Valerian  
Yerba Mate  
Soy Isoflavones  
Watercress  
Uva Ursi  
Whey Isolate  
Whey Protein  
Yarrow  
60 Winter Cherry  
Slippery Elm  
Russian Ginseng  
Wolfberry  
Senna  
Royal Jelly  
Saw palmetto  
Sea Buckthorn  
Red clover  
Scilla  
70 Chlorella  
Cats Claw  
Black Cohosh  
Avena sativa  
Bilberry  
Burdock  
Collagen  
Euphrasia Eyebright  
Fenugreek  
Green Lipped Mussels  
80 Muira Puama  
Milk Thistle  
Cardamom

Rhodiola  
St. John's Wort  
Tarragon

<http://www.herbwisdom.com/herb-cinnamon.html>

**Cinnamon (Cinnamomum zeylanicum)**

**Cinnamon Benefits**

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Where to buy Cinnamon  
Cinnamon review

Cinnamon is a herb traditionally used by many ancient cultures. It is indicated for a variety of ailments including gastrointestinal problems, urinary infections, relieving symptoms of colds and flu and has remarkable anti-fungal and anti-bacterial properties. Some studies have shown that

True cinnamon, or Cinnamomum Zeylanicum, is the inner bark of a small evergreen tree native to Sri Lanka and was used in ancient Egypt for embalming. It was also added to food to prevent spoiling. During the Bubonic Plague, sponges were soaked in cinnamon and cloves and placed in sick rooms. Cinnamon was the most sought after spice during explorations

Most therapeutic uses of Chinese cinnamon bark are rooted in its historical use as a traditional medicine and on laboratory and animal studies. Test-tube or animal research does not guarantee safety or effectiveness in humans, but German health authorities (Commission E) do approve of cinnamon bark for

It is used in flatulent dyspepsia, dyspepsia with nausea, intestinal colic and digestive atony associated with cold & debilitated conditions. It is known to relieve nausea and vomiting, and because of its mild astringency it is

Cinnamon warms and stimulates the digestive system, useful in weak digestion, colic, griping, diarrhea, nausea and vomiting, wind and distension. The tannins have an astringent action, stemming bleeding in

***Cinnamon may help to:***

*Soothe an upset stomach:*

Cinnamon extracts have been used medically to treat gastrointestinal problems and to help calm the stomach. Cinnamon is a carminative, an agent that helps break up intestinal gas that has traditionally been used to combat diarrhea and morning sickness. Both test-tube and some animal studies have found that cinnamon may help to relieve mild abdominal discomfort caused by excess gas.

*Clear up urinary-tract infections:*

One German study showed that Cinnamon "suppresses completely" the cause of most urinary-tract infections (Escherichia coli bacteria) and the fungus responsible for vaginal yeast infections (Candida albicans).

*Allow diabetics to use less insulin:*

Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better. In adult-onset (Type II) diabetes, the pancreas produces insulin, but the body can't use it efficiently to break down blood

Richard Anderson at the US Department of Agriculture's Human Nutrition Research Center in Beltsville, Maryland found that Cinnamon enhances the ability of insulin to metabolise glucose, helping to control blood sugar levels.

Cinnamon contains the anti-oxidant glutathione and a type of flavonoid called MHCP (methylhydroxy chalcone polymer). It is believed that cinnamon makes fat cells much more responsive to insulin, the hormone that regulates sugar metabolism and thus controls the level of glucose in the blood. "One-eighth of a teaspoon of cinnamon triples insulin efficiency," say James A. Duke, Ph.D., a botanist retired from the U.S. Department of Agriculture and author of *The CRC Handbook of Medicinal Herbs*. Dr. Duke suggests that people with adult-onset diabetes discuss Cinnamon's benefits with their doctor. Taking ½ to ¾ teaspoon of ground Cinnamon with each meal

#### *Aid digestion:*

Cinnamon contains compounds called catechins, which help relieve nausea. The volatile oil in cinnamon bark may also help the body to process food by

#### *Kill many disease-causing fungi and viruses:*

Preliminary results from test tube and animal studies suggest that cinnamon oil and cinnamon extract have anti-fungal, anti-bacterial, and anti-parasitic properties. For example, cinnamon has been found to be active against *Candida albicans*, the fungus responsible for vaginal yeast infections and thrush (oral yeast infection), *Helicobacter pylori* (the bacteria that causes stomach

An incredible experiment in the journal of Food Science for 1974 demonstrated the power of cinnamon over most yeasts and fungi.

Slices of white, raisin, rye and whole wheat breads, manufactured without the usual mold inhibitors, were subjected to various aflatoxins, a group of toxic molds so dangerous that they can cause liver cancer and kill humans

The toxic molds grew vigorously on all of the other breads, except for the raisin bread where growth was described as being "scant or not visible at all."

In trying to identify whether it was the raisins or cinnamon responsible for this, food scientists discovered that as little as 2% or 20 mg. of the spice per ml of a yeast-extract and sucrose broth inhibited 97 -99 per cent of these

#### *Relieve Pain:*

Cinnamon is considered a pain-killer due to its prostaglandin-inhibiting

#### *Relieve Colds and Flu:*

In both India and Europe, cinnamon has been traditionally taken as a warming herb for "cold" conditions, often in combination with ginger

The herb stimulates the circulation, especially to the fingers and toes and has been used for arthritis.

Cinnamon is also a traditional remedy for aching muscles and other symptoms of viral conditions such as colds and flu.

#### <http://foodmatters.tv/articles-1/10-healing-benefits->

Ayurveda gives ginger the status of a virtual medicine chest. That's because this wonder spice has time-tested digestion-friendly properties, in addition to its numerous other health benefits. In India, ginger is liberally used in daily life. Ginger-infused chai is a household favorite, and it's grandma's antidote

On millions of dining tables in India, you'll see matchsticks of fresh ginger that have turned a soft pink from being soaked in lemon juice and salt: a *Let's give this knobbly root a closer look.*

### 10 Terrific Benefits of Ginger

1. Haven't been feeling hungry? Eat fresh ginger just before lunch to stoke a dull appetite and fire up the digestive juices.
2. Ginger improves the absorption and assimilation of essential nutrients in . . . . .
3. Ginger clears the 'microcirculatory channels' of the body, including the pesky sinuses that tend to flare up from time to time.
4. Feeling airsick or nauseous? Chew on ginger, preferably tossed in a little .
5. Can't stop the toot-a-thon? Gas—oops—guess what?! Ginger helps . . . . .
6. Tummy moaning and groaning under cramps? Munch on ginger.
7. Reeling under joint pain? Ginger, with its anti-inflammatory properties—can bring relief. Float some ginger essential oil into your bath to
8. Got a surgery done? Chewing ginger post-operation can help overcome
9. Stir up some ginger tea to get rid of throat and nose congestion. And when there's a nip in the air, the warming benefits of this tasty tea are even greater!
10. Bedroom blues? Try adding a gingery punch to a bowl of soup. (Pss...the Ayurvedic texts credit ginger with aphrodisiac properties)

### 3 Ways to Use Ginger

#### 1. Ginger & Herb Rice

Cook basmati rice. When you take the lid off the pan, quickly stir in finely chopped garlic, ginger, green chillies and fresh cilantro leaves—the burst of flavor and fragrance will drive your senses crazy with desire!

#### 2. Ginger In Your Juice

'Grate' idea: grate some ginger root and put it in your juicer, along with carrots and apples and a little lemon juice. Totally yummy, and of course, so good for you!

#### 3. Gingery Dessert

Even a smidgen of grated ginger on your vanilla pana cotta or strawberry sorbet can wake up the flavor!

### Ginger

<http://en.wikipedia.org/wiki/Ginger>

**Color plate from Köhler's Medicinal Plants**

*Scientific classification*

Kingdom: Plantae

Clade: Angiosperms  
Clade: Monocots  
Clade: Commelinids  
Order: Zingiberales  
Family: Zingiberaceae  
Genus: Zingiber  
Species: *Z. officinale*  
Binomial name  
Zingiber officinale  
Roscoe 1807

Ginger or ginger root is the rhizome of the plant *Zingiber officinale*, consumed as a delicacy, medicine, or spice. It lends its name to its genus and family (Zingiberaceae). Other notable members of this plant family are  
Ginger cultivation began in South Asia and has since spread to East Africa

### Etymology

The English name ginger comes from French: gingembre, Old English: gingifere, Medieval Latin: ginginer, Greek: zingiberis ( ζίνγιβερις ). Ultimately the origin is from Tamil word 'inji ver' (இஞ்சி வேர்) or Malayalam word 'inji veru' (ഇഞ്ചി വേര്). The botanical term for root in

### Horticulture

Ginger produces clusters of white and pink flower buds that bloom into yellow flowers. Because of its aesthetic appeal and the adaptation of the plant to warm climates, ginger is often used as landscaping around subtropical homes. It is a perennial reed-like plant with annual leafy stems, rhizome is gathered when the stalk withers; it is immediately scalded, or washed and scraped, to kill it and prevent sprouting. The fragrant perisperm of Zingiberaceae is used as sweetmeats by Bantu, also as a condiment and

### Uses

#### *Gari (ginger)*

Ginger produces a hot, fragrant kitchen spice. Young ginger rhizomes are juicy and fleshy with a very mild taste. They are often pickled in vinegar or sherry as a snack or just cooked as an ingredient in many dishes. They can also be steeped in boiling water to make ginger tea, to which honey is often added; sliced orange or lemon fruit may also be added. Ginger can also be

Mature ginger rhizomes are fibrous and nearly dry. The juice from old ginger roots is extremely potent and is often used as a spice in Indian recipes, and is a quintessential ingredient of Chinese, Korean, Japanese and many South Asian cuisines for flavoring dishes such as seafood or goat meat  
Ginger acts as a useful food preservative.

Fresh ginger can be substituted for ground ginger at a ratio of 6 to 1, although the flavors of fresh and dried ginger are somewhat different. Powdered dry ginger root is typically used as a flavoring for recipes such as  
Candied ginger is the root cooked in sugar until soft, and is a type of  
Fresh ginger may be peeled before eating. For longer-term storage, the ginger can be placed in a plastic bag and refrigerated or frozen.

#### *Regional use*

In Western cuisine, ginger is traditionally used mainly in sweet foods such as ginger ale, gingerbread, ginger snaps, parkin, ginger biscuits and speculaas. A ginger-flavored liqueur called Canton is produced in Jarnac, France. Green ginger wine is a ginger-flavored wine produced in the United Kingdom, traditionally sold in a green glass bottle. Ginger is also used as a

### *Ginger field*

In India and Pakistan, ginger is called adrak in Hindi, Punjabi and Urdu, aad in Maithili, aadi in Bhojpuri, aada in Bengali, Adu in Gujarati, hashi shunti (ಹಸಿ ಶುಂಠಿ) in the Kannada, allam (అల్లం) in

Telugu, inji (ఇంజీ) in Tamil and Malayalam, inguru (ඉඟුරු) in Sinhalese, alay in Marathi, and aduwa (अदुवा) in Nepali. Fresh ginger is one of the main spices used for making pulse and lentil curries and other vegetable preparations. Fresh, as well as dried, ginger is used to spice tea and coffee, especially in winter. Ginger powder is also used in certain food preparations, particularly for pregnant or nursing women, the most popular one being katlu which is a mixture of gum resin, ghee, nuts, and sugar. Ginger is also consumed in candied and pickled form. In Bangladesh, ginger is finely

In Burma, ginger is called gyin. It is widely used in cooking and as a main ingredient in traditional medicines. It is also consumed as a salad dish called gyin-thot, which consists of shredded ginger preserved in oil, and a variety of nuts and seeds. In Indonesia, a beverage called wedang jahe is made from ginger and palm sugar. Indonesians also use ground ginger root, called jahe, as a common ingredient in local recipes. In Malaysia, ginger is called halia and used in many kinds of dishes, especially a soup. In the Philippines it is brewed into a tea called salabat. In Vietnam, the fresh leaves, finely

In China, sliced or whole ginger root is often paired with savory dishes such as fish, and chopped ginger root is commonly paired with meat, when it is cooked. However, candied ginger is sometimes a component of Chinese

In Japan, ginger is pickled to make beni shoga and gari or grated and used raw on tofu or noodles. It is also made into a candy called shoga no sato zuke. In the traditional Korean kimchi, ginger is either finely minced or just juiced in order to avoid the fibrous texture and added to the ingredients of

In the Caribbean, ginger is a popular spice for cooking, and making drinks such as sorrel, a seasonal drink made during the Christmas season. Jamaicans make ginger beer both as a carbonated beverage and also fresh in their homes. Ginger tea is often made from fresh ginger, as well as the

Two varieties of ginger as sold in Haikou, Hainan, China

On the island of Corfu, Greece, a traditional drink called μ (tsitsibira), a type of ginger beer, is made. The people of Corfu and the rest of the Ionian islands adopted the drink from the British, during the period of

In Arabic, ginger is called zanjabil, and in some parts of the Middle East, ginger powder is used as a spice for coffee and for milk. In Somaliland, ginger is called sinjibil, and is served in coffee shops in Egypt. In Côte d'Ivoire, ginger is ground and mixed with orange, pineapple and lemon to produce a juice called nyamanku. Ginger powder is a component in hawaij,

### *Ginger tea*

Ginger tea is a beverage in many countries, made from ginger root. In China, the tea is made by boiling peeled and sliced ginger to which brown sugar is often added. Sliced orange or lemon fruit may also be added to give a flavor, and it may be consumed both hot or cold. In Korean cuisine, ginger tea is called saenggang cha (생강차). It can be made either by boiling the ginger or by mixing hot water and preserved sweetened ginger. For the latter, sliced ginger root is stored with honey for a few weeks like jam. In Japanese cuisine it is called shōgayu (生姜湯). In Philippine cuisine it is called salabat and served in the relatively cold month of December. From its main

#### *Preliminary research*

Preliminary research indicates that nine compounds found in ginger may bind to human serotonin receptors which may influence gastrointestinal Research conducted in vitro tests show that ginger extract might control the quantity of free radicals and the peroxidation of lipids.

In a 2010 study, daily consumption of ginger was shown to help ease muscle pain associated with exercise by 25%.

Ginger root supplement has been identified in one study to help reduce colon inflammation markers such as PGE2, thus indicating a measure that might

In limited studies, ginger was found to be more effective than placebo for treating nausea caused by seasickness, morning sickness and chemotherapy, although ginger was not found superior to placebo for pre-emptively treating post-operative nausea. Data suggests that ginger is mutagenic, and studies warn against taking it during pregnancy, though antimutagenic effects have also been reported. Other preliminary studies showed that ginger may affect arthritic pain or have blood thinning and cholesterol lowering properties, but Advanced glycation end-products are possibly associated in the development of diabetic cataract for which ginger was effective in preliminary studies, apparently by acting through antiglycating mechanisms.

Zingerone may have activity against enterotoxigenic Escherichia coli in enterotoxin-induced diarrhea.

#### *Chemistry*

##### *Ginger section*

The characteristic odor and flavor of ginger is caused by a mixture of zingerone, shogaols and gingerols, volatile oils that compose one to three percent of the weight of fresh ginger. In laboratory animals, the gingerols increase the motility of the gastrointestinal tract and have analgesic, sedative, antipyretic and antibacterial properties. Ginger oil has been shown to prevent skin cancer in mice and a study at the University of Michigan demonstrated that gingerols can kill ovarian cancer cells. -gingerol (1-[4'-hydroxy-3'-methoxyphenyl]-5-hydroxy-3-decanone) is the major pungent principle of ginger. The chemopreventive potentials of -gingerol present a Ginger contains up to three percent of a fragrant essential oil whose main constituents are sesquiterpenoids, with (-)-zingiberene as the main component. Smaller amounts of other sesquiterpenoids ( - sesquiphellandrene, bisabolene and farnesene) and a small monoterpenoid

The pungent taste of ginger is due to nonvolatile phenylpropanoid-derived compounds, particularly gingerols and shogaols, which form from gingerols when ginger is dried or cooked. Zingerone is also produced from gingerols during this process; this compound is less pungent and has a spicy-sweet aroma. Ginger is also a minor chemical irritant, and because of this was used as a horse tranquilizer by the World War I mounted regiments for feeding. Ginger has a sialagogue action, stimulating the production of saliva, which makes swallowing easier.[citation needed]

#### *Folk medicine*

[A packet of ginger powder from the Philippines used in brewing salabat](#)

[Ginger house rum, Madagascar.](#)

The traditional medical form of ginger historically was called Jamaica ginger; it was classified as a stimulant and carminative and used frequently for dyspepsia, gastroparesis, slow motility symptoms, constipation, and colic.[citation needed] It was also frequently employed to disguise the taste

Some studies indicate ginger may provide short-term relief of pregnancy-related nausea and vomiting.[citation needed] Studies are inconclusive about effects for other forms of nausea or in treating pain from rheumatoid arthritis, osteoarthritis, or joint and muscle injury. Side effects, mostly

Tea brewed from ginger is a common folk remedy for colds. Ginger ale and ginger beer are also drunk as stomach settlers in countries where the In Burma, ginger and a local sweetener made from palm tree juice (htan nyat) are boiled together and taken to prevent the flu.

In China, ginger is included in several traditional preparations. A drink made with sliced ginger cooked in water with brown sugar or a cola is used as a folk medicine for the common cold. "Ginger eggs" (scrambled eggs with finely diced ginger root) is a common home remedy for coughing.[citation needed] The Chinese also make a kind of dried ginger candy that is fermented in plum juice and sugared, which is also commonly consumed to suppress coughing. Ginger has also been historically used to treat inflammation, which several scientific studies support, though one arthritis

In Congo, ginger is crushed and mixed with mango tree sap to make tangawisi juice, which is considered a panacea.

In India, ginger is applied as a paste to the temples to relieve headache, and consumed when suffering from the common cold. Ginger with lemon and

In Indonesia, ginger (jahe in Indonesian) is used as a herbal preparation to reduce fatigue, reducing "winds" in the blood, prevent and cure rheumatism and control poor dietary habits.[citation needed]

In Nepal, ginger is called aduwa, अदुवा and is widely grown and used throughout the country as a spice for vegetables, used medically to treat cold

In the Philippines, ginger is known as luya and is used as a throat lozenge in traditional medicine to relieve sore throat. It is also brewed into a tea known

In the United States, ginger is used to prevent motion and morning sickness.[citation needed] It is recognized as safe by the Food and Drug Administration[citation needed] and is sold as an unregulated dietary

In Peru, ginger is sliced in hot water as an infusion for stomach aches as

In Japan it is purported to aid blood circulation. Scientific studies investigating these effects have been inconclusive.

#### Nutritional information

##### *Ginger root (raw)*

Nutritional value per 100 g (3.5 oz)

Energy 333 kJ (80 kcal)

Carbohydrates 17.77 g

- Sugars 1.70 g

- Dietary fiber 2.0 g

Fat 0.75 g

Protein 1.82 g

Vitamin A 0 IU

Vitamin C 5.0 mg (6%)

Phosphorus 34 mg (5%)

Potassium 415 mg (9%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

##### *Ginger root (ground)*

Nutritional value per 100 g (3.5 oz)

Energy 1,404 kJ (336 kcal)

Carbohydrates 71.62 g

- Sugars 3.39 g

- Dietary fiber 14.1 g

Fat 4.24 g

Protein 8.98 g

Vitamin A 30 IU

Vitamin C 0.7 mg (1%)

Phosphorus 168 mg (24%)

Potassium 1320 mg (28%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

### **Safety**

Ginger is on the FDA's "generally recognized as safe" list, though it does interact with some medications, including warfarin. Ginger is contraindicated in people suffering from gallstones, as it promotes the

An acute overdose of ginger is usually in excess of about 2 grams of ginger per kilogram of body mass, dependent on level of ginger tolerance, and can result in a state of central nervous system over-stimulation called ginger

Allergic reactions to ginger generally result in a rash, and although generally recognized as safe, ginger can cause heartburn, bloating, gas, belching and nausea, particularly if taken in powdered form. Unchewed fresh ginger may result in intestinal blockage, and individuals who have had ulcers, inflammatory bowel disease or blocked intestines may react badly to large quantities of fresh ginger. Ginger can also adversely affect individuals with

Products in Taiwan made from Hebo Natural Products Limited (禾博天然產物有限公司) of China contained ginger contaminated with DIBP, some 80,000 nutritional supplement capsules made with imported

### **Similar ingredients**

Myoga (*Zingiber mioga* Roscoe) appears in Japanese cuisine; the flower

Another plant in the Zingiberaceae family, galangal, is used for similar purposes as ginger in Thai cuisine. Galangal is also called Thai ginger. Also referred to as galangal, fingerroot (*Boesenbergia rotunda*), or Chinese ginger Thai krachai, is used in cooking and medicine.

A dicotyledonous native species of eastern North America, *Asarum canadense*, is also known as "wild ginger", and its root has similar aromatic properties, but it is not related to true ginger. The plant also contains

### **Production**

Top ten ginger producers – 11 June 2008

Country Production (tonnes)

India 380,100

China 331,393

Indonesia 192,500

Nepal 174,268

Thailand 170,125

Nigeria 152,106

Bangladesh 72,608

Japan 52,000

Philippines 27,415

Cameroon 12,000

World 1,615,974

**Source:** Food And Agricultural Organization of **United Nations:** Economic And Social **Department:** The Statistical Division

From 1585, Jamaican ginger was the first oriental spice to be grown in the New World and imported back to Europe. India, with over 30% of the global share, now leads in global production of ginger, replacing China, which has slipped to the second position (~20.5%), followed by Indonesia (~12.7%),

#### **See also**

Bu Zhong Yi Qi Wan – contains ginger material

Kaempferia galanga

Xiao Yao Wan – contains ginger material

#### *The Heath Benefits of Ginger*

<http://www.celestialhealing.net/healthintro..htm>

Ginger is one of the world's seven most potent disease-fighting spices. It has been widely regarded for centuries as a natural remedy for a variety of

<http://www.ageless.co.za/herb-ginger.htm>

**Ginger (Jamaica ginger)**

**Zingiber officinale, Roscoe**

This is information on ginger and how it is used as a herb in alternative herbal treatments to treat ailments and problems, such as nausea, indigestion

Botanical classification of ginger

Description of ginger

Parts used

Properties of ginger

Internal use

External use

Use of essential oil

Safety precautions and warnings

Used in the following products

Herbal Index

Please note that we are not advocating that people stop using their normal medication, but would like to make people aware that some alternative therapies can be very effective to help treat problems and create a healthier,

Although we believe in the therapeutic and healing properties of herbs, care must be taken in the use thereof, as they are powerful compounds.

Botanical Classification

Family

Zingiberaceae

Genus and specie

Zingiber officinale, Roscoe

Other names

Jamaica ginger and Sheng Jiang.

Description of the herb ginger

Ginger is a deciduous perennial with thick, branching rhizomes and sturdy, upright stems with pointed lance-like leaves. Yellow-green flowers, with a deep purple lip with a yellow marking are produced, followed by the fruits,

*Parts used*

The fresh and dried rhizomes are used and an essential oil is also extracted.

*Properties*

Ginger is a sweet, pungent and aromatic herb that has expectorant properties. The herb increases perspiration, improves digestion and liver function, controls nausea, vomiting and coughing. It stimulates circulation,

The taste of this herb is caused by the numerous gingerols, such as [6]-gingerol, found in the plant and the volatile essential oil also contains monoterpenoids (camphene, b-phellandrene, neral and geranial), diterpene lactones, such as galanolactone, as well as sesquiterpenes (a-zingiberene and

*Therapeutic uses*

*Internal use*

Ginger is used internally for motion sickness, nausea, morning sickness, indigestion, colic, abdominal chills, colds, coughs, influenza and peripheral It is a very "warming" herb, and is used in "cold" conditions like frigidity Some hypoglycaemic, cholesterol lowering, immune stimulant and anti-inflammatory properties have been noted. It has a very beneficial effect on ulcers, and also increases peristalsis and the secretion of bile and gastric juices. In Chinese medicine, it is used for nausea, vomiting, fever, cold, cough, nasal discharge, blood in the urine, abdominal unease and feeling of fullness Green ginger (fresh young rhizomes) is juiced, eaten raw, preserved and

*External use*

Used externally for spasmodic pain, rheumatism, lumbago, menstrual

Aromatherapy and essential oil use

To warm the body and the mind, ginger essential oil is most effective. It sharpens the senses and memory.

It will also "ground" a person, while stimulating the mind, and is very effective in removing excess moisture in the body - such as catarrh and Furthermore it boosts the digestive system and is valuable in fighting nausea and motion sickness - be that car or sea. The circulation boosting properties helps the entire body and its analgesic affect aids with rheumatic and On the skin it reduces bruises, sores and carbuncles.

It has analgesic, antisept.....

**Ginger**

<http://www.nlm.nih.gov/medlineplus/druginfo/natu>

*What is it?*

*How effective is it?*

*How does it work?*

*Are there safety concerns?*

*Are there interactions with medications?*

*Are there interactions with herbs and supplements?*

*Are there interactions with foods?*

*What dose is used?*

Other names

Methodology

References

*What is it?*

Ginger is a herb. The rhizome (underground stem) is used as a spice and also as a medicine. It can be used fresh, dried and powdered, or as a juice or oil.

Ginger is commonly used to treat various types of “stomach problems,” including motion sickness, morning sickness, colic, upset stomach, gas, diarrhea, nausea caused by cancer treatment, nausea and vomiting after

Other uses include pain relief from arthritis or muscle soreness, menstrual pain, upper respiratory tract infections, cough, and bronchitis. Ginger is also sometimes used for chest pain, low back pain, and stomach pain.

Some people pour the fresh juice on their skin to treat burns. The oil made from ginger is sometimes applied to the skin to relieve pain.

In foods and beverages, ginger is used as a flavoring agent.

In manufacturing, ginger is used as for fragrance in soaps and cosmetics.

One of the chemicals in ginger is also used as an ingredient in laxative, anti-gas, and antacid medications.

*How effective is it?*

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective,

*How does it work?*

Ginger contains chemicals that may reduce nausea and inflammation. Researchers believe the chemicals work primarily in the stomach and intestines, but they may also work in the brain and nervous system to control

*Are there safety concerns?*

Ginger is **LIKELY SAFE** for most people. Some people can have mild side effects including heartburn, diarrhea, and general stomach discomfort. Some women have reported extra menstrual bleeding while taking ginger.

**When ginger is applied to the skin, it may cause irritation.**

*Special precautions & warnings:*

*Pregnancy:* Using ginger during pregnancy is controversial. There is some concern that ginger might affect fetal sex hormones. There is also a report of miscarriage during week 12 of pregnancy in a woman who used ginger for morning sickness. However, studies in pregnant women suggest that ginger can be used safely for morning sickness without harm to the fetus. The risk for major malformations in infants of women taking ginger does not appear to be higher than the usual rate of 1% to 3%. As with any medication given during pregnancy, it's important to weigh the benefit against the risk. Before

*Breast-feeding:* Not enough is known about the safety of using ginger during breast-feeding. Stay on the safe side and don't use it.

*Bleeding disorders:* Taking ginger might increase your risk of bleeding.

*Diabetes:* Ginger might lower your blood sugar. As a result, your diabetes medications might need to be adjusted by your healthcare provider.

*Heart conditions:* High doses of ginger might worsen some heart conditions. Don't use ginger if you have a heart condition.

*Are there interactions with medications?*

*Moderate*

Be cautious with this combination.

*Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)*

Ginger might slow blood clotting. Taking ginger along with medications that also slow clotting might increase the chances of bruising and bleeding.

Some medications that slow blood clotting include aspirin, clopidogrel (Plavix), diclofenac (Voltaren, Cataflam, others), ibuprofen (Advil, Motrin, others), naproxen (Anaprox, Naprosyn, others), dalteparin (Fragmin),

*Phenprocoumon*

Phenprocoumon is used in Europe to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with phenprocoumon might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your phenprocoumon might need to be

*Warfarin (Coumadin)*

Warfarin (Coumadin) is used to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with warfarin (Coumadin) might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your warfarin (Coumadin) might need to be

*Minor*

Be watchful with this combination.

*Medications for diabetes (Antidiabetes drugs)*

Ginger might decrease blood sugar. Diabetes medications are also used to lower blood sugar. Taking ginger along with diabetes medications might cause your blood sugar to go too low. Monitor your blood sugar closely. The

Some medications used for diabetes include glimepiride (Amaryl), glyburide (DiaBeta, Glynase PresTab, Micronase), insulin, metformin (Glucophage), pioglitazone (Actos), rosiglitazone (Avandia), and others.

*Medications for high blood pressure (Calcium channel blockers)*

Ginger might reduce blood pressure in a way that is similar to some medications for blood pressure and heart disease. Taking ginger along with these medications might cause your blood pressure to drop too low or cause



Ginger root (*Zingiber officinale*) is well known as a remedy for travel sickness, nausea and indigestion and is used for wind, colic, irritable bowel, loss of appetite, chills, cold, flu, poor circulation, menstrual cramps, dyspepsia (bloating, heartburn, flatulence), indigestion and gastrointestinal problems such as gas and stomach cramps. Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems. It has also been indicated for arthritis, fevers, headaches, toothaches, coughs, bronchitis, osteoarthritis, rheumatoid arthritis, to ease

Ginger has been well researched and many of its traditional uses confirmed. It is well known as a remedy for travel sickness, nausea and indigestion. It is a warming remedy, ideal for boosting the circulation, lowering high blood pressure and keeping the blood thin in higher doses. Ginger is anti-viral and makes a warming cold and flu remedy. Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint

Ginger root is a medicinal herb used primarily for the treatment of Dyspepsia (discomfort after eating), this includes the symptoms of bloating, heartburn, flatulence, and nausea. It is also considered helpful as a preventative for motion sickness and as a digestive. Due to its antispasmodic characteristic some people have used it to help ease menstrual cramps. In some traditional systems it is credited with the ability to treat

Ginger may also be taken orally as a herbal remedy to prevent or relieve nausea resulting from chemotherapy, motion sickness, pregnancy, and

Results of laboratory studies as well as from small studies conducted among seasick sailors or ship passengers, found that ginger generally has more effectiveness for relieving motion sickness than placebo (or sugar pills). Several comparisons between ginger and prescription or non-prescription

In some of the studies, similar effectiveness was seen between ginger and the comparator drug, while other studies found less or no effectiveness for ginger as compared to the drugs. In general, no adverse effects were noted from using ginger, for either the mother or the developing baby. Ginger has also been used in folk medicine to treat minor gastrointestinal problems such as gas or stomach cramps. Recent studies may confirm that ginger directly affects the gastrointestinal tract, helping to improve muscle tone and to

Results of limited studies in animals with diabetes show that ginger may reduce blood levels of sugar and cholesterol, while also lowering blood pressure. However, no human studies with similar results have been reported. A few small studies that have been conducted in humans have shown some promise for supplemental ginger in the treatment of both

If a person has exercised too much or suffers from arthritis or rheumatism, ginger has been known to ease inflammation of the joints and muscle tissue. Due to its tremendous circulation-increasing qualities, ginger is thought to improve the complexion. It has reduced nervousness, eased tendonitis, and helped sore throats return to normal. Studies demonstrate that ginger can lower cholesterol levels by reducing cholesterol absorption in the blood and

*\*\*New Research! \*\**- Ginger root was recently the subject of a startling new research report presented at The American Association for Cancer research conference in Phoenix. In the study, ginger actually suppressed cancer cells suggesting that the herb was able to fuel apoptosis or the death of the cancer cells. Ginger has been shown to work against skin, ovarian, colon and breast cancer. But it had not been shown to halt the progression of

This stimulating herb is warming to the system. In her book '10 Essential Herbs' author Lalitha Thomas describes the properties: "The major active ingredients in ginger are terpenes (quite similar to the chemical action of turpentine) and an oleo-resin called ginger oil. These two, and other active ingredients in ginger, provide antiseptic, lymph-cleansing, circulation-stimulating, and mild constipation relief qualities along with a potent

#### **Ginger Root Herb Notes / Side Effects**

<http://www.herbwisdom.com/herb-ginger-root.html>

*Latin Name* : Zingiber officinale

*Common Names* : Black ginger, Canton ginger, Cochin ginger, Common ginger, Garden ginger, Gingembre, Imber, Jamaican ginger

*Properties*: Anti-emetic, anti-inflammatory, anti-oxidant, antiseptic, antispasmodic, anti-viral, carminative, circulation-stimulating, detoxifying, diaphoretic, digestive, lymph-cleansing, mild laxative, perspiration-

**Uses**: For nausea and the nausea of pregnancy and travel sickness. For wind, colic and irritable bowel. Chills, cold, flu and poor circulation. Menstrual cramps. Dyspepsia (bloating, heartburn, flatulence). Indigestion. Improves circulation. Gastrointestinal problems such as gas or stomach cramps.

*Indicated for*: Arthritis, fevers, headaches, and toothaches, lowers blood cholesterol and blood-pressure and aids in preventing internal blood clots. Coughs or bronchitis, osteoarthritis and rheumatoid arthritis, improves the complexion, eases tendonitis. There is some evidence to suggest that it helps

Avoid taking in acute inflammatory conditions. Although there is some evidence that ginger may actually be helpful in gastritis and peptic ulceration, care is needed in these conditions as any spice may exacerbate the problem. Avoid when pregnant or trying to get pregnant (large doses may have abortifacient effects). Avoid therapeutic doses if taking anti-coagulant therapy such as warfarin and seek advice if taking medication for

[http://www.health24.com/dietnfood/Healthy\\_foods/](http://www.health24.com/dietnfood/Healthy_foods/)

#### **Ginger Diet & Nutrition**

##### **Ginger**

Nibble on some fresh ginger if you suffer from vertigo or flatulence. Or use it for its myriad of other beneficial qualities.

##### *How much to eat*

The recommended daily intake is 1g of dried ginger or two cups of ginger tea. Eating too much ginger can cause itchiness in the bladder opening.

##### *Nutritional values*

Calories 10

Per 25g fresh ginger

Because ginger is eaten in such small quantities, its contribution to the vitamin, energy and mineral requirements of the body are negligible.

##### *Key benefits*

Ginger can relieve nausea and relieves indigestion and flatulence. It discourages blood clots, stimulates circulation and may relieve rheumatism. It also has calming, anti-spasmodic and anti-inflammatory properties.

##### *Maximising the benefits*

It is the oleo-resins and volatile oils that are the key active constituents in ginger. Ginger should be kept in the fridge to stop it from going mouldy. Dried ginger retains many of its healing properties, but fresh ginger is still

### **Ginger: Add a healthy zing to your day!**

<http://www.gnet.org/ginger-add-a-healthy-zing-to->

From the ancient Chinese and the Romans, to mothers of poorly children worldwide, for thousands of years now ginger has been used as a spice and a medicine. Although it is commonly described as a root, it is in fact a rhizome, a stem that grows out from the plant underground, and from which

Ginger's most well-known medicinal use is as a digestive-aid, to relieve tummy pain, nausea and diarrhoea, as well as morning sickness and travel sickness. This is thought to be because of the spice's high levels of gingerol; a powerful component that gives it its natural zingy flavour, and which acts

If you're wondering how to use ginger, it's very easy- since it is both fibrous and tough, and full of juice and oils, it is ideal for grating or expressing into just about any food or drink that you feel like.

Even ginger ale and candied ginger have medicinal properties, if you're not sure about using the fresh variety.

Don't like the taste? Don't worry, you can buy it in supplement form too, so you get all the great benefits, without any of the strong flavour!

### **Benefits of Ginger – The Superfood**

Have a look at what else ginger can do for your health

The anti-inflammatory properties of ginger are thought to provide pain relief in a number of ways, from halting migraines in their tracks, to easing the Studies have started showing really exciting results on the effect ginger has on ovarian cancer: Although more research is needed, it seems that ginger has the ability to eliminate cancerous ovarian cells. It also seems to dramatically slow the progress of bowel cancer; encouraging news indeed!

Were you spoon-fed ginger ale as a child when you had the flu? If you were, Mum had the right idea, as ginger is shown to have a boosting effect on the immune-system, making you better faster.

So ginger is delicious AND nutritious! But let's check there's nothing we

### **Side Effects of Ginger?**

These seem to be minimal! Some consumer reports have suggested that ginger can cause nausea and stomach-upset rather than prevent it, but these do seem to be rare cases. Since ginger is an anti-inflammatory, people on any blood-thinning medications should perhaps approach the spice with caution to ensure it doesn't interfere with their condition, although studies

*Studies say...*

It helps morning sickness!

The University of Maryland conducted research into the effect of 1g of ginger on morning sickness and found it to be more effective than a placebo

<http://www.umm.edu/altmed/articles/ginger->

*It is a great anti-inflammatory!*

The University of Miami concluded that ginger is an effective anti-inflammatory, and even suggested that ginger extract could one day be used instead of synthetic anti-inflammatory medication!

<http://www.arthritistoday.org/nutrition-and-weight-loss/healthy-eating/good-food/ginger-benefits.php>

*It fights ovarian cancer!*

Studies at the University of Michigan showed that ginger was as effective at destroying cancerous cells as standard platinum-based chemotherapy drugs.

<http://chiefherb.com/proven-health-benefits-of->

*It slows bowel cancer!*

The University of Minnesota carried out studies that showed the growth of colorectal cancerous cells being slowed by treatment with ginger.

<http://www.whfoods.com/genpage.php?tname=foo>

*From the web:*

It Helps My Asthma Pains...

If my chest hurts and I have sinus issues on top of the chest breathing pain and I take Ginger Capsules or drink Ginger Tea it really helps.

– Graystar

(<http://www.dailystrength.org/>)

It Works for My Irritable Bowel Syndrome!

Someone suggested it to help with IBS, and it's working wonders! I take it in table form once a day.

– ellostev88

(<http://www.dailystrength.org/>)

No More Nausea!

I'm a chef, and my former sous chef gave me a piece to chew on one shift where I was feeling particularly ill; I felt fine immediately and finished the

– Neil G.

(<http://answers.yahoo.com/>)

**11 Benefits of Ginger That You Didn't Know About** by Brian Lee in

<http://www.lifehack.org/articles/lifestyle/10-benefits-of-ginger-that-you-didnt-know-about.html>

I love the taste of Ginger. It's used widely used in many meals that I eat from starters, main meals and even deserts. It's used all over the world in a variety of world cuisines from chili crab, curries to ginger confectionary and ginger biscuits. It's also supposed to hold medicinal health benefits so it's supposed to be good for me to eat... But what are they? I decided to find out what

*But why ginger?*

Ginger is grown as a root and is a flexible ingredient that can be consumed in drinks (tea, beer, ale) or in cooking. It can be used to make foods spicy and even as a food preservative. For over 2000 years, Chinese medicine has recommended the use of ginger to help cure and prevent several health problems. It is known to promote energy circulation in the body and increase

Here 's a list of some of the amazing benefits of ginger that you may not aware of. Although some of these are still being debated, you could do your own research if you want to use ginger for medicinal purposes.

### **The Benefits of Ginger**

**Maintains Normal Blood Circulation.** Ginger contains chromium, magnesium and zinc which can help to improve blood flow, as well as help Remedies Motion Sickness. Ginger is a known effective remedy for the nausea associated with motion sickness. The exact reason is unknown, but in a study of naval cadets, those given ginger powder suffered less.

Improves absorption. Ginger improves the absorption and stimulation of essential nutrients in the body. It does this by stimulating gastric and  
Cold and Flu Prevention. Ginger has been used for thousands of years as a natural treatment for colds and flu around Asia. The University of Maryland Medical Center states that to treat cold and flu symptoms in adults, steep 2 tbsp. of freshly shredded or chopped ginger root in hot water, two to three  
Combats Stomach Discomfort. Ginger is ideal in assisting digestion, thereby improving food absorption and avoiding possible stomach ache. Ginger appears to reduce inflammation in a similar way to aspirin and ibuprofen  
Colon Cancer Prevention. A study at the University of Minnesota found that ginger may slow the growth of colorectal cancer cells.  
Reduce Pain and Inflammation. Ginger contains some of the most potent anti-inflammatory fighting substances known and is a natural powerful

Fights Common Respiratory Problems. If you're suffering from common respiratory diseases such as a cough, ginger aids in expanding your lungs and loosening up phlegm because it is a natural expectorant that breaks down and removes mucus.. That way you can quickly recover from  
Ovarian Cancer Treatment. Ginger powder induces cell death in ovarian  
Strengthens Immunity. Ginger helps improve the immune system.  
Consuming a little bit ginger a day can help foil potential risk of a stroke by inhibiting fatty deposits from the arteries. It also decreases bacterial  
Combats Morning Sickness. Ginger has demonstrated a success rate of 75 percent in curing morning sickness and stomach flu.

#### *How Much?*

These are some of the health benefits to ginger. How it can be taken is up to you, some people will say that 2 tablespoons of shredded ginger in a cup 2-3 times a day is ideal when you are feeling under the weather. A lot of people will mix ginger and honey to help soothe a cold and drink it many times a day. Naturally, it's used in cooking and candy, so it's difficult to measure to  
But with all these benefits, and with it so readily available, it's really something we shouldn't even try to avoid. In fact you could even mix it up

### [http://www.3fatchicks.com/8-benefits-of-ginger-8-Benefits of Ginger Tea](http://www.3fatchicks.com/8-benefits-of-ginger-8-Benefits-of-Ginger-Tea)

Ginger is brown, fleshy, and has a pungent smell and a scorching taste. It is valued for its wondrous qualities that help cure a number of common diseases. Best consumed as tea, ginger is a perfect source of a number of vitamins and minerals such as vitamin C and magnesium. Ginger tea is best prepared with honey, lemon juice or peppermint. With all of the great

*Here are several of the known benefits of ginger tea.*

#### *1. Impedes Motion Sickness*

Ginger tea can soothe nerves and prevent vomiting, as well as eradicate headaches and migraines. It also keeps you from being nauseous during a trip, so drink a cup of ginger tea before setting off on your travels.

#### *2. Combats Stomach Discomfort*

Ginger tea is ideal in assisting digestion, thereby improving food absorption and avoiding possible tummy aches from too much food intake. Unnecessary belching can also be thwarted by ginger tea. What's more, ginger tea enhances your appetite when you're feeling bloated, by helping to

#### *3. Reduces Inflammation*

Ginger tea can ease inflammation of the joints, which is commonly referred to as rheumatoid arthritis. It is also effective in alleviating tired, sore muscles and joints. A warm ginger tea soak can lessen swelling and puffiness. If you have athlete's foot, ginger tea is recommended as a foot

#### *4. Fights Common Respiratory Problems*

Drinking ginger tea is recommended if you're suffering from common respiratory diseases such as cold and cough. Ginger aids in loosening up phlegm and expanding your lungs, so you can recover quickly from difficulty in breathing. It also helps appease allergies and constant sneezing

#### *5. Encourages Normal Blood Circulation*

Consuming a cup of ginger tea can help improve blood flow, as well as help prevent chills, fever and excessive sweating. The active components of ginger, such as minerals and amino acids, help make the blood flow

#### *6. Remedies Menstrual Discomfort*

If you are a woman suffering from menstrual cramps, try placing a hot towel drenched in ginger tea on your uterine area to overcome the pain and relax the muscles. Drinking a cup of ginger tea can also provide a soothing effect.

#### *7. Strengthens Immunity*

Ginger tea has antioxidants that help improve the immune system. Drinking a cup of ginger tea every day can also help foil potential risks of a stroke by inhibiting fatty deposits from clogging the arteries. Ginger has also been proven successful in lowering cholesterol levels and preventing cancer.

#### *8. Relieves Stress*

Taking a whiff of ginger tea can help improve your mood and give you a sunny disposition. It leaves you feeling refreshed and calm, and if you're having a bad day, all those negative vibes will dissipate. Ginger tea is a

<http://www.herbwisdom.com/herb-garlic.html>

### **Garlic**

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Garlic (*Allium sativum*) is one of the earth's greatest health tonics and does indeed have scientifically-proven medicinal properties. It contains a substance called Allicin, which has anti-bacterial properties that are equivalent to a weak penicillin. It is a natural antibiotic and is useful in treating everything from allergies to tonsillitis. Garlic contains many sulfur compounds which detoxify the body, boost the immune system, lower blood

The smooth muscle relaxant Adenosine is found in Garlic and this seems to help lower blood pressure. Garlic is also used to help prevent atherosclerosis (plaque build up in the arteries causing blockage and possibly leading to

Garlic can stimulate the production of glutathione, an amino acid which is known to be a very potent antioxidant and de-toxifier. See also our article on NAC for more glutathione info. Antioxidants help scavenge free radicals.

Free radicals are particles that can damage cell membranes, interact with genetic material and possibly contribute to the aging process as well as the development of a number of conditions including heart disease and cancer. Free radicals occur naturally in the body but environmental toxins (including ultraviolet light, radiation, cigarette smoking and air pollution) can also increase the number of these damaging particles. Antioxidants can neutralize

**Atherosclerosis:** Studies suggest that fresh garlic and garlic supplements may prevent blood clots and destroy plaque. Blood clots and plaque block blood flow and contribute to the development of atherosclerosis. Blockage of blood flow to the heart, brain and legs, can lead to heart attack, stroke, or peripheral vascular disease (PVD). People with PVD experience pain in the legs when they walk and move. If garlic does reduce the build up of plaque

**High Cholesterol and High Blood Pressure:** A number of studies have found that garlic reduces elevated total cholesterol levels and lowers blood pressure more effectively than placebo. However, the extent to which garlic is

**Diabetes:** Garlic has been used as a traditional dietary supplement for diabetes in Asia, Europe and the Middle East. Preliminary studies in rabbits, rats and limited numbers of people have demonstrated that garlic has some ability to lower blood sugars. More research in this area is needed. (See

**Common Cold:** A well-designed study of nearly 150 people supports the value of garlic for preventing and treating the common cold. In this study, people received either garlic supplements or placebo for 12 weeks during "cold season" (between the months of November and February). Those who received the garlic had significantly fewer colds than those who received placebo. Plus, when faced with a cold, the symptoms lasted a much shorter

**Cancer:** Test tube and animal studies suggest that garlic may have some anti-cancer activity. Observational, population-based studies (which follow groups of people over time) suggest that people who have more raw or cooked garlic in their diet are less likely to have certain types of cancer, particularly colon and stomach cancers. Dietary garlic may also offer some protection against the development of breast, prostate and laryngeal (throat)

**Tuberculosis:** Numerous test tube studies have demonstrated that garlic extract inhibits the growth of different species of bacteria, including *Mycobacterium tuberculosis*, the organism responsible for tuberculosis. Very high concentrations of garlic extract were needed to slow down the growth of *M. tuberculosis* in these studies, so some experts are concerned that these levels may be toxic to people. While further research in people is

**Intestinal Parasites:** Laboratory studies suggest that large quantities of fresh, raw garlic may have antiparasitic properties against the roundworm, *Ascaris lumbricoides*, which is the most common type of intestinal parasite. Garlic

<http://www.herbwisdom.com/herb-cayenne.html>

**Cayenne (*Capsicum annuum*)**

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Cayenne is used as a natural fat burner and pain killer, to treat ulcers, increase metabolism, improve circulation, boost the immune system and aid digestion. It is used as a tonic for the heart, kidneys, lungs, pancreas, spleen and stomach and to treat herpes, shingles and rheumatism. It is also known to combat chills and has been used to treat bunions, psoriasis, pleuritis and

Studies have shown that it can raise metabolic rates by as much as 25 percent, aid in treating herpes, shingles and Raynauds disease, and help prevent heart disease and ulcers. Cayenne is also used as a natural pain killer with anti-inflammatory properties. Cayenne may be used internally or externally to treat arthritis, bunions, psoriasis, and muscle and joint pain. For external use just open a capsule and add some to a cream or lotion that you are already using if you want to use it for massage. Taken internally, cayenne is used to treat ulcers, improve circulation, and aid digestion. It is used as a tonic for the heart, kidneys, lungs, pancreas, spleen and stomach.

A stimulating stomachic. A catalyst for all herbs. Improves circulation, aids digestion by stimulating gastric juices, stimulates the appetite, reduces inflammation, is a mild stimulant or tonic, improves metabolism, relieves gas, colds, chills, and stops bleeding from ulcers. Good for the kidneys, lungs, spleen, pancreas, heart, and stomach.

Taken for nausea, scrofula, swollen lymph glands, rheumatism, arthritis, and pleurisy. Use with lobelia for nerves.

Recently, cayenne has been used successfully to treat patients with cluster headaches, a particularly painful type of headache.

Used externally, cayenne liniment may soothe the stiffness and pain of

Can be used as a general stimulant to build up resistance at the beginning of a cold, tonsilitis, laryngitis, hoarseness, shingles. It can be taken as an infusion for stomach and bowel pains or cramps. Small quantities of the fresh fruit or the powder may stimulate appetite and expel worms. For external use, cayenne can be made into plasters or liniment or the tincture may be applied to increase blood flow to areas afflicted with rheumatism,

**Cayenne contains:** Alkaloids, apsaicine, capsacutin, capsaicin, capsanthine, capsico PABA, fatty acids, flavonoids, sugars, carotene, volatile oil, and vitamins A, B1, B2, B3, B5, B6, B9, and C.

<http://www.herbwisdom.com/herb-coriander.html>

**Coriander (Coriandrum sativum)**

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Coriander (Coriandrum sativum), commonly known as Cilantro or Dhania, is a powerful herb with many health benefits. This plant is rich in micronutrients and nutritional elements. It contains dietary fiber, vitamins and minerals like calcium, magnesium, sodium and potassium. Aside from being used in cooking, coriander leaves and seeds strengthen the stomach,

Its medicinal proprieties have been documented in Sanskrit and Greek writings. Hippocrates used this powerful herb for its health benefits. In some parts of Europe, cilantro has been referred to as an "anti-diabetic" plant because its seeds have hypoglycemic effects. In India, coriander is very popular for its anti-inflammatory proprieties. The seeds of this plant were found in the tomb of Ramses II. Individuals who suffer from diabetes, as well as those with high cholesterol levels can benefit from using this herbal

This herb is an excellent source of iron, phytonutrients and flavonoids. It protects the body against urinary tract infections, prevents nausea, lowers blood sugar levels and aids in digestion. Coriander juice is beneficial in treating dysentery, colitis, indigestion and hepatitis. When mixed with pinch

Recent studies have shown that coriander can be successfully used in treating anxiety, depression and panic attacks due to its anxiolytic and sedative effects. This plant contains linalol, an essential oil that can help detoxify the liver and increase the appetite. Coriander also has blood

Dry coriander is highly effective in treating diarrhea. Boiled coriander seeds are beneficial for women who suffer from heavy menstrual flow and hormonal mood swings. Coriander contains powerful antioxidants that protect the body from the damage caused by free radicals. Fresh coriander leaves are a rich source of carotenoids. It has been shown that 125 ml of fresh coriander leaf juice contain almost as much beta-carotene as 250 ml of

Scientists have proved that the antibacterial properties of this plant can be used to improve oral health. The essential oil in coriander is believed to stimulate creativity, optimism and imagination. As an infusion, this herbal remedy has been used for digestive problems, diarrhea and anorexia. Recent studies have shown that coriander can cause a mild euphoria. Due to its analgesic proprieties, coriander leaves may help in treating arthritis. This

Coriander fruits are anthelmintic, fungicide and bactericide. They reduce digestive spasms and alleviate abdominal pain. The fruits are rich in amino acids, fatty acids and proteic substances. Some of these acids are very effective in reducing cholesterol levels in the body. Fresh dried coriander has beneficial effects for people with conjunctivitis. This herbal remedy contains citronelol, which is a powerful antiseptic. The antioxidant and antifungal proprieties of coriander are ideal for treating skin dryness, eczema and other

The antimicrobial substances in coriander help prevent and cure small pox. Because of its heating and analgesic effect, this plant is used to treat pain in bones and rheumatism. The high content of bioflavonoids from the leaves helps in treating varices and hemorrhoids. People concerned with heart health may benefit from using coriander because this herbal remedy reduces hypertension by lowering blood pressure. Coriander not only freshens breath, but it can help cure ulcers and sores in the mouth. It also reduces the accumulation of heavy metals in the body, which helps in preventing Alzheimer's disease and memory loss. Researchers indicated that this plant may have sedative and muscle relaxant effects. A study on mice found that coriander had insulin-like activity. One of the most notable proprieties of

Mixing coriander seeds with milk and honey is an excellent way to reduce fever. This medicinal can also help in diarrhea and flatulence. During summer, cilantro has a cooling effect. For individuals suffering from conjunctivitis, it reduces eye burn and irritation. Coriander has a number of

<http://www.herbwisdom.com/herb-honey.html>

**Honey**

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Honey is the sweet, delicious product that results from honey bees feasting on flowers. The honey bees (of the genus *Apis*) feed on the naturally occurring nectars found in flowers, allowing the nectar to mix with enzymes in their saliva. The nectar is then regurgitated into beehives in the form of honey. Due to the perfect amount of ventilation in honeycombs, moisture is slowly reduced until the honey is ready for consumption. Honey mainly consists of glucose and fructose, which provide it with a rich, universally palatable flavor. Due to its inherent sweetness, it can often be used as a natural substitute for table sugar. In addition to being a delicious treat, honey has several health benefits and homeopathic uses. When selecting honey, it

**Surge of Natural Energy** The natural sugars in honey are rapidly digested, which makes it an ideal source of fast-acting energy. Athletes who require an immediate surge in energy can benefit from the addition of honey to their pre-workout meals and snacks. Some marathoners swear by adding a couple tablespoons of honey to their peanut butter sandwiches before heading out on long runs. This practice dates back to ancient times when the first

People suffering from diabetes, hypoglycemia, or other blood sugar-related ailments may benefit from this effect, as well. A sudden drop in blood sugar may be critically harmful, and consumption of honey can quickly bring blood sugar back up to normal levels. Also, research shows that honey is far superior to white sugar with regard to insulin sensitivity. Despite being equally palatable as a sweetener, honey will not cause the same degree of sugar intolerance that is commonly found in diabetics. In fact, moderate

**Boosting Immunity to Infection** Honey naturally boosts the immune system due to its antimicrobial, antifungal, and antiviral properties. The pH of honey is generally quite acidic with a reading in the 3 to 5 range. Acidic substances are known to counteract the growth of most bacterial species, as the majority of bacteria prefer a neutral pH around 7. As a result, bacterial

Recent scientific research found a chemical compound in honey that may be instrumental to its longstanding reputation as an antimicrobial agent. Methylglyoxal is a compound specifically found in Manuka honey. Laboratory experiments continue to show methylglyoxal as an effective antimicrobial against drug-resistant *Staphylococcus aureus* biofilms. The *Staphylococcus aureus* bacteria, particularly the drug-resistant strands, are the culprits in numerous, potentially fatal infections collectively referred to

Honey is rich in polyphenols that provide it with antioxidant qualities. Antioxidants neutralize free radicals, which are an unavoidable byproduct of normal metabolic processes. Free radical buildup can cause significant damage to the body, and may eventually lead to heart disease, cancer, and other devastating illnesses. Honey has been specifically noted for reducing incidences of colon cancer. While there is no definitive cure for the common cold, honey has withstood the test of time as a reliable remedy. This may be

Topical Treatment for Wounds The miraculous benefits of ingesting honey can also be reaped from applying it as a topical antiseptic. Honey is especially useful when treating burns. Burn wounds have an unbelievably high rate of infection due to the destruction of several layers of dermal tissue. Honey has natural antiseptic properties that ward off bacteria and prevent infections. Not only does honey prevent infections, but it also promotes rapid healing. The glucose and fructose components in honey tend to absorb water, which dries the wound up, accelerating the healing process. Most bacteria cannot thrive in a moisture-free environment. Additionally, honey is naturally infused with enzymes that combine with water to form the

<http://www.herbwisdom.com/herb-bee->

## **Bee Propolis**

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Bees are some of nature's busiest creatures. They build intricate hives, produce honey, pollinate flowers and provide health supplements to humans in the form of bee pollen and propolis. The use of bee propolis as a treatment for various ailments has been around almost since the beginning of time.

#### **What Is Bee Propolis?**

Propolis is a sticky substance that bees make which is better known as "bee glue". The process begins when an expert propolis-making bee gathers resin from cone-producing evergreen trees or from the buds of trees. The bee will gather this sticky sap when the proper weather makes it pliable and soft. After the bee gathers enough, he blends the resin with wax flakes that he stores in the gland of his abdomen. After the bee has shaped it into a ball, he tucks it into the pollen basket that is attached to his leg. The bee will continue until the basket is full, then take it back to the hive. At this point, the propolis is unloaded and used to patch up holes in the hive. Bees also use

#### **Propolis As A Natural Antiseptic**

Humans have been using this as an antiseptic since the times of ancient Egypt. Applying propolis to wounds greatly improved healing and throughout the centuries, this substance has been shown to have other healing properties as well. In the last several decades, health practitioners have found even more positive uses for propolis as a natural supplement. Propolis has been shown to increase the effects of other antibiotics like penicillin and can also strengthen the immune system. Studies are now being

#### **Propolis Contains Powerful Antioxidants**

As far as supplements go, what exactly are people using propolis for? Some people simply take it as a nutritional supplement in capsule form for the healthy ingredients it contains. It's rich in amino acids, bioflavonoids, minerals and vitamins. Bioflavonoids are a powerful antioxidant with great health benefits to the immune system and help fight the free radicals that damage healthy red blood cells. The properties contained in propolis also promote better circulation. Some users have marveled at the increased

In natural medicine, propolis is used to relieve the symptoms of inflammations. It is also used as a way to treat superficial wounds like third-degree burns, scalds and ulcers of the skin. Practitioners also use it for people who have cataracts and viral diseases. In the natural medicine

## **Propolis Can Be Found In Many Forms**

Lozenges are used as a remedy for sore throat because of its antimicrobial properties. It has strong antifungal properties as well. It works as a treatment for any type of mouth, throat or dental problem like plaque, canker sores and for the prevention of oral disease. Some health practitioners also believe that propolis can be effective against oral tumors. Used as an oral rinse, it can

Propolis is also available in capsules, as an ointment and also as a rinse or topical liquid. As a rinse it has the ability to regenerate dental pulp, making it ideal for the prevention of dental caries. The cream form has numerous uses in the treatment of blemishes, acne and psoriasis. As an acne treatment,

The cream form is also used for relieving discomfort from herpes outbreaks and the scaling pain of eczema. Creams are versatile and can be combined with other natural ingredients such as aloe for increased skin soothing

<http://www.herbwisdom.com/herb-cherry.html>

## **Cherries**

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Cherries are not just the fruit of one particular plant. Cherries come from many different species of the plant genus *Prunus*. Not all *Prunus* tree fruits are cherries. *Prunus* trees also produce plums, apricots and peaches to name but a few. Cherries are a small, rich fleshy fruit with a stone in the middle.

The two cultivated forms of cherries are the sour cherry, *Prunus cerasus*, and the wild cherry, *Prunus avium*. Most cultivators grow the wild cherry variety, which is the variety most often utilized commercially. The sour cherry variety is the one most commonly associated with cooking.

The two species are not cross-pollinated although both originated in Asia and Europe. Due to their relative fragility under a barrage of rain or hail, the highly valued fruit is expensive compared to many fruits. Even so, wild and

Depending on where they are being grown, cherries become ripe for picking at different times of the year, but usually their peak season is the summertime. In North America and Europe, June is cherry picking time. In the U.K. and Canada, cherries are harvested in mid-July to August. Based on the data from 2007, annual production worldwide is about two million tons,

Cherries are used in many baking recipes for their tartness or flavorful sweetness, depending on the variety used. The cherry has also been found to have medicinal properties that have been proven to be beneficial in the

Lucius Licinius Lucullus is recorded to have brought a cultivated cherry from Anatolia to Rome in 72 BC. Later, King Henry VIII, who had enjoyed the fruit in Flanders, had the cherry introduced to his country at Teynham,

Cherries contain anthocyanins which is the red pigment in many fruits. The anthocyanins in cherries have proven to reduce inflammation and pain in laboratory rats. The anthocyanins have also been shown to be potent antioxidants with the potential for being helpful in a variety of ways as health benefits. Studies have indicated that they may be beneficial in the fight against diabetes and heart disease. In addition, the anthocyanins in cherries resulted in lower levels of triglycerides and cholesterol in rats that

Research also revealed that the health benefits of drinking one full glass of cherry juice daily equals the benefits of consuming 23 portions of vegetables and fruit. Further, it was determined that drinking 250ml of cherry juice provides more antioxidants than five portions of tomatoes, carrots, peas, watermelon and bananas. Antioxidants attack free radical molecules in the body and can also help prevent heart disease, aging, cancer and stroke. The

Cherries contain numerous vitamins such as Vitamin C and Vitamin A, and are high in nutrients like beta-carotene, perillyl, ellagic acid, bioflavonoids and potassium. This delightful fruit also produces melatonin. Melatonin, in addition to helping slow the aging process, also helps control healthy sleep patterns. A diet that includes cherries can help decrease body fat, cholesterol

The health benefits of cherries are quite impressive. In addition to the aforementioned benefits, Cherries also are known to relieve headaches, gout and the associated symptoms of Fibromyalgia Syndrome.

Sweet or sour, cherries have a pleasant taste and are perfect for desserts and snacks. They can be baked in pies, added to homemade granola bars or yogurt, or even eaten as whole fruit by themselves. Of course, a cherry is the perfect topper for an ice cream dessert. Black cherries and bing cherries are also manufactured in teas for a tasty tea and biscuit afternoon tea break. The knowledge that you are adding nutritious antioxidants along with a tasty

Nature has provided man with so many delicious foods with high nutritional value. We are only beginning to realize the extent of that nutritional bounty. As science develops new technologies for the exploration of disease-preventing foods, we often find that the simplest things have complexities that offer significant health benefits. Cherries are being championed as one

<http://www.herbwisdom.com/herb-cocoa.html>

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Cocoa beans are known to have more than 300 healthful compounds. Some of these include, phenylethylamine, theobromine, and many polyphenols, like flavonoids. Cocoa beans also contain many vitamins and minerals as well as healthy doses of potassium and copper, which support cardiovascular health, and iron, which transports oxygen through the body. Calcium and magnesium is also found in cocoa beans, which are necessary in order for all

Cacao beans, better known as cocoa beans, first appeared in the Amazon basin, and grow only in moist, warm and shady climates. Cocoa beans are primarily grown in Africa, Asia and, Central and South America. Cacao beans are produced by the plant *Theobroma cacao*, which translated, means "food of the Gods". That is a good name for them, given the numerous

*Listed below are the many health benefits of cocoa beans:*

#### *Antidepressant*

Cocoa beans are considered to be nature's anti-depressant. These beans contain dopamine, phenylethylamine (PEA) and serotonin, all of which are used to promote positive mental health and moods. In addition to this, these beans also contain monoamine oxidase inhibitors and amino acid tryptophan. Monoamine oxidase (MOA) inhibitors work to keep dopamine and serotonin in the bloodstream longer, which could ease depression and

#### *Antioxidant*

Research reveals that cocoa beans are perhaps the best source of antioxidants, containing up to ten percent antioxidant concentration levels. That is three times more antioxidants than green tea and twice the amount in red wine. Blueberries are often said to be a great source of antioxidants, however, while domestic blueberries have 32 antioxidants, and wild

Antioxidants have several health benefits. They protect against cell damage and reduce the risks of several kinds of cancer. Antioxidants also help

#### *Cardiovascular Health*

Cocoa beans are also good for the cardiovascular system as they contain polyphenols, which has been proven to be quite beneficial for good heart health. Research indicates that polyphenols, as found in cocoa beans, might

Cocoa beans contain magnesium. This is another nutrient that promotes good heart health. Magnesium increases heart strength and improves its condition. This helps to ensure that the heart will continue to effectively pump blood. Magnesium also decreases the risk of blood clots. This in turn,

#### *Energy Booster*

Cocoa beans reduce anxiety while simultaneously promoting alertness. A cup of cocoa can provide the same energy as a cup of coffee. However, due to the fewer stimulants in cocoa, there is no strong crash afterward, as there

#### *Weight Loss*

A good number of the health benefits that are known to be contributed to cocoa beans indicate a possibility that they could be a weight loss aid. Research shows that the polyphenols in cocoa beans might improve sensitivity to insulin. Scientists are currently studying the connection between obesity and a condition known as Insulin Resistance Syndrome. Increased insulin sensitivity, from coco beans or dark chocolate for example, may support weight loss efforts. Further more, the natural anti-depressants

#### **Incorporating Cocoa Beans Into Your Diet**

Cocoa beans, in their raw form, may be purchased at health stores. It is possible to purchase and consume them in that manner however many people find it difficult to deal with the harsh, bitter taste. Luckily there is a more pleasant tasting option, dark chocolate. There are specific characteristics that dark chocolate, selected for health, should contain: Healthy dark chocolate needs to have no less than 70% cacao. No milk or any other dairy products should be present in the chocolate as they inhibit the body's ability to absorb antioxidants. The chocolate should be made from

Chocolate is a tasty food source that we can enjoy all the more knowing that it has health benefits as well!

<http://www.herbwisdom.com/herb-coconut-oil.html>

## Coconut Oil

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Coconut oil provides benefits to weight loss, skin and hair care, increased immunity and boosted energy levels whilst also helping to strengthen bones and promoting a healthy digestive system. Coconut oil is also very stable at high temperatures so is ideal for frying as it doesn't easily break down to

The human body carries normal levels of a substance called monolaurin. This substance assists in increasing our immune system by warding off many harmful bacteria, fungi and viruses. Monolaurin levels in coconut oil help improve a compromised immune system while also increasing the body's proper nourishment and energy levels. Monolaurin derives from our body's natural production of lauric acid. Coconut oil's main component is lauric acid, which is among a group of medium-chain triglycerides in the saturated fat group. Unfortunately, because of the negative publicity of

A common misconception of coconut oil is its association with weight gain when in fact the opposite is true. Coconut oil consists of 50% lauric acid, which is a medium-chain triglyceride. Also included is myristic, caprylic and palmitic acid. The presence of these acids helps to reduce appetite while increasing proper function of the thyroid. This does not mean they are an appetite suppressant rather they allow a healthy level of food consumption and provide longer time durations of feeling full. The increase in metabolism and thyroid function assists in our body burning fat calories rather than storing them. The presence of medium-chain triglycerides in coconut oil allows the rapid digestion of these acids before they reach the intestinal tract whereas other oils contain slow digesting long chain triglycerides. These

Hair and skin reap coconut oil benefits by receiving high levels of antioxidants, which is an effective combater of free radicals. Free radicals promote the body's aging process by weakening skin tissue whereas antioxidants work to combat free radical levels. In addition, a natural derivative of coconut oil is Vitamin E. This vitamin strengthens skin tissue and hair follicles while retaining skin and hair's optimum condition. The antibacterial, antiviral and antifungal properties in coconut oil (lauric and

The presence of high free radical levels damages the body's artery walls. Once damage occurs, walls of the arteries start collecting cholesterol or plaque buildup. If left untreated this buildup causes life-threatening artery blocks resulting in hardening of the arteries, strokes and heart disease. The healthy acids provided in coconut oil help to heal the damaged artery walls while reducing harmful free radical levels. In addition, a healthy level of

Coconut oil increases our body's absorption of many beneficial substances such as calcium and magnesium. When these substance levels increase, they promote strong bones and healthy teeth conditioning. Healthy teeth ward off cavities, which cut down on tooth decay while strong bones ward off osteoarthritis. In addition, the medium-chain fatty acids found in coconut oil help the effects of arthritis by increasing our body's absorption rate. Microorganisms in the bodies system create infection and secure themselves deep within joint membranes causing damage and creating arthritis. Antibiotics are unable to penetrate deeply enough into joint membranes making these microorganisms immune to antibiotics. However, the deep absorption rate of healthy fatty acids reaches these joint membranes destroying the infection-causing microorganisms. The healthy acids in

Setting a container of oil in warm water will sufficiently melt coconut oil as it comes in solid form. Recommendations include starting with one tablespoon of organic/virgin coconut oil daily while increasing to three tablespoons daily; one tablespoon taken after each meal. For individuals unable to stand pure doses, including it in drinks or recipes requiring oil will help. Hair treating involves massaging two tablespoons into hair and scalp and leaving on overnight followed by a shampoo in the morning. Skin treatment involves massaging the oil into your face and body to remove dead

Not all individuals may tolerate coconut oil and temporary side effects may include bouts of diarrhea. It is important to start by consuming small doses while slowly increasing to the daily-recommended three-tablespoon dosage intake. This allows your body time to become properly acclimated to virgin or organic coconut oil. Many individuals should be aware of allergic

<http://www.herbwisdom.com/herb-coriander.html>

## Cumin

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Cuminum cyminum is an annual herb that grows to be about a foot tall and is native to China, Mexico, India and the Mediterranean. Its seeds are yellow-brown in color and they are harvested by hand. White or pink flowers blossom on the cumin plant during its three to four month growing period during the hot summers. The small, flat seeds provide a peppery flavor that is used in Mexican dishes, as well as in combination with curry in Indian and Middle Eastern food. Some southern Chinese cooks use cumin to give

While quite plain in appearance, its health benefits are anything but plain. Cumin is a great supplement for any diet, as Eastern culutres have known for thousands of years. Cumin is high in iron and manganese, supplying seven and three percent respectively of the recommended daily value. It also supplies our bodies with calcium, many vitamins and fiber. Cumin is said to prevent gas, reduce muscle spasms, clear jaundice and stop diarrhea

Cumin oil, which is readily produced in the United States, is used for flavoring desserts, condiments and alcoholic beverages. It is also used as a

*Here are some of the many ways in which cumin can help you:*

**Great Source of Iron:** Cumin is a great source of iron which is key in keeping your immune system healthy and producing energy and maintaining your metabolism. Children, teenagers, women going through their menstrual cycle and women who are pregnant or nursing need to consume more iron and

**Relieves Colds, Fevers and Sore Throats:** Cumin is high in vitamin C and its anti-fungal properties make it difficult to suffer long from a cold if you consume it regularly. Make up your own cold remedy by mixing one teaspoon of ground cumin in boiling water and allow to simmer for a few

**Aids Digestion and Relieves Constipation:** Cumin is well known for its effects on the digestive system and scientists have said that cumin aids in proper digestion of food and the body's ability to absorb nutrients because the enzymes found in cumin help break down the food. Thanks to the levels of fiber that is found in cumin, piles can be gotten rid of when consumed

**May Prevent Cancer:** As scientists do more research on cumin they are finding that it may also contain anti-carcinogenic properties which is key for preventing cancer. Lab rats who took cumin did not develop tumors like the others thanks to cumins ability to detoxify the liver and prevent free radicals from entering the blood stream. Cumin is a great way to help detoxify your

**Insomnia:** Insomnia can be relieved if you mix a teaspoon of cumin powder with one mashed banana and eat before going to bed.

**Breast Feeding:** Cumin, taken with milk and honey, can help increase milk supply when consumed regularly.

**Maintain Healthy Skin:** The vitamins found in cumin, both vitamin C and E, are essential for healthy, young looking skin. Cumin's essential oils also

**Cooking with Cumin:** It's always best to use whole cumin seeds that you grind with a mortar and pestle, but cumin powder is more convenient though it loses its flavor faster than whole seeds. Whole seeds will keep for a year, when stored in a cool, dark place, while powder should be used within six

Boil some cumin seeds in water and steep for eight to ten minutes for a soothing tea. Sauté vegetables and toss with cumin powder for a tasty vegetarian dish. Cumin is great sprinkled on rice and beans to give extra flavor. In Eastern cultures cumin is mixed with black pepper and honey as

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**Evening Primrose Oil (Oenothera biennis)**

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Evening Primrose Oil has been called the most sensational preventive discovery since vitamin C. It contains the pain relieving compound phenylalanine and is increasingly being used to treat chronic headaches. It is currently being studied all over the world as a treatment for aging problems, alcoholism, acne, heart disease, hyperactivity in children, symptoms of menopause, multiple sclerosis, weight control, obesity, PMS and schizophrenia. It has so many preventive and therapeutic qualities that it has

Evening Primrose Oil contains a high concentration of a fatty acid called GLA and it is this fatty acid that is largely responsible for the remarkable healing properties of the plant. In fact, Evening Primrose contains one of the highest concentrations known of this important substance and only a few other plants contain it at all. This makes Evening Primrose an important medicinal herb, and as studies continue, the list of benefits will likely become much longer. The gamma-linoleic acid, linoleic acid and other nutrients in this oil are essential for cell structure and improve the elasticity of the skin. These fatty acids also help to regulate hormones and improve

***Specifically, evening primrose oil may help to:***

***Relieve the discomforts of PMS, menopause, menstruation, endometriosis***

By interfering with the production of inflammatory prostaglandins released during menstruation, the GLA in evening primrose oil can help to lessen menstrual cramps. It may also minimise premenstrual breast tenderness, irritable bowel flare-ups, and carbohydrate cravings, and help to control endometriosis-associated inflammation. Many PMS sufferers are found to have unusually low levels of GLA in their systems, which is why supplements might help so much. In women with fibrocystic breasts, the oil's essential fatty acids can minimise breast inflammation and promote the absorption of iodine, a mineral that can be present in abnormally low levels in women with this condition. In menopause, it is widely reported that

***Ease the joint pain and swelling of rheumatoid arthritis:***

Supplementation with evening primrose oil and other sources of GLA has been shown to lessen the joint pain and swelling of this crippling disease. A six-month study reported fewer signs of inflammation in rheumatoid arthritis sufferers taking capsules containing GLA than in those taking a placebo. In another trial, the number of tender joints and swollen joints dropped

***Prevent diabetes-associated nerve damage:***

Research indicates that the GLA in evening primrose oil can help prevent, and in some cases even reverse, the nerve damage (neuropathy) so commonly seen with diabetes. In a year-long study, such symptoms as numbness, tingling, and loss of sensation in participants with mild diabetic neuropathy were less marked in those who took evening primrose oil than in

***Reduce the symptoms of eczema:***

In some cases, eczema develops when the body has problems converting dietary fats into GLA. Getting supplemental GLA from evening primrose oil may therefore be helpful. Some studies indicate that this oil can outperform a placebo in relieving eczema-related inflammation, as well as the itching, oozing, and flaking associated with this condition. By taking GLA, eczema sufferers may tolerate reduced doses of steroid creams and drugs, many of

***Help treat acne and rosacea:***

By working to dilute sebum, a thick oily substance that is oversecreted in some people with acne, the essential fatty acids in evening primrose oil may reduce the risk of pores becoming clogged and lesions developing. The oil's EFAs help treat rosacea by reducing inflammation, controlling cells' use of nutrients and by producing prostaglandins, which stimulate the contraction

*Combat damage from multiple sclerosis:*

The abundant supply of essential fatty acids in evening primrose oil may be valuable in minimizing the inflammation associated with this progressive nerve disorder. The fatty acids may also contribute to healthy nerve

*Treat Alzheimer's-related memory deficiencies:*

By boosting the transmission of nerve impulses, evening primrose oil may be valuable in treating this progressive brain disorder.

*Counter impotence and female infertility:*

By promoting blood flow, the GLA in evening primrose oil can help treat a primary cause of male impotence; compromised circulation leading to impaired penile blood flow. The oil is often taken with vitamin C and ginkgo biloba for this purpose. In addition, when the oil is taken long term, GLA can help prevent blood vessel narrowing, often a consequence of plaque

*Nourish nails, scalp, and hair:*

The rich stores of essential fatty acids in evening primrose oil not only prevent nails from cracking but also help to keep them generally healthy. In addition, the essential fatty acids nourish the scalp, making the supplement potentially valuable in treating a variety of hair problems.

*Prevent alcohol withdrawal symptoms:*

GLA prompts the brain to produce a specific type of prostaglandin called prostaglandin E, which works to prevent withdrawal symptoms such as depression and seizures by indirectly protecting the liver and nervous system.

<http://www.herbwisdom.com/herb-daikon.html>

**Daikon / Radish**

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*Raw daikon root* is a white fleshed radish that has a very mild taste and is very low in calories, coming in at around 6 calories per ounce. Because of the multitude of benefits it gives, daikon is considered a superfood. It contains large amounts of enzymes that aid in fat and starch digestion as well as high levels of vitamin C, phosphorus and potassium. It also contains other phyto-nutrients that fight cancer. The extract from the seed is also a

*Daikon Seeds Daikon Seeds (Latin name Raphanus Sativus)* have been used for centuries to aid in digestion, relieve fatigue and for their ability to cleanse the blood and body. They are an effective treatment for hangovers, sore throats, migraine headaches, congestion and edema. Also, they are effective against anything caused by rich diet or food stagnation such as acne, diabetes, bloating and cellulite. They can aid in weight loss and improve kidney function, immune function and blood circulation. Topically,

*How Daikon Seed is used* Daikon seed can be sprouted and then consumed similar to other sprouted seeds. It can also be cooked with grains. An extract can be made from the seeds and then put into capsules or tincture.

Commonly, this extract is combined with things like holly leaf, garlic and hawthorn to effectively lower blood pressure and improve overall cardiovascular health. It can also be combined with other common remedies such as ginger and honey to treat digestive woes. The freeze dried sprouts

*How Daikon Root is used* Daikon root is primarily used in Asian cuisine and traditional Chinese medicine. It is often served pickled. A broth can be created by boiling Daikon Root with seaweed and then taken to help rid the body of dairy build up and animal toxins. A tea made from the root is often used to aid digestion, fight disease and to treat both constipation and diarrhea. Two thin slices of pickled and then sun dried daikon is the traditional end to a meal in Japan as it is said to both cleanse the palate and aid in the digestion of the meal. Daikon can also be juiced. Laboratory testing has shown that the enzyme profile in daikon juice is very similar to the human digestive tract. It also contains selenic compounds that block

*Helping Kidney Function* Alone, daikon, both in food form and in its extract, is a very effective diuretic. It causes the kidneys to process waste more effectively and thus excrete more urine. This helps to both improve kidney function and to treat edema. It also helps to clean the blood, eliminating the toxins through the kidneys, liver, sweat glands and digestive tract. Because of this, it helps food be digested more completely leading to

*Migraine Relief* The same action that allows daikon to treat high blood pressure also allows it to help prevent and treat migraines. Migraines are caused by blood vessels in the brain constricting. Daikon helps to dilate those blood vessels. It works best as a preventive but can also be taken at the

*Habitat* Growth of the daikon plant began in the Mediterranean but quickly spread east. Traditionally, it was grown across all of Asia and is still today especially common in China, Japan, Korea and the Philippines. Most recently, as its health benefits have become more widely known, it has come

*Dosage* The amount of daikon seed extract varies widely between brands. The therapeutic dosage for blood pressure is 400-800 mg per day. Many commercially available blood pressure blends contain much less of the extract than this. When used in a commercial cleansing program, most

The benefits of using daikon root will quickly be seen if you give this super food and amazing supplement a try.

<http://www.herbwisdom.com/herb-thyme.html>

**Thyme (Thymus)**

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Thyme has been well-used for centuries for a variety of purposes. People in ancient Rome used thyme in order to treat melancholy and added the herb to alcoholic beverages and cheese. The ancient Greeks would use thyme in incense. During medieval times, the herb was used in order to infuse the user

Approximately 350 thyme species exist. Some of these species are good plants for gardening and possess a sweet fragrance and pretty lilac or pink flowers. Despite the fact that the flowers are quite small, there are many of them which produce nectar and therefore attract bees. Some of the most

The plants are perennial and belong to the family of mint. They also exist in several different colors and shapes. The flowers of the plant range from pale pink, blue-violet, magenta, lilac, mauve, and white while the leaves vary in

The vast range of differences between each of the plants makes them each unique. As such, there are a number of different names for the various thyme types which include Rainbow Falls, Archer's Gold, Golden King, Silver Queen, and Lemon Curd. All of these plants have different scents which can generate aromas such as camphor, lemon, orange, celery, tangerine, caraway, pine, as well as eucalyptus. The different flavors and aromas are due to the subtle differences in the essential oil within the plant.

Thyme is a highly fragrant and pleasant plant to grow within a garden. They are small in size which makes them easy to plan in small spaces such as in rock gardens, small pots, and in between paving stones. They can be used in order to repel cabbage pests and beetles. In order to ensure that they grow well, it is best to trim the plant after they flower and remove any of the dead

### **Culinary Uses**

The lemon thyme and common thyme are the most common forms of thyme that are used in cooking. In contrast, thyme is also used for medicinal purposes with the most common types used being Spanish thyme, common thyme, as well as creeping thyme. All of these types are indigenous to

The dried or fresh leaves of the thyme plant along with the flowers can be used within stews, soups, sautéed or baked vegetables, custards, and casseroles. The herb gives the food a tangy and warm flavor, similar to camphor, and is able to retain its strong flavor even after cooking. It can also

Thyme's essential oil may also be used within toothpastes, soaps, perfumes, antiseptic ointments, and cosmetics. The oil is also utilized in order to elevate the mood and relieving pain in aromatherapy. It can also be calming during conditions of stress and baths with thyme can help to relieve joint

### **Therapeutic Uses of Thyme**

The essential oils within thyme contain large amounts of thymol, which is a strong antibacterial agent as well as a strong antiseptic and antioxidant. The oil can be used within mouthwashes in order to treat mouth inflammations as well as infections of the throat. Thyme is also used often within cough drops.

Due to the essential oil, the herb contains bronchial antispasmodic and expectorant properties which makes it quite useful in treatment chronic as well as acute bronchitis, upper respiratory tract inflammation, and whooping cough. Thyme can also enhance the functioning of the bronchi's cilia, also affecting the bronchial mucosa. Thyme's terpenoids provide the herb with its expectorant properties while the flavonoids in the herb provide thyme with its spasmolytic effects. All members of the family of mint, such as

Tea can also be made with 1 tsp of crushed thyme mixed in with ½ cup of water which is boiling. The thyme should steep within the water for a period of 10 minutes and then strained. The tea should be drunk between 3 and 4 times per day in order to treat coughs. If the tea needs to be sweetened,

#### **Safety Precautions when Using Thyme**

Thyme has no known side effects and is completely safe to use. However, thyme's essential oil could cause skin and mucous membrane irritation and can also cause allergic reactions. It is also recommended that thyme should not be used medicinally during pregnancy as they have been linked with

<http://www.herbwisdom.com/herb-water.html>

#### **Water**

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In the rush to buy vitamins, supplements, and natural remedies to all of life's ailments, many people overlook the importance of water when considering the best path toward great, long-lasting health. The simple fact of the matter is that water comprises 60 percent of the average person's bodyweight and is a crucial way to regulate body temperature, protect tissues and joints, remove waste, and aid digestion. When all four of these are functioning

##### *Water as a Protector:*

##### **Maintaining the Integrity of Joints, Tissues, and the Spinal Cord**

In order for joints to be healthy, they must be well-lubricated. In order for tissues to be healthy, flexible, and able to adapt to life's everyday movements, they must be moist. In order for the spinal cord to be protected, it must be well-hydrated. Water does all of these things in the human body, especially when it comes to tissues. Anyone who has ever suffered from a dry, stuffy nose, or cracked and chapped lips, knows how discomforting it

##### **Water is a Key Way to Aid Regular Digestion**

When digestion becomes inconsistent, many people look to their diet and blame certain solid foods for their discomfort. Those foods might certainly be a cause, based on their own chemistry, but water is often an important part of the mix when it comes to healthy and regular digestion in adult humans. To hammer this point home, people need only understand where the

It all starts with the water-infused saliva contained in a person's mouth; beyond that, substances move through the kidneys and intestines, which possess their own digestive enzymes that break down food and usher waste through (and out of) the body. When water is running low, saliva, the kidneys, and the intestines, all suffer. They perform their job much more slowly and far more inefficiently. That leads to slower digestion, less regular bowel movements, and can even lead to kidney infections due to chronic

##### **Water Flushes Waste Out of the Body**

Most people associate urination or defecation with the digestive process, but that's actually an oversimplification. Both urination and defecation, along with perspiration, are key ways for the body to remove waste. It should be noted that waste itself is often separate from the by-products of consuming food and other beverages. Waste can include bodily fluids, excess vitamins or proteins, and other chemicals, that simply must be removed in order for

When water levels are low in the body, this process gets put on hold. The body performs less waste removal overall, and that can lead to feelings of fatigue and more frequent incidences of illness. A sick body is one that is never quite able to get into great shape, even through regular exercise, and it can lead to major immune system and joint problems if water levels are

### **Temperature Regulation Requires a Good Amount of Water**

Most health experts recommend 64 ounces of water per day to avoid dehydration and aid bodily functions. This same daily requirement of water helps regulate body temperature on hot days, during intense workouts, or in any other heat-intensive scenarios. That's because healthy amounts of water allow people to sweat more effectively and consistently; a healthy amount of water on a daily basis will also lead to more efficient breathing and a lesser

### **A Key Component for a Healthy Human Life**

With more than half of the body being comprised of water in some form, it's no surprise that this essential substance is the key to a healthy life, a long-lasting body, and maximum enjoyment of exercise and high temperatures. This essential substance can lead to more comfortable joints, less aches and fatigue in bodily tissues, and even a healthier brain and spinal cord. It gives a much-needed boost to saliva, kidneys, and intestines, promoting great digestion and waste removal, as well. For effective digestion, healthy

<http://www.herbwisdom.com/herb-wheatgrass.html>

### **Wheatgrass**

#### **Wheatgrass Benefits**

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Wheatgrass is made from the cotyledons (seed leaves) of the normal wheat plant *Triticum aestivum*. It is usually sold as a juice or powder concentrate. The difference between Wheatgrass and Wheat malt is that Wheatgrass is left to grow for longer until it reaches the Jointing Stage, where it has peak nutritional value. It is then freeze-dried (i.e. at a low temp) or served fresh. In comparison, standard wheat malt is harvested earlier and then dried at a higher temperature. Wheatgrass therefore manages to produce, and maintain, a highly nutritious content compared to normal wheat. Consumers of wheatgrass report that their levels of energy greatly increase, their skin clears

#### **Key Facts Regarding Wheatgrass**

- 30mls of wheatgrass juice has the same nutritional value of 1 kg of green leafy vegetables.
- 90 minerals can be found in the wheatgrass including potassium, calcium, magnesium, iron, zinc, copper, manganese, selenium, and iodine.
- Wheatgrass contains enzymes such as cytochrome oxidase, protease, amylase, transhydrogenase, and lipase.
- Wheatgrass contains 19 different amino acids.

The juice of wheatgrass allows the body to increase red blood cell production, thereby increasing oxygenation. Wheatgrass contains a large amount of vitamin C.

### **Health Benefits of Wheatgrass**

*There are four primary health benefits of wheatgrass:*

#### *Health Benefit #1*

Numerous health experts have determined that the chlorophyll within the wheatgrass is practically identical to that of the hemoglobin which is found within the blood of a human. The only determined difference between the two is that chlorophyll's central element consists of magnesium while

Because of the close similarities between the hemoglobin and the chlorophyll, the body is able to make hemoglobin from the chlorophyll with ease. This serves to increase the count of red blood cells so as to deliver

Studies have shown that chlorophyll is able to generate red blood cells, improve blood pressure through the dilation of veins, eliminate carbon dioxide, and increase metabolism. Along with the other benefits, the consumption of chlorophyll is a great way to obtain additional energy and

#### *Health Benefit #2*

Wheatgrass is a highly beneficial when it comes to cleansing the body. Wheatgrass powder and juice have been shown to be a "complete" food meaning that it provides the body with almost all of the nutrients which is required for energy and survival. Only 140 g of wheatgrass can provide you

Wheatgrass provides the consumer with vitamins E, C, and B as well as carotene which are all essential in eliminating the free radicals from the body. The substance is also known for its wonderful ability to cleanse the

Because wheatgrass contains large amounts of saponin, it is able to boost the lymphatic system, thereby removing toxins from the body's cells. Studies show that wheatgrass allows the body to detoxify through increasing the removal of crystallized acids, fecal matter, as well as hardened mucous. It is a fast and sure way to remove waste as well as generate a highly nutritious

Whether you want to cleanse your body or you want to make a permanent change in your diet, wheatgrass is an excellent choice for both.

#### *Health Benefit #3*

Wheatgrass have been shown to contain large amounts of amino acids, which are necessary to the building of protein. They are also necessary to the regeneration and growth of the body's cells. Because of this, many professional bodybuilders and those who wish to increase their muscle tone take wheatgrass in either fresh or powdered form before and after their daily

The juice of wheatgrass contains numerous amino acids including serine, arginine, asparic acid, lysine, alanine, glycine, methionine, tryptophane, leucine, valine, and phenylalanine.

#### *Health Benefit #4*

Wheatgrass has been shown to protect and fight certain illnesses. The organic wheatgrass juices and powders are highly effective in the boosting of the immune system which allows the body to fight as well as more swiftly recover from a variety of ailments and illnesses. Wheatgrass is an excellent means of obtaining beta carotene, which contains a number of B vitamins along with E, K, H, and C. It also possesses more than 90 minerals and 19 different amino acids. Wheatgrass also possesses many different enzymes,

Several health benefits provided by the substance is based upon the fact that wheatgrass consists of living food. Because it is anti-bacterial, the consumption of wheatgrass can detoxify both the blood and lymph cells and well as eliminate toxins and poisons from the body in an effective and

Reflecting back on the first point, chlorophyll can serve to protect against carcinogens in a more effective manner than other foods. Studies, which have been conducted on animals, have demonstrated that the consumption of wheatgrass reduces carcinogen absorption while strengthening the cells,

<http://www.herbwisdom.com/herb-sage.html>

**Sage (Salvia officinalis)**

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Sage has one of the longest histories of use of any culinary or medicinal herb. Ancient Egyptians used it as a fertility drug (Bown, 1995). In the first century C.E. Greek physician Dioscorides reported that the aqueous decoction of sage stopped bleeding of wounds and cleaned ulcers and sores. He also recommended sage juice in warm water for hoarseness and cough. It was used by herbalists externally to treat sprains, swelling, ulcers, and bleeding. Internally, a tea made from sage leaves has had a long history of use to treat sore throats and coughs; often by gargling. It was also used by herbalists for rheumatism, excessive menstrual bleeding, and to dry up a mother's milk when nursing was stopped. It was particularly noted for strengthening the nervous system, improving memory, and sharpening the

Sage Tea or infusion of Sage is a valuable agent in the delirium of fevers and in the nervous excitement frequently accompanying brain and nervous diseases. It has a considerable reputation as a remedy, given in small and often-repeated doses. It is highly serviceable as a stimulant tonic in debility of the stomach and nervous system and weakness of digestion generally. It was for this reason that the Chinese valued it, giving it the preference to their own tea. It is considered a useful medicine in typhoid fever and beneficial in biliousness and liver complaints, kidney troubles, haemorrhage from the lungs or stomach, for colds in the head as well as sore throat, quinsy, measles, for pains in the joints, lethargy and palsy. It has been used to check excessive perspiration in phthisis cases, and is useful as an

The German Commission E approved internal use for mild gastrointestinal upset and excessive sweating as well as for external use in conditions of inflamed mucous membranes of the mouth and throat. An unpublished, preliminary German study with people suffering from excessive perspiration found that either a dry leaf extract or an infusion of the leaf reduced sweating by as much as 50%

In Germany, sage tea is also applied topically as a rinse or gargled for inflammations. Sage extract, tincture, and essential oil are all used in prepared medicines for mouth and throat and as gastrointestinal remedies in fluid (e.g., juice) and solid dosage forms (Leung and Foster, 1996; Wichtl

Sage has been used effectively for throat infections, dental abscesses, infected gums and mouth ulcers. The phenolic acids in Sage are particularly potent against *Staphylococcus aureus*. In vitro, sage oil has been shown to be effective against both *Escherichia coli* and *Salmonella* species, and against filamentous fungi and yeasts such as *Candida albicans*. Sage also has an antiseptic action due to its relatively high tannin content and can be used in

Its antiseptic action is of value where there is intestinal infection. Rosmarinic acid contributes to the herb's anti-inflammatory activity.

Sage has an anti-spasmodic action which reduces tension in smooth muscle, and it can be used in a steam inhalation for asthma attacks. It is an excellent remedy for helping to remove mucous congestion in the airways and for checking or preventing secondary infection. It may be taken as a carminative to reduce griping and other symptoms of indigestion, and is also of value in the treatment of dysmenorrhoea. Its bitter component stimulates upper digestive secretions, intestinal mobility, bile flow, and pancreatic function, while the volatile oil has a carminative and stimulating effect on the digestion. It has a vermifuge action. There also seems to be a more general relaxant effect, so that the plant is suitable in the treatment of nervousness

In 1997, the National Institute of Medical Herbalists in the United Kingdom sent out a questionnaire to its member practitioners on the clinical use and experience of sage. Of 49 respondents, 47 used sage in their practice and 45 used it particularly in prescriptions for menopause. Almost all references were to sage's application for hot flashes, night sweats, and its estrogenic effect. The age range of the menopause patients was 40 to 64, with an average of 49.76. Three-quarters were aged 47 to 52. Forty-three practitioners also noted its use in infections, mainly of the upper respiratory tract, 29 reported its use in sore throat, and 15 reported its use in mouth and gum disease, taken in the form of gargles and mouthwashes. Another main area emphasised by the respondents was its use as a general tonic, for fatigue, nervous exhaustion, immune system depletion, and poor memory and concentration, at any age. Dosage form preference was also reported. Sage was prescribed as tea (aqueous infusion) by 37 practitioners, alcoholic

It is well documented that Sage leaf helps to reduce menopausal sweats. In one study, excessive sweating was induced by pilocarpine. The sweating was reduced when participants were given an aqueous extract of fresh Sage leaf. In a further study 40 patients were given dried aqueous extract of fresh sage (440mg) and 40 were given infusion of sage (4.5g) herb daily. Both groups of patients experienced a reduction in sweating.

Sage has a strong anti-hydrotic action, and was a traditional treatment for night sweats in tuberculosis sufferers. Its oestrogenic effects may be used to treat some cases of dysmenorrhoea and menstrual irregularity or

Research has suggested that the presence of volatile oil in Sage is largely responsible for most of its therapeutic properties, especially its anti-septic, astringent and relaxing actions. Sage is also used internally in the treatment of night sweats, excessive salivation (as in Parkinson's disease), profuse perspiration (as in TB), anxiety and depression. Externally, it is used to treat

It is thought that Sage is similar to Rosemary in its ability to improve brain function and memory. In a study involving 20 healthy volunteers Sage oil caused indicated improvements in word recall and speed of attention. Meanwhile the activity of Sage and its constituents have been investigated in the search for new drugs for the treatment of Alzheimer's disease with

ESCOP (European Scientific Cooperative on Phytotherapy) indicate its use for inflammations such as stomatitis, gingivitis and pharyngitis, and

<http://www.herbwisdom.com/herb-tea-tree-oil.html>

## Tea Tree Oil (Melaleuca)

### Tea Tree Oil Benefits

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Bundjalung Aborigines who historically resided in what is now known as New South Wales, Australia would pick the leaves from the tea tree plant, break them (like aloe leaves.) Then, to heal burns, cuts, and insect bites they would rub the leaves over their skin. They also ground the leaves into a fine paste as wound dressing. Those crushed leaves were also applied over the body as an insect repellent. They taught Captain Cook how to boil the leaves to create a spiced tea, so Cook called the plant a "tea tree."

In the early 1990s scientists in the University of Western Australia's School of Biomedical, Biomolecular and Chemical Sciences began a study of essential tea tree oil. Their purpose was to investigate and verify the medicinal properties of tea tree oil, especially the oil's antimicrobial benefits. Tea tree oil has demonstrated its wide spectrum of ability in healing bacterial, fungal, and viral infections in the laboratory. These researchers

Tea tree oil is produced by steam distilling the leaves of the Australian *Melaleuca alternifolia*. The *M. alternifolia* is a plant species which grows only in Australia and is native to Northern New South Wales. The plant oil contains more than 100 separate components. These are mostly monoterpenes, sesquiterpenes, and their alcohol forms. Tea tree oil is comprised of at least 30% terpinen-4-ol which causes most of its antimicrobial activity. This component--with specific levels of 13 others--are

Tea tree oil has proven effective in treating skin infections. Whether the cause of the infection is bacterial, fungal or viral, the oil works to heal it. Although it provides strong pharmaceutical medication, tea tree oil doesn't show dangerous side effects. This pale yellow or colorless oil smells similar to eucalyptus. Although it contains more than 100 compounds, so far only

Each batch of tea tree oil is checked by sampling the quantity of two main compounds: cineole must be less than 15% because it can become caustic to skin in higher percentages, and terpinen-4-ol needs to be 30% or greater for good quality oil. Although these two compounds are the ones measured to verify the oil's quality. However, its efficacious treatment of bacterial, fungal, and viral infection is actually produced by a combination of multiple

Harvesting the leaves from tea trees isn't easy. They grow in swamps infested with snakes and insects. Machinery won't work under those conditions, so the leaves must be cut by hand. Workers use machetes to cut suckers off the stumps and then use a cane knife to strip the leaves from the branches. The tea trees' growth appears to actually increase when regularly cropped. No damage is done to the trees or the surrounding ecosystem because machinery can't be used. The leaves are then placed in a steam distiller on racks. Oil is drawn from the leaves, floating on top of the water in collection tanks. The tea tree oil goes through a filtration process before it

Tea tree oil is efficacious in various dilution in treating abrasions, minor cuts, acne, arthritis, asthma, athletes foot, bladder infections, bronchial congestion, minor burns, chapped lips, rash from chicken pox, dandruff, dry skin, earaches, eczema, head colds, lice, herpes lesions, warts, hives, shingles, etc. Tea tree oil may be diluted with olive oil and rubbed onto an irritated or inflamed site as in the case of arthritis or gout. Added to bath water, it soothes the entire skin area. A few drops placed on a hot washcloth

The popularity of natural treatments for health problems is once again gaining momentum. In past history, before “modern” medicine, natural medicine was the only treatment available. Over the centuries native peoples found many plants which effectively treated various illnesses. Today, with the problems that have risen from overuse of antibiotics and other medications, and the side effects caused by the use of many of these, the old is becoming new again. Due to the wide spectrum of viral, microbial, and

<http://www.herbwisdom.com/herb-spirulina.html>

### **Spirulina (Arthrospira platensis)**

#### **Spirulina Benefits**

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Spirulina is a simple one-celled microscopic blue-green algae with the scientific name *Arthrospira platensis*. Under a microscope, spirulina appears as long, thin, blue-green spiral threads. The odor and taste of spirulina is

Spirulina can be found in many freshwater environments, including ponds, lakes, and rivers. It thrives best under pesticide-free conditions with plenty of sunlight and moderate temperature levels, but it is also highly adaptable, surviving even in extreme conditions. More than 25,000 species of algae live everywhere - in water, in soils, on rocks, on plants. They range in size from a single cell to giant kelp over 150 feet long. Macroalgae are large like seaweeds. Microalgae are microscopic. Ocean microalgae, called phytoplankton, are the base of the ocean food web. Spirulina is often deemed the most nutritionally complete of all food supplements, containing a rich supply of many important nutrients, including protein, complex carbohydrates, iron, and vitamins A, K, and B complex. It also has a high supply of carotenoids such as beta carotene and yellow xanthophylls which have antioxidant properties. It is also rich in chlorophyll, fatty acid, and

Spirulina is the richest beta carotene food, with a full spectrum of ten mixed carotenoids. About half are orange carotenes: alpha, beta and gamma and half are yellow xanthophylls. They work synergistically at different sites in our body to enhance antioxidant protection. Twenty years of research proves eating beta carotene rich fruits and vegetables gives us real anti-cancer protection. Synthetic beta carotene has not always shown these benefits. Research in Israel showed natural beta carotene from algae was far more effective. Natural is better assimilated and contains the key 9-cis isomer, making it superior. As suggested, natural carotenoids in blue and

Spirulina is an ideal anti-aging food; concentrated nutrient value, easily digested and loaded with antioxidants. Beta carotene is good for healthy eyes and vision. Spirulina beta carotene is ten times more concentrated than

Iron is essential to build a strong system, yet is the most common mineral deficiency. Spirulina is rich in iron, magnesium and trace minerals, and is

Spirulina is the highest source of B-12, essential for healthy nerves and tissue, especially for vegetarians.

### **Healthy Dieting with Spirulina**

About 60% of spirulina's dry weight is protein, which is essential for growth and cell regeneration. It is a good replacement for fatty and cholesterol-rich meat and dairy products in one's diet. Every 10 grams of spirulina can supply up to 70% of the minimum daily requirements for iron, and about three to four times of minimum daily requirements for vitamins A (in the form of beta carotene), B complex, D, and K. By itself, it does not contain

Spirulina is rich in gamma-linolenic acid or GLA, a compound found in breast milk that helps develop healthier babies. Moreover, with its high digestibility, spirulina has been proven to fight malnutrition in impoverished communities by helping the body absorb nutrients when it has lost its ability

Another health benefit of spirulina is that it stimulates beneficial flora like lactobacillus and bifidobacteria in your digestive tract to promote healthy digestion and proper bowel function. It acts as a natural cleanser by eliminating mercury and other deadly toxins commonly ingested by the body.

Spirulina also increases stamina and immunity levels in athletes, and its high protein content helps build muscle mass. At the same time, it can curb hunger that may develop during the most demanding training routines. Thus, it indirectly acts as an effective way to maintain an athlete's ideal body

### **The Disease Fighter**

As well as beta carotene, Spirulina contains other nutrients such as iron, manganese, zinc, copper, selenium, and chromium. These nutrients help fight free radicals, cell-damaging molecules absorbed by the body through pollution, poor diet, injury, or stress. By removing free radicals, the nutrients help the immune system fight cancer and cellular degeneration. In some findings, spirulina has helped reduce oral cancer tumors in laboratory rats,

Spirulina's ability to reduce the bad cholesterol LDL in the body helps prevent the onset of cardiovascular diseases, such as hardening of the arteries and strokes. It also helps lower blood pressure. While not clinically proven, spirulina may also protect against allergic reactions and liver

Research confirms Spirulina promotes digestion and bowel function. It suppresses bad bacteria like e-coli and Candida yeast and stimulates beneficial flora like lactobacillus and bifidobacteria. Healthy flora is the foundation of good health and it increases absorption of nutrients from the foods we eat, and helps protect against infection. Spirulina builds healthy

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### **Removing Toxins**

In 1994, a Russian Patent was awarded for spirulina as a medical food to reduce allergic reactions from radiation sickness. 270 Children of Chernobyl consuming 5 grams a day for 45 days (donated by Earthrise Farms), lowered radionuclides by 50%, and normalized allergic sensitivities. Today we are subject to an onslaught of toxic chemicals in our air, water, food and drugs. Our bodies need to continually eliminate these accumulated toxins. Spirulina has a completely unique combination of phytonutrients - including

### **How to Take Spirulina**

Spirulina is now commercially available in tablet or powder form. Some health tonics contain spirulina as part of their ingredients. A simple daily regimen for spirulina involves taking a 500 mg tablet four to six times daily.

Sources for these forms of spirulina are normally laboratory-grown. Harvesting spirulina from more natural settings has posed a challenge because of possible contamination from toxic substances that cannot be removed from the product. Hopefully, more eco-friendly and safer ways to

<http://www.herbwisdom.com/herb-st-johns->

### **St. John's Wort (*Hypericum perforatum*)**

#### **St. John's Wort Benefits**

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St. John's Wort has become popular again as an antidepressant. It is the number one treatment in Germany and has been extensively studied by Commission E, the scientific advisory panel to the German government. It contains several chemicals, including hypericin, hyperforin, and pseudohypericin, which are thought to be the major sources of antidepressant activity. In several studies of laboratory animals and humans, one or more of the chemicals in St. John's wort appeared to delay or decrease re-absorption of the neurotransmitters dopamine, norepinephrine, and

Neurotransmitters are chemicals that carry messages from nerve cells to other cells. Ordinarily, once the message has been delivered, neurotransmitters are re-absorbed and inactivated by the cells that released them. Chemicals in St. John's wort may keep more of these antidepressant neurotransmitters available for the body to utilize. Multiple studies have shown that St. John's wort may be effective in relieving mild to moderate

St. John's Wort is an MAO inhibitor and should not be used with alcohol and some other foods.

St. John's wort has also been studied for the treatment of other emotional disorders such as anxiety, obsessive-compulsive disorder (OCD), menopausal mood swings, and premenstrual syndrome. In laboratory studies, it has shown some effectiveness for lessening the symptoms of nicotine withdrawal and for reducing the craving for alcohol in addicted animals. It is believed that chemicals in St. John's wort may act like other chemicals that

Possible antiviral effects of St. John's wort are being investigated for the treatment of HIV/AIDS, hepatitis C, and other viral illnesses. It is thought that hypericin, pseudohypericin, and other chemicals in St. John's wort may stick to the surfaces of viruses and keep them from binding to host cells. Another theory is that St. John's wort may contain chemicals that interfere with the production or release of viral cells. This antiviral activity is enhanced greatly by exposure to light. However, the doses needed for active antiviral effect from St. John's wort may be so high that unbearable side

It has also been used to treat hypothyroidism and a salve made with the extract can be used topically to treat bruises, burns, insect bites and scabies.

<http://www.herbwisdom.com/herb-fennel.html>

### **Fennel (Foeniculum vulgare)**

#### **Fennel Benefits**

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Rich in phytoestrogens, Fennel is often used for colic, wind, irritable bowel, kidneys, spleen, liver, lungs, suppressing appetite, breast enlargement, promoting menstruation, improving digestive system, milk flow and increasing urine flow. Fennel is also commonly used to treat amenhorrea, angina, asthma, anxiety, depression, heartburn, water retention, lower blood pressure, boost libido, respiratory congestion, coughs and has been indicated for high blood pressure and to boost sexual desire.

Fennel is a useful addition to any of the Breast Enlargement herbs and has an impressive number of other health benefits.

Fennel is also commonly used to treat amenhorrea, angina, asthma, heartburn, high blood pressure and to boost sexual desire. Fennel is a mild appetite suppressant and is used to improve the kidneys, spleen, liver and

Fennel is an effective treatment for respiratory congestion and is a common ingredient in cough remedies.

It is also used for cancer patients after radiation and chemotherapy treatments to help rebuild the digestive system. Fennel relaxes the smooth muscle lining the digestive tract (making it an antispasmodic). It also helps

It is a tested remedy for gas, acid stomach, gout, cramps, colic and spasms. Fennel seed ground and made into tea is believed to be good for snake bites, insect bites or food poisoning. Excellent for obesity. It increases the flow of

Available in 100 Vegetarian Capsules each 500mg pure herb. Also try our new 100ml) Fennel tincture.

Avoid internal use during pregnancy.

<http://www.herbwisdom.com/herb-dandelion.html>

### **Dandelion (Taraxacum officinale)**

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Dandelion as a medicine was first mentioned in the works of the Arabian physicians of the tenth and eleventh centuries, who speak of it as a sort of wild Endive, under the name of Taraxacon. In this country, we find allusion to it in the Welsh medicines of the thirteenth century. Dandelion was much valued as a medicine in the times of Gerard and Parkinson, and is still

Dandelion roots have long been largely used on the Continent, and the plant is cultivated largely in India as a remedy for liver complaints.

Daniel Mowrey PH.D, author of "The Scientific Validation of Herbal Medicine" states, "Dandelion heads the list of excellent foods for the liver." The herb has been used for centuries to treat jaundice and the yellowing of the skin that comes with liver dysfunction, cirrhosis, hepatitis and liver

But liver function isn't the only use of this nutritious plant. It is also used to treat infections, swelling, water retention, breast problems, gallbladder problems, pneumonia and viruses. Studies have shown that dandelion

Modern naturopathic physicians use dandelion to detoxify the liver and reduce the side effects of prescription medications.

Dandelion is on the FDA's list of safe foods and is approved by the Council of Europe

The chief constituents of Dandelion root are Taraxacin, acrySTALLINE and Taraxacerin, an acrid resin, with Inulin (a sort of sugar which replaces starch in many of the Dandelion family, Compositae), gluten, gum and potash. It contains substantial levels of vitamins A, C, D, B-complex, iron,

Diuretic, tonic and slightly aperient. It is a general stimulant to the system, but especially to the urinary organs, and is chiefly used in kidney and liver

Dandelion is not only official but is used in many patent medicines. Not being poisonous, quite big doses of its preparations may be taken. Its beneficial action is best obtained when combined with other agents.

<http://www.herbwisdom.com/herb-fo-ti-root.html>

**Fo-ti Root (*Polygonum multiflorum*)**

**Fo-ti Root Benefits**

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Modern research indicates that this herb contains an alkaloid that has rejuvenating effects on the nerves, brain cells and endocrine glands. It stimulates a portion of the adrenal gland and helps to detoxify the body. It has been used for a long list of ailments including atherosclerosis, constipation, fatigue, high cholesterol, high blood pressure, blood deficiency, nerve damage, eczema, scrofula and inflammation of lymph

Chung Yun, a famous Chinese herbalist who reportedly lived to be 256 years old, used Fo-Ti on a daily basis. This herb is thought to have been responsible for both his long life and his legendary sexual prowess, (he was said to have had 24 wives). In another Chinese legend Fo-ti was thought to be responsible for returning natural black colour to a previously gray-haired man. He Shou Wu means "black haired Mr. He."

Thankfully, we have a little more to go on than folk medicine legends. Modern research indicates that this herb contains an alkaloid that has rejuvenating effects on the nerves, brain cells and endocrine glands. It stimulates a portion of the adrenal gland and helps to detoxify the body. Hair

Processed fo-ti contains protein-sugar complexes known as lectins.

Processed fo-ti contains protein-sugar complexes known as lectins. Because they attach to specific arrangements of carbohydrates on cells in the body, lectins act like antibodies, but they do not cause allergy symptoms. The lectins in processed fo-ti may affect fat levels in the blood, helping to prevent or delay heart disease by blocking the formation of plaques in blood vessels. Plaques are accumulations of fat and other cells that restrict the size

Because they attach to specific arrangements of carbohydrates on cells in the body, lectins act like antibodies, but they do not cause allergy symptoms. The lectins in processed fo-ti may affect fat levels in the blood, helping to prevent or delay heart disease by blocking the formation of plaques in blood vessels. Plaques are accumulations of fat and other cells that restrict the size of blood vessels and limit the flexibility of their walls. In animal studies, processed fo-ti also reduced the amount of fat that deposited in the liver and

Although supported by a small number of animal studies and numerous human case reports from China, where processed fo-ti has been used for centuries as an anti-aging tonic, none of these uses for processed fo-ti has

Blood deficiency, premature graying of the hair, nerve damage, wind rash, eczema, sores, carbuncles, goiter, scrofula and inflammation of lymph nodes and heat toxicity. The herb is also used to lower cholesterol and blood

The whole root has been shown to lower cholesterol levels, according to animal and human research, as well as to decrease hardening of the arteries, or atherosclerosis. Other fo-ti research has investigated this herb's role in strong immune function, red blood cell formation and antibacterial action.

<http://www.herbwisdom.com/herb-elderberry.html>

**Elderberry (Sambucus nigra)**

**Elderberry Benefits**

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Elderberry reviews

Used for its antioxidant activity, to lower cholesterol, improve vision, boost the immune system, improve heart health and for coughs, colds, flu, bacterial and viral infections and tonsillitis. Elderberry juice was used to treat

Elderberries have been a folk remedy for centuries in North America, Europe, Western Asia, and North Africa, hence the medicinal benefits of elderberries are being investigated and rediscovered. Elderberry is used for its antioxidant activity, to lower cholesterol, to improve vision, to boost the immune system, to improve heart health and for coughs, colds, flu, bacterial and viral infections and tonsillitis. Bioflavonoids and other proteins in the juice destroy the ability of cold and flu viruses to infect a cell. People with the flu who took elderberry juice reported less severe symptoms and felt better much faster than those who did not. Elderberry juice was used to treat

Elderberries contain organic pigments, tannin, amino acids, carotenoids, flavonoids, sugar, rutin, viburnic acid, vitamin A and B and a large amount of vitamin C. They are also mildly laxative, a diuretic, and diaphoretic. Flavonoids, including quercetin, are believed to account for the therapeutic actions of the elderberry flowers and berries. According to test tube studies<sup>2</sup>

Elderberries were listed in the CRC Handbook of Medicinal Herbs as early as 1985, and are listed in the 2000 Mosby's Nursing Drug reference for colds, flu, yeast infections, nasal and chest congestion, and hay fever. In Israel, Hasassah's Oncology Lab has determined that elderberry stimulates the body's immune system and they are treating cancer and AIDS patients with it. The wide range of medical benefits (from flu and colds to debilitating asthma, diabetes, and weight loss) is probably due to the

At the Bundesforschungsanstalt research center for food in Karlsruhe, Germany, scientists conducting studies on Elderberry showed that elderberry anthocyanins enhance immune function by boosting the production of cytokines. These unique proteins act as messengers in the immune system to help regulate immune response, thus helping to defend the body against disease. Further research indicated that anthocyanins found in elderberries

Studies at Austria's University of Graz found that elderberry extract reduces oxidation of low-density lipoprotein (LDL) cholesterol. Oxidation of LDL cholesterol is implicated in atherogenesis, thus contributing to

1. J Alt Compl Mod 1995; 1:361-69 2. Youdim KA, Martin A, Joseph JA. Incorporation of the elderberry anthocyanins by endothelial cells increases protection against oxidative stress. Free Radical Biol Med 2000; 29:51-60

<http://www.herbwisdom.com/herb-bergamot->

## **Bergamot Orange**

### **Bergamot Orange Benefits**

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Bergamot Orange reviews

The Bergamot is a surprisingly nutritious citrus fruit that has a fresh scent and a very useful essential oil which is taken from the peel. Bergamot supplements are taken for several reasons including lowering cholesterol

#### **Habitat**

Native to South Asia, the bergamot orange or *Citrus bergamia* was exported to Italy where it flourished and now the fruit is harvested for medicinal and commercial purposes. The fruit is the size of an orange but yellow in color. The juice is very sour and bitter, so it would be very hard to drink enough to

### **Lowers Cholesterol**

Studies showed that bergamot lowered the total cholesterol levels in participants as well as the low-density lipoprotein (LDL) levels, which is a major factor for heart disease. It also raised the high-density lipoprotein

It is considered that bergamot works by blocking the production of cholesterol in the liver. Without cholesterol, the liver may be forced to find cholesterol that is stored in the bloodstream. Bergamot has compounds that are similar to commercial chemicals that are given to lower cholesterol.

Bergamot contains very large amounts of polyphenols. Brutelidin and Metilidin are two that directly inhibit the biosynthesis of cholesterol. Triglyceride levels were also lowered in the participants of these studies.

*Other uses for bergamot are-*

- Along with ultra-violet (UV) light treatment for a fungal infection tumor
- Preventative for lice and other parasites
- Treatment along with UV light for psoriasis

Bergamot is used in skin care products such as creams, soaps, perfumes, lotions and suntan oils. It is used for psoriasis as well as an antiseptic against infections and to reduce inflammation. It is also used to treat Mycosis Fungoides, a rare type of skin cancer. It increases the skin's sensitivity to sunlight, so it must not be used along with other medications that increase sensitivity to sunlight. It could cause severe sunburn and rashes and blisters. For anyone using bergamot, it is necessary to wear protective clothing and

### **Bergamot Essential Oil**

The essential oil used in aromatherapy is energizing and uplifting. It is used to reduce stress and calm as well as treat depression. For this purpose, it can be used as incense, or added to an essential oil diffuser. Its fragrance is very fresh and sweet and slightly fruity. It restores the appetite if the loss of appetite is due to depression. Inhaling the fragrance of the oil has been seen

*The principal constituents of bergamot orange oil are-*

- Linalol for the fragrant scent • Linalyl acetate for the pleasant odor • Sesquiterpenes for antibacterial, antiseptic or anti-inflammatory properties and for its calming effect • Terpenes shape the properties of the pleasant odor and taste • Furocoumarins used as treatment for pigment loss in skin • Bergapten for the treatment of pigment loss in skin • Alkanes for lubrication

A small amount can also be added to bath water, but if it is too concentrated, it can be harsh on the skin.

### **Dosage**

There are no guidelines for the dosage of bergamot orange for high cholesterol, but usually two to four 500 milligrams of extract in capsules is taken on an empty stomach once or twice a day for a month. After that, one capsule per day is taken to maintain the bergamot in the blood. The dosage for using the essential oil depends on the user's health, age and other

Bergamot oil and zest is used in very small amounts as a flavoring in food, and this is safe for most people. It is used as a citrus flavoring element in

<http://www.herbwisdom.com/herb-chamomile.html>

### **Chamomile (*Matricaria recutita*)**

#### **Chamomile Benefits**

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Chamomile reviews

Dried chamomile flower is an age-old medicinal drug known in ancient Egypt, Greece and Rome. Chamomile's popularity grew throughout the Middle Ages, when people turned to it as a remedy for numerous medical complaints including asthma, colic, fevers, inflammations, nausea, nervous complaints, children's ailments, skin diseases and cancer. As a popular remedy, it may be thought of as the European equivalent of ginseng.

Recent and on-going research has identified chamomile's specific anti-inflammatory, anti-bacterial, anti-allergenic and sedative properties, validating its long-held reputation. This attention appears to have increased the popularity of the herb and nowadays Chamomile is included as a drug in Chamomile has been used for centuries in teas as a mild, relaxing sleep aid, treatment for fevers, colds, stomach ailments, and as an anti-inflammatory, to name only a few therapeutic uses. Extensive scientific research over the past 20 years has confirmed many of the traditional uses for the plant and established pharmacological mechanisms for the plant's therapeutic activity, including antipeptic, antispasmodic, antipyretic, antibacterial, antifungal,

In addition to medicinal use, chamomile enjoys wide usage, especially in Europe and the U.S., as a refreshing beverage tea and as an ingredient in numerous cosmetic and external preparations. Rob McCaleb, President of the Herb Research Foundation in Boulder, Colorado estimates that over one million cups of Chamomile tea are ingested worldwide each day, making it probably the most widely consumed herb tea.

Although best known as a muscle relaxant and antispasmodic, chamomile is also believed to have antiseptic and anti-inflammatory capabilities. The plant's healing properties come from its daisylike flowers, which contain volatile oils (including bisabolol, bisabolol oxides A and B, and matricin) as well as flavonoids (particularly a compound called apigenin) and other therapeutic substances. Chamomile may be used internally or externally. As

*Specifically, chamomile may:*

as a tea, be used for lumbago, rheumatic problems and rashes.

as a salve, be used for haemorrhoids and wounds.

as a vapor, be used to alleviate cold symptoms or asthma.

relieve restlessness, teething problems, and colic in children.

relieve allergies, much as an antihistamine would.

aid in digestion when taken as a tea after meals.

relieve morning sickness during pregnancy.

speed healing of skin ulcers, wounds, or burns.  
treat gastritis and ulcerative colitis.  
reduce inflammation and facilitate bowel movement without acting directly  
be used as a wash or compress for skin problems and inflammations,  
including inflammations of mucous tissue.  
promote general relaxation and relieve stress. Animal studies show that  
chamomile contains substances that act on the same parts of the brain and  
nervous system as anti-anxiety drugs. Never stop taking prescription  
control insomnia. Chamomile's mildly sedating and muscle-relaxing effects  
may help those who suffer from insomnia to fall asleep more easily.  
Treat diverticular disease, irritable bowel problems and various  
gastrointestinal complaints. Chamomile's reported anti-inflammatory and  
antispasmodic actions relax the smooth muscles lining the stomach and  
intestine. The herb may therefore help to relieve nausea, heartburn, and  
stress-related flatulence. It may also be useful in the treatment of diverticular  
soothe skin rashes (including eczema), minor burns and sunburn. Used as a  
lotion or added in oil form to a cool bath, chamomile may ease the itching of  
eczema and other rashes and reduces skin inflammation. It may also speed  
treat eye inflammation and infection. Cooled chamomile tea can be used in a  
compress to help soothe tired, irritated eyes and it may even help treat  
heal mouth sores and prevent gum disease. A chamomile mouthwash may  
help soothe mouth inflammations and keep gums healthy.  
reduce menstrual cramps. Chamomile's believed ability to relax the smooth  
muscles of the uterus helps ease the discomfort of menstrual cramping.

<http://www.herbwisdom.com/herb-colloidal->

## **Colloidal Silver**

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Colloidal silver is a health supplement that is created by immersing tiny particles of silver in a colloidal base solution. It is consumed by those who would like to stave off such serious health ailments as cancer, AIDS and herpes. Silver is thought to make the immune system more active and thereby more effective at fending off disease. It is most commonly available in a liquid form that is dispensed with a dropper. Clear or pale yellow colloidal silver is the best as the particle size affects the colour of the

History of Use Before the invention of antibacterial soap, colloidal silver was used as a disinfectant. It is still most commonly used to kill bacteria. Silver is effective at both preventing and combating bacterial illnesses and infections because it does not corrode. In ancient times silver was used in wound dressings and it was frequently used for the same purposes in America following the Civil War. It is also why churches use silver chalices in Communion to stop disease spreading through the congregation. Silver fell out of favor with the advent of regulated synthesized medications but has become popular again along with lifestyle trends that promote natural

Blue Bloods Even thousands of years ago, Ancient Greeks realised that the rich families who ate, drank and stored food in silverware were much less likely to be ill than the commoners who ate from ceramics and used iron utensils. The rich people developed a slight blue tinge to their skin from

How it Works Proponents of colloidal silver claim that it is effective against every virus and illness and that it has never reacted dangerously with other medications. Scientific studies have shown that pure silver quickly kills bacteria. It even kills the super-bacteria that evolve after conventional disinfecting agents kill the weak strains of bacteria. Silver acts as a catalyst and disables an enzyme that facilitates actions inside cells. It is not consumed in the process so it is available to keep working again and again. The enzyme silver destroys is required by anaerobic bacteria, viruses, yeast and molds. (Unfriendly bacteria tend to be anaerobic and friendly bacteria aerobic). This is the action that destroys pathogens. It stops them from using the body's own cells as vehicles for replication. Colloidal silver creates an

Since it is not designed to combat a specific pathogen but rather works against the very nature of their life cycles, it is an effective preventative agent against all illnesses caused by all pathogens including future mutations. There is no known disease-causing organism that can live in the presence of even minute traces of colloidal silver. Laboratory tests show that anaerobic bacteria, virus, and fungus organisms are all killed within minutes of contact. Parasites are also killed whilst still in their egg stage. Colloidal silver is effective against infections, colds, influenza, fermentation and

Colloidal Silver is touted as a treatment for HIV and AIDS. These claims have not been recognized by the medical community but there is no denying the lengthy survival rates of some AIDS patients who swear by colloidal silver.

The same mechanism that hinders the replication of pathogens also seems to prevent the body from developing cancer. Cancerous tumors form when the cells' internal regulators stop working. The cells divide at a rate that outstrips the body's need for them. Colloidal silver recalibrates cells' rates of division.

When colloidal silver is used as a broad-spectrum viral and bacterial preventative it may cure other seemingly unrelated ailments. People who have sustained severe burns can use colloidal silver to promote healthy cell growth and fend off infections. It reduces the appearance of acne that is bacterial in origin. It helps maintain a healthy digestive environment and it maximizes the amount of nutrients that the body is able to extract from food.

Colloidal Silver is also effective as a digestive aid when taken with meals as it stops fermentation of food in the stomach and intestines. Fermentation can occur if food sits there for too long and this can lead gas, bloating, pain, indigestion and reflux, so taking silver can help avoid all these unpleasant symptoms which a lot of people suffer with after meals.

Silver has also been known to destroy water-borne parasites and to filter out

How to Use People who use colloidal silver tend to develop their own ways of maximizing its efficacy. People who suffer from conjunctivitis sometimes drop it directly into their eyes several times every day. Throat problems are treated by gargling colloidal silver. The most common way to ingest it is to

Side Effects All of these positive claims considered, colloidal silver is still ignored by the medical community at large. Scientifically speaking, the human body has no essential need for silver. Someone who is overzealous in his consumption may experience a buildup of the metal in his organs. The most common negative side effect of colloidal silver is a condition called argyria. It causes the skin and eyes to permanently become gray but it does

<http://www.herbwisdom.com/herb-cla.html>

**Conjugated Linoleic Acid - CLA**

**Conjugated Linoleic Acid - CLA Benefits**

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Improves Immune System Function

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Conjugated Linoleic Acid - CLA reviews

Conjugated linoleic acid (CLA) is a type of unsaturated fatty acid that is found in meat and dairy products of ruminant animals, such as cows and sheep. CLA consist of at least 28 different forms (isomers) of the fatty acid known as Linoleic acid. Conjugated forms of Linoleic acid are where there are at least two double bonds in the molecule, with either one to four

Even though meat and dairy products are the best sources of CLA, many people today choose to take it in the form of a supplement. Researchers have studied the effects of CLA since the 1970s, and they have found that CLA

*Below are some of the potential benefits:*

#### **Prevention of Cancer**

There have been studies performed on animals that have shown that increasing one's intake of CLA by 0.5 percent can reduce the risk of cancer by up to 50 percent. Breast, colon, skin and stomach cancer are the types that this supplement can potentially help prevent. CLA helps prevent cancer

#### **Improves Insulin Sensitivity**

Type 2 diabetes is the most prevalent type of diabetes. It occurs when the body produces insulin, but the cells are unable to respond to it. There was a study done where type 2 diabetic mice were given a CLA supplement. The results of the study showed that CLA can improve insulin action and

Furthermore, there was an eight-week study performed on humans that showed similar results. Researchers believe that CLA mimics the actions of

#### **Promotes Weight Loss**

Health experts have been debating about whether or not CLA can cause weight loss. However, there has been evidence to suggest that this supplement can indeed have a modest effect on weight loss. One of the studies was performed by Lipid Nutrition, which is a company in Los

The study consisted of 105 subjects who were placed into two groups. One of the groups was given a CLA supplement while the other group was given a placebo. The results of the study showed that the subjects who were given the CLA supplement lost an average of 5.6 percent more body fat than the

#### **Improves Immune System Function**

Some studies suggest that people who take CLA supplements suffer from fewer colds and are less likely to develop the flu. CLA helps reduce the amount of prostaglandins and leukotrienes in the body. Both of these substances can potentially suppress the immune system. Additionally, CLA can benefit people who suffer from allergies. This supplement can block the

#### **Prevent Heart Disease**

Heart disease is the top killer of both men and women in the United States. CLA supplements have been shown to potentially reduce the risk of this condition. This supplement helps reduce LDL, which is better known as the bad cholesterol. High cholesterol is one of the major risk factors for heart

CLA can also help prevent atherosclerosis. Atherosclerosis is a condition that causes plaque to build up in the arteries. This condition can potentially

### **Arthritis Management**

Arthritis is a condition that causes pain and inflammation around the joints. CLA has anti-inflammatory properties and can potentially help treat and

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### **Damiana (Turnera aphrodisiaca)**

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Damiana leaves have been used as an aphrodisiac and to boost sexual potency by the native peoples of Mexico, including the Mayan Indians and is used for both male and female sexual stimulation, increased energy,

Damiana is a small shrub with aromatic leaves found on dry, sunny, rocky hillsides in south Texas, Southern California, Mexico, and Central America. Damiana leaves have been used as an aphrodisiac and to boost sexual potency by the native peoples of Mexico, including the Mayan Indians. The two species used in herbal healing, both of which are referred to as damiana,

Historically damiana has been used to relieve anxiety, nervousness, and mild depression, especially if these symptoms have a sexual component. The herb is also used as a general tonic to improve wellness.

Damiana has also been used traditionally to improve digestion and to treat constipation, as in larger doses it is thought to have a mild laxative effect.

It is well known in southwestern cultures as a sexuality tonic and is recommended by many top herbalists. It stimulates the intestinal tract and brings oxygen to the genital area. It also increases energy levels which does a lot to restore libido and desire. In women, Damiana often restores the ability to achieve orgasm. Damiana is used primarily as an energy tonic and an

Damiana has a dual effect. It can work quickly to stimulate the genital area by enriching the oxygen supply. Longer term use can improve sexual fitness

The libido-boosting power of damiana hasn't been tested in humans, although a liquor made from the leaves has long been used as an aphrodisiac in Mexico. In animal studies, extracts of damiana speeded up the mating behavior of "sexually sluggish" or impotent male rats. It had no effect on

The chemical composition of damiana is complex and all of the components have not been completely identified. However, the known make-up is 0.5-1% volatile oil, flavonoids, gonzalitosin, arbutin, tannin and damianin (a brown bitter substance). It also contains essential oils (containing cineol, cymol, pinene), cyanogenic glycosides, thymol and trace amounts of

How damiana works as an aphrodisiac is currently not known. It is also claimed that when drunk as a tea it has a relaxing effect not-unlike low doses

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### **Feverfew (Tanacetum parthenium)**

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Used for the prevention of migraines & headaches, arthritis, fevers, muscle tension and pain, Feverfew is also used to lower blood pressure, lessen stomach irritation, stimulate the appetite and to improve digestion and kidney function. It has been indicated for colitis, dizziness, tinnitus and

Herbal medicine has an impressive track record in treating migraines and chronic headaches. Feverfew treats the cause of the headaches rather than simply the pain. Both the British Medical Journal and the Harvard Medical School Health Letter have paid tribute to the success of feverfew in relieving

Clinical tests have shown the use of feverfew may reduce of frequency and severity of headaches. It may be more effective than other nonsteroidal antiinflammatories (NSAIDS), like aspirin. It is the combination of ingredients in the feverfew plant that brings such effective relief. It works to inhibit the release of two inflammatory substances, serotonin and prostaglandins, both believed to contribute to the onset of migraines. By inhibiting these amines as well as the production of the chemical histamine,

In several studies, both the frequency and the severity of migraines were reduced among study participants who took feverfew daily as a preventive measure. However, active migraine headaches were not relieved by taking feverfew. Feverfew should be taken regularly to receive maximum benefit

Menstrual cramps occur when the uterine lining produces too much prostaglandin, a hormone that can cause pain and inflammation. Because it can help limit the release of prostaglandin, feverfew may have a role to play in easing menstrual cramps. While more research is required, there's probably no harm in starting to take feverfew a day before you anticipate

Feverfew has also been used for relieving the pain and inflammation of arthritis. It is known that chemicals in feverfew may reduce the body's production of substances that initiate and prolong inflammation, which is the body's response to irritation, injury, or infection. Inflammation usually includes pain, redness, and swelling in the area of the damage ,and it can occur within body tissues as well as on the surface of the skin. Chemicals in feverfew are thought to prevent blood components called platelets from releasing inflammatory substances. Feverfew may also reduce the body's production of prostaglandins, hormone-like substances made in the body and involved in regulating a number of body functions including blood pressure,

Additional benefits include lower blood pressure, less stomach irritation and a renewed sense of well-being. Feverfew has been used to stimulate appetite, and improve digestion and kidney function. It may also relieve dizziness, tinnitus, and painful or sluggish menstruation. Its extracts have been claimed

25 million Americans spend \$5 billion a year on medication for migraines. But many of the over-the-counter and prescription pain killers have a "rebound effect" after a period of use. The unfortunate consequence is that the drug actually begins to cause the headache. Feverfew does not have this problem and is recommended by experts such as Dr. Andrew Weil as an effective alternative for headache sufferers. Since Feverfew is a fraction of the cost of the pharmaceutical drugs and has been shown to be effective for

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### **Echinacea purpurea**

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Echinacea should be of particular interest during the cold and flu season when you are exposed to these illnesses on a regular basis. When used correctly it is the closest thing to a cure for the common cold.

Echinacea stimulates the overall activity of the cells responsible for fighting all kinds of infection. Unlike antibiotics, which directly attack bacteria, echinacea makes our own immune cells more efficient at attacking bacteria, viruses and abnormal cells, including cancer cells. It increases the number and activity of immune system cells including anti-tumor cells, promotes T-cell activation, stimulates new tissue growth for wound healing and reduces

The most consistently proven effect of echinacea is in stimulating phagocytosis (the consumption of invading organisms by white blood cells and lymphocytes). Extracts of echinacea can increase phagocytosis by 20-

Echinacea also stimulates the production of interferon as well as other important products of the immune system, including "Tumor Necrosis Factor", which is important to the body's response against cancer.

Echinacea also inhibits an enzyme (hyaluronidase) secreted by bacteria to help them gain access to healthy cells. Research in the early 1950's showed that echinacea could completely counteract the effect of this enzyme,

Although echinacea is usually used internally for the treatment of viruses and bacteria, it is now being used more and more for the treatment of external wounds. It also kills yeast and slows or stops the growth of bacteria and helps to stimulate the growth of new tissue. It combats inflammation

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### **Cranesbill/Geranium**

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The roots of Cranesbill (*Geranium maculatum*) contain a powerful ingredient called tannin. Tannin is responsible for soothing the digestive tract, and it is useful in preventing and treating frequent diarrhea.

Many people turn to harsh over-the-counter liquid medications and horse pills to deal with gastrointestinal problems. Patients with gastrointestinal ailments are increasingly looking for ways to naturally treat their conditions without the use of synthetic medications. Cranesbill has been used for centuries as a way to treat such problems. The raw plant was used in the past

## **Facts**

Cranesbill is indigenous to the Northeastern United States, where the herb has been utilized as a natural remedy for centuries. The plant is most commonly referred to as a geranium, and it features small flowers in a variety of colors. Many people feature the flowers in their gardens without

## **Active Ingredients**

Geraniums look pretty, but the roots of cranesbill contain a powerful ingredient called tannin. Tannin is responsible for soothing the digestive tract, and it is useful in preventing and treating frequent diarrhea. The primary active ingredient can also act as a natural astringent to reduce

Cranesbill contains other active ingredients that can potentially interact with other herbs that have the same features. The ingredients include calcium oxalate, gallic acid and potassium. Take care in combining herbal treatments

## **Health Benefits**

Cranesbill best benefits those with mild gastrointestinal ailments. The presence of tannin in the herb may help alleviate diarrhea, inflammation in the bladder and other symptoms related to Chron's disease. Cranesbill may also be applied topically to help treat hemorrhoids. Less common uses of the herb are for the treatment of eye conditions, such as conjunctivitis and moderate retina irritations. Diabetic patients may turn to cranesbill as a

Historically, cranesbill was also used in folk medicine to stop abnormal bleeding, including that related to menstruation and uterine problems. However, this potentially life-threatening problem is best addressed with an emergency medical professional. Herbal remedies like cranesbill are most appropriate for the use of mild to moderate health ailments. Never replace

## **Instructions**

Like many herbs, the healing power of cranesbill is derived from the roots. Capsules are the most common forms of the herb today, and they are best taken once or twice a day with a glass of water. Experienced herb users might opt for a tea version, which is brewed with hot water and consumed throughout the day. Tincture versions of cranesbill can be more powerful than tea and capsules, so it is important to take extra care. Generally, users

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**Holly**

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It may surprise some to learn that the leaves of certain types of holly are used for medicinal purposes. They are utilized to combat issues such as digestive maladies, rheumatism, fever, high blood pressure and more. When it is taken in the correct dosage and format, the plant can serve as an invaluable remedy for a variety of health conditions.

*Which varieties of Holly are used?* Many people only think of holly as a decorative plant used during winter holidays. Others are aware that its berries can be highly toxic when ingested. Only the leaves of certain species of holly plants are employed for medicinal use. Examples of some of the types used include *Ilex vomitoria*, which is also known as Yaupon holly, and *Ilex aquifolium*, which is commonly referred to as European holly. *Ilex*

Yaupon holly is a native species of the southeastern part of the North American continent. It can grow in various types of soil, and it is fairly resistant to many pest species. While European holly was originally grown in the central and southern parts of Europe, it is now grown in the northwestern regions of Canada and the United States. The European variety grows well in densely wooded places. American holly originates from the eastern part of

*Holly Berries* Although holly berries have been used by some in a purgative capacity, they can also cause excessive diarrhea, vomiting and dehydration. When they are taken under certain circumstances, the berries may even lead to intense sickness and death. The leaf is the part of the plant that is typically

*Holly Leaves* After they have been dried, the leaves can be implemented in the form of a tea. While there is not a set standard of how much to take at one time, a common dosage is a few teaspoonfuls of dried leaves per cup of water. The beverage is often taken a few times per day. Another method used to ingest holly leaves is to swallow a liquid extract. When it is taken in

*Active Ingredients* The primary active ingredient in holly is caffeine, and this should be taken into consideration by those who use it as a health aid. The berries typically contain a higher concentration of caffeine than is found in the leaves. The amount found in some holly leaves is undetermined, but

*Ailments* Holly Leaves are used for Holly leaves are utilized to offset a variety of health disorders. One common ailment they are used to remedy is hypertension, which is also referred to as high blood pressure. The leaves can have a calming effect, and they have been known to facilitate better

Other ailments that the leaves are used to treat include fever, rheumatism and digestive issues. Some species are utilized for their emetic properties, and others are employed to assist with symptoms such as joint pain and swelling. Holly leaf extract is sometimes used to combat jaundice, dizziness and emotional problems. In some cases, holly is even utilized as a method of

While it is true that holly is widely utilized for its aesthetic qualities, it is also valued for its medicinal properties. When they are used properly, holly leaves may offer people an alternative to modern medical treatments. In other cases, the leaves may be implemented to enhance medical treatments that are currently in use. The plant has been employed for centuries as an

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## Goldenseal (*Hydrastis canadensis*)

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Goldenseal is one of the most popular herbs sold on the American market and has recently gained a reputation as a herbal antibiotic and immune system enhancer. American Indians used goldenseal as a medication for inflammatory internal conditions such as respiratory, digestive and genito-urinary tract inflammation induced by allergy or infection. The Cherokee used the roots as a wash for local inflammations, a decoction for general debility, dyspepsia, and to improve appetite. The Iroquois used a decoction of the root for whooping cough, diarrhea, liver disease, fever, sour stomach, flatulence, pneumonia, and with whiskey for heart trouble. They also

It was not until 1798 that its medicinal virtues began to attract attention. From then on its reputation as a powerful healing herb spread, both in England and America, and by about 1850 it had become an important article of commerce. It was popularly used as a bitter stomach digestive (to help stimulate digestion and improve appetite), to treat skin inflammations, and those of the eyes such as conjunctivitis. It was also used for inflammation of the mucous membranes of the throat and digestive system. Its traditional uses also include the treatment of peptic ulcers, gastritis, dyspepsia and colitis. It is said to stimulate appetite and generally have a toning effect on the whole body has also been used for anorexia nervosa. It is also said to be

Goldenseal's numerous uses are attributed to its antibiotic, anti-inflammatory and astringent properties. It soothes irritated mucus membranes aiding the eyes, ears, nose and throat. Taken at the first signs of respiratory problems, colds or flu, Goldenseal helps can help to prevent further symptoms from developing. It has also been used to help reduce fevers, and relieve congestion and excess mucus.

Goldenseal cleanses and promotes healthy glandular functions by increasing bile flow and digestive enzymes, therefore regulating healthy liver and spleen functions. It can relieve constipation and may also be used to treat

Goldenseal contains calcium, iron, manganese, vitamin A, vitamin C, vitamin E, B-complex, and other nutrients and minerals. The roots and rhizomes of goldenseal contain many isoquinoline alkaloids, including hydrastine, berberine, canadine, canadoline, and l-hydrastine as well as traces of essential oil, fatty oil and resin. It is believed that the high content

In particular it is the alkaloid berberine that is most likely responsible for Goldenseal's effectiveness against bacteria, protozoa, fungi, Streptococci and it also promotes easier removal of the bacteria by inhibiting their ability to adhere to tissue surfaces. Berberine is also anti-fungal and strongly anti-diarrheal. It aids against the infection of mucous membranes such as the lining of the oral cavity, throat, sinus, bronchi, genito-urinary tract and gastrointestinal tract. Clinical studies have shown it is effective in the treatment of diarrhea cause by *E. coli* (traveller's diarrhea), *Shigella dysenteriae* (shigellosis), *Salmonella paratyphi* (food poisoning), *Clostridia*

Goldenseal may also help with allergic rhinitis, hay fever, laryngitis, hepatitis, cystitis, and alcoholic liver disease.

It has proven its value in cases of diarrhea and haemorrhoids. Its astringent properties have also been employed in cases of excessive menstruation and internal bleeding. Externally, a wash can be prepared to treat skin conditions such as eczema and ringworm, as well as wounds and badly healing sores, or used as drops in cases of earache and conjunctivitis. The decoction is also said to be effective as a douche to treat trichomonas and thrush. As a gargle it can be employed in cases of gum infections and sore throats. The application of a paste or poultice containing goldenseal root is sometimes recommended for boils, abscesses and carbuncles on the grounds that

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## **Ginkgo biloba**

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Ginkgo biloba has been traced back nearly 300 million years making it the oldest surviving tree species on earth! The Chinese have used the plant medicinally for eons but many of the modern applications come from the research of German scientists. Ginkgo is a prescription herb in Germany.

Ginkgo Biloba is especially good when combined with Panax Ginseng.

Ginkgo extract has proven benefits to elderly persons. This ancient herb acts to enhance oxygen utilization and thus improves memory, concentration, and other mental faculties. The herbal extract has also been shown to significantly improve long-distance vision and may reverse damage to the retina of the eye. Studies have also confirmed its value in the treatment of depression in elderly persons. The ginkgo extract may provide relief for

In studies, Ginkgo biloba has been reported as demonstrating anti-oxidant abilities with improvements of the platelet and nerve cell functions and blood flow to the nervous system and brain. It has also been reported as reducing blood viscosity. It's ability to increase vascular dilation, may help reduce retinal damage due to macular degradation and may reverse deafness

Recently, extensive research on the herb has been conducted on the healing properties of the leaf extract. Germany and France have run literally hundreds of studies on the leaf extract. These studies along with similar studies in America, have shown significant results. The extract of Ginkgo biloba has been studied for its effectiveness in the treatment of Acrocyanosis, Alzheimer's disease, Cerebral atherosclerosis, Cerebral insufficiencies, Cochlear deafness, Dementia, Depression, Menopause, Peripheral and cerebral circulatory stimulation, Peripheral vascular disease, Raynaud's syndrome, Retinopathy, Spastic, Spontaneous, tremor, vertigo,

It is said to be effective in improving the blood flow to the hands and the feet as well as stimulating the brain and reducing short-term memory loss. It increases blood flow to the brain, the uptake of glucose by brain cells, and has been said to improve the transmission of nerve signals.

*Depression:* Patients suffering from varying degrees of vascular insufficiency also noted an improvement in mood while taking ginkgo biloba extract. This has prompted a surge of interest in its use as a treatment for depression, especially in the elderly. Many people have found GBE to enhance other depression treatments and to often even prevent the need for pharmaceutical treatments in mild cases of depression. Those under the age of fifty may also benefit from ginkgo biloba's antidepressant effects. So far

*Alzheimer's & Mental Function:* As more than 300 studies demonstrate, ginkgo facilitates better blood flow through out the body, most notably the brain, where it both protects and promotes memory and mental function, even for people with Alzheimer's disease. It also offers a wealth of

**\*\*Alzheimer's:** \*\*Since doctors are still not sure what causes Alzheimer's disease, we do not have a definite idea of how ginkgo works to stabilise, and in some cases, improve the quality of life for those suffering from this degenerative disease. Scientists have noted that Alzheimer's is marked by a major loss of nerve cells in the brain, particularly those in areas controlling memory and thinking. Since doctors have found antioxidants to help slow the destruction of nerves, it is not a stretch to see ginkgo's antioxidant properties helping in this area. The disease is also believed to have a connection to decreased blood flow to the brain. If so, ginkgo's vasodilating prominent doctors and scientists believe ginkgo to be the supplement of choice to help hold off and possibly treat Alzheimer's.

*Antioxidant Properties:* Although oxygen is essential for life, it can have adverse effects on your body. Unstable oxygen molecules can often be created during our body's normal break down and use of oxygen or can form in response to external factors and pollutants. These unstable molecules, called free radicals, can damage cells and structures within cells. If the genetic material in cells is affected and not repaired, it can replicate in new cells, contributing to cancer and other health problems. These free radicals may also weaken artery walls, allowing fatty deposits that can lead to heart disease. As an antioxidant, ginkgo biloba combats free radicals and repairs molecular damage. A great deal of research suggests that antioxidants such as GBE may play important roles in preventing or delaying heart disease

*Impotency:* Another use for ginkgo biloba is in the treatment of impotency. The main cause of male impotence is poor circulation and impaired blood flow through the penis, which is often the result of atherosclerosis. Since ginkgo biloba increases blood flow, it's been found to help up to fifty percent

*Raynaud's disease:* Raynaud's disease is believed to be caused by blood vessels that over react to the cold and spasm, reducing blood flow and thereby depriving extremities of oxygen. Ginkgo biloba may help this condition by widening the small blood vessels, which would keep these spasms from

**\*\*Parkinson's Disease:** \*\*The lack of dopamine is believed to produce the progressive stiffness, shaking and loss of muscle coordination typical in Parkinson's disease. Doctor's theorise that along with other treatments, Ginkgo biloba may help symptoms by increasing the brain's blood flow and thereby allowing more of the depleted dopamine to be circulated to the areas

*Other Conditions:* Other uses for which ginkgo biloba extract is often recommended include depression, diabetes related nerve damage and poor circulation, allergies, vertigo, short-term memory loss, headache, atherosclerosis, tinnitus, cochlear deafness, macular degeneration, diabetic

*Strokes:* Scientists continue to study the prevention and treatment benefits to stroke patients that are attributed to GBE. It's believed that by preventing blood clots from developing and increasing the blood flow to the brain, ginkgo biloba may help stop strokes from occurring. It's also believed that

*Multiple sclerosis & Organ transplant:* GBE also appears to have an anti-inflammatory action that may make it valuable in the future for conditions such as multiple sclerosis and organ transplants.

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## **Liverwort**

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Also known as American Liverwort and by its scientific name, *Anemone hepatica*, this perennial herb has a long history of medicinal herbal use especially for liver ailments. References to Liverwort can be found in the pages of Maude Grieve's 1931 *Modern Herbal* and in the *Physician's Desk Reference for Herbal Medicine*.

**Habitat and Cultivation** Liverwort prefers deciduous forests with loamy soil, but the plant has been found in clay soils, lime soils, and in grasslands. It is indigenous to the eastern United States, ranging as far north as Iowa and south to the Florida panhandle. Typically a lowland plant, it has been spotted in the Allegheny mountain range. Many variations of the species *hepatica* exist around the world, including those on the Asian and European continent. At least one variation is indigenous to Japan. Taxonomists

Liverwort is a deep-rooted and hardy plant. It requires good drainage and can survive in most soils that meet this requirement. Unlike other medicinal herbs, this one actually prefers a rich, porous soil and shelter, hence its

The leaves are the medicinal part and should be harvested while the plant is in bloom and dried in the shade.

The Liverwort plant is considered to be endangered in many areas, though its broad, dark-green leaves can still be found in temperate forests and grasslands across the world. Many early herbalists treated the plant dismissively, and modern science has yet to widely investigate the qualities

*Historic and Modern Uses* This herb was first identified by the Doctrine of Signatures and has been mistaken numerous times over the centuries for other herbal remedies. The first pharmaceutical reference comes from Tournefort's 1708 *Materia Medica*. It has been classified as an astringent, gentle herb suitable for topical applications in healing wounds and biliary complaints, from gallstones to jaundice. Grieve considered *hepatica* as an expectorant useful in bronchial conditions. Due to conflicts between authors, who were promoting their own herbal remedies through publication of herbal lists, liverwort appears prominently in some texts and is utterly

Preparations of liverwort are now primarily used for liver ailments. Herbalists may occasionally provide a topical rinse or liniment of the herb for skin conditions. Owing to the lack of scientific evidence confirming the actions of liverwort, it may be best thought of as a gentle tonic for the liver, instead of a stimulant.

**Active Constituents** Primary constituents of prepared *hepatica* include flavonoids and saponins. Saponins are also found in a number of more widely known medicinal herbs including ginseng, soybean and onions. Saponins have shown immuno-modulating, anti-inflammatory, and

Flavonoids are considered the active constituents of Liverwort and include flavo-glycosides, anthocyan, and lactone-forming glycosides. Anthocyanins They have been investigated extensively for anti-inflammatory action with positive results. The flavo-glycosides in hepatica include quercimeritrin,

Astragalin has shown some efficacy in treating dermatitis.

Isoquercitrin is a superior form of quercetin, due to better absorption, and both have been proven to aid capillary health by strengthening vessel walls. Quercimeritrin is broken down to quercetin and glucose during digestion.

The plant must be prepared carefully prior to use, because the fresh plant contains the precursor ranunculins, which produce protoanemonines on contact with the skin and mucous membranes. These compounds can cause blisters, which heal slowly. Severe irritation of the digestive tract follows

Dosage Forms and Amounts No side effects have been reported from therapeutic dosage of liverwort. The fresh plant should be avoided, due to irritating constituents that are destroyed through drying and preparation. There is no defined dosage for liverwort rinses or liniments. Alcohol, oils,

Internal dosage has traditionally been through infusion or extract of the herb. Dosage should not exceed 3.8 grams of the dried herb, which is roughly the equivalent of 4 teaspoons of a 3-6 percent infusion. Tinctured extracts may be more precisely calculated, depending on the reputability of the source.

<http://www.herbwisdom.com/herb-ginseng->

**Ginseng (Panax ginseng)**

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Asian Ginseng is one of the most highly regarded of herbal medicines in the Orient, where it has gained an almost magical reputation for being able to promote health, general body vigour, to prolong life and treat many ailments including depression, diabetes, fatigue, ageing, inflammations, internal degeneration, nausea, tumours, pulmonary problems, dyspepsia, vomiting,

Asian Ginseng has a history of herbal use going back over 5,000 years. It is one of the most highly regarded of herbal medicines in the Orient, where it has gained an almost magical reputation for being able to promote health, general body vigour and also to prolong life. The genus name Panax is derived from the Greek word meaning "panacea" or "all-healing"; the *Both terms refer to the medicinal virtues of the plant. In the last decade it has gained popularity in the West and there is extensive literature on the beneficial effects of ginseng and its constituents.*

Ginkgo Biloba is especially good when combined with Panax Ginseng.

Ginseng has been listed by some as useful in the treatment of anemia, cancer, depression, diabetes, fatigue, hypertension, insomnia, shock, effects of radiation, effects of morphine and cocaine use, environmental, physical and mental stress, and chronic illness. It has been said to act as a stimulant, promote endurance, increase life expectancy, relax the nervous system, improve mental awareness, encourage proper hormonal functions, improve lipid levels, lower cholesterol, improve nerve growth, and increase resistance to disease. It has been used to increase the appetite and bodily energy, regulate menses, ease childbirth, increase fertility of women, and treat

Research has shown that Ginseng may have the ability to act as an "adaptogen", prolonging life by combating viral infections and *Pseudomonas aeruginosa*. Research continues to support ginseng's protective role against anti-cancer treatments and drugs, perhaps even countering the side effects of

There is some thought that Ginseng may be useful for the prevention of abuse and dependence of opioids and psychostimulants.

Ginseng has been used to both stimulate and relax the nervous system. It increases capillary circulation in the brain and decreases the effects of stress. Though there are many kinds of ginsengs in the world but they cannot rival Asian Ginseng in ingredients and medicinal effects. It contains as many as 20 different ginsenosides with distinct pharmacological effects.

Asian Ginseng contains anti-ageing substances such as anti-oxidants and insulin-like substances which are not found in any other type of ginseng.

Ginsenosides are a diverse group of steroidal saponins, which demonstrate the ability to target a myriad of tissues, producing an array of pharmacological responses. However, many mechanisms of ginsenoside activity still remain unknown. Since ginsenosides and other constituents of ginseng produce effects that are different from one another, and a single ginsenoside initiates multiple actions in the same tissue, the overall pharmacology of ginseng remains remarkably complex and eclectic.

In western herbal medicine, Panax ginseng's regulating effects on the immune system have been studied for potential effectiveness in preventing colds, flu, and some forms of cancer. In clinical studies, Panax ginseng has been shown to lower blood levels of both sugar and cholesterol, therefore it may help treat type 2 diabetes and high cholesterol. Its other potential uses are not as well defined, however. In separate studies of laboratory animals and humans, Panax ginseng had a relaxing effect on muscles in the lungs.

In other studies, a combination of Panax ginseng and ginkgo is believed to boost memory and thinking processes. Early results from laboratory study may show that chemicals in Panax ginseng promote the growth of blood

Recent reports on the pharmacology of ginseng indicate a wide range of effects, including influence on the central nervous system, endocrine and adrenocortical systems, internal organs, metabolism, blood pressure and sugar, gonadotropic activity, cellular ageing, tumours, and stress. Ginseng appears to relieve stress, increase sexual activity, and facilitate mating in laboratory animals. The herb has been reported to be effective in prolonging survival time during cardiac arrest. It is reported to show hypoglycemic activity. Asian Ginseng has also been identified to protect the testis against 2,3,7,8-tetrachloro-di-benzo-di-p-DIOXIN inducing testicular damage. This particular dioxin is the most dangerous of perhaps the most toxic chemical

Other data shows it works not only in preventing adult diseases including cancer, diabetes, hypertension, and impotence but can also aid in treatment.

German Commission E monograph and WHO support the use of ginseng as a prophylactic and restorative agent for enhancement of mental and physical capacities, in cases of weakness, exhaustion, tiredness, and loss of concentration, and during convalescence (WHO, 1999). In general, ginseng is used as a tonic, stimulant, aphrodisiac, immune booster, blood pressure modulator (lowers and raises, depending on needs), and a modulator of

<http://www.herbwisdom.com/herb-horny-goats->

## **Horny Goats Weed**

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The herbal plant known as Horny Goat Weed gets its name from the Latin term "Epimedium"(often mis-spelt as: Epimedium). Legend in China claims that this weed was ingested by some goats. The herder observed the behavior of the animals after consuming the plant and decided that this plant must contain certain properties associated with aphrodisiacs. After many hundreds of years of use, the specific properties of the plant were identified

#### **Active Ingredients**

One of the principal active ingredients in Horny Goats weed is "icariin". The concentration may determine much of the potency of each particular species of Epimedium. The icariin works by relaxing smooth muscle tissue, which is different from skeletal muscle tissue. The significance of this is that involuntary tension in the internal tissues can be relaxed, which many believe cause the central nervous system to shift from the so-called fight/flight mode into the rest/restore mode. When this change occurs, many elements of a disease tend to reverse because the body is no longer in a stressed condition. Although this many not cure many problems, especially

#### **Habitat**

Horny goats Weed is found growing all over the southern areas of China, but can also be found in the Asian countries that immediately border China, as well as some neighboring European countries. The Chinese name is Yin Yang Huo, or Xian Ling Pi, and it is used extensively in Traditional Chinese Medicine (TCM). It has become popular in the field of Western alternative

One should realize that although the plant may bear the same name, there are close to 60 species of Epimedium plants and over 15 in China that bears the name "Yin Yang Huo." It might be difficult for the layperson to determine the strength and properties of the plant based on the name alone.

#### **Benefits and Conditions**

Horny Goat Weed is often used to treat osteoporosis and various sexual dysfunctions. However, other uses of the plant include the treatment of hypertension, bronchitis, coronary heart disease, polio and more. This makes sense because the active ingredient works on smooth muscle tissue. This is the tissues that surround the heart. When the heart muscles are under strain,

Secondary benefits can also occur when the smooth muscle tissues relax. The health benefits could extend to relieving fatigue in both the mind and the body, as this herb is employed for this purpose in TCM. It has been used to treat joint pain, numbness, memory problems, painful or cold low back and/or knees, as well as irregular menstrual cycles, spermatorrhea, and impotence. It has been cited as producing an anti-aging effect and can

### **Potency and Doses**

Although there are many natural concentrations of icariin found in this plant in nature, during the process of cultivation, it is possible to regulate the dose for individual consumption. The individual dose will be partly determined by height, weight and other medical conditions. As always, it is highly recommended for anyone with a medical condition to speak with their appropriate health care professionals about the use of this herb in treating their condition. Overdoses should be avoided, and the potency of the herb is

The leaves of this plant are edible, but are known to be extremely bitter and are sold most frequently in capsule form. However, some herbal outlets will also sell it in a prepared form that can be used to make a medicinal tea. The leaves will have been cooked, soaked and re-boiled before packaging to

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### **Melatonin**

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Melatonin is one of the many hormones produced by the body. This particular hormone is produced and released by the pineal gland, one of the body's other hormone producing glands besides the pituitary, thyroid, adrenal, and pancreas. Melatonin helps control all of the other hormones as

Circadian refers to any biological process that occur every 24-hours. Our circadian rhythm is like a clock in our system that comes in to play for our sleep process. It determines when we fall asleep and when we wake up. When the sun goes down and it gets dark, more melatonin is produced. Conversely, with the presence of the sun, the production decreases. Exposure to a lot of light in the evenings or not enough light during the day

*Some examples that can cause this kind of disruption are:*

*Jet lag* – This usually results from flying from one time zone to another and is most severe when traveling across many time zones.

*Shift work* – People who work at night and must sleep during the day are very likely to have their circadian rhythm disrupted.

*Poor vision* – Certain vision problems can upset the melatonin cycle.

*Aging* – It is believed by some that aging can affect melatonin levels. That is why many older adults have difficulty sleeping.

*Melatonin Supplements and Their Uses* Non-prescription melatonin supplements have been on the market for years and are used to treat numerous different medical conditions. Most are related to sleep problems but there is some scientific evidence to support that they work for some non-

## **JET LAG AND SLEEP-RELATED USES FOR MELATONIN**

*Jet lag* – Clinical trials have shown that melatonin supplements can significantly reduce jet lag. The melatonin should be taken on the first day of travel at approximately the bedtime of the destination and then every night for the next several days. This can decrease the days needed to get into a normal sleep routine, cut down on the time it takes to get to sleep (known as

*Delayed Sleep Phase Syndrome (DSPS)* – This refers to the difficulty getting to sleep at night even when the natural sleep process has not been disrupted by things like jet lag or too much light in the evenings.

*Insomnia in the Elderly* – Melatonin taken at the same time every evening, approximately 30 to 60 minutes before bedtime, can cut down on the amount of time to get to sleep that often plagues elderly people.

*Enhancement of sleep for healthy people* – Melatonin taken regularly can even help healthy people who occasionally have sleep issues.

## **OTHER USES FOR MELANTONIN SUPPLEMENTS**

There are conditions for which melatonin may be used that have been studied in trials where the results, while appearing to be positive, are not completely conclusive as to their effectiveness. In many of these cases

*Macular degeneration* – Melatonin does have some antioxidants what are thought to possibly have some positive affects on the eyes by protecting the retina and delaying the onset of macular degeneration.

*Anti-inflammatory* – There is some indication that melatonin acts as an anti-inflammatory agent.

*Anxiety* – There have been some positive results when melatonin supplements are used as anti-anxiety medication prior to surgery.

*Cancer treatment* – There have been some clinical trials on patients with early stage cancer of different types to discern its usefulness in reducing chemotherapy side effects or in fighting the cancer itself. Results are still

*Glaucoma* – There are theories that melatonin taken in high doses may possible increase the risk of glaucoma and other age-related eye problems. But these theories are being discounted because of some evidence that melatonin in fact may be useful as a treatment for glaucoma. Until this is more conclusively proven, people with glaucoma should check with their

Other studies are trying to prove the usefulness of melatonin for treating headaches, high blood pressure, high cholesterol, irritable bowel syndrome,

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**Glucosamine**

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Glucosamine supplements are one of the most popular in the Western World, vastly outselling Vitamin C.

As some people get older they develop a degenerative condition known as osteoarthritis which is characterized by pain, stiffness, swelling of the joints and a general inability to move about easily. The condition, which is irreversible, is caused by the deterioration and eventual loss of bone cartilage, the soft connective tissue that protects joints and keeps bones from directly rubbing against each other. Some studies suggest that most people over 60 have osteoarthritis though the severity of the symptoms can vary

Numerous allopathic and natural remedies are touted as treatments for the symptoms of osteoarthritis. Among them are nutritional supplements based on a substance called Glucosamine. Glucosamine is a naturally occurring amino sugar in the body that plays a vital role in keeping cartilage and other body tissues healthy. As people get older their bodies start producing less Glucosamine. This gradual diminishing of Glucosamine causes the bone cartilage to lose some of its elasticity and become stiff and inflexible, eventually resulting in osteoarthritis. Glucosamine supplements are designed to slow this process by compensating for the loss of the amino sugar that occurs with age. Glucosamine supplements are believed to help in the

### **Glucosamine Defined**

Our bodies naturally make glucosamine as part of its way of keeping our joints lubricated and flexible for maximum mobility. Glucosamine is needed to react with hydrochloric acid in the stomach to eventually produce Hyaluronic Acid, which is a glycosaminoglycan. Hyaluronic acid is found naturally in cartilage, tendons, ligaments and synovial fluid around the joints. It helps with elasticity. Hyaluronic acid is unique among glycosaminoglycans in that it is nonsulfated, and can be very large, with its molecular weight often reaching the millions. It is one of the main components of the extracellular matrix. The extracellular matrix provides

Since glucosamine is naturally occurring in the human body, many find it a viable alternative to over the counter or prescribed pills known to erode the digestive tract or cause internal bleeding or liver problems.

Glucosamine is also known as glucosamine sulfate, glucosamine sulphate, glucosamine hydrochloride, N-acetyl glucosamine, and chitosamine.

### **The Glucosamine Market**

The common dosage for the supplement is 1,000 mgs. It is also available in 300, 500 or 750 mgs. as well. It can be taken in one of three ways; as an injection, in solid or pill form, or in liquid form.

In most cases, Glucosamine supplements are taken along with supplements based on another naturally occurring substance in the body called chondroitin. Chondroitin is a complex carbohydrate that helps cartilage retain water. Supplements based on chondroitin are believed to slow down

Glucosamine supplements are typically made from crab, lobster and shrimp shells, though some supplements are based on vegetables. Chondroitin supplements meanwhile are made from the cartilage of cows. Glucosamine is commercially available in either sulfate or in hydrochloride form each of

## Research

Although it has only been tracked since the early 80's, research shows that it is generally safe for most people.

Though Glucosamine along with chondroitin supplements have been fairly widely used for some time now, there is still considerable discussion about the extent of their effectiveness in treating osteoarthritis. Previous clinical studies have suggested for instance that the effectiveness of a Glucosamine supplement is dependent on whether it is a Glucosamine hydrochloride or

Some research suggests that Glucosamine sulfate is more effective at alleviating osteoarthritis symptoms because it is more bio-available, or most easily absorbed by the body compared to hydrochloride supplements. Other studies however suggest that Glucosamine hydrochloride supplements are more concentrated, and are absorbed more rapidly in the gastrointestinal tract than other Glucosamine supplements. A third school of thought holds that Glucosamine supplements are most effective only when they are taken

Sufferers of osteoarthritis who are looking for some clarity on the subject unfortunately have little to go by. The most solid research to date on the effectiveness of Glucosamine was conducted by the University of Utah, School of Medicine on behalf of the National Institutes of Health (NIH). The study, which was called Glucosamine/chondroitin Arthritis Intervention Trial (GAIT), was designed to test the short-term effectiveness of

The study of 1583 patients suggested that patients with moderate to severe pain did indeed obtain statistically significant pain relief when they took Glucosamine combined with chondroitin sulfate. The results were somewhat less clear in the case of osteoarthritis sufferers with only moderate pain. The NIH study however looked only at the effectiveness of Glucosamine hydrochloride supplements and not Glucosamine Sulfate based ones.

Meanwhile, a much earlier three-year clinical study conducted in the Prague Institute of Rheumatology, showed Glucosamine Sulfate to be effective in slowing the progression of knee osteoarthritis. The results of this study were very similar to those from a previous clinical study investigating the effectiveness of Glucosamine sulfate. What appears less clear though is the effectiveness of Glucosamine when it is taken by itself. The GAIT study for

## Glucosamine and TMJ

The pain of Temporomandibular Joint pain (TMJ) is termed an arthritic condition and sufferers can attest to the enormous amount of pain the condition causes. Glucosamine has been labeled as "possibly effective" for

## The Mayo Clinic's Findings

In connection with glucosamine sulfate which is found in cartilage fluid, The Mayo Clinic's opinion is that available evidence does support the use of glucosamine sulfate to strengthen cartilage and that only this form of the

The Mayo Clinic also reported that glucosamine is common in patients with osteoarthritis, and may be helpful in reducing the need for NSAID's. (non-steroidal anti-inflammatory agents) This is of course good news for those

As a final grade, the Clinic gave glucosamine an "A" for good evidence to support its benefit for mild to moderate knee osteoarthritis. A "B" grade was issued for glucosamine's benefit when treating osteoarthritis in general. (The

## The National Institute of Health's Findings

Perhaps the final words about glucosamine should come from the United States National Institute of Health (NIH):

- Likely effective for osteoarthritis
- Takes 4-8 weeks to reduce pain compared to 2 weeks with standard
- Glucosamine slows break down of joints, if taken long term.
- Knee replacement surgery is less likely with glucosamine users.

Natural health enthusiasts advocate its use and its advantages over

- Less costly
- More natural and therefore gentler on the stomach so less side effects.
- Proven effective for treating gout, joint pain, and rheumatoid arthritis

As is often the case with natural supplements and natural remedies the best advice might be to do your research, weigh the pros and cons, and consult your doctor for his or her opinion. The apparent fact that Glucosamine supplements have no side effects associated with their use has been one major factor driving growing adoption of the remedy. For the moment at least clinical studies have shown the use of Glucosamine to have no long

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## **Lobelia**

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Lobelia inflata is an herb that is used to treat asthma, allergies, whooping cough, congestion, and bronchitis. In the past, it was also useful for tobacco withdrawal as an herbal remedy to quit smoking. It is found in the southeastern part of Canada from Nova Scotia to Southeast Ontario and British Columbia. It is also present in the eastern half of the United States

Lobelia is a fragile flower described as light bluish to violet in color with a touch of yellow that can grow to a height of about three feet. It is a very popular garden plant that also has pale green or yellowish leaves. It is categorized as an annual or biennial plant meaning that it reseeds every year or two. The stem is smooth towards the top and hairy and rough towards its bottom. The flowers are asymmetrical and bisexual. The main parts used of the Lobelia plant are the flowering parts and the seeds. The seeds are the

Named after Matthias de Lobel, a 17th century botanist, Lobelia is known as Indian Tobacco because it contains lobeline. Lobeline is believed to have a chemical make up similar to nicotine and was therefore used as an alternative to tobacco. In the 19th century, Lobelia was also used as a

The name Indian Tobacco was assigned because the Aboriginal people smoked dried leaves of the plant. Historically, the Aboriginal people were very creative and efficient in using the Lobelia plant for medicinal purposes. The Iroquois used the root to treat leg sores, venereal diseases and ulcers. The Cherokees used a poultice of the root for body aches. They also used the plant for boils, sores, bites and stings. Considered a plant to cure asthma, phthisic (lung disease), croup and a sore throat, it was also used to

### **Dosage**

Lobelia is considered to be a toxic herb because of its lobeline affiliation. It is important to begin with lower dosages and increase the dosage over a period of time. It is also imperative that you never surpass a dosage of 20 mg per day. If you consume a dosage higher than 500 mg, it could be fatal. Lobelia can be taken in a few different forms. It can be given as a vinegar tincture or a regular tincture, as a fluid extract, or as a dried herb for teas or in capsules. It is preferred that the dried herb be mixed in eight ounces of

*A few facts:*

*Latin Name:* Lobelia inflata

*Common Names:* Lobelia, pukeweed, Indian Tobacco, gagroot, asthma weed, vomitwort, rapuntium inflatum, bladderpod

*Indicated for:* bronchitis, whooping cough, congestion, asthma, tobacco withdrawal, allergies, colds, soother for inflamed conditions, pain reliever in

*Properties:* expectorant, emetic, anti-asthmatic, stimulant antispasmodic, diaphoretic, diuretic, nervine

<http://www.herbwisdom.com/herb-horse->

### **Horse Chestnut (Aesculus hippocastanum)**

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Horse chestnut is a traditional remedy for leg vein health. It tones and protects blood vessels and may be helpful in ankle oedema related to poor venous return. Utilised extensively throughout Europe as an anti-inflammatory agent for a variety of conditions, in addition to being used for vascular problems. The plant is taken in small doses internally for the treatment of a wide range of venous diseases, including hardening of the arteries, varicose veins, phlebitis, leg ulcers, haemorrhoids and frostbite.

Horse chestnut is an astringent, anti-inflammatory herb that helps to tone the vein walls which, when slack or distended, may become varicose, haemorrhoidal or otherwise problematic. The plant also reduces fluid retention by increasing the permeability of the capillaries and allowing the re-

The seeds are decongestant, expectorant and tonic. They have been used in the treatment of rheumatism, neuralgia and haemorrhoids. A compound of the powdered roots is analgesic and has been used to treat chest pains. Extracts of the seeds are the source of a saponin known as aescin, which has been shown to promote normal tone in the walls of the veins, thereby improving circulation through the veins and promoting the return of blood to

Veins that are either weak and/or under chronic stress are more likely to fail and therefore more likely to allow leakage of fluid from the vessels into the

Fluid accumulation is more common in the legs and far more likely in individuals who stand for extended periods of time. Prolonged standing and obesity can increase pressure within leg veins causing weak veins to swell, leak and deteriorate into varicose veins. Aescin, performs an antioxidant function and has a general vasoprotective role by protecting collagen and elastin (the two chief proteins that form the structure of veins). By protecting

A study out of West Germany, reported in the early 1980s, showed one commercial horse chestnut product affected both the collagen content and architecture of the varicose vein and helped make the veins more normal.

Horse chestnut contains several triterpene glycosides, with aescin predominating in the seeds. Coumarin glycosides aesculin, fraxin, and scopolin and their corresponding aglycones, aesculetin, fraxetin, and scopoletin, are also found, along with flavonoids such as quercetin. Allantoin, leucocyanidins, tannins, and the plant sterols sitosterol, stigmasterol, and campesterol have also been identified. The whole extract made from the Horse Chestnut is probably superior to the isolated Aescin. This is a commonly overlooked mechanism of most herbs. The combination

Horse chestnut has also been taken internally for leg ulcers and frostbite, and applied externally as a lotion, ointment, or gel. In France, an oil extracted from the seeds has been used externally for rheumatism. The topical preparation has also been used to treat phlebitis. Most studies have looked at the plant's use internally. But there is some evidence that applying an ointment to the affected area may also help.

Randomised double-blind, placebo-controlled studies have shown that horse chestnut can reduce oedema (swelling with fluid) following trauma, particularly those following sports injuries, surgery, and head injury. A clinical study compared horse chestnut extract to compression stockings and placebo for varicose veins. Both the herbal medicine and the stockings significantly reduced oedema of the lower legs compared to placebo. Feelings of tiredness and heaviness, pain, and swelling in the legs were alleviated by the extract, in comparison to placebo. In addition, common

Trial studies suggest that Horse Chestnut may also be of value in treating lung conditions of infarction, embolisms and thrombosis.

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**Mexican Wild Yam (*Dioscorea villosa*)**

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Mexican Wild Yam is a very good antispasmodic so is good for menstrual cramps, relaxing muscles, soothing nerves, relieving pain, poor circulation and neuralgia, for the inflammatory stage of rheumaty arthritis and for

It has long been used for its benefits in women's reproductive health, including pre-menstrual syndrome and menopausal problems. It can be taken in capsules or in tea (though there are mixed opinions on the flavour). The

Wild Yam's traditional use is for easing menstrual cramps. Its antispasmodic property is beneficial for any kind of muscular spasm and colic, such as intestinal and bilious colic, flatulence, ovarian and uterine pain; for poor circulation and neuralgia; for the inflammatory stage of rheumatoid arthritis; and for abdominal and intestinal cramping. Wild Yam can be very beneficial

As a stimulant for increased bile flow, it can help to relieve hepatic congestion, bilious colic and gallstones.

Also known to have a therapeutic action on overall liver health, it is believed that wild yam root's ability to lower blood cholesterol levels and lower blood pressure indirectly helps the liver by increasing its efficiency and reducing

Its steroidal saponins are also anti-inflammatory, making it a useful herb when treating rheumatoid arthritis and inflammatory conditions of the bowel. Its diuretic effect, combined with the antispasmodic action, soothes

Wild yam contains alkaloids, steroidal saponins, tannins, phytosterols and

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#### **Reishi Mushrooms**

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Reishi mushrooms are not often used in cooking because they are hard and have a bitter taste, although some people do use them in the same dishes that you might use shiitake mushrooms. But you are unlikely to find them at your favorite market. They are mainly used for purely medicinal purposes and have a number of health benefits. In fact, it is known among practitioners of Chinese medicine as the “king of herbs.”

All mushrooms are the “fruit” of fungi as well as the reproductive part. Reishi mushrooms can be found growing up from underground networks called mycelium near organic waste and logs, which are both a good nutrient source. Given the right conditions, reishi can actually be cultivated and used

The Eastern world has been using reishi for thousands of years, particularly in China and Japan. Even the ancient kings and emperors drank reishi tea because it was believed that its properties encouraged vigor and long life. They also thought that the tea would increase their wisdom and happiness.

The use of reishi has reached the Western world where these days people are making elixirs from the mushroom for the purpose of promoting vitality and longevity. It is also used to treat certain medical conditions.

#### **Benefits of Reishi Mushrooms and Supplements**

The benefits of reishi mushrooms are so well known and proven that you can get them in forms that are much convenient than slicing them up and cooking with them. You can buy them dried, in concentrated tablets, capsules, or even as an extract. In any of these forms reishi mushrooms can

*Here is a list of the benefits that reishi mushrooms have as a daily dietary supplement or in helping to treat certain medical conditions:*

- These mushrooms are very strong antioxidants. Antioxidants protect the body from the negative effects of free radicals that are formed inside the body by daily exposure to the sun, chemicals, and pollutants. Reishis are proven to boost the immune system, especially when taken with other
- It is believed that reishi mushrooms can suppress the growth of tumors in people with cancer. It can reinforce the membranes in cancerous cells to keep the tumor from spreading. For this reason, they are often used in efforts
- Reishis are also beneficial for people suffering from asthma and other respiratory conditions because it seems to have a healing effect on the lungs. They are good for building respiratory strength and curbing a cough.
- Reishi mushrooms have anti-inflammatory properties and are therefore used sometimes for patients who have Alzheimer's and heart disease. This is based on the idea that inflammation plays a part in each of these conditions. The pain that accompanies other inflammatory conditions like neuralgia and
- As far as benefits for the heart, reishi mushrooms can improve the flow of blood to the heart and reduce the amount of oxygen the heart consumes. It can help to lower cholesterol and some of the ingredients may help combat

#### **Ingredients in Reishi Mushrooms**

So exactly what is it in reishi mushrooms that give it so many health benefits? Scientists have learned one active ingredient is polysaccharides, which contain beta glucan. Beta glucan is known for its ability to enhance the immune system – in fact it is one of the strongest immune system

Another ingredient in reishi is triterpenes. The type found in reishi mushrooms is a ganoderic acid that has been proven in studies to ease the symptoms of allergies by stopping the release of histamines. It also can

#### **How Much Reishi to Take When Using As A Supplement**

The recommended dose when using reishi mushrooms as a dietary supplement is 150 to 900 mg if taken in tablet or capsule form or 1.5 to 9 grams of the dried variety. There have rarely been any side effects reported from reishi, but some people who take them for a period of several months

<http://www.herbwisdom.com/herb-horsetail.html>

#### **Horsetail (Equisetum arvense)**

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Horsetail is a member of the Equisetaceae family; the sole survivor of a line of plants going back three hundred million years. It is a descendant of ancient plants that grew as tall as trees during the carboniferous period of prehistoric times and members of this family gave rise to many of our coal deposits. Since being recommended by the Roman physician Galen, several cultures have employed horsetail as a folk remedy for kidney and bladder troubles, arthritis, bleeding ulcers, and tuberculosis. The Chinese use it to cool fevers and as a remedy for eye inflammations such as conjunctivitis and

Because of its content of silica, this plant is recommended when it is necessary for the body to repair bony tissues that are in not well condition, as a result of some traumatism or because of their own corporal decalcification. Silica helps to fix calcium, so that the body can store more

It will be advisable in those cases when an abnormal calcium intake or a bad fixation of it takes places, just as it happens in osteoporosis. Because of its mineral content horsetail is recommended for anemia and general debility. It has also been used to treat deep-seated lung damage such as tuberculosis or

Horsetail is an astringent herb and has a diuretic action. It has an affinity for the urinary tract where it can be used to sooth inflammation, haemorrhaging, cystic ulceration, ulcers, cystitis and to treat infections. It is considered a specific remedy in cases of inflammation or benign enlargement of the

Its toning and astringent action make it of value in the treatment of incontinence and bed-wetting in children. It may be applied to such conditions as urethritis or cystitis with haematuria, reducing haemorrhage and healing wounds thanks to the high silica content. This local astringent and anti-haemorrhagic effect explains the application of horsetail to such conditions as bleeding from the mouth, nose and vagina, its use to check

The horsetail constitutes one of the most diuretic species in all the plants. That is to say that it possesses a great capacity to eliminate water from the body, in such a point to increase urination up to 30% more than what is habitual. This fact makes that its scientific name *Equisetum arvense* generally appears in the composition of most of products that habitually are sold to reduce weight. This property is due to the action of several components, among which it is necessary to highlight equisetonin and potassium, but there are another ones that also take part such as calcium

As a diuretic it is particularly suited to metabolic or hormonal oedema during the menopause. The diuretic action is thought to be due partly to the flavonoids and saponins. *Equisetum* is restorative to damaged pulmonary tissue after pulmonary tuberculosis and other lung disease, as the silicic acid

It may be taken internally to stop bleeding from ulcers or curb heavy menstrual bleeding. It may also be used as a gargle and mouth rinse for sore throat and bleeding gums or mouth ulcers. Externally it is a vulnerary and may also be applied as a compress to fractures and sprains, wounds, sores,

It has been established that administration of silicic acid causes leucocytosis (a temporary increase in white blood cells). *Equisetum*'s silica content encourages the absorption and use of calcium by the body and also helps to guard against fatty deposits in the arteries. Its influence on lipid metabolism

Recent research in Russia has apparently demonstrated that horsetail is effective in removing lead accumulations in the body.

<http://www.herbwisdom.com/herb-nettle.html>

**Nettle (*Urtica dioica*)**

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Nettle has been used for centuries to treat allergy symptoms, particularly hayfever which is the most common allergy problem. It contains biologically active compounds that reduce inflammation. Dr. Andrew Weil M.D. author of Natural Health/ Natural Medicine says he knows of nothing more effective than nettle for allergy relief. And his statement is backed up by

Decongestants, antihistamines, allergy shots and even prescription medications such as Allegra and Claritin treat only the symptoms of allergies and tend to lose effectiveness over a period of time. They can also cause drowsiness, dry sinuses, insomnia and high blood pressure. Nettle has none of these side effects. It can be used on a regular basis and has an impressive

Nettle has been studied extensively and has shown promise in treating Alzheimer's disease, arthritis, asthma, bladder infections, bronchitis, bursitis, gingivitis, gout, hives, kidney stones, laryngitis, multiple sclerosis, PMS, prostate enlargement, sciatica, and tendinitis! Externally it has been used to improve the appearance of the hair, and is said to be a remedy against oily

In Germany today stinging nettle is sold as an herbal drug for prostate diseases and as a diuretic. It is a common ingredient in other herbal drugs produced in Germany for rheumatic complaints and inflammatory conditions (especially for the lower urinary tract and prostate). In the United States many remarkable healing properties are attributed to nettle and the leaf is utilized for different problems than the root. The leaf is used here as a

The root is recommended as a diuretic, for relief of benign prostatic hyperplasia (BPH) and other prostate problems, and as a natural remedy to

An infusion of the plant is very valuable in stemming internal bleeding. It is also used to treat anaemia, excessive menstruation, haemorrhoids, arthritis, rheumatism and skin complaints, especially eczema. Externally, the plant is used to treat skin complaints, arthritic pain, gout, sciatica, neuralgia,

Taken orally, products made from nettle's aerial parts may interfere with the body's production of prostaglandins and other inflammation-causing chemicals. Consequently, nettle may have an anti-inflammatory effect. It may also enhance responses of the immune system. Chemicals in nettle's aerial parts are also thought to reduce the feeling of pain or interfere with the way that nerves send pain signals. All of these effects may reduce the pain

In addition, nettle's aerial parts may reduce the amount of histamine that is produced by the body in response to an allergen. An allergen is a substance such as pollen that may provoke an exaggerated immune response in individuals who are sensitive to it. Through this potential action, the aerial parts of nettle may help to reduce allergy symptoms. Results from one

A solution of the extract may be applied to the skin to relieve joint pain and muscle aches. Astringent properties of nettle aerial parts may also help to lessen the swelling of hemorrhoids and stop bleeding from minor skin injuries such as razor nicks. An astringent shrinks and tightens the top layers of skin or mucous membranes, thereby reducing secretions, relieving irritation, and improving tissue firmness. It may also be used topically for

This herb should be used for a minimum of 30 days for full effects. Our Nettle is organically grown and cryogenically ground (minus 70 degrees) to

<http://www.herbwisdom.com/herb-maca.html>

## **Maca**

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Maca root (*Lepidium meyenii*) has many health benefits. Known for their advanced knowledge of healing and the body's connection with nature, the Incan civilization used the maca root in many of their natural remedies. According to ancient Incan history, the maca root was known to have special properties which were believed to enhance energy and stamina. It is also believed to increase the sexual desire and endurance. Maca is often termed as Peruvian Ginseng due to its natural stimulating qualities that are similar to the benefits found in the commonly known ginseng-related herbs.

The maca root can be found growing in the Andes Mountains, mainly in Peru. The environment which is deemed ideal for its growth is in uncongenial locations which are located high in the mountains. Maca flourishes in such climates due to its ability to thrive in spite of harsh

Maca is related to the mustard plant, and has similarities in appearance. The flowers of the maca resemble those of the mustard plant. It is not uncommon for farmers and /or those who are knowledgeable in horticulture to mistake

Medicinally, the part of the maca that holds the active nutrients is the flesh of its root. The nutritional contents of the maca root are impressive. The root or tuber is high in protein, natural sugars, iron, potassium, iodine, magnesium, calcium, and fiber. Due to maca's high nutritional content, it is

*Libido & Fertility* Culturally, the ancient Peruvians ingested this powerful root to boost the potency of the male libido. Its natural properties help to create an aphrodisiac-like response in men who have suffered from impotency, low sex-drive, and fertility problems. The maca root is known to improve the quality and quantity of sperm in men who have lower than

*Endurance* Athletically speaking, the main ingredients and naturally occurring substances in maca are becoming widely used by today's amateur and professional athletes alike. The main action of this powerful superfood is to strengthen endurance and energy levels, which gives the athlete a

*Menopause* Over time, other uses for maca have also shown promising benefits to health such as relief of fatigue and the reduction of menopausal symptoms in women. One of the most troublesome symptoms of menopause is hot flashes. The active ingredients in the maca root appear to lessen the severity and frequency of hot flashes that occur due to hormonal changes in a woman's body as they reach middle age. Maca root helps to bring back into balance the body's natural hormone levels without the use of synthetic

*Menstruation* Menstrual problems that often plague women of child-bearing age such as cramping, heavy or irregular periods, as well as PMS, have found that the maca root alleviates many of the uncomfortable symptoms.

*Skincare* For both men and women alike, skin problems such as acne have been drastically improved with the use of maca.

*Depression* Another essential benefit of the maca root is its known ability to relieve mild depression. There is an increase in the body's levels of serotonin in individuals using maca. Common treatments for depression are antidepressant medications which tend to have uncomfortable side effects such as weight gain, fatigue, and dulled senses. Maca has none of the side effects that are found in pharmaceutical antidepressants. In fact, the active

The benefits of the ancient Peruvian maca root continue through the present day as a leading superfood health enhancer. For those who have benefited from its health properties, maca comes highly recommended as a time-tested

*Dosage* The strength of the active ingredients in maca varies, yet the typical dosage is 500mg. twice daily. Maca generally comes in capsule form. However, many herbalists prefer maca in powder form. The powdered maca

<http://www.herbwisdom.com/herb-rosemary.html>

## **Rosemary**

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Rosemary (*Rosmarinus officinalis*) is a very popular shrubby, evergreen herb. Its small, drought-resistant leaves are widely used for their various medicinal properties as well as to season food. They are highly aromatic, which means they contain high concentrations of essential/volatile oils,

Rosemary was originally cultivated on the shores of the Mediterranean. In fact, the herb's Latin name, *rosmarinus*, is derived from the words "ros", which is translated to dew, and "marinus", which means sea, as Rosemary can survive on just the spray in the sea air. It is a plant well suited to growing in poor or sandy soil, high salt, high wind areas such as the

Rosemary's symbolic uses are deeply inlaid within many cultural traditions including weddings, funerals, and during religious ceremonies. The herb is seen by many as a gift by the gods and as a symbol of love, friendship, and trust. In modern times rosemary is grown throughout the world and is widely

Rosemary is a member of the Mint family (*Lamiaceae*). The first records of rosemary's use as a medicinal herb date back to ancient times in the civilizations surrounding the Mediterranean Sea. The herb was thought to have strong effects on memory and in strengthening the mind. Later accounts include that of Queen Elisabeth of Hungary, who claimed that drinking rosemary water led to her longevity as she lived beyond 70 years old while suffering from both gout and rheumatic disorder. Additional historic uses of the herb include its burning to purify the air near ill people to ward off infection during the plague, and it was also used by the French to

Rosemary is known to contain several chemicals that promote good health in human beings. The two primary active ingredients found in the herb are carnosic acid and rosmarinic acid. Carnosic acid is a preservative and antioxidant found in both rosemary and common sage. The compound has demonstrated its ability to prevent damage to skin cells by UV-A radiation and is accepted as a very powerful antioxidant. Studies have also shown that carnosic acid offers protection against harmful carcinogens. Rosmarinic acid is found in a variety of herbs other than rosemary, these include thyme, oregano, and pennywort. The compound exhibits properties as an

The rosemary herb is used in modern times to treat a variety of symptoms and illnesses. The most prominent modern use of rosemary is as an antioxidant. The primary goal of the herb in this use is to prevent the damage caused by oxidative stress that occurs during many diseases. The brain is particularly susceptible to the effects of oxidative stress, as demonstrated by the condition's role in diseases such as Parkinson's disease and Alzheimer's disease. Studies have shown that the antioxidants in rosemary, such as the carnosic and rosmarinic acids, are highly effective in

Studies have also shown that rosemary is a potent anti-carcinogen and may play a role in treating cancer in the near future. One such study was conducted on rats and showed that rosemary, when administered in a powdered format, prevented the effects of carcinogens by 76% and decreased the incidence of tumors in mammary glands. In addition, by reducing the damage caused by ultraviolet radiation, the herb also decreases

Rosemary has been thought of as a memory booster throughout history. Recent advances in the science surrounding the herb have shown that it inhibits the breakdown of acetylcholine, which is a compound that plays a role in sections of the brain responsible for memory and reasoning.

The herb is used by many as a natural antibacterial and antiviral. Rosemary is touted for its ability to eliminate several harmful forms of bacteria while leaving helpful bacteria undamaged. This use of the herb is particularly

Since it is also commonly used as a seasoning, there are many ways to incorporate rosemary into the typical diet. The most common method is to simply season prepared food with the herb to taste. A tea can also be made by adding two teaspoons of the rosemary leaves to hot water and allowing it to steep for 10 to 15 minutes. Herb butters and oils are made by adding the leaves or oil of the plant to the butter or oil and mixing thoroughly.

The leaves of the rosemary herb are used to make seasoning. When making rosemary oil nearly every part of this shrubby herb is used. Oil extract from the flowers is considered to be the best in quality. The leaves are often used to make tinctures that are applied directly to the skin to treat maladies such

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## **Sasparella**

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Sasparella is the common name for smilax regelii, which has been used medicinally to treat everything from chronic pain to toe fungus. It has likely been used for thousands of years by indigenous tribes of South America but was first introduced to Europe near the end of the Dark Ages. Today, it is still a popular supplement ingredient and medicinal treatment for a wide

## Description of the Plant

This prickly vine is native to Mexico, the Caribbean and Central and South America. It climbs well and can grow to be over 50 yards long. The berries of sasparella come in lustrous black, purple-blue and a red so rosy it could almost be called fuchsia. This beautiful fruit is popular among wild birds as well as humans. Certain varieties of sasparella can also be found in India and China. The common name is derived from the Spanish zarzaparilla which means "little grape vine shrub", a relatively accurate description of the

A sarsaparilla root typically measures between six and feet in length. It's tuberous in shape and has no particular smell or taste. It has been used medicinally for hundreds of years by the people native to Central and South America who found it relieved rheumatism, general physical weakness,

## \*Uses\*

Sarsaparilla root is globally recognized for medicinal properties. Since it was first introduced to the Western world, sarsaparilla has been used to treat gout, gonorrhea, open wounds, arthritis, cough, fever, hypertension, pain, a lack of sexual desire, indigestion, and even certain forms of cancer. More serious conditions have also been treated with sarsaparilla root. In the

Sarsaparilla first came to Europe in the 1400s as a medicine discovered in South America and brought back via boat. Europeans used the root to encourage sweating and urination as well as to purify blood, a common practice during the Dark Ages. During the 1800s, sarsaparilla was on the books in both Europe and the young United States for its blood purifying properties and recommended as a treatment for the sexually transmitted

Sarsaparilla is also consumed for pleasure in drink and pickled form. Stores in some parts of Oceania stock a popular drink named simply Sarsaparilla that uses the plant to increase foaminess. In the past, it was also popular in the United States as part of a drink made with sassafras. In India, too, sarsaparilla is eaten for more than medicinal purposes. As well as soft

Today, sarsaparilla roots is available most readily in health food stores. The capsules, tinctures and supplements of sarsaparilla usually include other herbs for a specific result. It is a common ingredient in hormone balancing, skin care and sex drive increasing natural products. These modern sarsaparilla products are primarily produced from plants grown in Latin

## Active Ingredients

The studies that have been done on sarsaparilla as a medicinal herb suggest that the benefits come from antioxidant properties and plant steroids beneficial to human health. Sarsaparilla also contains flavonoids, a pigmentation chemical that gives many plants their leaf, stem, flower and even root color. In the past decade, flavonoids have garnered more

One of the most fascinating ingredients in sarsaparilla root are saponins, a chemical compound. Saponins, usually bitter to the taste, are named after soap because of the foam-like reaction they have when placed in water. In the plants where they originate, saponin chemical compounds help deter fungi and insects from eating their leaves. This could be one of the possible

## Preparation

The best way to prepare raw or dried sarsaparilla root is to boil it into an infusion and take a cup of it several times a day. With capsules and supplements, read the instructions on the bottle. Usually, it takes less than half a teaspoon of ground root powder to have the desired effect. In the case

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## Sasparella

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<http://www.herbwisdom.com/herb-valerian.html>

**Valerian (Valeriana officinalis)**

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Valerian is well known for its sedative qualities and its ability to relax the central nervous system and the smooth muscle groups. It has been used as a sleeping aid for hundreds of years especially when there is excitation or difficulty in falling to sleep due to nervousness. Over 120 chemical components are found in valerian and although a very complex herb, it has not been found to have any negative side effects with moderate use.

It is calming without exerting too sedative an effect and is practically non-addictive. It is a valuable treatment for insomnia, the sedative effect due to the valepotriates and the isovaleric acid.

At least two double-blind studies have demonstrated that valerian extract can significantly reduce the amount of time it takes people to fall asleep without

Documented research has noted a mild hypnotic action in both normal sleepers and insomniacs, indicated by a beneficial effect on sleep latency, wake-time after sleep, frequency of waking, nocturnal motor activity, inner restlessness and tension and quality of sleep. Sleepiness and dream recall the morning after were unaffected. The valepotriates have a regulatory effect on the autonomic nervous system; research suggests that they have a calming

Valerian is used in Europe as an antispasmodic, particularly for abdominal cramps due to nervousness and for uterine cramps and menstrual agitation. It helps relieve dysmenorrhoea and it can be of benefit in migraine and rheumatic pain. It may also be applied locally as a treatment for cramps and

Valerian is also used as a mild tranquilizer for people experiencing emotional stress, much as anti-anxiety drugs are prescribed and has been prescribed for exhaustion. Valerian has occasionally been tried as part of a program to take a patient off antidepressants or benzodiazepines, and is

Valerian does not impair driving ability and produces no morning hangover effect. It is a gentle relaxant and an effective sleep aid.

Millions of people have difficulty sleeping and the pharmaceutical industry has cashed in on the problem to the tune of billions of dollars. But herbal sleep aids can be as effective as the powerful prescription sedatives such as

<http://www.herbwisdom.com/herb-yerba-mate.html>

**Yerba Mate (*Ilex paraguariensis*)**

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Woman's World writer Barbara Tunick reports; "A drink from South America has hit U.S. shores-and experts say it's the ticket for those who love

In addition to its standing as a popular beverage, yerba mate is used as a tonic, diuretic and as a stimulant to reduce fatigue, suppress appetite and aid gastric function in herbal medicine systems throughout South America. It also has been used as a depurative (to promote cleansing and excretion of waste). In Brazil, mate is said to stimulate the nervous and muscular systems and is used for digestive problems, renal colic, nerve pain, depression, fatigue, and obesity. It also has bitter qualities which help stimulate

Yerba mate has been used as a beverage since the time of the ancient Indians of Brazil and Paraguay and is considered a national drink in several South

In Europe it is used for weight loss, physical and mental fatigue, nervous depression, rheumatic pains and psychogenic and fatigue related headaches. In Germany it has become popular as a weight-loss aid. Yerba mate is the subject of a German monograph which lists its approved uses for mental and

In France yerba mate is approved for the treatment of asthenia (weakness or lack of energy), as an aid in weight-loss programs and as a diuretic.

It also appears in the British Herbal Pharmacopoeia (1996) and indicated for the treatment of fatigue, weight loss and headaches. In the U.S., Dr. James Balch, M.D. recommends yerba mate for arthritis, headaches, hemorrhoids, fluid retention, obesity, fatigue, stress, constipation, allergies and hay fever, and states that it "cleanses the blood, tones the nervous system, retards aging, stimulates the mind, controls the appetite, stimulates the production

Millions of South Americans drink Mate on a daily basis where weight problems are uncommon. Researchers think that Yerba Mate may be an important factor. A couple of cups a day may just set you on the course to

Yerba Mate contains xanthines, chemicals that boost your metabolic rate by 10% and is rich in pantothenic acid, which prevents overstimulation of the nervous system. Yerba Mate has a host of anti-oxidants that boost immunity and protect against colds and flu. Studies show it is as powerful a cell protector as vitamin C, reducing the effects of aging as well as protecting against cancer and other disease. Furthermore, researchers say that Yerba Mate is a rich source of magnesium that has been proven to ease anxiety: unlike the herbal formulas such as Metabolife that reduce appetite by overstimulating the central nervous system. Drinking 8 oz before a meal can

<http://www.herbwisdom.com/herb-soy->

## **Soy Isoflavones (Glycine)**

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For more than five thousand years China has been using soybeans as an additional nitrogen supplement for soil during crop rotation. Found in many East Asian and Hawaiian dishes, green baby soybeans are commonly known as edamame (Japanese for twig bean) or as maodou (Chinese for hairy bean).

Brought to America in the 1930s, soybeans have proved to be useful in a variety of ways. Soy products are derived from soybeans that are labeled as field or vegetable types. Also classified as oil, field types are generally grown to produce soy oil. High in Omega fatty acids, soy is also used in feed for livestock and fowl. Vegetable soybeans known as garden types are higher in protein than field types and are used to produce soy milk, tofu, and other

Soy is used to make a wide range of vegan and vegetarian products like soy vegetable oil, soy milk, soy lecithin, and tofu. Miso, soy sauce, and tempeh, are some fermented food products made from soy. Textured vegetable protein is made from fat free soy flour that can be used as a meat substitute

Processed soy is used in various dairy free products such as ice cream, cheese, yogurt, milk, cream cheese, and margarine. Although they are high in protein, soy based dairy products do not contain large amounts of calcium. To manufacture products like sprouted soybeans, tofu, soy

For babies who may be allergic to the proteins in pasteurized cows milk, or for vegetarian and vegan families, soy companies offer soy based infant formulas that the Food and Drug Administration have concluded as safe to use for sole or supplemental nutrition. Soy based infant formulas should not

The United States Food and Drug Administration declares that supplemental vitamin products must have a source of full protein. Full, or complete protein contains adequate amounts of essential amino acids that is required by the human body. Soy products offer complete protein for those who would like to replace or reduce their consumption of meat. Animal based food products are high in protein, but are also very high in saturated fat. Soy

Since 1990, protein quality has been measured by The Protein Digestibility Corrected Amino Acid Score. Their primary focus is the evaluation of protein quality according to human amino acid requirements, and how well they can be digested. According to score criteria, soy protein products are nutritionally equivalent to eggs and meat, and includes casein, which

Concentrated soy protein absorbs nearly all of the fiber from the initial soybean. Soy's high protein content makes it an extensively used ingredient for manufactured cereals and baked goods, and for protein powders and

Not only high in protein, soy based products offer other healthy benefits such as Omega-3 fatty acids that contribute to numerous body actions, and isoflavones that are considered useful in the prevention of prostate, uterine and breast cancer. There is still some medical doubt regarding isoflavones

Soy is rich in isoflavones, which are the most active phytoestrogens in the human diet. These may help to relieve menopausal symptoms. After the menopause, the level of oestrogen in a woman's body falls and it is thought that phytoestrogens may provide a substitute for the body's own oestrogen, relieving symptoms such as hot flushes and dry skin. The interest in phytoestrogens has developed because of the evidence that women in Japan and Asia who consume diets rich in these compounds, do not appear to suffer the same way with hot flushes and sweats as in the western world. In these countries, the diet is rich in soya containing foods, and menopausal symptoms are reported much less. Amongst the main phytoestrogens in the

Phytoestrogens can be consumed by purely increasing dietary intake, but this involves eating large amounts of legume food plants, such as peas and beans, with variable phytoestrogen content. Supplements of Soya

Cholesterol reduction is another healthful advantage that comes with soy protein and soy based foods. Diets high in cholesterol and saturated fats are primary targets for heart disease. Fat free textured vegetable protein and processed soy products contain no added cholesterol or saturated fat.

<http://www.herbwisdom.com/herb-watercress.html>

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Watercress (*Nasturtium officinale*) has a long history of its many medicinal uses, and a long history in general, dating back to the ancient times of the Greeks. It is an herb native to Europe but grown perennially all over the world. It is cultivated in water and often used in salads as greens.

#### *Skin Health*

Watercress is a good source of lutein and beta-caratene, two important components in preventing UV-damage and maintaining skin health, which is key to an anti-aging regime. It also helps in treating eczema, acne, and

#### *Antioxidants*

Watercress is heavy in antioxidants, a key ingredient in the prevention of cancer. Antioxidants prevent damage to cells by stopping dangerous free radicals from running rampant and causing cancerous harm. These active antioxidants include vitamins C, A, E, and several B vitamins. The antioxidant properties of watercress especially help in preventing the

#### *Liver*

Watercress is very rich in glucosinolates, which are water soluble phytochemicals that contain sulfur. The liver, the body's filtration system, serves to clean the blood of impurities that pass through the body. It also controls synthesis, creates and breaks down proteins, and plays a key part in maintaining a healthy metabolism. It is a vital organ that effects many

#### *Weight Loss*

Watercress is loaded with potassium, which acts as a diuretic and draws out excess water weight from the body. Watercress has a lot of fiber as well, which treats and prevents constipation and other bowel troubles. A healthy digestive system is imperative to maintaining a healthy weight. Watercress also contains iodine, which helps maintain a healthy thyroid gland, which in

#### *All round Multivitamin*

There are many more health benefits to watercress than the ones listed above, and it really is something of nature's multivitamin.

*It is host to a number of beneficial vitamins and minerals, including:*

Vitamin A, K, D, E and several B vitamins

Iron

Potassium

Calcium

Glycosides

Protein

Omega-3 Fats

Antioxidants

Leucine

Iodine

Fiber

Sulfur

#### **How to take**

The leaves or stem of watercress are often taken fresh rather than in capsule form to get the most benefits. It is most nutritious when freshly picked and eaten raw. Use it for a salad or a sandwich for a quick shot of nutrition. It is

<http://www.herbwisdom.com/herb-uva-ursi.html>

**Uva Ursi (Arctostaphylos uva-ursi)**

#### **Uva Ursi Benefits**

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## Uva Ursi reviews

The leaves of this small shrub have been used as an herbal folk medicine for centuries as a mild diuretic and astringent, and in the treatment of urinary tract infections such as cystitis, urethritis and nephritis, pyelitis and in pyelonephritis. Uva-ursi can help to reduce accumulations of uric acid and relieve the pain of bladder stones. Uva Ursi is also helpful for chronic diarrhea. As a nutritional supplement and muscle relaxant, Uva Ursi soothes, strengthens, and tightens irritated and inflamed tissues.

Uva Ursi has a history of medicinal use dating back to the 2nd century. It has been widely used as a diuretic, astringent, and antiseptic. Folk medicine around the world has recommended Uva Ursi for nephritis, kidney stones, and chronic cystitis. The herb has also been used as a general tonic for weakened kidneys, liver or pancreas. Native Americans used it as a remedy for headaches, to prevent and cure scurvy and to treat urinary tract infections. In fact, until the discovery of sulfa drugs and anti-biotics, Uva Ursi was the treatment of choice for such bladder and related infections.

Uva Ursi may be of great value in diseases of the bladder and kidneys, strengthening and imparting tone to the urinary passages. The diuretic action is due to the glucoside Arbutin, which is largely absorbed unchanged and is excreted by the kidneys. During its excretion, Arbutin exercises an antiseptic effect on the urinary mucous membrane. Therefore, it is used in inflammatory diseases of the urinary tract, urethritis, cystitis, etc.

This herb helps prevent postpartum infection. Uva Ursi is also helpful for chronic diarrhea. As a nutritional supplement and muscle relaxant, Uva Ursi soothes, strengthens, and tightens irritated and inflamed tissues. The herb neutralizes acidity in the urine, increasing urine flow, therefore reducing bloating and water retention, making it beneficial for weight loss. Uva Ursi's

Uva Ursi also contains allantoin which is well known for its soothing and tissue-repairing properties. Externally, it has been used as an astringent wash for cuts and scrapes and applied externally for back sprain.

### *Urinary Tract Infections*

Uva Ursi contains chemicals, primarily hydroquinone and hydroquinone derivatives, that make it potentially useful for urinary conditions and is used to treat infections such as cystitis, urethritis and nephritis. The hydroquinone derivative, arbutin, is the chief active compound in Uva Ursi. It is absorbed in the stomach and converted into a substance with antimicrobial, astringent, and disinfectant properties. During urination, as it passes out of the body, it acts on the mucus membranes of the urinary tract to soothe irritation, reduce inflammation, and fight infection. Interestingly, arbutin taken alone is not as effective as the whole Uva Ursi plant in controlling urinary tract infections. That's because intestinal bacteria can break down arbutin, but they are less

Uva Ursi has been approved for treating inflammation of the lower urinary tract by Commission E of the German Federal Institute for Drugs and Medical Devices, which is the German governmental agency that evaluates the safety and effectiveness of herbal products. An astringent shrinks and tightens the top layers of mucous membranes, thereby reducing secretions, relieving irritation, and increasing tissue firmness.

Uva Ursi also contains diuretic chemicals, including ursolic acid, powerful astringents, and a chemical that helps promote the growth of healthy new cells, allantoin. In addition to its antiseptic and astringent actions, Uva Ursi may help to flush out bacteria by promoting urination. It has been used to reduce the accumulation of uric acid and relieve pain of bladder stones. The

### *E. Coli*

Uva Ursi has been reported to be effective against E. coli. Preparations made from bearberries act anti-bacterially in vitro against Proteus vulgaris, E. coli, Ureaplasma urealyticum, Mycoplasma hominis, Staphylococcus aureus, Pseudomonas aeruginosa, Friedländer's pneumonia, Enterococcus faecalis, and Streptococcus strains, as well as against Candida albicans. The anti-microbial effect is associated with the aglycone hydroquinone released from

#### *High Blood Pressure*

Diuretics are often prescribed to treat high blood pressure. However as they also deplete the body's potassium, it is advisable to increase your intake of fresh vegetables and bananas. Diuretics are also prescribed for congestive heart failure. However, consultation with a doctor before using Uva Ursi for

#### *Wounds/Infections*

Allantoin contained in Uva Ursi is an active ingredient in many over the counter creams to treat cold sores, herpes, and vaginal infections.

#### *Diarrhea*

Astringent tannins found in this herb are binding and help relieve diarrhea.

<http://www.herbwisdom.com/herb-whey->

### **Whey Isolate**

#### **Whey Isolate Benefits**

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Whey isolate is one of the most complete forms of protein available and because it lacks carbs, fats, cholesterol and lactose, it is commonly used as a health supplement. A single serving of many brands of whey isolate may provide your body with all of the amino acids it needs to promote ideal health results from workout and fitness efforts. Further, it contains a high level of leucine, cysteine and amino acids. These elements, in combination with the high levels of pure protein it provides to your body with practically

#### **What Is Whey Isolate?**

Whey isolate, otherwise known as whey protein isolate, is natural byproduct from the cheese production process. It is typically a dry, powdery substance that may be used in the making of various products that range from meats to candies and certain types of beverages. Because of its unique health benefits, whey isolate is also widely used as a health supplement. Through the whey isolate manufacturing process, this powder provides you with one of the most pure forms of complete protein available. It generally has a higher concentration of protein than other forms of whey, such as concentrated whey protein. Further, the manufacturing process removes excess fats and lactose from the powder. Some types of whey isolate on the market are also

#### **A Closer Look At Its Benefits**

After learning that whey isolate is a complete form of protein that is also rich in amino acids, leucine and cysteine, the question arises of what results you might expect to enjoy when you take a whey isolate supplement on a regular basis. The benefits are varied, and they include the promotion of muscle growth, the loss of body fat, a boost to the body's immune function, a reduction in the risk for breast cancer in women, an improvement in the control of blood glucose levels and prevention for muscle and bone loss in aging adults. Through a review of the benefits whey isolate can provide, you can see that this substance is ideal for use as a health supplement to enhance

### **How to Get the Best Results**

There are several different types of whey isolate available on the market, and the supplement can be found both online and in numerous local and chain stores. The most common type is a powder that is designed to be added to water or milk to prepare a health drink. You may also find whey isolate in an already prepared drink that is ready for immediate consumption. Both the powder mixes and prepared drinks may be found in a variety of flavors like chocolate, vanilla and more. The best results for muscle growth are usually enjoyed when the whey isolate enters your body either immediately before or immediately after a workout. Instructions and recommendations may vary,

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### **Whey Protein**

#### **Whey Protein Benefits**

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Whey protein can be a healthy addition to many diets. It can be used as a food supplement or consumed with meals. Athletes and bodybuilders are associated with using whey protein because it helps to increase lean muscle mass. However, anyone wanting to build, retain and repair muscle tissue may benefit. Due to the variety available, it is an accessible source of protein for many people. Receiving adequate protein is essential for good health. Though other forms of protein are also high quality, whey protein is a safe and natural form which offers many health benefits in addition to providing

*Athletic Performance* Athletes may use whey protein in their training regimen to enhance their performance and increase lean muscle mass. When the body is exposed to physical stress, such as exercise, muscle is naturally broken down and repaired. Whey protein optimizes muscle repair by speeding the time it takes to regenerate tissue. The production of glutathione is increased, assisting the process of muscle building and repair. Fat

*Muscle Wasting Diseases* Whey protein may benefit those with cachexia because it helps to prevent muscle wasting. Cachexia occurs in patients with certain diseases such as the AIDS virus or those with cancer. Consuming whey protein may also benefit senior citizens and others who may be losing muscle mass due to natural aging. A healthy musculoskeletal system

*Improved Digestion* Whey protein may improve digestion. It can help to regulate bowel movements and in certain forms, may be consumed by those who are lactose intolerant. It is often used in milk-based formulas for infants.

### **So What exactly is Whey Protein?**

Whey is the liquid portion of milk that separates after manufacturing cheese. It is a globular protein composed of beta-lactoglobulin, alpha-lactalbumin, bovine serum albumin and immunoglobulins. The chemical composition is similar to human breast milk and the branched chain amino acids in human

**Good Source of Amino Acids** Whey protein is a good source of amino acids such as glutamine, leucine, and cystine. The high concentration of branched chain amino acids are specifically responsible for the whey protein's optimal maintenance and repair of muscle tissue. Glutamine and leucine stimulate protein synthesis after exercise and are responsible for reducing tissue damage and improving endurance. Cystine helps to produce glutathione, an

*Whey Protein is Available in a Variety of Forms* Whey protein may be consumed as a protein concentrate, an isolate or in a hydrolyzed form. See also our article on Whey Isolate. Whey protein concentrate is usually found in protein powder supplements and is approximately 80% protein. Whey protein isolate is the purest form of whey protein and is approximately 90-95% protein. The isolate form contains minimal lactose, making it suitable for those who are lactose intolerant. Hydrolyzed whey protein is the most easily absorbed because the protein has already been broken down into peptides. Because of its ease on the digestive tract, hydrolyzed whey protein

Whey protein is available in snack and energy bars, pre-made shakes and sports drinks. It can be consumed in powders and be added to smoothies or mixed with food. Whey protein can also be taken in capsules.

<http://www.herbwisdom.com/herb-yarrow.html>

**Yarrow (*Achillea millefolium*)**

**Yarrow Benefits**

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*Achillea millefolium*, or yarrow, originates from Europe and has adapted to the regions of North America as well as other moderate regions. The word "Achillea" refers to Achilles, an ancient hero. He said that he used yarrow for himself and for his soldiers. "Millefolium" means "coming of a thousand leaves". This refers to the very small, fine and feathery leaves of this plant. The yarrow plant carries several other names: bloodwort, common yarrow, carpenter's weed, knight's milfoil, noble yarrow, old man's penny, neckblood

This herb plant was first used by ancient Greeks over 3,000 years ago for treating external wounds on the skin. The flowers and leaves of yarrow were eaten and also made into a tea-like drink. The fresh leaves were used to stop bleeding wounds, treat gastrointestinal problems, fight fevers, lessen menstrual bleeding and better circulation. The fresh leaves were also chewed

Native Americans used yarrow for wounds, infections and bleeding. Chinese medicine gives it praise for the ability to affect the kidney, spleen, liver and energy channels throughout the body. Animal studies have also shown support for the use of yarrow in cleansing wounds and controlling the bleeding of wounds, cuts and abrasions. Many times yarrow is categorized as a uterine tonic, which supports the circulation in the uterine. Many

*There are many other benefits of yarrow:*

Fights bacteria. Yarrow has an antiseptic action. The bitter parts and fatty acids encourage bile flow out of the gallbladder, known as the cholagogue effect. The free-flowing action improves digestion and prevents and  
Decongestant. Yarrow contains a drying effect and seems to improve coughs and sinus infections with sputum formation.  
Astringent. Very helpful with allergies where nasal secretions and watery eyes are caused by molds, dust, pollen and dander. Yarrow is also known to cause sweating in cases of flu, fevers and colds, helping to cure simple  
Infusion. Yarrow is used to aid in healing skin conditions, such as eczema. The essential oils are used and rubbed onto the affected area.  
Anti-inflammatory. The oil found in the yarrow has been used to treat  
Expectorant. Helps to cure colds.  
Promotes digestion. Helps in the secretion of enzymes and digestive juice and increases appetite; both help in digestion.

Yarrow is highly known and widely used in herbal medicines and supplied either externally or internally. The entire plant is used, both dried and fresh and is best when gathered while in flower. It is recommended to use caution when this herb is used in large or frequent doses taken for a long period of time. This can possibly be harmful and may cause rashes or make the skin

The leaves of the yarrow can be used cooked or raw. They have a bitter flavor but are good in mixed salads and best used when they are young. The leaves may also be used as a preservative or flavoring for beer. The flowers and leaves can be made into an aromatic tea and the essential oils found in the flowering heads can be used as flavor for soft drinks. Its basic components are Alpha Pinene, Acetate, Borneol, Beta Pinene, Borneol,

#### *Recommended dosage and administration of yarrow for adults*

~Yarrow flowers or equal preparations: 3g in one day as tea or infusion  
~Extract (1:1, 25 ethanol): 1-4 ml three times in a day ~Dried herb: 2-4 g of infusion or capsules three times in a day ~Tincture (1:5; 40 ethanol): 2-4

<http://www.herbwisdom.com/herb->

### **Ashwagandha (Winter Cherry)**

#### **Ashwagandha Benefits**

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Ashwagandha root is a herb of the ages. It is the 'ginseng' of Ayurvedic medicine, the traditional medicine of India and is considered an 'adaptogen', a term used to describe herbs that improve physical energy and athletic ability, increase immunity to colds and infections and increase sexual

One reason for ashwagandha's reputation as a general energy-promoting, disease-preventing tonic may be its effect on the immune system. A number of studies have shown significant increases in white blood cell counts and other measures of strengthened immunity in rodents given ashwagandha or certain chemicals extracted from the herb. Ashwagandha may also have a mild sedative effect on the central nervous system and in animal studies it has been shown to be a muscle relaxant. It is commonly used to increase vitality, particularly when recovering from chronic illnesses and pain management for arthritic conditions. Ashwagandha may also help regulate blood sugar which aids in suppressing sugar cravings. Research shows ashwagandha may be a promising alternative for cancer treatment and prevention. Ashwagandha seems to show positive effects on the endocrine

Ashwagandha is used to restore male libido, cure impotence and increase male fertility. It is widely used in southern Asia as a male sexuality tonic.

Preliminary studies indicate that the herb helps to reduce the negative effects of stress, slow tumour growth, treat anxiety and insomnia, and reduce cholesterol in addition to increasing sexual performance.

Ashwagandha is generally safe at the doses recommended on the packaging. In high doses it may have steroidal activity similar to Creatine.

Research on ashwagandha has concluded that extracts of the plant has a direct spermatogenic influence on the seminiferous tubules of immature rats presumably by exerting a testosterone-like effect<sup>1</sup>. It is could also a potential source of hypoglycemic, diuretic and hypocholesterolemic agents<sup>2</sup>.

Because ashwagandha has traditionally been used to treat various diseases associated with nerve tissue damage related to the destructive molecules known as free radicals, some researchers have speculated that the herb may have antioxidant properties. Free-radical damage plays a role in normal ageing and in such neurological conditions as epilepsy, Parkinson's disease

\_1. J Ethnopharmacol 2001 Apr;75(1):1-4 - The effect of aqueous extracts of Cynomorium coccineum and Withania somnifera on testicular development in immature Wistar rats. - Abdel-Magied EM, Abdel-Rahman HA, Harraz FM. 2. Indian J Exp Biol 2000 Jun;38(6):607-9 -- Hypoglycemic, diuretic and hypocholesterolemic effect of winter cherry (Withania somnifera, Dunal) root. -- Andallu B, Radhika B. -- Department

<http://www.herbwisdom.com/herb-slippery->

## **Slippery Elm**

### **Slippery Elm Benefits**

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Slippery Elm reviews

Slippery Elm is a species of elm tree that has been used as an herbal remedy in North America for hundreds of years. It is extremely versatile, providing relief from a number of ailments, including Irritable Bowel Syndrome (IBS) and sore throats. Slippery Elm is also known as *Ulmus fulva*, Red Elm,

### **Habitat**

Native to North America, Slippery Elm is a deciduous tree that can grow up to about 65 feet in height and 20 inches in diameter. It grows mostly in the Appalachian Mountains and the damp forests of eastern North America and southeastern Canada. As mentioned previously, another name for the tree is "Red Elm." This is due to its reddish heartwood. With long, slender, and green leaves, the branches grow downward and also present densely-clustered flowers. A great thing about the tree is that it is very resistant to

### **Slippery Elm Uses**

Native Americans used Slippery Elm to create balms or salves to heal wounds, burns, ulcers, psoriasis and other skin conditions. They also used it orally to soothe sore throats, relieve coughs, and help with diarrhea and stomach issues. Slippery Elm was used during the American Revolution to help treat and soothe the wounds of soldiers. The tree is mentioned quite a bit in older literature and today it is widely discussed in alternative medicine writings and reports. Currently, there is little scientific research regarding

### **Active Ingredients**

Slippery Elm contains a substance called mucilage, which is a polysaccharide that becomes a gel when mixed with water. The mucilage comes from the inner bark of the tree and is a bit slippery and slimy, hence the name "Slippery Elm". The mucilage does a good job of soothing and coating the mouth, throat, stomach, and intestines, causing much relief from things like Gastroesophageal Reflux Disease (GERT), Crohn's Disease,

### **Protect from Gastric Ulcers**

Since many experts think it causes extra mucus production in the gastrointestinal tract, Slippery Elm may protect the tract from ulcers due to excess acid. It is rich in nutrients, including beneficial antioxidants that help

### **Slippery Elm Bark**

The inner bark of the Slippery Elm is the part that is used to treat all of the mentioned ailments and even more. It is dried, ground, powdered, and used

<http://www.herbwisdom.com/herb-ginseng->

**Russian Ginseng (*Eleutherococcus senticosus*)**

### **Russian Ginseng Benefits**

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Russian Ginseng, a relatively new addition to Western natural medicine, has quickly gained a reputation similar to that of the better known and more expensive Korean Ginseng. Unlike many herbs with a medicinal use, it is more useful for maintaining good health rather than treating ill-health. Research has shown that it stimulates resistance to stress and so it is now widely used as a tonic in times of stress and pressure. Regular use is said to restore vigour, improve the memory and increase longevity. It has been used during convalescence and in the treatment of menopausal problems, geriatric

Russian Ginseng or Eleuthero has been used in China for 2000 years as a folk remedy for bronchitis, heart ailments, and rheumatism, and as a tonic to restore vigour, improve general health, restore memory, promote healthy appetite, and increase stamina. Referred to as ci wu ju in Chinese medicine, it was used to prevent respiratory tract infections as well as colds and flu. It was also believed to provide energy and vitality. In Russia, eleuthero was

Eleuthero's ability to increase stamina and endurance led Soviet Olympic athletes to use it to enhance their training. Explorers, divers, sailors, and miners used eleuthero to prevent stress-related illness. After the Chernobyl accident, many Russian citizens were given eleuthero to counteract the

Although a relatively new addition to Western natural medicine, it has quickly gained a reputation similar to that of the better known and more expensive Korean Ginseng. Unlike many herbs with a medicinal use, it is more useful for maintaining good health rather than treating ill-health. Research has shown that it stimulates resistance to stress and so it is now widely used as a tonic in times of stress and pressure. Regular use is said to restore vigour, improve the memory and increase longevity. It has been used

They are classified to the group of adaptogens, which raise resistance to various negative factors: physical, chemical, biological and psychological. The preparations stimulate physical and mental ability, raise the organism resistance at various kinds of sicknesses, poisoning, irradiation. They stimulate central nerve system, sex glands activities, decrease sugar and cholesterol level in blood, improve appetite, sleep, sight and hearing.

Eleuthero produces a comprehensive strengthening and toning impact; it has been recommended in treating various neural diseases, impotence, lung ailments, medium forms of diabetes mellitus, and malignant tumours.

The results of pharmacological investigations of Eleuthero have been summarised by I. V. Dardymov and E. I. Khasina (1993) in their book. The authors postulate Eleuthero's effects on the body, which involve an energy-mobilizing impact primarily through intensified utilization of glucose and a stress-protective effect conditioned by change in central nervous system and hormonal regulation. In an alarming situation, the adrenal glands release corticosteroids and adrenaline which prepare the organism for the fight or flight reaction. When these hormones are depleted, the organism reaches an

Another way that eleuthero reduces stress on the body is to combat harmful toxins. Eleuthero has shown a protective effect in animal studies, against chemicals such as ethanol, sodium barbital, tetanus toxoid, and chemotherapeutic agents. Eleuthero can also reduce the side effects of

Eleuthero has been shown to have immunoprotective effects against breast (mammary gland) carcinoma, stomach carcinoma, oral cavity carcinoma, skin melanoma and ovarian carcinoma. It was found to have a pronounced effect on T lymphocytes, predominantly of the helper/inducer type, but also on cytotoxic and natural killer cells. Its active ingredients may also be of use

Germany's Commission E approved eleuthero as a tonic in times of fatigue and debility, declining capacity for work or concentration, and during convalescence. Other uses for eleuthero are for chronic inflammatory conditions and traditionally for functional asthenia (Bruneton, 1995). Eleuthero has also been reported to increase stamina and endurance and

Eleuthero has been shown to enhance mental acuity and physical endurance without the letdown that comes with caffeinated products. Research has shown that eleuthero improves the use of oxygen by the exercising muscle. This means that a person is able to maintain aerobic exercise longer and

Other findings that are more positive have resulted from animal and human studies of eleuthero's other potential effects. Chemicals in eleuthero appear to produce moderate reductions in blood sugar and blood cholesterol levels and modest improvements in memory and concentration. Eleuthero may also have mild estrogenic effects. In laboratory studies, various chemicals found in eleuthero have also shown antiviral and anticancer properties, but these

Several studies were conducted to evaluate the effects of eleuthero on eye conditions and color distinction. One study evaluated the pre and post-operative effects of eleuthero extract (1.5 ml twice daily) on 282 male or female patients suffering from primary glaucoma (102 cases) and eye burns (58 cases). Beneficial effects were noted in both treatments. Eleuthero was also found beneficial in 122 cases of myopia treatment (Zelikov, 1968).

In 50 patients with normal trichromatic vision a single dose of eleuthero extract (2 ml) stimulated color distinction (red and green) within 30 to 60 minutes after ingestion. Maximum effect was reached in six to seven hours and persisted for a minimum of 29 hours (Sosnova, 1969).

### **Immune System**

Evidence is also mounting that eleuthero enhances and supports the immune response. Eleuthero may be useful as a preventive measure during cold and flu season. Recent evidence also suggests that eleuthero may prove valuable in the long-term management of various diseases of the immune system, including HIV infection, chronic fatigue syndrome, and autoimmune

In perhaps the most convincing study carried out so far, B. Bohn and co-workers in Heidelberg, West Germany looked at immune parameters in 18 individuals in a randomised, double-blind fashion for a total of four weeks. The subjects in this study had venous blood drawn both before and after Eleutherococcus Senticosus administration, and the samples were analysed

Overall, the Eleutherococcus Senticosus group showed an absolute increase in all immune cells measured. Total T-cell numbers advanced by 78 per cent, T helper/inducer cells went up by 80 per cent, cytotoxic Ts by 67 percent, and NK cells by 30 per cent, compared to the control group. B Lymphocytes, which are cells that produce antibodies against infectious organisms, expanded by 22 per cent in the Eleutherococcus Senticosus subjects, compared to controls. Most importantly, no side effects were noted in the

The researchers stated: 'We conclude from our data that Eleutherococcus senticosus exerts a strong immunomodulatory effect in healthy normal subjects.' The Bohn study has caused drug companies to spend millions of dollars in an effort to get Eleutherococcus Senticosus approved as a drug by the FDA in the USA.

The increases in T, B, and NK cells in people given Eleutherococcus Senticosus suggest that it could be very useful in alleviating the immune suppression associated with strenuous exercise. In addition, one might speculate about a positive effect of Eleutherococcus Senticosus in the very early stages of HIV (AIDS-virus) infection. In an HIV-infected patient, Eleutherococcus Senticosus might prevent or retard the spread of the virus,

Supporting these findings, Eleutherococcus Senticosus is now used in the support of cancer patients undergoing radiation and chemotherapy, especially in Germany. Studies have shown that ES, when administered to patients, drastically reduces the side effects of radiation and chemotherapy (e.g., nausea, weakness, fatigue, dizziness, and loss of appetite). Other research with cancer patients has linked Eleutherococcus Senticosus with improved healing and recovery times, increased weight gain, and improved immune cell counts. In Russia, the administration of Eleutherococcus Senticosus to cancer patients seemed to permit larger than normal doses of

How does *Eleutherococcus Senticosus* actually spur the immune system to greater activity? At present, there is no consensus. Some researchers believe that *Eleutherococcus Senticosus* induces increased interferon biosynthesis (interferon is a powerful chemical which boosts immune-system activity), while others believe that polysaccharides (long-chain sugar molecules) naturally found in *Eleutherococcus Senticosus* stimulate the activity of special white blood cells called macrophages. These macrophages play a number of roles in the immune system, including the breakdown of infected cells and the stimulation of other immune cells. However, the polysaccharides are probably 'non-specific' immune stimulants, which

### **Athletes & Antibiotics**

Why should athletes try to stimulate their own immune systems, rather than rely on antibiotics and other remedies to control infections? Obviously, prevention of infection can promote more consistent, high-quality training and lower the risk of missed competitions. In addition, many microorganisms are now resistant to many of the commonly used antibiotics.

Some of the more notable antibiotic-resistant organisms include *Streptococcus pyogenes*, which causes 'strep throat', upper respiratory infections, and is reported to be resistant to both penicillin and chloramphenicol. Another common bacterial species, *Hemophilus influenzae*, which produces both ear and upper-respiratory tract infections, is now resistant to a variety of antibiotics, including chloramphenicol, ampicillin, and tetracycline. *Staphylococcus aureus*, which causes 'staph infections' of the skin, especially around surgical wounds, is resistant to erythromycin, tetracycline, and the so-called B-lactam antibiotics. Finally,

Investigators in the US recently completed a pilot study in which *Eleutherococcus Senticosus* extract was given to AIDS patients in hopes of improving their immune-system functioning and overall survivability. The results were very promising, and so a four-city, randomised, double-blind, clinical trial will be conducted next with *Eleutherococcus Senticosus* in the near

Extracts of *Eleutherococcus senticosus* appear to have the ability to prevent immune suppression in vigorously training athletes and may limit the risk of infection. By boosting recovery following hard workouts, *E. senticosus* may

There is a relatively small number of controlled clinical trials performed with eleuthero. A single-blind, placebo-controlled, crossover trial lasting eight days investigated the effect of eleuthero extract (2 ml, twice daily) on working capacity and fatigue of six male athletes, ages 21-22. Oxygen uptake, heart rate, total work, and exhaustion time were measured. Significant results were observed in all parameters, particularly the 23.3%

An eight-week double-blind, placebo-controlled study evaluated the efficacy of eleuthero extract (3.4 ml daily) on submaximal and maximal exercise performance of 20 highly trained distance runners. No significant difference was observed between test and control groups in heart rate, oxygen consumption, expired minute volume, respiratory exchange ratio, perceived

<http://www.herbwisdom.com/herb-goji-berry.html>

### **Goji Berry/Wolfberry**

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Goji Berry (Lycium) is also commonly known as Wolfberry. Like many of the herbs and natural supplements that have been found in Asia, Goji Berry is known to have many positive effects for people who want to promote total body health. Goji has been around for more than 6,000 and during that time, the virtues have been explored in various tests. Scientists have found that people can benefit greatly from the use of Goji in a number of different areas, which confirms some of the suspicions of the Chinese herbalists who have used the berry for decades to treat people with a host of different ailments. One of the most important tests for Goji Berry was run in 1994, when scientists finally used humans in some experiments with the berry. They found that patients suffering from cancer were more receptive to their treatments and showed better results from those treatments when they had eaten the berries. This makes sense because the primary draw of Goji is the fact that it has antioxidants that are known to fight off cancer and other

The test tube experiments found that Goji Berry was good for promoting proper cell growth and the antioxidants found within it were very powerful in disease prevention. One of the interesting finds was that Goji could help lower glucose levels in individuals and also lower cholesterol in some people. There are many things that are not yet known about Goji Berry, but all of the tests up to this point indicate that it can be a very good item for those people looking to get healthier and ward off potential disease in the

#### **What things does Goji Berry improve specifically?**

There are many different areas that have shown improvement because of the use of this treatment, which comes with a pretty high price tag in China. The price is justified by the fact that Goji does so much for the body and most people see it is an investment in their long term health. The antioxidants within Goji are most well known for fighting off disease within the liver. For people who want to protect their liver in the face of alcohol or drug use, the

Likewise, there are some small, subsidiary effects that have come along with Goji Berry. Improved eyesight is thought to be a positive effect, while increased leg strength is, as well. This promotes the theory that the berry helps to improve the body as a whole, instead of just helping to improve any one particular area. With this knowledge, people have been much more likely to try Goji as a part of their daily routine. Those who use it daily have found that Goji increases their energy levels to a point where they feel more

#### **Goji Berry as a sexual enhancer**

Though its primary role is in preventing disease, Goji Berry has also been found to help increase fertility in women and help improve sexual function in men. One reason for this is that it improves circulation throughout the body, allowing people to perform at their peak in a host of different activities. Sexual activity is one of those and although it is a nice side effect,

Improving immune function and longevity are two items that most people cite when they use Goji Berry. They want to ward off not only things like cancer through the antioxidants, but they also want to stay healthier on a day to day basis. Having to constantly fight off things like a cold or the flu can weigh on the body and it can make life difficult for people during their routine. In order to stay healthy for longer, the body has to stay sharp and

All in all, Goji is popular not just for one purpose, but because it helps to improve the body in lots of different ways. The tests have shown that it has significant power to both prevent and help cure diseases such as cancer, while other tests have proven Goji to be an effective holistic treatment. Total body health and keeping in tune for the long run is a concern for most, so it figures that those people would want to use Goji to not only lengthen life,

<http://www.herbwisdom.com/herb-senna.html>

**Senna (Cassia senna)**

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Senna is a herb that is generally used for its laxative properties. Senna is also known as cassia senna, wild senna, cassia marilandica, or locust plant. It works by interacting with the bacteria in the digestive track, resulting in intestinal contractions. These contractions are caused by the anthraquinone that is contained in senna. These dimeric glycosides anthraquinone derivatives are known as Senna glycosides or sennosides. They are named after their abundant occurrence in these plants of the genus Senna. The main forms of these glycosides are often referred to by: A, B, C & D. Both leaves and pods of the senna plant are used for their laxative effects. The pods are

Senna is found in many tropical countries. The plant has been used in India for thousands of years as a laxative. It can be found in capsule and tablet form, tea bags and loose tea, as well as liquid extracts. The undiluted dried

**How Does Senna Work?**

Senna contains glycosides, which are a group of organic compounds that are commonly found in plants. These compounds work as a laxative by smoothing the muscles as digested food moves through the intestines. This helps to enhance the stool volume and move it out of the colon. The process is caused by the chain of fatty acids that promote digestion, fermentation,

**How to Use Senna**

Senna is generally used by people suffering from constipation. For relief, a person should take ½ teaspoon of the liquid, or one 50 or 100 mg capsule or tablet. After taking the Senna, a bowel movement should occur within six to 12 hours. There is also a tea available, but since Senna has an unpleasant

Senna is the ingredient in the commercial laxative suppository called Senokot. The suppositories are inserted into the rectum for constipation

**Senna Tea**

Many people like to take herbal preparations in the form of a tea. Senna tea comes in teabags and can be found in health food stores, but some people like to use the loose leaves of Senna and brew the tea themselves. Steep the leaves in a pot of boiling water for approximately ten minutes. The leaves can also be put in cold water and steeped for 10 to 12 hours. Using cold water to steep the leaves will leave less resin in the tea, so the chances of abdominal cramping will be reduced. Regardless of the method used, once the tea is ready, strain and drink. When relieving constipation with Senna tea, it will take up to 12 hours to get relief. It is recommended to take before

A common preparation is to boil 100 grams of the tea leaves in distilled water with 5 grams of fresh ginger that has been sliced. Cover and steep for 15 minutes, strain, and drink while hot. Make only the amount to drink, as the Senna tea gets stronger if it sits, and can lead to abdominal cramping. Other carminative herbs that mix well with Senna are peppermint and fennel. When sensitive stomachs are an issue, making the tea from the Senna

<http://www.herbwisdom.com/herb-royal-jelly.html>

## Royal Jelly

### Royal Jelly Benefits

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Royal Jelly is a substance that is secreted by the honey bee. It is used to feed the larvae and the adult queens. Royal Jelly is made up of 60-70 percent water, 12 percent protein, 12-15 carbohydrates and five to six percent lipid. It also has vitamin B1, vitamin B2, vitamin B6, niacin, pantothenic acid, folic acid and trace amounts of vitamin C. The recommend serving of royal jelly is between 500 and 2000 mg per day.

Researchers have been studying Royal Jelly for quite some time and have found that it has many health benefits.

*Below are some of the health benefits of Royal Jelly:*

#### *Lower cholesterol level*

High cholesterol is a condition that affects nearly 40 percent of the adult populations. If it is left untreated, it can cause a stroke and/or heart attack. There was a study done that involved two groups of volunteers. Half of the volunteers were given six grams of royal Jelly while the other half were given a placebo. The results of the study were that the volunteers who were

#### *Lower cholesterol level*

High cholesterol is a condition that affects nearly 40 percent of the adult populations. If it is left untreated, it can cause a stroke and/or heart attack. There was a study done that involved two groups of volunteers. Half of the volunteers were given six grams of royal Jelly while the other half were given a placebo. The results of the study were that the volunteers who were

#### *Helps aid female fertility*

Infertility is a problem that affects approximately 10 percent of women. Ovulatory dysfunction is the most common cause of female infertility. Royal Jelly can help boost a woman's fertility by increasing the quality of her eggs

#### *Eases the symptoms of PMS*

Pre-menstrual syndrome, which is also referred to as PMS, is a condition that affects over 50 percent of women. Mood swings, bloating, headaches and fatigue are some of the most common symptoms of PMS. There has been evidence to suggest that royal jelly can help ease some of the symptoms of

#### *Can help treat bacterial infections*

Antibiotics are a class of medication that is commonly prescribed to treat bacterial infections. Royal Jelly contains 10-Hydroxy-Dgr2-decenoic acid, which is a natural antibiotic. Additionally, royal jelly has also been shown to

#### *Has anti-inflammatory properties*

Inflammation is a natural process that occurs when the body detects a harmful stimulus. Chronic inflammation can lead to a number of health problems if it is left unchecked. Royal Jelly has anti-inflammatory properties.

### *Can help slow down the aging process*

Most people look forward to living longer, but no one wants the wrinkles, age spots and fine lines that come along with getting older. Royal Jelly can help slow down the aging process. It has been shown to boost collagen production and promote healthier skin. Royal jelly can also help wounds on

### *Lower blood sugar*

Diabetes is a condition that affects roughly eight percent of the population. The key to controlling diabetes is to keep one's blood sugar within a healthy range. Royal jelly has been shown to help lower blood sugar. There was a study done in Germany that involved 20 volunteers. The volunteers underwent an oral glucose tolerance test and were given a 20 grams of royal jelly. After they were given the jelly, they underwent a second oral glucose tolerance test. The results of the study were that the participants' blood sugar

### *Reduce the risk of breast cancer*

Breast cancer is a condition that affects approximately 12 percent of women. Researchers have not been able to identify the exact cause of breast cancer. However, they have found that excess estrogen can make a woman or man more susceptible to developing it. Royal Jelly has been shown to suppress

Royal Jelly has a number of health benefits. Side effects from Royal Jelly are rare, but have been reported. Royal Jelly can cause skin irritations and may

<http://www.herbwisdom.com/herb-saw->

**Saw palmetto (Serenoa repens)**

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Saw palmetto is an extract derived from the deep purple berries of the saw palmetto fan palm (*Serenoa repens*), a plant indigenous to the coastal regions of the southern United States and southern California.

Saw palmetto is a remarkable herb for both men and women and is used by natural health practitioners to treat a variety of ailments such as testicular inflammation, urinary tract inflammation, coughs and respiratory congestion. It is also used to strengthen the thyroid gland, balance the metabolism, stimulate appetite and aid digestion. This wonderful herb is becoming famous for its uses in hair restoration, prostate health, sexual

Saw palmetto berry also tones the urethra and it may be used to uphold the healthy function of the thyroid gland and urinary system.

In the United States, its medicinal uses were first documented in 1879 by Dr. J.B. Read, a physician in Savannah, Georgia, who published a paper on the medicinal benefits of the herb in the April 1879 issue of American Journal of Pharmacy. He found the herb useful in treating a wide range of conditions. "By its peculiar soothing power on the mucous membrane it induces sleep, relieves the most troublesome coughs, promotes expectoration, improves digestion and increases fat, flesh and strength. Its sedative and diuretic properties are remarkable," Read wrote. "Considering the great and diversified power of the saw palmetto as a therapeutic agent it

Since the 1960s, extensive clinical studies of saw palmetto have been done in Europe. A review of 24 European trials appeared in the November 1998 issue of the Journal of the American Medical Association. The trials involved nearly 3,000 men, some taking saw palmetto, others taking Proscar

The men taking saw palmetto had a 28% improvement in urinary tract symptoms, a 24% improvement in peak urine flow and 43% improvement in overall urine flow. The results were nearly comparable to the group taking

There is much scientific documentation outlining the effectiveness of the herb in treating irritable bladder and urinary problems in men with benign prostate hyperplasia (BPH), an enlargement of the prostate gland. BPH results in a swelling of the prostate gland that obstructs the urethra. This causes painful urination, reduced urine flow, difficulty starting or stopping the flow, dribbling after urination and more frequent nighttime urination. In addition to causing pain and embarrassment, BPH can lead to serious kidney problems if undiagnosed and left untreated. It is a common problem in men

Saw palmetto does not reduce prostate enlargement. Instead, it is thought to work in a variety of ways. First, it inhibits the conversion of testosterone into dihydrotestosterone (DHT). BPH is thought to be caused by an increase in testosterone to DHT. Secondly, saw palmetto is believed to interfere with the production of estrogen and progesterone, hormones associated with DHT

In a controlled clinical trial with patients with enlarged prostate glands, 50 patients who received saw palmetto (320 mg per day - 4 tablets taken in two separate doses with meals) were compared to 44 patients receiving placebo. Patients treated with saw palmetto urinated less frequently, produced a better flow rate and amount of urine and had less pain and discomfort in urinating than control subjects. There were actually fewer adverse side effects in patients receiving saw palmetto than in controls.

Presently, saw palmetto is being evaluated by the U.S. Food and Drug Administration (FDA) for treatment of BPH. If approved, it would become the first herbal product to be licensed by the agency as a treatment for a

<http://www.herbwisdom.com/herb-sea->

## **Sea Buckthorn**

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The Sea Buckthorn is becoming increasingly popular for its impressive range of healing properties! Sea-Buckthorn is a thorny shrub that grows near rivers and in sandy soil along the Atlantic coasts of Europe and throughout Asia, where it has been used for centuries in traditional medical

#### **About The Plant**

There are seven varieties of the Sea Buckthorn, the most common of which is the *Hippophae rhamnoides* L. Sea Buckthorn, or *Hippophae rhamnoides* L. is commonly known by a plethora of names including: Argasse, Argousier, Buckthorn, Chharma, Dhar-Bu, Espino Armarrillo, Espino Falso, Finbar, Grisset, *Hippophae rhamnoides*, Meerdorn, Oblepikha, Purging

Most of the world's sea buckthorn plantations are located in China. There, the shrub is used for soil and water conservation in addition to its healing properties. The fruit of the Sea Buckthorn is difficult to harvest, due to the thorny nature of the shrubs themselves. The harvested fruit is quite acidic and its juices are often combined with those of sweeter fruits, such as grape

## Uses

In natural medicine, there are many uses and indications for the Sea Buckthorn. Leaves and flowers are utilized for arthritis, GI ulcers, gout and skin rashes and irritations. Tea made from the leaves contains vitamins and minerals, antioxidants, amino acids, and fatty acids. The tea is typically used for lowering blood pressure and serum cholesterol, prevention and treatment of diseases of the blood vessel, and for increasing immunity. Sea buckthorn berries are used for preventing skin infections, improving sight, and slowing

Seed or berry oil is used for asthma, angina, hyperlipidemia (high cholesterol), as an antioxidant and as an expectorant. Sea Buckthorn oil is used in traditional medicine to slow the reduction of mental agility associated with aging and to reduce the side effects of cancer and cancer treatments. It may be used to treat GI tract diseases including ulcers, GERD,

Sea Buckthorn is a supplemental source of vitamins C, A, and E, beta-carotene, minerals, amino acids, and fatty acids. One recent study suggests that Sea Buckthorn seed oil may be effective for assisting in weight loss. Chinese researchers have completed a study suggesting that Sea Buckthorn oil extract can lower cholesterol, reduce angina and improve heart function in patients with cardiac disease. Research on Sea Buckthorn as it relates to weight loss, cardiac disease and cholesterol levels are ongoing and appear to

Sea Buckthorn tea, oil or berries can be used for a variety of skin conditions and to heal wounds of the skin, and scientific studies indicate it may have some antibiotic properties. Extracts can be used for acne, rosacea, insect

<http://www.herbwisdom.com/herb-red-clover.html>

## Red clover (*Trifolium pratense*)

### Red clover Benefits

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Red clover is considered to be one of the richest sources of isoflavones (water-soluble chemicals that act like estrogens and are found in many plants). It is used for hot flashes/flushes, PMS, lowering cholesterol, breast enhancement and breast health, improving urine production and improving circulation of the blood. It is also used to help prevent osteoporosis, reduce the possibility of blood clots and arterial plaques and limiting the development of benign prostatic hyperplasia.

Red clover is a source of many valuable nutrients including calcium, chromium, magnesium, niacin, phosphorus, potassium, thiamine, and vitamin C. Red clover is also considered to be one of the richest sources of isoflavones (water-soluble chemicals that act like estrogens and are found in

Several studies of a proprietary extract of red clover isoflavones suggest that it may significantly reduce hot flashes in menopausal women. Also, menopause increases a woman's risk for developing osteoporosis (significant bone loss) and some studies suggest that a proprietary extract of red clover isoflavones may slow bone loss and even boost bone mineral density in pre and peri-menopausal women. The estrogen-like effect of red clover isoflavones may be involved, and red clover also may have a direct effect by

However, this possible bone-strengthening effect has not been seen in men and post-menopausal women.

Because it contains chemicals called isoflavones, which belong to a larger class of plant chemicals known as phyto (plant-derived) estrogens, red clover is often taken to relieve symptoms of premenstrual syndrome (PMS). Isoflavones are similar in shape to the female hormone, estrogen. Therefore, they may attach to estrogen receptors throughout the body particularly in the

For women with normal estrogen levels, red clover isoflavones may displace some natural estrogens, possibly preventing or relieving estrogen-related symptoms, such as breast pain, that are associated with PMS. This effect may also reduce the possibility of developing estrogen-dependent cancer of the endometrium (the lining of the uterus). In addition, results from a review of nearly 1000 women suggest that red clover may interfere with an enzyme

Red clover may also block enzymes thought to contribute to prostate cancer in men. It has shown a definite limiting effect, however, in the development of benign prostate hyperplasia (BPH), which is a non-cancerous enlargement of the prostate gland. An enlarged prostate may cause men to experience a weak or interrupted urine stream, dribbling after urinating, or the urge to

It is believed that red clover may help to prevent heart disease in several ways. Although results from human studies are not definite, some show that taking red clover may lower the levels of 'bad' low-density lipoprotein cholesterol (LDL) and raise the levels of 'good' high-density lipoprotein (HDL) cholesterol in the body. In addition, red clover may also promote an increase in the secretion of bile acid. Because cholesterol is a major component of bile acid, increased bile acid production usually means that more cholesterol is used and less cholesterol circulates in the body. Additionally, red clover contains small amounts of chemicals known as coumarins, which may help keep the blood from becoming thick and gummy. Therefore, the possibility of forming blood clots and arterial plaques may be reduced. Plaques are accumulations of blood cells, fats, and other substances that may build up in blood vessels, possibly reducing or blocking blood flow. Red clover may also help the arteries remain strong and

It has been found to be helpful in quitting smoking.

<http://www.herbwisdom.com/herb-squill.html>

**Squill/Scilla**

**Squill/Scilla Benefits**

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Squill (Scilla) is a bulb-forming herbaceous perennial plant in the hyacinth family that grows along the sandy coastline of the Mediterranean Sea. Squill plants have a large bulb root, 15cm across, looking similar to an onion. This bulb can weigh up to four pounds. It is normally harvested after the base leaves have withered, a time when the medicinal properties of the bulb are at their highest levels.

There are two varieties of squill distinguished by herbalists, 25 varieties distinguished by horticulturists, each with slightly different chemical properties. Red squill, often referred to as Indian Squill, contains a toxin called Scilliroside. This toxin is harmful to all creatures and deadly to those unable to rid itself of the toxin through vomiting. This is why red squill is commercially prepared for use as a rodent poison. White Squill, known as European squill, is the most common used for herbal supplements. White

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The compounds that make squill desirable for medicinal purposes are found in the inner layers of the bulb. Just as an onion is peeled, squill's outer layer is removed and discarded. The inner layers are finely sliced, dehydrated and ground in to a powdered form to use in medicines. Squill can be distilled as vinegar. It is often prepared in liquid form as an extract or juice. The bulb can also be washed to use in medicines.

Ancient physicians surrounding the Mediterranean Sea used squill as a remedy for coughs, as an expectorant and as a diuretic. It is also believed they used a tonic containing squill to assist the function of a patient's heart. These ancient physicians were aware of the poisonous affect on animals, including humans, from the over consumption of any remedy containing squill. Writings describing squill, its' usage and effects , can be found in

Squill is found in remedies used to treat various lung diseases. Tonics are prepared for persons suffering with asthma, chronic bronchitis and those with whooping cough. The addition of squill to the body stimulates the production of phlegm, thinning the thickened mucus found in the patient's

Medications containing squill are still used in some countries by traditional physicians to treat irregular heartbeats, mild heart failure and other heart-related issues. The bulb contains glucosamides, aiding the stimulation of the heart. Squill extract's affect on the heart is both slowing the beats per minute and increasing the force of each individual beat. It has been found to take affect faster than that of Digitalis extract, which is more commonly used and

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**Chlorella (Chlorella pyrenoidosa)**

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Chlorella is a fresh water, single-celled algae that grows in fresh water. Chlorella emerged over 2 billion years ago, and was the first form of a plant with a well-defined nucleus. Because Chlorella is a microscopic organism, it was not discovered until the late 19th century, deriving its name from the Greek, "chloros" meaning green and "ella" meaning small. In fact that chlorella contains the highest amount of chlorophyll of any known plant.

It is thought to boost the immune system and help fight infection. It has been shown to increase the good bacteria in the gastrointestinal (GI) tract, which helps to treat ulcers, colitis, diverticulosis and Crohn's disease. It is also used to treat constipation, fibromyalgia, high blood pressure and high cholesterol. Chlorella has been used to treat cancer and also help protect the body from

The algae, which is a popular food supplement in Asia and has been used as energy-producing food for centuries, is often used to prevent or curb the spread of cancer, enhance immunity, promote a good balance of bacteria in the gut, and lower blood cholesterol. In Japan, it is traditionally used as a treatment for duodenal ulcers, gastritis, hypertension, diabetes, hypoglycemia, asthma, and constipation. More recently, it has been touted as an effective therapy for elevated cholesterol levels, a probiotic to ward

Chlorella is now used as an adjunct supplement during radiation treatment for cancer. Its abundance of chlorophyll is known to protect the body against

It is a nutrient-dense superfood that contains 60% protein, 18 amino acids (including all the essential amino acids), and various vitamins and minerals. One of its unique properties is a phytonutrient called CGF.

Chlorella provides all of the dietary-essential amino acids in excellent ratios. It is also a reliable source of essential fatty acids that are required for many important biochemical functions, including hormone balance. Chlorella also contains high levels of chlorophyll, beta-carotene and RNA/DNA. More than 20 vitamins and minerals are found in chlorella, including iron, calcium, potassium, magnesium, phosphorous, pro-vitamin A, vitamins C, B1, B2, B3, B5, B6, B12, E and K, biotin, inositol, folic acid, plus vitamins C, E and

Although the algae grow naturally in fresh water, Chlorella destined for human consumption is generally cultivated outdoors in mineral-rich freshwater ponds under direct sunlight. The entire process from strain maintenance in the laboratory to harvesting of the final product is monitored by microbiologists to ensure optimal nutrient value and product purity. It is

Chlorella has been the focus of many medical and scientific research projects. Based on very early research, it appears that chlorella may play a role in fibromyalgia, hypertension, or ulcerative colitis and has an effect on the immune system. More studies are needed to confirm initial findings.

Research conducted in Japan suggests that chlorella may have antitumour activity against breast cancer. However, its main use in cancer therapy is to help remove radioactive particles from the body after radiation treatment.

So far, the bulk of evidence for chlorella's long list of medicinal powers comes from animal studies. Studies in mice have shown that Chlorella vulgaris can protect against the development and spread of cancer, and other rodent studies have shown that it lowers cholesterol and helps organisms get

<http://www.herbwisdom.com/herb-cats-claw.html>

## **Cats Claw (*Uncaria tomentosa*)**

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Cats Claw is a vine commonly known as Una de Gato and is used traditionally in Peruvian medicine for the treatment of a wide range of health problems, particularly digestive complaints and arthritis and to treat wounds, stomach problems, cancer, and more. It has only recently caught the attention of western herbalists and researchers. Today, mainly by word of mouth, it has become one of the best selling herbs in the USA.

Since the 1970s, studies and research have been carried out by scientists in Peru, Germany, Austria, England and other countries, to find out more about the powerful healing properties of Cat's Claw. Today, mainly by word of mouth, it has become one of the best selling herbs in the USA. Not since quinine was discovered in the bark of a Peruvian tree during the seventeenth

The most attention was given to the oxindole alkaloids found in the bark and roots of Cats Claw, which have been documented to stimulate the immune system. It is these seven different alkaloids that are credited with having a variety of different medicinal and healing properties. The most immunologically active alkaloid is believed to be Isopteropodin (Isomer A), which increases the immune response in the body and act as antioxidants to rid the body of free radicals. Compounds found in Cat's Claw may also work to kill viruses, bacteria, and other microorganisms that cause disease, and

It has been suggested that Cat's claw extracts exert a direct anti-proliferative activity on MCF7 (a breast cancer cell line). This has led to its use as a adjunctive treatment for cancer and AIDS as well as other diseases that negatively impact the immunological system. In addition, the presence of glycosides, proanthocyanidins and beta sitosterol help provide anti-viral and anti-inflammatory support for the body. These alkaloids also exert a

This herb's anti-inflammatory properties may help to relieve arthritis, gout, and other inflammatory problems. The primary mechanism for Cat's claw anti-inflammatory actions appears to be immunomodulation via suppression

Cat's Claw may help create support for the intestinal and immune systems of the body, and may also creates intestinal support with its ability to cleanse the entire intestinal tract. This cleansing helps create support for people experiencing different stomach and bowel disorders, including: colitis,

In addition, in one study, human volunteers who took Cat's claw for 8 weeks showed improved DNA repair.

*Cat's Claw can often be found combined with other 'immune' herbs with similar healing properties such as Echinacea and may:*

reduce pain and inflammation of rheumatism, arthritis and other types of inflammatory problems.

have anti-tumor and anti-cancer properties that inhibits cancerous cell formation.  
promote the healing of wounds.

be useful for treatment of gastric ulcers and intestinal complaints

help to relieve chronic pain.

enhance immunity by stimulating the immune system.

help people experiencing stomach and bowel disorders, including colitis, Crohn's disease, irritable bowel syndrome, leaky bowel syndrome, gastritis  
help fight both viral and fungal infections such as Herpes and Candida

<http://www.herbwisdom.com/herb-black->

## **Black Cohosh (Cimicifuga racemosa)**

### **Black Cohosh Benefits**

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Black Cohosh has been used by Native Americans for more than two hundred years, after they discovered the root of the plant helped relieve menstrual cramps and symptoms of menopause. These days it is still used for menopausal symptoms such as hot flashes/flushes, irritability, mood swings and sleep disturbances. It is also used for PMS, menstrual irregularities, uterine spasms and has been indicated for reducing

Herbal researcher Dr. James Duke has this to say about Black Cohosh; "Black cohosh really should be better known in this country, especially with our aging population and the millions of women who are now facing menopause. Recognized for its mild sedative and anti-inflammatory activity, black cohosh can help with hot flashes and other symptoms associated with that dramatic change of life called menopause. It's also reported to have some estrogenic activity. Herbalist Steven Foster refers to a study that compared the effects of conventional estrogen replacement therapy with black cohosh. That study looked at 60 women, younger than 40 years old, who had had complete hysterectomies and were experiencing about

"Native Americans used the roots and rhizomes of this member of the buttercup family to treat kidney ailments, malaria, rheumatism, and sore throats. Early American settlers turned to it for bronchitis, dropsy, fever, hysteria and nervous disorders, lumbago, rattlesnake bites, and yellow fever. It also reports through history for easing PMS and menstrual irregularities."

This estrogenic activity, notes Dr. Duke, can contribute to a 'mastogenic' effect; the natural enlargement of the breasts. Black Cohosh has also been used to induce labour and should not be used during pregnancy.

A dozen studies or more conducted throughout the 1980s and 1990s confirm that the long-standing use of black cohosh for menopausal symptoms has scientific validity. For example, in a German study involving 629 women, black cohosh improved physical and psychological menopausal symptoms in more than 80% of the participants within four weeks. In a second study, 60 menopausal women were given black cohosh extract, conjugated estrogens, or diazepam (a leading anti-anxiety medication) for three months. Those who received black cohosh reported feeling significantly less depressed and anxious than those who received either estrogens or diazepam. In another study, 80 menopausal women were treated for 12 weeks with black cohosh extract, conjugated estrogens, or placebo. Black cohosh improved anxiety, menopause and vaginal symptoms. In addition, the number of hot flashes dropped from 5 to less than 1 average daily occurrences in the black cohosh

Given these examples, and results of other studies, some experts have concluded that black cohosh may be a safe and effective alternative to estrogen replacement therapy (ERT) for women who cannot or will not take

Preliminary studies also suggest that black cohosh may help reduce inflammation associated osteoarthritis and rheumatoid arthritis. In a review of scientific studies, researchers concluded that a combination of black cohosh, willow bark (*Salix* spp.), sarsaparilla (*Smilax* spp.), guaiacum (*Guaiacum officinale*) resin, and poplar bark (*Populus tremuloides*) may

For more information on Black Cohosh visit [drugdigest.org](http://drugdigest.org).

<http://www.herbwisdom.com/herb-avena->

**Avena sativa (Oats)**

**Avena sativa Benefits**

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Are you feeling stressed, tired, depressed, fed-up, run down or even lacking your usual sexual desire? If so, have you considered a daily dose of Avena

This wonderful herb is thought to be soothing to the brain and nervous system, whilst at the same time increasing sexual desire, and performance, in

Avena sativa is quickly becoming a popular natural alternative to pharmaceutical erection enhancers without the dangerous side effects. Also known as Oats Milky Seed or Oatstraw, Avena Sativa is used to stimulate both men and women quickly and effectively. It is often described as the "Natural Viagra"! Its stimulating effects are well known in the animal world, especially with horses where it is widely known that if you feed them oats

Dr. Larry Clapp has studied alternative virility medicines extensively and concludes that "ten drops, under the tongue, twice a day works very powerfully to enhance erectile function." Other studies have also suggested

In women, the effect seems to be that of increasing sexual desire rather than physical performance. Avena sativa contains compounds which are both sedative and soothing to the brain and nervous system, hence it is said to be a good herb as a nerve restorative. In women the aphrodisiac effect seems to work by relaxing the body which in turn allows a natural increase in desire.

In men it appears to be effective for treating impotence and premature ejaculation, probably by increasing healthy blood flow.

As a food, oats are known to be good for the heart because they keep blood fats under control. They also have other medicinal properties.

Avena sativa seeds are not only a rich source of carbohydrate and soluble fibre, they also have the highest content of Iron, Zinc and Manganese of any grain. It is said to be useful as a nerve restorative.

Avena sativa has no known side effects, unlike the sometimes dangerous sexual prescription drugs. It is used as a nervous system general tonic as well

Avena sativa is often the primary ingredient in expensive sexual formulas and in the popular alternatives Herbal V, Cobra and Biogra. There is no need to purchase expensive herbal formulas. The pure herb is more powerful and

Avena sativa does not appear to interact with drugs so it is often used as a safe alternative to other herbs that are used for anxiety, such as St John's wort, which cannot be taken with many prescription medications. Avena sativa may also be of use in helping with drug withdrawal and is often

Oats are sometimes added to the bath as a topical treatment for the skin condition eczema. Generally, there are no side effects or contra-indications from using avena sativa herbal supplements.

<http://www.herbwisdom.com/herb-bilberry.html>

**Bilberry (Vaccinium myrtillus)**

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Bilberry has a long medicinal history in Europe. It has been used to treat anything from kidney stones to Typhoid fever. During World War 2 British pilots noted that Bilberry jam before a flight dramatically improved night

Bilberry contains anthocyanosides which are potent antioxidants which strengthen blood vessels and capillary walls, improve red blood cells, stabilize collagen tissues such as tendons, ligaments and cartilage and has cholesterol lowering effects. They also increase retinal pigments that allow the eye to tolerate light. In addition, it helps to maintain the flexibility of red blood cells, allowing them to pass through the capillaries and supply oxygen. The herb has been shown to be a vasodilator that opens blood vessels and lowers blood pressure. Since the eyes have a high concentration of capillaries, bilberry may be particularly helpful in improving eyesight. The herb has been shown to improve night vision, slow macular degeneration, prevent cataracts and diabetic retinopathy. Scientific studies have shown improvement in the eyesight, circulation, vision, stroke and atherosclerosis

Individuals with hardening of the arteries, diabetes, high blood pressure or other conditions that increase the likelihood of damage to the small blood vessels in the eyes are more likely to have serious vision problems as a result of blood vessel damage. Note that bilberry is taken by mouth to treat eye

Oral bilberry preparations are also used to prevent and treat a condition known as chronic venous insufficiency, which occurs when valves in the veins that carry blood back to the heart are weak or damaged.

Blood may collect in the veins of the legs and lead to varicose veins, spider veins, or sores on the legs. More serious results can include blood clots in the legs. Because bilberry may strengthen the walls of all blood vessels in

In the past, dried bilberries have been used to treat diarrhea because the tannins it contains (1.5% and as much as 10%) act as an astringent to the gastrointestinal tract. An astringent shrinks and tightens the top layers of skin or mucous membranes thereby reducing secretions, relieving irritation, and improving tissue firmness. Tea brewed from dried bilberry fruits has

In folk medicine, bilberry leaf has been used to treat a number of conditions including diabetes. Limited evidence from a few animal studies shows that it may have a decreasing effect on blood sugar. Additionally, in at least one study, an extract of bilberry leaves may also have lowered cholesterol levels in laboratory animals. Other laboratory and animal studies have tested potential anticancer effects of bilberry. In a laboratory study, bilberry stopped the growth of both leukemia and colon cancer cells. While preliminary results suggest that anthocyanosides obtained from bilberries may also block the effects of an enzyme and other chemicals that promote tumor growth, much more study is needed. To date, no human clinical

Recent research showed that Bilberry extract has promising anti-ulcer activity, both preventive and curative. It also has shown anti-cancer properties in animal experiments. When administered to diabetes patients, Bilberry normalised capillary collagen thickness and blood sugar levels in

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### **Burdock (Arctium)**

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In the United States, many people may be surprised at the thought of eating the Burdock plant. However, in many countries across the globe, the burdock plant is widely used as a food source and also for its medicinal

In many parts of Asia, young burdock roots, flower stems and even very young leaves are consumed eagerly. The long thin root of the burdock is only a few centimeters wide but can reach over a meter in length and are crisp and the taste is mild. They are best after thinly sliced and soaked in water to remove any bitter taste. There have been studies that the fiber of the burdock is a good aid to digestion. In the United Kingdom, it is combined with

The burdock in appearance is sometimes confused with cockle burr or even rhubarb, both members of the same family of plants, as is the artichoke. Dark green leaves shaped like hearts or large ovals often up to twenty eight inches in length jut from the hollow stems that can reach over a yard in length. The burdock flowers from June until October, turn into green or silver buds and purple blooms. After blooming, the seeds are enclosed inside

In the early 1940's, a Swiss inventor, George de Mestral was hiking with his dog and became intrigued by the burrs that clung tenaciously to his clothing and the dog's fur. The interaction of the sharp hooks of the burdock and loops of thread in his clothes inspired him to invent Velcro. The roots of the burdock are dark brown, gray or even black in appearance. The undersides of the leaves are covered with a downy like fuzz and can pose allergy problems for those allergic to ragweds and related

The burdock is also known by many other names, most having to do with the characteristics of the seeds or traditional herbal uses; beggar's buttons, love leaves, clot-bur. Herbalists and others have long known that burdock is often used as a dietary aid to help cure different ailments such as sore throats, colds, blood purifiers, to combat hair loss and dandruff, to name a few. It also increases the flow of urine and is used as a tonic in mild doses

Traditionally, the use of burdock as a medicine in China included the treatment of skin disorders, cleansing of the blood, as an effective treatment of impotence and barrenness in women. The use of the burdock root in Russia and India has also included treatment of certain types of cancer. The burdock is also a plant used in the treatment of burns, as it reduces pain and

The burdock is mentioned in several of Shakespeare's plays as in Tolstoy's writings as well as other authors of historical fiction who describe the use of burdock to treat various ailments. Caution should be used if you are childbearing or nursing, burdock is could cause problems with both conditions. The properties of the burdock plant are still being researched and it is very important not to obtain plants from the wild unless you are entirely sure of what you are doing. The roots and leaves of nightshade which are poisonous if ingested, as are the leaves of the rhubarb plant; both of these plants are members of the same family of plants as the burdock. It is vital

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## **Collagen**

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Collagen is a substance that is naturally produced by the body. However, the production of this substance diminishes as people grow older. The results of the low production include wrinkles, thinning skin and brittle hair among others. There are a number of collagen supplements available in the market that can restore the amount of collagen in the body. Many individuals use

### **What is Collagen?**

Collagen is a protein found in connective tissues of the body. It is significant in making certain parts of the body such as nails strong and is also an important factor in joint health. Collagen supplements come in various forms. One of the most common is called Gelatin. For a long time Gelatin has been used in collagen replacement and has been thought to strengthen nails and hair. Individuals suffering from conditions such as osteoarthritis and rheumatoid arthritis often take collagen supplements to replace collagen in the joints. The collagen supplements mostly used in such a case has chicken collagen as an active ingredient. There are also collagen creams that

### **How Collagen Works**

Collagen is a form of fibrous protein that is normally present in the bodies of humans and even mammals. It provides a supportive structure for various body tissues such as muscles, bones and ligaments and prevents them from falling apart. It works with another compound called Elastin to provide strength and firmness to the tissues. Collagen also works to keep the skin looking firm, tight, flexible and youthful looking. Young people naturally produce more collagen than older people. With age, the collagen in the body breaks down leading to wrinkles and folds around the mouth. As such, collagen stimulation leads to a more youthful looking skin. The substance

### **Collagen in Plastic Surgery**

Collagen works to reduce the signs of aging by plumping up the skin, making it firm and flexible due to the fibrous and stable structure of the substance. Many plastic surgeons use the substance to give their clients a youthful appearance. In this case, the collagen is injected directly to the skin in the areas with depressions created by wrinkles. The collagen plumps up the wrinkles making them less noticeable. The collagen injections may last up to six months after which one has to go through the same procedure to

Collagen has various other uses including artificial skin construction for burn victims. The collagen used in this procedure is normally obtained from bovine or equine sources to replace lost skin as a result of third party burns. Recently, collagen from human sources has become available for skin

### **Benefits of Collagen Supplements**

Many people take collagen supplements because of the substantial health benefits it has on the body. Anecdotal reports state that there are certain improvements when taken. However, little research has been done to support the effectiveness of these supplements. The substance is purported to assist individuals with arthritis and other illnesses affecting the joints or bones. Collagen helps to increase mobility and reduce pain. Collagen is also believed to improve the appearance of the skin, nails and hair. There are various topical health products that are available for enhancing the look of skin. Collagen injections are normally administered by plastic surgeons to

### **Collagen for Arthritis**

Various studies indicate that chicken collagen supplements can be effective in the treatment of pain, swelling as well as stiffness around joints. This type of collagen is mostly used by people suffering from rheumatoid arthritis. Studies also indicate that collagen supplements used with protein and amino

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### **Euphrasia/Eyebright**

#### **Euphrasia/Eyebright Benefits**

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Herbal use of Eyebright, or Euphrasia officinalis, dates to the 14th century when it was described as a cure for all eye maladies. By the 16th century, eyebright was hailed by well-regarded herbalists such as Fuchsius and Tragus. It is found and used in Europe, North America, Western Asia, and Northern Asia. The name Euphrasia originates in Greece from the word for gladness. Other names for the plant are "Euphrasia" in English,

### **The Euphrasia Plant**

This annual herb grows two to eight inches tall with deep cut leaves and white or purple blooms that have yellow variegations. It is a member of the Figwort family of plants. It has a bloom season between July and September. There are opposite branches on an erect stem with leaves that will be up to 1/2 an inch long. Flowers are on terminal spokes with a two-lipped corolla. Seeds are in tiny flat capsules. It needs to be near grass to grow in a

#### *What Parts Are Used*

When the plant is in full flower stage, around July or August, a fluid extract is prepared. The plant is cut right about the root for preparation. It has several chemical compounds such as the tannin Euphrasia-Tannin acid, glucose, and mannite, which is a crystalline water-soluble sweet-tasting

#### *What Eyebright Does for the Eyes*

This plant has a long history of use for eye problems, hence the name of Eyebright. When used appropriately, eyebright will reduce inflammation in the eye caused by blepharitis (inflammation of the eyelash follicles) and conjunctivitis (inflammation or infection of the membrane lining the eyelids). It can be used as an eye wash, as eye drops, or plant infusions taken

#### *What Eyebright Does for the Respiratory Tract*

It is used as an anti-inflammatory for hay fever, sinusitis, upper respiratory tract infections, and catarrh (inflammation of the mucous membranes). As an astringent, it is used for dry congestion. There is an herbal smoking mix of the dried herb that is used for bronchial colds. It also can be used for

#### *What Eyebright Does for Skin Wounds*

As an astringent, the herb is used to aid in the healing on skin wounds. It is made into a poultice and used on the wound topically. It can also be used to treat acne and aid in skin inflammation. A cold eyebright poultice can help

#### *Dosages*

Traditionally, an adult dosage of eyebright is two to four grams of the herb, dried, up to three times a day. This can be in tea form with 5 ounces of boiling water. For eye drops, one to five times a day of a single drop appears the norm. These eyedrops, when used for pinkeye, can be taken for three to

#### *Preparations*

Eyebright is able to be purchased in the forms of teabags, loose dried leaves, capsules, liquid, tablets, powder, tincture, and oil. It is also in several over-the-counter and online herbal supplement combinations. It is an ingredient in some cough and cold remedies, in skin lotions, acne medications, and

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**Fenugreek (Trigonella Foenum-graecum)**

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Fenugreek reviews Fenugreek has a long history as a breast enlarger and contains diosgenin which is used to make synthetic estrogen. It has been found to promote the growth of new breast cells and increase the size and fullness of the breasts. Of all the herbs used for breast enlargement fenugreek has the highest concentrations of the effective plant compounds. Diosgenin, a steroid sapogenin is the starting compound for over 60% of the total steroid production by the pharmaceutical industry. Other sapogenins

While Fenugreek is considered the finest herb for enhancing feminine beauty it also aids in sexual stimulation, balances blood sugar levels, and contains choline which aids the thinking process. Fenugreek has been the focus of several studies concerning the treatment of diabetes and the prevention of breast cancer. Its ability to balance hormone levels aids in treating PMS and menopause. Its antioxidants slow ageing and help prevent disease.

The plant has also been employed against bronchitis, fevers, sore throats, wounds swollen glands, skin irritations, diabetes, ulcers, and in the treatment of cancer. Fenugreek has been used to promote lactation and as an aphrodisiac.

Fenugreek contains an amino acid called 4-hydroxyisoleucine, which appears to increase the body's production of insulin when blood sugar levels

Higher insulin production may decrease the amounts of sugar that stay in the blood for many individuals. In some studies of animals and humans with both diabetes and high cholesterol levels, fenugreek lowered cholesterol

However, no blood-sugar lowering effect was seen in non-diabetic animals. Similarly individuals with normal cholesterol levels showed no significant reductions in cholesterol while taking fenugreek.

Fenugreek contains an amino acid called 4-hydroxyisoleucine, which appears to increase the body's production of insulin when blood sugar levels are high. Higher insulin production may decrease the amounts of sugar that stay in the blood for many individuals. In some studies of animals and humans with both diabetes and high cholesterol levels, fenugreek lowered

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### **Green Lipped Mussels**

#### **Green Lipped Mussels Benefits**

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The green lipped mussel, or perna canalicula, hails from New Zealand and is speculated to be a treatment option for a variety of different health issues including osteoarthritis, rheumatoid arthritis, joint pain caused by cancer treatments, asthma and daytime wheezing. The oil extracted from these miracle muscles acts as an anti-inflammatory agent that is totally natural and

##### **Active Ingredients**

The oil extracted from green lipped mussels is rich in Omega 3s, an extremely powerful health supplement. The nutrients of these mussels can also be extracted in a powder form which is equally as effective at treating inflammatory illnesses and joint pain, with many other accompanying health

Some of the most powerfully marketed forms of green lipped mussel oil contain only three ingredients, those being the green lipped mussel oil as well as grape seed extract powder and kiwi fruit seed oil. The oil may be combined with a variety of omega-3 oils including linseed oil, hemp seed oil, sesame oil, sunflower oil, evening primrose oil, soy bean oil, walnuts and canola seeds. Other marine sources of omega-3 oils are often paired with the green lipped mussel oil, such as fish oil, krill oil, cod liver oil and marine algae. These are all effective anti inflammatory treatments as well which boost the efficacy of the mussel oil itself. There is actually no need to pair green lipped muscle oil or powder with any other supplement, because it is

### **Anti-inflammatory Pain Relief**

As the body metabolizes the natural omega-3s found in green lipped mussel oil, they go to work on restoring and soothing inflamed joints, muscles and tissues. This can cause a great deal of pain relief for people suffering from rheumatoid arthritis, osteoarthritis, fibromyalgia, lupus and other illnesses which cause severe joint pain. It is also of great benefit to people who suffer from asthma, chronic bronchitis or respiratory issues, as it helps lung tissue

### **Habitat in New Zealand**

Green lipped mussels have often been hailed as a miracle food because no matter how you consume them, be it as a delicious seafood itself or as oil or powder, their health benefits are absolutely amazing. The restorative powers found in the omega 3s of these mussels have restorative abilities that have created a high demand for the seafood, powder, oil and extract. One reason that these mussels are in such high demand is that they only occur naturally on the New Zealand coast. The green lipped mussels have been cultivated off the New Zealand coast since the 1970s, and are currently experiencing annual growth in a median range of 18%, a huge expansion per year, based on the demand for the seafood and its extracts. Green lipped mussels are considered to be one of the top two ecologically sound types of seafood

### **How To Take**

Green lipped mussel oil is typically produced in a supplement form within an easy to swallow capsule. It is sold in bottles in most health food stores. Selling the oil in the capsule is the most effective way to ship it while preserving its natural healthy qualities and also making the oil palatable to the person who is taking it. Green lipped mussel powder is, like its oil counterpart, sold in capsule form for the preservation of the integrity of the product and to maintain a taste that is acceptable to the purchaser. The oil, powder and the mussels themselves all contain a variety of proteins, minerals, vitamins, omega 3s, healthy enzymes, polypeptides, chondroitin sulphates, glycosaminoglycans, polysaccharides and glycoproteins. These supplementary nutrients aid in the preservation of mobility and joint health, functional cartilage, a healthy heart, glowing skin and overall health.

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### **Muir Puama (Liriosma ovata)**

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Used to improve psychological and physical aspects of libido and sexual function, menstrual cramps and PMS, neurasthenia, to tonify the nervous system and for treating cases of mild exhaustion. Helps with gastrointestinal and reproductive disorders, stress and trauma. It is known in some circles as "the Viagra of the Amazon" and in fact, many people now consider it the new Yohimbe but with considerably less possible side effects.

Muirapuama is one of the most active botanicals with a long history of traditional use as an energy tonic, general health improver and remedy for impotence & sexual insufficiency. It is known in some circles as "the Viagra of the Amazon" and in fact, many people now consider it the new Yohimbe

The roots of this Amazonian tree were the subject of a study conducted by the UCLA School of Medicine.

The study showed a significant improvement in both erectile function and sexual desire. The Amazon natives have known this for centuries, as this herb has been widely used as an aphrodisiac by both men and women, and is

The short term effects of Muirapuama include increasing blood flow to the pelvic area, aiding erections in men as well as sensation and orgasm in women. Longer term use enhances the production of sex hormones in both sexes. It has no noted side effects though, as with many sexual stimulants, it

Muirapuama has also been used for stress management, nervous system stimulation and for general overall health. Two French studies showed that muirapuama seemed to improve libido and sexual function. Scientists also believe that this herb increases testosterone levels, though this has not yet been definitively proven.

It has been used to tonify the nervous system and to treat cases of mild exhaustion. It can also help with gastrointestinal and reproductive disorders, while its anti-rheumatic properties have been used for treating stress and

A clinical study with 262 patients complaining of lack of sexual desire and the inability to attain or maintain an erection demonstrated Muirapuama extract to be effective in many cases. Within 2 weeks, at a daily dose of 1 to 1.5 grams of the extract, 62% of patients with loss of libido claimed that the treatment had dynamic effect while 51 percent of patients with "erection failures" felt that muirapuama was of benefit. Primary chemical constituents of muirapuama include alkaloids (specifically muirapuamine), esters, plant sterols, free fatty acids and phytosterols. Presently, the exact mechanism of action of this herb is still under investigation. From the preliminary

Muirapuama is still employed around the world today in herbal medicine. In Brazil and South American herbal medicine, it is used as a neuromuscular tonic, for asthenia, paralysis, chronic rheumatism, sexual impotency, grippe, ataxia, and central nervous system disorders. In Europe, it has used to treat impotency, infertility, neurasthenia, menstrual disturbances and dysentery. Because of the long history of use of Muirapuama in England, it is still listed in the British Herbal Pharmacopoeia, a noted source on herbal medicine from the British Herbal Medicine Association, where it is recommended for the treatment of dysentery and impotence. It has been gaining in popularity in the United States where herbalists and health care practitioners are using muirapuama for impotency, menstrual cramps and

While so-called "aphrodisiacs" have come and gone in history, Muirapuama has risen above this class of products and may well provide the most effective natural therapeutic approach for loss of libido in both sexes.

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**Milk Thistle (Silybum marianum)**

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Milk Thistle is unique in its ability to protect the liver and has no equivalent in the pharmaceutical drug world. In fact, in cases of poisoning with Amanita mushrooms, which destroy the liver, milk thistle is the only treatment option. It has been so dramatically effective that the treatment has

Milk thistle acts in a similar fashion to detoxify other synthetic chemicals that find their way into our bodies, from acetaminophen and alcohol to

Milk thistle was approved in 1986 as a treatment for liver disease and it is widely used to treat alcoholic hepatitis, alcoholic fatty liver, cirrhosis, liver poisoning and viral hepatitis. It has also been shown to protect the liver against medications such as acetaminophen, a non-aspirin pain reliever.

The active ingredient, or liver-protecting compound in milk thistle is known as silymarin. This substance, which actually consists of a group of compounds called flavonolignands, helps repair liver cells damaged by alcohol and other toxic substances by stimulating protein synthesis. By changing the outside layer of liver cells, it also prevents certain toxins from getting inside. Silymarin also seems to encourage liver cell growth. It can reduce inflammation (important for people with liver inflammation or hepatitis), and has potent antioxidant effects. Antioxidants are thought to protect body cells from damage caused by a chemical process called oxidation. Our Milk Thistle is not standardized to an exact amount (as it is made from pure dried natural herbs Milk Thistle naturally contains about 70

This herb benefits adrenal disorders and inflammatory bowel syndrome, and is used to treat psoriasis (increases bile flow).

Milk thistle has some estrogen-like effects that may stimulate the flow of breast milk in women who are breast-feeding infants. It may also be used to start late menstrual periods. Milk thistle's estrogen-like effect may also have

In animal studies and one small study in humans, milk thistle produced modest reductions in total cholesterol. However, these results have not been

This herb is a must for cleansing and for anyone with any sort of liver dysfunction or exposure to toxins. (e.g. alcohol).

A comprehensive review by the U.S. Agency for Healthcare Research and Quality (AHRQ) recently identified 16 scientific studies on the use of milk thistle for the treatment of various forms of liver disease. A European standardized extract of milk thistle was used in most of the trials. Problems in study design (such as small numbers of participants, variations in the causes of liver disease, and differences in dosing and duration of milk thistle therapy) made it difficult to draw any definitive conclusions. However, five of seven studies evaluating milk thistle for alcoholic liver disease found significant improvements in liver function. Those with the mildest form of the disease appeared to improve the most. Milk thistle was less effective for

*Viral hepatitis*

Despite the fact that milk thistle is widely used in the treatment of hepatitis (particularly hepatitis C), results from four viral hepatitis studies were contradictory. Some found improvements in liver enzyme activity while others failed to detect these benefits. None of the studies compared milk

#### *Cancer*

Preliminary laboratory studies also suggest that active substances in milk thistle may have anti-cancer effects. One active substance known as silymarin has strong antioxidant properties and has been shown to inhibit the growth of human prostate, breast, and cervical cancer cells in test tubes. Further studies are needed to determine whether milk thistle is safe or

#### *High cholesterol*

One animal study found that silymarin (an active compound in milk thistle) worked as effectively as the cholesterol-lowering drug probucol, with the additional benefit of substantially increasing HDL ("good") cholesterol.

<http://www.herbwisdom.com/herb-cardamom.html>

### **Cardamom**

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Cardamom is well known as a spice used in Indian cooking, and is one of the primary constituents of Garam Masala. What many people don't realize is that cardamom is also medicinal, and helps relieve digestive problems induced by garlic and onion, making it more than merely an aromatic addition to the stomach-challenging cuisine it accompanies. Cardamom is considered one of the most valuable spices in the world due to its rich aroma

Many varieties of cardamom exist, but there are two genera which include cardamom plants. The first, known scientifically as *Ellataria* and commonly referred to as green or true cardamom, is found mainly in India. Cardamom grown in Asia is part of the genus *Amomum*, and goes by an assortment of common names, such as brown cardamom, Java cardamom, Bengal

*Both Ellataria and Amomum are part of the Ginger family (Zingiberaceae).*

Cardamom is farmed in only a few places in the world, including Sri Lanka, China, Laos, Nepal, Vietnam, pockets of India, and Guatemala. It grows uncultivated more rarely, limited to the rich, dense soils of certain South Asian forests. Despite these limitations, the ground seeds of cardamom, as

As a member of the ginger family, cardamom grows perennially and produces vast, fleshy root structures known as rhizomes. It has large leaves, green and white flowers, an edible but slightly bitter fruit, and large seeds. The seeds of the cardamom plant contain a variety of important minerals such as calcium, sulfur, and phosphorus. They also contain volatile oil composed of acetic and formic acids. This volatile oil, which makes up

Studies confirm that cardamom oil acts as an analgesic and antispasmodic in rats and rabbits, producing relief and lowered distention and writhing within digestive systems reacting negatively to uncomfortable stimuli. This effect is the primary medicinal quality of cardamom, and Eastern cultures have been

*Cardamom has been used to relieve the following medical problems:*

#### *Bad Breath*

Cardamom is one of the most effective remedies against halitosis. Simply chewing on the seeds eliminates bad odors. Cardamom is even used in some chewing gums because of its effectiveness, billed as a surefire cure to the

#### *Tooth, Gum, and Oral Disorders*

Cardamom is widely used in South Asia to fight tooth and gum decay and disease. It can also be used to help soothe a sore throat and relieve

#### *Digestion*

The volatile oil in cardamom has been proven to soothe the stomach and intestines, making cardamom an ideal solution for a host of digestive problems, such as constipation, dysentery, and indigestion. Cardamom can be used aromatically to increase or encourage appetite, and also assists in soothing gas and heartburn. Generally, cardamom relieves most upset stomachs. To use Cardamom for digestive problems, consume seeds alone,

#### *Urinary problems*

South Asians use cardamom's relieving properties to help with the discomfort of passing gall and kidney stones. Cardamom, combined with banana leaf and alma juice, can act as a diuretic, soothing a variety of kidney, bladder, and urinary problems like nephritis, burning or painful urination, and frequent urges to urinate. The relief from uncomfortable

#### *Depression and Aromatherapy*

Cardamom oils can be added to baths as a form of aromatherapy that fights depression and reduces stress. Ground Cardamom seeds can be made into a

#### *Cancer Prevention*

Cardamom contains IC3 (indole-3-carbinol) and DIM(diindolylmethane). These phytochemicals are well-known cancer fighters, helping to specifically ward off hormone-responding cancers like breast cancer, ovarian cancer, and prostate cancer. Early research suggests that consuming cardamom regularly

In addition to these specific medicinal uses, cardamom contains an abundance of antioxidants, which protect the body against aging and stress, and fight common sicknesses and bodily strife. In rat studies, cardamom has been shown to increase glutathione, an antioxidant enzyme found naturally

Cardamom volatile oil has only recently come under the scrutiny of scientists curious about its therapeutic properties, but Asian and Indian cultures have reliably used it for ages as a remedy for discomfort and depression, and still rely upon it today. It is now being discovered to have

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**Rhodiola (Rhodiola rosea)**

**Rhodiola Benefits**

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Rhodiola rosea is a remarkable herb that has a wide and varied history of uses. It is thought to strengthen the nervous system, fight depression, enhance immunity, elevate the capacity for exercise, enhance memory, aid weight reduction, increase sexual function and improve energy levels. It has long been known as a potent adaptogen. Adaptogens are natural plant

Rhodiola has a legendary history dating back thousands of years. In 77 A.D., the Greek physician Dioscorides documented the medical applications of the plant, which he then called rodia riza, in his classic medical text *De Materia Medica*. The Vikings depended on the herb to enhance their physical strength and endurance, while Chinese emperors sent expeditions to Siberia to bring back "the golden root" for medicinal preparations. The people of central Asia considered a tea brewed from Rhodiola rosea to be the most

Research on Rhodiola rosea and other medicinal herbs was part of the Soviet Union's great push to compete with the West in military development, the arms race, space exploration, Olympic sports, science, medicine, and industry. It is a popular plant in traditional medical systems in Eastern Europe and Asia, with a reputation for stimulating the nervous system, decreasing depression, enhancing work performance, eliminating fatigue,

#### *Stress*

Rhodiola rosea has long been known as a potent adaptogen. Adaptogens are natural plant substances that increase the body's non-specific resistance and normalise the functions of the body. When a stressful situation occurs, consuming adaptogens generates a degree of generalised adaptation (or non-specific resistance) that allows our physiology to handle the stressful situation in a more resourceful manner. It is believed that adaptogens work

Since Rhodiola rosea administration appears to impact central monoamine levels, it might also provide benefits and be the adaptogen of choice in clinical conditions characterised by an imbalance of central nervous system monoamines. This is consistent with Russian claims for improvements in depression and schizophrenia. It also suggests that research in areas such as seasonal affective disorder, fibromyalgia, and chronic fatigue syndrome,

There have also been claims that this plant has great utility as a therapy in asthenic conditions (decline in work performance, sleep disturbances, poor appetite, irritability, hypertension, headaches, and fatigue) developing subsequent to intense physical or intellectual strain, influenza and other viral exposures, and other illness. Two randomised, double-blind, placebo-controlled trials of the standardised extract of Rhodiola rosea root (SHR-5)

#### *Muscle Recovery*

Rhodiola rosea has been shown to shorten recovery time after prolonged workouts, to increase attention span, memory, strength, and anti-toxic action. Rhodiola rosea extract increases the level of enzymes, RNA, and proteins important to muscle recovery after exhaustive exercise. It also stimulates muscle energy status: glycogen synthesis in muscles and liver;

#### *Memory*

Studies using proofreading tests have demonstrated that Rhodiola rosea enhances memorisation and concentration ability over prolonged periods. It increases the bioelectrical activity of the brain which improves memory and

In one study, forty students were randomised to receive either 50 mg standardised Rhodiola extract or placebo twice daily for a period of 20 days. The students receiving the standardised extract demonstrated significant improvements in physical fitness, psychomotor function, mental performance, and general wellbeing. Subjects receiving the Rhodiola rosea extract also reported statistically significant reductions in mental fatigue, improved sleep patterns, a reduced need for sleep, greater mood stability, and a greater motivation to study. The average exam scores between students

#### *Cardiac Problems*

Rhodiola has also been shown to be effective for cardiac problems caused or aggravated by stress. Its action for these conditions is in its ability to decrease the amount of catecholamines and corticosteroids released by the adrenal glands during stress. The abnormal presence of these stress hormones will subsequently raise blood pressure, cholesterol, potassium levels and increase risk factors for heart disease. Rhodiola has been found to decrease harmful blood lipids and thus decrease the risk of heart disease. It also decreases the amount of cyclic-AMP (c-AMP) released into cardiac cells. Cyclic AMP is related to ATP (adenosine triphosphate), the body's primary energy molecule. C-AMP acts as a 'second messenger' or liaison between the outer and inner environments of the cell. It assists in the uptake of more intracellular calcium into the heart thus promoting a greater

#### *Cancer*

Rhodiola has been shown to increase anti-tumour activity by increasing the body's resistance to toxins. A range of anti-oxidant compounds have been identified in Rhodiola rosea and related species and significant free-radical scavenging activity has been demonstrated for alcohol and water extracts of Rhodiola. Rhodiola rosea might be useful in conjunction with some pharmaceutical anti-tumour agents. According to the information from Russian researchers have found that the oral administration of Rhodiola inhibited tumour growths in rats by 39% and decreased metastasis by 50%. It improved urinary tissue and immunity in patients with bladder cancer. In other experiments with various types of cancer, including adenocarcinoma

#### *Immune System*

Rhodiola both stimulates and protects the immune system by reinstating homeostasis (metabolic balance) in the body. It also increases the natural killer cells (NK) in the stomach and spleen. This action may be due to its ability to normalise hormones by modulating the release of glucocorticoid

#### *Depression*

In animal studies, extracts of rhodiola, seem to enhance the transport of serotonin precursors, tryptophan, and 5-hydroxytryptophan into the brain. Serotonin is a widely studied brain neurotransmitter chemical that is involved in many functions including, smooth muscle contraction, temperature regulation, appetite, pain perception, behavior, blood pressure and respiration. When balanced, it imparts a sense of contentment and mental ease. Either too much or too little serotonin on the other hand has been linked to various abnormal mental states such as clinical depression. Thus rhodiola has been used by Russian scientists alone or in combination with antidepressants to boost one's mental state, a boon in countries and seasons where one is deprived of adequate sun over prolonged periods of

#### **Other Benefits**

Many other benefits from the use of Rhodiola has been found including its ability to improve hearing, to regulate blood sugar levels for diabetics and protect the liver from environmental toxins. It has been shown to activate the lipolytic processes (fat breakdown) and mobilise lipids from a dipose tissue to the natural fat burning system of your body for weight reduction. It can also clinically enhance thyroid function without causing hyperthyroidism, enhance thymus gland function and protect or delay involution that occurs with ageing. It can also improve your adrenal gland reserves without causing hypertrophy. Throughout the years it has shown to substantially improve

<http://www.herbwisdom.com/herb-st-johns->

### **St. John's Wort (Hypericum perforatum)**

#### **St. John's Wort Benefits**

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St. John's Wort benefits

Notes / side effects

St. John's Wort reviews

St. John's Wort has become popular again as an antidepressant. It is the number one treatment in Germany and has been extensively studied by Commission E, the scientific advisory panel to the German government. It contains several chemicals, including hypericin, hyperforin, and pseudohypericin, which are thought to be the major sources of antidepressant activity. In several studies of laboratory animals and humans, one or more of the chemicals in St. John's wort appeared to delay or decrease re-absorption of the neurotransmitters dopamine, noradrenaline, and

Neurotransmitters are chemicals that carry messages from nerve cells to other cells. Ordinarily, once the message has been delivered, neurotransmitters are re-absorbed and inactivated by the cells that released them. Chemicals in St. John's wort may keep more of these antidepressant neurotransmitters available for the body to utilise. Multiple studies have shown that St. John's wort may be effective in relieving mild to moderate

St. John's Wort is an MAO inhibitor and should not be used with alcohol

St. John's wort has also been studied for the treatment of other emotional disorders such as anxiety, obsessive-compulsive disorder (OCD), menopausal mood swings, and premenstrual syndrome. In laboratory studies, it has shown some effectiveness for lessening the symptoms of nicotine withdrawal and for reducing the craving for alcohol in addicted animals. It is believed that chemicals in St. John's wort may act like other chemicals that are associated with relieving emotional conditions.

Possible antiviral effects of St. John's wort are being investigated for the treatment of HIV/AIDS, hepatitis C, and other viral illnesses. It is thought that hypericin, pseudohypericin, and other chemicals in St. John's wort may stick to the surfaces of viruses and keep them from binding to host cells. Another theory is that St. John's wort may contain chemicals that interfere with the production or release of viral cells. This antiviral activity is enhanced greatly by exposure to light. However, the doses needed for active

It has also been used to treat hypothyroidism and a salve made with the extract can be used topically to treat bruises, burns, insect bites and scabies.

<http://www.herbwisdom.com/herb-tarragon.html>

### **Tarragon**

#### **Tarragon Benefits**

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Tarragon benefits

Notes / side effects

Where to buy Tarragon

Tarragon reviews

Tarragon (*Artemisia dracunculus*) is an aromatic herb that is considered one of the four finest seasoning ingredients in traditional French cooking. Also commonly known as estragon and dragon herb, this perennial plant is native to most of the Northern Hemisphere including Europe, Asia, India, western North America and parts of northern Mexico. Averaging about four feet in height when mature, the slender green leaves produced from branched stems of this herb contain aromas and flavors similar to anise. Both the leaves and stems are can be used, either fresh or dried, as seasoning in a wide variety of dishes. They are also often steeped in vinegar and soft drinks to impart their unique flavors into the surrounding liquids. There are written records of

While many people are familiar with the culinary uses for tarragon, most may not be aware of its unique medicinal qualities. This herb has been used by numerous cultures for centuries as a natural treatment for many ailments. In addition, it is a superb supplement to any diet because it is high in vitamins, potassium and other nutrients that have been proven to provide health benefits. Whether added to foods as a seasoning or taken as a supplement, there are many good reasons for making tarragon a part of an

### *Antioxidant Properties*

Tarragon, especially the Turkish variety, has antioxidant properties that can help neutralize the actions of free radicals throughout the body. Free radicals, which are a byproduct of metabolism, have been proven to damage cells unless they are quickly expelled as waste. Studies have found that tarragon oil works as a free radical scavenger to help stop or decrease the

### *Toothache Remedy*

Throughout history, tarragon has been widely used as an aid for toothaches. The ancient Greeks chewed it because of its ability to numb the mouth. This pain relieving effect is due to the high levels of eugenol found in the plant. This is the same pain relieving compound contained in clove oil. It has also been proven that tarragon can also help decrease the sore gums that often

### *Appetite Stimulant*

Based upon several studies, tarragon appears to have chemicals that can help to increase appetites. Whether used as a seasoning herb in cooking or consumed raw as a small garnish, it may help people who have poor

### *Digestive Aid*

Tarragon has long been used as a digestive tonic because it aids in the production of bile by the liver. Not only can it improve natural digestion, but it has also been found to relieve common digestive problems like an upset stomach, irritable bowels and dyspepsia. It has also been used in traditional

### *Sedative*

Tarragon can be used as a mild sedative to help relieve anxiety and stress. It is also beneficial in promoting a good night's sleep.

### *Heart Health*

Tarragon contains chemicals that can help support cardiovascular health. These chemicals can assist in keeping blood platelets and other compounds from adhering and accumulating in the heart's blood vessels.

### *Female Health*

Tarragon has proven useful as a supplement for women who suffer from suppressed menstruation. It has also been promoted as a means for maintaining the overall health of the female reproductive tract. However, it has been found that tarragon should not be used for these reasons while

### *Eye Function*

Because it is rich in potassium and the Vitamin A precursor beta carotene, tarragon can assist in the overall health and function of the eyes.

### *Building Muscle Mass/ Weight Control*

Recent studies have shown that tarragon, primarily the Russian variety, helps to increase muscle creatine absorption. This is similar to the muscle creatine adsorption that occurs when large amounts of carbohydrates are ingested. Since tarragon creates the same effect, consuming large amounts of carbohydrates is no longer necessary to increase muscle mass. Similarly, this

Today, the medicinal benefits of tarragon can easily become a part of any diet whether it is in the form of pills, powders, teas, used as a seasoning or consumed raw. The appropriate dosage will depend on several factors

264

100

265

## **697 Cannabis strains**

### **Cannabis strains**

[https://en.wikipedia.org/wiki/Cannabis\\_strains](https://en.wikipedia.org/wiki/Cannabis_strains)

Cannabis strains are either pure breeds or hybrid varieties of Cannabis, typically of the species *C. indica* or *C. sativa*. Varieties are developed to highlight a specific combination of properties of the plant or to establish marketing differentiation. Variety names are typically chosen by their growers, and often reflect properties of the plant, such as taste, color, smell,

### **Variety ambiguity**

A variety may refer ambiguously to different forms of cannabis:

**Clone-only variety** – A cannabis grower may grow a cannabis seed into a plant and find that this plant is unique in some way. The grower may make genetically identical clones of the plant and distribute these. A clone is the only way to propagate the exact genetic makeup that makes a variety unique; however, growing conditions greatly affect the plant and the final

**Stable seed variety** – For a cannabis breeder wishing to develop a new variety, the process is complicated and time consuming. It involves selectively choosing male and female cannabis plants and breeding them over the course of multiple generations. The final generation's seeds will have been stabilized by the breeder on the specific attributes chosen, though

**Unstable seed varieties** – While these can be produced more quickly, plants grown from these seeds may have widely varying characteristics. Reputable seed shops will not distribute unstable seed varieties, though some amateur growers might. Third-party growers may produce unstable derivatives from

**Wild varieties (landraces)** – Some varieties, such as Colombian and Thai refer to cannabis plants found growing wild in certain regions. Typically, these plants are used as bases for the production of more specialized

Additionally, black market Cannabis dealers may distribute marijuana that is misleadingly called by a variety name. For example, Skunk and G13 may be

### **Major variety types**

*Cannabis indica*

*Cannabis ruderalis*

*Cannabis sativa*

The Cannabis genus is typically considered to have two species, Cannabis indica and Cannabis sativa. A third species known as Cannabis ruderalis differs from the other two species in a few key ways. C. ruderalis is very short, produces only trace amounts of tetrahydrocannabinol (THC) and

Pure sativas are relatively tall (reaching as high as 4.5 meters), with long internodes and branches, and large, narrow-bladed leaves. Pure indica varieties are shorter and bushier, have wider leaflets, and are often favored by indoor growers. Sativas bloom later than indicas, often taking a month or two longer to mature. The subjective effects of sativas and indicas are said to differ, but the ratio of tetrahydrocannabinol (THC) to cannabidiol (CBD) in most named drug varieties of both types is similar (averaging about 200:1). Unlike most commercial drug varieties, indica landraces often consist of a mixture of plants with varying THC/CBD ratios. The relatively high CBD to THC ratio typical of hashish produced in regions where these landraces are

### **Varieties**

Indica

Lowryder

Royal Kush

White Widow

Sativa

Jack Herer (sativa-dominant)

In addition to "pure" indica, sativa, and ruderalis varieties, hybrid varieties with varying ratios of these three types are common. For example, the White Widow hybrid is purported to have about 60% "indica" and 40% "sativa" genetics. These hybrid varieties have combinations of traits derived from both parental types. There are also commercial crossbred hybrids which contain a mix of both ruderalis, indica and/or sativa genes (these hybrids are usually called autoflowering varieties). "Lowryder" is the most famous autoflowering hybrid and retains the auto-flowering characteristic of ruderalis plants, while also producing usable amounts of THC/CBD. Autoflowering marijuana varieties are considered advantageous by some growers due to their discreet size, short growing periods, and the fact that they do not rely

### **Variety naming**

Varieties are often named by the breeder or grower to differentiate one from another. In competitive legal markets, such as in Amsterdam, there is significant pressure to create unique varieties that dominate the market. This results in a number of distinct variety names that may refer to very similar

Likewise, when a variety becomes popular, many breeders and growers may produce variations of the same variety using the same or similar name. For example, Sour refers to a subset of sativa-dominant Cannabis strains.

### **Breeding new varieties**

Breeding involves pollinating a female cannabis plant with male pollen. This will happen naturally. However, the intentional creation of new varieties typically involves selective breeding in a controlled environment.

Often male plants, once identified by their ball-like stamen, will be separated from female flowers. This prevents accidental fertilization of the female plants, either to facilitate sinsemilla flowering or to provide more control over which male is chosen. Pollen produced by the male is caught and stored

The seeds produced by a germinated female will be F1 hybrids of the male and female. These offspring will not be identical to their parents. Instead, they will have characteristics of both parents. Advanced techniques can

A common technique to stabilize a cannabis variety is called "cubing", in which the breeder will seek specific traits in the hybrid offspring (e.g. greater resin production, tighter node spacing, etc.) and breed said offspring with a parent plant. The same traits are sought in the new inbred offspring, which are then again bred with the original parent plant. This process is called cubing because it usually repeated across three (or possibly more)

Seed shops sell both pure varieties that have specific aspects stabilized as well as unstabilized hybrids that may be of questionable quality.

Most cannabis varieties used today in North America are asexually propagated Indica varieties that were bred hydroponically to produce large

**See also**

Jack Herer

Malawi Gold (Chamba)

Autoflowering cannabis

*100*

*697 Cannabis strains*

*101*

*149 empty*

(if you wish to add more, just position the cursor at the last column, and press tab.)

NCCAM classifications – The National Center for Complementary and Alternative Medicine, or NCCAM, has classified complementary and alternative therapies into five different

Whole Medical Systems

Mind-Body Interventions

Biologically Based Therapies

Manipulative and body-based methods

Energy Therapies

*1 Touching Lives Title*

## **ARO-HEALING REVISED COMPLEMENTARY**

### **THERAPY (ARC)**

ARO-HEALING REVISED COMPLEMENTARY

THERAPY

AS A

WHOLE MEDICAL SYSTEM

**LYNETTE BARNARD**

**2 To make this Volume a guide or a study**

**Alternative Medicine is such a wide topic**

Alternative Medicine is such a wide topic that I think individual page specifications

This **specification** defines the HyperText Markup Language (HTML), the publishing language of the World Wide Web.

[www.w3.org/TR/html401](http://www.w3.org/TR/html401)

are almost mandatory.

required by law or mandate; compulsory.

"wearing helmets was made mandatory for pedal cyclists"

*synonyms:*

obligator  
y, compul  
sory, bind  
ing, requi  
red

We could start a discussion, or maybe we could even create a consensus on the common understanding of whole medical systems, about the functionality of the whole process.

You may wish to disagree, but I think best of all would be to work with me from page-to-page.

I don't think we need to do anything more to define a whole medical system - the parameters

*technical*

a numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation.

"there are three parameters by which a speaker is able to modify the meaning of the utterance—pitch, volume, and tempo"

a limit or boundary which defines the scope of a particular process or activity.

"the parameters within which the media work"

*synonyms:*

k, variabl  
e, limit, b  
oundary, l  
imiting fa  
ctor, limit  
ation, restr

*technicalconst  
ant*

"they set the  
parameters of  
the debate"

need to stay in place even if you decide not to agree with me from this point onwards.

The definition of *whole medical system* does not work for all whole medical systems:

1) because of the mystical

relating to mystics or religious mysticism.

"the mystical theology of Richard Rolle"

inspiring a sense of spiritual mystery, awe, and fascination.

"the mystical city of Kathmandu"

and vitalistic The theory or doctrine that life processes arise from or contain a non-material vital principle and cannot be explained entirely as physical and chemical phenomena

roots of some of the professions in the alternative medicinal field

2) by definition largely based on non-scientific methods.

Scientific method refers to the particular process of solving problems--based on observation, empiricity and attribute of repetitiveness.

[http://www.answers.com/Q/What\\_is\\_difference\\_between\\_scientific\\_method\\_and\\_non-scientific\\_method](http://www.answers.com/Q/What_is_difference_between_scientific_method_and_non-scientific_method)

A method that claims to be scientific involves the use of clear procedures which not only show how the results were achieved, but also clear enough for other researchers to attempt to repeat them and must also have empirical relevance to the world. Empirical relevance involves showing that statements, explanation etc. which are used or derived from this approach can be verified or checked out. A scientific method should be objective and not biased and should not rely on hearsay on unsubstantiated facts. A non-scientific method is not systematic and do not have principles in place that should be adhered to. Tshogofatso Rampatla

[http://www.answers.com/Q/What\\_is\\_difference\\_between\\_scientific\\_method\\_and\\_non-scientific\\_method](http://www.answers.com/Q/What_is_difference_between_scientific_method_and_non-scientific_method)

### **3 About the Author**

### **4 The advice and insight**

The advice and insight offered in this book, although based on the Author's extensive experience, are not intended to be substituted for the advice of your physician or other suitably qualified person.

Neither the Publisher nor the Author

accept responsibility for any legal or medical liability or

other consequences which may arise directly or indirectly as a

result of the use or misuse of the information contained in this

book.

You are advised to seek medical advice

from a suitably qualified practitioner about the treatment of your specific condition before the change or cessation of any

prescribed or recommended medication, or other treatment programme.

You are also advised to seek medical

advice from a suitably qualified practitioner

before adopting any treatment programme, whether it be recommended in this Volume or not.

***THREE PART MASSAGE AND HEALTH THERAPY SERIES:***

**THREE PART MASSAGE AND**

**HEALTH THERAPY SERIES VOLUME 2**

**1 OVERVIEW**

THE FOUNDING HISTORY OF A WHOLE MEDICAL SYSTEM

**2 GENERAL INFORMATION**

ARO-HEALING REVISED COMPLEMENTARY

THERAPY (ARC) AS A WHOLE MEDICAL SYSTEM

**4 ARO-HEALING REVISED COMPLEMENTARY**

**THERAPY (ARC) AS A WHOLE MEDICAL SYSTEM —**

MASSAGE HEALTH THERAPY

*5 Market research questionnaire*

Once I was questioned by a market researcher. It was an experience!

I had to sit in front of a laptop and watch three advertisements. The object of the research was to examine the psychological effect of advertising. Does a specific advertisement allow you to frown or smile?

In my experience how they advertise the product has nothing to do with the product. Oh? It has everything to do with the product! On a psychological level – yes!

Ads usually come and go. You would think the whole subject about ads is stupid, but let me tell you this. Ads impose on your subliminal reasoning. Unconsciously.

*6 Have a theme when marketing something*

**Volume 2 of ARC can be classified into 4 sections and 10 Chapters:**

## **VOLUME TWO**

**Section 1 Holistic, Natural, Therapeutic**

**Section 2 Whole Medical Systems**

**Section 3 ARC versus TCM**

**Section 4 Introduction to Psychology**

*Volume One*

*Aro-healing Touching Lives—Theories, Techniques and Therapies*  
*The Techniques and Therapies of Aro-healing*

*Volume Two*

*Aro-healing Revised Complementary Therapy (ARC) Touching*  
*Lives—ARC as a Whole Medical System*

*Aro-Technique Products and Product Ranges*

*Volume Three*

*Arochology Touching Lives—Therapies, Philosophies and Sciences*

*The Health Science Arochology*

*7 In this Volume and Volume 3 I will ...*

PART 1 THE INTRODUCTION OF HERBOLOGY

Naturopathy and Homeopathy

## PART 2 OTHER WHOLE MEDICAL SYSTEMS

Ayurvedic, Chiropractic, Tibetan .....

## PART 3 MASSAGE HEALTH THERAPY

ARC versus TCM

## PART 4 SCIENTIFIC SKEPTICISM

The Reasonable Feasibility Concept

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## ***PART 1 THE FOUNDING OF ARO-HEALING***

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**Aro-healing      ARC      Arochology**

Massage Therapy    Naturopathy    Psychology

Lymphatic Drainage    Herbology    Behaviour Modification

Sports Therapy    Massage Therapy    Massage Therapy

*13*

*Salt is born of the purest of parents: the sun and the sea ”*

**Pythagoras**

*14*

*empty*

*15*

*empty*

CHAPTER ONE

1 Alternative Medicine or Whole Medical System

Alternative Medicine

*Alternative medical systems*

Alternative medical systems

[http://en.wikipedia.org/wiki/Category\\_talk:Alternative\\_medical\\_systems](http://en.wikipedia.org/wiki/Category_talk:Alternative_medical_systems)

Terms and concepts in alternative medicine

*The NCCAM name for this category is "whole medical systems."*

Some people practice this category as Complementary therapies, they include mainstream medicine; they are not recognized as complete systems of health by the mainstream.

The use of the word 'whole' in this context refers to the ability of a medical system to treat every condition that it considers 'pertaining to one's health', not to whether or not it addresses psycho-social-spiritual conditions).

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### *Proposal to evaluate definition*

#### **Proposal to evaluate definition**

It appears that the NCCAM name for this category is actually "whole medical systems".

The NCCAM may believe these are whole medical systems, but a lot of people practice them as Complementary therapies, i.e. they use mainstream medicine too, and they are not recognised as complete systems on which people should rely wholly by the mainstream and consensus. I guess that's why the category was named 'alternative medical systems'. They are 'alternative' in terms of the mainstream, mostly not endorsed by normal doctors; they are alternative medical systems - that's what most people would call them. I use a neutral point of view, and put views which are not the mainstream views in perspective.

It appears that the terms are used interchangeably to keep it at alternative medical systems, because that term is

(1) understandable to the uninformed lay person

(2) excludes mainstream medicine (which is surely a "whole" medical system itself, since the use of the word whole refers to the ability of the medical system to treat every health condition, not to whether it can address psycho-social-spiritual conditions).

"NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine." Some CAMS are whole, many are not. This is an incorrect statement in the formation of a definition for alternative therapies or complementary therapies, and whole medical systems.

Whole medical systems are:

Acupuncture

Naturopathic medicine

Homeopathy

Ayurveda

Chiropractic

Osteopathy



*Glossary of alternative medicine*

[http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

**A**

*Acupuncture* is the practice of inserting very thin needles into specific acupuncture points or combinations of points on the body.

*Alternative Medical Systems* is a NCCAM classification for alternative medicine that are built upon a complete system of ideas and practice. *It can include:*

Naturopathic medicine

Homeopathy

Ayurveda

Chiropractic

Osteopathy

Traditional Chinese medicine

*Anthroposophical medicine* is a holistic approach to healing developed in the early twentieth century by Rudolf Steiner and Ita Wegman. Practitioners supplement the uniquely anthroposophical approach with conventional and homeopathic therapies and remedies.

*Anthroposophical doctors* must have a recognized medical degree (M.D., D.O., or equivalent).

Anthroposophic Pharmacy is the discipline related to conceiving, developing and producing medicinal products according to the **anthroposophic**

understanding of man, nature, substance and pharmaceutical processing. Anthroposophic medicinal products are used within anthroposophic medicine.

*Aromatherapy* is the use of essential oils and other aromatic compounds from plants to affect someone's mood or health.

*Attachment therapy* is a form of therapy aimed at children with alleged 'attachment disorders', usually fostered or adopted children. It is substantially based on outdated notions of suppressed rage due to early adverse experiences. Traditionally it uses a variety of confrontational and physically coercive techniques of which the most common form is holding therapy, accompanied by parenting methods which emphasize obedience.

Following implication in a number of child death and maltreatment cases in the USA there has been a recent move away from coercion by some leading theorists and practitioners. It is largely **unvalidated**.

## **B**

*Bates method* – an alternative approach to eyesight improvement and maintenance. It is based on the belief that errors in visual accommodation are due to mental strain, and that vision may be improved by appropriate relaxation techniques.

*"Biologically based therapies"*, is the precise name of a NCCAM classification, for alternative treatments that use substances found in nature and/or some other natural therapy. *It can include"*

*Chinese food therapy*

Naturopathy

Natural health

Natural therapy

Diet and Food

Exercise

Herbal therapy

Orthomolecular medicine

Fasting

Macrobiotic lifestyle

Dietary supplements

Urine therapy

*The Biomedical model* of health is a conceptual model of illness that excludes psychological and social factors and includes only biological factors in an attempt to understand a person's illness. According to this model, health constitutes the freedom from disease, pain, or defect, thus making the normal human condition health. The model's focus on the physical processes, such as the pathology, the biochemistry and the physiology of a disease, does not take into account the role of social factors or individual subjectivity. The model also overlooks the fact that the diagnosis (that will affect treatment of the patient) is a result of negotiation between doctor and patient.

*Body work is any therapeutic, healing, or personal development work* that involves some form of energetic work, touching, or the physical manipulation of a practically oriented physical and somatic understanding of the body.[citation needed]

## C

CAM is for complementary and alternative medicine, treatments and theories on the nature of health and illness, many of them unrelated, which have in common that they are not employed by the conventional medical establishment.

While in conventional medicine, *chelation therapy* is used only to treat heavy metal poisoning. Some alternative practitioners advocate the use of chelation therapy to treat coronary artery disease.

*Chinese medicine* – the group of philosophies embodied by Chinese medicine are, more accurately, referred to as Oriental Medicine with roots in many different Asian countries. This millennia-old Asian medical tradition works to bring balance to the body through acupuncture, massage, Eastern herbalism, diet; and lifestyle changes such as martial arts and meditation.

The practice of *Chiropractic* is a manual therapy involving the manipulation of the vertebral subluxation to restore proper motion, **biomechanics**,

and nerve flow from the brain to the body.

*Christian Science* is a denomination that teaches that Christian healing as practiced by Jesus of Nazareth and his followers for several centuries, was in fact not a short-term **dispensation**

to induce faith, but had an underlying principle (specifically God) and method. While its practice is regarded within the **denomination**

as incompatible with medical care, it also respects the **philanthropy**

of the medical faculty and is non-compulsory. Resort to Christian Science may be private or involve the care of a Christian Science practitioner.

*Colorpuncture* is an alternative medicine practice asserting that light can be used to stimulate acupuncture points for the purpose of balancing energy in the body to promote healing and health. It is also known as color light acupuncture in North America. It is a form of color therapy.

Complementary medicine is treatments that are used alongside ("complementary to") conventional medicine.

## **D**

*Diet-based therapy* uses a variety of diets:

to improve health and longevity,

to control weight, and

to treat specific health conditions such as high cholesterol.

Breatharian

Fruitarianism

List of diets

Living foods diet

Macrobiotic lifestyle

Okinawa diet

Ovo-lacto vegetarian

Raw foodist

Vegan

Vegetarianism

Low-fat diet

Low-carb diet (Zone diet, Atkins diet)

*The Doctrine of signatures* was developed around 1500 and claims that a plant's physical appearance reveals its medical value. The Doctrine of Signatures is often associated with Western herbalism.

## **E**

*Eclectic medicine* was a nineteenth-century system of medicine used in North America that treated diseases by the application of single herbal remedies to effect specific cures of certain signs and symptoms.

*Energy medicine* is a NCCAM classification for alternative treatments that involve the use of **veritable**

(i.e., that which can be measured) and **putative**

(i.e., that which have yet to be measured) energy fields. It can include:

Magnet therapy

Reiki

Shiatsu

Therapeutic Touch

Eden Energy Medicine – approach developed by Donna Eden

*Exercise-based therapy* uses a variety of traditional physical movement

to improve health and **longevity**,

to increase, lengthen & tone muscle mass,

gain flexibility,

treat specific health conditions and

relieve stress. It can include:

Aerobic exercise

Aerobics

Body-building

Feldenkrais method

Martial arts

Physical Culture

Pilates

PNF stretching

Stretching

Some forms of Qigong

T'ai chi

Walking

Weight training

Yoga

**F**

*Feldenkrais Method* is an educational system centered on movement, and aim to expand and refine the use of the self through awareness.

*Flower essence therapy* is regarded by some as a sub-category of homeopathy (which uses homeopathic dilutions of flowers). This practice was begun by Edward Bach with the Bach flower remedies, but is now practiced more widely.

*Folk medicine* is the collection of procedures traditionally used for treatment of illness and injury, aid to childbirth, and maintenance of wellness.

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## **G**

Grahamism, named for Sylvester Graham, recommended hard mattresses, open bedroom windows, chastity,

cold showers, loose clothing, pure water and vigorous exercise.[citation needed]

## **H**

Herbalism is the practice of making or prescribing herbal remedies for medical conditions.

Heroic medicine is any medicine or method of treatment that is aggressive or daring in a dangerously ill patient. It generally includes the pre-scientific treatments of 18th-century doctors, such as blood letting.

Holism is the study of wholeness in health, science, politics, or any other area of life.

Hydrotherapy is the external use of water in the medical treatment of disease, such as the use of baths, the application of hot and cold compresses or sheet packs, and shower sprays. These applications use water as a medium for delivery of heat and cold to the body, capitalising on the thermoregulatory properties of the body for therapeutic effect.

Homeopathy -

I

[http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

Integrative medicine as defined by National Center for Complementary and Alternative Medicine combines conventional medical treatments and CAM treatments for which there is some claimed scientific evidence of their safety and effectiveness.[ Integrative medicine also adopts the term "integrative health" which incorporates mental, spiritual and community wellness with personal health.

Iridology (known as iridodiagnosis) is an alternative medicine technique whose proponents believe that patterns, colors, and other characteristics of the iris can be examined to determine information about a patient's systemic health. Practitioners match their observations to iris charts which divide the iris into zones corresponding to specific parts of the human body.

## **L**

Life extension is a movement the goal of which is to live longer through intervention, and to increase maximum lifespan or average lifespan, especially in mammals. Researchers of life extension are a subclass of biogerontologists known as "biomedical gerontologists".

List of life extension related topics.

Lifestyle is the particular attitudes, habits, or behaviors associated with an individual.

Lifestyle diseases are diseases that increase in frequency as countries become more industrialized and people live longer.

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## **M**

Manipulative and body-based methods, is the precise name of a NCCAM classification, for alternative treatments that are based on manipulation and/or movement of one or more parts of the body.

It can include:

Acupressure

Alexander Technique

Body work

Bowen Technique

Chiropractic

Feldenkrais Method

Manipulative therapy

Massage therapy

Medical acupuncture

Metamorphic Technique

Myofascial Release

Naprapathy

Osteopathy

Rolfing

Shiatsu

Somatics

Taijiquan

Trager Approach

Tui na

Zero Balancing

Manual Lymphatic Drainage (MLD) is a type of gentle massage which encourages the natural circulation of the lymph through the body.

The mind-body connection idea says that the causes, development, and outcomes of an illness are determined as much from the interaction of psychological and social factors as they are due to the biological factors of health. Many mind-body therapists take the definition of "mind-body connection" further and state that the root cause of illness is actually in the mind and spirit, and that for complete and permanent eradication of an illness, the cause must be addressed and cure focused there.

Mind-Body Intervention is the name of a NCCAM classification, that covers a variety of techniques designed to enhance the mind's capacity to affect bodily function and symptoms.

*It can include:*

Aromatherapy

Art Therapy

Auto-suggestion

Bach Flower Therapy

Buteyko method

Eutony

Feldenkrais method

Hatha yoga

Hypnotherapy

Metamorphic Technique

Journaling

Meditation

Music Therapy

Nia technique

Reiki

Self-hypnosis

Support groups

Taijiquan

Trager Approach

Visualization

Vivation

Yoga

**N**

"Nature cure" is the progenitor of naturopathy in Europe. It postulates that all disease is due to violations of nature's laws, and that true healing consists in a return to natural habits.

Natural health is an eclectic self-care system of natural therapies that purports to build and restore health by working with the natural recuperative powers of the human body.

Naturopathy is the eclectic practice of Naturopathic Doctors (N.D.) using many different natural therapies as treatment. The original method of treatment of Naturopathy was the water cure.

Natural therapy is the treatment method used by advocates of natural health.

NCCAM classifications – The National Center for Complementary and Alternative Medicine, or NCCAM, has classified complementary and alternative therapies into five different categories, or domains:

Whole Medical Systems

Mind-Body Intervention

Biologically Based Therapy

Manipulative and body-based methods

Energy Therapy

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## Q

Qigong is an exercise aspect of Chinese medicine. Qigong is mostly taught for health maintenance purposes, but there are also some who teach it, especially in China, for therapeutic interventions. There are hundreds of different schools, and it is also an adjunct training of many East Asian martial arts.

## R

Reflexology

Reiki is a form of treatment developed by Mikao Usui in Japan around 1922. Practitioners use their hands on or above the patient to control, increase or open up a postulated energy, "ki", in the body. Training is usually through short courses, after which one can become certified as a "Reiki master".

## T

Thalassotherapy – the use of seawater as a form of therapy. Thalassotherapy was popular in England during the second half of the eighteenth century, with Doctor Richard Russell credited as playing a significant role in its popularity.

Therapeutic music – music played live at the bedside of persons who are faced with physical, emotional, and spiritual challenges, generally in the person's home, a hospice or in a clinical setting.[\[citation needed\]](#)

Traditional Chinese medicine (TCM) is a system of health care which is based on the Chinese notion of harmony and balance inside the human body as well as harmony between the body and its outside environment.

TCM can include the following components:

Acupressure

Acupuncture

Chinese martial arts

Chinese pulse diagnosis

Coin rubbing

Cupping

Five Elements

Food therapy

Herbology

Jing

Meridian

Moxibustion

Neigong

Qigong

San Jiao

Shen

Tao Yin

TCM model of the body

Trigger point

Tui na

Yin and yang

Zang Fu theory

## History of traditional Chinese medicine

Traditional Japanese medicine – Pre-Western Japanese medicine was strongly influenced by traditional Chinese medicine and is often seen as a sub-category of TCM.

It includes the following practices:

Shiatsu

Japanese martial arts

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## U

Unani

Urography is a specialized branch of alternative medicine, including any sort of oral or external application of urine for medicinal or cosmetic purposes.

## W

Water cure (therapy) in the therapeutic sense is medical treatment by hydrotherapy. In the nineteenth century, the term "Water Cure" was used synonymously with "hydropathy", which itself is the 19th century term for hydrotherapy. Water cures include a broad range of practices – essentially any therapeutic uses of water.

*See Water cure (therapy) and Hydrotherapy for further discussion and links.*

Wellness has been used in CAM contexts since Halbert L. Dunn began using the phrase "high level wellness" in the 1950s, based on a series of lectures at a Unitarian Universalist Church in Arlington, VA. Wellness is generally used to mean a healthy balance of the mind-body and spirit that results in an overall feeling of well-being.

## Y

Yoga is a diverse and ancient East Indian practise. There are many different styles and schools of yoga. It is generally a combination of breathing exercises, physical postures, and meditation, that calms the nervous system and balances body, mind, and spirit. It is thought to prevent specific diseases and maladies by relaxing the body, deepening respiration and calming the mind. Yoga has been used to lower blood pressure, reduce stress, and improve flexibility, concentration, sleep, and digestion. It has also been used as supplementary therapy for such diverse conditions as cancer, diabetes, asthma, and AIDS.

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*Medicine ...*

*Anthroposophic medicine*

*Whole medical systems*

*NCCAM classifications*

*Dietary Supplements - NCCAM Clearinghouse*

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*Alternative medicine*

*Alternative medicine*

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

## **Alternative medicine**

### *Alternative medical systems*

Alternative medicine is any practice that has the healing effect of medicine, but is not based on evidence gathered with the scientific method.

Often not part of conventional treatment, alternative medicine is usually based on tradition, belief in supernatural energies, pseudo-science, errors in reasoning, propaganda, or fraud.

Alternative therapies lack scientific validation, and their effectiveness is either unproved or disproved.

More broadly, they have also been defined as the treatments that are not part of the conventional, science based healthcare system.

Alternative medicine is sometimes grouped with complementary medicine which, in general, refers to the same interventions when used in conjunction with mainstream techniques, under the umbrella term complementary and alternative medicine, or CAM.

Integrative medicine (integrative health) is the combination of the practices and methods of alternative medicine with evidence based medicine.

Critics maintain that the terms “complementary” and “alternative medicine” are deceptive euphemisms meant to give an impression of medical authority.

Alternative medicine methods are diverse in their foundations and methodologies. Methods may incorporate or base themselves on traditional medicine, folk knowledge, spiritual beliefs, or newly conceived approaches claiming to heal.

Many of the claims regarding the efficacy of alternative medicines are controversial. Research on alternative medicine is frequently of low quality and methodologically flawed.

The safety of alternative medicine is also controversial. Some alternative treatments have been associated with unexpected side effects, which can be fatal.

Alternative treatments are used in place of conventional science based medicines, but even with the very safest alternative medicines, where they are ineffective, delays and absences of conventional science based medicine has resulted in deaths.

Some voluntary health agencies focused upon health fraud, misinformation, and quackery as public health problems, have been highly critical of alternative medicine generally or more specifically.

## **Terminology**

"Alternative medicine" refers to any practice that is put forward as having the healing effects of medicine, but is not based on evidence gathered with the scientific method, when used independently or in place of medicine based on science. Alternative medical systems can only exist when there is a identifiable, regularized and authoritative medical orthodoxy, such as arose in the west during the nineteenth-century, to which they can function or act as an alternative.

"Complementary medicine" refers to use of alternative medicine alongside conventional science based medicine, in the belief that it increases the effectiveness. An example of “complementary medicine” is use of the alternative medicine called acupuncture (sticking needles in the body to influence the flow of a supernatural energy), along with using medicine based on science, in the belief that the alternative medicine increases the effectiveness of the medicine based only on science, which does not address problems with the flow of the supernatural energy. The alternative medicine is thus believed to “complement” medicine that is based on science.

"CAM" is an abbreviation for "complementary and alternative medicine".

The term "Integrative medicine" ("integrated medicine") is used in two different ways. One use refers to a belief that medicine based on science can be "integrated" with practices that are not. Another use refers only to a combination of alternative medical treatments with conventional science based treatments that have some scientific proof of efficacy, in which case it is identical with CAM. Some well known advocates of integrative medicine claim that it also addresses alleged problems with medicine based on science, which are not addressed by CAM. For example, Ralph Snyderman and Andrew Weil state that "integrative medicine is not synonymous with complementary and alternative medicine. It has a far larger meaning and mission in that it calls for restoration of the focus of medicine on health and healing and emphasizes the centrality of the patient-physician relationship."

"Whole medical systems" is used in two different ways.

One refers to a spiritual belief, that "spiritual wholeness" is the root of physiological and physical well-being. Ayurveda, Chinese medicine, Homeopathy and Naturopathy are cited as Another use is that of the National Institute of Health's National Center for Complementary and Alternative Medicine (NCCAM), to differentiate widely comprehensive systems of practice, from specific components of the system, or from practices that claim to heal only a limited kind of specific medical conditions. An example is Ayurvedic medicine (a traditional medicine of India based in part on religious beliefs and in part on traditional use of herbs), which includes many practices and claims to treat many conditions, as compared to a specific herbal remedy within the Ayurvedic medicine system.

Alternative medicine often relies on using loose language to give the appearance of effectiveness or to suggest that a dichotomy exists when it does not. One example of this is the use of "Western medicine" and "Eastern medicine" to suggest that the difference is not between evidence based medicine and treatments which don't work, but a cultural difference between the asiatic east and the European west.

## **Characterization**

There is no clear and consistent definition for either alternative or complementary medicine.

### *Self-characterization*

The US National Center for Complementary and Alternative Medicine (NCCAM) defines CAM as "a group of diverse medical and healthcare systems, practices, and products, that are not currently part of conventional medicine", in a context where conventional medicine is that which is scientifically proven. This definition of CAM is widely known and used and is inclusive of many different types of therapies and products.

The Danish Knowledge and Research Center for Alternative Medicine an independent institution under the Danish Ministry of the Interior and Health (Danish abbreviation: ViFAB) uses the term "alternative medicine" for:

Treatments performed by therapists that are not authorized healthcare professionals

Treatments performed by authorized healthcare professionals, but those based on methods otherwise used mainly outside the healthcare system. People without a healthcare authorisation must be able to perform the treatments.

### *Institutions*

The World Health Organization defines complementary and alternative medicine as a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system.

In a consensus report released in 2005, entitled Complementary and Alternative Medicine in the United States, the Institute of Medicine (IOM) defined complementary and alternative medicine (CAM) as the non-dominant approach to medicine in a given culture and historical period. A similar definition has been adopted by the Cochrane Collaboration, and official government bodies such as the UK Department of Health. The Cochrane Collaboration Complementary Medicine Field finds that what is considered complementary or alternative practices in one country may be considered conventional medical practices in another. Their definition is, therefore, general: "complementary medicine includes all such practices and ideas that are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness, or promoting health and well-being." As an example biofeedback is commonly used within the Physical Medicine & Rehabilitation community but is considered alternative within the medical community as a whole. While some herbal therapies are mainstream in Europe, but are alternative in the United States.

Proponents of evidence-based medicine, such as the Cochrane Collaboration, use the term alternative medicine but agree that all treatments, whether "mainstream" or "alternative", ought to be held to the standards of the scientific method.

The United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using scientific methods."

### *Scientists*

Numerous mainstream scientists and physicians have commented on and criticised alternative medicine.

A clinical review published in the British Medical Journal defined complementary and alternative medicine as "group of therapeutic and diagnostic disciplines that exist largely outside the institutions where conventional health care is taught and provided."

There is a debate among medical researchers over whether any therapy may be properly classified as 'alternative medicine'. Some claim that there is only medicine that has been adequately tested and that which has not. They feel that healthcare practices should be classified based solely on scientific evidence. If a treatment has been rigorously tested and found safe and effective, traditional medicine will adopt it regardless of whether it was considered "alternative" to begin with. It is thus possible for a method to change categories (proven vs. unproven), based on increased knowledge of its effectiveness or lack thereof. Prominent supporters of this position include George D. Lundberg, former editor of the Journal of the American Medical Association (JAMA).

David M. Eisenberg, an integrative medicine researcher, defines it as "medical interventions not taught widely at US medical schools or generally available at US hospitals," NCCAM states that formerly unproven remedies may be incorporated into conventional medicine if they are shown to be safe and effective. Barrie R. Cassileth, a researcher of complementary and alternative medicine, has summed up the situation as "not all mainstream physicians are pleased with CAM, with current efforts to integrate CAM into mainstream medicine, or with a separate NIH research entity for "alternative" medicine.

Stephen Barrett, founder and operator of Quackwatch, argues that practices labeled "alternative" should be reclassified as either genuine, experimental, or questionable. Here he defines genuine as being methods that have sound evidence for safety and effectiveness, experimental as being unproven but with a plausible rationale for effectiveness, and questionable as groundless without a scientifically plausible rationale. He has concerns that just because some "alternatives" have merit, there is the impression that the rest deserve equal consideration and respect even though most are worthless. He says that there is a policy at the NIH of never saying something doesn't work only that a different version or dose might give

Edzard Ernst, professor of complementary medicine, characterizes the evidence for many alternative techniques as weak, non-existent, or negative, but states that evidence exists for others, in particular certain herbs and acupuncture. Ernst has concluded that 95% of the alternative treatments he and his team have studied, including acupuncture, herbal medicine, homeopathy, and reflexology, are, according to The Economist, "statistically indistinguishable from placebo treatments."

Richard Dawkins, an evolutionary biologist, defines alternative medicine as a "set of practices that cannot be tested, refuse to be tested, or consistently fail tests." He also states that "there is no alternative medicine. There is only medicine that works and medicine that doesn't work." He says that if a technique is demonstrated effective in properly performed trials, it ceases to be alternative and simply becomes medicine.

A letter by four Nobel Laureates and other prominent scientists deplored the lack of critical thinking and scientific rigor in National Institutes of Health supported alternative medicine research. In 2009 a group of scientists made a proposal to shut down the National Center for Complementary and Alternative Medicine. They argued that the vast majority of studies were based on unconventional understandings of physiology and disease and have shown little or no effect. Further, they argue that the field's more-plausible interventions such as diet, relaxation, yoga and botanical remedies can be studied just as well in other parts of NIH, where they would need to compete with conventional research projects.

These concerns are supported by negative results in almost all studies conducted over ten years at a cost of \$2.5 billion by the NCCAM. R. Barker Bausell, a research methods expert and author of "Snake Oil Science" states that "it's become politically correct to investigate There are concerns that just having NIH support is being used to give unfounded "legitimacy to treatments that are not legitimate."

Wallace Sampson, an editor of *Scientific Review of Alternative Medicine* and a Stanford University professor of medicine write that CAM is the "propagation of the absurd" based on the example that alternative and complementary have been substituted for quackery, dubious and implausible and concerns that CAM tolerates contradiction without thorough reason and experiment.

#### *Popular press*

The Washington Post reports that a growing number of traditionally trained physicians practice integrative medicine, which it defines as "conventional medical care that incorporates strategies such as acupuncture, reiki and herbal remedies."

An editorial in the *Economist* characterized alternative medicine as mostly "quackery" and described the vast majority as offering nothing more than the placebo effect. It suggested that, "Virtually all alternative medicine is bunk; but the placebo effect is rather interesting."

#### **Classifications**

NCCAM has developed one of the most widely used classification systems for the branches of complementary and alternative medicine. It classifies complementary and alternative therapies into five major groups, which have some overlap.

Whole medical systems: cut across more than one of the other groups; examples include Traditional Chinese medicine, Naturopathy, Homeopathy, and Ayurveda

Mind-body medicine: takes a holistic approach to health that explores the interconnection between the mind, body, and spirit. It works under the premise that the mind can affect "bodily functions and symptoms"

Biology-based practices: use substances found in nature such as herbs, foods, vitamins, and other natural substances

Manipulative and body-based practices: feature manipulation or movement of body parts, such as is done in chiropractic and osteopathic manipulation

Energy medicine: is a domain that deals with putative and verifiable energy fields:

Biofield therapies are intended to influence energy fields that, it is purported, surround and penetrate the body. No empirical evidence has been found to support the existence of the putative energy fields on which these therapies are predicated.

Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current, or direct-current fields in an unconventional manner.

#### **Usage**

##### *Further information: List of branches of alternative medicine*

Age-adjusted percent of adults who have used complementary and alternative medicine: United States, 2002

A 2011 multi-National systematic review concluded that about 40% of cancer patients use some form of complementary and alternative medicine. Alternative medicine varies from country to country. Jurisdictions where alternative medical practices are sufficiently widespread may license and regulate them. Edzard Ernst has said that in Austria and Germany complementary and alternative medicine is mainly in the hands of physicians, while some estimates suggest that at least half of American alternative practitioners are physicians. In Germany herbs are tightly regulated: half are prescribed by doctors and covered by health insurance based on their Commission E legislation.

Many people utilize mainstream medicine for diagnosis and basic information, while turning to alternatives for therapy or health-enhancing measures. Studies indicate that alternative approaches are often used in conjunction with conventional medicine. This is referred to by NCCAM as integrative (or integrated) medicine because it "combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness." According to Andrew T. Weil M.D., a leading proponent of integrative medicine, the principles of integrative medicine include: appropriate use of conventional and CAM methods; patient participation; promotion of health as well as treatment of disease; and a preference for natural, minimally-invasive methods.

A 1997 survey found that 13.7% of respondents in the United States had sought the services of both a medical doctor and an alternative medicine practitioner. The same survey found that 96% of respondents who sought the services of an alternative medicine practitioner also sought the services of a medical doctor in the past 12 months. Medical doctors are often unaware of their patient's use of alternative medical treatments as only 38.5% of the patients alternative therapies were discussed with their medical doctor.

Edzard Ernst, Professor of Complementary Medicine at the University of Exeter, wrote in the Medical Journal of Australia that "about half the general population in developed countries use complementary and alternative medicine (CAM)." Survey results released in May 2004 by the National Center for Complementary and Alternative Medicine, part of the United States National Institutes of Health, found that in 2002 62.1% of adults in the country had used some form of CAM in the past 12 months and 75% across lifespan (though these figure drop to 36.0% and 50% if prayer specifically for health reasons is excluded); this study included yoga, meditation, herbal treatments and the Atkins diet as CAM. Another study suggests a similar  
A British telephone survey by the BBC of 1209 adults in 1998 shows that around 20% of adults in Britain had used alternative medicine in the past 12 months. Ernst has been active politically on this issue as well, publicly requesting that Prince Charles recall two guides to alternative medicine published by the Foundation for Integrated Health, on the grounds that "[t]hey both contain numerous misleading and inaccurate claims concerning the supposed benefits of alternative medicine" and that "[t]he nation cannot be served by promoting ineffective and sometimes dangerous alternative treatments." In general, he believes that CAM can and should be subjected to scientific testing.

The use of alternative medicine in developed countries appears to be increasing. A 1998 study showed that the use of alternative medicine had risen from 33.8% in 1990 to 42.1% in 1997. In the United Kingdom, a 2000 report ordered by the House of Lords suggested that "...limited data seem to support the idea that CAM use in the United Kingdom is high and is increasing." In developing nations, access to essential medicines is severely restricted by lack of resources and poverty. Traditional remedies, often closely resembling or forming the basis for alternative remedies, may comprise primary healthcare or be integrated into the healthcare system. In Africa, traditional medicine is used for 80% of primary healthcare, and in developing nations as a whole over one-third of the population lack access to essential medicines.

#### *page 10*

Advocates of alternative medicine hold that the various alternative treatment methods are effective in treating a wide range of major and minor medical conditions, and that recently published research (such as Michalsen, 2003, Gonsalkorale 2003, and Berga 2003) proves the effectiveness of specific alternative treatments. They assert that a PubMed search revealed over 370,000 research papers classified as alternative medicine published in Medline-recognized journals since 1966 in the National Library of Medicine database. See also Kleijnen 1991, and Linde 1997.

Complementary therapies are often used in palliative care or by practitioners attempting to manage chronic pain in patients. Complementary medicine is considered more acceptable in the interdisciplinary approach used in palliative care than in other areas of medicine. "From its early experiences of care for the dying, palliative care took for granted the necessity of placing patient values and lifestyle habits at the core of any design and delivery of quality care at the end of life. If the patient desired complementary therapies, and as long as such treatments provided additional support and did not endanger the patient, they were considered acceptable." The non-pharmacologic interventions of complementary medicine can employ mind-body interventions designed to "reduce pain and concomitant mood disturbance and increase quality of life." Physicians who practice complementary medicine usually discuss and advise patients as to available complementary therapies. Patients often express interest in mind-body complementary therapies because they offer a non-drug approach to treating some health conditions. Some mind-body techniques, such as cognitive-behavioral therapy, were once considered complementary medicine, but are now a part of conventional medicine in the United States. "Complementary medicine treatments used for pain include: acupuncture, low-level laser therapy, meditation, aroma therapy, Chinese medicine, dance therapy, music therapy, massage, herbalism, therapeutic touch, yoga, osteopathy, chiropractic, naturopathy, and homeopathy."

In defining complementary medicine in the UK, the House of Lords Select Committee determined that the following therapies were the most often used to complement conventional medicine: Alexander technique, Aromatherapy, Bach and other flower remedies, Body work therapies including massage, Counselling stress therapies, hypnotherapy, Meditation, Reflexology, Shiatsu, Maharishi Ayurvedic medicine, Nutritional medicine, and Yoga.

## **United States**

A botánica, such as this one, caters to the Latino community and sells folk medicine alongside statues of saints, candles decorated with prayers, and other items.

A 2002 survey of US adults 18 years and older conducted by the National Center for Health Statistics (CDC) and the National Center for Complementary and Alternative Medicine

74.6% had used some form of complementary and alternative medicine (CAM).

62.1% had done so within the preceding twelve months.

When prayer specifically for health reasons is excluded, these figures fall to 49.8% and 36.0%, respectively.

45.2% had in the last twelve months used prayer for health reasons, either through praying for their own health or through others praying for them.

54.9% used CAM in conjunction with conventional medicine.

14.8% "sought care from a licensed or certified" practitioner, suggesting that "most individuals who use CAM prefer to treat themselves."

The Dietary Supplement Industry is expected to be \$250 Billion by 2016 worldwide

Most people used CAM to treat and/or prevent musculoskeletal conditions or other conditions associated with chronic or recurring pain.

"Women were more likely than men to use CAM. The largest sex differential is seen in the use of mind-body therapies including prayer specifically for health reasons".

"Except for the groups of therapies that included prayer specifically for health reasons, use of CAM increased as education levels increased".

The most common CAM therapies used in the US in 2002 were prayer (45.2%), herbalism (18.9%), breathing meditation (11.6%), meditation (7.6%), chiropractic medicine (7.5%), yoga (5.1%), body work (5.0%), diet-based therapy (3.5%), progressive relaxation (3.0%), mega-vitamin therapy (2.8%) and Visualization (2.1%)

In 2004, a survey of nearly 1,400 U.S. hospitals found that more than one in four offered alternative and complementary therapies such as acupuncture, homeopathy, and massage

A 2008 survey of US hospitals by Health Forum, a subsidiary of the American Hospital Association, found that more than 37 percent of responding hospitals indicated they offer one or more alternative medicine therapies, up from 26.5 percent in 2005. Additionally, hospitals in the southern Atlantic states were most likely to include CAM, followed by east north central states and those in the middle Atlantic. More than 70% of the hospitals offering CAM were in urban areas.

In 2011 the Millennium Cohort Study (United States) found that 39% of the then currently enrolled 44,287 cohort members reported using at least one CAM therapy.

The National Science Foundation has also conducted surveys of the popularity of alternative medicine. After describing the negative impact science fiction in the media has on public attitudes and understandings of pseudo-science, and defining alternative medicine as all treatments that have not been proven effective using scientific methods, as well as mentioning the concerns of individual scientists, organizations, and members of the science policy-making community, it commented that "nevertheless, the popularity of alternative medicine appears to be increasing."

In the state of Texas, physicians may be partially protected from charges of unprofessional conduct or failure to practice medicine in an acceptable manner, and thus from disciplinary action, when they prescribe alternative medicine in a complementary manner, if board specific practice requirements are satisfied and the therapies utilized do not present "a safety risk for the patient that is unreasonably greater than the conventional treatment for the patient's medical condition."

## *Denmark*

45.2% of the Danish population aged 16 or above had in 2005 used alternative medicine at some point in life. 22.5% had used alternative medicine within the previous year.

The most popular types of therapies within the previous year (2005) are:

Massage, osteopathy or other manipulative techniques (13.2 percent)

Reflexology (6.1 percent)

Acupuncture (5.4 percent)

More results of statistical surveys on alternative medicine in Denmark is available on ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the pages on Statistics: <http://www.vifab.dk/uk/alternative+medicine/statistics>

#### *Use among medical students*

68% of the medical students in Denmark were in 2008 using or had used alternative therapy.

The *most commonly used types of alternative medicine were:*

Herbal medicines and Dietary supplements (50 percent)

Acupuncture (18 percent)

Reflexology (18 percent).

#### *Education*

The examples and perspective in this section may not represent a worldwide view of the subject. Please improve this article and discuss the issue on the talk page. (January 2010)

In the United States, increasing numbers of medical colleges have started offering courses in alternative and complementary medicine. A 1998 study reported "There is tremendous heterogeneity and diversity in content, format, and requirements among courses in complementary and alternative medicine at US medical schools". Common topics included chiropractic, acupuncture, homeopathy, herbal therapies, and mind-body techniques. In three separate research surveys that surveyed 729 schools (125 medical schools offering a Doctor of Medicine degree (M.D.), 25 medical schools offering a Doctor of Osteopathic Medicine degree (D.O.), and 585 schools offering a nursing degree), 60% of the medical schools, 95% of osteopathic medical schools and 84.8% of the nursing schools teach some form of CAM. The University of Arizona College of Medicine offers a program in Integrative Medicine under the leadership of Andrew Weil that trains physicians in various branches of alternative medicine that "...neither rejects conventional medicine nor embraces alternative practices uncritically." The Florida Institute for Complementary and Alternative Medicine is the only state accredited school which can confer an Alternative Medicine degree.[citation needed] Accredited Naturopathic colleges and universities are also increasing in number and popularity in Canada and the USA. (See Naturopathic medical school in North America).

A 2001 survey of European universities found that unconventional medicine courses are widely represented at European universities. They cover a wide range of therapies and many of them are used clinically. Research work is under way at several faculties. A 2006 survey showed that 40% of the responding European universities were offering some form of CAM training."

Universities in the United Kingdom have been dropping their degree courses in alternative medicine, and as of 2012, no more degrees will be offered in such courses as homeopathy, naturopathy, and reflexology.

#### *Regulation*

Because of the uncertain nature of various alternative therapies and the wide variety of claims different practitioners make, alternative medicine has been a source of vigorous debate, even over the definition of alternative medicine. Dietary supplements, their ingredients, safety, and claims, are a continual source of controversy. In some cases, political issues, mainstream medicine and alternative medicine all collide, such as in cases where synthetic drugs are legal but the herbal sources of the same active chemical are banned.

In other cases, controversy over mainstream medicine causes questions about the nature of a treatment, such as water fluoridation. Alternative medicine and mainstream medicine debates can also spill over into freedom of religion discussions, such as the right to decline lifesaving treatment for one's children because of religious beliefs. Government regulators continue to attempt to find a regulatory balance.

Jurisdiction differs concerning which branches of alternative medicine are legal, which are regulated, and

which (if any) are provided by a government-controlled health service or reimbursed by a private health medical insurance company. The United Nations Committee on Economic, Social and Cultural Rights – article 34 (Specific legal obligations) of the General Comment No. 14 (2000) on The right to the highest attainable standard of health – states that

Furthermore, obligations to respect include a State's obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines, from marketing unsafe drugs and from applying coercive medical treatments, unless on an exceptional basis for the treatment of mental illness or the prevention and control of communicable diseases.

—  
Specific implementations of this article are left to member states.

A number of alternative medicine advocates disagree with the restrictions of government agencies that approve medical treatments. In the United States, for example, critics say that the Food and Drug Administration's criteria for experimental evaluation methods impedes those seeking to bring useful and effective treatments and approaches to the public, and that their contributions and discoveries are unfairly dismissed, overlooked or suppressed. Alternative medicine providers recognize that health fraud occurs, and argue that it should be dealt with appropriately when it does, but that these restrictions should not extend to what they view as legitimate healthcare products.

In New Zealand, alternative medicine products are classified as food products, so there are no regulations or safety standards in place.

In Australia, the topic is termed as complementary medicine and the Therapeutic Goods Administration has issued various guidances and standards. Australian regulatory guidelines for complementary medicines (ARGCM) demands that the pesticides, fumigants, toxic metals, microbial toxins, radionuclides, and microbial contaminations present in herbal substances should be monitored, although the guidance does not request for the evidences of these traits. However, for the herbal substances in pharmacopoeial monographs, the detailed information should be supplied to relevant authorities

The production of modern pharmaceuticals is strictly regulated to ensure that medicines contain a standardized quantity of active ingredients and are free from contamination. Alternative medicine products are not subject to the same governmental quality control standards, and consistency between doses can vary. This leads to uncertainty in the chemical content and biological activity of individual doses. This lack of oversight means that alternative health products are vulnerable to adulteration and contamination. This problem is magnified by international commerce, since different countries have different types and degrees of regulation. This can make it difficult for consumers to properly evaluate the risks and qualities of given

*Denmark:* Herbal and dietary supplements is the designation of a range of products, which have in common their status as medicine belonging under the Danish Medicines Act. In the Danish Medicines Act there exist four types of herbal and dietary supplements: Herbal medicinal products, Strong vitamin and mineral preparations, Traditional botanical medicinal products and Homeopathic medicinal products. Some dietary supplements fall within a special category of products, which differ from the above in that they are not authorized medicinal products. Dietary supplements are regulated under the Food Act and are registered by the Danish Veterinary and Food Administration.

#### *Alternative therapists*

Denmark has a registration system for alternative therapy practitioners, RAB.

#### *Criticism*

The NCCAM budget has been criticized because, despite the duration and intensity of studies to measure the efficacy of alternative medicine, there had been no effective CAM treatments supported by scientific evidence as of 2002 according to the QuackWatch website. Despite this, the National Center for Complementary and Alternative Medicine budget has been on a sharp sustained rise to support complementary medicine. In fact, the whole CAM field has been called by critics the SCAM.

"There really is no such thing as alternative medicine--only medicine that has been proved to work and medicine that has not." Arnold Relman, editor in chief emeritus of The New England Journal of Medicine.[full citation needed] Speaking of government funding studies of integrating alternative medicine techniques into the mainstream, Steven Novella, a neurologist at Yale School of Medicine wrote that it "is used to lend an appearance of legitimacy to treatments that are not legitimate." Marcia Angell, former executive editor of The New England Journal of Medicine says, "It's a new name for snake oil."

Speaking of ethics, in November 2011 Edzard Ernst stated that the "level of misinformation about alternative medicine has now reached the point where it has become dangerous and unethical. So far, alternative medicine has remained an ethics-free zone. It is time to change this."

## Alternative and evidence-based medicine

### *Efficacy*

Many alternative therapies have been tested and certain CAM interventions do have evidence. In 2003, a project funded by the CDC identified 208 condition-treatment pairs, of which 58% had been studied by at least one randomized controlled trial (RCT), and 23% had been assessed with a meta-analysis. According to a 2005 book by a US Institute of Medicine panel, the number of RCTs focused on CAM has risen dramatically. The book cites Vickers (1998), who found that many of the CAM-related RCTs are in the Cochrane register, but 19% of these trials were not in MEDLINE, and 84% were in conventional medical journals.

As of 2005, the Cochrane Library had 145 CAM-related Cochrane systematic reviews and 340 non-Cochrane systematic reviews. An analysis of the conclusions of only the 145 Cochrane reviews was done by two readers. In 83% of the cases, the readers agreed. In the 17% in which they disagreed, a third reader agreed with one of the initial readers to set a rating. These studies found that, for CAM, 38.4% concluded positive effect or possibly positive (12.4%) effect, 4.8% concluded no effect, 0.69% concluded harmful effect, and 56.6% concluded insufficient evidence. An assessment of conventional treatments found that 41.3% concluded positive or possibly positive effect, 20% concluded no effect, 8.1% concluded net harmful effects, and 21.3% concluded insufficient evidence. However, the CAM review used the 2004 Cochrane database, while the conventional review used the 1998 Cochrane database.

Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (updated monthly) are made available at ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the lists here:  
<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

Most alternative medical treatments are not patentable, which may lead to less research funding from the private sector. In addition, in most countries, alternative treatments (in contrast to pharmaceuticals) can be marketed without any proof of efficacy—also a disincentive for manufacturers to fund scientific research. Some have proposed adopting a prize system to reward medical research. However, public funding for research exists. Increasing the funding for research on alternative medicine techniques is the purpose of the US National Center for Complementary and Alternative Medicine. NCCAM and its predecessor, the Office of Alternative Medicine, have spent more than \$2.5 billion on such research since 1992; this research has largely not demonstrated the efficacy of alternative treatments.

Some sceptics of alternative practices say that a person may attribute symptomatic relief to an otherwise-ineffective therapy due to the placebo effect, the natural recovery from or the cyclical nature of an illness (the regression fallacy), or the possibility that the person never originally had a true illness.

In the same way as for conventional therapies, drugs, and interventions, it can be difficult to test the efficacy of alternative medicine in clinical trials. In instances where an established, effective, treatment for a condition is already available, the Helsinki Declaration states that withholding such treatment is unethical in most circumstances. Use of standard-of-care treatment in addition to an alternative technique being tested may produce confounded or  
Cancer researcher Andrew J. Vickers has stated:

Contrary to much popular and scientific writing, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have been shown to be ineffective. In this article, clinical trial data on a number of alternative cancer cures including Livingston-Wheeler, Di Bella Multitherapy, antineoplastons, vitamin C, hydrazine sulfate, Laetrile, and psychotherapy are reviewed. The label "unproven" is inappropriate for such therapies; it is time to assert that many alternative cancer therapies have been "disproven."

### **Safety**

*See also: List of herbs with known adverse effects*

#### *Adequacy of Regulation and CAM Safety*

One of the commonly voiced concerns about complementary alternative medicine (CAM) is the manner in which it is regulated. There have been significant developments in how CAMs should be assessed prior to re-sale in the United Kingdom and the European Union (EU) in the last 2 years. Despite this, it has been suggested that current regulatory bodies have been ineffective in preventing deception of patients as many companies have re-labelled their drugs to avoid the new laws. There is no general consensus about how to balance consumer protection (from false claims, toxicity, and advertising) with freedom to choose remedies.

Advocates of CAM suggest that regulation of the industry will adversely affect patients looking for alternative ways to manage their symptoms, even if many of the benefits may represent the placebo effect. Some contend that alternative medicines should not require any more regulation than over-the-counter medicines that can also be toxic in overdose (such as paracetamol).

#### Interactions with conventional pharmaceuticals

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine. Examples include immuno-augmentation therapy, shark cartilage, bioresonance therapy, oxygen and ozone therapies, insulin potentiation therapy. Some herbal remedies can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among other problems. An anecdotal example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention that she had been taking "natural" potions to "build up her strength" before the operation, including a powerful anticoagulant that nearly caused her death.

To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly [sic] there's the cynicism and disappointment and depression that some patients get from going on from one alternative medicine to the next, and they find after three months the placebo effect wears off, and they're disappointed and they move on to the next one, and they're disappointed and disillusioned, and that can create depression and make the eventual treatment of the patient with anything effective difficult, because you may not get compliance, because they've seen the failure so often in the past.

#### Potential side-effects

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing at all. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the appeal to nature fallacy, i.e., "that which is natural cannot be harmful".

An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be much higher than allowed in conventional drugs.

#### Treatment delay

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the opportunity to obtain treatments that could be more helpful. In short, even innocuous treatments can indirectly produce negative outcomes.

Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use conventional medicine.

#### Unconventional cancer "cures"

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centers and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have been shown to be

### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

### **Integrative medicine, complementary medicine, fringe medicine**

Integrative medicine is the combination of the practices and methods of alternative/complementary medicine with conventional medicine. It may include preventive medicine and patient-centered medicine. It may also include practices not normally referred to as medicine, such as using prayer, meditation, socializing, and recreation as therapies. Its academic proponents sometimes recommend misleading patients by using known placebo treatments in order to achieve a placebo effect. However, a 2010 survey of family physicians found that 56% of respondents said they had used a placebo in clinical practice as well. Eighty-five percent of respondents believed placebos can have both psychological and physical benefits. A number of universities and hospitals have departments of integrative medicine.

Criticism of integrative medicine includes about proposing to lie to patients about alternative medicines known to be no more than a placebo in order to achieve a placebo effect, and "diverting research time, money, and other resources from more fruitful lines of investigation in order to pursue a theory that has no basis in biology".

"Quackademic medicine" is a pejorative term used for "integrative medicine", when considered to be an infiltration of quackery into academic science-based medicine, and was picked up by science-based medicine anti-ACM critics.

### *History*

Fueled by a nationwide survey published in 1993 by David Eisenberg, which revealed that in 1990 approximately 60 million Americans had used one or more complementary or alternative therapies to address health issues. A study published in the November 11, 1998 issue of the *Journal of the American Medical Association* reported that 42% of Americans had used complementary and alternative therapies, up from 34% in 1990. However, despite the growth in patient demand for complementary medicine, most of the early alternative/complementary medical centers failed.

### **Appeal**

A study published in 1998 indicates that a majority of alternative medicine use was in conjunction with standard medical treatments. Approximately 4.4 percent of those studied used alternative medicine as a replacement for conventional medicine. The research found that those having used alternative medicine tended to have higher education or report poorer health status. Dissatisfaction with conventional medicine was not a meaningful factor in the choice, but rather the majority of alternative medicine users appear to be doing so largely because "they find these healthcare alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life." In particular, subjects reported a holistic orientation to health, a transformational experience that changed their worldview, identification with a number of groups committed to environmentalism, feminism, psychology, and/or spirituality and personal growth, or that they were suffering from a variety of common and minor ailments – notable ones being anxiety, back problems, and chronic pain.

Authors have speculated on the socio-cultural and psychological reasons for the appeal of alternative medicines among that minority using them in lieu of conventional medicine. There are several socio-cultural reasons for the interest in these treatments centered on the low level of scientific literacy among the public at large and a concomitant increase in anti-scientific attitudes and new age mysticism. Related to this are vigorous marketing of extravagant claims by the alternative medical community combined with inadequate media scrutiny and attacks on

There is also an increase in conspiracy theories toward conventional medicine and pharmaceutical companies, mistrust of traditional authority figures, such as the physician, and a dislike of the current delivery methods of scientific biomedicine, all of which have led patients to seek out alternative medicine to treat a variety of ailments. Many patients lack access to contemporary medicine, due to a lack of private or public health insurance, which leads them to seek out lower-cost alternative medicine. Medical doctors are also aggressively marketing alternative medicine to profit from this market.

In addition to the social-cultural underpinnings of the popularity of alternative medicine, there are several psychological issues that are critical to its growth. One of the most critical is the placebo effect, which is a well-established observation in medicine. Related to it are similar psychological effects such as the will to believe, cognitive biases that help maintain self-esteem and promote harmonious social functioning, and the post hoc, ergo propter hoc fallacy.

Patients can also be averse to the painful, unpleasant, and sometimes-dangerous side effects of biomedical treatments. Treatments for severe diseases such as cancer and HIV infection have well-known, significant side-effects. Even low-risk medications such as antibiotics can have potential to cause life-threatening anaphylactic reactions in a very few individuals. Also, many medications may cause minor but bothersome symptoms such as cough or upset stomach. In all of these cases, patients may be seeking out alternative treatments to avoid the adverse effects of conventional treatments.

Schofield et al., in a systematic review published in 2011, make ten recommendations which they think may increase the effectiveness of consultations in a conventional (here: oncology) setting, such as "Ask questions about CAM use at critical points in the illness trajectory"; "Respond to the person's emotional state"; and "Provide balanced, evidence-based advice". They suggest that this approach may address "... concerns surrounding CAM use [and] encourage informed decision-making about CAM and ultimately, improve outcomes for CAM's popularity may be related to other factors which Edzard Ernst mentions in an interview in *The Independent*:

Why is it so popular, then? Ernst blames the providers, customers and the doctors whose neglect, he says, has created the opening into which alternative therapists have stepped. "People are told lies. There are 40 million websites and 39.9 million tell lies, sometimes outrageous lies. They mislead cancer patients, who are encouraged not only to pay their last penny but to be treated with something that shortens their lives. "At the same time, people are gullible. It needs gullibility for the industry to succeed. It doesn't make me popular with the public, but it's the truth  
In a paper published in October 2010 entitled *The public's enthusiasm for complementary and alternative medicine amounts to a critique of mainstream medicine*, Ernst describes these views in greater detail and concludes:

[CAM] is popular. An analysis of the reasons why this is so points towards the therapeutic relationship as a key factor. Providers of CAM tend to build better therapeutic relationships than mainstream healthcare professionals. In turn, this implies that much of the popularity of CAM is a poignant criticism of the failure of mainstream healthcare. We should consider it seriously with a view of improving our service to patients.

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*Alternative medical systems*

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*Alternative medical systems*

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*Mind-body interventions*

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*Energy Medicine*

**Energy Medicine**

<http://www.integrativemedicine.co.za/energy-medicine.html>

Energy or bio-energetic medicine refers to therapies which use an energy field - electrical, magnetic, sonic or acoustic - to screen for or treat health conditions by detecting imbalances in the body's energy fields and then correcting them.

The earliest recorded use of electricity for healing purposes dates from 2750BC, when sick people were exposed to the shocks of electric eels. Magnetite or load-stone was used for healing by the ancient Egyptians, Chinese and later by the Greeks.

The Bible and other spiritual texts describe healing such as the laying on of hands (which is still practised today in some churches). Therapeutic touch, Quantum touch and Reiki are some of the modern versions of this technique. Mesmer began using magnets for healing in 1773, but then progressed to using the laying on of hands.

Medical electricity had its golden era between the late 1700's and early 1900's. During that period a wide variety of healing devices were developed for treating a range of ailments. In 1867 Duchenne published his classical studies of muscle points, which gave rise to the modern field of medical electromyography. By the turn of the 20th century a wide variety of electromagnetic devices for healing were available, providing therapies for every disease and ~~problem~~ Modern medicine has been using a form of energy medicine since the discovery of Xrays by Roentgen. Electrocardiographs (ECG's), Electroencephalograms (EEG's), Xrays, Computerised tomography (CT) and MRI scans are now in common use for diagnostic purposes.

Over the last few decades scientists have developed methods to measure the subtle but important energy fields within and around the human body. These fields were once considered non-existent by mainstream medicine.

Bio-energetic/energy medicine has the potential to improve the treatment of diseases which do not respond to conventional clinical treatment.

Integrative medical practitioners are currently using one or more of the following energy medicine modalities (each of which will have a detailed explanation of its own):

Acupuncture (AP)

Homeopathy

Anthroposophical medicine

Homotoxicology (which utilises homeopathic principles)

Biopuncture (injecting homeopathics into AP points)

Flower essences

Rife resonator therapy

Pulsed electromagnetic field therapy (PEFT) - Bemer

QX/Scio/Indigo biofeedback  
EAV devices - Vegatest  
Low energy laser treatment  
Cranio-electrical stimulation  
Polarised light therapy - Bioptron  
Neurofeedback (also known as EEG biofeedback or Neurotherapy)  
Sound - Voicebio

Information provided by Dr. Les Emdin

[www.integrativemedicalcentre.co.za](http://www.integrativemedicalcentre.co.za)

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*Category talk Medicinal plants ...*

**Category talk:Medicinal plants**

[http://en.wikipedia.org/wiki/Category\\_talk:Medicinal\\_plants](http://en.wikipedia.org/wiki/Category_talk:Medicinal_plants)

About the suggestion of merging the categories: 'Medicinal Plants' and 'Medicinal Herbs and Fungi' -

- 1) I think this would be a very sensible move. 'Herbs' is a relatively loose term.
  - 2) All herbs are plants, not all plants are herbs. Someone looking under 'herb' might easily miss an entry.
  - 3) The broader category would mean less chance of someone missing an entry by using the narrower search term 'herb'.
  - 4) If there is strong feeling about it, a subcategory of 'medicinal herbs' could be set up within plants?
- Kitb 19:57, 25 September 2006 (UTC)

We're talking about merging herbs+fungi into plants, right? I think that is quite a sensible idea. I'm not sure why plants is currently a subcat of herbs+fungi... well, except that fungi aren't technically plants. But not all plants are herbs. Perhaps "Medicinal plants and fungi"? Also, what about the capitalisation? --Alynn 14:59, 16 November 2006 (UTC)

Agree - merge these two into Medicinal plants and fungi - no capitalisation, and plants and herbs are much more defined than "herbs". If no one objects in the next couple of days - I will get to it. Lethaniol 16:18, 5 December 2006 (UTC)

The sensible way to deal with these two would be to split them into Category:Medicinal plants and Category:Medicinal fungi. That would avoid the logical problem noted by Alynn above that fungi should not be categorised under plants (or vice versa). --Stemonitis 14:21, 30 December 2006 (UTC)

I agree with Stemonitis. Axl 12:35, 18 January 2007 (UTC)

Sounds good. All then that needs to be done is 1) Creating Category:Medicinal fungi and 2) Sorting pages at Category:Medicinal herbs and fungi. --Alynn 19:25, 18 January 2007 (UTC)

And then, I guess, a discussion could be started about renaming Category:Medicinal herbs and fungi to Category:Medicinal plants and fungi. But that takes more work ;) --Alynn 19:28, 18 January 2007 (UTC)

I've been bold and performed step (1), and started on step (2). --Alynn 19:32, 18 January 2007 (UTC)

*Medicinal vs Herbalism*

I think we ought to distinguish between plants (and fungi) for which well researched, confirmed medical uses have been found and other plants which may be used as part of "holistic" traditions (e.g. herbalism or traditional Chinese Medicine). --Salimfadhley (talk) 16:36, 10 February 2010 (UTC)

*Few plants or their phytochemical constituents have been proven to have medicinal effects by rigorous science.*

This sentence is absolutely false: "Medicinal plants are various plants used in herbalism and thought by some to have medicinal properties. Few plants or their phytochemical constituents have been proven to have medicinal effects by rigorous science or have been approved by regulatory agencies such as the United States Food and Drug Administration or European Food Safety Authority." Plants have been used as medicine for thousands upon thousands of years and continue to be used by the majority (80%) of the world's population. The German E Commission is a book full of all the plants that are legal in Germany. This paper, who's data was taken directly from the FDA, states that of the 500 million prescriptions in the USA every year, 125 million involve a preparation from a leafy plants: Newman DJ, Cragg GM, Snader KM (2003) Natural products of new drugs over the period 1981–2002. *J Nat Prod* 66: 1022–1037. I tried to edit this ridiculous statement about Medicinal plants but someone reverted it back. — Preceding unsigned comment added by Orbitald (talk • contribs) 00:11, 5 December 2011 (UTC)

Categories: Category-Class plant articlesNA-importance plant articlesCategory-Class Alternative medicine articlesNA-Class pharmacology articlesNA-importance pharmacology

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*Nineteenth-century non-conventional medicine ...*

**Nineteenth-century non-conventional medicine**

[http://en.wikipedia.org/wiki/History\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/History_of_alternative_medicine)

From the late eighteenth century and more robustly from the mid-nineteenth century a number of non-conventional medical systems developed in the West which proposed oppositional medical systems, criticised orthodox medical practitioners, emphasised patient-centredness, and offered substitutes for the treatments offered by the medical mainstream.

While neither the medical marketplace nor irregular practitioners disappeared during the nineteenth century, the proponents of alternative medical systems largely differed from the entrepreneurial quacks of the previous century in eschewing showy self-promotion and instead adopting a more sober and serious self-presentation. The relationship between medical orthodoxy and heterodoxy was complex, both categories contained considerably variety, were subject to substantial change throughout the period, and the divisions between the two were frequently blurred. The variety of alternative medical systems which developed during this period can be approximately categorized according to the form of treatment advocated.

*These were:*

those employing spiritual or psychological therapies, such as hypnosis (mesmerism); nutritional therapies based upon special diets, such as medical botanism; drug and biological therapies such as homeopathy and hydrotherapy; and, manipulative physical therapies such as osteopathy and chiropractic massage. Non-conventional medicine might define health in terms of concepts of balance and harmony or espouse vitalistic doctrines of the body. Illness could be understood as due to the accretion of bodily toxins and impurities, to result from magical, spiritual, or supernatural causes, or as arising from energy blockages in the body such that healing actions might constitute energy transfer from practitioner to patient.

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*Mesmerism ...*

**Mesmerism**

*Main articles: Franz Mesmer and Animal magnetism*

[http://en.wikipedia.org/wiki/History\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/History_of_alternative_medicine)

Mesmerism was the eponymous medical system proposed by the Viennese-trained physician, Franz Anton Mesmer, (1734-1815) in the late eighteenth century. The basis of this doctrine was Mesmer's claimed discovery of a new aetherial fluid, animal magnetism, which, he contended, permeated the universe and the bodies of all animate beings and whose proper balance was fundamental to health and disease. Animal magnetism was but one of series of postulated subtle fluids and substances, such as caloric, phlogiston, magnetism, and electricity, which then suffused the scientific literature. It also reflected Mesmer's doctoral thesis, *De Planatarum Influxu* ("On the Influence of the Planets"), which had investigated the impact of the gravitational effect of planetary movements on fluid-filled bodily tissues. His focus on magnetism and the therapeutic potential of magnets was derived from his reading of Paracelsus, Athanasius Kircher and Johannes Baptista van Helmont. The immediate impetus for his medical speculation, however, derived from his treatment of a patient, Franzisca Oesterlin, who suffered from episodic seizures and convulsions which induced vomiting, fainting, temporary blindness and paralysis. His cure consisted of placing magnets upon her body which consistently produced convulsive episodes and a subsequent diminution of symptoms.

According to Mesmer, the logic of this cure suggested that health was dependent upon the uninterrupted flow of a putative magnetic fluid and that ill health was consequent to its blockage. His treatment methods claimed to resolve this by either directly transferring his own superabundant and naturally occurring animal magnetism to his patients by touch or through the transmission of these energies from magnetic objects.

By 1775 Mesmer's Austrian practice was prospering and he published the text *Schrieben über die Magnetkur an einen auswärtigen Arzt* which first outlined his thesis of animal magnetism. In 1778, however, he became embroiled in a scandal resulting from his treatment of a young, blind patient who was connected to the Viennese court and relocated to Paris where he established a medical salon, "The Society of Harmony", for the treatment of

patients. Recruiting from a client-base drawn predominantly from society women of the middle- and upper-classes, Mesmer held group séances at his salubrious salon-clinic which was physically dominated by a large, lidded, wooden tank, known as the baquet, containing iron, glass and other material that Mesmer had magnetized and which was filled with "magnetized water". At these sessions patients were enjoined to take hold of the metal rods emanating from the tub which acted as a reservoir for the animal magnetism derived from Mesmer and his clients. Mesmer, through the apparent force of his will – not infrequently

assisted by an intense gaze or the administration of his wand – would then direct these energies into the afflicted bodies of his patients seeking to provoke either a "crisis" or a trance-like state; outcomes which he believed essential for healing to occur. Patient proclamations of cure ensured that Mesmer enjoyed considerable and fashionable success in late-eighteenth-century Paris where he occasioned something of a sensation and a scandal.

Popular caricature of mesmerism emphasised the eroticised nature of the treatment as spectacle: "Here the physician in a coat of lilac or purple, on which the most brilliant flowers have been painted in needlework, speaks most consolingly to his patients: his arms softly enfolding her sustain her in her spasms, and his tender burning eye expresses his desire to comfort her".

Responding chiefly to the hint of sexual impropriety and political radicalism imbuing these séances, in 1784 mesmerism was subject to a commission of inquiry by a royal-appointed scientific panel of the prestigious French Académie de Médecine.[n 4] Its findings were that animal magnetism had no basis in fact and that Mesmer's cures had been achieved through the power of suggestion. The commission's report, if damaging to the personal status of Mesmer and to the professional ambitions of those faculty physicians who had adopted mesmeric practices,[n 5] did little to hinder the diffusion of the doctrine of animal magnetism.

*1843 Punch magazine caricature depicting John Elliotson "playing the brain" of a working-class, mesmerised woman*

In England mesmerism was championed by John Elliotson, Professor of Practical Medicine at University College London and the founder and president of the London Phrenological Society. A prominent and progressive orthodox physician, he was President of the Medico-Chirurgical Society of London and an early adopter of the stethoscope in English medical practice. He had been introduced to mesmerism in the summer of 1837 by the French physician and former student of Mesmer, Dupotet, who is credited as the most significant

cross-channel influence on the development of mesmerism in England. Elliotson believed that animal magnetism provided the basis for a consideration of the mind and will in material terms thus allowing for their study as medical objects. Initially supported by the *Lancet*, a reformist medical journal, he contrived to demonstrate the scientific properties of animal magnetism as a physiological process on the predominantly female charity patients under his care in the University College Hospital. Working-class patients were preferred as experimental subjects to exhibit the physical properties of mesmerism on the nervous system as, being purportedly more animalistic and machine-like than their social superiors, their personal characteristics were deemed less likely to interfere with the experimental process. He sought to reduce his subjects to the status of mechanical automata claiming that he could, through the properties of animal magnetism and the pacifying altered states of consciousness which it induced, "play" their brains as if they were musical instruments.

Two Irish-born charity patients, the adolescent O'Key sisters, emerged as particularly important to Elliotson's increasingly popular and public demonstrations of mesmeric treatment. Initially, his magnetising practices were used to treat the sisters' shared diagnosis of hysteria and epilepsy in controlling or curtailing their convulsive episodes. By the autumn of 1837 Elliotson had ceased to treat the O'Keys merely as suitable objects for cure and instead sought to mobilise them as diagnostic instruments. When in states of mesmeric entrancement the O'Key sisters, due to the apparent increased sensitization of their nervous system and sensory apparatus, behaved as if they had the ability to see through solid objects, including the human body, and thus aid in medical diagnosis. As their fame rivalled that of Elliotson, however, the O'Keys behaved less like human diagnostic machines and became increasingly intransigent to medical authority and appropriated to themselves the power to examine, diagnose, prescribe treatment and provide a prognosis. The emergence of this threat to

medical mastery in the form of a pair of working-class, teenage girls without medical training aroused general disquiet amongst the medical establishment and cost Elliotson one of his early and influential supporters, the leading proponent of medical reform, Thomas Wakley. Wakley, the editor of the *Lancet*, had initially hoped that Elliotson's scientific experiments with animal magnetism might further the agenda of medical reform in bolstering the authority of the profession through the production of scientific truth and, equally importantly in a period when the power-relations between doctors and patients were being redefined, quiescent patient bodies. Perturbed by the O'Key's provocative displays, Wakley convinced Elliotson to submit his mesmeric practice to a trial in August 1838 before a jury of ten gentlemen during which he accused the sisters of fraud and his colleague of gullibility. Following a series of complaints issued to the Medical Committee of University College Hospital they elected to discharge the O'Keys along with other mesmeric subjects in the hospital and Elliotson resigned his post in protest

This setback, while excluding Elliotson from the medical establishment, ended neither his mesmeric career nor the career of mesmerism in England. From 1842 he became an advocate of phreno-mesmerism – an approach that amalgamated the tenets of phrenology with animal magnetism and that led to a split in the Phrenological Society. The following year he founded, together with the physician and then President of the Phrenological Society, W.C. Engledue, the principal journal on animal magnetism entitled the *Zoist: A Journal of Cerebral Physiology and Mesmerism and their Application to Human Welfare* which remained in print until 1856. Mesmeric societies, frequently patronised by those among the scientific and social elite were established in many major population centres in Britain from the 1840s onwards. Some sufficiently endowed societies, such as those in London, Bristol and Dublin, Ireland, supported mesmeric infirmaries with permanent mesmeric practitioners in their employ. Due to the competing rise of spiritualism and psychic research by the mid-1860s these mesmeric infirmaries had closed.

*The First Operation under Ether, painted by Robert Hinckley 1881-96. This operation on the jaw of a female patient took place in Boston on 19 October 1846. William Morton acted as the anaesthetist and John Morrow was the surgeon*

The 1840s in Britain also witnessed a deluge of travelling magnetisers who put on public shows for paying audiences to demonstrate their craft. These mesmeric theatres, intended in part as a means of soliciting profitable private clientele, functioned as public fora for debate between sceptics and believers as to whether the performances were genuine or constituted fraud. In order to establish that the loss of sensation under mesmeric trance was real, these itinerant mesmerists indulged in often quite violent methods – including discharging firearms close to the ears of mesmerised subjects, pricking them with needles, putting acid on their skin and knives beneath their fingernails.

Such displays of the anaesthetic qualities of mesmerism inspired some medical practitioners to attempt surgery on subjects under the spell of magnetism. In France, the first major operation of this kind had been trialled, apparently successfully, as early as 1828 during a mastectomy procedure. In Britain the first significant surgical procedure undertaken on a patient while mesmerised occurred in 1842 when James Wombell, a labourer from Nottingham, had his leg amputated. Having been mesmerised for several days prior to the operation by a barrister named William Topham, Wombell exhibited no signs of pain during the operation and reported afterwards that the surgery had been painless. This account was disputed by many in the medical establishment who held that Wombell had fraudulently concealed the pain of the amputation both during and after the procedure. Undeterred, in 1843 Elliotson continued to advocate for the use of animal magnetism in surgery publishing *Numerous Cases of Surgical Operation without Pain in the Mesmeric State*. This marked the beginning of a campaign by London mesmerists to gain a foothold for the practice within British hospitals by convincing both doctors and the general public of the value of surgical mesmerism. Mesmeric surgery enjoyed considerable success in the years from 1842 to 1846 and colonial India emerged as a particular stronghold of the practice; word of its success was propagated in Britain through the *Zoist* and the publication in 1846 of *Mesmerism in India and its Practical Application in Surgery and Medicine* by James Esdaile, a Scottish surgeon with the East India Company and the chief proponent of animal magnetism in the subcontinent.

Although a few surgeons and dentists had undertaken fitful experiments with anaesthetic substances in the preceding years, it was only in 1846 that use of ether in surgery was popularised amongst orthodox medical practitioners. This was despite the fact that the desensitising effects of widely available chemicals like ether and nitrous oxide were commonly known and had formed part of public and scientific displays over the previous half-century. Vapourous ether was successfully used in

A feature of the dissemination of magnetism in the New World was its increasing association with spiritualism. By the 1830s mesmerism was making headway in the United States amongst figures like the intellectual progenitor of the New Thought movement, Phineas Parkhurst Quimby, whose treatment combined verbal suggestion with touch. Quimby's most celebrated "disciple", Mary Baker Eddy would go on to found the "medico-religious hybrid", Christian Science, in the latter half of the nineteenth century. In the 1840s the American spiritualist Andrew Jackson Davis sought to combine animal magnetism with spiritual beliefs and postulated that bodily health was dependent upon the unobstructed movement of the "spirit", conceived as a fluid substance, throughout the body. As with Quimby, Davis's healing practice involved the use of touch.

Hydropathy

Main article: Hydrotherapy

Medical Botany

Main article: Samuel Thomson

Homeopathy

Main article: Homeopathy

**Osteopathy and chiropractic manipulation**

Deriving from the tradition of 'bone-setting', both osteopathy and chiropractic developed in the USA in the late 19th century. The British School of Osteopathy was established in 1917 but it was the 1960s before the first chiropractic college was established in the UK. While chiropractic theories and methods (which are concerned with subluxations or small displacements of the spine and other joints) do not accord with orthodox medicine's current knowledge of the biomechanics of the spine, osteopathy has been largely subsumed into conventional medicine in the USA. The passing of the

Osteopaths Act (1993) and the Chiropractors Act (1994), however, created for the first time autonomous statutory regulation for two CAM therapies in the UK.

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### *Medical professionalisation ...*

#### **Medical professionalisation**

[http://en.wikipedia.org/wiki/History\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/History_of_alternative_medicine)

In the late eighteenth and nineteenth centuries regular and irregular medical practitioners became more clearly differentiated throughout much of Europe. In part, this was achieved through processes of state-sanctioned medical regulation. The different types of regulatory medical markets created across nineteenth-century Europe and America reflected differing historical patterns of state formation. Where states had traditionally enjoyed strong, centralised power, such as in the German states, government more easily assumed control of the medical regulation. In states that had exercised weaker central power and adopted a free-market model, such as in Britain, government gradually assumed greater control over medical regulation as part of increasing state focus on issues of public health. This process was significantly complicated in Britain by the enduring existence of the historical medical colleges. A similar process is observable in America from the 1870s but this was facilitated by the absence of medical corporations. Throughout the nineteenth century, however, most Western states converged in the creation of legally delimited and semi-protected medical markets. It is at this point that an "official" medicine, created in cooperation with the state and employing a scientific rhetoric of legitimacy, emerges as a recognisable entity and that the concept of alternative medicine as a historical category becomes tenable.

France provides perhaps one of the earliest examples of the emergence of a state-sanctioned medical orthodoxy – and hence also of the conditions for the development of forms of alternative medicine – the beginnings of which can be traced to the late eighteenth century. In addition to the traditional French medical faculties and the complex hierarchies of practitioners over which they presided, the state increasingly supported new institutions, such as the Société Royale de Médecine (Royal Society of Medicine) which received its royal charter in 1778, that played a role in policing medical practice and the sale of medical nostrums. This system was radically transformed during the early phases of the French Revolution when both the traditional faculties and the new institutions under royal sponsorship were removed and an entirely unregulated medical market was created. This anarchic situation was reformed under the exigencies of war when in 1793 the state established national control over medical education; under Napoleon in 1803 state-control was extended over the licensing of medical practitioners. This latter reform introduced a new hierarchical division between practitioners in the creation of a medical élite of graduate physicians and surgeons, who were at liberty to practice throughout the state, and the lowly officiers de santé who received less training, could only offer their services to the poor, and were

restricted in where they could practice. This national system of medical regulation under state-control, exported to regions of Napoleonic conquest such as Italy, the Rhineland and the Netherlands, became paradigmatic in the West and in countries adopting western medical systems. While offering state protection to licensed doctors and establishing a medical monopoly in principal it did not, however, remove competition from irregular practitioners.

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### *Alternative medicine ...*

**TCCUAIA:**

**Terminology**

**Characterization**

**Classifications**

**Usage**

**Alternative and evidence-based medicine**

**Safety**

**Integrative medicine, complementary medicine,**

**fringe medicine**

**Appeal**

**Terminology**

**Characterization**

*Self-characterization*

*Institutions*

*Scientists*

*Popular press*

**Classifications**

**Usage**

*Further information: List of branches of alternative medicine*

**United States**

*indicated:*

*Denmark*

*home page, see the pages on Statistics:*

<http://www.vifab.dk/uk/alternative+medicine/statistics>

*Use among medical students*

*most commonly used types of alternative medicine were:*

*Education*

*Regulation*

*Denmark:*

*Alternative therapists*

*Criticism*

### **Alternative and evidence-based medicine**

*Efficacy*

*home page, see the lists here:*

*<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>*

### **Safety**

*See also: List of herbs with known adverse effects*

*Adequacy of Regulation and CAM Safety*

*possible mechanism:*

*Potential side-effects*

*Treatment delay*

*Unconventional cancer "cures"*

*Research funding*

### **Integrative medicine, complementary medicine, fringe medicine**

*History*

### **Appeal**

*(here: oncology )*

*The Independent:*

*in greater detail and concludes:*

### **Academic resources**

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### **Classifications - Alternative medicine**

*1 Classifications*

### **Classifications**

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

NCCAM has developed one of the most widely used classification systems for the branches of complementary and alternative medicine. It classifies complementary and alternative therapies into five major groups, which have some overlap.

*Whole medical systems:* cut across more than one of the other groups; examples include Traditional Chinese medicine, Naturopathy, Homeopathy, and Ayurveda

*Mind-body medicine:* takes a holistic approach to health that explores the interconnection between the mind, body, and spirit. It works on the idea that the mind can affect "bodily functions and symptoms"

*Biology-based practices:* use substances found in nature such as herbs, foods, vitamins, and other natural substances

*Manipulative and body-based practices:* feature manipulation or movement of body parts, such as in chiropractic and osteopathic manipulation

*Energy medicine:* is a domain that deals with putative and verifiable energy fields:

Biofield therapies are intended to influence energy fields that, it is purported, surround and penetrate the body. No empirical evidence has been found to support the existence of the putative energy fields on which these therapies are predicated.

Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current, or direct-current fields in an unconventional manner.

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## 2 Terminology

"Alternative medicine" refers to any practice that is put forward as having the healing effects of medicine, but is not based on evidence gathered with the scientific method, when used independently or in place of medicine based on science. Alternative medical systems can only exist when there is a identifiable, regularized and authoritative medical orthodoxy, such as arose in the west during the nineteenth-century, to which they can function or act as an alternative.

"Complementary medicine" refers to use of alternative medicine alongside conventional science based medicine, in the belief that it increases the effectiveness. An example of "complementary medicine" is use of the alternative medicine called acupuncture (sticking needles in the body to influence the flow of a supernatural energy), along with using medicine based on science, in the belief that the alternative medicine increases the effectiveness of the medicine based only on science, which does not address problems with the flow of the supernatural energy. The alternative medicine is thus believed to "complement" medicine that is based on science.

"CAM" is an abbreviation for "complementary and alternative medicine".

The term "Integrative medicine" ("integrated medicine") is used in two different ways. One use refers to a belief that medicine based on science can be "integrated" with practices that are not. Another use refers only to a combination of alternative medical treatments with conventional science based treatments that have some scientific proof of efficacy, in which case it is identical with CAM. Some well known advocates of integrative medicine claim that it also addresses alleged problems with medicine based on science, which are not addressed by CAM. For example, Ralph Snyderman and Andrew Weil state that "integrative medicine is not synonymous with complementary and alternative medicine. It has a far larger meaning and mission in that it calls for restoration of the focus of medicine on health and healing and emphasizes the centrality of the patient-physician relationship."

"Whole medical systems" is used in two different ways.

One refers to a spiritual belief, that "spiritual wholeness" is the root of physiological and physical well-being. Ayurveda, Chinese medicine, Homeopathy and Naturopathy are cited as Another use is that of the National Institute of Health's National Center for Complementary and Alternative Medicine (NCCAM), to differentiate widely comprehensive systems of practice, from specific components of the system, or from practices that claim to heal only a limited kind of specific medical conditions. An example is Ayurvedic medicine (a traditional medicine of India based in part on religious beliefs and in part on traditional use of herbs), which includes many practices and claims to treat many conditions, as compared to a specific herbal remedy within the Ayurvedic medicine system.

Alternative medicine often relies on using loose language to give the appearance of effectiveness or to suggest that a dichotomy exists when it does not. One example of this is the use of "Western medicine" and "Eastern medicine" to suggest that the difference is not between evidence based medicine and treatments which don't work, but a cultural difference between the Asiatic east and the European west.

The United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using scientific methods."

## Scientists

Numerous mainstream scientists and physicians have commented on and criticised alternative medicine.

A clinical review published in the British Medical Journal defined complementary and alternative medicine as "group of therapeutic and diagnostic disciplines that exist largely outside the institutions where conventional health care is taught and provided."

There is a debate among medical researchers over whether any therapy may be properly classified as 'alternative medicine'. Some claim that there is only medicine that has been adequately tested and that which has not. They feel that healthcare practices should be classified based solely on scientific evidence. If a treatment has been rigorously tested and found safe and effective, traditional medicine will adopt it regardless of whether it was considered "alternative" to begin with. It is thus possible for a method to change categories (proven vs. unproven), based on increased knowledge of its effectiveness or lack thereof. Supporters of this position include George D. Lundberg, former editor of the Journal of the American Medical Association

David M. Eisenberg, an integrative medicine researcher, defines it as "medical interventions not taught widely at US medical schools or generally available at US hospitals," NCCAM states that formerly unproven remedies may be incorporated into conventional medicine if they are safe and effective. Barrie R. Cassileth, a researcher of complementary and alternative medicine, summed up the situation as "not all mainstream physicians are pleased with CAM, with current efforts to integrate CAM into mainstream medicine, or with a separate NIH research entity for "alternative" medicine.

Stephen Barrett, founder and operator of Quackwatch, argues that practices labeled "alternative" should be reclassified as either genuine, experimental, or questionable. He defines genuine as methods that have sound evidence for safety and effectiveness, experimental as unproven but with a plausible rationale for effectiveness, and questionable as groundless without a scientifically plausible rationale. He has concerns that because some "alternatives" have merit, there is an impression that the rest deserve equal consideration and respect even though most are worthless. He mentioned a policy at the NIH of never saying something doesn't work only that a different version or dose might give different results.

Edzard Ernst, professor of complementary medicine, characterizes the evidence for many alternative techniques as weak, nonexistent, or negative, but states that evidence exists for others, in particular certain herbs and acupuncture. Ernst concluded that 95% of the alternative treatments he and his team studied, including acupuncture, herbal medicine, homeopathy, and reflexology, are, according to The Economist, "statistically indistinguishable from placebo treatments."

Richard Dawkins, an evolutionary biologist, defines alternative medicine as a "set of practices that cannot be tested, refuse to be tested, or consistently fail tests." He also states that "there is no alternative medicine. There is only medicine that works and medicine that doesn't work." He says that if a technique is demonstrated effective in properly performed trials, it ceases to be alternative and becomes medicine.

A letter by four Nobel Laureates and other prominent scientists deplored the lack of critical thinking and scientific rigor in National Institutes of Health supported alternative medicine research. In 2009 a group of scientists put forward a proposal to shut down the National Center for Complementary and Alternative Medicine. They argued that the vast majority of studies were based on unconventional understandings of physiology and disease and showed little or no effect. Further, they argued that the field's more-plausible interventions such as diet, relaxation, yoga and botanical remedies can be studied just as well in other parts of NIH, where they would need to compete with conventional research projects.

These concerns are supported by negative results in almost all studies conducted over ten years at a cost of \$2.5 billion by the NCCAM. R. Barker Bausell, a research methods expert and author of "Snake Oil Science" states that "it's become politically correct to investigate. There are concerns that merely having NIH support is used to give unfounded "legitimacy to treatments that are not legitimate."

Wallace Sampson, an editor of Scientific Review of Alternative Medicine and a Stanford University professor of medicine wrote that CAM is the "propagation of the absurd" based on the example that alternative and complementary have been substituted for quackery, dubious and implausible and concerns that CAM tolerates contradiction without thorough reason and experiment.

#### *Popular press*

The Washington Post reports that a growing number of traditionally trained physicians practice integrative medicine, which it defines as "conventional medical care that incorporates strategies such as acupuncture, reiki and herbal remedies."

An editorial in the Economist characterized alternative medicine as mostly "quackery" and described the vast majority as offering nothing more than the placebo effect. It suggested that, "Virtually all alternative medicine is bunk; but the placebo effect is rather interesting."

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### *Characterization - Alternative medicine*

#### *3 Characterization*

#### **Characterization**

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

There is no consistent or clear definition for either alternative or complementary medicine.

#### *Self-characterization*

The US National Centre for Complementary and Alternative Medicine (NCCAM) defines CAM as "a group of diverse medical and healthcare systems, practices, and products, that are not currently part of conventional medicine", in a context where conventional medicine is that which is scientifically proven. This definition of CAM is widely known and used and is inclusive of many different types of therapies and products.

The Danish Knowledge and Research Centre for Alternative Medicine an independent institution under the Danish Ministry of the Interior and Health (Danish abbreviation: ViFAB) uses the term "alternative medicine" for:

Treatments performed by therapists that are not authorized healthcare professionals

Treatments performed by authorized healthcare professionals, but those based on methods used mainly outside the healthcare system. People without a healthcare authorisation must be able to perform the treatments.

#### *Institutions*

The World Health Organization defines complementary and alternative medicine as a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system.

In a consensus report released in 2005, entitled Complementary and Alternative Medicine in the United States, the Institute of Medicine (IOM) defined complementary and alternative medicine (CAM) as the non-dominant approach to medicine in a given culture and historical period. A similar definition has been adopted by the Cochrane Collaboration, and official government bodies such as the UK Department of Health. The Cochrane Collaboration Complementary Medicine Field finds that what is considered complementary or alternative practices in one country may be considered conventional medical practices in another. Their definition is, therefore, general:

"complementary medicine includes all such practices and ideas that are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness, or promoting health and well-being." For example biofeedback is widely used within the Physical Medicine & Rehabilitation community, but is considered alternative within the medical community as a whole. While some herbal therapies are mainstream in Europe, but are alternative in the United States.

Proponents of evidence-based medicine, such as the Cochrane Collaboration, use the term alternative medicine but agree that all treatments, whether "mainstream" or "alternative", ought to be held to the standards of the scientific method.

The United States' National Science Foundation has defined alternative medicine as "all treatments that have not been proven effective using scientific methods."

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## *Interactions with conventional pharmaceuticals - Alternative medicine*

### **Interactions with conventional pharmaceuticals**

<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

Some forms of alternative medicine, that are biologically active, can be dangerous. Even when used in conjunction with conventional medicine.

Examples include:

- 1 immuno-augmentation therapy
- 2 shark cartilage
- 3 bioresonance therapy
- 4 oxygen and ozone therapies
- 5 insulin potentiation therapy

There are even herbal remedies that can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anaesthetics during surgery, among other problems.

An example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention that she had been taking "natural" potions to "build up her strength" before the operation, including a powerful anticoagulant that nearly caused her death.

To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly [sic] there's the cynicism, disappointment and depression that some patients get from going on from one alternative medicine to the next. They find after three months the placebo effect wears off. They're disappointed and disillusioned and move on to the next. The patient's disappointment can create depression and make the eventual treatment with anything effective difficult. This is due to the fact that the therapist or doctor may not get compliance, because the patient has so often seen the failure.

### *Potential side-effects*

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing at all. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the appeal to nature fallacy, i.e., "that which is natural cannot be harmful".

An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be much higher than allowed in conventional drugs.

### *Treatment delay*

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the opportunity to obtain treatments that could be more helpful. In short, even innocuous treatments can indirectly produce negative outcomes.

Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use conventional medicine.

#### *Unconventional cancer "cures"*

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centers and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have been shown to be

#### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

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#### ***Integrative medicine, complementary medicine, fringe medicine (Alternative medicine)***

Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (and updated monthly) are made available at ViFABs (Knowledge and Research Centre for Alternative Medicines) home page, see the lists here:  
<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

#### *8 Integrative medicine, complementary medicine, fringe medicine*

##### **Integrative medicine, complementary medicine, fringe medicine**

<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

Integrative medicine is the combination of the practices and methods of alternative/complementary medicine with conventional medicine. It may include preventive medicine and patient-centred medicine. It may also include practices not normally referred to as medicine, such as using prayer, meditation, socializing, and recreation as therapies. Its academic proponents sometimes recommend misleading patients by using known placebo treatments in order to achieve a placebo effect. However, a 2010 survey of family physicians found that 56% of respondents said they had used a placebo in clinical practice as well. Eighty-five percent of respondents believed placebos can have both psychological and physical benefits. A number of universities and hospitals have departments of integrative medicine.

Criticism of integrative medicine includes about proposing to lie to patients about alternative medicines known to be no more than a placebo in order to achieve a placebo effect, and "diverting research time, money, and other resources from more fruitful lines of investigation in order to pursue a theory that has no basis in biology".

"Quackademic medicine" is a pejorative term used for "integrative medicine", when considered to be an infiltration of quackery into academic science-based medicine, and was picked up by science-based medicine anti-ACM critics.

#### *History*

Fuelled by a nationwide survey published in 1993 by David Eisenberg, which revealed that in 1990 approximately 60 million Americans had used one or more complementary or alternative therapy to address health issues. A study published in the November 11, 1998 issue of the Journal of the American Medical Association reported that 42% of Americans had used complementary and alternative therapies, up from 34% in 1990. However, despite the growth in patient demand for complementary medicine, most of the early alternative/complementary medical centres failed.

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## Appeal

### 9 Appeal

A study published in 1998 indicates that a majority of alternative medicine use was in conjunction with standard medical treatments. Approximately 4.4 percent of those studied used alternative medicine as a replacement for conventional medicine. The research found that those having used alternative medicine tended to have higher education or report poorer health status. Dissatisfaction with conventional medicine was not a meaningful factor in the choice, but rather the majority of alternative medicine users appear to do so because "they find these healthcare alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life." In particular, subjects reported a holistic orientation to health, a transformational experience that changed their world view, identification with a number of groups committed to environmentalism, feminism, psychology, and/or spirituality and personal growth, or that they were suffering from a variety of common and minor ailments – notable ones being anxiety, back problems, and chronic pain.

Authors have speculated on the socio-cultural and psychological reasons for the appeal of alternative medicines among that minority using them in lieu of conventional medicine. There are several socio-cultural reasons for the interest in these treatments centered on the low level of scientific literacy among the public at large and a concomitant increase in antiscientific attitudes and new age mysticism. Related to this are vigorous marketing of extravagant claims by the alternative medical community combined with inadequate media scrutiny and attacks on

There is also an increase in conspiracy theories toward conventional medicine and pharmaceutical companies, mistrust of traditional authority figures, such as the physician, and a dislike of the current delivery methods of scientific biomedicine, all of which have led patients to seek out alternative medicine to treat a variety of ailments. Many patients lack access to contemporary medicine, due to a lack of private or public health insurance, which leads them to seek out lower-cost alternative medicine. Medical doctors are also aggressively marketing alternative medicine to profit from this market.

In addition to the social-cultural underpinnings of the popularity of alternative medicine, there are several psychological issues that are critical to its growth. One of the most critical is the placebo effect, which is a well-established observation in medicine. Related to it are similar psychological effects such as the will to believe, cognitive biases that help maintain self-esteem and promote harmonious social functioning, and the post hoc, ergo propter hoc fallacy.

Patients can also be averse to the painful, unpleasant, and sometimes-dangerous side effects of biomedical treatments. Treatments for severe diseases such as cancer and HIV infection have well-known, significant side-effects. Even low-risk medications such as antibiotics can have potential to cause life-threatening anaphylactic reactions in a very few individuals. Also, many medications may cause minor but bothersome symptoms such as cough or upset stomach. In all of these cases, patients may be seeking out alternative treatments to avoid the adverse effects of conventional treatments.

Schofield et al., in a systematic review published in 2011, make ten recommendations which they think may increase the effectiveness of consultations in a conventional (here: oncology) setting, such as "Ask questions about CAM use at critical points in the illness trajectory"; "Respond to the person's emotional state"; and "Provide balanced, evidence-based advice".

They suggest that this approach may address "... concerns surrounding CAM use [and] encourage informed decision-making about CAM and ultimately, improve outcomes for

CAM's popularity may be related to other factors which Edzard Ernst mentions in an interview in *The Independent*:

Why is it so popular, then? Ernst blames the providers, customers and the doctors whose neglect, he says, has created the opening into which alternative therapists have stepped. "People are told lies. There are 40 million websites and 39.9 million tell lies, sometimes outrageous lies. They mislead cancer patients, who are encouraged not only to pay their last penny but to be treated with something that shortens their lives. "At the same time, people are gullible. It needs gullibility for the industry to succeed. It doesn't make me popular with the public, but it's the

In a paper published in October 2010 entitled *The public's enthusiasm for complementary and alternative medicine amounts to a critique of mainstream medicine*, Ernst describes these views in greater detail and concludes:

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### Academic resources

Cochrane and alternative medicine (full lists of updated reviews found on Knowledge and Research Centre for Alternative Medicine)

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### 10 Usage

#### Usage

*Further information: List of branches of alternative medicine*

Age-adjusted percent of adults who have used complementary and alternative medicine: United States, 2002

A 2011 multi-National systematic review concluded that about 40% of cancer patients use some form of complementary and alternative medicine. Alternative medicine varies from country to country. Jurisdictions where alternative medical practices are sufficiently widespread may license and regulate them. Edzard Ernst said that in Austria and Germany complementary and alternative medicine is mainly in the hands of physicians, while some estimates suggest that at least half of American alternative practitioners are physicians. In Germany herbs are tightly regulated: half are prescribed by doctors and covered by health insurance based on their

Commission E list.  
Many people utilize mainstream medicine for diagnosis and basic information, while turning to alternatives for therapy or health-enhancing measures. Studies indicate that alternative approaches are often used in conjunction with conventional medicine. This is referred to by NCCAM as integrative (or integrated) medicine because it "combines treatments from conventional medicine and CAM for which there is high-quality evidence of safety and effectiveness." According to Andrew T. Weil M.D., a leading proponent of integrative medicine, the principles of integrative medicine include: appropriate use of conventional and CAM methods; patient participation; promotion of health as well as treatment of disease; and a preference for natural, minimally-invasive methods.

A 1997 survey found that 13.7% of respondents in the United States sought the services of both a medical doctor and an alternative medicine practitioner. The same survey found that 96% of respondents who sought the services of an alternative medicine practitioner also sought the services of a medical doctor in the past 12 months. Medical doctors are often unaware of their patient's use of alternative medical treatments as only 38.5% of the patient's alternative therapies were discussed with their medical doctor.

Edzard Ernst, Professor of Complementary Medicine at the University of Exeter, wrote in the Medical Journal of Australia that "about half the general population in developed countries use complementary and alternative medicine (CAM)." Survey results released in May 2004 by the National Center for Complementary and Alternative Medicine, part of the United States National Institutes of Health, found that in 2002 62.1% of adults in the country had used some form of CAM in the past 12 months and 75% across lifespan (though these figures drop to 36.0% and 50% if prayer specifically for health reasons is excluded); this study included yoga, meditation, herbal treatments and the Atkins diet as CAM. Another study suggests a similar

A British telephone survey by the BBC of 1209 adults in 1998 showed that around 20% of adults in Britain used alternative medicine in the past 12 months. Ernst was also active politically on this issue, publicly requesting that Prince Charles recall two guides to alternative medicine published by the Foundation for Integrated Health, on the grounds that "they both contain numerous misleading and inaccurate claims concerning the benefits of alternative medicine" and that "the nation cannot be served by promoting ineffective and sometimes dangerous alternative treatments." In general, he believed that CAM can and should be used. The use of alternative medicine in developed countries appeared to increase. A 1998 study showed that the use of alternative medicine rose from 33.8% in 1990 to 42.1% in 1997. In the United Kingdom, a 2000 report ordered by the House of Lords suggested that "...limited data seemed to support the idea that CAM use in the United Kingdom was high and on the increase." In developing nations, access to essential medicines was severely restricted by lack of resources and poverty. Traditional remedies, often closely resembling or forming the basis for alternative remedies, may comprise primary healthcare or be integrated into the healthcare system. In Africa, traditional medicine was used for 80% primary healthcare, and in developing nations as a whole over one-third of the population lacked access to essential medicines.

Advocates of alternative medicine held that the various alternative treatment methods were effective in treating a wide range of major and minor medical conditions, and that published research (such as Michalsen, 2003, Gonsalkorale 2003, and Berga 2003) proved the effectiveness of specific alternative treatments. They asserted that a PubMed search revealed over 370,000 research papers classified as alternative medicine published in Medline-recognized journals since 1966 in the National Library of Medicine database. (*See also Kline 1991 and Lindo 1997*) Complementary therapies were often used in palliative care or by practitioners who attempted to manage chronic pain in patients. Complementary medicine was considered more acceptable in the interdisciplinary approach used in palliative care than in other areas of medicine. "From its early experiences of care for the dying, palliative care took for granted the necessity of placing patient values and lifestyle habits at the core of any design and delivery of quality care at the end of life. If the patient desired complementary therapies, and as long as such treatments provided additional support and did not endanger the patient, they were considered acceptable." The non-pharmacologic interventions of complementary medicine can employ mind-body interventions designed to "reduce pain and concomitant mood disturbance and increase quality of life." Physicians who practice complementary medicine usually discuss and advise patients as to available complementary therapies. Patients often express interest in mind-body complementary therapies because they offer a non-drug approach to treating various health conditions. Some mind-body techniques, such as cognitive-behavioral therapy, were once considered complementary medicine, but are now a part of conventional medicine in the United States. "Complementary medicine treatments used for pain include: Acupuncture, Low-level Laser Therapy, Meditation, Aromatherapy, Chinese Medicine, Dance Therapy, Music Therapy, Massage, Herbalism, Therapeutic Touch, Yoga, Osteopathy, Chiropractic, Naturopathy, and Homeopathy."

In defining complementary medicine in the UK, the House of Lords Select Committee determined that the following therapies were the most often used to complement conventional medicine: Alexander Technique, Aromatherapy, Bach and other Flower Remedies, Body Work Therapies including Massage, Counsel Stress Therapies, Hypnotherapy, Meditation, Reflexology, Shiatsu, Maharishi Ayurvedic Medicine, Nutritional Medicine, and Yoga.

## United States

A 2002 survey of US adults 18 years and older conducted by the National Center for Health Statistics (CDC) and the National Center for Complementary and Alternative Medicine showed that 74.6% had used some form of complementary and alternative medicine (CAM).

62.1% had done so within the preceding twelve months.

When prayer specifically for health reasons is excluded, these figures fall to 49.8% and 36.0%, respectively.

45.2% had in the last twelve months used prayer for health reasons, either through praying for their own health or through others praying for them.

54.9% used CAM in conjunction with conventional medicine.

14.8% "sought care from a licensed or certified" practitioner, suggesting that "most individuals who use CAM prefer to treat themselves."

The Dietary Supplement Industry is expected to be \$250 Billion by 2016 worldwide

Most people used CAM to treat and/or prevent musculoskeletal conditions or other conditions associated with chronic or recurring pain.

"Women were more likely than men to use CAM. The largest sex differential is seen in the use of mind-body therapies including prayer specifically for health reasons".

"Except for the groups of therapies that included prayer specifically for health reasons, use of CAM increased as education levels increased".

The most common CAM therapies used in the US in 2002 were prayer (45.2%), herbalism (18.9%), breathing meditation (11.6%), meditation (7.6%), chiropractic medicine (7.5%), yoga (5.1%), body work (5.0%), diet-based therapy (3.5%), progressive relaxation (3.0%), mega-vitamin therapy (2.8%) and Visualization (2.1%)

In 2004, a survey of nearly 1,400 U.S. hospitals found that more than one in four offered alternative and complementary therapies such as acupuncture, homeopathy, and massage. A 2008 survey of US hospitals by Health Forum, a subsidiary of the American Hospital Association, found that more than 37 percent of responding hospitals indicated that they offer one or more alternative medicine therapies, up from 26.5 percent in 2005. Additionally, hospitals in the southern Atlantic states were most likely to include CAM, followed by east north central states and those in the middle Atlantic. More than 70% of the hospitals offering CAM were in urban areas.

In 2011 the Millennium Cohort Study (United States) found that 39% of the then currently enrolled 44,287 cohort members reported using at least one CAM therapy.

The National Science Foundation had also conducted surveys of the popularity of alternative medicine. After describing the negative impact that science fiction in the media had on public attitudes and understandings of pseudo-science, and defining alternative medicine as all treatments that have not been proven effective using scientific methods, as well as mentioning the concerns of individual scientists, organizations, and members of the science policy-making community, it commented that "nevertheless, the popularity of alternative medicine appeared to increase."

In the state of Texas, physicians may be partially protected from charges of unprofessional conduct or failure to practice medicine in an acceptable manner, and thus from disciplinary action, when they prescribe alternative medicine in a complementary manner, if board specific practice requirements are satisfied and the therapies utilized do not present "a safety risk for the patient that is unreasonably greater than the conventional treatment for the patient's medical condition."

#### *Denmark*

45.2% of the Danish population aged 16 or above had in 2005 used alternative medicine at some point in life. 22.5% had used alternative medicine within the previous year.

The most popular types of therapies within the previous year (2005) are:

Massage, osteopathy or other manipulative techniques (13.2 percent)

Reflexology (6.1 percent)

Acupuncture (5.4 percent)

More results of statistical surveys on alternative medicine in Denmark is available on ViFABs (Knowledge and Research Center for Alternative Medicines) home page, see the pages on Statistics:

<http://www.vifab.dk/uk/alternative+medicine/statistics>

#### *Use among medical students*

68% of the medical students in Denmark were in 2008 using or had used alternative therapy.

*The most commonly used types of alternative medicine were:*

Herbal medicines and Dietary supplements (50 percent)

Acupuncture (18 percent)

Reflexology (18 percent).

### ***Regulation - Alternative medicine***

#### *4 Regulation*

[http://en.wikipedia.org/wiki/Alternative\\_medicine](http://en.wikipedia.org/wiki/Alternative_medicine)

Because of the uncertain nature of various alternative therapies and the wide variety of claims different practitioners make, alternative medicine has been a source of vigorous debate, even over the definition of alternative medicine. Dietary supplements, their ingredients, safety, and claims, are a continual source of controversy. In some cases, political issues, mainstream medicine and alternative medicine all collide, such as in cases where synthetic drugs are legal but the herbal sources of the same active chemical are banned.

In other cases, controversy over mainstream medicine causes questions about the nature of a treatment, such as water fluoridation. Alternative medicine and mainstream medicine debates can also spill over into freedom of religion discussions, such as the right to decline lifesaving treatment for one's children because of religious beliefs. Government regulators continue to attempt to find a regulatory balance.

Jurisdiction differs concerning which branches of alternative medicine are legal, which are regulated, and which (if any) are provided by a government-controlled health service or reimbursed by a private health medical insurance company. The United Nations Committee on Economic, Social and Cultural Rights – article 34 (Specific legal obligations) of the General Comment No. 14 (2000) on The right to the highest attainable standard of health – states that Furthermore, obligations to respect include a State's obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines, from marketing unsafe drugs and from applying coercive medical treatments, unless on an exceptional basis for the treatment of mental illness or the prevention and control of communicable diseases.

Specific implementations of this article are left to member states.

A number of alternative medicine advocates disagree with the restrictions of government agencies that approve medical treatments. In the United States, for example, critics say that the Food and Drug Administration's criteria for experimental evaluation methods impedes those seeking to bring useful and effective treatments and approaches to the public, and that their contributions and discoveries are unfairly dismissed, overlooked or suppressed. Alternative medicine providers recognize that health fraud occurs, and argue that it should be dealt with appropriately when it does, but that these restrictions should not extend to what they view as legitimate healthcare products.

In New Zealand, alternative medicine products are classified as food products, so there are no regulations or safety standards in place.

In Australia, the topic is termed as complementary medicine and the Therapeutic Goods Administration has issued various guidances and standards. Australian regulatory guidelines for complementary medicines (ARGCM) demands that the pesticides, fumigants, toxic metals, microbial toxins, radionuclides, and microbial contaminations present in herbal substances should be monitored, although the guidance does not request for the evidences of these traits. However, for the herbal substances in pharmacopoeial monographs, the detailed information should be supplied to relevant authorities.

The production of modern pharmaceuticals is strictly regulated to ensure that medicines contain a standardized quantity of active ingredients and are free from contamination. Alternative medicine products are not subject to the same governmental quality control standards, and consistency between doses can vary. This leads to uncertainty in the chemical content and biological activity of individual doses. This lack of oversight means that alternative health products are vulnerable to adulteration and contamination. This problem is magnified by international commerce, since different countries have different types and degrees of regulation. This can make it difficult for consumers to properly evaluate the risks and qualities of given

#### *Denmark:*

Herbal and dietary supplements is the designation of a range of products, which have in common their status as medicine belonging under the Danish Medicines Act. In the Danish Medicines Act exists four types of herbal and dietary supplements: Herbal medicinal products, Strong vitamin and mineral preparations, Traditional botanical medicinal products and Homeopathic medicinal products. Some dietary supplements fall within a special category of products, which differ from the above as they are not authorized medicinal products. Dietary supplements are regulated under the Food Act and are registered by the Danish Veterinary and Food Administration.

#### *Alternative therapists*

Denmark has a registration system for alternative therapy practitioners, RAB.

#### *5 Education*

*The examples and perspective in this section may not represent a worldwide view of the subject.*

In the United States, increasing numbers of medical colleges started offering courses in alternative and complementary medicine. A 1998 study reported "There is tremendous heterogeneity and diversity in content, format, and requirements among courses in complementary and alternative medicine at US medical schools". Common topics included chiropractic, acupuncture, homeopathy, herbal therapies, and mind-body techniques. In three separate research surveys that surveyed 729 schools (125 medical schools offering a Doctor of Medicine degree (M.D.), 25 medical schools offering a Doctor of Osteopathic Medicine degree (D.O.), and 585 schools offering a nursing degree), 60% of the medical schools, 95% of osteopathic medical schools and 84.8% of the nursing schools teach some form of CAM. The University of Arizona College of Medicine offers a program in Integrative Medicine under the leadership of Andrew Weil that trains physicians in various branches of alternative medicine that "...neither rejects conventional medicine nor embraces alternative practices uncritically." Accredited Naturopathic colleges and universities are also increasing in number and popularity in Canada and the USA

(See [Naturopathic medical school in North America](#)).

A 2001 survey of European universities found that unconventional medicine courses are widely represented at European universities. They cover a wide range of therapies and many are used clinically. Research work is underway at several faculties. A 2006 survey showed that 40% of the responding European universities offered some form of CAM training."

Universities in the United Kingdom dropped their degree courses in alternative medicine, and as of 2012, no more degrees were offered in such courses as homeopathy, naturopathy, and reflexology.

## 6 Criticism

The NCCAM budget has been criticized because, despite the duration and intensity of studies to measure the efficacy of alternative medicine, according to the QuackWatch website there has been no effective CAM treatments supported by scientific evidence since 2002. Despite this, the National Center for Complementary and Alternative Medicine budget showed a sharp rise to support complementary medicine. In fact, the whole CAM field has been called the SCAM by critics.

Speaking of government funding studies of integrating alternative medicine techniques into the mainstream, Steven Novella, a neurologist at Yale School of Medicine wrote that it "is used to lend an appearance of legitimacy to treatments that are not legitimate." Marcia Angell, former executive editor of The New England Journal of Medicine says, "It's a new name for snake oil."

Speaking of ethics, in November 2011 Edzard Ernst stated that the "level of misinformation about alternative medicine has now reached the point where it has become dangerous and unethical. So far, alternative medicine has remained an ethics-free zone. It is time to change this."

## Alternative and evidence-based medicine

### 7 Alternative and evidence-based medicine

#### Efficacy

As of 2005, the Cochrane Library had 145 CAM-related Cochrane systematic reviews and 340 non-Cochrane systematic reviews. An analysis of the conclusions of only the 145 Cochrane reviews was done by two readers. In 83% of the cases, the readers agreed. In the 17% in which they disagreed, a third reader agreed with one of the initial readers to set a rating. These studies found that, for CAM, 38.4% concluded positive effect or possibly positive (12.4%) effect, 4.8% concluded no effect, 0.69% concluded harmful effect, and 56.6% concluded insufficient evidence. An assessment of conventional treatments found that 41.3% concluded positive or possibly positive effect, 20% concluded no effect, 8.1% concluded net harmful effects, and 21.3% concluded insufficient evidence. However, the CAM review used the 2004 Cochrane database, while the conventional review used the 1998 Cochrane database.

Lists of the Cochrane Reviews on alternative medicine including summaries of the results sorted by type of therapy (updated monthly) are made available at ViFABs (Knowledge and Research Center for Alternative Medicines) *home page*, *see the lists here*:

<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

Most alternative medical treatments are not patentable, which may lead to less research funding from the private sector. In addition, in most countries, alternative treatments (in contrast to pharmaceuticals) can be marketed without any proof of efficacy—also a disincentive for manufacturers to fund scientific research. Some have proposed adopting a prize system to reward medical research. However, public funding for research exists. Increasing the funding for research on alternative medicine techniques is the purpose of the US National Centre for Complementary and Alternative Medicine. NCCAM and its predecessor, the Office of Alternative Medicine, have spent more than \$2.5 billion on such research since 1992; this research hasn't demonstrated the efficacy of alternative treatments.

Some sceptics of alternative practices say that a person may attribute symptomatic relief to an otherwise-ineffective therapy due to the placebo effect, the natural recovery from or the cyclical nature of an illness (the regression fallacy), or the possibility that the person never originally had a true illness.

In the same way as for conventional therapies, drugs, and interventions, it can be difficult to test the efficacy of alternative medicine in clinical trials. In instances where an established, effective, treatment for a condition is already available, the Helsinki Declaration states that withholding such treatment is unethical in most circumstances. Use of standard-of-care treatment in addition to an alternative technique being tested may produce confounded or  
Cancer researcher Andrew J. Vickers stated:

Contrary to much popular and scientific writing, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have shown to be ineffective. In this article, clinical trial data on a number of alternative cancer cures including Livingston-Wheeler, Di Bella Multitherapy, antineoplastons, vitamin C, hydrazine sulfate, Laetrile, and psychotherapy are reviewed. The label "unproven" is inappropriate for such therapies; it is time to assert that many alternative cancer therapies have been "disproven."

*empty*

#### **Safety**

*See also: List of herbs with known adverse effects*

#### *Adequacy of Regulation and CAM Safety*

One of the commonly voiced concerns about complementary alternative medicine (CAM) is the manner in which it is regulated. In the last 2 years there have been significant developments in how CAMs should be assessed prior to re-sale in the United Kingdom and the European Union (EU). Despite this, it has been suggested that current regulatory bodies have been ineffective in preventing deception of patients as many companies have re-labelled their drugs to avoid the new laws. There is no general consensus about how to balance consumer protection (from false claims, toxicity, and advertising) with freedom to choose remedies.

Advocates of CAM suggest that regulation of the industry will adversely affect patients looking for alternative ways to manage their symptoms, even if many of the benefits may represent the placebo effect. Some contend that alternative medicines should not require any more regulation than over-the-counter medicines that can also be toxic in overdose (such as paracetamol).

#### *Interactions with conventional pharmaceuticals*

<http://www.vifab.dk/uk/cochrane+and+alternative+medicine>

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine. Examples include immuno-augmentation therapy, shark cartilage, bioresonance therapy, oxygen and ozone therapies, insulin potentiation therapy. Some herbal remedies can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among other problems. An anecdotal example of these dangers was reported by Associate Professor Alastair MacLennan of Adelaide University, Australia regarding a patient who almost bled to death on the operating table after neglecting to mention that she had been taking "natural" potions to "build up her strength" before the operation, including a powerful anticoagulant that nearly caused her death.

To ABC Online, MacLennan also gives another *possible mechanism*:

And lastly there's the cynicism and disappointment and depression that some patients get from going on from one alternative medicine to the next, and they find after three months the placebo effect wears off, and they're disappointed and they move on to the next one, and they're disappointed and disillusioned, and that can create depression and make the eventual treatment of the patient with anything effective difficult, because you may not get compliance, because they've seen the failure so often in the past.

#### *Potential side-effects*

Conventional treatments are subjected to testing for undesired side-effects, whereas alternative treatments, in general, are not subjected to such testing. Any treatment – whether conventional or alternative – that has a biological or psychological effect on a patient may also have the potential to possess dangerous biological or psychological side-effects. Attempts to refute this fact with regard to alternative treatments sometimes use the appeal to nature fallacy, i.e., "that which is natural cannot be harmful".

An exception to the normal thinking regarding side-effects is Homeopathy. Since 1938, the U.S. Food and Drug Administration (FDA) has regulated homeopathic products in "several significantly different ways from other drugs." Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be much higher than allowed in conventional drugs.

#### *Treatment delay*

Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. According to mental health journalist Scott Lilienfeld in 2002, "unvalidated or scientifically unsupported mental health practices can lead individuals to forgo effective treatments" and refers to this as "opportunity cost". Individuals who spend large amounts of time and money on ineffective treatments may be left with precious little of either, and may forfeit the opportunity to obtain treatments that could be more helpful. In short, even innocuous treatments can indirectly produce negative outcomes.

Between 2001 and 2003, four children died in Australia because their parents chose ineffective naturopathic, homeopathic, or other alternative medicines and diets rather than conventional therapies. In all, they found 17 instances in which children were significantly harmed by a failure to use conventional medicine.

#### *Unconventional cancer "cures"*

Perhaps because many forms of cancer are difficult or impossible to cure, there have always been many therapies offered outside of conventional cancer treatment centres and based on theories not found in biomedicine. These alternative cancer cures have often been described as "unproven," suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. However, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have shown to be ineffective.

#### *Research funding*

Although the Dutch government funded CAM research between 1986 and 2003, it formally ended funding in 2006.

#### **Academic resources**

Cochrane and alternative medicine (full lists of updated reviews found on Knowledge and Research Center for Alternative Medicine)

#### **See also**

Alternative cancer treatments

Health freedom movement  
History of alternative medicine  
List of branches of alternative medicine  
Program for Evaluating Complementary Medicine  
Shakoor v Situ  
Traditional medicine  
Folk medicine

*empty*

***15 Some of the alternative therapies studied with grants from NIH***

Some of the alternative therapies studied with grants from NIH

*Acupuncture* to treat depression, attention-deficit hyperactivity disorder, osteoarthritis, and postoperative dental pain.

*Ayurvedic herbals* for Parkinson's disease. (Ayurvedic medicine is a holistic system, based on the belief that herbals, massage, and other stress relievers help the body make its own natural

*Biofeedback* for diabetes, low back pain, and face and mouth pain caused by jaw disorders. (Biofeedback is the conscious control of biological functions such as those of the heart and blood vessels normally controlled involuntarily.)

*Electric currents* to treat tumors.

*Hypnosis* for chronic low back pain and accelerated fracture healing.

*Imagery* for asthma and breast cancer. (With imagery, patients are guided to see themselves in a different physical, emotional or spiritual state. For example, patients might be guided to imagine themselves in a state of vibrant health and the disease organisms as weak and

*empty*

**See also**

*Alternative cancer treatments*

*Health freedom movement*

*History of alternative medicine*

*List of branches of alternative medicine*

*Program for Evaluating Complementary Medicine*

*Shakoor v Situ*

*Traditional medicine*

*Folk medicine*

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***Integrative medicine – (Glossary of alternative medicine)***

## **Complementary and alternative medicine**

**Complementary and alternative medicine** By *Mayo Clinic staff*

<http://www.mayoclinic.com/health/alternative->

*Complementary and alternative medicine* has never been more popular. Nearly 40 percent of adults report using complementary and alternative medicine, also called CAM for short. Doctors are embracing CAM therapies, too, often combining them with mainstream medical therapies — spawning the new term "integrative medicine." But what is CAM? This guide explains the ABCs of CAM.

*What are some examples of complementary and alternative medicine?*

Exactly what's considered complementary and alternative medicine changes constantly as treatments undergo testing and move into the mainstream. To make sense of the many therapies available, it helps to look at how they're classified by the National Center for Complementary and Alternative Medicine (NCCAM), the agency that funds *scientific research on complementary and alternative medicine*:

*Whole medical systems*

A system isn't just a single practice or remedy — such as massage — but many practices that center on a philosophy, such as the power of nature or the presence of energy in your body.

*Examples of whole medical systems include:*

*Ancient healing systems* . These healing systems arose long before conventional Western medicine and include ayurveda from India and traditional Chinese medicine.

*Homeopathy* . This approach uses minute doses of a substance that causes symptoms to stimulate the body's self-healing response.

*Naturopathy* . This approach focuses on noninvasive treatments to help your body do its own healing and uses a variety of practices, such as massage, acupuncture, herbal remedies, exercise and lifestyle counseling.

*Mind-body medicine*

*Mind-body techniques*

*Mind-body techniques* strengthen the communication between your mind and your body. Complementary and alternative medicine practitioners say these two systems must be in harmony for you to stay healthy. Examples of mind-body connection techniques include meditation, prayer, and relaxation and art therapies.

*Biologically based practices*

*Examples* include dietary supplements and herbal remedies. These treatments use ingredients found in nature. Examples of herbs include ginseng, ginkgo and echinacea, while examples of other dietary supplements include selenium, glucosamine sulfate and SAME. Herbs and supplements can be taken as teas, oils, syrups, powders, tablets or capsules.

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**Complementary and Alternative Medicine (CAM)**

<http://nihseniorhealth.gov/cam/wholemedicalsystems/01.html>

*Complementary and Alternative Medicine (CAM)*

*Whole Medical Systems*

*Whole medical systems* are built upon complete systems of theory and practice. Often, these systems have evolved apart from, and earlier than, the standard medical approach used in the United States. Examples of whole medical systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurvedic medicine. Examples of systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine.

### *Traditional Chinese Medicine (TCM)*

*Traditional Chinese medicine, or TCM*, is a healing system that dates back more than 5,000 years. It is based on the concept that disease results from disruption in the flow of vital energy, or qi (pronounced "chee") in the body. The flow of qi is maintained by keeping a balance in the two forces known as yin and yang. TCM uses specific principles to analyze symptoms—such as cold/heat, interior/exterior, excess/deficiency, and yin yang; and the theory of five elements—fire, earth, metal, water, and wood—to explain how the body works.

*TCM* uses a number of therapeutic approaches such as acupuncture and moxibustion, herbs and other natural products, and massage.

### *Acupuncture, Moxibustion and Herbs*

*Acupuncture* is the stimulation of specific points on the body by a variety of techniques, including the insertion of thin metal needles through the skin. It is intended to remove blockages in the flow of qi and restore and maintain health.

*Moxibustion* is the application of heat from the burning of a herb (usually mugwort) at the acupuncture point.

*Herbs and other natural products* in TCM are usually used together in formulas to fit a person's specific condition.

### *Ayurvedic Medicine*

*Ayurveda* (pronounced "i-yer-vay-duh"), which means "the science of life" in Sanskrit, originated in India and evolved there over thousands of years. Its goal is to prevent disease and promote well-being by bringing the body, mind, and spirit into balance. Ayurveda also proposes treatments for specific health problems.

*Three types of energy* called doshas are believed to form important characteristics of each person's body constitution and to control bodily activities. Imbalances in the doshas, which can be caused by an unhealthy lifestyle, diet, too little or too much mental or physical exertion, the weather, chemicals, or germs, can lead to illness.

*Ayurvedic medicine* relies on therapies such as diet, exercise, meditation, herbs, massage, cleansing, exposure to sunlight, and controlled breathing. The goals of treatment are to eliminate impurities, reduce symptoms, reduce worry, increase harmony in a person's life, and increase resistance to disease.

### *Homeopathy*

*Homeopathy* originated in Europe and has been practiced in the United States since the early 19th century. Its goal is to help the body heal itself by using very small doses of highly diluted substances that in larger doses would produce illness or symptoms. Most homeopathic remedies are derived from natural substances that come from plants, minerals, or animals.

A *homeopathic practitioner* selects treatments based upon a total picture of a person's health and evaluates not only physical symptoms but the emotions, psychological state, body type, genetic and personal health history, and other aspects. In homeopathy, people with the same symptoms may receive different homeopathic remedies.

#### *Naturopathy*

Like homeopathy, naturopathy originated in Europe, but it also includes ancient and modern therapies from other traditions. Naturopathy attempts to help the body heal itself, and naturopaths consider a person's physical, emotional, genetic, environmental, and social circumstances when evaluating treatment. The emphasis is on supporting health rather than fighting disease.

*Practitioners of naturopathy* prefer to use treatment approaches that they consider the most natural and least invasive, relying on methods other than standard medications and surgery. They focus on changes in diet and lifestyle and on preventing disease, together with CAM therapies such as herbs and massage.

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### ***What Is Complementary and Alternative Medicine***

#### **What Is Complementary and Alternative Medicine?**

<http://nccam.nih.gov/health/whatiscam>

#### **Introduction**

Many Americans use complementary and alternative medicine (CAM) in pursuit of health and well-being.

The 2007 National Health Interview Survey (NHIS), which included a comprehensive survey of CAM use by Americans, showed that approximately 38 percent of adults use CAM.

#### *Defining CAM*

Defining CAM is difficult, because the field is very broad and constantly changing. NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine.

Conventional medicine (also called Western or allopathic medicine) is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and registered nurses. The boundaries between CAM and conventional medicine are not absolute, and specific CAM practices may, over time, become widely accepted.

"*Complementary medicine*" refers to use of CAM together with conventional medicine, such as using acupuncture in addition to usual care to help lessen pain.

Most use of CAM by Americans is complementary. "Alternative medicine" refers to use of CAM in place of conventional medicine.

"*Integrative medicine*" combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness. It is also called integrated medicine.

## *Types of CAM*

CAM practices are often grouped into broad categories, such as natural products, mind and body medicine, and manipulative and body-based practices. Although these categories are not formally defined, they are useful for discussing CAM practices.

Some CAM practices may fit into more than one category.

### *Natural Products*

This area of CAM includes use of a variety of herbal medicines (also known as botanicals), vitamins, minerals, and other "natural products." Many are sold over the counter as dietary supplements. (Some uses of dietary supplements—e.g., taking a multivitamin to meet minimum daily nutritional requirements or taking calcium to promote bone health—are not thought of as CAM.)

CAM "*natural products*" also include probiotics—live micro-organisms (usually bacteria) that are similar to micro-organisms normally found in the human digestive tract and that may have beneficial effects. Probiotics are available in foods (e.g., yogurts) or as dietary supplements. They are not the same thing as prebiotics—non-digestible food ingredients that selectively stimulate the growth and/or activity of micro-organisms already present in the body.

*Historical note:* *Herbal or botanical medicines* reflect some of the first attempts to improve the human condition. The personal effects of the mummified prehistoric "ice man" found in the Italian Alps in 1991 included medicinal herbs. By the Middle Ages, thousands of botanical products had been inventoried for their medicinal effects.

*Current use:* Interest in and use of CAM natural products have grown considerably in the past few decades. The 2007 NHIS found that 17.7 percent of American adults had used a non-vitamin/non-mineral natural product. These products were the most popular form of CAM among both adults and children. The most commonly used product among adults was fish oil/omega 3s (reported by 37.4 percent of all adults who said they used natural products); popular products for children included echinacea (37.2 percent) and fish oil/omega 3s (30.5 percent).

### *Mind and Body Medicine*

*Mind and body practices* focus on the interactions among the brain, mind, body, and behavior, with the intent to use the mind to affect physical functioning and promote health. Many CAM practices embody this concept—in different ways.

*Meditation techniques* include specific postures, focused attention, or an open attitude toward distractions. People use meditation to increase calmness and relaxation, improve psychological balance, cope with illness, or enhance overall health and well-being.

The various styles of *yoga* used for health purposes typically combine physical postures, breathing techniques, and meditation or relaxation. People use yoga as part of a general health regimen, and also for a variety of health conditions.

*Acupuncture* is a family of procedures involving the stimulation of specific points on the body using a variety of techniques, such as penetrating the skin with needles that are then manipulated by hand or by electrical stimulation. It is one of the key components of traditional Chinese medicine, and is among the oldest healing practices in the world.

*Other examples of mind and body practices* include deep-breathing exercises, guided imagery, hypnotherapy, progressive relaxation, qi gong, and tai chi.

*Historical note:* The concept that the mind is important in the treatment of illness is integral to the healing approaches of traditional Chinese medicine and Ayurvedic medicine, dating back more than 2,000 years. Hippocrates also noted the moral and spiritual aspects of healing and believed that treatment could occur only with consideration of attitude, environmental influences, and natural remedies.

*Current use:* Several mind and body approaches ranked among the top 10 CAM practices reported by adults in the 2007 NHIS. For example, the survey found that 12.7 percent of adults had used deep-breathing exercises, 9.4 percent had practiced meditation, and 6.1 percent had practiced yoga; use of these three CAM practices had increased significantly since the previous (2002) NHIS. Progressive relaxation and guided imagery were also among the top 10 CAM therapies for adults; deep breathing and yoga ranked high among children. Acupuncture had been used by 1.4 percent of adults and 0.2 percent of children.

1 *Acupuncture* is considered to be a part of mind and body medicine, but it is also a component of energy medicine, manipulative and body-based practices, and traditional Chinese medicine.

### *Manipulative and Body-Based Practices*

Manipulative and body-based practices focus primarily on the structures and systems of the body, including the bones and joints, soft tissues, and circulatory and lymphatic systems. *Two commonly used therapies fall within this category:*

*Spinal manipulation* is practiced by health care professionals such as chiropractors, osteopathic physicians, naturopathic physicians, physical therapists, and some medical doctors.

Practitioners perform spinal manipulation by using their hands or a device to apply a controlled force to a joint of the spine. The amount of force applied depends on the form of manipulation used. The goal of the treatment is to relieve pain and improve physical functioning. Spinal manipulation is among the treatment options used by people with low-back pain—a very common condition that can be difficult to treat.

The term massage therapy encompasses many different techniques. In general, therapists press, rub, and otherwise manipulate the muscles and other soft tissues of the body. People use massage for a variety of health-related purposes, including to relieve pain, rehabilitate sports injuries, reduce stress, increase relaxation, address anxiety and depression, and aid general well-

*Historical note:* Spinal manipulation has been used since the time of the ancient Greeks and was incorporated into chiropractic and osteopathic medicine in the late 19th century. Massage therapy dates back thousands of years. References to massage appear in writings from ancient China, Japan, India, Arabic nations, Egypt, Greece (Hippocrates defined medicine as "the art of rubbing"), and Rome.

*Current use:* According to the 2007 NHIS, chiropractic/osteopathic manipulation and massage ranked in the top 10 CAM therapies among both adults and children. The survey found that 8.6 percent of adults and 2.8 percent of children had used chiropractic or osteopathic manipulation, and 8.3 percent of adults and 1 percent of children had used massage.

### *Other CAM Practices*

CAM also encompasses movement therapies—a broad range of Eastern and Western movement-based approaches used to promote physical, mental, emotional, and spiritual well-being.

Examples include Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration. According to the 2007 NHIS, 1.5 percent of adults and 0.4 percent of children used movement therapies.

*Practices of traditional healers* can also be considered a form of CAM. Traditional healers use methods based on indigenous theories, beliefs, and experiences handed down from generation to generation. A familiar example in the United States is the Native American healer/medicine man. The 2007 NHIS found that 0.4 percent of adults and 1.1 percent of children had used a traditional healer (usage varied for the seven specific types of healers identified in the survey).

Some CAM practices involve *manipulation of various energy fields* to affect health. Such fields may be characterized as veritable (measurable) or putative (yet to be measured). Practices based on veritable forms of energy include those involving electromagnetic fields (e.g., magnet therapy and light therapy). Practices based on putative energy fields (also called biofields) generally reflect the concept that human beings are infused with subtle forms of energy; qi gong, Reiki, and healing touch are examples of such practices. The 2007 NHIS found relatively low use of putative energy therapies. Only 0.5 percent of adults and 0.2 percent of children had used energy healing/Reiki (the survey defined energy healing as the channelling of healing energy through the hands of a practitioner into the client's body).

Finally, whole medical systems, which are complete systems of *theory and practice that have evolved* over time in different cultures and apart from conventional or Western medicine, may be considered CAM. Examples of ancient whole medical systems include Ayurvedic medicine and traditional Chinese medicine. More modern systems that have developed in the past few centuries include homeopathy and naturopathy. The 2007 NHIS asked about the use of Ayurveda, homeopathy, and naturopathy. Although relatively few respondents said they had used Ayurveda or naturopathy, homeopathy ranked 10th in usage among adults (1.8 percent) and 5th among children (1.3 percent).

### *A Note About Safety and Effectiveness*

Rigorous, well-designed clinical trials for many CAM therapies are often lacking; therefore, the safety and effectiveness of many CAM therapies are uncertain. NCCAM is sponsoring research designed to fill this knowledge gap by building a scientific evidence base about CAM therapies—whether they are safe; and whether they work for the conditions for which people use them and, if so, how they work.

As with any medical treatment, there can be risks with CAM therapies. *These general precautions can help to minimize risks:*

*Select CAM practitioners with care.* Find out about the practitioner's training and experience.

Be aware that some dietary supplements may interact with medications or other supplements, may have side effects of their own, or may contain potentially harmful ingredients not listed on the label. Also keep in mind that most supplements have not been tested in pregnant women, nursing mothers, or children.

*Tell all your health care providers about any complementary and alternative practices you use.* Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's Time to Talk campaign.

#### *NCCAM's Role*

NCCAM's mission is to define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care. NCCAM achieves its mission through basic, translational ("bench-to-bedside"), and clinical research; research capacity building and training; and education and

*Be an Informed Consumer:* Information

#### *Resources From NCCAM*

The Health Information page of the NCCAM Web site provides access to a variety of information on CAM, as well as links to other National Institutes of Health (NIH) resources.

*Materials include:*

*Fact sheets designed to help you think about the issues involved in deciding whether to use CAM:*

Are You Considering CAM?

CAM Use and Children

Evaluating Web-Based Health Resources

Paying for CAM Treatment

Selecting a CAM Practitioner

Tips for Talking With Your Health Care Providers About CAM

Using Dietary Supplements Wisely

Fact sheets on specific CAM therapies (e.g., Yoga for Health: An Introduction) and on CAM for specific health conditions (e.g., CAM and *Hepatitis C*: A Focus on Herbal Supplements)—including information on safety, the status of evidence-based research on effectiveness, and points to consider in deciding to use the therapy.

*Herbs at a Glance:* Information on more than 40 of the most common herbs in popular dietary supplements. Available in a booklet and in individual fact sheets.

*A Note About Government Regulation*

#### *Dietary Supplements*

The Federal Government regulates dietary supplements primarily through the U.S. Food and Drug Administration (FDA). The regulations for dietary supplements are not the same as those for prescription or over-the-counter drugs. In general, the regulations for dietary supplements are less strict; for example, a manufacturer does not have to prove the safety and effectiveness of a dietary supplement before it is marketed. Once a dietary supplement is on the market, the FDA monitors safety and product information (label claims and package inserts), and the Federal Trade Commission (FTC) monitors advertising.

#### *Practitioner-Based Therapies*

There is no standardized, national system for credentialing CAM practitioners. The extent and type of credentialing vary widely from state to state and from one CAM profession to another. For example, some CAM professions (e.g., chiropractic) are licensed in all or most states, although specific requirements for training, testing, and continuing education vary; other CAM professions are licensed in only a few states or not at all.

*For More Information*

NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on NCCAM and complementary health approaches, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.:

1-888-644-6226

TTY (for deaf and hard-of-hearing callers):

1-866-464-3615

Web site:

[nccam.nih.gov](http://nccam.nih.gov)

E-mail:

[info@nccam.nih.gov](mailto:info@nccam.nih.gov)

Office of Dietary Supplements (ODS), National Institutes of Health (NIH)

ODS seeks to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, supporting research, sharing research results, and educating the public. Its resources include publications (such as Dietary Supplements: What You Need to Know), fact sheets on a variety of specific supplement ingredients and products (such as vitamin D and multivitamin/mineral supplements), and the PubMed® Dietary Supplement Subset.

Web site:

[ods.od.nih.gov](http://ods.od.nih.gov)

U.S. Food and Drug Administration (FDA)

The FDA oversees the safety of many products, such as foods, medicines, dietary supplements, medical devices, and cosmetics.

Toll-free in the U.S.:

1-888-463-6332

Web site:

[www.fda.gov](http://www.fda.gov)

Center for Food Safety and Applied Nutrition (CFSAN)

CFSAN, a center within FDA, oversees the safety and labeling of supplements, foods, and cosmetics. It has information on dietary supplements.

Toll-free in the U.S.:

1-888-723-3366

Web site:

[www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSA](http://www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSA)

PubMed®

A service of the National Library of Medicine (NLM), PubMed® contains publication information and (in most cases) brief summaries of articles from scientific and medical journals.

Web site:

[www.ncbi.nlm.nih.gov/sites/entrez](http://www.ncbi.nlm.nih.gov/sites/entrez)

NIH National Library of Medicine's MedlinePlus

To provide resources that help answer health questions, MedlinePlus brings together authoritative information from the National Institutes of Health as well as other Government agencies and health-related organizations.

Web site: [www.medlineplus.gov](http://www.medlineplus.gov)

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NCCAM has provided this material for your information. It is not intended to substitute for the medical expertise and advice of your primary health care provider. We encourage you to discuss any decisions about treatment or care with your health care provider. The mention of any product, service, or therapy is not an endorsement by NCCAM.

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*What Is Complementary and Alternative Medicine ...*<http://nccam.nih.gov/health/whatiscam>*What Is Complementary and Alternative Medicine?**On this page:*

Defining CAM

Types of CAM

A Note About Safety and Effectiveness

NCCAM's Role

*Be an Informed Consumer:* Information Resources From NCCAM

A Note About Government Regulation

For More Information

Introduction

Many Americans use complementary and alternative medicine (CAM) in pursuit of health and well-being. The 2007 National Health Interview Survey (NHIS), which included a comprehensive survey of CAM use by Americans, showed that approximately 38 percent of adults use CAM. This fact sheet presents an overview of CAM, types of CAM, summary information on safety and regulation, the mission of the National Center for Complementary and Alternative Medicine (NCCAM), and additional resources.

*Defining CAM*

Defining CAM is difficult, because the field is very broad and constantly changing. NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. Conventional medicine (also called Western or allopathic medicine) is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and registered nurses. The boundaries between CAM and conventional medicine are not absolute, and specific CAM practices may, over time,

"Complementary medicine" refers to use of CAM together with conventional medicine, such as using acupuncture in addition to usual care to help lessen pain. Most use of CAM by Americans is complementary. "Alternative medicine" refers to use of CAM in place of conventional medicine. "Integrative medicine" combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness. It is also called integrated medicine.

*Types of CAM*

CAM practices are often grouped into broad categories, such as natural products, mind and body medicine, and manipulative and body-based practices. Although these categories are not formally defined, they are useful for discussing CAM practices. Some CAM practices may fit into more than one category.

*Natural Products*

This area of CAM includes use of a variety of herbal medicines (also known as botanicals), vitamins, minerals, and other "natural products." Many are sold over the counter as dietary supplements. (Some uses of dietary supplements—e.g., taking a multivitamin to meet minimum daily nutritional requirements or taking calcium to promote bone health—are not thought of as CAM.)

CAM "natural products" also include probiotics—live micro-organisms (usually bacteria) that are similar to micro-organisms normally found in the human digestive tract and that may have beneficial effects. Probiotics are available in foods (e.g., yogurts) or as dietary supplements. They are not the same thing as prebiotics—non-digestible food ingredients that selectively stimulate the growth and/or activity of micro-organisms already present in the body.

*Historical note:* Herbal or botanical medicines reflect some of the first attempts to improve the human condition. The personal effects of the mummified prehistoric "ice man" found in the Italian Alps in 1991 included medicinal herbs. By the Middle Ages, thousands of botanical products had been inventoried for their medicinal effects.

*Current use:* Interest in and use of CAM natural products have grown considerably in the past few decades. The 2007 NHIS found that 17.7 percent of American adults had used a non-vitamin/non-mineral natural product. These products were the most popular form of CAM among both adults and children. The most commonly used product among adults was fish oil/omega 3s (reported by 37.4 percent of all adults who said they used natural products); popular products for children included echinacea (37.2 percent) and fish oil/omega 3s (30.5

#### *Mind and Body Medicine*

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Meditation techniques include specific postures, focused attention, or an open attitude toward distractions. People use meditation to increase calmness and relaxation, improve psychological balance, cope with illness, or enhance overall health and well-being.

The various styles of yoga used for health purposes typically combine physical postures, breathing techniques, and meditation or relaxation. People use yoga as part of a general health regimen, and also for a variety of health conditions.

Acupuncture is a family of procedures involving the stimulation of specific points on the body using a variety of techniques, such as penetrating the skin with needles that are then manipulated by hand or by electrical stimulation. It is one of the key components of traditional Chinese medicine, and is among the oldest healing practices in the world.

*Other examples* of mind and body practices include deep-breathing exercises, guided imagery, hypnotherapy, progressive relaxation, qi gong, and tai chi.

*Historical note:* The concept that the mind is important in the treatment of illness is integral to the healing approaches of traditional Chinese medicine and Ayurvedic medicine, dating back more than 2,000 years. Hippocrates also noted the moral and spiritual aspects of healing and believed that treatment could occur only with consideration of attitude, environmental influences, and natural remedies.

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*Acupuncture* is considered to be a part of mind and body medicine, but it is also a component of energy medicine, manipulative and body-based practices, and traditional Chinese medicine.

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Manipulative and body-based practices focus primarily on the structures and systems of the body, including the bones and joints, soft tissues, and circulatory and lymphatic systems. *Two commonly used therapies fall within this category:*

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The term *massage therapy* encompasses many different techniques. In general, therapists press, rub, and otherwise manipulate the muscles and other soft tissues of the body. People use massage for a variety of health-related purposes, including to relieve pain, rehabilitate sports injuries, reduce stress, increase relaxation, address anxiety and depression, and aid general well-

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*Current use:* According to the 2007 NHIS, chiropractic/osteopathic manipulation and massage ranked in the top 10 CAM therapies among both adults and children. The survey found that 8.6 percent of adults and 2.8 percent of children had used chiropractic or osteopathic manipulation, and 8.3 percent of adults and 1 percent of children had used massage.

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## *Alternative medicine*

### **Alternative medicine**

#### **Alternative medical systems**

Anthroposophical medicine Ayurveda Chiropractic Herbalism Homeopathy Isopathy  
Naturopathic medicine Orthomolecular medicine Traditional Chinese medicine Traditional  
Mongolian medicine Traditional Tibetan medicine

#### Treatments

Mind-body intervention Biologically based therapy Manipulative and body-based methods  
Energy therapy  
Public-health issues

Aspartame Dental amalgams Growth hormone Trans fat Vaccines Water fluoridation

#### Key terms

Alternative medicine Complementary medicine Glossary of alternative medicine

#### Contrary viewpoints

Scientific scepticism Pseudo-science Anti-quackery organizations Evidence-based medicine

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## *Category talk Alternative medical systems*

## Alternative medical systems

[http://en.wikipedia.org/wiki/Template\\_talk:Alternative\\_medical](http://en.wikipedia.org/wiki/Template_talk:Alternative_medical)

**Category talk:Alternative medical systems**

*Alternative Medicine portal*

This category is within the scope of WikiProject Alternative medicine, a collaborative effort to improve the coverage of Alternative medicine related articles on Wikipedia. If you would like to participate, please visit the project page, where you can join the discussion and see a list of open tasks.

I am glad to see that the Glossary of alternative medicine index/article is the main article for Category: Alternative medical systems rather than Alternative medicine. It should also be the main article for Category: Alternative Medicine.

You would NEVER expect that certain personalities not very long ago actually tried unsuccessfully to delete this KEY index to articles on alternative medicine.

I like the Big Blue InfoBox, on these articles. Looks good! -- John Gohde 12:03, 17 September 2006 (UTC)

Not sure exactly what you mean when you say "this article is the main article for Category: Alternative medical systems" - to me it currently looks like Glossary of alternative medicine is the article linked by {{catmore}}. --apers0n 17:42, 18 September 2006 (UTC)

"Category:Alternative medical systems

From Wikipedia, the free encyclopedia

Category: Alternative medicine

The main article for this category is Terms and concepts in alternative medicine."

-- John Gohde 02:23, 20 September 2006 (UTC)

[edit]Proposal to rename category

It appears that the NCCAM name for this category is actually "whole medical systems"; see this overview, for example. Should this category be renamed?

Not realizing the overlap, I have created the other category already...they should probably be merged. Hgilbert (talk) 14:26, 7 November 2008 (UTC)

The NCCAM may believe these are whole medical systems but a lot of people practice them as Complementary therapies, i.e. they use mainstream medicine too, and they are not recognised as complete systems on which people should rely wholly by the mainstream and consensus. I presume that's why the category was named 'alternative medical systems' (I wasn't there at the time) as they are 'alternative' in terms of the mainstream, mostly not endorsed by normal doctors etc, so they are alternative medical systems and that's what most people would call them. On wikipedia we use a neutral point of view and put views which are not the mainstream views in perspective.

-actually, this category describes itself as "Alternative medical systems is the precise name of the NCCAM" thingy, which is worded like they've had this discussion before lol. Hopefully someone will come along who can tell us what was decided as the precise name and why. Sticky Parkin 23:21, 7 November 2008 (UTC)

It appears that the terms are used interchangeably -- for example, on the same page that you link to, actually, which has a link labeled 'alternative medical systems' that takes the reader to a page about 'whole medical systems'.

I don't think that it is either necessary or important to rename this category, but the two should definitely be merged. My preference is to keep all of it at alternative medical systems, because that term is (1) clearly understandable to the uninformed lay person and (2) clearly excludes mainstream medicine (which is surely a "whole" medical system itself, since the use of the word whole here refers to the ability of the medical system to treat every condition that it considers noxious, not to whether or not it is perceived as addressing psycho-social-spiritual conditions). WhatamIdoing (talk) 05:58, 8 November 2008 (UTC)

The first sentence in this article is incorrect as it refers to the NCCAM definition of a subcategory of CAM, namely whole medical systems. NCCAM defines alternative medicine as: "NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine." Some CAMs are whole, many are not. We have to change this. Desoto10 (talk) 22:05, 16 March 2011 (UTC)

## NCCAM classifications

{{**Alternative medical systems**}} -- Alternative medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of alternative medical systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine. Examples of systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurveda.

{{**Mind-body interventions**}} -- Mind-body medicine uses a variety of techniques designed to enhance the mind's capacity to affect bodily function and symptoms. Some techniques that were considered CAM in the past have become mainstream (for example, patient support groups and cognitive-behavioral therapy). Other mind-body techniques are still considered CAM, including meditation, prayer, mental healing, and therapies that use creative outlets such as art, music, or dance.

{{**Biologically based therapy**}} -- Biologically based therapies in CAM use substances found in nature, such as herbs, foods, and vitamins. Some examples include dietary supplements,<sup>3</sup> herbal products, and the use of other so-called natural but as yet scientifically unproven therapies (for example, using shark cartilage to treat cancer).

{{**Manipulative methods**}} -- Manipulative and body-based methods in CAM are based on manipulation and/or movement of one or more parts of the body. Some examples include chiropractic or osteopathic manipulation, and massage.

{{**Energy therapy**}} -- Energy therapies involve the use of energy fields.

-- John Gohde 19:44, 4 December 2007 (UTC)

## Dianetics

Dianetics is an alternative medical system. What is the rationale for viewing it as anything else?  
ausa ↵ui × 06:53, 24 November 2006 (UTC)

Why is NCCAM regarded as the sole source that is acceptable for determining what is and isn't an alternative medicine? --74.132.180.62 22:14, 25 November 2006 (UTC)



VanTucky Talk 18:56, 27 September 2007 (UTC)

FWIW, I'm in favor of keeping the NCCAM classification. The existence of a long standing version usually indicates that quite a few editors agree with that version. While a new consensus is always possible, chances are that it will not stick. I also think that an important change like this one should be discussed and a consensus reached before we change a template that is in such wide use. Having said that, I feel that some of your arguments may have merit. The NIH classification is, indeed, US-centric. How about making this explicit (e.g. by adding "(U.S.)" to the text)? I do not think your other complaint (only one view of several) should be solved by removing the NCCAM classification. It would be better to add other notable/well-sourced classifications (if they exist). Avb 23:59, 27 September 2007 (UTC)

Also FWIW, keep the current template. There are a huge number of editors, myself included, that don't actually believe in "alternative" medicine, we ascribe to scientific analysis and therefore there is medicine as science and there's folklore or faith or something else. Keeping the NCCAM verbiage at least gives a little bit of cover to claiming that these alternative medicine classifications have some meaning. OrangeMarlin Talk• Contributions 00:14, 28 September 2007 (UTC)

I'd vote to keep also; the version with NCCAM has been stable and reflects a well-known VRS without endorsing it exclusively. Others could be added, but speaking as an American-trained acupuncturist with a prior career as a research scientist, I see nothing wrong with NCCAM at all, and much to recommend it. thanks, Jim Butler(talk) 21:03, 28 September 2007 (UTC)

This is an actual consensus I can accept for the time being, even if I still obviously disagree. I sympathize with your point about maintaining a mainstream, scientifically acceptable (at least to some degree, the NCCAM has its notable detractors in the scientific community) system of classification for alt medicine. However, I urge people to keep in mind that this system is not accepted or even well-known among many of the actual systems that fall under the NCCAM's purview. A bit of cultural sensitivity wouldn't hurt here. VanTucky Talk 00:40, 28 September 2007 (UTC)

Well, things like germ theory, the scientific method and avogadro's constant are neither well known nor well accepted by practitioners of the er... systems... listed, but that doesn't, or at least shouldn't, stop us from presenting them in the light of those things. In any case the categories presented are a convenient and logical way of navigating the plethora of cam articles, and even better we have a reliable source to back that up. –ornis 01:04, 28 September 2007 (UTC)

Those examples are inappropriate. They're far too generalized. The classification of, for example, mind-body intervention was created expressly and exclusively for categorization of these systems and techniques, so the fact that it is disputed and/or unknown by practitioners is much more indicative. VanTucky Talk 01:09, 28 September 2007 (UTC)

*Comment.* A related discussion is occurring at [Wikipedia:Templates\\_for\\_deletion/Log/2007\\_September\\_22#Template:Mind-body\\_interventions](http://Wikipedia:Templates_for_deletion/Log/2007_September_22#Template:Mind-body_interventions). Many of the same arguments apply there. -- Fyslee / talk 04:22, 28 September 2007 (UTC)

*Comment* I see nothing particularly objectionable to the NCCAM classifications. I don't know how useful they are, but it's as good of a way to link to the relevant articles as any. Adam Cuerden talk 17:01, 4 October 2007 (UTC)

*Reorganizing this template slightly*

What do you guys think about moving the Complementary and Alternative Medicine sections, under See also, to the top of this template? It seems like those should receive prominence. II 02:11, 8 July 2008 (UTC)

*Acupuncture*

*Re this change:* normally acupuncture is not considered to be an alternative medical system in its own right: it is a healing practice that is part of traditional Chinese medicine, which is an alternative medical system that is already listed in this template. The relationship between acupuncture and traditional Chinese medicine is akin to the relationship between spinal manipulation and chiropractic. For consistency, we should list traditional Chinese medicine and chiropractic in this template, and we should not list acupuncture and spinal manipulation. Eubulides (talk) 00:56, 3 November 2008 (UTC)

### *Faith healing*

Re this change, which introduced a wikilink to Faith healing: normally faith healing, like acupuncture, is not considered to be an alternative medical system in its own right: it is a healing practice that is part of a religious system, not a medical system. The NCCAM page on CAM doesn't list faith healing as a medical system, and looking in other sources I don't see anyone claiming that it is a medical system. For now reverted the change. Eubulides (talk) 17:38, 11 November 2008 (UTC)

### *Anthroposophic medicine*

*Re this change:* as Anthroposophic medicine says, anthroposophic medicine is complementary medicine and not alternative medicine. The NCCAM seems to agree with this, so this template is not the right place for a wikilink to Anthroposophic medicine. If there is a template for complementary medicine, that would be a better place for the wikilink; if there is no such template, perhaps one ought to be created. For now, I reverted that change. Eubulides (talk) 21:42, 4 December 2008 (UTC)

There is little (too little) distinction made between complementary and alternative medicine both here and elsewhere. For example, the Wikipedia article on complementary medicine redirects to alternative medicine. Usually they are grouped together; perhaps we should change this template title to "complementary and alternative medicine". hgilbert (talk) 22:22, 4 December 2008 (UTC)

I checked; NCCAM's category "alternative medical systems" explicitly relates to both complementary and alternative medicine (see their page describing CAM). There seems to be no ground to differentiate them here, then. hgilbert (talk) 22:43, 4 December 2008 (UTC)

Sorry, I don't follow the above remarks: the source you cite seems to say exactly the opposite of what you're saying. In NCCAM's FAQ, the question "*Are complementary medicine and alternative medicine different from each other?*" is answered as follows:

*"Yes, they are different.*

Complementary medicine is used together with conventional medicine. An example of a complementary therapy is using aromatherapy to help lessen a patient's discomfort following surgery.

*Alternative medicine* is used in place of conventional medicine. An example of an alternative therapy is using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by a conventional doctor."

Eubulides (talk) 01:22, 5 December 2008 (UTC)

Pretty late comment here,... but we have discussed this to death prior to the merging of the various CAM articles. That NCCAM quote is rather misleading when read superficially. Actually it doesn't propose a real difference in the methods used, only a difference in how identical methods are used in different settings. It is the setting that is different, IOW any imaginable alternative medical method or technique is considered "complementary" if used in conjunction with mainstream medicines and techniques. One will find even the most absurd and non-evidence-based alternative methods identified as "complementary" because of this definitional distinction, which is therefore pretty useless most of the time. In Britain the situation is even worse, where "complementary" is used pretty synonymously with "alternative" much of the time. That's simply because the alternative medicine movement in Britain (likely because of support from HRH, the Prince of Quacks) has been more successful at affecting terminology so nonsense could slip under the radar, and into folk's consciousness as relatively innocuous. -- Fyslee (talk) 04:29, 1 March 2009 (UTC)

Anthroposophy is considered an alternative medical system: see Holistic Nursing and Annex 1 of these Model Guidelines for the EU. hgilbert (talk) 01:44, 5 December 2008 (UTC)

Thanks for the cites, particularly the EU one. I added a few more from it. Eubulides (talk) 02:22, 5 December 2008 (UTC)

I think we need to be careful of using such promotional, self-published, publications and guidelines from the groups themselves. We need independent governmental sources.

We also need to avoid link bloat in such a template. Only old, large, and very well-established systems that have long promoted themselves as complete systems for dealing with all health care needs (truly "alternative" to mainstream care) should be included. This needs paring down. Especially Neural therapy hardly deserves mention in the template (and its article happens to be an atrocious piece of advertising). -- Fyslee (talk) 04:29, 1 March 2009 (UTC)

Good point about Neural therapy; I removed it. *Any others?* Eubulides (talk) 06:38, 1 March 2009 (UTC)

*Please add a template of Academic resources...*

or the one of academic journal--222.64.29.57 (talk) 02:03, 17 May 2009 (UTC)

As far as I know, there are no reliable sources for alternative medicine. SciMedKnowledge (talk) 02:15, 17 May 2009 (UTC)

In a certain sense that is true. The promotional ones are rarely RS, and the mainstream ones that discuss alternative medicine are usually critical, and they are RS. There are quite a few listed [Alternative medicine critics](#)

-- Brangifer (talk) 05:57, 17 May 2009 (UTC)

I agree that peer reviewed journals are highly critical. But almost any medical or scientific journal that is peer reviewed and also has a high impact factor have published critiques of alt med, so it's almost like the list could be huge. Oh well, I don't think it's a big issue.

SciMedKnowledge (talk) 06:16, 17 May 2009 (UTC)

NEJM devoted a whole issue to it, and its editors had incisive comments. I think this is the editorial from that issue.

*This is another noted editor who doesn't hide his views:*

Gerald Weissmann, Editor-in-Chief, The FASEB Journal. The Federation of American Societies for Experimental Biology, abbreviated FASEB, is a non-profit organization that is the principal umbrella organization of U.S. societies in the field of biological and medical research. FASEB organizes academic conferences and publishes scientific literature.

-- Brangifer (talk) 07:51, 17 May 2009 (UTC)

### *Orthopathy*

Zanze123 (talk · contribs) has twice added Orthopathy to this template, claiming that it's an alternative medical system of note. I see no evidence that it's of any note. It's not listed at NCCAM, and it's not listed in mainstream sources. Google searches for the term show that it's more often used in a religious sense that has nothing to do with medicine (it means "right-heartedness", as opposed to orthodoxy which means "right-mindedness"). This template does not have room for every medical theory that might have a few adherents. I don't see any way that orthopathy can make the cut here. Eubulides (talk) 21:55, 13 November 2009 (UTC)

Eubulides (talk · contribs) has twice removed Orthopathy before providing any discussion on the subject. OK, orthopathy is not an alternative medical system, it's not of note because Eubulides can't find information on it, NCCAM is gospel even though it only covers subjects where there are published papers and published papers are only published when publishers deem published papers 'relevant' to the journal's audience (publishers can publish whatever they like), Orthopathy only has a 'few adherents' because Eubulides believes so, and the meaning of

Orthopathy has nothing to do with alternative medicine because Eubulides says so according to one definition of what it means. Zanze123 (talk)

22:28, 13 November 2009 (UTC)

*Eubulides is correct.* He followed the WP:BRD cycle, while you began edit warring by restoring it, instead of following the BRD cycle by discussing the problem here. This template is only for large systems with a significant following. They must be very notable. We can't list every single possible alternative medical practice with a few followers. Keep in mind this is a template, not an article or list. Don't restore it without a solid consensus. -- Brangifer (talk) 00:33, 14 November 2009 (UTC)

*There is no consensus on Wikipedia,* only warring factions. I did not begin edit warring. I made a change, which was then reversed WITHOUT discussion. OK orthopathy is not a large system with a significant following. Lol. As for what is notable. to what extent is NCCAM notable given that it is based on clinical research in published journals, where published journals first

whether the papers are of interest to their audience before bothering to send papers for peer review, giving them freedom to not publish anything they don't want to. Zanze123 (talk) 14:43, 14 November 2009 (UTC)

The previous comment seems to be arguing against two Wikipedia policies (Wikipedia:Consensus and Wikipedia:Verifiability) at the same time. Wikipedia policies are sometimes wrong and can be changed, but that should be taken up on the policies' talk pages, not here. Eubulides (talk) 18:52, 14 November 2009 (UTC)

### template image

I do think the template needs some kind of image - it's pretty ugly as is. can we find something that works? --Ludwigs2 20:07, 21 January 2010 (UTC)

Do other templates of this type have an image? If we're going to use an image, I suggest the one used on the template at the top of the page:

<http://en.wikipedia.org/wiki/File:Outline-body-aura.png>

Brangifer (talk) 22:05, 24 January 2010 (UTC)

eh, I added the template image option mostly because I think the template looks bare and ugly without one. The default is currently blank, but the image can be added on a page-by-page basis. Which page are you talking about for this aura image? --Ludwigs2 22:24, 24 January 2010 (UTC)

Make it the default image for all uses. Allowing different images on each article is an open invitation to POV pushing and myriad edit wars. This image has been accepted by the community for some time now. It was designed by

User:Levine2112. -- Brangifer (talk) 01:27, 25 January 2010 (UTC)

Alt Med is such a widely ranging topic that I think individual page specifications are almost mandatory. besides, I've already run into opposition to using any kind of generic default image. I think it's best to just leave it blank and let pages specify. I mean, we can start a discussion about using a generic image - maybe we could create an animated gif to run through various appropriate images? but currently there's no consensus for it. --Ludwigs2 01:40, 25 January 2010 (UTC)

Where have you run into opposition? Currently there is no consensus for anything, much less an image. The template's been functioning fine without it. -- Brangifer (talk) 02:35, 25 January 2010 (UTC)

I think we're talking past each other. I added an image originally, which Eubulides reverted. so I added it as an option with a default image, and Eubulides removed the default. both perfectly fine actions, but making it clear that there's no consensus for having a common image on the template. the functionality for a page-dependent images is still in there, and is used on a couple of pages (where I've added it). I think the template looks much better with an image of some sort rather than without, which is why I started this whole process. you can disagree with that, but I think at this point the best thing to do is work with it on a page-by-page basis. I don't think we need to do anything more with the template - the parameter can stay in place even if we decide not to use it. --Ludwigs2 02:45, 25 January 2010 (UTC)

The default image wasn't appropriate for Chiropractic, and I think it unlikely that any single image will work that well in all the places this template is used. For example,

**File:Outline-body-aura.png** might be appropriate for energy therapies but it's not right for herbalism (or for chiropractic, for that matter). Eubulides (talk) 04:24, 25 January 2010 (UTC)

Note that it was created by one of the strongest pushers of chiropractic opinion around. It does fit for chiropractic because of the mystical and vitalistic roots of the profession, even today, since they still haven't (and can't) divorced themselves from non-existent vertebral subluxations per the last official statement from the school leaders. Since alternative medicine is by definition largely based on non-scientific methods and/or is non-EBM, the image works pretty well, which is probably why even the supporters of alternative medicine have accepted its use. -- Brangifer (talk) 05:29, 25 January 2010 (UTC)

Brangifer: Eub was talking about the default image I used (spanish herbal market) not the aural image you're referring to. I don't know anything about chiropractic, I don't know who pushes for it or who pushes against it, and I'd rather not hear about that anyway. --Ludwigs2 06:15, 25 January 2010 (UTC)

My, this is getting confusing! I originally was talking about the Spanish herbal market, but my most recent comment also discussed the aura image. Eubulides (talk) 06:35, 25 January 2010 (UTC)

lol - well, does anyone have any objections to the current arrangement? --Ludwigs2 06:49, 25 January 2010 (UTC)

My main concern is that we limit edit warring, and different images on each article are potential edit war magnets. Either use no image or use a neutral one that has been accepted widely without any opposition. -- Brangifer (talk) 07:01, 25 January 2010 (UTC)

(outdent) I don't think that's a reasonable request. what image would work on topics as diverse as chiropractic, Chinese traditional medicine, and ayurveda (not to mention more arcane topics)? I can't see opposing the possibility of an image just because of the potential for edit wars, nor can I see the value on insisting on a common image when it will obviously be unsatisfactory on some pages, and will certainly cause stressful debates. --Ludwigs2 07:27, 25 January 2010 (UTC)  
That's why no image has worked just fine. The image I suggested has already been working with no objections, but I'm not insisting on an image, since having no image has also worked just fine. Other templates have no image. While improvement always involves change, there can be lots of change without improvement. Sometimes it's best to follow the old adage: "If it isn't broken, don't fix it." -- Brangifer (talk) 14:49, 25 January 2010 (UTC)

#### *Formatting by hand*

A recent edit replaced the old version 1, which used {{Infobox}}, with a new version 2 that uses {{Sidebar with heading backgrounds}} and formatted the sidebar by hand using "<br/>". I redid it to version 3, which lets the browser do the layout, but this was reverted with the edit summary 'That makes the template to narrow, and puts a "." at the end of every line.'

However, version 3 doesn't make the sidebar too narrow: the width looks just fine when the sidebar stands alone. Version 2 results in very bad layout when browsers are configured to use large fonts (a common practice among visually impaired readers), as the sidebar becomes way too wide and doesn't even fit within the screen. If width is an issue in some contexts (perhaps because of neighboring images or other sidebars), we can add a |style= parameter to let the template invoker choose their own width and other style parameters.

Also, there's nothing wrong with version 3's putting the "." at the end of the lines when this separates items; this clearly and consistently indicates the reader the boundary between two items, and is less confusing than the version 2 approach, which occasionally breaks an item across line boundaries and for which a line boundary therefore is visually ambiguous (sometimes it's a separator between items, sometimes not). Consistent use of "." is common in navbox templates, and is used in {{Alternative medicine}} and many similar templates.

While we're on the subject, what's the point of using {{Sidebar with heading backgrounds}} at all? What's wrong with {{Infobox}}? If we can't come up with a good approach with {{Sidebar with heading backgrounds}} perhaps we should just revert back to version 1.

Anyway, I've made this further edit to version 3, which adds a |style= parameter as discussed above. Further comments are welcome. Eubulides (talk) 18:32, 19 February 2010 (UTC)

Ah, I see your point. Sorry! Gabbe (talk) 22:25, 21 February 2010 (UTC)

#### *Osteopathy*

What was the reason for inclusion osteopathy in this template? That's a traditional medicine, is not it? Biophys (talk) 18:40, 17 January 2011 (UTC)

Not to my knowledge - the article says late 19th century, whereas traditional medicine usually means practiced since time immemorial or something along those lines. My guess is that non-US osteopathy is the intended target (the holistic kind rather than the roughly-equivalent-to-an-MD kind). Osteopathy talks about the differences a fair bit, and seems to be the main article for the alternative medicine; Osteopathic manipulative medicine is hat-linked from there, and I am not sure how we could really make the distinction in this template. - 2/0 (cont.) 19:18, 17 January 2011 (UTC)

I mean "modern" or "mainstream" medicine (it seems that Traditional medicine actually refer to "alternative medicine", sorry, I did not realized that). The point is very simple. The vast majority of people with DO degrees come from the US and work in the field of "mainstream medicine", legally and based on their education and qualification. Hence placing this area to "alternative medicine" (as something opposed to "mainstream medicine") is hardly justifiable. Biophys (talk) 20:44, 17 January 2011 (UTC)

Meaning that free of the context at that article, it is misleading simply to say osteopathy? I can buy that. I think that this template is intended as a representative rather than comprehensive list, so go ahead and remove it if nobody else objects. The template still renders fine on my display without it, so I do not think we need to worry overmuch about replacing it. - 2/0 (cont.) 21:25, 17 January 2011 (UTC)

As 2/0 says, there is a difference. The original form of osteopathy as started by Andrew Taylor Still (a spiritualist like D. D. Palmer, the founder of chiropractic), was a form of alternative medicine with metaphysical and unscientific roots, but unlike Palmer, Still was an MD to begin with and had quite a bit more knowledge, although at the time that was quite limited. In contrast to chiropractic, osteopaths officially and in writing distanced themselves from their unscientific roots and gradually updated their educational standards to something nearing, but still not quite, that of MDs. (Chiropractic has yet to make such an official declaration, but hopes to modernize under the radar so they don't have to admit they've been treating a fictive lesion all along, IOW operating a scam all along.) These DOs are legally considered on a par with MDs. It is these DOs who are referred to as Doctor of Osteopathic Medicine, yet in common parlance they are still often called Osteopaths, which makes the matter confusing. To distinguish the scientific ones from those who practice according to the old unscientific manner, especially in countries outside the USA where they do not receive the same degree of education and are educated in the old manner, we have two articles. One is generic and the other specifically for the near-equals of MDs. Are you still confused? You should be! As long as there exists a separate education, there will be confusion. It also increases the likelihood that a Doctor of

Osteopathic Medicine will include old-fashioned quackery in his practice, like Joseph Mercola does. To be fair, there are also MDs who include unscientific ideas and methods in their practices (think Andrew Weil and Dr. Oz). Quackery knows no boundaries. -- Brangifer (talk) 03:54, 18 January 2011 (UTC)

I got a bit sidetracked in my long homily, but our osteopathy article covers the whole thing and describes both the alternative aspects and links to the scientific Doctor of Osteopathic Medicine article, but because the template uses the system of classification set up by NCCAM, we shouldn't have it under "alternative...". They classify it as "conventional" like MDs, PTs, etc., and not "alternative". We can just leave it up to the article to make the distinctions because of local applications in other countries. So I vote for removing it from this template. -- Brangifer (talk) 04:11, 18 January 2011 (UTC)

A part of the confusion comes from the existence of two separate articles, Osteopathic manipulative medicine (history/philosophical issues) and Soft tissue technique (that is what osteopathic physicians actually do). The latter is just a standard/mainstream medical technique to relax muscles and restore blood circulation. Curiously enough, it was even taught in Russian medical schools, but was not widely used. Biophys (talk) 15:44, 18 January 2011 (UTC)

The latter of which is a much better written and informative article. Anyone feel up to upgrading or maybe merging? Anyway, consensus seems good enough here that I just removed Osteopathy from the template. Spot-checking a few of the articles where the template is used, this does not seem to have borked anything, but a few more eyes viewing at different screen widths would not go amiss (also keep in mind that the width of the template follows the image, if used). - 2/0 (cont.) 23:23, 18 January 2011 (UTC)

*Thank you!* I will probably look at some articles in this area later. Biophys (talk) 05:18, 20 January 2011 (UTC)

Despite of consensus here, someone placed Osteopathy back without discussion. I am going to remove it. My very best wishes (talk) 04:05, 6 September 2012 (UTC)

#### *NCCAM Classifications*

Maybe the original editor used information that is not currently on the NCCAM website. In any case, *NCCAM offers the following classifications of alternative medicine:*

Natural Products

Mind-Body Medicine

Manipulative and Body-Based Practices

Movement Therapies

Traditional Healers

Energy Fields

Whole Medical Systems

If this is how NCCAM classifies this field, and we say that we are using NCCAM classification then the two should match up. If Wiki articles have different names, then the NCCAM name should be used in the template and redirected to the appropriate article.Desoto10 (talk) 22:48, 16 March 2011 (UTC)

*Well, according to their definition* [2], the conventional medicine is something that certified doctors and nurses do ("Conventional medicine is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathic medicine) degrees and by allied health professionals, such as physical therapists, psychologists, and registered nurses."). That sounds logical. Other than that, their classification is a strange combination of an outright pseudo-science (like Magnet therapy) and something that obviously works (like massage) ... My very best wishes (talk) 04:41, 6 September 2012 (UTC)

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### *History of alternative medicine ...*

#### **Definition of Alternative medical system**

<http://www.medterms.com/script/main/art.asp?articlekey=33078>

*Alternative medical system:*

An umbrella term for a number of practices beyond the scope of conventional medicine. These forms of alternative medicine are built upon a complete system of ideas and practice and may have evolved in Western or non-Western cultures. Examples include Ayurveda, Chiropractic, Homeopathy, Naturopathic medicine, Osteopathy, and Traditional Chinese medicine.

#### **History of alternative medicine**

[http://en.wikipedia.org/wiki/History\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/History_of_alternative_medicine)

This article or section is in the process of an expansion or major restructuring. You are welcome to assist in its construction by editing it as well. If this article or section has not been edited in several days, please remove this template.

This article was last edited by FiachraByrne (talk | contribs) 1 second ago. (Purge)

"Disease Can Not Exist", October 1899 advertisement in the People's Home Journal for Weltmerism, a form of "magnetic healing"

The term alternative medicine refers to systems of medical thought and practice which function as alternatives to or subsist outside of conventional, mainstream medicine. Alternative medicine cannot exist absent an established, authoritative and stable medical orthodoxy to which it can function as an alternative. Such orthodoxy was only established in the West during the nineteenth century through processes of regulation, association, institution building and systematised medical education.

#### **Alternative medicine?**

The concept of alternative medicine is problematic as it cannot exist autonomously as an object of study in its own right but must always be defined in relation to a non-static and transient medical orthodoxy. It also divides medicine into two realms, a medical mainstream and fringe, which, in privileging orthodoxy, presents difficulties in constructing an historical analysis independent of the often biased and polemical views of regular medical practitioners. The description of non-conventional medicine as alternative reinforces both its marginality and the centrality of official medicine. Although more neutral than either pejorative or promotional designations such as “quackery” or “natural medicine”, cognate terms like “unconventional”, “heterodox”, “unofficial”, “irregular”, “folk”, “popular”, “marginal”, “complementary”, “integrative” or “unorthodox” define their object against the standard of conventional biomedicine, entail particular perspectives and judgements, often carry moral overtones, and can be inaccurate. Conventional medical practitioners in the West have, since the nineteenth century, used some of these and similar terms as a means of defining the boundary of “legitimate” medicine, marking the division between that which is scientific and that which is not. The definition of mainstream medicine, generally understood to refer to a system of licensed medicine which enjoys state and legal protection in a jurisdiction,[n 1] is also highly specific to time and place. In countries such as India and China traditional systems of medicine, in conjunction with Western biomedical science, may be considered conventional and mainstream. The shifting nature of these terms is underlined by recent efforts to demarcate between alternative treatments on the basis of efficacy and safety and to amalgamate those therapies with scientifically adjudged value into complementary medicine as a pluralistic adjunct to conventional practice.[n 2] This would introduce a new line of division based upon medical validity.

### **Before the "fringe"**

"Marriage à la Mode, Plate 3, (The Scene with the Quack)" by William Hogarth, 1745

Prior to the nineteenth century European medical training and practice was ostensibly self-regulated through a variety of antique corporations, guilds or colleges. Among regular practitioners, university trained physicians formed a medical elite while provincial surgeons and apothecaries, who learnt their art through apprenticeship, made up the lesser ranks. In Old Regime France, licenses for medical practitioners were granted by the medical faculties of the major universities, such as the Paris Faculty of Medicine. Access was restricted and successful candidates, amongst other requirements, had to pass examinations and pay regular fees. In the Austrian Empire medical licences were granted by the Universities of Prague and Vienna. Amongst the German states the top physicians were academically qualified and typically attached to medical colleges associated with the royal court.

Outside of these formal medical structures there were myriad other medical practitioners, often termed irregulars, plying a range of services and goods. The eighteenth-century medical marketplace, a period often referred to as the "Golden Age of quackery", [n 3] was a highly pluralistic one that lacked a well-defined and policed division between "conventional" and "unconventional" medical practitioners. In much of continental Europe legal remedies served to control at least the most egregious forms of "irregular" medical practice but the medical market in both Britain and America was less restrained through regulation. Quackery in the period prior to modern medical professionalisation should not be considered equivalent to alternative medicine as those commonly deemed quacks were not peripheral figures by default nor did they necessarily promote oppositional and alternative medical systems. Indeed, the charge, which might allege medical incompetence, avarice or fraud, was levelled quite indiscriminately across the varied classes of medical practitioners be they regular medics, such as the hierarchical, corporate classes of physicians, surgeons and apothecaries in England, or irregulars such as nostrum mongers, bonesetters and local wise-women. Commonly,

however, quackery was associated with a growing medical entrepreneurship amongst both regular and irregular practitioners in the provision of goods and services along with associated techniques of advertisement and self-promotion in the medical marketplace. The constituent features of the medical marketplace during the eighteenth century were the development of medical consumerism and a high degree of patient power and choice in the selection of treatments, the limited efficacy of available medical therapies, and the absence of both medical professionalisation and enforced regulation of the market.

*empty*

### *NCCAM's Role*

NCCAM's mission is to define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care. NCCAM achieves its mission through basic, translational ("bench-to-bedside"), and clinical research; research capacity building and training; and education and

### *Be an Informed Consumer: Information Resources From NCCAM*

The Health Information page of the NCCAM Web site provides access to a variety of information on CAM, as well as links to other National Institutes of Health (NIH) resources.

*Materials include:*

*Fact sheets designed to help you think about the issues involved in deciding whether to use*

*CAM:*

Are You Considering CAM?

CAM Use and Children

Evaluating Web-Based Health Resources

Paying for CAM Treatment

Selecting a CAM Practitioner

Tips for Talking With Your Health Care Providers About CAM

Using Dietary Supplements Wisely

Fact sheets on specific CAM therapies (e.g., Yoga for Health: An Introduction) and on CAM for specific health conditions (e.g., CAM and Hepatitis C: A Focus on Herbal Supplements)—including information on safety, the status of evidence-based research on effectiveness, and points to consider in deciding to use the therapy.

Herbs at a Glance: Information on more than 40 of the most common herbs in popular dietary supplements. Available in a booklet and in individual fact sheets.

A Note About Government Regulation

Dietary Supplements

The Federal Government regulates dietary supplements primarily through the U.S. Food and Drug Administration (FDA). The regulations for dietary supplements are not the same as those for prescription or over-the-counter drugs. In general, the regulations for dietary supplements are less strict; for example, a manufacturer does not have to prove the safety and effectiveness of a dietary supplement before it is marketed. Once a dietary supplement is on the market, the FDA monitors safety and product information (label claims and package inserts), and the Federal Trade Commission (FTC) monitors advertising.

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### ***NCCAM classifications ...***

#### **NCCAM classifications**

[http://en.wikipedia.org/wiki/Template\\_talk:Alternative\\_medical](http://en.wikipedia.org/wiki/Template_talk:Alternative_medical)

Wikipedia carries a fundamentally world-wide point of view. Relying solely on an American governmental body as a system of classification in the template, especially for systems that are not of U.S. origin, is a violation of this neutral and international stance. VanTucky Talk 23:10, 26 September 2007 (UTC)

Four out of the eight systems mentioned are "systems that are not of U.S. origin," so what's the problem? The NCCAM recognizes them as such. Keep in mind that all systems get brought to the US and are practiced there. They therefore get assessed by the NCCAM. -- Fyslee / talk 04:38, 27 September 2007 (UTC)

It's not the systems of alt medicine mentioned (TCM etc.), it was the following NCCAM classification system (which are not medicinal systems in and of themselves) which I have removed. VanTucky Talk 04:53, 27 September 2007 (UTC)

It is a V & RS of a system of classification that is all-inclusive and has been a consensus part of the template for ages. No need to remove such a valuable resource. Restoring consensus version. -- Fyslee / talk 05:19, 27 September 2007 (UTC)

First off, a discussion between two users where they disagree is not a consensus. Relying on a previous consensus by default when new issues have been brought up is not okay. Second, the NCCAM is a solely American body, and by including its method of classification (which not a single other regulatory or private body uses) the template fails to represent a world-wide POV. Third, many of the classifications that the NCCAM uses for arts such as qigong, t'ai chi ch'uan, feldenkrais and yoga are very controversial. They take a stance on the healing mechanism of these practices that is only one significant view, and thus including only NCCAM on the template, and presenting it as if it were widely accepted, is a violation of NPOV. VanTucky Talk 18:56, 27 September 2007 (UTC)

FWIW, I'm in favor of keeping the NCCAM classification. The existence of a long standing version usually indicates that quite a few editors agree with that version. While a new consensus is always possible, chances are that it will not stick. I also think that an important change like this one should be discussed and a consensus reached before we change a template that is in such wide use. Having said that, I feel that some of your arguments may have merit. The NIH classification is, indeed, US-centric. How about making this explicit (e.g. by adding "(U.S.)" to the text)? I do not think your other complaint (only one view of several) should be solved by removing the NCCAM classification. It would be better to add other notable/well-sourced classifications (if they exist). Avb 23:59, 27 September 2007 (UTC)

Also FWIW, keep the current template. There are a huge number of editors, myself included, that don't actually believe in "alternative" medicine, we ascribe to scientific analysis and therefore there is medicine as science and there's folklore or faith or something else. Keeping the NCCAM verbiage at least gives a little bit of cover to claiming that these alternative medicine classifications have some meaning. OrangeMarlin Talk• Contributions 00:14, 28 September 2007 (UTC)

I'd vote to keep also; the version with NCCAM has been stable and reflects a well-known VRS without endorsing it exclusively. Others could be added, but speaking as an American-trained acupuncturist with a prior career as a research scientist, I see nothing wrong with NCCAM at all, and much to recommend it. thanks, Jim Butler(talk) 21:03, 28 September 2007 (UTC)

This is an actual consensus I can accept for the time being, even if I still obviously disagree. I sympathize with your point about maintaining a mainstream, scientifically acceptable (at least to some degree, the NCCAM has its notable detractors in the scientific community) system of classification for alt medicine. However, I urge people to keep in mind that this system is not accepted or even well-known among many of the actual systems that fall under the NCCAM's purview. A bit of cultural sensitivity wouldn't hurt here. VanTucky Talk 00:40, 28 September 2007 (UTC)

Well, things like germ theory, the scientific method and avogadro's constant are neither well known nor well accepted by practitioners of the er... systems... listed, but that doesn't, or at least shouldn't, stop us from presenting them in the light of those things. In any case the categories presented are a convenient and logical way of navigating the plethora of cam articles, and even better we have a reliable source to back that up. – ornis 01:04, 28 September 2007 (UTC)

*Those examples are inappropriate.*

They're far too generalized. The classification of, for example, mind-body intervention was created expressly and exclusively for categorization of these systems and techniques, so the fact that it is disputed and/or unknown by practitioners is much more indicative. VanTucky Talk 01:09, 28 September 2007 (UTC)

*Comment.*

A related discussion is occurring at Wikipedia:Templates\_for\_deletion/Log/2007\_September\_22#Template:Mind-body\_interventions. Many of the same arguments apply there. -- Fyslee / talk 04:22, 28 September 2007 (UTC)

Comment I see nothing particularly objectionable to the NCCAM classifications. I don't know how useful they are, but it's as good of a way to link to the relevant articles as any. Adam Cuerden talk 17:01, 4 October 2007 (UTC)

*Reorganizing this template slightly*

What do you guys think about moving the Complementary and Alternative Medicine sections, under See also, to the top of this template? It seems like those should receive prominence. II 02:11, 8 July 2008 (UTC)

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### ***Practitioner-Based Therapies***

#### *Practitioner-Based Therapies*

There is no standardized, national system for credentialing CAM practitioners. The extent and type of credentialing vary widely from state to state and from one CAM profession to another. For example, some CAM professions (e.g., chiropractic) are licensed in all or most states, although specific requirements for training, testing, and continuing education vary; other CAM professions are licensed in only a few states or not at all.

#### *A Note About Safety and Effectiveness*

Rigorous, well-designed clinical trials for many CAM therapies are often lacking; therefore, the safety and effectiveness of many CAM therapies are uncertain. NCCAM is sponsoring research designed to fill this knowledge gap by building a scientific evidence base about CAM therapies—whether they are safe; and whether they work for the conditions for which people use them and, if so, how they work.

As with any medical treatment, there can be risks with CAM therapies. *These general precautions can help to minimize risks:*

*Select CAM practitioners with care.* Find out about the practitioner's training and experience.

Be aware that some dietary supplements may interact with medications or other supplements, may have side effects of their own, or may contain potentially harmful ingredients not listed on the label. Also keep in mind that most supplements have not been tested in pregnant women, nursing mothers, or children.

Tell all your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's Time to Talk campaign.

ODS seeks to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, supporting research, sharing research results, and educating the public. *Its resources include publications (such as Dietary Supplements: What You Need to Know), fact sheets on a variety of specific supplement ingredients and products (such as vitamin D and multivitamin/mineral*

supplements), and the PubMed® Dietary Supplement Subset.

*Web site:*

[ods.od.nih.gov](http://ods.od.nih.gov)

U.S. Food and Drug Administration (FDA)

The FDA oversees the safety of many products, such as foods, medicines, dietary supplements, medical devices, and cosmetics.

*Toll-free in the U.S.:*

1-888-463-6332

Web site:

[www.fda.gov](http://www.fda.gov)

Center for Food Safety and Applied Nutrition (CFSAN)

CFSAN, a center within FDA, oversees the safety and labeling of supplements, foods, and cosmetics. *It has information on dietary supplements*

*Toll-free in the U.S.:*

1-888-723-3366

Web site:

[www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSA](http://www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSA)

PubMed®

A service of the National Library of Medicine (NLM), PubMed® contains publication information and (in most cases) brief summaries of articles from scientific and medical journals.

*Web site:*

[www.ncbi.nlm.nih.gov/sites/entrez](http://www.ncbi.nlm.nih.gov/sites/entrez)

NIH National Library of Medicine's MedlinePlus

To provide resources that help answer health questions, MedlinePlus brings together authoritative information from the National Institutes of Health as well as other Government agencies and health-related organizations.

*Web site: www.medlineplus.gov*

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\* *Note:* PDF files require a viewer such as the free Adobe Reader.

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### ***Other CAM Practices ...***

#### *Other CAM Practices*

CAM also encompasses movement therapies—a broad range of Eastern and Western movement-based approaches used to promote physical, mental, emotional, and spiritual well-being.

Examples include Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration. According to the 2007 NHIS, 1.5 percent of adults and 0.4 percent of children used movement therapies.

*Practices of traditional healers* can also be considered a form of CAM. Traditional healers use methods based on indigenous theories, beliefs, and experiences handed down from generation to generation. A familiar example in the United States is the Native American healer/medicine man. The 2007 NHIS found that 0.4 percent of adults and 1.1 percent of children had used a traditional healer (usage varied for the seven specific types of healers identified in the survey).

Some CAM practices involve *manipulation of various energy fields* to affect health. Such fields may be characterized as veritable (measurable) or putative (yet to be measured). Practices based on veritable forms of energy include those involving electromagnetic fields (e.g., magnet therapy and light therapy). Practices based on putative energy fields (also called biofields) generally reflect the concept that human beings are infused with subtle forms of energy; qi gong, Reiki, and healing touch are examples of such practices. The 2007 NHIS found relatively low use of putative energy therapies. Only 0.5 percent of adults and 0.2 percent of children had used energy healing/Reiki (the survey defined energy healing as the channeling of healing energy through the hands of a practitioner into the client's body).

Finally, whole medical systems, which are complete systems of theory and practice that have evolved over time in different cultures and apart from conventional or Western medicine, may be considered CAM. Examples of ancient whole medical systems include Ayurvedic medicine and traditional Chinese medicine. More modern systems that have developed in the past few centuries include homeopathy and naturopathy. The 2007 NHIS asked about the use of Ayurveda, homeopathy, and naturopathy. Although relatively few respondents said they had used Ayurveda or naturopathy, homeopathy ranked 10th in usage among adults (1.8 percent) and 5th among children (1.3 percent).

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*empty*

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### Whole Medical Systems

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[http://en.wikipedia.org/wiki/Category:Whole\\_medical\\_systems](http://en.wikipedia.org/wiki/Category:Whole_medical_systems)

*Alternative medicine*

*Alternative medical systems*

*Anthroposophical medicine Ayurveda Chiropractic Herbalism Homeopathy Isopathy Naturopathic medicine Orthomolecular medicine Traditional Chinese medicine Traditional Mongolian medicine Traditional Tibetan medicine*

*Treatments*

*Mind-body intervention Biologically based therapy Manipulative and body-based methods Energy therapy*

*Public-health issues*

*Aspartame Dental amalgams Growth hormone Trans fat Vaccines Water fluoridation*

*Key terms*

*Alternative medicine Complementary medicine Glossary of alternative medicine*

*Contrary viewpoints*

*Scientific skepticism Pseudo-science Anti-quackery organizations Evidence-based medicine*

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<http://nihseniorhealth.gov/cam/wholemedicalsyste.ms/01.html>

*Complementary and Alternative Medicine (CAM)*

*Whole Medical Systems*

Whole medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from, and earlier than, the standard medical approach used in the United States. Examples of whole medical systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurvedic medicine. Examples of systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine.

*Traditional Chinese Medicine (TCM)*

Traditional Chinese medicine, or TCM, is a healing system that dates back more than 5,000 years. It is based on the concept that disease results from disruption in the flow of vital energy, or qi (pronounced "chee") in the body. The flow of qi is maintained by keeping a balance in the two forces known as yin and yang. TCM uses specific principles to analyze symptoms—such as cold/heat, interior/exterior, excess/deficiency, and yin yang; and the theory of five elements—fire, earth, metal, water, and wood—to explain how the body works.

TCM uses a number of therapeutic approaches such as acupuncture and moxibustion, herbs and other natural products, and massage.

#### *Acupuncture, Moxibustion and Herbs*

Acupuncture is the stimulation of specific points on the body by a variety of techniques, including the insertion of thin metal needles through the skin. It is intended to remove blockages in the flow of qi and restore and maintain health.

Moxibustion is the application of heat from the burning of an herb (usually mugwort) at the acupuncture point.

#### *What Happens during an Acupuncture Session?*

Video length: 2 min 43 sec

[Click to watch this video](#)

Herbs and other natural products in TCM are usually used together in formulas to fit a person's specific condition.

#### *Ayurvedic Medicine*

Ayurveda (pronounced "i-yer-vay-duh"), which means "the science of life" in Sanskrit, originated in India and evolved there over thousands of years. Its goal is to prevent disease and promote well-being by bringing the body, mind, and spirit into balance. Ayurveda also proposes treatments for specific health problems.

Three types of energy called doshas are believed to form important characteristics of each person's body constitution and to control bodily activities. Imbalances in the doshas, which can be caused by an unhealthy lifestyle, diet, too little or too much mental or physical exertion, the weather, chemicals, or germs, can lead to illness.

Ayurvedic medicine relies on therapies such as diet, exercise, meditation, herbs, massage, cleansing, exposure to sunlight, and controlled breathing. The goals of treatment are to eliminate impurities, reduce symptoms, reduce worry, increase harmony in a person's life, and increase resistance to disease.

#### *Homeopathy*

Homeopathy originated in Europe and has been practiced in the United States since the early 19th century. Its goal is to help the body heal itself by using very small doses of highly diluted substances that in larger doses would produce illness or symptoms. Most homeopathic remedies are derived from natural substances that come from plants, minerals, or animals.

A homeopathic practitioner selects treatments based upon a total picture of a person's health and evaluates not only physical symptoms but the emotions, psychological state, body type, genetic and personal health history, and other aspects. In homeopathy, different people with the same symptoms may receive different homeopathic remedies.

#### *Naturopathy*

Like homeopathy, naturopathy originated in Europe, but it also includes ancient and modern therapies from other traditions. Naturopathy attempts to help the body heal itself, and naturopaths consider a person's physical, emotional, genetic, environmental, and social circumstances when evaluating treatment. The emphasis is on supporting health rather than fighting disease.

Practitioners of naturopathy prefer to use treatment approaches that they consider to be the most natural and least invasive, relying on methods other than standard medications and surgery. They focus on changes in diet and lifestyle and on preventing disease, together with CAM therapies such as herbs and massage.

**Whole Medical Systems***empty***Whole Medical Systems****Whole Medical Systems**

<http://www.accessmedicine.ca/content.aspx?aID=7839867&searchStr=holistic+health>

Whole medical systems broadly constitute approaches to diagnostic and therapeutic applications that are based on paradigms conceptually distinct from the Western allopathic

By and large, whole medical systems are ancient and culturally based and are notable for their holistic character.

Typically the allopathic fixation on mechanical processes or selected organ systems is viewed as an "undersampling error" by whole medical systems.

In traditional Chinese medicine, for instance, cardiovascular disorders are simply one feature of symptom complexes characterized across four relative states of yin deficiency or excess combined with yang deficiency or excess, where both yin and yang energies are associated with a broad range of emotional states and specific body organs.

In Ayurvedic medical systems, the body is essentially referenced across five inorganic elements constituting the material universe—earth, water, fire, air, and ether.

The body itself is envisioned as coarse material, or maya, that is structurally configured by vibrational energy conveyed from a collective or cosmic source, or Atma.

This coarse material structure rendered by vibrational influences of life energy could be conceptually compared, in a different metaphor, to the..."

<http://nihseniorhealth.gov/cam/wholemedicalsyste.ms/01.html>

**Complementary and Alternative Medicine (CAM)****Whole medical systems**

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*Category Biologically based therapies ...*

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## Biologically based practices

Examples include dietary supplements and herbal remedies. These treatments use ingredients found in nature. Examples of herbs include ginseng, ginkgo and echinacea, while examples of other dietary supplements include selenium, glucosamine sulfate and SAME. Herbs and supplements can be taken as teas, oils, syrups, powders, tablets or capsules.

## *Category Energy therapies ...*

[http://en.wikipedia.org/wiki/Category:Energy\\_therapies](http://en.wikipedia.org/wiki/Category:Energy_therapies)

The main article for this category is Energy medicine.

Alternative therapies that involve the use of purported energy fields. There are two types:

Category:Biofield therapies, and

Category:Bioelectromagnetic-based therapies

### Subcategories

- Bioelectromagnetic-based therapies (11 P)

- Biofield therapies (7 P)

Energy medicine

Acupuncture

Anatomy of the Spirit

Attunement

Australian bush flower essences

Bach flower remedies

BDORT

Bioenergetic analysis

Breathwork

Chromotherapy

Crystal healing

C cont.

Cymatic therapy

Electroacupuncture according to Voll

Electromagnetic therapy (alternative medicine)

Emotional Freedom Techniques

Energy (esotericism)

Energy field disturbance

Hologram bracelet

Holotropic Breathwork

Ionized jewelry

Magnet therapy

Meridian Therapy

Nambudripad's Allergy Elimination Techniques

Nishi Shiki

Pranic healing

QT Inc.

Radionics

Seitai

Tapas Acupressure Technique

Therapeutic touch

Thought Field Therapy

Zero Balancing

Categories: Alternative medicineTherapy

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*Category Manipulative therapy ...*

[http://en.wikipedia.org/wiki/Category:Manipulative\\_therapy](http://en.wikipedia.org/wiki/Category:Manipulative_therapy)

The main article for this category is Manipulative therapy.

Alternative therapy that is based upon manipulation and/or movement of one or more parts of the human body. It is done by physical therapists and is one of the physical therapy techniques they apply.

Subcategories

Chiropractic (5 C, 47 P)

Massage (4 C, 29 P)

Massage therapy (63 P)

Osteopathy (2 C, 12 P)

Shiatsu (4 P)

Manual therapy

Acupressure

Apex effect

Authentic Movement

Bates method

Body psychotherapy

Bodywork (alternative medicine)

Bowen technique

Breathwork

Breema

Cervical manipulation

Chiropractic

Chiropractic controversy and criticism

Counterstrain

Craniosacral therapy

Effleurage

Emotional Freedom Techniques

Foam rolling

Graston Technique

Holotropic Breathwork

Jin Shin Do

Joint manipulation

Joint mobilization

Kinesis Myofascial Integration

Kinetic Awareness

Manipulation under anesthesia

Massage

Mechanotherapy

Metamorphic Technique

Movement studies

Muscle energy technique

Myofascial release

Myotherapy

Naprapathy

Neo-Reichian massage

Nishi Shiki

Orgasmatron (massage device)

Osteomyology

Osteopathic medicine in the United States

Petrissage

McKenzie method

Physical therapy

Postural Integration

Psychotherapeutic Postural Integration

Pulsing (bodywork)

Reflexology

Rolfing

Rosen Method Bodywork

Seitai

Soft tissue technique

Soft tissue therapy  
Somatic dysfunction  
Somatics  
Sotai  
Spinal adjustment  
Spinal manipulation  
Spinal mobilization  
Stone massage  
Strain and counterstrain  
Structural Integration  
  
Tapas Acupressure Technique  
Tapotement  
Thai massage  
Tui na  
  
Waterdance  
  
Yakchim  
  
Zero Balancing

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*Manipulative and Body-Based Practices ...*

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*Category Mind-body interventions*

[http://en.wikipedia.org/wiki/Category:Mind-body\\_interventions](http://en.wikipedia.org/wiki/Category:Mind-body_interventions)

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*Mind and Body Medicine ...*

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**Mind-body medicine**

*empty*

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*empty*

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**Pharmacognosy***empty***PHARMACOGNOSY****Pharmacognosy****Pharmacognosy**

<http://en.wikipedia.org/wiki/Pharmacognosy>

*Dioscorides' Materia Medica, c. 1334 copy in Arabic, describes medicinal features of various plants.*

Pharmacognosy is the study of medicines derived from natural sources. The American Society of Pharmacognosy defines pharmacognosy as "the study of the physical, chemical, biochemical and biological properties of drugs, drug substances or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources." It is also defined as the study of crude drugs.

**Introduction**

The word "pharmacognosy" is derived from the Greek words φάρμακον (pharmakon (drug), and γνῶσις (gnosis (knowledge)). The term "pharmacognosy" was used for the first time by the Austrian physician Schmidt in 1811 and 1815 by Crr. Anotheus Seydler in a work titled *Analecta Pharmacognostica*.

Originally—during the 19th century and the beginning of the 20th century—"pharmacognosy" was used to define the branch of medicine or commodity sciences (Warenkunde in German) which deals with drugs in their crude, or unprepared, form. Crude drugs are the dried, unprepared material of plant, animal or mineral origin, used for medicine. The study of these materials under the name pharmakognosie was first developed in German-speaking areas of Europe, while other language areas often used the older term *materia medica* taken from the works of Galen and Dioscorides. In German the term *drogenkunde* ("science of crude drugs") is

As late as the beginning of the 20th century, the subject had developed mainly on the botanical side, being particularly concerned with the description and identification of drugs both in their whole state and in powder form. Such branches of pharmacognosy are still of fundamental importance, particularly for pharmacopoeial identification and quality control purposes, but rapid development in other areas has enormously expanded the subject.

Although most pharmacognostic studies focus on plants and medicines derived from plants, other types of organisms are also regarded as pharmacognostically interesting, in particular, various types of microbes (bacteria, fungi, etc.), and, recently, various marine organisms.

According to the American Society of Pharmacognosy, pharmacognosy is "the study of natural product molecules (typically secondary metabolites) that are useful for their medicinal, ecological, gustatory, or other functional properties." Other definitions are more encompassing, drawing on a broad spectrum of biological subjects, including botany, ethnobotany, medical anthropology, marine biology, microbiology, herbal medicine, chemistry, biotechnology, phytochemistry, pharmacology, pharmaceuticals, clinical pharmacy and pharmacy practice.

The contemporary study of pharmacognosy can be divided into the fields of

medical ethnobotany: the study of the traditional use of plants for medicinal purposes;

ethnopharmacology: the study of the pharmacological qualities of traditional medicinal substances;

the study of phytotherapy (the medicinal use of plant extracts); and

phytochemistry, the study of chemicals derived from plants (including the identification of new drug candidates derived from plant sources).

zoopharmacognosy, the process by which animals self-medicate, by selecting and using plants, soils, and insects to treat and prevent disease.

marine pharmacognosy, the study of chemicals derived from marine organisms.

At the 9th congress of Italian society of pharmacognosy it was stated that current return of phyto-therapy was clearly reflected by the increased market of such products. In 1998 the latest figures available for Europe, the total OTC market for herbal medicinal products reached a figure of \$6 billion, with consumption for Germany of \$2.5 billion, France \$1.6 billion and Italy \$600 million. In the US, where the use of herbal products has never been as prevalent as in continental Europe, the market for all herb sales reached a peak in 1998 of \$700 billion. This welcomed the scientific investigation of a rigorous nature.

The plant kingdom still holds many species of plants containing substances of medicinal value which have yet to be discovered. Large numbers of plants are constantly being screened for their possible pharmacological value.

### **Issues in phytotherapy**

The part of pharmacognosy focusing on use of crude extracts or semi-pure mixtures originating from nature, namely phytotherapy, is probably the best known and also the most debated area in pharmacognosy. Although phytotherapy is sometimes considered as alternative medicine, when critically conducted, it can be considered the scientific study on the effects and clinical use of herbal medicines.

#### *Constituents and drug synergism*

One characteristic of crude drug material is that constituents may have an opposite, moderating or enhancing effect. Hence, the final effect of any crude drug material will be a product of the interactions between the constituents and the effect of each constituent on its own. To effectively study the existence and affect of such interactions, scientific studies must examine the effect that multiple constituents, given concurrently, have on the system. Herbalists assert that as phytopharmaceuticals rely upon synergy for their activities, plants with high levels of active constituents like ginsenosides or hypericin may not correlate with the strength of the herbs. In phytopharmaceutical or herbal medicine, the therapeutic effects of herbs cannot be determined unless its active ingredient or cofactors are identified or the herb is administered as a whole. One way to indicate strength is standardization to one or several marker compound that are believed to be mainly responsible for the biological effects. However many herbalists believe that the active ingredient in a plant is the plant itself.

#### *Herb and drug interactions*

A study of herb drug interactions indicated that the vast majority of drug interactions occurred in four classes of drugs, the chief class being blood thinners, but also including protease inhibitors, cardiac glycosides and the immuno-suppressant ciclosporin.

#### *Natural products chemistry*

Most bioactive compounds of natural origin are secondary metabolites, i.e., species-specific chemical agents that can be grouped into various categories [citation needed].

A typical protocol to isolate a pure chemical agent from natural origin is bioassay-guided fractionation, meaning step-by-step separation of extracted components based on differences in their physicochemical properties, and assessing the biological activity, followed by next round of separation and assaying. Typically, such work is initiated after a given crude drug formulation (typically prepared by solvent extraction of the natural material) is deemed "active" in a particular in vitro assay. If the end-goal of the work at hand is to identify which one(s) of the scores or hundreds of compounds are responsible for the observed in vitro activity,

*the path to that end is fairly straightforward:*

1. fractionate the crude extract, e.g. by solvent partitioning or chromatography.
2. test the fractions thereby generated with in vitro assay.
3. repeat steps 1) and 2) until pure, active compounds are obtained.
4. determine structure(s) of active compound(s), typically by using spectroscopic methods.

In vitro activity does not necessarily translate to activity in humans or other living systems.

The most common means for fractionation are solvent-solvent partitioning and chromatographic techniques such as high-performance liquid chromatography (HPLC), medium-pressure liquid chromatography, "flash" chromatography, open-column chromatography, vacuum-liquid chromatography (VLC), thin-layer chromatography (TLC), with each technique being most appropriate for a given amount of starting material. Countercurrent chromatography (CCC) is particularly well-suited for bioassay-guided fractionation because, as an all-liquid separation technique, concern about irreversible loss or denaturation of active sample components is minimized. After isolation of a pure substance, the task of elucidating its chemical structure can be addressed. For this purpose, the most powerful methodologies available are nuclear magnetic resonance spectroscopy (NMR) and mass spectrometry (MS)[citation needed]. In the case of drug discovery efforts, structure elucidation of all components that are active in vitro is typically the end goal. In the case of phytotherapy research, the investigator may use in vitro BAGF as a tool to identify pharmacologically interesting or important components of the crude drug. The work does not stop after structural identification of in vitro actives, however. The task of "dissecting and reassembling" the crude drug one active component at a time, in order to achieve a mechanistic understanding of how it works in phytotherapy, is quite daunting. This is because it is simply too difficult, from cost, time, regulatory, and even scientific perspectives, to study experimental fractions of the crude drug in humans. In vitro assays are therefore used to identify chemical components of the crude drug that may rationally be expected to have a given pharmacological effect in humans, and to provide a rational basis for standardization of a crude drug formulation to be tested in [and sold/marketed to] humans.

#### *Loss of biodiversity*

Farnsworth for example, has found that 25% of all prescriptions dispensed from community pharmacies in the United States from 1959 to 1980 contained active ingredients extracted from higher plants. In some countries in Asia and Africa 80% of the population relies on traditional medicine (including herbal medicine) for primary health care. Constituents of substances used by traditional healers, have rarely been incorporated into modern medicine. Quinine, physostigmine, d-tubocurarine, pilocarpine and ephedrine, have been demonstrated to have active effects. Knowledge of traditional medicinal practices is fast disappearing(?), particularly in the Amazon, as native healers die out and are replaced by more modern medical practitioners. Botanists and pharmacologists are racing to learn these ancient practices[citation needed], which, like the forest plants they employ, are also endangered

An explanation for some species loss is habitat lost due to invasive species introduction. Herbalist David Winston has suggested that a high proportion of non-native species seen as invasive (kudzu, Japanese knotweed, mimosa, lonicera, St. Johnswort and purple loosestrife) may be harvested for the domestic herbal medicine market.

Species extinction is not only due to habitat loss. Over-harvesting of medicinal species of plants and animals also contributes to species loss. This is particularly notable in the matter of Traditional Chinese Medicine where crude drugs of plant and animal origin are used with increasing demand. People with a stake in TCM often seek chemical and biological alternatives to endangered species because they realize that plants and animals lost from the wild are also lost to medicine forever but different cultural attitudes bedevil conservation efforts[citation needed]. Still conservation is not a new idea: Chinese advice against overexploitation of natural medicinal species dates from at least Mencius, a philosopher living in the 4th century BC[citation needed].

Cooperation between Western conservationists and practitioners have been beset by cultural difficulties. Westerners may emphasise urgency in matters of conservation, while Chinese may wish for the products used in TCM to remain publicly available. One repeated fallacy[citation needed] is that rhinoceros horn is used as an aphrodisiac in TCM. It is, in fact, prescribed for fevers and convulsions by TCM practitioners. There are no peer-reviewed studies showing that this treatment is effective. In 1995 representatives of the oriental medicine communities in Asia met with conservationists at a symposium in Hong Kong, organized by TRAFFIC. The two groups established a clear willingness to cooperate through dialogue and mutual understanding. This has led to several meetings, including the 1997 First International Symposium on Endangered Species Used in Traditional East Asian Medicine where China was among 136 nations to sign a formal resolution recognizing that the uncontrolled use of wild species in traditional medicine threatens their survival and the continuation of these medical practices. The resolution, drawn up by the UN Convention on International Trade in Endangered Species (CITES), aims to initiate new partnerships in conservation.

#### *Sustainable sources of plant and animal drugs*

As species face loss of habitat or over-harvesting, there have been new issues to deal with in sourcing crude drugs. These include changes to the herb from farming practices, substitution of species or other plants altogether, adulteration and cross-pollination issues[citation needed]. For instance, ginseng which is field farmed may have significant problems with fungus, making contamination with fungicides an issue.[citation needed] This may be remedied with woods grown programs, but they are insufficient to produce enough ginseng to meet demand.[citation needed]

The wild-crafted echinacea, black cohosh and American ginseng often rely upon old growth root, often in excess of 50 years of age and it is not clear that younger stock will have the same pharmaceutical effect. Black cohosh may be adulterated with the related Chinese actea species, which is not the same. Ginseng may be replaced by ginseniodes from Jiaogulan which has been stated to have a different effect than the full panax root.

The problem may be exacerbated by the growth of pills and capsules as the preferred method of ingesting medication as they are cheaper and more available than traditional, individually tailored prescriptions of raw medicinals but the contents are harder to track.[citation needed] Seahorses are a case in point: Seahorses once had to be of a certain size and quality before they were accepted by practitioners and consumers.[citation needed] But declining availability of the preferred large, pale and smooth seahorses has been offset by the shift towards pre-packaged medicines, which make it possible for TCM merchants to sell previously unused juvenile, spiny and dark-coloured animals.[citation needed]

Today almost a third of the seahorses sold in China are pre-packaged.

The farming of plant or animal species for medicinal purposes has caused difficulties.

*Rob Parry Jones and Amanda Vincent write:*

One solution is to farm medicinal animals and plants. Chinese officials have promoted this as a way of guaranteeing supplies as well as protecting endangered species. And there have been some successes—notably with plant species, such as American ginseng—which is used as a general tonic and for chronic coughs. Red deer, too, have for centuries been farmed for their antlers, which are used to treat impotence and general fatigue. But growing your own is not a universal panacea. Some plants grow so slowly that cultivation is not economically viable. Animals such as musk deer may be difficult to farm, and so generate little profit. Seahorses are difficult to feed and plagued by disease in captivity. Other species cannot be cultivated at all. Even when it works, farming usually fails to match the scale of demand.

Overall, cultivated TCM plants in China supply less than 20 per cent of the required 1.6 million tonnes per annum. Similarly, China's demand for animal products such as musk and pangolin scales far exceeds supply from captive-bred sources.

Farming alone can never resolve conservation concerns, as government authorities and those who use Chinese medicine realise. For a start, consumers often prefer ingredients taken from the wild, believing them to be more potent. This is reflected in the price, with wild oriental ginseng fetching up to 32 times as much as cultivated plants. Then there are welfare concerns. Bear farming in China is particularly controversial. Around 7600 captive bears have their bile "milked" through tubes inserted into their gall bladders. The World Society for the Protection of Animals states that bear farming is surrounded by "appalling levels of cruelty and neglect". Chinese officials state that 10,000 wild bears would need to be killed each year to produce as much bile, making bear farming the more desirable option. The World Society for the Protection of Animals, however, states that "it is commonly believed in China that the bile from a wild bear is the most potent, and so farming bears for their bile cannot replace the demand for the product extracted from wild animals".

One alternative to farming involves replacing medical ingredients from threatened species with manufactured chemical compounds. In general, this sort of substitution is difficult to achieve because the active ingredient is often not known. In addition, most TCM users believe that TCM compounds may act synergistically so several ingredients may interact to give the required effect. Thus TCM users often prefer the wild source. Tauro ursodeoxycholic acid, the active ingredient of bear bile, can be synthesised and is used by some Western doctors to treat gallstones, but many TCM consumers reject it as being inferior to the natural substance from wild animals.

*American Society of Pharmacognosy*

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**American Society of Pharmacognosy**

[http://en.wikipedia.org/wiki/American\\_Society\\_of\\_Pharmacognosy](http://en.wikipedia.org/wiki/American_Society_of_Pharmacognosy)

The American Society of Pharmacognosy (ASP) is a scientific society that promotes the growth and development of pharmacognosy through presentation of research achievements and publication of meritorious research.

ASP was founded in 1959 as an outgrowth of the Plant Science Seminar established in 1923. ASP currently has over 1,100 active and associate members. Approximately 40 percent of the active members reside outside the U.S. and Canada and represent more than 60 countries.

Pharmacognosy includes the study of the physical, chemical, biochemical and biological properties of drugs, drug substances, or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources. Research problems in pharmacognosy include studies in the areas of phytochemistry, microbial chemistry, biosynthesis, biotransformation, chemotaxonomy, and other biological and chemical sciences.

ASP publishes the quarterly ASP Newsletter and co-publishes the Journal of Natural Products with the American Chemical Society. Honorary members included [[Albert Hoffman](1906-2008)].[citation needed]

#### **External links**

American Society of Pharmacognosy website

Journal of Natural Products website

## **REGULATIONS**

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### **European Food Safety Authority**

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#### **European Food Safety Authority**

[http://en.wikipedia.org/wiki/European\\_Food\\_Safety\\_Authority](http://en.wikipedia.org/wiki/European_Food_Safety_Authority)

Motto Committed to ensuring that Europe's food is safe

Formation January 2002 (established)

Location Parma, Italy

Director Catherine Geslain-Lanéelle

Website [efsa.europa.eu](http://efsa.europa.eu)

The European Food Safety Authority (EFSA) is an agency of the European Union that provides independent scientific advice and communication on existing and emerging risks associated with the food chain, created by European Regulation 178/2002.

The Authority's work covers all matters with a direct or indirect impact on food and feed safety, including animal health and welfare, plant protection and plant health and nutrition.

EFSA supports the European Commission, European Parliament and EU member states in taking effective and timely risk management decisions that ensure the protection of the health of the European consumers and the safety of the food and feed chain.

The Authority communicates to the public in an open and transparent way on all matters within its remit.

EFSA was set up in January 2002 and is based in Parma, Italy.

#### **Structure**

*EFSA is composed of four bodies:*

The Management Board sets the budget, approves the annual work programme, and is responsible for ensuring that EFSA co-operates successfully with partner organisations across the EU and beyond. The Executive Director is the legal representative of the Authority, and is responsible for operational matters, staffing issues and drawing up the annual programme in consultation with the European Commission, European Parliament and EU Member States.

The Executive Director is assisted by an Advisory Forum composed of representatives of national bodies responsible for risk assessment in the Member States, with observers from Norway, Iceland, Switzerland and the European Commission.

EFSA's scientific opinions and advice are provided by the Scientific Committee (SC) and Scientific Panels, each within their own sphere of competence. EFSA's Scientific Committee and Panels are composed of highly qualified experts in scientific risk assessment.

#### **Funding EFSA activities**

EFSA is an independent European agency funded by the EU budget that operates separately from the European Commission, European Parliament and EU Member States. Its budget for 2008 was €65.9 million.

## Criticism

EFSA has been continuously criticised for their alleged over-regulation, failure to comply with scientific studies and frequent promotion of conflict of interest. For example, Corporate Europe Observatory and Earth Open Source have documented cases where EFSA has used industry scientists and information in risk assessments used by EU institutions and national governments, accusing the agency of basing their decisions on industry data rather than independent science. They also claim that many EFSA panel members have ties with biotech, food, or pesticide companies, paving the way for blatant conflicts of interest.

## Food and Drug Administration

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### Food and Drug Administration

[http://en.wikipedia.org/wiki/Food\\_and\\_Drug\\_Administration](http://en.wikipedia.org/wiki/Food_and_Drug_Administration)

Agency overview

Formed 1906

Preceding agencies Food, Drug, and Insecticide Administration (July 1927 to July 1930)

Bureau of Chemistry, USDA (July 1901 through July 1927)

Division of Chemistry, USDA (established 1862)

Jurisdiction Federal government of the United States

Headquarters White Oak Campus, 10903 New Hampshire Avenue, Silver Spring, Maryland

39°02′07″N 76°58′59″W﻿ / ﻿39.035278°N 76.983056°W﻿ / 39.035278; -76.983056

Employees 9,300 (2008)

Annual budget \$4.36 billion (2012)

Agency executive Margaret Hamburg, Commissioner of Food and Drugs

Parent Agency Department of Health and Human Services

Child agencies Center for Biologics Evaluation and Research

Center for Devices and Radiological Health

Center for Drug Evaluation and Research

Center for Food Safety and Applied Nutrition

Center for Tobacco Products

Center for Veterinary Medicine

National Center for Toxicological Research

Office of Criminal Investigations

Office of Regulatory Affairs

Website

U.S. Food and Drug Administration – Homepage

The Food and Drug Administration (FDA or USFDA) is an agency of the United States Department of Health and Human Services, one of the United States federal executive departments. The FDA is responsible for protecting and promoting public health through the regulation and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), and veterinary products. The FDA also enforces other laws, notably Section 361 of the Public Health Service Act and associated regulations, many of which are not directly related to food or drugs. These include sanitation requirements on interstate travel and control of disease on products ranging from certain household pets to sperm donation for assisted reproduction.

The FDA is led by the Commissioner of Food and Drugs, appointed by the President with the advice and consent of the Senate. The Commissioner reports to the Secretary of Health and Human Services. The 21st and current Commissioner is Dr. Margaret A. Hamburg. She has served as Commissioner since February 2009.

The FDA has its headquarters in Silver Spring, Maryland. The agency also has 223 field offices and 13 laboratories located throughout the 50 states, the United States Virgin Islands, and Puerto Rico. In 2008, the FDA started opening offices in foreign countries, including China, India, Costa Rica, Chile, Belgium, and the United Kingdom.

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### **3 Regulatory programs**

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#### ***3.2 Drugs***

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###### ***3.2.1.1 Advertising and promotion***

###### ***3.2.1.2 Postmarket safety surveillance***

##### ***3.2.2 Generic drugs***

###### ***3.2.2.1 Generic drug scandal***

##### ***3.2.3 Over-the-counter drugs***

#### ***3.3 Vaccines, blood and tissue products, and biotechnology***

#### ***3.4 Medical and radiation-emitting devices***

#### ***3.5 FDA-Cleared vs FDA-Approved***

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#### ***6.3 Post-marketing drug safety monitoring***

#### ***6.4 Pediatric drug testing***

#### ***6.5 Rules for generic biologics***

### **7 Criticisms**

### **8 See also**

## **Organization**

The FDA comprises several offices and centers. There is

Office of the Commissioner

Center for Biologics Evaluation and Research

Center for Devices and Radiological Health (CDRH)

Office of the Center Director

Office of Communication, Education, and Radiation Programs  
Office of Compliance  
Office of Device Evaluation  
Office of In Vitro Diagnostic Device Evaluation and Safety  
Office of Management Operations  
Office of Science and Engineering Laboratories  
Office of Surveillance and Biometrics  
Center for Drug Evaluation and Research (CDER)  
Office of the Center Director  
Advisory Committee Staff  
Controlled Substance Staff  
Office of Compliance  
Division of Compliance Risk Management and Surveillance  
Division of Manufacturing and Product Quality  
Division of New Drugs and Labeling Compliance  
Division of Scientific Investigations  
Office of Medical Policy  
Office of Prescription Drug Promotion  
Office of New Drugs  
Office of Non-prescription Products  
Office of Oncology Drug Products  
Radioactive Drug Research Committee (RDRC) Program  
Office of Pharmaceutical Science  
Office of Biotechnology Products  
Office of Generic Drugs  
Office of New Drugs Quality Assessment  
Office of Testing and Research  
Division of Applied Pharmacology Research  
Division of Pharmaceutical Analysis  
Division of Product Quality Research  
Informatics and Computational Safety Analysis Staff (ICSAS)  
Office of Surveillance and Epidemiology (formerly Office of Drug Safety)  
Office of Translational Sciences  
Office of Biostatistics  
Office of Clinical Pharmacology  
Pharmacometrics Staff  
Division of Drug Information  
FDA Pharmacy Student Experiential Program  
Botanical Review Team  
Maternal Health Team  
Center for Food Safety and Applied Nutrition  
Center for Tobacco Products  
Center for Veterinary Medicine  
National Center for Toxicological Research  
Office of Regulatory Affairs

In recent years, the agency began undertaking a large-scale effort to consolidate its operations in the Washington Metropolitan Area from its main headquarters in Rockville and several fragmented office buildings in the vicinity to the former site of the Naval Ordnance Laboratory in the White Oak area of Silver Spring, Maryland.[4][6] When the FDA arrived, the site was renamed from the White Oak Naval Surface Warfare Center to the Federal Research Center at White Oak. The first building, the Life Sciences Laboratory, was dedicated and opened with 104 employees on the campus in December 2003. The project is slated to be completed by 2013.

While most of the Centers are located around the Washington, D.C., area as part of the Headquarters divisions, two offices – the Office of Regulatory Affairs (ORA) and the Office of Criminal Investigations (OCI) – are primarily field offices with a workforce spread across the country.

The Office of Regulatory Affairs is considered the "eyes and ears" of the agency, conducting the vast majority of the FDA's work in the field. Consumer Safety Officers, more commonly called Investigators, are the individuals who inspect production and warehousing facilities, investigate complaints, illnesses, or outbreaks, and review documentation in the case of medical devices, drugs, biological products, and other items where it may be difficult to conduct a physical examination or take a physical sample of the product. The Office of Regulatory Affairs is divided into five regions, which are further divided into 13 districts. Districts are based roughly on the geographic divisions of the federal court system. Each district comprises a main district office, and a number of Resident Posts, which are FDA offices located away from the district office to serve a particular geographic area. ORA also includes the Agency's network of laboratories, which analyze any physical samples taken. Though samples are usually food-related, some laboratories are equipped to analyze drugs, cosmetics, and radiation-emitting devices.

The Office of Criminal Investigations was established in 1991 to investigate criminal cases. Unlike ORA Investigators, OCI Special Agents are armed, and are not focused on the technical aspects of the regulated industries. OCI agents pursue and develop cases where criminal actions have occurred, such as fraudulent claims, or knowingly and willfully shipping known adulterated goods in interstate commerce. In many cases, OCI will pursue cases where Title 18 violations have occurred (e.g. conspiracy, false statements, wire fraud, mail fraud), in addition to prohibited acts as defined in Chapter III of the FD&C Act. OCI Special Agents often come from other criminal investigations backgrounds, and work closely with the Federal Bureau of Investigation, Assistant Attorney General, and even Interpol. OCI will receive cases from a variety of sources, including ORA, local agencies, and the FBI, and will work with ORA investigators to help develop the technical and science-based aspects of a case. OCI is a smaller branch, comprising about 200 agents nationwide.

The FDA frequently works in conjunction with other federal agencies including the Department of Agriculture, Drug Enforcement Administration, Customs and Border Protection, and Consumer Product Safety Commission. Often local and state government agencies also work in cooperation with the FDA to provide regulatory inspections and enforcement action.

### **Scope and funding**

The FDA regulates more than \$1 trillion worth of consumer goods, about 25% of consumer expenditures in the United States. This includes \$466 billion in food sales, \$275 billion in drugs, \$60 billion in cosmetics and \$18 billion in vitamin supplements. Much of the expenditures is for goods imported into the United States; the FDA is responsible for monitoring a third of all imports.

The FDA's federal budget request for fiscal year (FY) 2012 totaled \$4.36 billion. About \$2 billion of this budget is generated by user fees.

Pharmaceutical firms pay the majority of these fees, which are used to expedite drug reviews. The FDA's federal budget request for fiscal year (FY) 2008 (October 2007 through September 2008) totaled \$2.1 billion, a \$105.8 million increase from what it received for fiscal year 2007. In February 2008, the FDA announced that the Bush Administration's FY 2009 budget request for the agency was just under \$2.4 billion: \$1.77 billion in budget authority (federal funding) and \$628 million in user fees. The requested budget authority was an increase of \$50.7 million more than the FY 2008 funding – about a three percent increase. In June 2008, Congress gave the agency an emergency appropriation of \$150 million for FY 2008 and another \$150 million.

Most federal laws concerning the FDA are part of the Food, Drug and Cosmetic Act, (first passed in 1938 and extensively amended since) and are codified in Title 21, Chapter 9 of the United States Code. Other significant laws enforced by the FDA include the Public Health Service Act, parts of the Controlled Substances Act, the Federal Anti-Tampering Act, as well as many others. In many cases these responsibilities are shared with other federal agencies.

## **Regulatory programs**

Regulation of therapeutic goods in the United States

Prescription drugs

Over-the-counter drugs

Law[show]

Government agencies[show]

Process[show]

International coordination[show]

Non-governmental organizations[show]

The programs for safety regulation vary widely by the type of product, its potential risks, and the regulatory powers granted to the agency. For example, the FDA regulates almost every facet of prescription drugs, including testing, manufacturing, labeling, advertising, marketing, efficacy and safety, yet FDA regulation of cosmetics is focused primarily on labeling and safety. The FDA regulates most products with a set of published standards enforced by a modest number of facility inspections. Inspection observations are documented on Form 483.

### *Food and dietary supplements*

*Main article:* Regulation of food and dietary supplements by the U.S. Food and Drug Administration

The Center for Food Safety and Applied Nutrition is the branch of the FDA that is responsible for ensuring the safety and accurate labeling of nearly all food products in the United States. One exception is meat products derived from traditional domesticated animals, such as cattle and chickens, which fall under the jurisdiction of the United States Department of Agriculture Food Safety and Inspection Service. Products that contain minimal amounts of meat are regulated by FDA, and the exact boundaries are listed in a memorandum of understanding between the two agencies. However, medicines and other products given to all domesticated animals are regulated by the FDA through a different branch, the Center for Veterinary Medicine. Other consumables that are not regulated by the FDA include beverages containing more than 7% alcohol (regulated by the Bureau of Alcohol, Tobacco, Firearms and Explosives in the Department of Justice), and non-bottled drinking water (regulated by the United States Environmental Protection Agency (EPA)).

CFSAN's activities include establishing and maintaining food standards, such as standards of identity (for example, what the requirements are for a product to be labeled, "yogurt") and standards of maximum acceptable contamination. CFSAN also sets the requirements for nutrition labeling of most foods. Both food standards and nutrition labeling requirements are part of the Code of Federal Regulations.

The Dietary Supplement Health and Education Act of 1994 mandated that the FDA regulate dietary supplements as foods, rather than as drugs. Therefore, dietary supplements are not subject to safety and efficacy testing and there are no approval requirements. The FDA can take action against dietary supplements only after they are proven to be unsafe. Manufacturers of dietary supplements are permitted to make specific claims of health benefits, referred to as "structure or function claims" on the labels of these products. They may not claim to treat, diagnose, cure, or prevent disease and must include a disclaimer on the label.

Bottled water is regulated in America by the FDA. State governments also regulate bottled water. Tap water is regulated by state and local regulations, as well as the United States EPA. FDA regulations of bottled water generally follow the guidelines established by the EPA, and new EPA rules automatically apply to bottled water if the FDA does not release an explicit new rule. Federal bottled water regulations have been criticized as weaker than the tap water regulations facing city water supplies.

### *Drugs*

The Center for Drug Evaluation and Research has different requirements for the three main types of drug products: new drugs, generic drugs and over-the-counter drugs. A drug is considered "new" if it is made by a different manufacturer, uses different excipients or inactive ingredients, is used for a different purpose, or undergoes any substantial change. The most rigorous requirements apply to "new molecular entities": drugs that are not based on existing

### *New drugs*

New drugs receive extensive scrutiny before FDA approval in a process called a New Drug Application or NDA. New drugs are available only by prescription by default. A change to over-the-counter (OTC) status is a separate process, and the drug must be approved through an NDA first. A drug that is approved is said to be "safe and effective when used as directed."

### *Advertising and promotion*

The FDA's Office of Prescription Drug Promotion reviews and regulates prescription drug advertising and promotion through surveillance activities and issuance of enforcement letters to pharmaceutical manufacturers. Advertising and promotion for over-the-counter drugs is regulated by the Federal Trade Commission.

The drug advertising regulation contains two broad requirements: (1) a company may advertise or promote a drug only for the specific indication or medical use for which it was approved by FDA. Also, an advertisement must contain a "fair balance" between the benefits and the risks (side effects) of a drug.

The term off-label refers to drug usage for indications other than those approved by the FDA

### *Postmarket safety surveillance*

After approval of an NDA, the sponsor must review and report to the FDA every patient adverse drug experience of which it learns. Unexpected serious and fatal adverse drug events must be reported within 15 days, and other events on a quarterly basis. The FDA also receives directly adverse drug event reports through its MedWatch program. These reports are called "spontaneous reports" because reporting by consumers and health professionals is voluntary. While this remains the primary tool of postmarket safety surveillance, FDA requirements for postmarketing risk management are increasing. As a condition of approval, a sponsor may be required to conduct additional clinical trials, called Phase IV trials. In some cases, the FDA requires risk management plans for some drugs that may provide for other kinds of studies, restrictions, or safety surveillance activities.

### *Generic drugs*

Generic drugs are chemical equivalents of name-brand drugs whose patents have expired. In general, they are less expensive than their name brand counterparts, are manufactured and marketed by other companies and, in the 1990s, accounted for about a third of all prescriptions written in the United States. For approval of a generic drug, the U.S. Food and Drug Administration (FDA) requires scientific evidence that the generic drug is interchangeable with or therapeutically equivalent to the originally approved drug. This is called an "ANDA" (Abbreviated New Drug Application).

### *Generic drug scandal*

In 1989, a major scandal erupted involving the procedures used by the FDA to approve generic drugs for sale to the public. Charges of corruption in generic drug approval first emerged in 1988, in the course of an extensive congressional investigation into the FDA. The oversight subcommittee of the United States House Energy and Commerce Committee resulted from a complaint brought against the FDA by Mylan Laboratories Inc. of Pittsburgh. When its application to manufacture generics were subjected to repeated delays by the FDA, Mylan, convinced that it was being discriminated against, soon began its own private investigation of the agency in 1987. Mylan eventually filed suit against two former FDA employees and four drug-manufacturing companies, charging that corruption within the federal agency resulted in racketeering and in violations of antitrust law. "The order in which new generic drugs were approved was set by the FDA employees even before drug manufacturers submitted applications" and, according to Mylan, this illegal procedure was followed to give preferential treatment to certain companies. During the summer of 1989, three FDA officials (Charles Y. Chang, David J. Brancato, Walter Kletch) pleaded guilty to criminal charges of accepting bribes from generic drugs makers, and two companies (Par Pharmaceutical and its subsidiary Quad Pharmaceuticals) pleaded guilty to giving bribes. Furthermore, it was discovered that several manufacturers had falsified data submitted in seeking FDA authorization to market certain generic drugs. Vitarine Pharmaceuticals of New York, which sought approval of a generic version of the drug Dyazide, a medication for high blood pressure, submitted Dyazide, rather than its generic version, for the FDA tests. In April 1989, the FDA investigated 11 manufacturers for irregularities; and later brought that number up to 13. Dozens of drugs were eventually suspended or recalled by manufacturers. In the early 1990s, the U.S. Securities and Exchange Commission filed "securities fraud charges against the Bolar Pharmaceutical Company, a major generic manufacturer based in Long Island, New York.

#### *Over-the-counter drugs*

Over-the-counter (OTC) drugs are drugs and combinations that do not require a doctor's prescription. The FDA has a list of approximately 800 approved ingredients that are combined in various ways to create more than 100,000 OTC drug products. Many OTC drug ingredients had been previously approved prescription drugs now deemed safe enough for use without a medical practitioner's supervision.

#### *Vaccines, blood and tissue products, and biotechnology*

The Center for Biologics Evaluation and Research is the branch of the FDA responsible for ensuring the safety and efficacy of biological therapeutic agents. These include blood and blood products, vaccines, allergenics, cell and tissue-based products, and gene therapy products. New biologics are required to go through a premarket approval process similar to that for drugs. The original authority for government regulation of biological products was established by the 1902 Biologics Control Act, with additional authority established by the 1944 Public Health Service Act. Along with these Acts, the Federal Food, Drug, and Cosmetic Act applies to all biologic products, as well. Originally, the entity responsible for regulation of biological products resided under the National Institutes of Health; this authority was transferred to the FDA in 1972.

#### *Medical and radiation-emitting devices*

The Center for Devices and Radiological Health (CDRH) is the branch of the FDA responsible for the premarket approval of all medical devices, as well as overseeing the manufacturing, performance and safety of these devices. The definition of a medical device is given in the FD&C Act, and it includes products from the simple toothbrush to complex devices such as implantable brain pacemakers. CDRH also oversees the safety performance of non-medical devices that emit certain types of electromagnetic radiation. Examples of CDRH-regulated devices include cellular phones, airport baggage screening equipment, television receivers, microwave ovens, tanning booths, and laser products.

CDRH regulatory powers include the authority to require certain technical reports from the manufacturers or importers of regulated products, to require that radiation-emitting products meet mandatory safety performance standards, to declare regulated products defective, and to order the recall of defective or non-compliant products. CDRH also conducts limited amounts of direct product testing.

#### *FDA-Cleared vs FDA-Approved*

Clearance requests are for medical devices that prove they are "substantially equivalent" to the predicate devices already on the market. Approved requests are for items that are new or substantially different and need to demonstrate "safety and efficacy", for example it may be inspected for safety in case of new toxic hazards. Both aspects need to be proved or provided by the submitter to ensure proper procedures are followed.

### *Cosmetics*

Cosmetics are regulated by the Center for Food Safety and Applied Nutrition, the same branch of the FDA that regulates food. Cosmetic products are not in general subject to premarket approval by the FDA unless they make "structure or function claims", which make them into drugs (see Cosmeceutical). However, all color additives must be specifically approved by the FDA before they can be included in cosmetic products sold in the U.S. The labelling of cosmetics is regulated by the FDA, and cosmetics that have not been subjected to thorough safety testing must bear a warning to that effect.

### *Cosmetic products*

Though the cosmetic industry is predominantly responsible in ensuring the safety of its products, the FDA also has the power to intervene when necessary to protect the public but in general does not require pre-market approval or testing.

Companies are required to place a warning note on their products if they have not been tested. Experts in cosmetic ingredient reviews also play a role in monitoring safety through influence on the use of ingredients, but also lack legal authority.

Overall the organization has reviewed about 1,200 ingredients and has suggested that several hundred be restricted, but there is no standard or systemic method for reviewing chemicals for safety and a clear definition of what is meant by 'safety' so that all chemicals are tested on the same basis.

### **Veterinary products**

The Center for Veterinary Medicine (CVM) is the branch of the FDA that regulates food, food additives, and drugs that are given to animals, including food animals and pets. CVM does not regulate vaccines for animals; these are handled by the United States Department of Agriculture.

CVM's primary focus is on medications that are used in food animals and ensuring that they do not affect the human food supply. The FDA's requirements to prevent the spread of bovine spongiform encephalopathy are also administered by CVM through inspections of feed manufacturers.

### **Tobacco products**

Since the Family Smoking Prevention and Tobacco Control Act became law in 2009, the FDA also has had the authority to regulate tobacco products.

In 2009, Congress passed a law requiring color warnings on cigarette packages and on printed advertising, in addition to text warnings from the U.S. Surgeon General.

The nine new graphic warning labels were announced by the FDA in June 2011 and were scheduled to be required to appear on packaging by September 2012. The implementation date is uncertain, due to ongoing proceedings in the case of R.J. Reynolds Tobacco Co. v. U.S. Food and Drug Administration.

R.J. Reynolds, Lorillard, Commonwealth Brands Inc., Liggett Group LLC and Santa Fe Natural Tobacco Company Inc. have filed suit in Washington, D.C. federal court claiming that the graphic labels are an unconstitutional way of forcing tobacco companies to engage in anti-smoking advocacy on the government's behalf. A First Amendment lawyer, Floyd Abrams, is representing the tobacco companies in the case, contending requiring graphic warning labels on a lawful product cannot withstand constitutional scrutiny. The Association of National Advertisers and the American Advertising Federation have also filed a brief in the suit, arguing that the labels infringe on commercial free speech and could lead to further government intrusion if left unchallenged. In November 2011, Federal judge Richard Leon of the U.S. District Court for the District of Columbia temporarily halted the new labels, likely delaying the requirement that tobacco companies display the labels. The U.S. Supreme Court ultimately could decide the matter.

#### *Regulation of living organisms*

With acceptance of premarket notification 510(k) k033391 in January 2004, the FDA granted Dr. Ronald Sherman permission to produce and market medical maggots for use in humans or other animals as a prescription medical device. Medical maggots represent the first living organism allowed by the Food and Drug Administration for production and marketing as a prescription medical device.

In June 2004, the FDA cleared *Hirudo medicinalis* (medicinal leeches) as the second living organism to be used as a medical devices.

#### **Science and research programs**

In addition to its regulatory functions, the FDA carries out research and development activities to develop technology and standards that support its regulatory role, with the objective of resolving scientific and technical challenges before they become impediments. The FDA's research efforts include the areas of biologics, medical devices, drugs, women's health, toxicology, food safety and applied nutrition, and veterinary medicine.

#### **History**

Main article: History of the Food and Drug Administration

Up until the 20th century, there were few federal laws regulating the contents and sale of domestically produced food and pharmaceuticals, with one exception being the short-lived Vaccine Act of 1813. The history of the FDA can be traced to the latter part of the 19th century and the U.S. Department of Agriculture's Division of Chemistry (later Bureau of Chemistry). Under Harvey Washington Wiley, appointed chief chemist in 1883, the Division began conducting research into the adulteration and misbranding of food and drugs on the American market. Wiley's advocacy came at a time when the public had become aroused to hazards in the marketplace by muckraking journalists like Upton Sinclair, and became part of a general trend for increased federal regulations in matters pertinent to public safety during the Progressive Era. The 1902 Biologics Control Act was put in place after diphtheria antitoxin was collected from a horse named Jim who contracted tetanus, resulting in several deaths.

In June 1906, President Theodore Roosevelt signed into law the Food and Drug Act, also known as the "Wiley Act" after its chief advocate. The Act prohibited, under penalty of seizure of goods, the interstate transport of food that had been "adulterated". The act applied similar penalties to the interstate marketing of "adulterated" drugs, in which the "standard of strength, quality, or purity" of the active ingredient was not either stated clearly on the label or listed in the United States Pharmacopoeia or the National Formulary. The responsibility for examining food and drugs for such "adulteration" or "misbranding" was given to Wiley's USDA Bureau of Chemistry. Wiley used these new regulatory powers to pursue an aggressive campaign against the manufacturers of foods with chemical additives, but the Chemistry Bureau's authority was soon checked by judicial decisions, which narrowly defined the bureau's powers and set high standards for proof of fraudulent intent. In 1927, the Bureau of Chemistry's regulatory powers were reorganized under a new USDA body, the Food, Drug, and Insecticide organization. This name was shortened to the Food and Drug Administration (FDA) three years later.

By the 1930s, muckraking journalists, consumer protection organizations, and federal regulators began mounting a campaign for stronger regulatory authority by publicizing a list of injurious products that had been ruled permissible under the 1906 law, including radioactive beverages, the mascara Lash lure, which caused blindness, and worthless "cures" for diabetes and tuberculosis. The resulting proposed law was unable to get through the Congress of the United States for five years, but was rapidly enacted into law following the public outcry over the 1937 Elixir Sulfanilamide tragedy, in which over 100 people died after using a drug formulated with a toxic, untested solvent. President Franklin Delano Roosevelt signed the new Food, Drug, and Cosmetic Act (FD&C Act) into law on June 24, 1938. The new law significantly increased federal regulatory authority over drugs by mandating a pre-market review of the safety of all new drugs, as well as banning false therapeutic claims in drug labeling without requiring that the FDA prove fraudulent intent. Soon after passage of the 1938 Act, the FDA began to designate certain drugs as safe for use only under the supervision of a medical professional, and the category of "prescription-only" drugs was securely codified into law by the 1951 Durham-Humphrey Amendment. These developments confirmed extensive powers for the FDA to enforce post-marketing recalls of ineffective drugs.

In 1959, the thalidomide tragedy, in which thousands of European babies were born deformed after their mothers took that drug – marketed for treatment of nausea – during their pregnancies, led to the 1962 Kefauver-Harris Amendment to the FD&C Act, which represented a "revolution" in FDA regulatory authority. The most important change was the requirement that all new drug applications demonstrate "substantial evidence" of the drug's efficacy for a marketed indication, in addition to the existing requirement for pre-marketing demonstration of safety. This marked the start of the FDA approval process in its modern form.

These reforms had the effect of increasing the time required to bring a drug to market. One of the most important statutes in establishing the modern American pharmaceutical market was the 1984 Drug Price Competition and Patent Term Restoration Act, more commonly known as the "Hatch-Waxman Act" after its chief sponsors. The act extended the patent exclusivity terms of new drugs, and tied those extensions, in part, to the length of the FDA approval process for each individual drug. For generic manufacturers, the Act created a new approval mechanism, the Abbreviated New Drug Application (ANDA), in which the generic drug manufacturer need only demonstrate that their generic formulation has the same active ingredient, route of administration, dosage form, strength, and pharmacokinetic properties ("bioequivalence") as the corresponding brand-name drug. This act has been credited with in essence creating the modern generic drug industry.

Concerns about the length of the drug approval process were brought to the fore early in the AIDS epidemic. In the mid- and late 1980s, ACT-UP and other HIV activist organizations accused the FDA of unnecessarily delaying the approval of medications to fight HIV and opportunistic infections. Partly in response to these criticisms, the FDA issued new rules to expedite approval of drugs for life threatening diseases, and expanded pre-approval access to drugs for patients with limited treatment options. All of the initial drugs approved for the treatment of HIV/AIDS were approved through these accelerated approval mechanisms.

In two instances, state governments have sought to legalize drugs that have not been approved by the FDA. Because federal law passed pursuant to Constitutional authority overrules conflicting state laws[citation needed], federal authorities still claim the authority to seize, arrest, and prosecute for possession and sales of these substances, even in states where they are legal under state law. The first wave was the legalization by 27 states of laetrile in the late 1970s. This drug was used as a treatment for cancer, but scientific studies both before and after this legislative trend found it to be ineffective. The second wave concerned medical marijuana in the 1990s and 2000s (decade). Though Virginia passed a law with limited effect in 1979, a more widespread trend began in California in 1996.

## **Recent and ongoing reforms**

### *Critical Path Initiative*

The Critical Path Initiative is FDA's effort to stimulate and facilitate a national effort to modernize the sciences through which FDA-regulated products are developed, evaluated, and manufactured. The Initiative was launched in March 2004, with the release of a report entitled Innovation/Stagnation: Challenge and Opportunity on the Critical Path to New Medical

### *Patients' rights to access unapproved drugs*

A 2006 court case, *Abigail Alliance v. von Eschenbach*, would have forced radical changes in FDA regulation of unapproved drugs. The Abigail Alliance argued that the FDA must license drugs for use by terminally ill patients with "desperate diagnoses," after they have completed Phase I testing. The case won an initial appeal in May 2006, but that decision was reversed by a March 2007 rehearing. The US Supreme Court declined to hear the case, and the final decision denied the existence of a right to unapproved medications.

Critics of the FDA's regulatory power argue that the FDA takes too long to approve drugs that might ease pain and human suffering faster if brought to market sooner. The AIDS crisis created some political efforts to streamline the approval process. However, these limited reforms were targeted for AIDS drugs, not for the broader market. This has led to the call for more robust and enduring reforms that would allow patients, under the care of their doctors, access to drugs that have passed the first round of clinical trials.

### *Post-marketing drug safety monitoring*

The widely publicized recall of Vioxx, a non-steroidal anti-inflammatory drug now estimated to have contributed to fatal heart attacks in thousands of Americans, played a strong role in driving a new wave of safety reforms at both the FDA rule making and statutory levels. Vioxx was approved by the FDA in 1999, and was initially hoped to be safer than previous NSAIDs, due to its reduced risk of intestinal tract bleeding. However, a number of pre- and post-marketing studies suggested that Vioxx might increase the risk of myocardial infarction, and this was conclusively demonstrated by results from the APPROVe trial in 2004. Faced with numerous lawsuits, the manufacturer voluntarily withdrew it from the market. The example of Vioxx has been prominent in an ongoing debate over whether new drugs should be evaluated on the basis of their absolute safety, or their safety relative to existing treatments for a given condition. In the wake of the Vioxx recall, there were widespread calls by major newspapers, medical journals, consumer advocacy organizations, lawmakers, and FDA officials for reforms in the FDA's procedures for pre- and post- market drug safety regulation.

In 2006, a congressionally requested committee was appointed by the Institute of Medicine to review pharmaceutical safety regulation in the U.S. and to issue recommendations for improvements. The committee was composed of 16 experts, including leaders in clinical medicine-medical research, economics, biostatistics, law, public policy, public health, and the allied health professions, as well as current and former executives from the pharmaceutical, hospital, and health insurance industries. The authors found major deficiencies in the current FDA system for ensuring the safety of drugs on the American market. Overall, the authors called for an increase in the regulatory powers, funding, and independence of the FDA. Some of the committee's recommendations have been incorporated into drafts of the PDUFA IV bill, which was signed into law in 2007.

### *Paediatric drug testing*

Prior to the 1990s, only 20% of all drugs prescribed for children in the United States were tested for safety or efficacy in a paediatric population. This became a major concern of paediatricians as evidence accumulated that the physiological response of children to many drugs differed significantly from those drugs' effects on adults. There were several reasons that not many medical trials were done with children. For many drugs, children represented such a small proportion of the potential market, that drug manufacturers did not see such testing as cost-effective. Also, because children were thought to be ethically restricted in their ability to give informed consent, there were increased governmental and institutional hurdles to approval of these clinical trials, as well as greater concerns about legal liability. Thus, for decades, most medicines prescribed to children in the U.S. were done so in a non-FDA-approved, "off-label" manner, with dosages "extrapolated" from adult data through body weight and body-surface-area calculations.

An initial attempt by the FDA to address this issue was the 1994 FDA Final Rule on Paediatric Labeling and Extrapolation, which allowed manufacturers to add paediatric labeling information, but required drugs that had not been tested for paediatric safety and efficacy to bear a disclaimer to that effect. However, this rule failed to motivate many drug companies to conduct additional paediatric drug trials. In 1997, the FDA proposed a rule to require paediatric drug trials from the sponsors of New Drug Applications. However, this new rule was successfully pre-empted in federal court as exceeding the FDA's statutory authority. While this debate was unfolding, Congress used the 1997 Food and Drug Administration Modernization Act to pass incentives that gave pharmaceutical manufacturers a six-month patent term extension on new drugs submitted with paediatric trial data. The act reauthorizing these provisions, the 2002 Best Pharmaceuticals for Children Act, allowed the FDA to request NIH-sponsored testing for paediatric drug testing, although these requests are subject to NIH funding constraints. Most recently, in the Paediatric Research Equity Act of 2003, Congress codified the FDA's authority to mandate manufacturer-sponsored paediatric drug trials for certain drugs as a "last resort" if incentives and publicly funded mechanisms proved inadequate.

#### *Rules for generic biologics*

Since the 1990s, many successful new drugs for the treatment of cancer, autoimmune diseases, and other conditions have been protein-based biotechnology drugs, regulated by the Center for Biologics Evaluation and Research. Many of these drugs are extremely expensive; for example, the anti-cancer drug Avastin costs \$55,000 for a year of treatment, while the enzyme replacement therapy drug Cerezyme costs \$200,000 per year, and must be taken by Gaucher's Disease patients for life. Biotechnology drugs do not have the simple, readily verifiable chemical structures of conventional drugs, and are produced through complex, often proprietary techniques, such as transgenic mammalian cell cultures. Because of these complexities, the 1984 Hatch-Waxman Act did not include biologics in the Abbreviated New Drug Application (ANDA) process, in essence precluding the possibility of generic drug competition for biotechnology drugs. In February 2007, identical bills were introduced into the House to create an ANDA process for the approval of generic biologics, but were not passed.

#### **Criticisms**

Main article: Criticism of the Food and Drug Administration

Wikinews has related news: Obama calls food safety system a 'hazard to public health'

The FDA currently has regulatory oversight over a large array of products that affect the health and life of American citizens. As a result, the FDA's powers and decisions are carefully monitored by several governmental and non-governmental organizations. A \$1.8 million 2006 Institute of Medicine report on pharmaceutical regulation in the U.S. found major deficiencies in the current FDA system for ensuring the safety of drugs on the American market. Overall, the authors called for an increase in the regulatory powers, funding, and independence of the FDA.

**Nine** FDA scientists appealed to then president-elect Barack Obama over pressures from management, experienced during the George W. Bush presidency, to manipulate data, including in relation to the review process for medical devices. Characterized as "corrupted and distorted by current FDA managers, thereby placing the American people at risk," these concerns were also highlighted in the 2006 report on the agency as well.

The FDA has also been criticized from the opposite viewpoint, as being too tough on industry. According to an analysis published on the website of the libertarian Mercatus Center as well as published statements by economists, medical practitioners, and concerned consumers, many feel the FDA oversteps its regulatory powers and undermines small business and small farms in favor of large corporations. Three of the FDA restrictions under analysis are the permitting of new drugs and devices, the control of manufacturer speech, and the imposition of prescription requirements. The authors argue that in the increasingly complex and diverse food marketplace, the FDA is not equipped to adequately regulate or inspect food.

However, in an indicator that the FDA may be too lax in their approval process, in particular for medical devices, a 2011 study by Dr. Diana Zuckerman and Paul Brown of the National Research Center for Women and Families, and Dr. Steven Nissen of the Cleveland Clinic, published in the Archives of Internal Medicine, showed that most medical devices recalled in the last five years for “serious health problems or death” had been previously approved by the FDA using the less stringent, and cheaper, 510(k) process. In a few cases the devices had been deemed so low-risk that they did not need FDA regulation. Of the 113 devices recalled, 35 were for cardiovascular health purposes.

In 1956 the FDA had moved for the burning of William Reich's books and research materials, which is seen as one of the worst examples of censorship in U.S. history.

*Products not evaluated by the Food and Drug Administration*

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<http://www.amritaveda.com/learning/articles/ginger.asp>

Products found herein have not been evaluated by the Food and Drug Administration.

Such products are not intended to diagnose, treat or prevent any disease.

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**CATEGORIES IN DETAIL**

Cinnamon

Ginger

Garlic

Cayenne

Coriander

Honey

Bee Propolis

Cherries

Cocoa Beans

10 Coconut Oil

Cumin

Evening Primrose Oil

Radish

Thyme

Water

Wheatgrass

Sage

Tea Tree Oil

Spirulina

20 St. John's Wort

Fennel

Dandelion

Fo-ti Root

Elderberry

Bergamot Orange

Chamomile

Colloidal Silver

Conjugated Linoleic Acid

Damiana

30 Feverfew

Echinacea purpurea

Geranium

Holly

Goldenseal

Ginkgo biloba

Liverwort

Ginseng

Horny Goats Weed

Melatonin

40 Glucosamine

Lobelia

Horse Chestnut

Mexican Wild Yam

Reishi Mushrooms

Horsetail

Nettle

Maca

Rosemary

50 Sasparella

Saffron

Valerian

Yerba Mate

Soy Isoflavones

Watercress

Uva Ursi

Whey Isolate

Whey Protein

Yarrow

60 Winter Cherry

Slippery Elm

Russian Ginseng

Wolfberry

Senna

Royal Jelly

Saw palmetto

Sea Buckthorn

Red clover

Scilla

70 Chlorella

Cats Claw

Black Cohosh

Avena sativa

Bilberry

Burdock

Collagen

Euphrasia Eyebright

Fenugreek

Green Lipped Mussels  
80 Muira Puama  
Milk Thistle  
Cardamom  
Rhodiola  
St. John's Wort  
Tarragon

<http://www.herbwisdom.com/herb-cinnamon.html>

**Cinnamon (Cinnamomum zeylanicum)**

**Cinnamon Benefits**

**Contents**

Cinnamon benefits  
Notes / side effects  
Where to buy Cinnamon  
Cinnamon reviews

### ***Cinnamon***

*Cinnamon* is a herb traditionally used by many ancient cultures. It is indicated for a variety of ailments including gastrointestinal problems, urinary infections, relieving symptoms of colds and flu and has remarkable anti-fungal and anti-bacterial properties. Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better.

True cinnamon, or *Cinnamomum Zeylanicum*, is the inner bark of a small evergreen tree native to Sri Lanka and was used in ancient Egypt for embalming. It was also added to food to prevent spoiling. During the Bubonic Plague, sponges were soaked in cinnamon and cloves and placed in sick rooms. Cinnamon was the most sought after spice during explorations of the 15th and 16th centuries.

Most therapeutic uses of *Chinese cinnamon bark* are rooted in its historical use as a traditional medicine and on laboratory and animal studies. Test-tube or animal research does not guarantee safety or effectiveness in humans, but German health authorities (Commission E) do approve of cinnamon bark for mild gastrointestinal spasms, stimulating appetite and relieving indigestion.

It is used in flatulent dyspepsia, dyspepsia with nausea, intestinal colic and digestive atony associated with cold & debilitated conditions. It is known to relieve nausea and vomiting, and because of its mild astringency it is particularly used for infantile diarrhoea.

*Cinnamon* warms and stimulates the digestive system, useful in weak digestion, colic, griping, diarrhoea, nausea and vomiting, wind and distension. The tannins have an astringent action, stemming bleeding in nosebleeds, heavy periods and resolving diarrhoea and catarrhal

### ***Cinnamon may help to:***

#### *Soothe an upset stomach:*

Cinnamon extracts have been used medically to treat gastrointestinal problems and to help calm the stomach. Cinnamon is a carminative, an agent that helps break up intestinal gas that has traditionally been used to combat diarrhoea and morning sickness. Both test-tube and some animal studies have found that cinnamon may help to relieve mild abdominal discomfort caused by excess gas.

#### *Clear up urinary-tract infections:*

One German study showed that Cinnamon "suppresses completely" the cause of most urinary-tract infections (*Escherichia coli* bacteria) and the fungus responsible for vaginal yeast infections (*Candida albicans*).

#### *Allow diabetics to use less insulin:*

Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better. In adult-onset (Type II) diabetes, the pancreas produces insulin, but the body can't use it efficiently to break down blood sugar.

Richard Anderson at the US Department of Agriculture's Human Nutrition Research Center in Beltsville, Maryland found that Cinnamon enhances the ability of insulin to metabolise glucose, helping to control blood sugar levels. Cinnamon contains the anti-oxidant glutathione and a type of flavonoid called MHCP (methylhydroxy chalcone polymer). It is believed that cinnamon makes fat cells much more responsive to insulin, the hormone that regulates sugar metabolism and thus controls the level of glucose in the blood.

"One-eighth of a teaspoon of cinnamon triples insulin efficiency," say James A. Duke, Ph.D., a botanist retired from the U.S. Department of Agriculture and author of *The CRC Handbook of Medicinal Herbs*. Dr. Duke suggest that people with adult-onset diabetes discuss Cinnamon's benefits with their doctor. Taking ½ to ¾ teaspoon of ground Cinnamon with each meal may help control blood sugar levels.

#### *Aid digestion:*

Cinnamon contains compounds called catechins, which help relieve nausea. The volatile oil in cinnamon bark may also help the body to process food by breaking down fats during digestion.

#### *Kill many disease-causing fungi and viruses:*

Preliminary results from test tube and animal studies suggest that cinnamon oil and cinnamon extract have anti-fungal, anti-bacterial, and anti-parasitic properties. For example, cinnamon has been found to be active against *Candida albicans*, the fungus responsible for vaginal yeast infections and thrush (oral yeast infection), *Helicobacter pylori* (the bacteria that causes stomach ulcers), and even head lice.

An incredible experiment in the journal of Food Science for 1974 demonstrated the power of cinnamon over most yeasts and fungi. Slices of white, raisin, rye and whole wheat breads, manufactured without the usual mold inhibitors, were subjected to various aflatoxins, a group of toxic molds so dangerous that they can cause liver cancer and kill humans and animals alike and often occur in food. The toxic molds grew vigorously on all of the other breads, except for the raisin bread where growth was described as being "scant or not visible at all." In trying to identify whether it was the raisins or cinnamon responsible for this, food scientists discovered that as little as 2% or 20 mg. of the spice per ml of a yeast-extract and sucrose broth inhibited 97 -99 per cent of these molds.

#### *Relieve Pain:*

Cinnamon is considered a pain-killer due to its prostaglandin-inhibiting action.

#### *Relieve Colds and Flu:*

In both India and Europe, cinnamon has been traditionally taken as a warming herb for "cold" conditions, often in combination with ginger (*Zingiber officinale*). The herb stimulates the circulation, especially to the fingers and toes and has been used for arthritis. Cinnamon is also a traditional remedy for aching muscles and other symptoms of viral conditions such as colds and flue.

### **Ginger**

<http://foodmatters.tv/articles-1/10-healing-benefits-of-ginger>

Ayurveda gives ginger the status of a virtual medicine chest. That's because this wonder spice has time-tested digestion-friendly properties, in addition to its numerous other health benefits. In India, ginger is liberally used in daily life. Ginger-infused chai is a household favorite, and it's grandma's antidote of choice for battling cold and flu.

On millions of dining tables in India, you'll see matchsticks of fresh ginger that have turned a soft pink from being soaked in lemon juice and salt: a zingy accompaniment to any cooked

#### **10 Terrific Benefits of Ginger**

1. Haven't been feeling hungry? Eat fresh ginger just before lunch to stoke a dull appetite and fire up the digestive juices.

2. Ginger improves the absorption and assimilation of essential nutrients in the body.
3. Ginger clears the ‘micro-circulatory channels’ of the body, including the pesky sinuses that tend to flare up from time to time.
4. Feeling airsick or nauseous? Chew on ginger, preferably tossed in a little honey.
5. Can’t stop the toot-a-thon? Gas—oops—guess what?! Ginger helps reduce flatulence!
6. Tummy moaning and groaning under cramps? Munch on ginger.
7. Reeling under joint pain? Ginger, with its anti-inflammatory properties—can bring relief. Float some ginger essential oil into your bath to help aching muscles and joints.
8. Got a surgery done? Chewing ginger post-operation can help overcome nausea.
9. Stir up some ginger tea to get rid of throat and nose congestion. And when there’s a nip in the air, the warming benefits of this tasty tea are even greater!
10. Bedroom blues? Try adding a gingery punch to a bowl of soup. (Pss...the Ayurvedic texts credit ginger with aphrodisiac properties)

### **3 Ways to Use Ginger**

#### *1. Ginger & Herb Rice*

Cook basmati rice. When you take the lid off the pan, quickly stir in finely chopped garlic, ginger, green chillies and fresh cilantro leaves—the burst of flavor and fragrance will drive your senses crazy with desire!

#### *2. Ginger In Your Juice*

‘Grate’ idea: grate some ginger root and put it in your juicer, along with carrots and apples and a little lemon juice. Totally yummy, and of course, so good for you!

#### *3. Gingery Dessert*

Even a smidgen of grated ginger on your vanilla pana cotta or strawberry sorbet can wake up the flavor!

<http://en.wikipedia.org/wiki/Ginger>

From Wikipedia, the free encyclopedia

### **Ginger**

Color plate from Köhler's Medicinal Plants

Scientific classification

Kingdom: Plantae

Clade: Angiosperms

Clade: Monocots

Clade: Commelinids

Order: Zingiberales

Family: Zingiberaceae

Genus: Zingiber

Species: *Z. officinale*

Binomial name

*Zingiber officinale*

Ginger or ginger root is the rhizome of the plant *Zingiber officinale*, consumed as a delicacy, medicine, or spice. It lends its name to its genus and family (Zingiberaceae). Other notable members of this plant family are turmeric, cardamom, and galangal.

Ginger cultivation began in South Asia and has since spread to East Africa and the Caribbean.

## Etymology

The English name ginger comes from French: *gingembre*, Old English: *gingifere*, Medieval Latin: *ginginer*, Greek: *zingiberis* (  ). Ultimately the origin is from Tamil word 'inji ver' (இஞ்ச வேர்) or Malayalam word 'inji veru' (ഇഞ്ച വേര്). The botanical term for root in Tamil is ver (வேர்) and Malayalam is veru (വേര്), hence inji root or inji ver.

## Horticulture

*Ginger Plant with Flower* - South India

Ginger produces clusters of white and pink flower buds that bloom into yellow flowers. Because of its aesthetic appeal and the adaptation of the plant to warm climates, ginger is often used as landscaping around subtropical homes. It is a perennial reed-like plant with annual leafy stems, about a meter (3 to 4 feet) tall. Traditionally, the rhizome is gathered when the stalk withers; it is immediately scalded, or washed and scraped, to kill it and prevent sprouting. The fragrant perisperm of Zingiberaceae is used as sweetmeats by Bantu, also as a condiment and sialogogue.

## Uses

### Gari (ginger)

Ginger produces a hot, fragrant kitchen spice.

Young ginger rhizomes are juicy and fleshy with a very mild taste. They are often pickled in vinegar or sherry as a snack or just cooked as an ingredient in many dishes. They can also be steeped in boiling water to make ginger tea, to which honey is often added; sliced orange or lemon fruit may also be added. Ginger can also be made into candy, or ginger wine which has been made commercially since 1740.

Mature ginger rhizomes are fibrous and nearly dry. The juice from old ginger roots is extremely potent<sup>[6]</sup> and is often used as a spice in Indian recipes, and is a quintessential ingredient of Chinese, Korean, Japanese and many South Asian cuisines for flavoring dishes such as seafood or goat meat and vegetarian cuisine.

Ginger acts as a useful food preservative.

Fresh ginger can be substituted for ground ginger at a ratio of 6 to 1, although the flavors of fresh and dried ginger are somewhat different. Powdered dry ginger root is typically used as a flavoring for recipes such as gingerbread, cookies, crackers and cakes, ginger ale, and ginger

Candied ginger is the root cooked in sugar until soft, and is a type of confectionery.

Fresh ginger may be peeled before eating. For longer-term storage, the ginger can be placed in a plastic bag and refrigerated or frozen.

### Regional use

In Western cuisine, ginger is traditionally used mainly in sweet foods such as ginger ale, gingerbread, ginger snaps, parkin, ginger biscuits and speculaas. A ginger-flavored liqueur called Canton is produced in Jarnac, France. Green ginger wine is a ginger-flavored wine produced in the United Kingdom, traditionally sold in a green glass bottle. Ginger is also used as a spice added to hot coffee and tea.

In India and Pakistan, ginger is called adrak in Hindi, Punjabi and Urdu, aad in Maithili, aadi in Bhojpuri, aada in Bengali, Adu in Gujarati, hashi shunti (ಹಸಿ ಶುಂಟೆ) in the Kannada, allam (అల్లం) in Telugu, inji (இஞ்சீ) in Tamil and Malayalam, inguru (ඉඟුරු) in Sinhalese, alay in Marathi, and aduwa (अदुवा) in Nepali. Fresh ginger is one of the main spices used for making pulse and lentil curries and other vegetable preparations. Fresh, as well as dried, ginger is used to spice tea and coffee, especially in winter. Ginger powder is also used in certain food preparations, particularly for pregnant or nursing women, the most popular one being katlu which is a mixture of gum resin, ghee, nuts, and sugar. Ginger is also consumed in candied and pickled form. In Bangladesh, ginger is finely chopped or ground into a paste to use as a base for chicken and meat dishes alongside onion and garlic.

In Burma, ginger is called gyin. It is widely used in cooking and as a main ingredient in traditional medicines. It is also consumed as a salad dish called gyin-thot, which consists of shredded ginger preserved in oil, and a variety of nuts and seeds. In Indonesia, a beverage called wedang jahe is made from ginger and palm sugar. Indonesians also use ground ginger root, called jahe, as a common ingredient in local recipes. In Malaysia, ginger is called halia and used in many kinds of dishes, especially a soup. In the Philippines it is brewed into a tea called salabat. In Vietnam, the fresh leaves, finely chopped, can also be added to shrimp-and-yam soup (canh khoai m ) as a top garnish and spice to add a much subtler flavor of ginger than the ~~chopped root~~.

In China, sliced or whole ginger root is often paired with savory dishes such as fish, and chopped ginger root is commonly paired with meat, when it is cooked. However, candied ginger is sometimes a component of Chinese candy boxes, and a tisane can also be prepared from

In Japan, ginger is pickled to make beni shoga and gari or grated and used raw on tofu or noodles. It is also made into a candy called shoga no sato zuke. In the traditional Korean kimchi, ginger is either finely minced or just juiced in order to avoid the fibrous texture and added to the ingredients of the spicy paste just before the fermenting process.

In the Caribbean, ginger is a popular spice for cooking, and making drinks such as sorrel, a seasonal drink made during the Christmas season. Jamaicans make ginger beer both as a carbonated beverage and also fresh in their homes. Ginger tea is often made from fresh ginger, as well as the famous regional speciality Jamaican ginger cake.

Two varieties of ginger as sold in Haikou, Hainan, China

On the island of Corfu, Greece, a traditional drink called μ (tsitsibira), a type of ginger beer, is made. The people of Corfu and the rest of the Ionian islands adopted the drink from the British, during the period of the United States of the Ionian Islands.

In Arabic, ginger is called zanjabil, and in some parts of the Middle East, ginger powder is used as a spice for coffee and for milk. In Somaliland, ginger is called sinjibil, and is served in coffee shops in Egypt. In Côte d'Ivoire, ginger is ground and mixed with orange, pineapple and lemon to produce a juice called nyamanku. Ginger powder is a component in hawajj, a spice mix used mostly by Yemenite Jews for soups and coffee.

### Ginger tea

Ginger tea is a beverage in many countries, made from ginger root. In China, the tea is made by boiling peeled and sliced ginger to which brown sugar is often added. Sliced orange or lemon fruit may also be added to give a flavor, and it may be consumed both hot or cold. In Korean cuisine, ginger tea is called saenggang cha (생강차). It can be made either by boiling the ginger or by mixing hot water and preserved sweetened ginger. For the latter, sliced ginger root is stored with honey for a few weeks like jam. In Japanese cuisine it is called shōgayu (生姜湯). In Philippine cuisine it is called salabat and served in the relatively cold month of December. From its main ingredient ginger tea derives a flavor that is spicy and stimulating. Ginger, known as Adarak in Hindi, is used frequently in tea made in all parts of India as well.

#### *Preliminary research*

- 1 Preliminary research indicates that nine compounds found in ginger may bind to human serotonin receptors which may influence gastrointestinal function.
- 2 Research conducted in vitro tests show that ginger extract might control the quantity of free radicals and the peroxidation of lipids.
- 3 In a 2010 study, daily consumption of ginger was shown to help ease muscle pain associated with exercise by 25%.
- 4 Ginger root supplement has been identified in one study to help reduce colon inflammation markers such as PGE2, thus indicating a measure that might affect colon cancer.
- 5 In limited studies, ginger was found to be more effective than placebo for treating nausea caused by seasickness, morning sickness and chemotherapy, although ginger was not found superior to placebo for pre-emptively treating post-operative nausea.
- 6 Data suggests that ginger is mutagenic, and studies warn against taking it during pregnancy, though antimutagenic effects have also been reported.

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- 8 Other preliminary studies showed that ginger may affect arthritis pain or have blood thinning and cholesterol lowering properties, but these effects remain unconfirmed.
- 9 Advanced glycation end-products are possibly associated in the development of diabetic cataract for which ginger was effective in preliminary studies, apparently by acting through antiglycating mechanisms.
- 10 Zingerone may have activity against enterotoxigenic Escherichia coli in enterotoxin-induced diarrhoea.

## **Chemistry**

### **Ginger section**

The characteristic odor and flavor of ginger is caused by a mixture of zingerone, shogaols and gingerols, volatile oils that compose one to three percent of the weight of fresh ginger.

In laboratory animals, the gingerols increase the motility of the gastrointestinal tract and have analgesic, sedative, antipyretic and antibacterial properties.

Ginger oil has been shown to prevent skin cancer in mice and a study at the University of Michigan demonstrated that gingerols can kill ovarian cancer cells.

[6]-gingerol (1-[4'-hydroxy-3'-methoxyphenyl]-5-hydroxy-3-decanone) is the major pungent principle of ginger. The chemopreventive potentials of [6]-gingerol present a promising future alternative to expensive and toxic chemotherapeutic agents.

Ginger contains up to three percent of a fragrant essential oil whose main constituents are sesquiterpenoids, with (-)-zingiberene as the main component. Smaller amounts of other sesquiterpenoids (  $\alpha$ -sesquiphellandrene, bisabolene and farnesene) and a small monoterpenoid fraction (  $\alpha$ -phellandrene, cineol, and citral) have also been identified.

The pungent taste of ginger is due to nonvolatile phenylpropanoid-derived compounds, particularly gingerols and shogaols, which form from gingerols when ginger is dried or cooked. Zingerone is also produced from gingerols during this process; this compound is less pungent and has a spicy-sweet aroma.

Ginger is also a minor chemical irritant, and because of this was used as a horse suppository by pre-World War I mounted regiments for feaquiring.

Ginger has a sialagogue action, stimulating the production of saliva, which makes swallowing easier.[citation needed]

## **Folk medicine**

*A packet of ginger powder from the Philippines used in brewing salabat (ginger tea).*

*Ginger house rum, Madagascar*

The traditional medical form of ginger historically was called Jamaica ginger; it was classified as a stimulant and carminative and used frequently for dyspepsia, gastroparesis, slow motility symptoms, constipation, and colic.[citation needed]

It was also frequently employed to disguise the taste of medicines.

Some studies indicate ginger may provide short-term relief of pregnancy-related nausea and vomiting.[citation needed]

Studies are inconclusive about effects for other forms of nausea or in treating pain from rheumatoid arthritis, osteoarthritis, or joint and muscle injury.

Side effects, mostly associated with powdered ginger, are gas, bloating, heartburn, and nausea.

Tea brewed from ginger is a common folk remedy for colds.

Ginger ale and ginger beer are also drunk as stomach settlers in countries where the beverages are made.

In Burma, ginger and a local sweetener made from palm tree juice (htan nyat) are boiled together and taken to prevent the flu.

In China, ginger is included in several traditional preparations. A drink made with sliced ginger cooked in water with brown sugar or a cola is used as a folk medicine for the common cold.

"Ginger eggs" (scrambled eggs with finely diced ginger root) is a common home remedy for coughing.[citation needed]

The Chinese also make a kind of dried ginger candy that is fermented in plum juice and sugared, which is also commonly consumed to suppress coughing.

Ginger has also been historically used to treat inflammation, which several scientific studies support, though one arthritis trial showed ginger to be no better than a placebo or ibuprofen for treatment of osteoarthritis.

In Congo, ginger is crushed and mixed with mango tree sap to make tangawisi juice, which is considered a panacea.

In India, ginger is applied as a paste to the temples to relieve headache, and consumed when suffering from the common cold.

Ginger with lemon and black salt is also used for nausea.

In Indonesia, ginger (jahe in Indonesian) is used as a herbal preparation to reduce fatigue, reducing "winds" in the blood, prevent and cure rheumatism and control poor dietary habits.[citation needed]

In Nepal, ginger is called aduwa, अदुवा and is widely grown and used throughout the country as a spice for vegetables, used medically to treat cold and also sometimes used to flavor tea.

In the Philippines, ginger is known as luya and is used as a throat lozenge in traditional medicine to relieve sore throat. It is also brewed into a tea known as salabat.

In the United States, ginger is used to prevent motion and morning sickness.[citation needed]

It is recognized as safe by the Food and Drug Administration[citation needed] and is sold as an unregulated dietary supplement.

Ginger water is also used to avoid heat cramps.[citation needed]

In Peru, ginger is sliced in hot water as an infusion for stomach aches as infusión de Kión.

In Japan it is purported to aid blood circulation.

Scientific studies investigating these effects have been inconclusive.

## **Nutritional information**

Ginger root (raw)

Nutritional value per 100 g (3.5 oz)

Energy 333 kJ (80 kcal)

Carbohydrates 17.77 g

- Sugars 1.70 g

- Dietary fiber 2.0 g

Fat 0.75 g

Protein 1.82 g

Vitamin A 0 IU

Vitamin C 5.0 mg (6%)

Phosphorus 34 mg (5%)

Potassium 415 mg (9%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

Ginger root (ground)

Nutritional value per 100 g (3.5 oz)

Energy 1,404 kJ (336 kcal)

Carbohydrates 71.62 g

- Sugars 3.39 g

- Dietary fiber 14.1 g

Fat 4.24 g

Protein 8.98 g

Vitamin A 30 IU

Vitamin C 0.7 mg (1%)

Phosphorus 168 mg (24%)

Potassium 1320 mg (28%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

## **Safety**

Ginger is on the FDA's "generally recognized as safe" list, though it does interact with some medications, including warfarin. Ginger is contraindicated in people suffering from gallstones, as it promotes the production of bile.

An acute overdose of ginger is usually in excess of about 2 grams of ginger per kilogram of body mass, dependent on level of ginger tolerance, and can result in a state of central nervous system over-stimulation called ginger intoxication or colloquially the "ginger jitters".

Allergic reactions to ginger generally result in a rash, and although generally recognized as safe, ginger can cause heartburn, bloating, gas, belching and nausea, particularly if taken in powdered form.

Unchewed fresh ginger may result in intestinal blockage, and individuals who have had ulcers, inflammatory bowel disease or blocked intestines may react badly to large quantities of fresh ginger. Ginger can also adversely affect individuals with gallstones.

There are also suggestions that ginger may affect blood pressure, clotting, and heart rhythms.

Products in Taiwan made from Hebo Natural Products Limited (禾博天然產物有限公司) of China contained ginger contaminated with DIBP, some 80,000 nutritional supplement capsules made with imported ginger powder were seized by the Public Health Department of Taiwan in June 2011.

## **Similar ingredients**

Myoga (*Zingiber mioga* Roscoe) appears in Japanese cuisine; the flower buds are the part eaten.

Another plant in the Zingiberaceae family, galangal, is used for similar purposes as ginger in Thai cuisine. Galangal is also called Thai ginger. Also referred to as galangal, fingerroot (*Boesenbergia rotunda*), or Chinese ginger or the Thai krachai, is used in cooking and medicine.

A dicotyledonous native species of eastern North America, *Asarum canadense*, is also known as "wild ginger", and its root has similar aromatic properties, but it is not related to true ginger. The plant also contains aristolochic acid, a carcinogenic compound.[citation needed]

### **Production**

Top ten ginger producers – 11 June 2008

Country Production (tonnes)

India 380,100  
China 331,393  
Indonesia 192,500  
Nepal 174,268  
Thailand 170,125  
Nigeria 152,106  
Bangladesh 72,608  
Japan 52,000  
Philippines 27,415  
Cameroon 12,000  
World 1,615,974

Source: Food And Agricultural Organization of United Nations: Economic And Social Department: The Statistical Division

From 1585, Jamaican ginger was the first oriental spice to be grown in the New World and imported back to Europe.

India, with over 30% of the global share, now leads in global production of ginger, replacing China, which has slipped to the second position (~20.5%), followed by Indonesia (~12.7%), Nepal (~11.5%) and Thailand (~10%).

<http://www.celestialhealing.net/healthintro..htm>

*The Health Benefits of Ginger* are many. Ginger is one of the world's seven most potent disease-fighting spices. It has been widely regarded for centuries as a natural remedy for a variety of ailments.

<http://www.ageless.co.za/herb-ginger.htm>

**Ginger** (Jamaica ginger)

*Zingiber officinale*, Roscoe

Information on ginger and how it is used as a herb in alternative herbal treatments to treat ailments and problems, such as nausea, indigestion and blood in urine.

Botanical classification of ginger

Description of ginger

Parts used

Properties of ginger

Internal use

External use

Use of essential oil

Safety precautions and warnings

Used in the following products

Herbal Index

Please note that I am not advocating that you stop using your normal medication, but I would like to make you aware that some alternative therapies can be very effective to help treat problems and create a healthier, younger and more vital you.

Although I believe in the therapeutic and healing properties of herbs, care must be taken in the use thereof, as they are powerful compounds.

Botanical Classification

Family

Zingiberaceae

Genus and specie

Zingiber officinale, Roscoe

Other names

Jamaica ginger and Sheng Jiang.

Description of the herb ginger

Ginger is a deciduous perennial with thick, branching rhizomes and sturdy, upright stems with pointed lance-like leaves. Yellow-green flowers, with a deep purple lip with a yellow marking are produced, followed by the fruits, which resemble fleshy capsules.

#### ***Parts used***

The fresh and dried rhizomes are used and an essential oil is also extracted.

#### ***Properties***

Ginger is a sweet, pungent and aromatic herb that has expectorant properties. The herb increases perspiration, improves digestion and liver function, controls nausea, vomiting and coughing. It stimulates circulation, relaxes spasms and relieves pain.

The taste of this herb is caused by the numerous gingerols, such as [6]-gingerol, found in the plant and the volatile essential oil also contains monoterpenoids (camphene, b-phellandrene, neral and geranial), diterpene lactones, such as galanolactone, as well as sesquiterpenes (a-zingiberene and ar-curcumene).

#### **Therapeutic uses**

##### *Internal use*

Ginger is used internally for motion sickness, nausea, morning sickness, indigestion, colic, abdominal chills, colds, coughs, influenza and peripheral circulatory problems.

It is a very "warming" herb, and is used in "cold" conditions like frigidity and impotence.

Some hypoglycaemic, cholesterol lowering, immune stimulant and anti-inflammatory properties have been noted.

It has a very beneficial effect on ulcers, and also increases peristalsis and the secretion of bile and gastric juices.

In Chinese medicine, it is used for nausea, vomiting, fever, cold, cough, nasal discharge, blood in the urine, abdominal unease and feeling of fullness as well as chronic bronchitis.

Green ginger (fresh young rhizomes) is juiced, eaten raw, preserved and candied.

##### *External use*

Used externally for spasmodic pain, rheumatism, lumbago, menstrual cramps and sprains.

### *Aromatherapy and essential oil use*

To warm the body and the mind, ginger essential oil is most effective. It sharpens the senses and memory.

It will also "ground" a person, while stimulating the mind, and is very effective in removing excess moisture in the body - such as catarrh and phlegm.

Furthermore it boosts the digestive system and is valuable in fighting nausea and motion sickness - be that car or sea.

The circulation boosting properties helps the entire body and its analgesic affect aids with rheumatic and arthritic pain.

On the skin it reduces bruises, sores and carbuncles.

It has analgesic, antisept

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/961.html>

### **Ginger**

#### *What is it?*

Ginger is a herb. The rhizome (underground stem) is used as a spice and also as a medicine. It can be used fresh, dried and powdered, or as a juice or oil.

Ginger is commonly used to treat various types of "stomach problems," including motion sickness, morning sickness, colic, upset stomach, gas, diarrhoea, nausea caused by cancer treatment, nausea and vomiting after surgery, as well as loss of appetite.

Other uses include pain relief from arthritis or muscle soreness, menstrual pain, upper respiratory tract infections, cough, and bronchitis.

Ginger is also sometimes used for chest pain, low back pain, and stomach pain.

Some people pour the fresh juice on their skin to treat burns.

The oil made from ginger is sometimes applied to the skin to relieve pain.

In foods and beverages, ginger is used as a flavoring agent.

In manufacturing, ginger is used as for fragrance in soaps and cosmetics.

One of the chemicals in ginger is also used as an ingredient in laxative, anti-gas, and antacid medications.

#### *How effective is it ?*

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.

*The effectiveness ratings for GINGER are as follows:*

Possibly effective for...

*Nausea and vomiting following surgery.* Most clinical research shows that taking 1 gram of ginger one hour before surgery seems to reduce nausea and vomiting during the first 24 hours after surgery. One study found ginger reduced nausea and vomiting by 38%. However, ginger might not reduce nausea and vomiting in the period 3-6 hours after surgery.

*Dizziness.* Taking ginger seems to reduce the symptoms of dizziness, including nausea.

*Menstrual pain.* Some research shows that ginger can reduce symptoms of menstrual pain in some women when taken during menstruation. One study shows that taking a specific ginger extract (Zintoma, Goldaru) 250 mg four times daily for 3 days at the beginning of the menstrual period reduces pain symptoms in as many as 62% of people. It seems to work about as well as the medications ibuprofen or mefenamic acid.

*Arthritis.* Some research shows that taking ginger can modestly reduce pain in some people with a form of arthritis called "osteoarthritis." One study shows that taking a specific ginger extract (Zintona EC) 250 mg four times daily reduced arthritis pain in the knee after 3 months of treatment. Another study shows that using a different ginger extract (Eurovita Extract 77; EV ext-77), which combines a ginger with alpinia also reduces pain upon standing, pain after walking, and stiffness. Some research has compared ginger to medications such as ibuprofen. In one study, a specific ginger extract (Eurovita Extract 33; EV ext-33) did not work as well as taking ibuprofen 400 mg three times daily for reducing arthritis pain. But in another study, taking ginger extract 500 mg twice daily worked about as well as ibuprofen 400 mg three times daily for hip and knee pain related to arthritis.

*Preventing morning sickness* (discuss the possible risks with your healthcare provider). Ginger seems to reduce nausea and vomiting in some pregnant women. But taking any herb or medication during pregnancy is a big decision. Before taking ginger, be sure to discuss the possible risks with your healthcare provider.

Possibly ineffective for...

*Preventing motion sickness and seasickness.* Some people say they feel better after taking ginger before travel. But there is no hard evidence that ginger actually prevents motion sickness or seasickness.

*Insufficient evidence to rate effectiveness for...*

*Rheumatoid arthritis (RA).* There is some preliminary evidence that ginger might be helpful for decreasing joint pain in people with RA.

*Nausea and vomiting due to chemotherapy.* There is contradictory evidence about the effectiveness of ginger for nausea and vomiting caused by chemotherapy for cancer.

*Muscle pain after exercise.* There is contradictory evidence about whether ginger helps for muscle pain caused by exercise.

*Loss of appetite.*

*Colds.*

*Flu.*

*Migraine headache.*

*Preventing nausea caused by chemotherapy.*

*Other conditions.*

More evidence is needed to rate ginger for these uses.

*How does it work?*

Ginger contains chemicals that may reduce nausea and inflammation.

Researchers believe the chemicals work primarily in the stomach and intestines, but they may also work in the brain and nervous system to control nausea.

*Are there safety concerns?*

Ginger is **LIKELY SAFE** for most people.

Some people can have mild side effects including heartburn, diarrhoea, and general stomach discomfort.

Some women have reported extra menstrual bleeding while taking ginger.

When ginger is applied to the skin, it may cause irritation.

*Special precautions & warnings:*

*Pregnancy:*

Using ginger during pregnancy is controversial. There is some concern that ginger might affect foetal sex hormones. There is also a report of miscarriage during week 12 of pregnancy in a woman who used ginger for morning sickness. However, studies in pregnant women suggest that ginger can be used safely for morning sickness without harm to the foetus. The risk for major malformations in infants of women taking ginger does not appear to be higher than the usual rate of 1% to 3%. As with any medication given during pregnancy, it's important to weigh the benefit against the risk. Before using ginger during pregnancy, talk it over with your

*Breast-feeding:*

Not enough is known about the safety of using ginger during breast-feeding. Stay on the safe side and don't use it.

*Bleeding disorders:*

Taking ginger might increase your risk of bleeding. Avoid using it.

*Diabetes:*

Ginger might lower your blood sugar. As a result, your diabetes medications might need to be adjusted by your healthcare provider.

*Heart conditions:*

High doses of ginger might worsen some heart conditions. Don't use ginger if you have a heart condition.

*Are there interactions with medications?*

*Moderate*

*Be cautious with this combination.*

Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)

Ginger might slow blood clotting. Taking ginger along with medications that also slow clotting might increase the chances of bruising and bleeding.

Some medications that slow blood clotting include aspirin, clopidogrel (Plavix), diclofenac (Voltaren, Cataflam, others), ibuprofen (Advil, Motrin, others), naproxen (Anaprox, Naprosyn, others), dalteparin (Fragmin), enoxaparin (Lovenox), heparin, warfarin (Coumadin), and others.

Phenprocoumon

Phenprocoumon is used in Europe to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with phenprocoumon might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your phenprocoumon might need to be changed.

Warfarin (Coumadin)

Warfarin (Coumadin) is used to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with warfarin (Coumadin) might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your warfarin (Coumadin) might need to be changed.

*Minor*

*Be watchful with this combination.*

#### Medications for diabetes (Anti-diabetes drugs)

Ginger might decrease blood sugar. Diabetes medications are also used to lower blood sugar. Taking ginger along with diabetes medications might cause your blood sugar to go too low. Monitor your blood sugar closely. The dose of your diabetes medication might need to be

Some medications used for diabetes include glimepiride (Amaryl), glyburide (DiaBeta, Glynase PresTab, Micronase), insulin, metformin (Glucophage), pioglitazone (Actos), rosiglitazone (Avandia), and others.

#### Medications for high blood pressure (Calcium channel blockers)

Ginger might reduce blood pressure in a way that is similar to some medications for blood pressure and heart disease. Taking ginger along with these medications might cause your blood pressure to drop too low or cause an irregular heartbeat.

Some medications for high blood pressure and heart disease include nifedipine (Adalat, Procardia), verapamil (Calan, Isoptin, Verelan), diltiazem (Cardizem), isradipine (DynaCirc), felodipine (Plendil), amlodipine (Norvasc), and others.

#### *Are there interactions with herbs and supplements?*

Herbs and supplements that might slow blood clotting

Using ginger along with herbs that might slow blood clotting could increase the risk of bleeding in some people. These herbs include angelica, clove, danshen, garlic, ginkgo, Panax ginseng, red clover, turmeric, and others.

#### *Are there interactions with foods?*

There are no known interactions with foods.

#### *What dose is used?*

*The following doses have been studied in scientific research:*

#### BY MOUTH:

*For morning sickness:*

250 mg ginger 4 times daily.

*For postoperative nausea and vomiting:*

1-2 grams powdered ginger root one hour before induction of anesthesia.

#### *For arthritis:*

Many different ginger extract products have been used in studies. The dosing used differs depending on the product taken. One ginger extract (Eurovita Extract 33; EV ext-33) 170 mg three times daily has been used. Another extract (Eurovita Extract 77; EV ext-77), which combines a ginger with an alpinia, 255 mg twice daily has also been used. Another ginger extract (Zintona EC) 250 mg four times daily has also been used.

#### *Other names*

African Ginger, Amomum Zingiber, Ardraka, Black Ginger, Cochin Ginger, Gan Jiang, Gingembre, Gingembre Africain, Gingembre Cochin, Gingembre Indien, Gingembre Jamaïquain, Gingembre Noir, Ginger Essential Oil, Ginger Root, Huile Essentielle de Gingembre, Imber, Indian Ginger, Jamaica Ginger, Jengibre, Jiang, Kankyo, Kanshokyo, Nagara, Race Ginger, Racine de Gingembre, Rhizoma Zingiberi, Rhizoma Zingiberis, Rhizoma Zingiberis Recens, Shen Jiang, Sheng Jiang, Shoga, Shokyo, Shunthi, Srungavera, Sunth, Sunthi, Vishvabheshaja, Zingiber Officinale, Zingiberis Rhizoma, Zingiberis Siccatum

## Methodology

To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.

<http://www.herbwisdom.com/herb-ginger-root.html>

## Ginger Root

### Ginger Root Benefits

#### Contents

Ginger Root benefits

Notes / side effects

Where to buy Ginger Root

How to grow Ginger

Ginger Root reviews

*Ginger root (Zingiber officinale)* is well known as a remedy for travel sickness, nausea and indigestion and is used for wind, colic, irritable bowel, loss of appetite, chills, cold, flu, poor circulation, menstrual cramps, dyspepsia (bloating, heartburn, flatulence), indigestion and gastrointestinal problems such as gas and stomach cramps.

Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems.

It has also been indicated for arthritis, fevers, headaches, toothaches, coughs, bronchitis, osteoarthritis, rheumatoid arthritis, to ease tendonitis, lower cholesterol and blood-pressure and aid in preventing internal blood clots.

Ginger has been well researched and many of its traditional uses confirmed.

It is well known as a remedy for travel sickness, nausea and indigestion.

It is a warming remedy, ideal for boosting the circulation, lowering high blood pressure and keeping the blood thin in higher doses.

Ginger is anti-viral and makes a warming cold and flu remedy.

Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems.

Ginger root is a medicinal herb used primarily for the treatment of Dyspepsia (discomfort after eating), this includes the symptoms of bloating, heartburn, flatulence, and nausea.

It is also considered helpful as a preventative for motion sickness and as a digestive.

Due to it's antispasmodic characteristic some people have used it to help ease menstrual cramps.

In some traditional systems it is credited with the ability to treat arthritis, fevers, headaches, and toothaches.

Ginger may also be taken orally as a herbal remedy to prevent or relieve nausea resulting from chemotherapy, motion sickness, pregnancy, and surgery.

Results of laboratory studies as well as from small studies conducted among seasick sailors or ship passengers, found that ginger generally has more effectiveness for relieving motion sickness than placebo (or sugar pills).

Several comparisons between ginger and prescription or non-prescription drugs have been conducted for relieving the nausea of pregnancy, but results are inconclusive.

In some of the studies, similar effectiveness was seen between ginger and the comparator drug, while other studies found less or no effectiveness for ginger as compared to the drugs.

In general, no adverse effects were noted from using ginger, for either the mother or the developing baby.

Ginger has also been used in folk medicine to treat minor gastrointestinal problems such as gas or stomach cramps.

Recent studies may confirm that ginger directly affects the gastrointestinal tract, helping to improve muscle tone and to prevent abnormally rapid and strong intestinal contractions.

Results of limited studies in animals with diabetes show that ginger may reduce blood levels of sugar and cholesterol, while also lowering blood pressure. However, no human studies with similar results have been reported.

A few small studies that have been conducted in humans have shown some promise for supplemental ginger in the treatment of both osteoarthritis and rheumatoid arthritis.

If a person has exercised too much or suffers from arthritis or rheumatism, ginger has been known to ease inflammation of the joints and muscle tissue.

Due to its tremendous circulation-increasing qualities, ginger is thought to improve the complexion.

It has reduced nervousness, eased tendonitis, and helped sore throats return to normal.

Studies demonstrate that ginger can lower cholesterol levels by reducing cholesterol absorption in the blood and liver.

It may also aid in preventing internal blood clots.

***\*\*New Research! \*\****

Ginger root was recently the subject of a startling new research report presented at The American Association for Cancer research conference in Phoenix.

In the study, ginger actually suppressed cancer cells suggesting that the herb was able to fuel apoptosis or the death of the cancer cells.

Ginger has been shown to work against skin, ovarian, colon and breast cancer.

But it had not been shown to halt the progression of cancer until now.

However, more research is required to confirm this.

This stimulating herb is warming to the system. In her book '10 Essential Herbs' author Lalitha Thomas describes the properties: "The major active ingredients in ginger are terpenes (quite similar to the chemical action of turpentine) and an oleo-resin called ginger oil.

These two, and other active ingredients in ginger, provide antiseptic, lymph-cleansing, circulation-stimulating, and mild constipation relief qualities along with a potent perspiration-inducing action that is quite effective in cleansing the system of toxins."

<http://www.herbwisdom.com/herb-ginger-root.html>

#### **Ginger Root Herb Notes / Side Effects**

*Latin Name : Zingiber officinale*

*Common Names:*

Black ginger, Canton ginger, Cochin ginger, Common ginger, Garden ginger, Gingembre, Imber, Jamaican ginger

*Properties:*

Anti-emetic, anti-inflammatory, anti-oxidant, antiseptic, antispasmodic, anti-viral, carminative, circulation-stimulating, detoxifying, diaphoretic, digestive, lymph-cleansing, mild laxative, perspiration-inducing, warming.

*Uses:*

For nausea and the nausea of pregnancy and travel sickness. For wind, colic and irritable bowel. Chills, cold, flu and poor circulation. Menstrual cramps. Dyspepsia (bloating, heartburn, flatulence). Indigestion. Improves circulation. Gastrointestinal problems such as gas or stomach cramps. Lowers cholesterol.

*Indicated for:*

Arthritis, fevers, headaches, and toothaches, lowers blood cholesterol and blood-pressure and aids in preventing internal blood clots. Coughs or bronchitis, osteoarthritis and rheumatoid arthritis, improves the complexion, eases tendonitis. There is some evidence to suggest that it helps to combat skin, ovarian, colon and breast cancer.

Avoid taking in acute inflammatory conditions. Although there is some evidence that ginger may actually be helpful in gastritis and peptic ulceration, care is needed in these conditions as any spice may exacerbate the problem. Avoid when pregnant or trying to get pregnant (large doses may have abortifacient effects). Avoid therapeutic doses if taking anti-coagulant therapy such as warfarin and seek advice if taking medication for heart problems. High blood pressure should always be monitored by a healthcare professional. Do not use if suffering from Gall

[http://www.health24.com/dietnfood/Healthy\\_foods/15-18-20-](http://www.health24.com/dietnfood/Healthy_foods/15-18-20-)

## **Ginger Diet & Nutrition**

### **Ginger**

Nibble on some fresh ginger if you suffer from vertigo or flatulence. Or use it for its myriad of other beneficial qualities.

#### *How much to eat*

The recommended daily intake is 1g of dried ginger or two cups of ginger tea. Eating too much ginger can cause itchiness in the bladder opening. Ginger is most often used as a flavourant.

#### *Nutritional values*

Calories 10

Per 25g fresh ginger

Because ginger is eaten in such small quantities, its contribution to the vitamin, energy and mineral requirements of the body are negligible.

#### *Key benefits*

Ginger can relieve nausea and relieves indigestion and flatulence.

It discourages blood clots, stimulates circulation and may relieve rheumatism.

It also has calming, anti-spasmodic and anti-inflammatory properties.

#### *Maximising the benefits*

It is the oleo-resins and volatile oils that are the key active constituents in ginger.

Ginger should be kept in the fridge to stop it from going mouldy.

Dried ginger retains many of its healing properties, but fresh ginger is still the most beneficial.

<http://www.gnet.org/ginger-add-a-healthy-zing-to-your-day/>

### **Ginger: Add a healthy zing to your day!**

From the ancient Chinese and the Romans, to mothers of poor children worldwide, for thousands of years now ginger has been used as a spice and a medicine.

Although it is commonly described as a root, it is in fact a rhizome, a stem that grows out from the plant underground, and from which small roots will sprout, as well as new green shoots.

Nature's Way Ginger Root

550mg, 180 Caps (Pack of 2)

Regular Price \$26.98

Buy Today \$18.96

Ginger's most well-known medicinal use is as a digestive-aid, to relieve tummy pain, nausea and diarrhoea, as well as morning sickness and travel sickness.

This is thought to be because of the spice's high levels of gingerol; a powerful component that gives it its natural zingy flavour, and which acts as an anti-inflammatory in the body.

If you're wondering how to use ginger, it's very easy- since it is both fibrous and tough, and full of juice and oils, it is ideal for grating or expressing into just about any food or drink that you feel like.

Even ginger ale and candied ginger have medicinal properties, if you're not sure about using the fresh variety.

Don't like the taste? Don't worry, you can buy it in supplement form too, so you get all the great benefits, without any of the strong flavour!

### **Benefits of Ginger – The Superfood**

*Have a look at what else ginger can do for your health*

The anti-inflammatory properties of ginger are thought to provide pain relief in a number of ways, from halting migraines in their tracks, to easing the aches of arthritis.

Studies have started showing really exciting results on the effect ginger has on ovarian cancer:

Although more research is needed, it seems that ginger has the ability to eliminate cancerous ovarian cells. It also seems to dramatically slow the progress of bowel cancer; encouraging news indeed!

Were you spoon-fed ginger ale as a child when you had the flu? If you were, Mum had the right idea, as ginger is shown to have a boosting effect on the immune-system, making you better faster.

So ginger is delicious AND nutritious! But let's check there's nothing we should be cautious

### *Side Effects of Ginger?*

These seem to be minimal!

Some consumer reports have suggested that ginger can cause nausea and stomach-upset rather than prevent it, but these do seem to be rare cases.

Since ginger is an anti-inflammatory, people on any blood-thinning medications should perhaps approach the spice with caution to ensure it doesn't interfere with their condition, although studies on this are not by any means conclusive.

If you have any doubts at all, please consult your doctor.

*Studies say...*

*It helps morning sickness!*

The University of Maryland conducted research into the effect of 1g of ginger on morning sickness and found it to be more effective than a placebo at relieving symptoms.

<http://www.umm.edu/altmed/articles/ginger-000246.htm>

Chimes Original Ginger Chews

5-pound Box

Buy Today \$28.85

*It is a great anti-inflammatory!*

The University of Miami concluded that ginger is an effective anti-inflammatory, and even suggested that ginger extract could one day be used instead of synthetic anti-inflammatory medication!

<http://www.arthritistoday.org/nutrition-and-weight-loss/healthy-eating/good-food/ginger-benefits.php>

*It fights ovarian cancer!*

Studies at the University of Michigan showed that ginger was as effective at destroying cancerous cells as standard platinum-based chemotherapy drugs.

<http://chiefherb.com/proven-health-benefits-of-ginger/>

*It slows bowel cancer!*

The University of Minnesota carried out studies that showed the growth of colorectal cancerous cells being slowed by treatment with ginger.

<http://www.whfoods.com/genpage.php?tname=foodspice&dbid>

*What the Papers say:*

*BBC News:*

*The Huffington Post:*

*Mens Cosmo:*

*From the web:*

*It Helps My Asthma Pains...*

If my chest hurts and I have sinus issues on top of the chest breathing pain and I take Ginger Capsules or drink Ginger Tea it really helps.

– Graystar

(<http://www.dailystrength.org/>)

*It Works for My Irritable Bowel Syndrome!*

Someone suggested it to help with IBS, and it's working wonders! I take it in table form once a day.

– ellostev88

(<http://www.dailystrength.org/>)

*No More Nausea!*

I'm a chef, and my former sous chef gave me a piece to chew on one shift where I was feeling particularly ill; I felt fine immediately and finished the dinner shift.

– Neil G.

(<http://answers.yahoo.com/>)

<http://www.lifehack.org/articles/lifestyle/10-benefits-of-ginger-that-you-didnt-know-about.html>

*11 Benefits of Ginger That You Didn't Know About* by Brian Lee in Lifestyle

### **Lose weight start Juicing**

Feel great, lose weight.

Hurom is voted best new juicer. [www.huromjuicer.co.za](http://www.huromjuicer.co.za)

*I love the taste of Ginger.*

It's used widely used in many meals that I eat from starters, main meals and even deserts. It's used all over the world in a variety of world cuisines from chilli crab, curries to ginger confectionery and ginger biscuits. It's also supposed to hold medicinal health benefits so it's supposed to be good for me to eat... But what are they? I decided to find out what these benefits are that people talk about.

*But why ginger?*

Ginger is grown as a root and is a flexible ingredient that can be consumed in drinks (tea, beer, ale) or in cooking. It can be used to make foods spicy and even as a food preservative. For over 2000 years, Chinese medicine has recommended the use of ginger to help cure and prevent several health problems. It is known to promote energy circulation in the body and increase our body's metabolic rate.

Here 's a list of some of the amazing benefits of ginger that you may not aware of. Although some of these are still being debated, you could do your own research if you want to use ginger for medicinal purposes.

### **The Benefits of Ginger**

#### *Maintains Normal Blood Circulation.*

Ginger contains chromium, magnesium and zinc which can help to improve blood flow, as well as help prevent chills, fever, and excessive sweat.

Remedies Motion Sickness. Ginger is a known effective remedy for the nausea associated with motion sickness. The exact reason is unknown, but in a study of naval cadets, those given ginger powder suffered less.

#### *Improves absorption.*

Ginger improves the absorption and stimulation of essential nutrients in the body. It does this by stimulating gastric and pancreatic enzyme secretion.

#### *Cold and Flu Prevention.*

Ginger has been used for thousands of years as a natural treatment for colds and flu around Asia. The University of Maryland Medical Center states that to treat cold and flu symptoms in adults, steep 2 tbsp. of freshly shredded or chopped ginger root in hot water, two to three times

#### *Combats Stomach Discomfort.*

Ginger is ideal in assisting digestion, thereby improving food absorption and avoiding possible stomach ache. Ginger appears to reduce inflammation in a similar way to aspirin and ibuprofen

#### *Colon Cancer Prevention.*

A study at the University of Minnesota found that ginger may slow the growth of colorectal cancer cells.

#### *Reduce Pain and Inflammation.*

Ginger contains some of the most potent anti-inflammatory fighting substances known and is a natural powerful painkiller.

#### *Fights Common Respiratory Problems.*

If you're suffering from common respiratory diseases such as a cough, ginger aids in expanding your lungs and loosening up phlegm because it is a natural expectorant that breaks down and removes mucus.. That way you can quickly recover from difficulty in breathing.

#### *Ovarian Cancer Treatment.*

Ginger powder induces cell death in ovarian cancer cells.

Strengthens Immunity. Ginger helps improve the immune system. Consuming a little bit ginger a day can help foil potential risk of a stroke by inhibiting fatty deposits from the arteries. It also decreases bacterial infections in the stomach, and helps battle a bad cough and throat irritation.

#### *Combats Morning Sickness.*

Ginger has demonstrated a success rate of 75 percent in curing morning sickness and stomach

### *How Much?*

These are some of the health benefits to ginger. How it can be taken is up to you, some people will say that 2 tablespoons of shredded ginger in a cup 2-3 times a day is ideal when you are feeling under the weather. A lot of people will mix ginger and honey to help soothe a cold and drink it many times a day. Naturally, it's used in cooking and candy, so it's difficult to measure to say exactly how much you should consume,

But with all these benefits, and with it so readily available, it's really something we shouldn't even try to avoid. In fact you could even mix it up with other ingredients such as Green Tea.

<http://www.3fatchicks.com/8-benefits-of-ginger-tea/>

### **8 Benefits of Ginger Tea**

Ginger is brown, fleshy, and has a pungent smell and a scorching taste.

It is valued for its wondrous qualities that help cure a number of common diseases.

Best consumed as tea, ginger is a perfect source of a number of vitamins and minerals such as vitamin C and magnesium.

Ginger tea is best prepared with honey, lemon juice or peppermint.

With all of the great benefits it offers, you can never go wrong with drinking a cup of ginger tea.

*Here are several of the known benefits of ginger tea:*

#### *1. Impedes Motion Sickness*

Ginger tea can soothe nerves and prevent vomiting, as well as eradicate headaches and migraines. It also keeps you from being nauseous during a trip, so drink a cup of ginger tea before setting off on your travels.

#### *2. Combats Stomach Discomfort*

Ginger tea is ideal in assisting digestion, thereby improving food absorption and avoiding possible tummy aches from too much food intake. Unnecessary belching can also be thwarted by ginger tea. What's more, ginger tea enhances your appetite when you're feeling bloated, by helping to release gastric acids that aid digestion.

#### *3. Reduces Inflammation*

Ginger tea can ease inflammation of the joints, which is commonly referred to as rheumatoid arthritis. It is also effective in alleviating tired, sore muscles and joints. A warm ginger tea soak can lessen swelling and puffiness. If you have athlete's foot, ginger tea is recommended as a foot soak to lessen the painful burning sensation that comes with itching.

#### *4. Fights Common Respiratory Problems*

Drinking ginger tea is recommended if you're suffering from common respiratory diseases such as cold and cough. Ginger aids in loosening up phlegm and expanding your lungs, so you can recover quickly from difficulty in breathing. It also helps appease allergies and constant sneezing due to hay fever.

#### *5. Encourages Normal Blood Circulation*

Consuming a cup of ginger tea can help improve blood flow, as well as help prevent chills, fever and excessive sweating. The active components of ginger, such as minerals and amino acids, help make the blood flow smoothly, preventing the onset of cardiovascular disease.

#### *6. Remedies Menstrual Discomfort*

If you are a woman suffering from menstrual cramps, try placing a hot towel drenched in ginger tea on your uterine area to overcome the pain and relax the muscles. Drinking a cup of ginger tea can also provide a soothing effect.

#### *7. Strengthens Immunity*

Ginger tea has antioxidants that help improve the immune system. Drinking a cup of ginger tea every day can also help foil potential risks of a stroke by inhibiting fatty deposits from clogging the arteries. Ginger has also been proven successful in lowering cholesterol levels and preventing cancer.

#### *8. Relieves Stress*

Taking a whiff of ginger tea can help improve your mood and give you a sunny disposition. It leaves you feeling refreshed and calm, and if you're having a bad day, all those negative vibes will dissipate. Ginger tea is a remarkable stress reliever because of its comforting and relaxing

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*Cinnamon (Ch 2 Categories)*

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*Cannabis strains Wiki [49 pages](#)*

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*Categories*

Cinnamon

Ginger

Garlic

Cayenne

Coriander

Honey

Bee Propolis

Cherries

Cocoa Beans

10 Coconut Oil

Cumin

Evening Primrose Oil

Radish

Thyme

Water

Wheatgrass

Sage

Tea Tree Oil

Spirulina

20 St. John's Wort

Fennel

Dandelion

Fo-ti Root

Elderberry

Bergamot Orange

Chamomile

Colloidal Silver

Conjugated Linoleic Acid

Damiana

30 Feverfew

Echinacea purpurea

Geranium  
Holly  
Goldenseal  
Ginkgo biloba  
Liverwort  
Ginseng  
Horny Goats Weed  
Melatonin  
40 Glucosamine  
Lobelia  
Horse Chestnut  
Mexican Wild Yam  
Reishi Mushrooms  
Horsetail  
Nettle  
Maca  
Rosemary  
50 Sasparella  
Saffron  
Valerian  
Yerba Mate  
Soy Isoflavones  
Watercress  
Uva Ursi  
Whey Isolate  
Whey Protein  
Yarrow  
60 Winter Cherry  
Slippery Elm  
Russian Ginseng  
Wolfberry  
Senna  
Royal Jelly  
Saw palmetto  
Sea Buckthorn  
Red clover  
Scilla  
70 Chlorella  
Cats Claw  
Black Cohosh  
Avena sativa  
Bilberry  
Burdock  
Collagen  
Euphrasia Eyebright  
Fenugreek  
Green Lipped Mussels  
80 Muira Puama  
Milk Thistle  
Cardamom

Rhodiola  
St. John's Wort  
Tarragon

<http://www.herbwisdom.com/herb-cinnamon.html>

**Cinnamon (Cinnamomum zeylanicum)**

**Cinnamon Benefits**

### **Contents**

Cinnamon benefits  
Notes / side effects  
Where to buy Cinnamon  
Cinnamon review

Cinnamon is a herb traditionally used by many ancient cultures. It is indicated for a variety of ailments including gastrointestinal problems, urinary infections, relieving symptoms of colds and flu and has remarkable anti-fungal and anti-bacterial properties. Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better.

True cinnamon, or Cinnamomum Zeylanicum, is the inner bark of a small evergreen tree native to Sri Lanka and was used in ancient Egypt for embalming. It was also added to food to prevent spoiling. During the Bubonic Plague, sponges were soaked in cinnamon and cloves and placed in sick rooms. Cinnamon was the most sought after spice during explorations of the 15th and 16th centuries.

Most therapeutic uses of Chinese cinnamon bark are rooted in its historical use as a traditional medicine and on laboratory and animal studies. Test-tube or animal research does not guarantee safety or effectiveness in humans, but German health authorities (Commission E) do approve of cinnamon bark for mild gastrointestinal spasms, stimulating appetite and relieving indigestion.

It is used in flatulent dyspepsia, dyspepsia with nausea, intestinal colic and digestive atony associated with cold & debilitated conditions. It is known to relieve nausea and vomiting, and because of its mild astringency it is particularly used for infantile diarrhea.

Cinnamon warms and stimulates the digestive system, useful in weak digestion, colic, griping, diarrhoea, nausea and vomiting, wind and distension. The tannins have an astringent action, stemming bleeding in nosebleeds, heavy periods and resolving diarrhoea and catarrhal

### ***Cinnamon may help to:***

*Soothe an upset stomach:*

Cinnamon extracts have been used medically to treat gastrointestinal problems and to help calm the stomach. Cinnamon is a carminative, an agent that helps break up intestinal gas that has traditionally been used to combat diarrhoea and morning sickness. Both test-tube and some animal studies have found that cinnamon may help to relieve mild abdominal discomfort caused by excess gas.

*Clear up urinary-tract infections:*

One German study showed that Cinnamon "suppresses completely" the cause of most urinary-tract infections (Escherichia coli bacteria) and the fungus responsible for vaginal yeast infections (Candida albicans).

*Allow diabetics to use less insulin:*

Some studies have shown that Cinnamon helps people with diabetes metabolise sugar better. In adult-onset (Type II) diabetes, the pancreas produces insulin, but the body can't use it efficiently to break down blood sugar.

Richard Anderson at the US Department of Agriculture's Human Nutrition Research Center in Beltsville, Maryland found that Cinnamon enhances the ability of insulin to metabolise glucose, helping to control blood sugar levels.

Cinnamon contains the anti-oxidant glutathione and a type of flavonoid called MHCP (methylhydroxy chalcone polymer). It is believed that cinnamon makes fat cells much more responsive to insulin, the hormone that regulates sugar metabolism and thus controls the level of glucose in the blood.

"One-eighth of a teaspoon of cinnamon triples insulin efficiency," say James A. Duke, Ph.D., a botanist retired from the U.S. Department of Agriculture and author of *The CRC Handbook of Medicinal Herbs*. Dr. Duke suggest that people with adult-onset diabetes discuss Cinnamon's benefits with their doctor. Taking ½ to ¾ teaspoon of ground Cinnamon with each meal may help control blood sugar levels.

#### *Aid digestion:*

Cinnamon contains compounds called catechins, which help relieve nausea. The volatile oil in cinnamon bark may also help the body to process food by breaking down fats during digestion.

#### *Kill many disease-causing fungi and viruses:*

Preliminary results from test tube and animal studies suggest that cinnamon oil and cinnamon extract have anti-fungal, anti-bacterial, and anti-parasitic properties.

For example, cinnamon has been found to be active against *Candida albicans*, the fungus responsible for vaginal yeast infections and thrush (oral yeast infection), *Helicobacter pylori* (the bacteria that causes stomach ulcers), and even head lice.

An incredible experiment in the journal of Food Science for 1974 demonstrated the power of cinnamon over most yeasts and fungi.

Slices of white, raisin, rye and whole wheat breads, manufactured without the usual mold inhibitors, were subjected to various aflatoxins, a group of toxic molds so dangerous that they can cause liver cancer and kill humans and animals alike and often occur in food.

The toxic molds grew vigorously on all of the other breads, except for the raisin bread where growth was described as being "scant or not visible at all."

In trying to identify whether it was the raisins or cinnamon responsible for this, food scientists discovered that as little as 2% or 20 mg. of the spice per ml of a yeast-extract and sucrose broth inhibited 97 -99 per cent of these molds.

#### *Relieve Pain:*

Cinnamon is considered a pain-killer due to its prostaglandin-inhibiting action.

#### *Relieve Colds and Flu:*

In both India and Europe, cinnamon has been traditionally taken as a warming herb for "cold" conditions, often in combination with ginger (*Zingiber officinale*).

The herb stimulates the circulation, especially to the fingers and toes and has been used for arthritis.

Cinnamon is also a traditional remedy for aching muscles and other symptoms of viral conditions such as colds and flu.

## <http://foodmatters.tv/articles-1/10-healing-benefits-of-ginger>

Ayurveda gives ginger the status of a virtual medicine chest. That's because this wonder spice has time-tested digestion-friendly properties, in addition to its numerous other health benefits. In India, ginger is liberally used in daily life. Ginger-infused chai is a household favorite, and it's grandma's antidote of choice for battling cold and flu.

On millions of dining tables in India, you'll see matchsticks of fresh ginger that have turned a soft pink from being soaked in lemon juice and salt: a zingy accompaniment to any cooked  
*Let's give this knobbly root a closer look.*

### 10 Terrific Benefits of Ginger

1. Haven't been feeling hungry? Eat fresh ginger just before lunch to stoke a dull appetite and fire up the digestive juices.
2. Ginger improves the absorption and assimilation of essential nutrients in the body.
3. Ginger clears the 'micro-circulatory channels' of the body, including the pesky sinuses that tend to flare up from time to time.
4. Feeling airsick or nauseous? Chew on ginger, preferably tossed in a little honey.
5. Can't stop the toot-a-thon? Gas—oops—guess what?! Ginger helps reduce flatulence!
6. Tummy moaning and groaning under cramps? Munch on ginger.
7. Reeling under joint pain? Ginger, with its anti-inflammatory properties—can bring relief. Float some ginger essential oil into your bath to help aching muscles and joints.
8. Got a surgery done? Chewing ginger post-operation can help overcome nausea.
9. Stir up some ginger tea to get rid of throat and nose congestion. And when there's a nip in the air, the warming benefits of this tasty tea are even greater!
10. Bedroom blues? Try adding a gingery punch to a bowl of soup. (The Ayurvedic texts credit ginger with aphrodisiac properties)

### 3 Ways to Use Ginger

#### 1. Ginger & Herb Rice

Cook basmati rice. When you take the lid off the pan, quickly stir in finely chopped garlic, ginger, green chillies and fresh cilantro leaves—the burst of flavor and fragrance will drive your senses crazy with desire!

#### 2. Ginger In Your Juice

'Grate' idea: grate some ginger root and put it in your juicer, along with carrots and apples and a little lemon juice. Totally yummy, and of course, so good for you!

#### 3. Gingery Dessert

Even a smidgen of grated ginger on your vanilla pana cotta or strawberry sorbet can wake up the flavor!

### Ginger

<http://en.wikipedia.org/wiki/Ginger>

**Color plate from Köhler's Medicinal Plants**

*Scientific classification*

Kingdom: Plantae

Clade: Angiosperms  
Clade: Monocots  
Clade: Commelinids  
Order: Zingiberales  
Family: Zingiberaceae  
Genus: Zingiber  
Species: *Z. officinale*  
Binomial name  
*Zingiber officinale*  
Roscoe 1807

Ginger or ginger root is the rhizome of the plant *Zingiber officinale*, consumed as a delicacy, medicine, or spice. It lends its name to its genus and family (Zingiberaceae). Other notable members of this plant family are turmeric, cardamom, and galangal.

Ginger cultivation began in South Asia and has since spread to East Africa and the Caribbean.

### Etymology

The English name ginger comes from French: *gingembre*, Old English: *gingifere*, Medieval Latin: *ginginer*, Greek: *zingiberis* (  ). Ultimately the origin is from Tamil word 'inji ver' (இஞ்ச வேர்) or Malayalam word 'inji veru' (ഇഞ്ച വേര്). The botanical term for root in Tamil is *ver* (வேர்) and Malayalam is *veru* (വേര്), hence inji root or inji ver.

### Horticulture

Ginger produces clusters of white and pink flower buds that bloom into yellow flowers. Because of its aesthetic appeal and the adaptation of the plant to warm climates, ginger is often used as landscaping around subtropical homes. It is a perennial reed-like plant with annual leafy stems, about a meter (3 to 4 feet) tall. Traditionally, the

rhizome is gathered when the stalk withers; it is immediately scalded, or washed and scraped, to kill it and prevent sprouting. The fragrant perisperm of Zingiberaceae is used as sweetmeats by Bantu, also as a condiment and sialogogue.

### Uses

#### *Gari (ginger)*

Ginger produces a hot, fragrant kitchen spice. Young ginger rhizomes are juicy and fleshy with a very mild taste. They are often pickled in vinegar or sherry as a snack or just cooked as an ingredient in many dishes. They can also be steeped in boiling water to make ginger tea, to which honey is often added; sliced orange or lemon fruit may also be added. Ginger can also be made into candy, or ginger wine which has been made commercially since 1740.

Mature ginger rhizomes are fibrous and nearly dry. The juice from old ginger roots is extremely potent and is often used as a spice in Indian recipes, and is a quintessential ingredient of Chinese, Korean, Japanese and many South Asian cuisines for flavoring dishes such as seafood or goat meat and vegetarian cuisine.

Ginger acts as a useful food preservative.

Fresh ginger can be substituted for ground ginger at a ratio of 6 to 1, although the flavors of fresh and dried ginger are somewhat different. Powdered dry ginger root is typically used as a flavoring for recipes such as gingerbread, cookies, crackers and cakes, ginger ale, and ginger Candied ginger is the root cooked in sugar until soft, and is a type of confectionery.

Fresh ginger may be peeled before eating. For longer-term storage, the ginger can be placed in a plastic bag and refrigerated or frozen.

#### *Regional use*

In Western cuisine, ginger is traditionally used mainly in sweet foods such as ginger ale, gingerbread, ginger snaps, parkin, ginger biscuits and speculaas. A ginger-flavored liqueur called Canton is produced in Jarnac, France. Green ginger wine is a ginger-flavored wine produced in the United Kingdom, traditionally sold in a green glass bottle. Ginger is also used as a spice added to hot coffee and tea.

### *Ginger field*

In India and Pakistan, ginger is called adrak in Hindi, Punjabi and Urdu, aad in Maithili, aadi in Bhojpuri, aada in Bengali, Adu in Gujarati, hashi shunti (ಹಸಿ ಶುಂಟೆ) in the Kannada, allam (ಅಲ್ಲಂ) in

Telugu, inji (ఇంజి) in Tamil and Malayalam, inguru (ඉඟුරු) in Sinhalese, alay in Marathi, and aduwa (अदुवा) in Nepali. Fresh ginger is one of the main spices used for making pulse and lentil curries and other vegetable preparations. Fresh, as well as dried, ginger is used to spice tea and coffee, especially in winter. Ginger powder is also used in certain food preparations, particularly for pregnant or nursing women, the most popular one being katlu which is a mixture of gum resin, ghee, nuts, and sugar. Ginger is also consumed in candied and pickled form. In Bangladesh, ginger is finely chopped or ground into a paste to use as a base for chicken and meat dishes alongside onion and garlic.

In Burma, ginger is called gyin. It is widely used in cooking and as a main ingredient in traditional medicines. It is also consumed as a salad dish called gyin-thot, which consists of shredded ginger preserved in oil, and a variety of nuts and seeds. In Indonesia, a beverage called wedang jahe is made from ginger and palm sugar. Indonesians also use ground ginger root, called jahe, as a common ingredient in local recipes. In Malaysia, ginger is called halia and used in many kinds of dishes, especially a soup. In the Philippines it is brewed into a tea called salabat. In Vietnam, the fresh leaves, finely chopped, can also be added to shrimp-and-yam soup (canh khoai m ) as a top garnish and spice to add a much subtler flavor of ginger than the chopped root.

In China, sliced or whole ginger root is often paired with savory dishes such as fish, and chopped ginger root is commonly paired with meat, when it is cooked. However, candied ginger is sometimes a component of Chinese candy boxes, and a tisane can also be prepared from ginger.

In Japan, ginger is pickled to make beni shoga and gari or grated and used raw on tofu or noodles. It is also made into a candy called shoga no sato zuke. In the traditional Korean kimchi, ginger is either finely minced or just juiced in order to avoid the fibrous texture and added to the ingredients of the spicy paste just before the fermenting process.

In the Caribbean, ginger is a popular spice for cooking, and making drinks such as sorrel, a seasonal drink made during the Christmas season. Jamaicans make ginger beer both as a carbonated beverage and also fresh in their homes. Ginger tea is often made from fresh ginger, as well as the famous regional speciality Jamaican ginger cake.

Two varieties of ginger as sold in Haikou, Hainan, China

On the island of Corfu, Greece, a traditional drink called tsitsibira, a type of ginger beer, is made. The people of Corfu and the rest of the Ionian islands adopted the drink from the British, during the period of the United States of the Ionian Islands.

In Arabic, ginger is called zanjabil, and in some parts of the Middle East, ginger powder is used as a spice for coffee and for milk. In Somaliland, ginger is called sinjibil, and is served in coffee shops in Egypt. In Côte d'Ivoire, ginger is ground and mixed with orange, pineapple and lemon to produce a juice called nyamanku. Ginger powder is a component in hawaij, a spice mix used mostly by Yemenite Jews for soups and coffee.

### *Ginger tea*

Ginger tea is a beverage in many countries, made from ginger root. In China, the tea is made by boiling peeled and sliced ginger to which brown sugar is often added. Sliced orange or lemon fruit may also be added to give a flavor, and it may be consumed both hot or cold. In Korean cuisine, ginger tea is called saenggang cha. It can be made either by boiling the ginger or by mixing hot water and preserved sweetened ginger. For the latter, sliced ginger root is stored with honey for a few weeks like jam. In Japanese cuisine it is called shōgayu. In Philippine cuisine it is called salabat and served in the relatively cold month of December. From its main ingredient ginger tea derives a flavor that is spicy and stimulating.] Ginger, known as Adarak in Hindi, is used frequently in tea made in all parts of India as well.

#### *Preliminary research*

Preliminary research indicates that nine compounds found in ginger may bind to human serotonin receptors which may influence gastrointestinal function.

Research conducted in vitro tests show that ginger extract might control the quantity of free radicals and the peroxidation of lipids.

In a 2010 study, daily consumption of ginger was shown to help ease muscle pain associated with exercise by 25%.

Ginger root supplement has been identified in one study to help reduce colon inflammation markers such as PGE2, thus indicating a measure that might affect colon cancer.

In limited studies, ginger was found to be more effective than placebo for treating nausea caused by seasickness, morning sickness and chemotherapy, although ginger was not found superior to placebo for pre-emptively treating post-operative nausea. Data suggests that ginger is mutagenic, and studies warn against taking it during pregnancy, though antimutagenic effects have also been reported. Other preliminary studies showed that ginger may affect arthritis pain or have blood thinning and cholesterol lowering properties, but these effects remain

*unconfirmed*  
Advanced glycation end-products are possibly associated in the development of diabetic cataract for which ginger was effective in preliminary studies, apparently by acting through antiglycating mechanisms.

Zingerone may have activity against enterotoxigenic Escherichia coli in enterotoxin-induced diarrhoea.

#### *Chemistry*

##### *Ginger section*

The characteristic odor and flavor of ginger is caused by a mixture of zingerone, shogaols and gingerols, volatile oils that compose one to three percent of the weight of fresh ginger. In laboratory animals, the gingerols increase the motility of the gastrointestinal tract and have analgesic, sedative, antipyretic and antibacterial properties. Ginger oil has been shown to prevent skin cancer in mice and a study at the University of Michigan demonstrated that gingerols can kill ovarian cancer cells. -gingerol (1-[4'-hydroxy-3'-methoxyphenyl]-5-hydroxy-3-decanone) is the major pungent principle of ginger. The chemopreventive potentials of -gingerol present a promising future alternative to expensive and toxic chemotherapeutic agents.

Ginger contains up to three percent of a fragrant essential oil whose main constituents are sesquiterpenoids, with (-)-zingiberene as the main component. Smaller amounts of other sesquiterpenoids ( -sesquiphellandrene, bisabolene and farnesene) and a small monoterpenoid fraction ( -phellandrene, cineol, and citral) have also been identified.

The pungent taste of ginger is due to nonvolatile phenylpropanoid-derived compounds, particularly gingerols and shogaols, which form from gingerols when ginger is dried or cooked. Zingerone is also produced from gingerols during this process; this compound is less pungent and has a spicy-sweet aroma. Ginger is also a minor chemical irritant, and because of this was used as a horse suppository by pre-World War I mounted regiments for feaguing.

Ginger has a sialagogue action, stimulating the production of saliva, which makes swallowing easier.[*citation needed*]

#### *Folk medicine*

[A packet of ginger powder from the Philippines used in brewing salabat \(ginger tea\).](#)

[Ginger house rum, Madagascar.](#)

The traditional medical form of ginger historically was called Jamaica ginger; it was classified as a stimulant and carminative and used frequently for dyspepsia, gastroparesis, slow motility symptoms, constipation, and colic.[citation needed] It was also frequently employed to disguise the taste of medicines.

Some studies indicate ginger may provide short-term relief of pregnancy-related nausea and vomiting.[citation needed] Studies are inconclusive about effects for other forms of nausea or in treating pain from rheumatoid arthritis, osteoarthritis, or joint and muscle injury. Side effects, mostly associated with powdered ginger, are gas, bloating, heartburn, and nausea.

Tea brewed from ginger is a common folk remedy for colds. Ginger ale and ginger beer are also drunk as stomach settlers in countries where the beverages are made.

In Burma, ginger and a local sweetener made from palm tree juice (htan nyat) are boiled together and taken to prevent the flu.

In China, ginger is included in several traditional preparations. A drink made with sliced ginger cooked in water with brown sugar or a cola is used as a folk medicine for the common cold.

"Ginger eggs" (scrambled eggs with finely diced ginger root) is a common home remedy for coughing.[citation needed] The Chinese also make a kind of dried ginger candy that is fermented in plum juice and sugared, which is also commonly consumed to suppress coughing. Ginger has also been historically used to treat inflammation, which several scientific studies support, though one arthritis trial showed ginger to be no better than a placebo or ibuprofen for treatment of osteoarthritis.

In Congo, ginger is crushed and mixed with mango tree sap to make tangawisi juice, which is considered a panacea.

In India, ginger is applied as a paste to the temples to relieve headache, and consumed when suffering from the common cold. Ginger with lemon and black salt is also used for nausea.

In Indonesia, ginger (jahe in Indonesian) is used as a herbal preparation to reduce fatigue, reducing "winds" in the blood, prevent and cure rheumatism and control poor dietary habits.[citation needed]

In Nepal, ginger is called aduwa, and is widely grown and used throughout the country as a spice for vegetables, used medically to treat cold and also sometimes used to flavor tea.

In the Philippines, ginger is known as luya and is used as a throat lozenge in traditional medicine to relieve sore throat. It is also brewed into a tea known as salabat.

In the United States, ginger is used to prevent motion and morning sickness.[citation needed] It is recognized as safe by the Food and Drug Administration[citation needed] and is sold as an unregulated dietary supplement. Ginger water is also used to avoid heat cramps.[citation needed]

In Peru, ginger is sliced in hot water as an infusion for stomach aches as infusión de Kión.

In Japan it is purported to aid blood circulation. Scientific studies investigating these effects have been inconclusive.

### Nutritional information

#### *Ginger root (raw)*

Nutritional value per 100 g (3.5 oz)

Energy 333 kJ (80 kcal)

Carbohydrates 17.77 g

- Sugars 1.70 g

- Dietary fiber 2.0 g

Fat 0.75 g

Protein 1.82 g

Vitamin A 0 IU

Vitamin C 5.0 mg (6%)

Phosphorus 34 mg (5%)

Potassium 415 mg (9%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

#### *Ginger root (ground)*

Nutritional value per 100 g (3.5 oz)

Energy 1,404 kJ (336 kcal)

Carbohydrates 71.62 g

- Sugars 3.39 g

- Dietary fiber 14.1 g

Fat 4.24 g

Protein 8.98 g

Vitamin A 30 IU

Vitamin C 0.7 mg (1%)

Phosphorus 168 mg (24%)

Potassium 1320 mg (28%)

Percentages are relative to

US recommendations for adults.

Source: USDA Nutrient Database

### Safety

Ginger is on the FDA's "generally recognized as safe" list, though it does interact with some medications, including warfarin. Ginger is contraindicated in people suffering from gallstones, as it promotes the production of bile.

An acute overdose of ginger is usually in excess of about 2 grams of ginger per kilogram of body mass, dependent on level of ginger tolerance, and can result in a state of central nervous system over-stimulation called ginger intoxication or colloquially the "ginger jitters".

Allergic reactions to ginger generally result in a rash, and although generally recognized as safe, ginger can cause heartburn, bloating, gas, belching and nausea, particularly if taken in powdered form. Unchewed fresh ginger may result in intestinal blockage, and individuals who have had ulcers, inflammatory bowel disease or blocked intestines may react badly to large quantities of fresh ginger. Ginger can also adversely affect individuals with gallstones. There are also suggestions that ginger may affect blood pressure, clotting, and heart rhythms.

Products in Taiwan made from Hebo Natural Products Limited of China contained ginger contaminated with DIBP, some 80,000 nutritional supplement capsules made with imported ginger powder were seized by the Public Health Department of Taiwan in June 2011.

### Similar ingredients

Myoga (*Zingiber mioga* Roscoe) appears in Japanese cuisine; the flower buds are the part eaten.

Another plant in the Zingiberaceae family, galangal, is used for similar purposes as ginger in Thai cuisine. Galangal is also called Thai ginger. Also referred to as galangal, fingerroot (*Boesenbergia rotunda*), or Chinese ginger or the Thai krachai, is used in cooking and medicine.

A dicotyledonous native species of eastern North America, *Asarum canadense*, is also known as "wild ginger", and its root has similar aromatic properties, but it is not related to true ginger.

The plant also contains aristolochic acid, a carcinogenic compound.[citation needed]

### Production

Top ten ginger producers – 11 June 2008

Country Production (tonnes)

India 380,100

China 331,393

Indonesia 192,500

Nepal 174,268

Thailand 170,125

Nigeria 152,106

Bangladesh 72,608

Japan 52,000

Philippines 27,415

Cameroon 12,000

World 1,615,974

**Source:** Food And Agricultural Organization of **United Nations:** Economic And Social  
**Department:** The Statistical Division

From 1585, Jamaican ginger was the first oriental spice to be grown in the New World and imported back to Europe. India, with over 30% of the global share, now leads in global production of ginger, replacing China, which has slipped to the second position (~20.5%), followed by Indonesia (~12.7%), Nepal (~11.5%) and Thailand (~10%).

*The Heath Benefits of Ginger*

<http://www.celestialhealing.net/healthintro..htm>

Ginger is one of the world's seven most potent disease-fighting spices. It has been widely regarded for centuries as a natural remedy for a variety of ailments.

<http://www.ageless.co.za/herb-ginger.htm>

**Ginger (Jamaica ginger)**

**Zingiber officinale, Roscoe**

This is information on ginger and how it is used as a herb in alternative herbal treatments to treat ailments and problems, such as nausea, indigestion and blood in urine.

Botanical classification of ginger

Description of ginger

Parts used

Properties of ginger

Internal use

External use

Use of essential oil

Safety precautions and warnings

Used in the following products

Herbal Index

Please note that we are not advocating that people stop using their normal medication, but would like to make people aware that some alternative therapies can be very effective to help treat problems and create a healthier, younger and more vital you.

Although we believe in the therapeutic and healing properties of herbs, care must be taken in the use thereof, as they are powerful compounds.

Botanical Classification

Family

Zingiberaceae

Genus and specie

Zingiber officinale, Roscoe

#### Other names

Jamaica ginger and Sheng Jiang.

#### Description of the herb ginger

Ginger is a deciduous perennial with thick, branching rhizomes and sturdy, upright stems with pointed lance-like leaves. Yellow-green flowers, with a deep purple lip with a yellow marking are produced, followed by the fruits, which resemble fleshy capsules.

#### Parts used

The fresh and dried rhizomes are used and an essential oil is also extracted.

#### Properties

Ginger is a sweet, pungent and aromatic herb that has expectorant properties. The herb increases perspiration, improves digestion and liver function, controls nausea, vomiting and coughing. It stimulates circulation, relaxes spasms and relieves pain.

The taste of this herb is caused by the numerous gingerols, such as [6]-gingerol, found in the plant and the volatile essential oil also contains monoterpenoids (camphene, b-phellandrene, neral and geranial), diterpene lactones, such as galanolactone, as well as sesquiterpenes (a-zingiberene and ar-curcumene).

#### Therapeutic uses

##### Internal use

Ginger is used internally for motion sickness, nausea, morning sickness, indigestion, colic, abdominal chills, colds, coughs, influenza and peripheral circulatory problems.

It is a very "warming" herb, and is used in "cold" conditions like frigidity and impotence.

Some hypoglycaemic, cholesterol lowering, immune stimulant and anti-inflammatory properties have been noted.

It has a very beneficial effect on ulcers, and also increases peristalsis and the secretion of bile and gastric juices.

In Chinese medicine, it is used for nausea, vomiting, fever, cold, cough, nasal discharge, blood in the urine, abdominal unease and feeling of fullness as well as chronic bronchitis.

Green ginger (fresh young rhizomes) is juiced, eaten raw, preserved and candied.

##### External use

Used externally for spasmodic pain, rheumatism, lumbago, menstrual cramps and sprains.

##### Aromatherapy and essential oil use

To warm the body and the mind, ginger essential oil is most effective. It sharpens the senses and memory.

It will also "ground" a person, while stimulating the mind, and is very effective in removing excess moisture in the body - such as catarrh and phlegm.

Furthermore it boosts the digestive system and is valuable in fighting nausea and motion sickness - be that car or sea. The circulation boosting properties helps the entire body and its analgesic affect aids with rheumatic and arthritic pain.

On the skin it reduces bruises, sores and carbuncles.

It has analgesic, antisept.....

#### Ginger

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/961.html>

### *What is it?*

Ginger is a herb. The rhizome (underground stem) is used as a spice and also as a medicine. It can be used fresh, dried and powdered, or as a juice or oil.

Ginger is commonly used to treat various types of “stomach problems,” including motion sickness, morning sickness, colic, upset stomach, gas, diarrhoea, nausea caused by cancer treatment, nausea and vomiting after surgery, as well as loss of appetite.

Other uses include pain relief from arthritis or muscle soreness, menstrual pain, upper respiratory tract infections, cough, and bronchitis. Ginger is also sometimes used for chest pain, low back pain, and stomach pain.

Some people pour the fresh juice on their skin to treat burns. The oil made from ginger is sometimes applied to the skin to relieve pain.

In foods and beverages, ginger is used as a flavoring agent.

In manufacturing, ginger is used as for fragrance in soaps and cosmetics.

One of the chemicals in ginger is also used as an ingredient in laxative, anti-gas, and antacid medications.

### *How effective is it?*

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.

### *How does it work?*

Ginger contains chemicals that may reduce nausea and inflammation. Researchers believe the chemicals work primarily in the stomach and intestines, but they may also work in the brain and nervous system to control nausea.

### *Are there safety concerns?*

Ginger is **LIKELY SAFE** for most people. Some people can have mild side effects including heartburn, diarrhoea, and general stomach discomfort. Some women have reported extra menstrual bleeding while taking ginger.

**When ginger is applied to the skin, it may cause irritation.**

### *Special precautions & warnings:*

*Pregnancy:* Using ginger during pregnancy is controversial. There is some concern that ginger might affect foetal sex hormones. There is also a report of miscarriage during week 12 of pregnancy in a woman who used ginger for morning sickness. However, studies in pregnant women suggest that ginger can be used safely for morning sickness without harm to the foetus. The risk for major malformations in infants of women taking ginger does not appear to be higher than the usual rate of 1% to 3%. As with any medication given during pregnancy, it's important to weigh the benefit against the risk. Before using ginger during pregnancy, talk it over with your healthcare provider.

*Breast-feeding:* Not enough is known about the safety of using ginger during breast-feeding. Stay on the safe side and don't use it.

*Bleeding disorders:* Taking ginger might increase your risk of bleeding. Avoid using it.

*Diabetes:* Ginger might lower your blood sugar. As a result, your diabetes medications might need to be adjusted by your healthcare provider.

*Heart conditions:* High doses of ginger might worsen some heart conditions. Don't use ginger if you have a heart condition.

*Are there interactions with medications?*

*Moderate*

Be cautious with this combination.

*Medications that slow blood clotting (Anticoagulant / Anti - platelet drugs)*

Ginger might slow blood clotting. Taking ginger along with medications that also slow clotting might increase the chances of bruising and bleeding.

Some medications that slow blood clotting include aspirin, clopidogrel (Plavix), diclofenac (Voltaren, Cataflam, others), ibuprofen (Advil, Motrin, others), naproxen (Anaprox, Naprosyn, others), dalteparin (Fragmin), enoxaparin (Lovenox), heparin, warfarin (Coumadin), and others.

*Phenprocoumon*

Phenprocoumon is used in Europe to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with phenprocoumon might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your phenprocoumon might need to be changed.

*Warfarin (Coumadin)*

Warfarin (Coumadin) is used to slow blood clotting. Ginger can also slow blood clotting. Taking ginger along with warfarin (Coumadin) might increase the chances of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your warfarin (Coumadin) might need to be changed.

*Minor*

Be watchful with this combination.

*Medications for diabetes (Anti - diabetes drugs)*

Ginger might decrease blood sugar. Diabetes medications are also used to lower blood sugar. Taking ginger along with diabetes medications might cause your blood sugar to go too low. Monitor your blood sugar closely. The dose of your diabetes medication might need to be

Some medications used for diabetes include glimepiride (Amaryl), glyburide (DiaBeta, Glynase PresTab, Micronase), insulin, metformin (Glucophage), pioglitazone (Actos), rosiglitazone (Avandia), and others.

*Medications for high blood pressure (Calcium channel blockers)*

Ginger might reduce blood pressure in a way that is similar to some medications for blood pressure and heart disease. Taking ginger along with these medications might cause your blood pressure to drop too low or cause an irregular heartbeat.

Some medications for high blood pressure and heart disease include nifedipine (Adalat, Procardia), verapamil (Calan, Isoptin, Verelan), diltiazem (Cardizem), isradipine (DynaCirc), felodipine (Plendil), amlodipine (Norvasc), and others.

*Are there interactions with herbs and supplements?*

Herbs and supplements that might slow blood clotting

Using ginger along with herbs that might slow blood clotting could increase the risk of bleeding in some people. These herbs include angelica, clove, danshen, garlic, ginkgo, Panax ginseng, red clover, turmeric, and others.

*Are there interactions with foods?*

There are no known interactions with foods.

*What dose is used?*

*The following doses have been studied in scientific research:*

BY MOUTH:

For morning sickness: 250 mg ginger 4 times daily.

For postoperative nausea and vomiting: 1-2 grams powdered ginger root one hour before induction of anaesthesia.

For arthritis: Many different ginger extract products have been used in studies. The dosing used differs depending on the product taken. One ginger extract (Eurovita Extract 33; EV ext-33) 170 mg three times daily has been used. Another extract (Eurovita Extract 77; EV ext-77), which combines a ginger with an alpinia, 255 mg twice daily has also been used. Another ginger extract (Zintona EC) 250 mg four times daily has also been used.

*Other names*

African Ginger, Amomum Zingiber, Ardraka, Black Ginger, Cochin Ginger, Gan Jiang, Gingembre, Gingembre Africain, Gingembre Cochin, Gingembre Indien, Gingembre Jamaïquain, Gingembre Noir, Ginger Essential Oil, Ginger Root, Huile Essentielle de Gingembre, Imber, Indian Ginger, Jamaica Ginger, Jengibre, Jiang, Kankyo, Kanshokyo, Nagara, Race Ginger, Racine de Gingembre, Rhizoma Zingiberi, Rhizoma Zingiberis, Rhizoma Zingiberis Recens, Shen Jiang, Sheng Jiang, Shoga, Shokyo, Shunthi, Srungavera, Sunth, Sunthi, Vishvabhasha, Zingiber Officinale, Zingiberis Rhizoma, Zingiberis Siccatum

*Methodology*

To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.

<http://www.herbwisdom.com/herb-ginger-root.html>

**Ginger Root**

**Ginger Root Benefits**

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Ginger root (*Zingiber officinale*) is well known as a remedy for travel sickness, nausea and indigestion and is used for wind, colic, irritable bowel, loss of appetite, chills, cold, flu, poor circulation, menstrual cramps, dyspepsia (bloating, heartburn, flatulence), indigestion and gastrointestinal problems such as gas and stomach cramps. Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems. It has also been indicated for arthritis, fevers, headaches, toothaches, coughs, bronchitis, osteoarthritis, rheumatoid arthritis, to ease tendonitis, lower cholesterol and blood-pressure and aid in preventing internal blood clots.

Ginger has been well researched and many of its traditional uses confirmed. It is well known as a remedy for travel sickness, nausea and indigestion. It is a warming remedy, ideal for boosting the circulation, lowering high blood pressure and keeping the blood thin in higher doses. Ginger is anti-viral and makes a warming cold and flu remedy. Ginger is a powerful anti-inflammatory herb and there has been much recent interest in its use for joint problems.

Ginger root is a medicinal herb used primarily for the treatment of Dyspepsia (discomfort after eating), this includes the symptoms of bloating, heartburn, flatulence, and nausea. It is also considered helpful as a preventative for motion sickness and as a digestive. Due to its antispasmodic characteristic some people have used it to help ease menstrual cramps. In some traditional systems it is credited with the ability to treat arthritis, fevers, headaches, and toothaches.

Ginger may also be taken orally as a herbal remedy to prevent or relieve nausea resulting from chemotherapy, motion sickness, pregnancy, and surgery.

Results of laboratory studies as well as from small studies conducted among seasick sailors or ship passengers, found that ginger generally has more effectiveness for relieving motion sickness than placebo (or sugar pills). Several comparisons between ginger and prescription or non-prescription drugs have been conducted for relieving the nausea of pregnancy, but results

In some of the studies, similar effectiveness was seen between ginger and the comparator drug, while other studies found less or no effectiveness for ginger as compared to the drugs. In general, no adverse effects were noted from using ginger, for either the mother or the developing baby. Ginger has also been used in folk medicine to treat minor gastrointestinal problems such as gas or stomach cramps. Recent studies may confirm that ginger directly affects the gastrointestinal tract, helping to improve muscle tone and to prevent abnormally rapid and strong intestinal contractions.

Results of limited studies in animals with diabetes show that ginger may reduce blood levels of sugar and cholesterol, while also lowering blood pressure. However, no human studies with similar results have been reported. A few small studies that have been conducted in humans have shown some promise for supplemental ginger in the treatment of both osteoarthritis and rheumatoid arthritis.

If a person has exercised too much or suffers from arthritis or rheumatism, ginger has been known to ease inflammation of the joints and muscle tissue. Due to its tremendous circulation-increasing qualities, ginger is thought to improve the complexion. It has reduced nervousness, eased tendonitis, and helped sore throats return to normal. Studies demonstrate that ginger can lower cholesterol levels by reducing cholesterol absorption in the blood and liver. It may also aid in preventing internal blood clots.

***\*\*New Research! \*\**** Ginger root was recently the subject of a startling new research report presented at The American Association for Cancer research conference in Phoenix. In the study, ginger actually suppressed cancer cells suggesting that the herb was able to fuel apoptosis or the death of the cancer cells. Ginger has been shown to work against skin, ovarian, colon and breast cancer. But it had not been shown to halt the progression of cancer until now. However, more research is required to confirm this.\_

This stimulating herb is warming to the system. In her book '10 Essential Herbs' author Lalitha Thomas describes the properties: "The major active ingredients in ginger are terpenes (quite similar to the chemical action of turpentine) and an oleo-resin called ginger oil. These two, and other active ingredients in ginger, provide antiseptic, lymph-cleansing, circulation-stimulating, and mild constipation relief qualities along with a potent perspiration-inducing action that is quite effective in cleansing the system of toxins."

### **Ginger Root Herb Notes / Side Effects**

<http://www.herbwisdom.com/herb-ginger-root.html>

*Latin Name* : Zingiber officinale

*Common Names* : Black ginger, Canton ginger, Cochin ginger, Common ginger, Garden ginger, Gingembre, Imber, Jamaican ginger

*Properties*: Anti-emetic, anti-inflammatory, anti-oxidant, antiseptic, antispasmodic, anti-viral, carminative, circulation-stimulating, detoxifying, diaphoretic, digestive, lymph-cleansing, mild laxative, perspiration-inducing, warming.

**Uses**: For nausea and the nausea of pregnancy and travel sickness. For wind, colic and irritable bowel. Chills, cold, flu and poor circulation. Menstrual cramps. Dyspepsia (bloating, heartburn, flatulence). Indigestion. Improves circulation. Gastrointestinal problems such as gas or stomach cramps. Lowers cholesterol.

*Indicated for*: Arthritis, fevers, headaches, and toothaches, lowers blood cholesterol and blood-pressure and aids in preventing internal blood clots. Coughs or bronchitis, osteoarthritis and rheumatoid arthritis, improves the complexion, eases tendonitis. There is some evidence to suggest that it helps to combat skin, ovarian, colon and breast cancer.

Avoid taking in acute inflammatory conditions. Although there is some evidence that ginger may actually be helpful in gastritis and peptic ulceration, care is needed in these conditions as any spice may exacerbate the problem. Avoid when pregnant or trying to get pregnant (large doses may have abortifacient effects). Avoid therapeutic doses if taking anti-coagulant therapy such as warfarin and seek advice if taking medication for heart problems. High blood pressure should always be monitored by a healthcare professional. Do not use if suffering from Gall

[http://www.health24.com/dietnfood/Healthy\\_foods/15-18-20-](http://www.health24.com/dietnfood/Healthy_foods/15-18-20-)

### **Ginger Diet & Nutrition**

#### **Ginger**

Nibble on some fresh ginger if you suffer from vertigo or flatulence. Or use it for its myriad of other beneficial qualities.

#### *How much to eat*

The recommended daily intake is 1g of dried ginger or two cups of ginger tea. Eating too much ginger can cause itchiness in the bladder opening. Ginger is most often used as a flavourant.

#### *Nutritional values*

Calories 10

Per 25g fresh ginger

Because ginger is eaten in such small quantities, its contribution to the vitamin, energy and mineral requirements of the body are negligible.

#### *Key benefits*

Ginger can relieve nausea and relieves indigestion and flatulence. It discourages blood clots, stimulates circulation and may relieve rheumatism. It also has calming, anti-spasmodic and anti-inflammatory properties.

#### *Maximising the benefits*

It is the oleo-resins and volatile oils that are the key active constituents in ginger. Ginger should be kept in the fridge to stop it from going mouldy. Dried ginger retains many of its healing properties, but fresh ginger is still the most beneficial.

**Ginger: Add a healthy zing to your day!**

<http://www.gnet.org/ginger-add-a-healthy-zing-to-your-day/>

From the ancient Chinese and the Romans, to mothers of poorly children worldwide, for thousands of years now ginger has been used as a spice and a medicine. Although it is commonly described as a root, it is in fact a rhizome, a stem that grows out from the plant underground, and from which small roots will sprout, as well as new green shoots.

Ginger's most well-known medicinal use is as a digestive-aid, to relieve tummy pain, nausea and diarrhoea, as well as morning sickness and travel sickness. This is thought to be because of the spice's high levels of gingerol; a powerful component that gives it its natural zingy flavour, and which acts as an anti-inflammatory in the body.

If you're wondering how to use ginger, it's very easy- since it is both fibrous and tough, and full of juice and oils, it is ideal for grating or expressing into just about any food or drink that you feel like.

Even ginger ale and candied ginger have medicinal properties, if you're not sure about using the fresh variety.

Don't like the taste? Don't worry, you can buy it in supplement form too, so you get all the great benefits, without any of the strong flavour!

### **Benefits of Ginger – The Superfood**

Have a look at what else ginger can do for your health

The anti-inflammatory properties of ginger are thought to provide pain relief in a number of ways, from halting migraines in their tracks, to easing the aches of arthritis.

Studies have started showing really exciting results on the effect ginger has on ovarian cancer: Although more research is needed, it seems that ginger has the ability to eliminate cancerous ovarian cells. It also seems to dramatically slow the progress of bowel cancer; encouraging news indeed!

Were you spoon-fed ginger ale as a child when you had the flu? If you were, Mum had the right idea, as ginger is shown to have a boosting effect on the immune-system, making you better faster.

So ginger is delicious AND nutritious! But let's check there's nothing we should be cautious

### **Side Effects of Ginger?**

These seem to be minimal! Some consumer reports have suggested that ginger can cause nausea and stomach-upset rather than prevent it, but these do seem to be rare cases. Since ginger is an anti-inflammatory, people on any blood-thinning medications should perhaps approach the spice with caution to ensure it doesn't interfere with their condition, although studies on this are not by any means conclusive. If you have any doubts at all, please do consult your doctor.

*Studies say...*

It helps morning sickness!

The University of Maryland conducted research into the effect of 1g of ginger on morning sickness and found it to be more effective than a placebo at relieving symptoms.

<http://www.umm.edu/altmed/articles/ginger-000246.htm>

*It is a great anti-inflammatory!*

The University of Miami concluded that ginger is an effective anti-inflammatory, and even suggested that ginger extract could one day be used instead of synthetic anti-inflammatory medication!

<http://www.arthritistoday.org/nutrition-and-weight-loss/healthy-eating/good-food/ginger-benefits.php>

*It fights ovarian cancer!*

Studies at the University of Michigan showed that ginger was as effective at destroying cancerous cells as standard platinum-based chemotherapy drugs.

<http://chiefherb.com/proven-health-benefits-of-ginger/>

*It slows bowel cancer!*

The University of Minnesota carried out studies that showed the growth of colorectal cancerous cells being slowed by treatment with ginger.

<http://www.whfoods.com/genpage.php?tname=foodspice&dbid>

*From the web:*

It Helps My Asthma Pains...

If my chest hurts and I have sinus issues on top of the chest breathing pain and I take Ginger Capsules or drink Ginger Tea it really helps.

– Graystar

(<http://www.dailystrength.org/>)

It Works for My Irritable Bowel Syndrome!

Someone suggested it to help with IBS, and it's working wonders! I take it in table form once a day.

– ellosteve88

(<http://www.dailystrength.org/>)

No More Nausea!

I'm a chef, and my former sous chef gave me a piece to chew on one shift where I was feeling particularly ill; I felt fine immediately and finished the dinner shift.

– Neil G.

(<http://answers.yahoo.com/>)

**11 Benefits of Ginger That You Didn't Know About** by Brian Lee in Lifestyle

<http://www.lifehack.org/articles/lifestyle/10-benefits-of-ginger-that-you-didnt-know-about.html>

I love the taste of Ginger. It's used widely used in many meals that I eat from starters, main meals and even deserts. It's used all over the world in a variety of world cuisines from chili crab, curries to ginger confectionery and ginger biscuits. It's also supposed to hold medicinal health benefits so it's supposed to be good for me to eat... But what are they? I decided to find out what these benefits are that people talk about.

*But why ginger?*

Ginger is grown as a root and is a flexible ingredient that can be consumed in drinks (tea, beer, ale) or in cooking. It can be used to make foods spicy and even as a food preservative. For over 2000 years, Chinese medicine has recommended the use of ginger to help cure and prevent several health problems. It is known to promote energy circulation in the body and increase our body's metabolic rate.

Here 's a list of some of the amazing benefits of ginger that you may not aware of. Although some of these are still being debated, you could do your own research if you want to use ginger for medicinal purposes.

### **The Benefits of Ginger**

**Maintains Normal Blood Circulation.** Ginger contains chromium, magnesium and zinc which can help to improve blood flow, as well as help prevent chills, fever, and excessive sweat.

**Remedies Motion Sickness.** Ginger is a known effective remedy for the nausea associated with motion sickness. The exact reason is unknown, but in a study of naval cadets, those given ginger powder suffered less.

Improves absorption. Ginger improves the absorption and stimulation of essential nutrients in the body. It does this by stimulating gastric and pancreatic enzyme secretion.

Cold and Flu Prevention. Ginger has been used for thousands of years as a natural treatment for colds and flu around Asia. The University of Maryland Medical Center states that to treat cold and flu symptoms in adults, steep 2 tbsp. of freshly shredded or chopped ginger root in hot water, two to three times a day

Combats Stomach Discomfort. Ginger is ideal in assisting digestion, thereby improving food absorption and avoiding possible stomach ache. Ginger appears to reduce inflammation in a similar way to aspirin and ibuprofen

Colon Cancer Prevention. A study at the University of Minnesota found that ginger may slow the growth of colorectal cancer cells.

Reduce Pain and Inflammation. Ginger contains some of the most potent anti-inflammatory fighting substances known and is a natural powerful painkiller.

Fights Common Respiratory Problems. If you're suffering from common respiratory diseases such as a cough, ginger aids in expanding your lungs and loosening up phlegm because it is a natural expectorant that breaks down and removes mucus.. That way you can quickly recover from difficulty in breathing.

Ovarian Cancer Treatment. Ginger powder induces cell death in ovarian cancer cells.

Strengthens Immunity. Ginger helps improve the immune system. Consuming a little bit ginger a day can help foil potential risk of a stroke by inhibiting fatty deposits from the arteries. It also decreases bacterial infections in the stomach, and helps battle a bad cough and throat irritation.

Combats Morning Sickness. Ginger has demonstrated a success rate of 75 percent in curing morning sickness and stomach flu.

#### *How Much?*

These are some of the health benefits to ginger. How it can be taken is up to you, some people will say that 2 tablespoons of shredded ginger in a cup 2-3 times a day is ideal when you are feeling under the weather. A lot of people will mix ginger and honey to help soothe a cold and drink it many times a day. Naturally, it's used in cooking and candy, so it's difficult to measure to say exactly how much you should consume,

But with all these benefits, and with it so readily available, it's really something we shouldn't even try to avoid. In fact you could even mix it up with other ingredients such as Green Tea.

<http://www.3fatchicks.com/8-benefits-of-ginger-tea/>

#### **8 Benefits of Ginger Tea**

Ginger is brown, fleshy, and has a pungent smell and a scorching taste. It is valued for its wondrous qualities that help cure a number of common diseases. Best consumed as tea, ginger is a perfect source of a number of vitamins and minerals such as vitamin C and magnesium. Ginger tea is best prepared with honey, lemon juice or peppermint. With all of the great benefits it offers, you can never go wrong with drinking a cup of ginger tea.

*Here are several of the known benefits of ginger tea.*

##### *1. Impedes Motion Sickness*

Ginger tea can soothe nerves and prevent vomiting, as well as eradicate headaches and migraines. It also keeps you from being nauseous during a trip, so drink a cup of ginger tea before setting off on your travels.

##### *2. Combats Stomach Discomfort*

Ginger tea is ideal in assisting digestion, thereby improving food absorption and avoiding possible tummy aches from too much food intake. Unnecessary belching can also be thwarted by ginger tea. What's more, ginger tea enhances your appetite when you're feeling bloated, by helping to release gastric acids that aid in digestion.

##### *3. Reduces Inflammation*

Ginger tea can ease inflammation of the joints, which is commonly referred to as rheumatoid arthritis. It is also effective in alleviating tired, sore muscles and joints. A warm ginger tea soak can lessen swelling and puffiness. If you have athlete's foot, ginger tea is recommended as a foot soak to lessen the painful burning sensation that comes with itching.

##### *4. Fights Common Respiratory Problems*

Drinking ginger tea is recommended if you're suffering from common respiratory diseases such as cold and cough. Ginger aids in loosening up phlegm and expanding your lungs, so you can recover quickly from difficulty in breathing. It also helps appease allergies and constant sneezing due to hay fever.

#### *5. Encourages Normal Blood Circulation*

Consuming a cup of ginger tea can help improve blood flow, as well as help prevent chills, fever and excessive sweating. The active components of ginger, such as minerals and amino acids, help make the blood flow smoothly, preventing the onset of cardiovascular disease.

#### *6. Remedies Menstrual Discomfort*

If you are a woman suffering from menstrual cramps, try placing a hot towel drenched in ginger tea on your uterine area to overcome the pain and relax the muscles. Drinking a cup of ginger tea can also provide a soothing effect.

#### *7. Strengthens Immunity*

Ginger tea has antioxidants that help improve the immune system. Drinking a cup of ginger tea every day can also help foil potential risks of a stroke by inhibiting fatty deposits from clogging the arteries. Ginger has also been proven successful in lowering cholesterol levels and preventing cancer.

#### *8. Relieves Stress*

Taking a whiff of ginger tea can help improve your mood and give you a sunny disposition. It leaves you feeling refreshed and calm, and if you're having a bad day, all those negative vibes will dissipate. Ginger tea is a remarkable stress reliever because of its comforting and relaxing

<http://www.herbwisdom.com/herb-garlic.html>

### **Garlic**

#### **Garlic Benefit**

Garlic (*Allium sativum*) is one of the earth's greatest health tonics and does indeed have scientifically-proven medicinal properties. It contains a substance called Allicin, which has anti-bacterial properties that are equivalent to a weak penicillin. It is a natural antibiotic and is useful in treating everything from allergies to tonsillitis. Garlic contains many sulfur compounds which detoxify the body, boost the immune system, lower blood pressure and improve circulation. Garlic has also demonstrated anti-cancer, antibacterial, anti-fungal and

The smooth muscle relaxant Adenosine is found in Garlic and this seems to help lower blood pressure. Garlic is also used to help prevent atherosclerosis (plaque build up in the arteries causing blockage and possibly leading to heart attack or stroke), reduce colds, coughs and

Garlic can stimulate the production of glutathione, an amino acid which is known to be a very potent antioxidant and de-toxifier. See also our article on NAC for more glutathione info. Antioxidants help scavenge free radicals.

Free radicals are particles that can damage cell membranes, interact with genetic material and possibly contribute to the aging process as well as the development of a number of conditions including heart disease and cancer. Free radicals occur naturally in the body but environmental toxins (including ultraviolet light, radiation, cigarette smoking and air pollution) can also increase the number of these damaging particles. Antioxidants can neutralize free radicals and may reduce or even help prevent some of the damage they cause over time.

**Atherosclerosis:** Studies suggest that fresh garlic and garlic supplements may prevent blood clots and destroy plaque. Blood clots and plaque block blood flow and contribute to the development of atherosclerosis. Blockage of blood flow to the heart, brain and legs, can lead to heart attack, stroke, or peripheral vascular disease (PVD). People with PVD experience pain in the legs when they walk and move. If garlic does reduce the build up of plaque then strokes, heart attacks and PVD may be less likely to occur in people who eat garlic or take garlic

**High Cholesterol and High Blood Pressure:** A number of studies have found that garlic reduces elevated total cholesterol levels and lowers blood pressure more effectively than placebo. However, the extent to which garlic is effective is small.

**Diabetes:** Garlic has been used as a traditional dietary supplement for diabetes in Asia, Europe and the Middle East. Preliminary studies in rabbits, rats and limited numbers of people have demonstrated that garlic has some ability to lower blood sugars. More research in this area is needed. (See Notes regarding some concern about using garlic with certain diabetes

**Common Cold:** A well-designed study of nearly 150 people supports the value of garlic for preventing and treating the common cold. In this study, people received either garlic supplements or placebo for 12 weeks during "cold season" (between the months of November and February). Those who received the garlic had significantly fewer colds than those who received placebo. Plus, when faced with a cold, the symptoms lasted a much shorter time in those receiving garlic compared to those receiving placebo.

**Cancer:** Test tube and animal studies suggest that garlic may have some anti-cancer activity. Observational, population-based studies (which follow groups of people over time) suggest that people who have more raw or cooked garlic in their diet are less likely to have certain types of cancer, particularly colon and stomach cancers. Dietary garlic may also offer some protection against the development of breast, prostate and laryngeal (throat) cancers. However, these types of cancer have not been as extensively studied as colon and stomach cancer.

**Tuberculosis:** Numerous test tube studies have demonstrated that garlic extract inhibits the growth of different species of bacteria, including *Mycobacterium tuberculosis*, the organism responsible for tuberculosis. Very high concentrations of garlic extract were needed to slow down the growth of *M. tuberculosis* in these studies, so some experts are concerned that these levels may be toxic to people. While further research in people is needed, one animal study found that garlic oil also inhibited *M. tuberculosis* and reduced lesions in the lungs of these

**Intestinal Parasites:** Laboratory studies suggest that large quantities of fresh, raw garlic may have antiparasitic properties against the roundworm, *Ascaris lumbricoides*, which is the most common type of intestinal parasite. Garlic for this purpose, however, has not yet been tested in

<http://www.herbwisdom.com/herb-cayenne.html>

**Cayenne (*Capsicum annuum*)**

### **Cayenne Benefits**

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Cayenne is used as a natural fat burner and pain killer, to treat ulcers, increase metabolism, improve circulation, boost the immune system and aid digestion. It is used as a tonic for the heart, kidneys, lungs, pancreas, spleen and stomach and to treat herpes, shingles and rheumatism. It is also known to combat chills and has been used to treat bunions, psoriasis, pleuritis and pericarditis and has been indicated for preventing heart disease.

Studies have shown that it can raise metabolic rates by as much as 25 percent, aid in treating herpes, shingles and Raynauds disease, and help prevent heart disease and ulcers. Cayenne is also used as a natural pain killer with anti-inflammatory properties. Cayenne may be used internally or externally to treat arthritis, bunions, psoriasis, and muscle and joint pain. For external use just open a capsule and add some to a cream or lotion that you are already using if you want to use it for massage. Taken internally, cayenne is used to treat ulcers, improve circulation, and aid digestion. It is used as a tonic for the heart, kidneys, lungs, pancreas, spleen and stomach and to treat herpes, shingles and rheumatism.

A stimulating stomachic. A catalyst for all herbs. Improves circulation, aids digestion by stimulating gastric juices, stimulates the appetite, reduces inflammation, is a mild stimulant or tonic, improves metabolism, relieves gas, colds, chills, and stops bleeding from ulcers. Good for the kidneys, lungs, spleen, pancreas, heart, and stomach.

Taken for nausea, scrofula, swollen lymph glands, rheumatism, arthritis, and pleurisy. Use with lobelia for nerves.

Recently, cayenne has been used successfully to treat patients with cluster headaches, a particularly painful type of headache.

Used externally, cayenne liniment may soothe the stiffness and pain of rheumatism and arthritis.

Can be used as a general stimulant to build up resistance at the beginning of a cold, tonsilitis, laryngitis, hoarseness, shingles. It can be taken as an infusion for stomach and bowel pains or cramps. Small quantities of the fresh fruit or the powder may stimulate appetite and expel worms. For external use, cayenne can be made into plasters or liniment or the tincture may be applied to increase blood flow to areas afflicted with rheumatism, arthritis, pleuritis, or pericarditis. Also said to increase fertility and delay senility.

**Cayenne contains:** Alkaloids, apsaicine, capsacutin, capsaicin, capsanthine, capsico PABA, fatty acids, flavonoids, sugars, carotene, volatile oil, and vitamins A, B1, B2, B3, B5, B6, B9, and C.

<http://www.herbwisdom.com/herb-coriander.html>

**Coriander (Coriandrum sativum)**

### **Coriander Benefits**

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Coriander (*Coriandrum sativum*), commonly known as Cilantro or Dhania, is a powerful herb with many health benefits. This plant is rich in micro-nutrients and nutritional elements. It contains dietary fiber, vitamins and minerals like calcium, magnesium, sodium and potassium. Aside from being used in cooking, coriander leaves and seeds strengthen the stomach, reduce fever and lower cholesterol levels.

Its medicinal proprieties have been documented in Sanskrit and Greek writings. Hippocrates used this powerful herb for its health benefits. In some parts of Europe, cilantro has been referred to as an "anti-diabetic" plant because its seeds have hypoglycemic effects. In India, coriander is very popular for its anti-inflammatory proprieties. The seeds of this plant were found in the tomb of Ramses II. Individuals who suffer from diabetes, as well as those with high cholesterol levels can benefit from using this herbal remedy. Coriander may also be used in treating muscle pain, headaches and stiffness.

This herb is an excellent source of iron, phytonutrients and flavonoids. It protects the body against urinary tract infections, prevents nausea, lowers blood sugar levels and aids in digestion. Coriander juice is beneficial in treating dysentery, colitis, indigestion and hepatitis. When mixed with pinch of turmeric powder, it serves as a powerful remedy against blackheads and

Recent studies have shown that coriander can be successfully used in treating anxiety, depression and panic attacks due to its anxiolytic and sedative effects. This plant contains linalol, an essential oil that can help detoxify the liver and increase the appetite. Coriander also has blood thinning proprieties. Its seeds can be used to prepare medical teas to treat indigestion.

Dry coriander is highly effective in treating diarrhoea. Boiled coriander seeds are beneficial for women who suffer from heavy menstrual flow and hormonal mood swings. Coriander contains powerful antioxidants that protect the body from the damage caused by free radicals. Fresh coriander leaves are a rich source of carotenoids. It has been shown that 125 ml of fresh coriander leaf juice contain almost as much beta-carotene as 250 ml of broccoli juice. Coriander seeds do not contain this compound.

Scientists have proved that the antibacterial properties of this plant can be used to improve oral health. The essential oil in coriander is believed to stimulate creativity, optimism and imagination. As an infusion, this herbal remedy has been used for digestive problems, diarrhoea and anorexia. Recent studies have shown that coriander can cause a mild euphoria. Due to its analgesic proprieties, coriander leaves may help in treating arthritis. This herb is also mentioned as a powerful aphrodisiac in The Tales of the Arabian Nights.

Coriander fruits are anthelmintic, fungicide and bactericide. They reduce digestive spasms and alleviate abdominal pain. The fruits are rich in amino acids, fatty acids and proteic substances. Some of these acids are very effective in reducing cholesterol levels in the body. Fresh dried coriander has beneficial effects for people with conjunctivitis. This herbal remedy contains citronelol, which is a powerful antiseptic. The antioxidant and anti-fungal proprieties of coriander are ideal for treating skin dryness, eczema and other skin disorders. The presence of iron and vitamin C strengthens the immune system and relieves pain.

The antimicrobial substances in coriander help prevent and cure small pox. Because of its heating and analgesic effect, this plant is used to treat pain in bones and rheumatism. The high content of bioflavonoids from the leaves helps in treating varices and hemorrhoids. People concerned with heart health may benefit from using coriander because this herbal remedy reduces hypertension by lowering blood pressure. Coriander not only freshens breath, but it can help cure ulcers and sores in the mouth. It also reduces the accumulation of heavy metals in the body, which helps in preventing Alzheimer's disease and memory loss. Researchers indicated that this plant may have sedative and muscle relaxant effects. A study on mice found that coriander had insulin-like activity. One of the most notable proprieties of this plant is related to its ability to fight against Salmonella, a bacterium that can trigger potentially life-threatening

Mixing coriander seeds with milk and honey is an excellent way to reduce fever. This medicinal can also help in diarrhoea and flatulence. During summer, cilantro has a cooling effect. For individuals suffering from conjunctivitis, it reduces eye burn and irritation. Coriander has a number of health benefits, possessing anxiolytic, antibacterial and digestive proprieties.

<http://www.herbwisdom.com/herb-honey.html>

**Honey**

**Honey Benefits**

Honey is the sweet, delicious product that results from honey bees feasting on flowers. The honey bees (of the genus *Apis*) feed on the naturally occurring nectars found in flowers, allowing the nectar to mix with enzymes in their saliva. The nectar is then regurgitated into beehives in the form of honey. Due to the perfect amount of ventilation in honeycombs, moisture is slowly reduced until the honey is ready for consumption. Honey mainly consists of glucose and fructose, which provide it with a rich, universally palatable flavor. Due to its inherent sweetness, it can often be used as a natural substitute for table sugar. In addition to being a delicious treat, honey has several health benefits and homeopathic uses. When selecting honey, it is important to choose the purest form available in order to maximize these benefits.

**Surge of Natural Energy** The natural sugars in honey are rapidly digested, which makes it an ideal source of fast-acting energy. Athletes who require an immediate surge in energy can benefit from the addition of honey to their pre-workout meals and snacks. Some marathoners swear by adding a couple tablespoons of honey to their peanut butter sandwiches before heading out on long runs. This practice dates back to ancient times when the first Olympians would consume large amounts of natural honey to increase energy levels and better their

People suffering from diabetes, hypoglycemia, or other blood sugar-related ailments may benefit from this effect, as well. A sudden drop in blood sugar may be critically harmful, and consumption of honey can quickly bring blood sugar back up to normal levels. Also, research shows that honey is far superior to white sugar with regard to insulin sensitivity. Despite being equally palatable as a sweetener, honey will not cause the same degree of sugar intolerance that is commonly found in diabetics. In fact, moderate amounts of honey may help improve blood sugar control due to its unique ability to nourish blood vessels and improve the functionality of

**Boosting Immunity to Infection** Honey naturally boosts the immune system due to its antimicrobial, anti-fungal, and antiviral properties. The pH of honey is generally quite acidic with a reading in the 3 to 5 range. Acidic substances are known to counteract the growth of most bacterial species, as the majority of bacteria prefer a neutral pH around 7. As a result, bacterial colonies fail to flourish in the presence of honey.

Recent scientific research found a chemical compound in honey that may be instrumental to its long standing reputation as an antimicrobial agent. Methylglyoxal is a compound specifically found in Manuka honey. Laboratory experiments continue to show methylglyoxal as an effective antimicrobial against drug-resistant *Staphylococcus aureus* biofilms. The *Staphylococcus aureus* bacteria, particularly the drug-resistant strains, are the culprits in numerous, potentially fatal infections collectively referred to as "Staph infections." Honey inhibits several other bacteria implicated as the cause of common infections.

Honey is rich in polyphenols that provide it with antioxidant qualities. Antioxidants neutralize free radicals, which are an unavoidable by-product of normal metabolic processes. Free radical build-up can cause significant damage to the body, and may eventually lead to heart disease, cancer, and other devastating illnesses. Honey has been specifically noted for reducing incidences of colon cancer. While there is no definitive cure for the common cold, honey has withstood the test of time as a reliable remedy. This may be due to antioxidant compounds, as well. A mixture of honey and lemon juice provides relief for cold symptoms and is very

Topical Treatment for Wounds The miraculous benefits of ingesting honey can also be reaped from applying it as a topical antiseptic. Honey is especially useful when treating burns. Burn wounds have an unbelievably high rate of infection due to the destruction of several layers of dermal tissue. Honey has natural antiseptic properties that ward off bacteria and prevent infections. Not only does honey prevent infections, but it also promotes rapid healing. The glucose and fructose components in honey tend to absorb water, which dries the wound up, accelerating the healing process. Most bacteria cannot thrive in a moisture-free environment. Additionally, honey is naturally infused with enzymes that combine with water to form the antimicrobial agent, Hydrogen Peroxide.

<http://www.herbwisdom.com/herb-bee-propolis.html>

### **Bee Propolis**

#### **Bee Propolis Benefits**

Bees are some of nature's busiest creatures. They build intricate hives, produce honey, pollinate flowers and provide health supplements to humans in the form of bee pollen and propolis. The use of bee propolis as a treatment for various ailments has been around almost since the beginning of time.

#### **What Is Bee Propolis?**

Propolis is a sticky substance that bees make which is better known as "bee glue". The process begins when an expert propolis-making bee gathers resin from cone-producing evergreen trees or from the buds of trees. The bee will gather this sticky sap when the proper weather makes it pliable and soft. After the bee gathers enough, he blends the resin with wax flakes that he stores in the gland of his abdomen. After the bee has shaped it into a ball, he tucks it into the pollen basket that is attached to his leg. The bee will continue until the basket is full, then take it back to the hive. At this point, the propolis is unloaded and used to patch up holes in the hive. Bees also use propolis as an antiseptic barrier covering invaders with the sticky substance to prevent hive contamination.

#### **Propolis As A Natural Antiseptic**

Humans have been using this as an antiseptic since the times of ancient Egypt. Applying propolis to wounds greatly improved healing and throughout the centuries, this substance has been shown to have other healing properties as well. In the last several decades, health practitioners have found even more positive uses for propolis as a natural supplement. Propolis has been shown to increase the effects of other antibiotics like penicillin and can also strengthen the immune system. Studies are now being done to see if propolis can become an effective treatment for the prevention of certain types of cancer.

#### **Propolis Contains Powerful Antioxidants**

As far as supplements go, what exactly are people using propolis for? Some people simply take it as a nutritional supplement in capsule form for the healthy ingredients it contains. It's rich in amino acids, bioflavonoids, minerals and vitamins. Bioflavonoids are a powerful antioxidant with great health benefits to the immune system and help fight the free radicals that damage healthy red blood cells. The properties contained in propolis also promote better circulation. Some users have marveled at the increased vitality generated by taking this supplement. Propolis has also been known to help grow more beautiful hair and nails.

In natural medicine, propolis is used to relieve the symptoms of inflammations. It is also used as a way to treat superficial wounds like third-degree burns, scalds and ulcers of the skin. Practitioners also use it for people who have cataracts and viral diseases. In the natural medicine industry, propolis is called the great healer.

### **Propolis Can Be Found In Many Forms**

Lozenges are used as a remedy for sore throat because of its antimicrobial properties. It has strong antifungal properties as well. It works as a treatment for any type of mouth, throat or dental problem like plaque, canker sores and for the prevention of oral disease. Some health practitioners also believe that propolis can be effective against oral tumors. Used an oral rinse, it can reduce inflammation and irritation in the tissues of the gums, lips and throat.

Propolis is also available in capsules, as an ointment and also as a rinse or topical liquid. As a rinse it has the ability to regenerate dental pulp, making it ideal for the prevention of dental caries. The cream form has numerous uses in the treatment of blemishes, acne and psoriasis. As an acne treatment, propolis has excellent healing abilities.

The cream form is also used for relieving discomfort from herpes outbreaks and the scaling pain of eczema. Creams are versatile and can be combined with other natural ingredients such as aloe for increased skin soothing effects.

<http://www.herbwisdom.com/herb-cherry.html>

### **Cherries**

#### **Cherries Benefits**

Cherries are not just the fruit of one particular plant. Cherries come from many different species of the plant genus *Prunus*. Not all *Prunus* tree fruits are cherries. *Prunus* trees also produce plums, apricots and peaches to name but a few. Cherries are a small, rich fleshy fruit with a stone in the middle. Their colour is usually dark red but can also be pale pink and even yellowy.

The two cultivated forms of cherries are the sour cherry, *Prunus cerasus*, and the wild cherry, *Prunus avium*. Most cultivators grow the wild cherry variety, which is the variety most often utilized commercially. The sour cherry variety is the one most commonly associated with cooking.

The two species are not cross-pollinated although both originated in Asia and Europe. Due to their relative fragility under a barrage of rain or hail, the highly valued fruit is expensive compared to many fruits. Even so, wild and sour cherries are perpetually in high demand.

Depending on where they are being grown, cherries become ripe for picking at different times of the year, but usually their peak season is the summertime. In North America and Europe, June is cherry picking time. In the U.K. and Canada, cherries are harvested in mid-July to August. Based on the data from 2007, annual production worldwide is about two million tons, 40% of that originating in Europe and 13% in the U.S.

Cherries are used in many baking recipes for their tartness or flavorful sweetness, depending on the variety used. The cherry has also been found to have medicinal properties that have been proven to be beneficial in the prevention of some critical diseases and painful physical

Lucius Licinius Lucullus is recorded to have brought a cultivated cherry from Anatolia to Rome in 72 BC. Later, King Henry VIII, who had enjoyed the fruit in Flanders, had the cherry introduced to his country at Teynham, near Sittingbourne in Kent, England.

Cherries contain anthocyanins which is the red pigment in many fruits. The anthocyanins in cherries have proven to reduce inflammation and pain in laboratory rats. The anthocyanins have also been shown to be potent antioxidants with the potential for being helpful in a variety of ways as health benefits. Studies have indicated that they may be beneficial in the fight against diabetes and heart disease. In addition, the anthocyanins in cherries resulted in lower levels of triglycerides and cholesterol in rats that were given a high-fat diet that included whole tart cherry powder mixed in.

Research also revealed that the health benefits of drinking one full glass of cherry juice daily equals the benefits of consuming 23 portions of vegetables and fruit. Further, it was determined that drinking 250ml of cherry juice provides more antioxidants than five portions of tomatoes, carrots, peas, watermelon and bananas. Antioxidants attack free radical molecules in the body and can also help prevent heart disease, aging, cancer and stroke. The juice tested was from the Montmorency tart cherry variety which is U.S. grown.

Cherries contain numerous vitamins such as Vitamin C and Vitamin A, and are high in nutrients like beta-carotene, perillyl, ellagic acid, bioflavonoids and potassium. This delightful fruit also produces melatonin. Melatonin, in addition to helping slow the aging process, also helps control healthy sleep patterns. A diet that includes cherries can help decrease body fat, cholesterol and arthritic inflammation.

The health benefits of cherries are quite impressive. In addition to the aforementioned benefits, Cherries also are known to relieve headaches, gout and the associated symptoms of Fibromyalgia Syndrome.

Sweet or sour, cherries have a pleasant taste and are perfect for desserts and snacks. They can be baked in pies, added to homemade granola bars or yogurt, or even eaten as whole fruit by themselves. Of course, a cherry is the perfect topper for an ice cream dessert. Black cherries and Bing cherries are also manufactured in teas for a tasty tea and biscuit afternoon tea break. The knowledge that you are adding nutritious antioxidants along with a tasty snack only sweetens the experience.

Nature has provided man with so many delicious foods with high nutritional value. We are only beginning to realize the extent of that nutritional bounty. As science develops new technologies for the exploration of disease-preventing foods, we often find that the simplest things have complexities that offer significant health benefits. Cherries are being championed as one of the best in that category.

<http://www.herbwisdom.com/herb-cocoa.html>

**Cocoa Beans**

**Cocoa Beans Benefits**

Cocoa beans are known to have more than 300 healthful compounds. Some of these include, phenylethylamine, theobromine, and many polyphenols, like flavonoids. Cocoa beans also contain many vitamins and minerals as well as healthy doses of potassium and copper, which support cardiovascular health, and iron, which transports oxygen through the body. Calcium and magnesium is also found in cocoa beans, which are necessary in order for all the major organs to function properly.

Cacao beans, better known as cocoa beans, first appeared in the Amazon basin, and grow only in moist, warm and shady climates. Cocoa beans are primarily grown in Africa, Asia and, Central and South America. Cacao beans are produced by the plant *Theobroma cacao*, which translated, means "food of the Gods". That is a good name for them, given the numerous health benefits provided by them.

*Listed below are the many health benefits of cocoa beans:*

#### *Antidepressant*

Cocoa beans are considered to be nature's anti-depressant. These beans contain dopamine, phenylethylamine (PEA) and serotonin, all of which are used to promote positive mental health and moods. In addition to this, these beans also contain monoamine oxidase inhibitors and amino acid tryptophan. Monoamine oxidase (MOA) inhibitors work to keep dopamine and serotonin in the bloodstream longer, which could ease depression and promote feelings of well being. Tryptophan is important in the body's production of serotonin.

#### *Antioxidant*

Research reveals that cocoa beans are perhaps the best source of antioxidants, containing up to ten percent antioxidant concentration levels. That is three times more antioxidants than green tea and twice the amount in red wine. Blueberries are often said to be a great source of antioxidants, however, while domestic blueberries have 32 antioxidants, and wild blueberries have 61, cocoa beans have 621!

Antioxidants have several health benefits. They protect against cell damage and reduce the risks of several kinds of cancer. Antioxidants also help regulate cholesterol levels.

#### *Cardiovascular Health*

Cocoa beans are also good for the cardiovascular system as they contain polyphenols, which has been proven to be quite beneficial for good heart health. Research indicates that polyphenols, as found in cocoa beans, might reduce blood pressure.

Cocoa beans contain magnesium. This is another nutrient that promotes good heart health. Magnesium increases heart strength and improves its condition. This helps to ensure that the heart will continue to effectively pump blood. Magnesium also decreases the risk of blood clots. This in turn, reduces the risks of strokes and heart attacks.

#### *Energy Booster*

Cocoa beans reduce anxiety while simultaneously promoting alertness. A cup of cocoa can provide the same energy as a cup of coffee. However, due to the fewer stimulants in cocoa, there is no strong crash afterwards, as there is with a cup of coffee.

#### *Weight Loss*

A good number of the health benefits that are known to be contributed to cocoa beans indicate a possibility that they could be a weight loss aid. Research shows that the polyphenols in cocoa beans might improve sensitivity to insulin. Scientists are currently studying the connection between obesity and a condition known as Insulin Resistance Syndrome. Increased insulin sensitivity, from coco beans or dark chocolate for example, may support weight loss efforts. Further more, the natural anti-depressants found in cocoa beans might make it easier for individuals to stay on track with their diets.

#### **Incorporating Cocoa Beans Into Your Diet**

Cocoa beans, in their raw form, may be purchased at health stores. It is possible to purchase and consume them in that manner however many people find it difficult to deal with the harsh, bitter taste. Luckily there is a more pleasant tasting option, dark chocolate. There are specific characteristics that dark chocolate, selected for health, should contain: Healthy dark chocolate needs to have no less than 70% cacao. No milk or any other dairy products should be present in the chocolate as they inhibit the body's ability to absorb antioxidants. The chocolate should be made from cacao butter and not coconut or palm oil.

Chocolate is a tasty food source that we can enjoy all the more knowing that it has health benefits as well!

<http://www.herbwisdom.com/herb-coconut-oil.html>

## **Coconut Oil**

### **Coconut Oil Benefits**

Coconut oil provides benefits to weight loss, skin and hair care, increased immunity and boosted energy levels whilst also helping to strengthen bones and promoting a healthy digestive system. Coconut oil is also very stable at high temperatures so is ideal for frying as it doesn't easily break down to create harmful by-products like most of the common polyunsaturated

The human body carries normal levels of a substance called monolaurin. This substance assists in increasing our immune system by warding off many harmful bacteria, fungi and viruses. Monolaurin levels in coconut oil help improve a compromised immune system while also increasing the body's proper nourishment and energy levels. Monolaurin derives from our body's natural production of lauric acid. Coconut oil's main component is lauric acid, which is among a group of medium-chain triglycerides in the saturated fat group. Unfortunately, because of the negative publicity of saturated fats, the superior benefits of coconut oil have been widely overlooked.

A common misconception of coconut oil is its association with weight gain when in fact the opposite is true. Coconut oil consists of 50% lauric acid, which is a medium-chain triglyceride. Also included is myristic, caprylic and palmitic acid. The presence of these acids helps to reduce appetite while increasing proper function of the thyroid. This does not mean they are an appetite suppressant rather they allow a healthy level of food consumption and provide longer time durations of feeling full. The increase in metabolism and thyroid function assists in our body burning fat calories rather than storing them. The presence of medium-chain triglycerides in coconut oil allows the rapid digestion of these acids before they reach the intestinal tract whereas other oils contain slow digesting long-chain triglycerides. These particular long-chain triglycerides also trigger the body's fat storing function ultimately resulting in weight gain.

Hair and skin reap coconut oil benefits by receiving high levels of antioxidants, which is an effective combater of free radicals. Free radicals promote the body's aging process by weakening skin tissue whereas antioxidants work to combat free radical levels. In addition, a natural derivative of coconut oil is Vitamin E. This vitamin strengthens skin tissue and hair follicles while retaining skin and hair's optimum condition. The antibacterial, antiviral and anti-fungal properties in coconut oil (lauric and caprylic acid) ward off skin infections such as acne and blemishes as well.

The presence of high free radical levels damages the body's artery walls. Once damage occurs, walls of the arteries start collecting cholesterol or plaque build-up. If left untreated this build-up causes life-threatening artery blocks resulting in hardening of the arteries, strokes and heart disease. The healthy acids provided in coconut oil help to heal the damaged artery walls while reducing harmful free radical levels. In addition, a healthy level of coconut oil promotes good cardiovascular health benefits.

Coconut oil increases our body's absorption of many beneficial substances such as calcium and magnesium. When these substance levels increase, they promote strong bones and healthy teeth conditioning. Healthy teeth ward off cavities, which cut down on tooth decay while strong bones ward off osteoarthritis. In addition, the medium-chain fatty acids found in coconut oil help the effects of arthritis by increasing our body's absorption rate. Micro-organisms in the bodies system create infection and secure themselves deep within joint membranes causing damage and creating arthritis. Antibiotics are unable to penetrate deeply enough into joint membranes making these micro-organisms immune to antibiotics. However, the deep absorption rate of healthy fatty acids reaches these joint membranes destroying the infection-causing micro-organisms. The healthy acids in coconut oil help to correct the joint damage of arthritis while fighting and warding off further infection.

Setting a container of oil in warm water will sufficiently melt coconut oil as it comes in solid form. Recommendations include starting with one tablespoon of organic/virgin coconut oil daily while increasing to three tablespoons daily; one tablespoon taken after each meal. For individuals unable to stand pure doses, including it in drinks or recipes requiring oil will help. Hair treating involves massaging two tablespoons into hair and scalp and leaving on overnight followed by a shampoo in the morning. Skin treatment involves massaging the oil onto your face and body as you would a daily moisturizer.

Not all individuals may tolerate coconut oil and temporary side effects may include bouts of diarrhoea. It is important to start by consuming small doses while slowly increasing to the daily-recommended three-tablespoon dosage intake. This allows your body time to become properly acclimated to virgin or organic coconut oil. Many individuals should be aware of allergic reactions as well.

<http://www.herbwisdom.com/herb-coriander.html>

## **Cumin**

### **Cumin Benefits**

Cuminum cyminum is an annual herb that grows to be about a foot tall and is native to China, Mexico, India and the Mediterranean. Its seeds are yellow-brown in color and they are harvested by hand. White or pink flowers blossom on the cumin plant during its three to four month growing period during the hot summers. The small, flat seeds provide a peppery flavor that is used in Mexican dishes, as well as in combination with curry in Indian and Middle Eastern food. Some southern Chinese cooks use cumin to give unique flavors their dishes. Cumin is similar to caraway, coming from the same family of herbs, but has a stronger and coarser flavor

While quite plain in appearance, its health benefits are anything but plain. Cumin is a great supplement for any diet, as Eastern cultures have known for thousands of years. Cumin is high in iron and manganese, supplying seven and three percent respectively of the recommended daily value. It also supplies our bodies with calcium, many vitamins and fiber. Cumin is said to prevent gas, reduce muscle spasms, clear jaundice and stop diarrhoea amongst other things. It may also strengthen bones, lower blood sugar and reduce seizures.

Cumin oil, which is readily produced in the United States, is used for flavoring desserts, condiments and alcoholic beverages. It is also used as a fragrance in creams, perfumes and

*Here are some of the many ways in which cumin can help you:*

**Great Source of Iron:** Cumin is a great source of iron which is key in keeping your immune system healthy and producing energy and maintaining your metabolism. Children, teenagers, women going through their menstrual cycle and women who are pregnant or nursing need to consume more iron and cumin is an ideal source for obtaining iron.

**Relieves Colds, Fevers and Sore Throats:** Cumin is high in vitamin C and its anti-fungal properties make it difficult to suffer long from a cold if you consume it regularly. Make up your own cold remedy by mixing one teaspoon of ground cumin in boiling water and allow to simmer for a few minutes. Let cool before drinking. For a sore throat, add some ground ginger

**Aids Digestion and Relieves Constipation:** Cumin is well known for its effects on the digestive system and scientists have said that cumin aids in proper digestion of food and the body's ability to absorb nutrients because the enzymes found in cumin help break down the food. Thanks to the levels of fibre that is found in cumin, piles can be gotten rid of when consumed daily. Cumin's anti-fungal properties will help to clean out the digestive tract.

**May Prevent Cancer:** As scientists do more research on cumin they are finding that it may also contain anti-carcinogenic properties which is key for preventing cancer. Lab rats who took cumin did not develop tumors like the others thanks to cumins ability to detoxify the liver and prevent free radicals from entering the blood stream. Cumin is a great way to help detoxify your body and keep your insides clean and healthy.

**Insomnia:** Insomnia can be relieved if you mix a teaspoon of cumin powder with one mashed banana and eat before going to bed.

**Breast Feeding:** Cumin, taken with milk and honey, can help increase milk supply when consumed regularly.

**Maintain Healthy Skin:** The vitamins found in cumin, both vitamin C and E, are essential for healthy, young looking skin. Cumin's essential oils also keep fungal and microbial infections

**Cooking with Cumin:** It's always best to use whole cumin seeds that you grind with a mortar and pestle, but cumin powder is more convenient though it loses its flavor faster than whole seeds. Whole seeds will keep for a year, when stored in a cool, dark place, while powder should be used within six months. For enhanced flavor, you may roast cumin seeds before using them.

Boil some cumin seeds in water and steep for eight to ten minutes for a soothing tea. Sauté vegetables and toss with cumin powder for a tasty vegetarian dish. Cumin is great sprinkled on rice and beans to give extra flavor. In Eastern cultures cumin is mixed with black pepper and honey as an aphrodisiac but this combination is also tasty when put on fish, chicken and

<http://www.herbwisdom.com/herb-evening-primrose.html>

**Evening Primrose Oil (Oenothera biennis)**

**Evening Primrose Oil Benefits**

Evening Primrose Oil has been called the most sensational preventive discovery since vitamin C. It contains the pain relieving compound phenylalanine and is increasingly being used to treat chronic headaches. It is currently being studied all over the world as a treatment for aging problems, alcoholism, acne, heart disease, hyperactivity in children, symptoms of menopause, multiple sclerosis, weight control, obesity, PMS and schizophrenia. It has so many preventive and therapeutic qualities that it has become a standard part of recommendations of many herbalists for maintaining youth and preventing disease.

Evening Primrose Oil contains a high concentration of a fatty acid called GLA and it is this fatty acid that is largely responsible for the remarkable healing properties of the plant. In fact, Evening Primrose contains one of the highest concentrations known of this important substance and only a few other plants contain it at all. This makes Evening Primrose an important medicinal herb, and as studies continue, the list of benefits will likely become much longer. The gamma-linoleic acid, linoleic acid and other nutrients in this oil are essential for cell structure and improve the elasticity of the skin. These fatty acids also help to regulate hormones and improve nerve function aiding problems ranging from PMS to migraine headaches. The hormone balancing effect contributes to healthy breast tissue.

***Specifically, evening primrose oil may help to:***

*Relieve the discomforts of PMS, menopause, menstruation, endometriosis and fibrocystic*

By interfering with the production of inflammatory prostaglandins released during menstruation, the GLA in evening primrose oil can help to lessen menstrual cramps. It may also minimise premenstrual breast tenderness, irritable bowel flare-ups, and carbohydrate cravings, and help to control endometriosis-associated inflammation. Many PMS sufferers are found to have unusually low levels of GLA in their systems, which is why supplements might help so much. In women with fibrocystic breasts, the oil's essential fatty acids can minimise breast inflammation and promote the absorption of iodine, a mineral that can be present in abnormally low levels in women with this condition. In menopause, it is widely reported that Evening Primrose oil reduces hot flushes and increases feelings of well being.

*Ease the joint pain and swelling of rheumatoid arthritis:*

Supplementation with evening primrose oil and other sources of GLA has been shown to lessen the joint pain and swelling of this crippling disease. A six-month study reported fewer signs of inflammation in rheumatoid arthritis sufferers taking capsules containing GLA than in those taking a placebo. In another trial, the number of tender joints and swollen joints dropped significantly with GLA but not with a placebo.

*Prevent diabetes-associated nerve damage:*

Research indicates that the GLA in evening primrose oil can help prevent, and in some cases even reverse, the nerve damage (neuropathy) so commonly seen with diabetes. In a year-long study, such symptoms as numbness, tingling, and loss of sensation in participants with mild diabetic neuropathy were less marked in those who took evening primrose oil than in those who took a placebo.

*Reduce the symptoms of eczema:*

In some cases, eczema develops when the body has problems converting dietary fats into GLA. Getting supplemental GLA from evening primrose oil may therefore be helpful. Some studies indicate that this oil can outperform a placebo in relieving eczema-related inflammation, as well as the itching, oozing, and flaking associated with this condition. By taking GLA, eczema sufferers may tolerate reduced doses of steroid creams and drugs, many of which cause unpleasant side effects.

*Help treat acne and rosacea:*

By working to dilute sebum, a thick oily substance that is over-secreted in some people with acne, the essential fatty acids in evening primrose oil may reduce the risk of pores becoming clogged and lesions developing. The oil's EFAs help treat rosacea by reducing inflammation, controlling cells' use of nutrients and by producing prostaglandins, which stimulate the contraction of blood vessels.

*Combat damage from multiple sclerosis:*

The abundant supply of essential fatty acids in evening primrose oil may be valuable in minimizing the inflammation associated with this progressive nerve disorder. The fatty acids may also contribute to healthy nerve development when taken over time.

*Treat Alzheimer's-related memory deficiencies:*

By boosting the transmission of nerve impulses, evening primrose oil may be valuable in treating this progressive brain disorder.

*Counter impotence and female infertility:*

By promoting blood flow, the GLA in evening primrose oil can help treat a primary cause of male impotence; compromised circulation leading to impaired penile blood flow. The oil is often taken with vitamin C and ginkgo biloba for this purpose. In addition, when the oil is taken long term, GLA can help prevent blood vessel narrowing, often a consequence of plaque buildup from high cholesterol. By improving uterine function, GLA may also help those who

*Nourish nails, scalp, and hair:*

The rich stores of essential fatty acids in evening primrose oil not only prevent nails from cracking but also help to keep them generally healthy. In addition, the essential fatty acids nourish the scalp, making the supplement potentially valuable in treating a variety of hair problems.

*Prevent alcohol withdrawal symptoms:*

GLA prompts the brain to produce a specific type of prostaglandin called prostaglandin E, which works to prevent withdrawal symptoms such as depression and seizures by indirectly protecting the liver and nervous system.

<http://www.herbwisdom.com/herb-daikon.html>

**Daikon / Radish**

**Daikon / Radish Benefits**

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*Raw daikon root* is a white fleshed radish that has a very mild taste and is very low in calories, coming in at around 6 calories per ounce. Because of the multitude of benefits it gives, daikon is considered a super food. It contains large amounts of enzymes that aid in fat and starch digestion as well as high levels of vitamin C, phosphorus and potassium. It also contains other phyto-nutrients that fight cancer. The extract from the seed is also a powerful immune booster and cancer fighter.

*Daikon Seeds* *Daikon Seeds* (*Latin name Raphanus Sativus*) have been used for centuries to aid in digestion, relieve fatigue and for their ability to cleanse the blood and body. They are an effective treatment for hangovers, sore throats, migraine headaches, congestion and oedema. Also, they are effective against anything caused by rich diet or food stagnation such as acne, diabetes, bloating and cellulite. They can aid in weight loss and improve kidney function, immune function and blood circulation. Topically, the oil is used to soften and heal dry, cracked skin. Modern medicine has also suggested they have the ability to lower cholesterol and blood

*How Daikon Seed is used* Daikon seed can be sprouted and then consumed similar to other sprouted seeds. It can also be cooked with grains. An extract can be made from the seeds and then put into capsules or tincture. Commonly, this extract is combined with things like holly leaf, garlic and hawthorn to effectively lower blood pressure and improve overall cardiovascular health. It can also be combined with other common remedies such as ginger and honey to treat digestive woes. The freeze dried sprouts and less often the extract also finds a place in whole food multi-vitamin and in commercially available whole food cleansing systems.

*How Daikon Root is used* Daikon root is primarily used in Asian cuisine and traditional Chinese medicine. It is often served pickled. A broth can be created by boiling Daikon Root with seaweed and then taken to help rid the body of dairy build up and animal toxins. A tea made from the root is often used to aid digestion, fight disease and to treat both constipation and diarrhoea. Two thin slices of pickled and then sun dried daikon is the traditional end to a meal in Japan as it is said to both cleanse the palate and aid in the digestion of the meal. Daikon can also be juiced. Laboratory testing has shown that the enzyme profile in daikon juice is very similar to the human digestive tract. It also contains phenolic compounds that block potentially dangerous reactions from occurring.

*Helping Kidney Function* Alone, daikon, both in food form and in its extract, is a very effective diuretic. It causes the kidneys to process waste more effectively and thus excrete more urine. This helps to both improve kidney function and to treat oedema. It also helps to clean the blood, eliminating the toxins through the kidneys, liver, sweat glands and digestive tract. Because of this, it helps food be digested more completely leading to less over eating and often weight loss.

*Migraine Relief* The same action that allows daikon to treat high blood pressure also allows it to help prevent and treat migraines. Migraines are caused by blood vessels in the brain constricting. Daikon helps to dilate those blood vessels. It works best as a preventive but can also be taken at the first signs of a migraine.

*Habitat* Growth of the daikon plant began in the Mediterranean but quickly spread east. Traditionally, it was grown across all of Asia and is still today especially common in China, Japan, Korea and the Philippines. Most recently, as its health benefits have become more widely known, it has come to Texas and California.

*Dosage* The amount of daikon seed extract varies widely between brands. The therapeutic dosage for blood pressure is 400-800 mg per day. Many commercially available blood pressure blends contain much less of the extract than this. When used in a commercial cleansing program, most contain between 50 and 100 mg of freeze dried sprouts.

The benefits of using daikon root will quickly be seen if you give this super food and amazing supplement a try.

<http://www.herbwisdom.com/herb-thyme.html>

**Thyme (Thymus)**

**Thyme Benefits**

Thyme has been well-used for centuries for a variety of purposes. People in ancient Rome used thyme in order to treat melancholy and added the herb to alcoholic beverages and cheese. The ancient Greeks would use thyme in incense. During medieval times, the herb was used in order to infuse the user with vigor and courage.

Approximately 350 thyme species exist. Some of these species are good plants for gardening and possess a sweet fragrance and pretty lilac or pink flowers. Despite the fact that the flowers are quite small, there are many of them which produce nectar and therefore attract bees. Some of the most flavorful honey can be obtained from the nectar of thyme.

The plants are perennial and belong to the family of mint. They also exist in several different colors and shapes. The flowers of the plant range from pale pink, blue-violet, magenta, lilac, mauve, and white while the leaves vary in shades of green as well as bronze and silver.

The vast range of differences between each of the plants makes them each unique. As such, there are a number of different names for the various thyme types which include Rainbow Falls, Archer's Gold, Golden King, Goldstream, Silver Posie,

Silver Queen, and Lemon Curd. All of these plants have different scents which can generate aromas such as camphor, lemon, orange, celery, tangerine, caraway, pine, as well as eucalyptus. The different flavors and aromas are due to the subtle differences in the essential oil within the plant.

Thyme is a highly fragrant and pleasant plant to grow within a garden. They are small in size which makes them easy to plan in small spaces such as in rock gardens, small pots, and in between paving stones. They can be used in order to repel cabbage pests and beetles. In order to ensure that they grow well, it is best to trim the plant after they flower and remove any of the dead flowers.

### **Culinary Uses**

The lemon thyme and common thyme are the most common forms of thyme that are used in cooking. In contrast, thyme is also used for medicinal purposes with the most common types used being Spanish thyme, common thyme, as well as creeping thyme. All of these types are indigenous to Western Asia and Europe although they are cultivated throughout the world.

The dried or fresh leaves of the thyme plant along with the flowers can be used within stews, soups, sautéed or baked vegetables, custards, and casseroles. The herb gives the food a tangy and warm flavor, similar to camphor, and is able to retain its strong flavor even after cooking. It can also be used within marinades as well as stuffings.

Thyme's essential oil may also be used within toothpastes, soaps, perfumes, antiseptic ointments, and cosmetics. The oil is also utilized in order to elevate the mood and relieving pain in aromatherapy. It can also be calming during conditions of stress and baths with thyme can help to relieve joint pain and aches.

### **Therapeutic Uses of Thyme**

The essential oils within thyme contain large amounts of thymol, which is a strong antibacterial agent as well as a strong antiseptic and antioxidant. The oil can be used within mouthwashes in order to treat mouth inflammations as well as infections of the throat. Thyme is also used often within cough drops.

Due to the essential oil, the herb contains bronchial antispasmodic and expectorant properties which makes it quite useful in treatment chronic as well as acute bronchitis, upper respiratory tract inflammation, and whooping cough. Thyme can also enhance the functioning of the bronchi's cilia, also affecting the bronchial mucosa. Thyme's terpenoids provide the herb with its expectorant properties while the flavonoids in the herb provide thyme with its spasmolytic effects. All members of the family of mint, such as thyme, contain terpenoids that are well-known for battling cancer.

Tea can also be made with 1 teaspoon of crushed thyme mixed in with ½ cup of water which is boiling. The thyme should steep within the water for a period of 10 minutes and then strained. The tea should be drunk between 3 and 4 times per day in order to treat coughs. If the tea needs to be sweetened, honey can be used.

### **Safety Precautions when Using Thyme**

Thyme has no known side effects and is completely safe to use. However, thyme's essential oil could cause skin and mucous membrane irritation and can also cause allergic reactions. It is also recommended that thyme should not be used medicinally during pregnancy as they have been linked with uterine stimulation.

<http://www.herbwisdom.com/herb-water.html>

### **Water**

#### **Water Benefits**

In the rush to buy vitamins, supplements, and natural remedies to all of life's ailments, many people overlook the importance of water when considering the best path toward great, long-lasting health. The simple fact of the matter is that water comprises 60 percent of the average person's bodyweight and is a crucial way to regulate body temperature, protect tissues and joints, remove waste, and aid digestion. When all four of these are functioning properly, human beings are in their best shape. This makes water the cornerstone of a healthy lifestyle.

#### *Water as a Protector:*

##### **Maintaining the Integrity of Joints, Tissues, and the Spinal Cord**

In order for joints to be healthy, they must be well-lubricated. In order for tissues to be healthy, flexible, and able to adapt to life's everyday movements, they must be moist. In order for the spinal cord to be protected, it must be well-hydrated. Water does all of these things in the human body, especially when it comes to tissues. Anyone who has ever suffered from a dry, stuffy nose, or cracked and chapped lips, knows how discomfiting it can be for these sensitive areas to become dry. When this happens to tissues, the body can be tense, fatigued, and

##### **Water is a Key Way to Aid Regular Digestion**

When digestion becomes inconsistent, many people look to their diet and blame certain solid foods for their discomfort. Those foods might certainly be a cause, based on their own chemistry, but water is often an important part of the mix when it comes to healthy and regular digestion in adult humans. To hammer this point home, people need only understand where the digestion process begins: *saliva*.

It all starts with the water-infused saliva contained in a person's mouth; beyond that, substances move through the kidneys and intestines, which possess their own digestive enzymes that break down food and usher waste through (and out of) the body. When water is running low, saliva, the kidneys, and the intestines, all suffer. They perform their job much more slowly and far more inefficiently. That leads to slower digestion, less regular bowel movements, and can even lead to kidney infections due to chronic dehydration. Additionally, water is the key to digesting soluble fibre, which is, in turn, a key way to keep the digestive process moving at a

##### **Water Flushes Waste Out of the Body**

Most people associate urination or defecation with the digestive process, but that's actually an oversimplification. Both urination and defecation, along with perspiration, are key ways for the body to remove waste. It should be noted that waste itself is often separate from the by-products of consuming food and other beverages. Waste can include bodily fluids, excess vitamins or proteins, and other chemicals, that simply must be removed in order for an individual to remain healthy.

When water levels are low in the body, this process gets put on hold. The body performs less waste removal overall, and that can lead to feelings of fatigue and more frequent incidences of illness. A sick body is one that is never quite able to get into great shape, even through regular exercise, and it can lead to major immune system and joint problems if water levels are chronically low.

### **Temperature Regulation Requires a Good Amount of Water**

Most health experts recommend 64 ounces of water per day to avoid dehydration and aid bodily functions. This same daily requirement of water helps regulate body temperature on hot days, during intense workouts, or in any other heat-intensive scenarios. That's because healthy amounts of water allow people to sweat more effectively and consistently; a healthy amount of water on a daily basis will also lead to more efficient breathing and a lesser risk of dehydration when the body enacts its natural cooling processes to keep body temperature low.

### **A Key Component for a Healthy Human Life**

With more than half of the body being comprised of water in some form, it's no surprise that this essential substance is the key to a healthy life, a long-lasting body, and maximum enjoyment of exercise and high temperatures. This essential substance can lead to more comfortable joints, less aches and fatigue in bodily tissues, and even a healthier brain and spinal cord. It gives a much-needed boost to saliva, kidneys, and intestines, promoting great digestion and waste removal, as well. For effective digestion, healthy removal of waste, and thorough regulation of body temperature, there is no better health supplement than water.

<http://www.herbwisdom.com/herb-wheatgrass.html>

### **Wheat grass**

#### **Wheat grass Benefits**

Wheat grass is made from the cotyledons (seed leaves) of the normal wheat plant *Triticum aestivum*. It is usually sold as a juice or powder concentrate. The difference between Wheat grass and Wheat malt is that Wheat grass is left to grow for longer until it reaches the Jointing Stage, where it has peak nutritional value. It is then freeze-dried (i.e. at a low temp) or served fresh. In comparison, standard wheat malt is harvested earlier and then dried at a higher temperature. Wheat grass therefore manages to produce, and maintain, a highly nutritious content compared to normal wheat. Consumers of wheat grass report that their levels of energy greatly increase, their skin clears up and illnesses, coughs and allergies are alleviated.

#### **Key Facts Regarding Wheat grass**

30mls of wheat grass juice has the same nutritional value of 1 kg of green leafy vegetables.

90 minerals can be found in the wheat grass including potassium, magnesium, sodium, and

Wheat grass contains enzymes such as cytochrome oxidase, protease, amylase, transhydrogenase, and lipase.

Wheat grass contains 19 different amino acids.

The juice of wheat grass allows the body to increase red blood cell production, thereby increasing oxygenation.

Wheat grass contains a large amount of vitamin C.

## **Health Benefits of Wheat grass**

*There are four primary health benefits of wheat grass:*

### *Health Benefit nr 1*

Numerous health experts have determined that the chlorophyll within the wheat grass is practically identical to that of the haemoglobin which is found within the blood of a human. The only determined difference between the two is that chlorophyll's central element consists of magnesium while haemoglobin's is iron.

Because of the close similarities between the haemoglobin and the chlorophyll, the body is able to make haemoglobin from the chlorophyll with ease. This serves to increase the count of red blood cells so as to deliver oxygen as well as other nutrients more efficiently.

Studies have shown that chlorophyll is able to generate red blood cells, improve blood pressure through the dilation of veins, eliminate carbon dioxide, and increase metabolism. Along with the other benefits, the consumption of chlorophyll is a great way to obtain additional energy and alkalize the blood.

### *Health Benefit nr 2*

Wheat grass is a highly beneficial when it comes to cleansing the body. Wheat grass powder and juice have been shown to be a "complete" food meaning that it provides the body with almost all of the nutrients which is required for energy and survival. Only 140 g of wheat grass can provide you with the same nutrients as 3 kg of green, fresh vegetables.

Wheat grass provides the consumer with vitamins E, C, and B as well as carotene which are all essential in eliminating the free radicals from the body. The substance is also known for its wonderful ability to cleanse the gastrointestinal tract, the blood, as well as the organs.

Because wheat grass contains large amounts of saponin, it is able to boost the lymphatic system, thereby removing toxins from the body's cells. Studies show that wheat grass allows the body to detoxify through increasing the removal of crystallized acids, faecal matter, as well as hardened mucous. It is a fast and sure way to remove waste as well as generate a highly nutritious environment.

Whether you want to cleanse your body or you want to make a permanent change in your diet, wheat grass is an excellent choice for both.

### *Health Benefit nr 3*

Wheat grass have been shown to contain large amounts of amino acids, which are necessary to the building of protein. They are also necessary to the regeneration and growth of the body's cells. Because of this, many professional body builders and those who wish to increase their muscle tone take wheat grass in either fresh or powdered form before and after their daily exercise regimen.

The juice of wheat grass contains numerous amino acids including serine, arginine, absenismic, aspartic acid, lysine, alanine, glycine, methionine, tryptophane, leucine, valine, and phenylalanine.

### *Health Benefit nr 4*

Wheat grass has been shown to protect and fight certain illnesses. The organic wheat grass juices and powders are highly effective in the boosting of the immune system which allows the body to fight as well as more swiftly recover from a variety of ailments and illnesses.

Wheat grass is an excellent means of obtaining beta carotene, which contains a number of B vitamins along with E, K, H, and C. It also possesses more than 90 minerals and 19 different amino acids. Wheat grass also possesses many different enzymes, all of which promote the breaking down of fats, weight loss, and various biological functions.

Several health benefits provided by the substance is based upon the fact that wheat grass consists of living food. Because it is anti-bacterial, the consumption of wheat grass can detoxify both the blood and lymph cells and well as eliminate toxins and poisons from the body in an effective and efficient manner.

Reflecting back on the first point, chlorophyll can serve to protect against carcinogens in a more effective manner than other foods. Studies, which have been conducted on animals, have demonstrated that the consumption of wheat grass reduces carcinogen absorption while strengthening the cells, neutralizing toxic elements, and detoxifying organs such as the liver.

<http://www.herbwisdom.com/herb-sage.html>

**Sage (*Salvia officinalis*)**

### **Sage Benefits**

Sage has one of the longest histories of use of any culinary or medicinal herb. Ancient Egyptians used it as a fertility drug (Bown, 1995). In the first century C.E. Greek physician Dioscorides reported that the aqueous decoction of sage stopped bleeding of wounds and cleaned ulcers and sores. He also recommended sage juice in warm water for hoarseness and cough. It was used by herbalists externally to treat sprains, swelling, ulcers, and bleeding. Internally, a tea made from sage leaves has had a long history of use to treat sore throats and coughs; often by gargling. It was also used by herbalists for rheumatism, excessive menstrual bleeding, and to dry up a mother's milk when nursing was stopped. It was particularly noted for strengthening the nervous system, improving memory, and sharpening the senses. Sage was officially listed in the United States Pharmacopoeia from 1840 to 1900.

Sage Tea or infusion of Sage is a valuable agent in the delirium of fevers and in the nervous excitement frequently accompanying brain and nervous diseases. It has a considerable reputation as a remedy, given in small and often-repeated doses. It is highly serviceable as a stimulant tonic in debility of the stomach and nervous system and weakness of digestion generally. It was for this reason that the Chinese valued it, giving it the preference to their own tea. It is considered a useful medicine in typhoid fever and beneficial in biliousness and liver complaints, kidney troubles, haemorrhage from the lungs or stomach, for colds in the head as well as sore throat, quinsy, measles, for pains in the joints, lethargy and palsy. It has been used to check excessive perspiration in phthisis cases, and is useful as an emmenagogue. A cup of the strong infusion will be found good to relieve nervous headache.

The German Commission E approved internal use for mild gastrointestinal upset and excessive sweating as well as for external use in conditions of inflamed mucous membranes of the mouth and throat. An unpublished, preliminary German study with people suffering from excessive perspiration found that either a dry leaf extract or an infusion of the leaf reduced sweating by as much as 50%.

In Germany, sage tea is also applied topically as a rinse or gargled for inflammations. Sage extract, tincture, and essential oil are all used in prepared medicines for mouth and throat and as gastrointestinal remedies in fluid (e.g., juice) and solid dosage forms (Leung and Foster, 1996; Wichtl and Bisset, 1994).

Sage has been used effectively for throat infections, dental abscesses, infected gums and mouth ulcers. The phenolic acids in Sage are particularly potent against *Staphylococcus aureus*. In vitro, sage oil has been shown to be effective against both *Escherichia coli* and *Salmonella* species, and against filamentous fungi and yeasts such as *Candida albicans*. Sage also has an astringent action due to its relatively high tannin content and can be used in the treatment of infantile diarrhoea.

Its antiseptic action is of value where there is intestinal infection. Rosmarinic acid contributes to the herb's anti-inflammatory activity.

Sage has an anti-spasmodic action which reduces tension in smooth muscle, and it can be used in a steam inhalation for asthma attacks. It is an excellent remedy for helping to remove mucous congestion in the airways and for checking or preventing secondary infection. It may be taken as a carminative to reduce griping and other symptoms of indigestion, and is also of value in the treatment of dysmenorrhoea. Its bitter component stimulates upper digestive secretions, intestinal mobility, bile flow, and pancreatic function, while the volatile oil has a carminative and stimulating effect on the digestion. It has a vermifuge action. There also seems to be a more general relaxant effect, so that the plant is suitable in the treatment of nervousness, excitability and dizziness. It helps to fortify a generally debilitated nervous system.

In 1997, the National Institute of Medical Herbalists in the United Kingdom sent out a questionnaire to its member practitioners on the clinical use and experience of sage. Of 49 respondents, 47 used sage in their practice and 45 used it particularly in prescriptions for menopause. Almost all references were to sage's application for hot flashes, night sweats, and its oestrogenic effect. The age range of the menopause patients was 40 to 64, with an average of 49.76. Three-quarters were aged 47 to 52. Forty-three practitioners also noted its use in infections, mainly of the upper respiratory tract, 29 reported its use in sore throat, and 15 reported its use in mouth and gum disease, taken in the form of gargles and mouthwashes. Another main area emphasised by the respondents was its use as a general tonic, for fatigue, nervous exhaustion, immune system depletion, and poor memory and concentration, at any age. Dosage form preference was also reported. Sage was prescribed as tea (aqueous infusion) by 37 practitioners, alcoholic tincture by 30, fresh tincture by 14, alcoholic fluid extract by 2, fresh juice by 2, and fresh leaf by 1 (Beatty and Denham, 1998).

It is well documented that Sage leaf helps to reduce menopausal sweats. In one study, excessive sweating was induced by pilocarpine. The sweating was reduced when participants were given an aqueous extract of fresh Sage leaf. In a further study 40 patients were given dried aqueous extract of fresh sage (440mg) and 40 were given infusion of sage (4.5g) herb daily. Both groups of patients experienced a reduction in sweating.

Sage has a strong anti-hydrotic action, and was a traditional treatment for night sweats in tuberculosis sufferers. Its oestrogenic effects may be used to treat some cases of dysmenorrhoea and menstrual irregularity or amenorrhoea and can reduce breast-milk production.

Research has suggested that the presence of volatile oil in Sage is largely responsible for most of its therapeutic properties, especially its anti-septic, astringent and relaxing actions. Sage is also used internally in the treatment of night sweats, excessive salivation (as in Parkinson's disease), profuse perspiration (as in TB), anxiety and depression. Externally, it is used to treat insect bites, skin, throat, mouth and gum infections and vaginal discharge.

It is thought that Sage is similar to Rosemary in its ability to improve brain function and memory. In a study involving 20 healthy volunteers Sage oil caused indicated improvements in word recall and speed of attention. Meanwhile the activity of Sage and its constituents have been investigated in the search for new drugs for the treatment of Alzheimer's disease with promising results.

ESCOP (European Scientific Cooperative on Phytotherapy) indicate its use for inflammations such as stomatitis, gingivitis and pharyngitis, and hyperhidrosis (ESCOP, 1997).

<http://www.herbwisdom.com/herb-tea-tree-oil.html>

### **Tea Tree Oil (Melaleuca)**

#### **Tea Tree Oil Benefits**

Bundjalung Aborigines who historically resided in what is now known as New South Wales, Australia would pick the leaves from the tea tree plant, break them (like aloe leaves.) Then, to heal burns, cuts, and insect bites they would rub the leaves over their skin. They also ground the leaves into a fine paste as wound dressing. Those crushed leaves were also applied over the body as an insect repellent. They taught Captain Cook how to boil the leaves to create a spiced tea, so Cook called the plant a “tea tree.”

In the early 1990s scientists in the University of Western Australia’s School of Biomedical, Biomolecular and Chemical Sciences began a study of essential tea tree oil. Their purpose was to investigate and verify the medicinal properties of tea tree oil, especially the oil’s antimicrobial benefits. Tea tree oil has demonstrated its wide spectrum of ability in healing bacterial, fungal, and viral infections in the laboratory. These researchers have since advocated its acceptance as a topical antimicrobial agent.

Tea tree oil is produced by steam distilling the leaves of the Australian *Melaleuca alternifolia*. The *M. alternifolia* is a plant species which grows only in Australia and is native to Northern New South Wales. The plant oil contains more than 100 separate components. These are mostly monoterpenes, sesquiterpenes, and their alcohol forms. Tea tree oil is comprised of at least 30% terpinen-4-ol which causes most of its antimicrobial activity. This component--with specific levels of 13 others--are required for tea tree oil to meet the International Standard for Oil of *Melaleuca*.

Tea tree oil has proven effective in treating skin infections. Whether the cause of the infection is bacterial, fungal or viral, the oil works to heal it. Although it provides strong pharmaceutical medication, tea tree oil doesn’t show dangerous side effects. This pale yellow or colorless oil smells similar to eucalyptus. Although it contains more than 100 compounds, so far only 79 have been specifically identified. Some of these compounds have been found nowhere else in

Each batch of tea tree oil is checked by sampling the quantity of two main compounds: cineole must be less than 15% because it can become caustic to skin in higher percentages, and terpinen-4-ol needs to be 30% or greater for good quality oil. Although these two compounds are the ones measured to verify the oil’s quality. However, its efficacious treatment of bacterial, fungal, and viral infection is actually produced by a combination of multiple compounds.

Harvesting the leaves from tea trees isn’t easy. They grow in swamps infested with snakes and insects. Machinery won’t work under those conditions, so the leaves must be cut by hand. Workers use machetes to cut suckers off the stumps and then use a cane knife to strip the leaves from the branches. The tea trees’ growth appears to actually increase when regularly cropped. No damage is done to the trees or the surrounding ecosystem because machinery can’t be used. The leaves are then placed in a steam distiller on racks. Oil is drawn from the leaves, floating on top of the water in collection tanks. The tea tree oil goes through a filtration process before it is poured into a container. As the oil has gained in reputation and popularity, tea tree plantations have been established where the product is grown organically.

Tea tree oil is efficacious in various dilution in treating abrasions, minor cuts, acne, arthritis, asthma, athletes foot, bladder infections, bronchial congestion, minor burns, chapped lips, rash from chicken pox, dandruff, dry skin, earaches, eczema, head colds, lice, herpes lesions, warts, hives, shingles, etc. Tea tree oil may be diluted with olive oil and rubbed onto an irritated or inflamed site as in the case of arthritis or gout. Added to bath water, it soothes the entire skin area. A few drops placed on a hot wash cloth and held over the nose to breathe through alleviates symptoms of head colds, asthma, and bronchitis.

The popularity of natural treatments for health problems is once again gaining momentum. In past history, before "modern" medicine, natural medicine was the only treatment available. Over the centuries native peoples found many plants which effectively treated various illnesses. Today, with the problems that have risen from overuse of antibiotics and other medications, and the side effects caused by the use of many of these, the old is becoming new again. Due to the wide spectrum of viral, microbial, and fungal pathogens against which tea tree oil is effective, its use is becoming more widely established.

<http://www.herbwisdom.com/herb-spirulina.html>

**Spirulina (Arthrospira platensis)**

**Spirulina Benefits**

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Spirulina is a simple one-celled microscopic blue-green algae with the scientific name *Arthrospira platensis*. Under a microscope, spirulina appears as long, thin, blue-green spiral threads. The odor and taste of spirulina is similar to seaweed.

Spirulina can be found in many freshwater environments, including ponds, lakes, and rivers. It thrives best under pesticide-free conditions with plenty of sunlight and moderate temperature levels, but it is also highly adaptable, surviving even in extreme conditions. More than 25,000 species of algae live everywhere - in water, in soils, on rocks, on plants. They range in size from a single cell to giant kelp over 150 feet long. Macroalgae are large like seaweeds. Microalgae are microscopic. Ocean microalgae, called phytoplankton, are the base of the ocean food web. Spirulina is often deemed the most nutritionally complete of all food supplements, containing a rich supply of many important nutrients, including protein, complex carbohydrates, iron, and vitamins A, K, and B complex. It also has a high supply of carotenoids such as beta carotene and yellow xanthophylls which have antioxidant properties. It is also rich in chlorophyll, fatty and nucleic acids, and lipids. Thus, spirulina has countless uses as a supplement for maintaining good health and for preventing diseases.

Spirulina is the richest beta carotene food, with a full spectrum of ten mixed carotenoids. About half are orange carotenes: alpha, beta and gamma and half are yellow xanthophylls. They work synergistically at different sites in our body to enhance antioxidant protection. Twenty years of research proves eating beta carotene rich fruits and vegetables gives us real anti-cancer protection. Synthetic beta carotene has not always shown these benefits. Research in Israel showed natural beta carotene from algae was far more effective. Natural is better assimilated and contains the key 9-cis isomer, lacking in synthetic. As suspected, natural carotenoids in algae and vegetables have the most antioxidant and anti-cancer power.

Spirulina is an ideal anti-aging food; concentrated nutrient value, easily digested and loaded with antioxidants. Beta carotene is good for healthy eyes and vision. Spirulina beta carotene is ten times more concentrated than carrots.

Iron is essential to build a strong system, yet is the most common mineral deficiency. Spirulina is rich in iron, magnesium and trace minerals, and is easier to absorb than iron supplements.

Spirulina is the highest source of B-12, essential for healthy nerves and tissue, especially for vegetarians.

### **Healthy Dieting with Spirulina**

About 60% of spirulina's dry weight is protein, which is essential for growth and cell regeneration. It is a good replacement for fatty and cholesterol-rich meat and dairy products in one's diet. Every 10 grams of spirulina can supply up to 70% of the minimum daily requirements for iron, and about three to four times of minimum daily requirements for vitamins A (in the form of beta carotene), B complex, D, and K. By itself, it does not contain vitamin C, but it helps maintain this vitamin's potency.

Spirulina is rich in gamma-linolenic acid or GLA, a compound found in breast milk that helps develop healthier babies. Moreover, with its high digestibility, spirulina has been proven to fight malnutrition in impoverished communities by helping the body absorb nutrients when it has lost its ability to absorb normal forms of food.

Another health benefit of spirulina is that it stimulates beneficial flora like lactobacillus and bifidobacteria in your digestive tract to promote healthy digestion and proper bowel function. It acts as a natural cleanser by eliminating mercury and other deadly toxins commonly ingested by the body.

Spirulina also increases stamina and immunity levels in athletes, and its high protein content helps build muscle mass. At the same time, it can curb hunger that may develop during the most demanding training routines. Thus, it indirectly acts as an effective way to maintain an athlete's ideal body weight.

### **The Disease Fighter**

As well as beta carotene, Spirulina contains other nutrients such as iron, manganese, zinc, copper, selenium, and chromium. These nutrients help fight free radicals, cell-damaging molecules absorbed by the body through pollution, poor diet, injury, or stress. By removing free radicals, the nutrients help the immune system fight cancer and cellular degeneration. In some findings, spirulina has helped reduce oral cancer tumors in laboratory rats, and may thus provide a big medical breakthrough in cancer treatment.

Spirulina's ability to reduce the bad cholesterol LDL in the body helps prevent the onset of cardiovascular diseases, such as hardening of the arteries and strokes. It also helps lower blood pressure. While not clinically proven, spirulina may also protect against allergic reactions and liver infection.

Research confirms Spirulina promotes digestion and bowel function. It suppresses bad bacteria like e-coli and Candida yeast and stimulates beneficial flora like lactobacillus and bifidobacteria. Healthy flora is the foundation of good health and it increases absorption of nutrients from the foods we eat, and helps protect against infection. Spirulina builds healthy lactobacillus, aiding assimilation and elimination and relieving constipation.

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### **Removing Toxins**

In 1994, a Russian Patent was awarded for spirulina as a medical food to reduce allergic reactions from radiation sickness. 270 Children of Chernobyl consuming 5 grams a day for 45 days (donated by Earthrise Farms), lowered radionucleides by 50%, and normalized allergic sensitivities. Today we are subject to an onslaught of toxic chemicals in our air, water, food and drugs. Our bodies need to continually eliminate these accumulated toxins. Spirulina has a completely unique combination of phytonutrients - including chlorophyll, phycocyanin and polysaccharides, that can help cleanse our bodies.

### **How to Take Spirulina**

Spirulina is now commercially available in tablet or powder form. Some health tonics contain spirulina as part of their ingredients. A simple daily regimen for spirulina involves taking a 500 mg tablet four to six times daily.

Sources for these forms of spirulina are normally laboratory-grown. Harvesting spirulina from more natural settings has posed a challenge because of possible contamination from toxic substances that cannot be removed from the product. Hopefully, more eco-friendly and safer ways to cultivate the algae can eventually be developed and perfected.

<http://www.herbwisdom.com/herb-st-johns-wort.html>

### **St. John's Wort (*Hypericum perforatum*)**

#### **St. John's Wort Benefits**

St. John's Wort has become popular again as an antidepressant. It is the number one treatment in Germany and has been extensively studied by Commission E, the scientific advisory panel to the German government. It contains several chemicals, including hypericin, hyperforin, and pseudohypericin, which are thought to be the major sources of antidepressant activity. In several studies of laboratory animals and humans, one or more of the chemicals in St. John's wort appeared to delay or decrease re-absorption of the neurotransmitters dopamine, nor-epinephrine, and serotonin by nerve cells.

Neurotransmitters are chemicals that carry messages from nerve cells to other cells. Ordinarily, once the message has been delivered, neurotransmitters are re-absorbed and inactivated by the cells that released them. Chemicals in St. John's wort may keep more of these antidepressant neurotransmitters available for the body to utilize. Multiple studies have shown that St. John's wort may be effective in relieving mild to moderate depression, although maximum antidepressant effects may take several weeks to develop.

St. John's Wort is an MAO inhibitor and should not be used with alcohol and some other foods.

St. John's wort has also been studied for the treatment of other emotional disorders such as anxiety, obsessive-compulsive disorder (OCD), menopausal mood swings, and premenstrual syndrome. In laboratory studies, it has shown some effectiveness for lessening the symptoms of nicotine withdrawal and for reducing the craving for alcohol in addicted animals. It is believed that chemicals in St. John's wort may act like other chemicals that are associated with relieving emotional conditions.

Possible antiviral effects of St. John's wort are being investigated for the treatment of HIV/AIDS, hepatitis C, and other viral illnesses. It is thought that hypericin, pseudohypericin, and other chemicals in St. John's wort may stick to the surfaces of viruses and keep them from binding to host cells. Another theory is that St. John's wort may contain chemicals that interfere with the production or release of viral cells. This antiviral activity is enhanced greatly by exposure to light. However, the doses needed for active antiviral effect from St. John's wort may be so high that unbearable side effects may limit its usefulness as an antiviral.

It has also been used to treat hypothyroidism and a salve made with the extract can be used topically to treat bruises, burns, insect bites and scabies.

<http://www.herbwisdom.com/herb-fennel.html>

**Fennel (*Foeniculum vulgare*)**

**Fennel Benefits**

Rich in phytoestrogens, Fennel is often used for colic, wind, irritable bowel, kidneys, spleen, liver, lungs, suppressing appetite, breast enlargement, promoting menstruation, improving digestive system, milk flow and increasing urine flow. Fennel is also commonly used to treat amenorrhoea, angina, asthma, anxiety, depression, heartburn, water retention, lower blood pressure, boost libido, respiratory congestion, coughs and has been indicated for high blood pressure and to boost sexual desire.

Fennel is a useful addition to any of the Breast Enlargement herbs and has an impressive number of other health benefits.

Fennel is also commonly used to treat amenorrhoea, angina, asthma, heartburn, high blood pressure and to boost sexual desire. Fennel is a mild appetite suppressant and is used to improve the kidneys, spleen, liver and lungs.

Fennel is an effective treatment for respiratory congestion and is a common ingredient in cough remedies.

It is also used for cancer patients after radiation and chemotherapy treatments to help rebuild the digestive system. Fennel relaxes the smooth muscle lining the digestive tract (making it an antispasmodic). It also helps expel gas.

It is a tested remedy for gas, acid stomach, gout, cramps, colic and spasms. Fennel seed ground and made into tea is believed to be good for snake bites, insect bites or food poisoning. Excellent for obesity. It increases the flow of urine. It is gargled for hoarseness and sore throats.

Available in 100 Vegetarian Capsules each 500mg pure herb. Also try our new 100ml) Fennel tincture.

Avoid internal use during pregnancy.

<http://www.herbwisdom.com/herb-dandelion.html>

**Dandelion (*Taraxacum officinale*)**

**Dandelion Benefits**

Dandelion as a medicine was first mentioned in the works of the Arabian physicians of the tenth and eleventh centuries, who speak of it as a sort of wild Endive, under the name of Taraxacon. In this country, we find allusion to it in the Welsh medicines of the thirteenth century. Dandelion was much valued as a medicine in the times of Gerard and Parkinson, and is still extensively employed.

Dandelion roots have long been largely used on the Continent, and the plant is cultivated largely in India as a remedy for liver complaints.

Daniel Mowrey PH.D, author of "The Scientific Validation of Herbal Medicine" states, "Dandelion heads the list of excellent foods for the liver." The herb has been used for centuries to treat jaundice and the yellowing of the skin that comes with liver dysfunction, cirrhosis, hepatitis and liver disease.

But liver function isn't the only use of this nutritious plant. It is also used to treat infections, swelling, water retention, breast problems, gallbladder problems, pneumonia and viruses. Studies have shown that dandelion stimulates bile flow and has a mild diuretic effect.

Modern naturopathic physicians use dandelion to detoxify the liver and reduce the side effects of prescription medications.

Dandelion is on the FDA's list of safe foods and is approved by the Council of Europe.

The chief constituents of Dandelion root are Taraxacin, acrySTALLINE and Taraxacerin, an acrid resin, with Inulin (a sort of sugar which replaces starch in many of the Dandelion family, Compositae), gluten, gum and potash. It contains substantial levels of vitamins A, C, D, B-complex, iron, magnesium, zinc, potassium, manganese, choline, calcium and boron.

Diuretic, tonic and slightly aperient. It is a general stimulant to the system, but especially to the urinary organs, and is chiefly used in kidney and liver disorders.

Dandelion is not only official but is used in many patent medicines. Not being poisonous, quite big doses of its preparations may be taken. Its beneficial action is best obtained when combined with other agents.

<http://www.herbwisdom.com/herb-fo-ti-root.html>

**Fo-ti Root (Polygonum multiflorum)**

**Fo-ti Root Benefits**

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Modern research indicates that this herb contains an alkaloid that has rejuvenating effects on the nerves, brain cells and endocrine glands. It stimulates a portion of the adrenal gland and helps to detoxify the body. It has been used for a long list of ailments including atherosclerosis, constipation, fatigue, high cholesterol, high blood pressure, blood deficiency, nerve damage, eczema, scrofula and inflammation of lymph nodes and heat toxicity. It is also indicated to boost the immune system and increase sexual vigour.

Chung Yun, a famous Chinese herbalist who reportedly lived to be 256 years old, used Fo-Ti on a daily basis. This herb is thought to have been responsible for both his long life and his legendary sexual prowess, (he was said to have had 24 wives). In another Chinese legend Fo-ti was thought to be responsible for returning natural black colour to a previously grey-haired man- He Shou Wu means "black haired Mr. He."

Thankfully, we have a little more to go on than folk medicine legends. Modern research indicates that this herb contains an alkaloid that has rejuvenating effects on the nerves, brain cells and endocrine glands. It stimulates a portion of the adrenal gland and helps to detoxify the body. Hair health, energy and sexual vigor are the products of this rejuvenation.

Processed fo-ti contains protein-sugar complexes known as lectins.

Processed fo-ti contains protein-sugar complexes known as lectins. Because they attach to specific arrangements of carbohydrates on cells in the body, lectins act like antibodies, but they do not cause allergy symptoms. The lectins in processed fo-ti may affect fat levels in the blood, helping to prevent or delay heart disease by blocking the formation of plaques in blood vessels. Plaques are accumulations of fat and other cells that restrict the size of blood vessels and limit the flexibility of their walls.

Because they attach to specific arrangements of carbohydrates on cells in the body, lectins act like antibodies, but they do not cause allergy symptoms. The lectins in processed fo-ti may affect fat levels in the blood, helping to prevent or delay heart disease by blocking the formation of plaques in blood vessels. Plaques are accumulations of fat and other cells that restrict the size of blood vessels and limit the flexibility of their walls. In animal studies, processed fo-ti also reduced the amount of fat that deposited in the liver and it may protect the liver from damage by toxins such as dry cleaning fluid. Processed fo-ti may also have immune system effects.

Although supported by a small number of animal studies and numerous human case reports from China, where processed fo-ti has been used for centuries as an anti-aging tonic, none of these uses for processed fo-ti has been confirmed by controlled studies in humans.

Blood deficiency, premature greying of the hair, nerve damage, wind rash, eczema, sores, carbuncles, goiter, scrofula and inflammation of lymph nodes and heat toxicity. The herb is also used to lower cholesterol and blood pressure and restore from exhaustion.

The whole root has been shown to lower cholesterol levels, according to animal and human research, as well as to decrease hardening of the arteries, or atherosclerosis. Other fo-ti research has investigated this herb's role in strong immune function, red blood cell formation and antibacterial action.

<http://www.herbwisdom.com/herb-elderberry.html>

**Elderberry (Sambucus nigra)**

**Elderberry Benefits**

Used for its antioxidant activity, to lower cholesterol, improve vision, boost the immune system, improve heart health and for coughs, colds, flu, bacterial and viral infections and tonsillitis. Elderberry juice was used to treat a flu epidemic in Panama in 1995.

Elderberries have been a folk remedy for centuries in North America, Europe, Western Asia, and North Africa, hence the medicinal benefits of elderberries are being investigated and rediscovered. Elderberry is used for its antioxidant activity, to lower cholesterol, to improve vision, to boost the immune system, to improve heart health and for coughs, colds, flu, bacterial and viral infections and tonsillitis. Bioflavonoids and other proteins in the juice destroy the ability of cold and flu viruses to infect a cell. People with the flu who took elderberry juice reported less severe symptoms and felt better much faster than those who did not. Elderberry juice was used to treat a flu epidemic in Panama in 1995<sup>1</sup>

Elderberries contain organic pigments, tannin, amino acids, carotenoids, flavonoids, sugar, rutin, viburnic acid, vitamin A and B and a large amount of vitamin C. They are also mildly laxative, a diuretic, and diaphoretic. Flavonoids, including quercetin, are believed to account for the therapeutic actions of the elderberry flowers and berries. According to test tube studies<sup>2</sup> these flavonoids include anthocyanins that are powerful antioxidants and protect cells against

Elderberries were listed in the CRC Handbook of Medicinal Herbs as early as 1985, and are listed in the 2000 Mosby's Nursing Drug reference for colds, flu, yeast infections, nasal and chest congestion, and hay fever. In Israel, Hasassah's Oncology Lab has determined that elderberry stimulates the body's immune system and they are treating cancer and AIDS patients with it. The wide range of medical benefits (from flu and colds to debilitating asthma, diabetes, and weight loss) is probably due to the enhancement of each individual's immune system.

At the Bundesforschungsanstalt research center for food in Karlsruhe, Germany, scientists conducting studies on Elderberry showed that elderberry anthocyanins enhance immune function by boosting the production of cytokines. These unique proteins act as messengers in the immune system to help regulate immune response, thus helping to defend the body against disease. Further research indicated that anthocyanins found in elderberries possess appreciably more antioxidant capacity than either vitamin E or vitamin C.

Studies at Austria's University of Graz found that elderberry extract reduces oxidation of low-density lipoprotein (LDL) cholesterol. Oxidation of LDL cholesterol is implicated in atherogenesis, thus contributing to cardiovascular disease.

1. J Alt Compl Mod 1995: 1:361-69 2. Youdim KA, Martin A, Joseph JA. Incorporation of the elderberry anthocyanins by endothelial cells increases protection against oxidative stress. Free Radical Biol Med 2000: 29:51-60

<http://www.herbwisdom.com/herb-bergamot-orange.html>

### **Bergamot Orange**

#### **Bergamot Orange Benefits**

The Bergamot is a surprisingly nutritious citrus fruit that has a fresh scent and a very useful essential oil which is taken from the peel. Bergamot supplements are taken for several reasons including lowering cholesterol levels, blood sugar, reducing middle obesity and arterial stiffness.

#### **Habitat**

Native to South Asia, the bergamot orange or *Citrus bergamia* was exported to Italy where it flourished and now the fruit is harvested for medicinal and commercial purposes. The fruit is the size of an orange but yellow in color. The juice is very sour and bitter, so it would be very hard to drink enough to get the benefits that can be gotten in the extract supplement.

### **Lowers Cholesterol**

Studies showed that bergamot lowered the total cholesterol levels in participants as well as the low-density lipoprotein (LDL) levels, which is a major factor for heart disease. It also raised the high-density lipoprotein (HDL) which is good and has protective benefits.

It is considered that bergamot works by blocking the production of cholesterol in the liver. Without cholesterol, the liver may be forced to find cholesterol that is stored in the bloodstream. Bergamot has compounds that are similar to commercial chemicals that are given to lower cholesterol.

Bergamot contains very large amounts of polyphenols. Brutelidin and Metilidin are two that directly inhibit the biosynthesis of cholesterol. Triglyceride levels were also lowered in the participants of these studies.

*Other uses for bergamot are-*

- Along with ultra-violet (UV) light treatment for a fungal infection tumor under the skin
- Preventative for lice and other parasites
- Treatment along with UV light for psoriasis

Bergamot is used in skin care products such as creams, soaps, perfumes, lotions and suntan oils. It is used for psoriasis as well as an antiseptic against infections and to reduce inflammation. It is also used to treat Mycosis Fungoides, a rare type of skin cancer. It increases the skin's sensitivity to sunlight, so it must not be used along with other medications that increase sensitivity to sunlight. It could cause severe sunburn and rashes and blisters. For anyone using bergamot, it is necessary to wear protective clothing and sunblock if there will be time spent in direct sunlight

### **Bergamot Essential Oil**

The essential oil used in aromatherapy is energizing and uplifting. It is used to reduce stress and calm as well as treat depression. For this purpose, it can be used as incense, or added to an essential oil diffuser. Its fragrance is very fresh and sweet and slightly fruity. It restores the appetite if the loss of appetite is due to depression. Inhaling the fragrance of the oil has been seen to reduce anxiety in people who are having radiation treatment for cancer.

*The principal constituents of bergamot orange oil are-*

- Linalol for the fragrant scent
- Linalyl acetate for the pleasant odor
- Sesquiterpenes for antibacterial, antiseptic or anti-inflammatory properties and for its calming effect
- Terpenes shape the properties of the pleasant odor and taste
- Furocoumarins used as treatment for pigment loss in skin
- Bergapten for the treatment of pigment loss in skin
- Alkanes for lubrication
- Alcohols

A small amount can also be added to bath water, but if it is too concentrated, it can be harsh on the skin.

### **Dosage**

There are no guidelines for the dosage of bergamot orange for high cholesterol, but usually two to four 500 milligrams of extract in capsules is taken on an empty stomach once or twice a day for a month. After that, one capsule per day is taken to maintain the bergamot in the blood. The dosage for using the essential oil depends on the user's health, age and other conditions, and the recommendations on the label should be followed.

Bergamot oil and zest is used in very small amounts as a flavoring in food, and this is safe for most people. It is used as a citrus flavoring element in gelatins and puddings.

<http://www.herbwisdom.com/herb-chamomile.html>

**Chamomile (*Matricaria recutita*)**

**Chamomile Benefits**

Dried chamomile flower is an age-old medicinal drug known in ancient Egypt, Greece and Rome. Chamomile's popularity grew throughout the Middle Ages, when people turned to it as a remedy for numerous medical complaints including asthma, colic, fevers, inflammations, nausea, nervous complaints, children's ailments, skin diseases and cancer. As a popular remedy, it may be thought of as the European counterpart of ginseng.

Recent and on-going research has identified chamomile's specific anti-inflammatory, anti-bacterial, anti-allergenic and sedative properties, validating its long-held reputation. This attention appears to have increased the popularity of the herb and nowadays Chamomile is included as a drug in the pharmacopoeia of 26 countries.

Chamomile has been used for centuries in teas as a mild, relaxing sleep aid, treatment for fevers, colds, stomach ailments, and as an anti-inflammatory, to name only a few therapeutic uses. Extensive scientific research over the past 20 years has confirmed many of the traditional uses for the plant and established pharmacological mechanisms for the plant's therapeutic activity, including anti-peptic, antispasmodic, antipyretic, antibacterial, antifungal, and anti-allergenic activity.

In addition to medicinal use, chamomile enjoys wide usage, especially in Europe and the U.S., as a refreshing beverage tea and as an ingredient in numerous cosmetic and external preparations. Rob McCaleb, President of the Herb Research Foundation in Boulder, Colorado estimates that over one million cups of Chamomile tea are ingested worldwide each day, making it probably the most widely consumed herb tea.

Although best known as a muscle relaxant and antispasmodic, chamomile is also believed to have antiseptic and anti-inflammatory capabilities. The plant's healing properties come from its daisy-like flowers, which contain volatile oils (including bisabolol, bisabolol oxides A and B, and matricin) as well as flavonoids (particularly a compound called apinegin) and other therapeutic substances. Chamomile may be used internally or externally. As a popular remedy, it may be thought of as the European counterpart of ginseng.

*Specifically, chamomile may:*

as a tea, be used for lumbago, rheumatic problems and rashes.

as a salve, be used for haemorrhoids and wounds.

as a vapor, be used to alleviate cold symptoms or asthma.

relieve restlessness, teething problems, and colic in children.

relieve allergies, much as an antihistamine would.

aid in digestion when taken as a tea after meals.

relieve morning sickness during pregnancy.

speed healing of skin ulcers, wounds, or burns.

treat gastritis and ulcerative colitis.

reduce inflammation and facilitate bowel movement without acting directly as a purgative.

be used as a wash or compress for skin problems and inflammations, including inflammations of mucous tissue.

promote general relaxation and relieve stress. Animal studies show that chamomile contains substances that act on the same parts of the brain and nervous system as anti-anxiety drugs. Never stop taking prescription medications, however, without consulting your doctor.

control insomnia. Chamomile's mildly sedating and muscle-relaxing effects may help those who suffer from insomnia to fall asleep more easily.

Treat diverticular disease, irritable bowel problems and various gastrointestinal complaints.

Chamomile's reported anti-inflammatory and

antispasmodic actions relax the smooth muscles lining the stomach and intestine. The herb may therefore help to relieve nausea, heartburn, and stress-related flatulence. It may also be useful in the treatment of diverticular disorders and inflammatory bowel conditions such as Crohn's

soothe skin rashes (including eczema), minor burns and sunburn. Used as a lotion or added in oil form to a cool bath, chamomile may ease the itching of eczema and other rashes and reduces skin inflammation. It may also speed healing and prevent bacterial infection.

treat eye inflammation and infection. Cooled chamomile tea can be used in a compress to help soothe tired, irritated eyes and it may even help treat conjunctivitis.

heal mouth sores and prevent gum disease. A chamomile mouthwash may help soothe mouth inflammations and keep gums healthy.

reduce menstrual cramps. Chamomile's believed ability to relax the smooth muscles of the uterus helps ease the discomfort of menstrual cramping.

<http://www.herbwisdom.com/herb-colloidal-silver.html>

### **Colloidal Silver**

#### **Colloidal Silver Benefits**

Colloidal silver is a health supplement that is created by immersing tiny particles of silver in a colloidal base solution. It is consumed by those who would like to stave off such serious health ailments as cancer, AIDS and herpes. Silver is thought to make the immune system more active and thereby more effective at fending off disease. It is most commonly available in a liquid form that is dispensed with a dropper. Clear or pale yellow colloidal silver is the best as the particle size affects the colour of the solution and the larger particles produce a darker coloured liquid but they aren't easily absorbed by the body.

**History of Use** Before the invention of antibacterial soap, colloidal silver was used as a disinfectant. It is still most commonly used to kill bacteria. Silver is effective at both preventing and combating bacterial illnesses and infections because it does not corrode. In ancient times silver was used in wound dressings and it was frequently used for the same purposes in America following the Civil War. It is also why churches use silver chalices in Communion to stop disease spreading through the congregation. Silver fell out of favor with the advent of regulated synthesized medications but has become popular again along with lifestyle trends that promote natural organic food.

**Blue Bloods** Even thousands of years ago, Ancient Greeks realised that the rich families who ate, drank and stored food in silverware were much less likely to be ill than the commoners who ate from ceramics and used iron utensils. The rich people developed a slight blue tinge to their skin from years of silver ingestion, hence the term Blue Bloods was born.

How it Works Proponents of colloidal silver claim that it is effective against every virus and illness and that it has never reacted dangerously with other medications. Scientific studies have shown that pure silver quickly kills bacteria. It even kills the super-bacteria that evolve after conventional disinfecting agents kill the weak strains of bacteria. Silver acts as a catalyst and disables an enzyme that facilitates actions inside cells. It is not consumed in the process so it is available to keep working again and again. The enzyme silver destroys is required by anaerobic bacteria, viruses, yeast and molds. (Unfriendly bacteria tend to be anaerobic and friendly bacteria aerobic). This is the action that destroys pathogens. It stops them from using the body's own cells as vehicles for replication. Colloidal silver creates an environment that makes it impossible for pathogens to survive and multiply.

Since it is not designed to combat a specific pathogen but rather works against the very nature of their life cycles, it is an effective preventative agent against all illnesses caused by all pathogens including future mutations. There is no known disease-causing organism that can live in the presence of even minute traces of colloidal silver. Laboratory tests show that anaerobic bacteria, virus, and fungus organisms are all killed within minutes of contact. Parasites are also killed whilst still in their egg stage. Colloidal Silver is effective against infections, colds, influenza, fermentation and parasitic infestations.

Colloidal Silver is touted as a treatment for HIV and AIDS. These claims have not been recognized by the medical community but there is no denying the lengthy survival rates of some AIDS patients who swear by colloidal silver.

The same mechanism that hinders the replication of pathogens also seems to prevent the body from developing cancer. Cancerous tumors form when the cells' internal regulators stop working. The cells divide at a rate that outstrips the body's need for them. Colloidal silver recalibrates cells' rates of division.

When colloidal silver is used as a broad-spectrum viral and bacterial preventative it may cure other seemingly unrelated ailments. People who have sustained severe burns can use colloidal silver to promote healthy cell growth and fend off infections. It reduces the appearance of acne that is bacterial in origin. It helps maintain a healthy digestive environment and it maximizes the amount of nutrients that the body is able to extract from food. Colloidal silver makes it impossible for parasites to flourish and lay their eggs.

Colloidal Silver is also effective as a digestive aid when taken with meals as it stops fermentation of food in the stomach and intestines. Fermentation can occur if food sits there for too long and this can lead gas, bloating, pain, indigestion and reflux, so taking silver can help avoid all these unpleasant symptoms which a lot of people suffer with after meals.

Silver has also been known to destroy water-borne parasites and to filter out impurities.

How to Use People who use colloidal silver tend to develop their own ways of maximizing its efficacy. People who suffer from conjunctivitis sometimes drop it directly into their eyes several times every day. Throat problems are treated by gargling colloidal silver. The most common way to ingest it is to mix three or four drops into a large glass of water.

Side Effects All of these positive claims considered, colloidal silver is still ignored by the medical community at large. Scientifically speaking, the human body has no essential need for silver. Someone who is overzealous in his consumption may experience a build-up of the metal in his organs. The most common negative side effect of colloidal silver is a condition called argyria. It causes the skin and eyes to permanently become grey but it does not otherwise affect one's health. It is claimed that silver does not interact with other drugs or herbs.

<http://www.herbwisdom.com/herb-cla.html>

**Conjugated Linoleic Acid - CLA**

**Conjugated Linoleic Acid - CLA Benefits**

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Conjugated Linoleic Acid - CLA reviews

Conjugated linoleic acid (CLA) is a type of unsaturated fatty acid that is found in meat and dairy products of ruminant animals, such as cows and sheep. CLA consist of at least 28 different forms (isomers) of the fatty acid known as Linoleic acid. Conjugated forms of Linoleic acid are where there are at least two double bonds in the molecule, with only a single bond between them.

Even though meat and dairy products are the best sources of CLA, many people today choose to take it in the form of a supplement. Researchers have studied the effects of CLA since the 1970s, and they have found that CLA has many potential health benefits.

*Below are some of the potential benefits:*

#### **Prevention of Cancer**

There have been studies performed on animals that have shown that increasing one's intake of CLA by 0.5 percent can reduce the risk of cancer by up to 50 percent. Breast, colon, skin and stomach cancer are the types that this supplement can potentially help prevent. CLA helps prevent cancer by reducing the growth of both benign and malignant tumors.

#### **Improves Insulin Sensitivity**

Type 2 diabetes is the most prevalent type of diabetes. It occurs when the body produces insulin, but the cells are unable to respond to it. There was a study done where type 2 diabetic mice were given a CLA supplement. The results of the study showed that CLA can improve insulin action and decrease blood glucose.

Furthermore, there was an eight-week study performed on humans that showed similar results. Researchers believe that CLA mimics the actions of synthetic diabetic drugs.

#### **Promotes Weight Loss**

Health experts have been debating about whether or not CLA can cause weight loss. However, there has been evidence to suggest that this supplement can indeed have a modest effect on weight loss. One of the studies was performed by Lipid Nutrition, which is a company in Los Angeles that sells weight loss products.

The study consisted of 105 subjects who were placed into two groups. One of the groups was given a CLA supplement while the other group was given a placebo. The results of the study showed that the subjects who were given the CLA supplement lost an average of 5.6 percent more body fat than the placebo group. They also lost an average 3.3 pounds more than the

#### **Improves Immune System Function**

Some studies suggest that people who take CLA supplements suffer from fewer colds and are less likely to develop the flu. CLA helps reduce the amount of prostaglandins and leukotrienes in the body. Both of these substances can potentially suppress the immune system. Additionally, CLA can benefit people who suffer from allergies. This supplement can block the release of IgE antibodies, which are the antibodies that trigger allergies.

#### **Prevent Heart Disease**

Heart disease is the top killer of both men and women in the United States. CLA supplements have been shown to potentially reduce the risk of this condition. This supplement helps reduce LDL, which is better known as the bad cholesterol. High cholesterol is one of the major risk factors for heart disease.

CLA can also help prevent atherosclerosis. Atherosclerosis is a condition that causes plaque to build up in the arteries. This condition can potentially lead to strokes and heart attacks.

### **Arthritis Management**

Arthritis is a condition that causes pain and inflammation around the joints. CLA has anti-inflammatory properties and can potentially help treat and prevent arthritis.

<http://www.herbwisdom.com/herb-cumin.html>

### **Damiana (Turnera aphrodisiaca)**

#### **Damiana Benefits**

Damiana leaves have been used as an aphrodisiac and to boost sexual potency by the native peoples of Mexico, including the Mayan Indians and is used for both male and female sexual stimulation, increased energy, asthma, depression, impotence and menstrual problems.

Damiana is a small shrub with aromatic leaves found on dry, sunny, rocky hillsides in south Texas, Southern California, Mexico, and Central America. Damiana leaves have been used as an aphrodisiac and to boost sexual potency by the native peoples of Mexico, including the Mayan Indians. The two species used in herbal healing, both of which are referred to as damiana, are *Turnera aphrodisiaca* and *Turnera diffusa*.

Historically damiana has been used to relieve anxiety, nervousness, and mild depression, especially if these symptoms have a sexual component. The herb is also used as a general tonic to improve wellness.

Damiana has also been used traditionally to improve digestion and to treat constipation, as in larger doses it is thought to have a mild laxative effect.

It is well known in south-western cultures as a sexuality tonic and is recommended by many top herbalists. It stimulates the intestinal tract and brings oxygen to the genital area. It also increases energy levels which does a lot to restore libido and desire. In women, Damiana often restores the ability to achieve orgasm. Damiana is used primarily as an energy tonic and an aphrodisiac for both men and women.

Damiana has a dual effect. It can work quickly to stimulate the genital area by enriching the oxygen supply. Longer term use can improve sexual fitness and performance.

The libido-boosting power of damiana hasn't been tested in humans, although a liquor made from the leaves has long been used as an aphrodisiac in Mexico. In animal studies, extracts of damiana speeded up the mating behavior of "sexually sluggish" or impotent male rats. It had no effect on sexually potent rats.

The chemical composition of damiana is complex and all of the components have not been completely identified. However, the known make-up is 0.5-1% volatile oil, flavonoids, gonzalitosin, arbutin, tannin and damianin (a brown bitter substance). It also contains essential oils (containing cineol, cymol, pinene), cyanogenic glycosides, thymol and trace amounts of phosphorus.

How damiana works as an aphrodisiac is currently not known. It is also claimed that when drunk as a tea it has a relaxing effect not-unlike low doses of cannabis.

<http://www.herbwisdom.com/herb-feverfew.html>

### **Feverfew (*Tanacetum parthenium*)**

#### **Feverfew Benefits**

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Used for the prevention of migraines & headaches, arthritis, fevers, muscle tension and pain, Feverfew is also used to lower blood pressure, lessen stomach irritation, stimulate the appetite and to improve digestion and kidney function. It has been indicated for colitis, dizziness, tinnitus and menstrual problems.

Herbal medicine has an impressive track record in treating migraines and chronic headaches. Feverfew treats the cause of the headaches rather than simply the pain. Both the British Medical Journal and the Harvard Medical School Health Letter have paid tribute to the success of feverfew in relieving migraines.

Clinical tests have shown the use of feverfew may reduce of frequency and severity of headaches. It may be more effective than other non-steroidal antiinflammatories (NSAIDS), like aspirin. It is the combination of ingredients in the feverfew plant that brings such effective relief. It works to inhibit the release of two inflammatory substances, serotonin and prostaglandins, both believed to contribute to the onset of migraines. By inhibiting these amines as well as the production of the chemical histamine, the herb controls inflammation that constricts the blood vessels in the head and prevents blood vessel spasms which may contribute

In several studies, both the frequency and the severity of migraines were reduced among study participants who took feverfew daily as a preventive measure. However, active migraine headaches were not relieved by taking feverfew. Feverfew should be taken regularly to receive maximum benefit and protection from migraines.

Menstrual cramps occur when the uterine lining produces too much prostaglandin, a hormone that can cause pain and inflammation. Because it can help limit the release of prostaglandin, feverfew may have a role to play in easing menstrual cramps. While more research is required, there's probably no harm in starting to take feverfew a day before you anticipate that your menstrual cramps will begin.

Feverfew has also been used for relieving the pain and inflammation of arthritis. It is known that chemicals in feverfew may reduce the body's production of substances that initiate and prolong inflammation, which is the body's response to irritation, injury, or infection. Inflammation usually includes pain, redness, and swelling in the area of the damage, and it can occur within body tissues as well as on the surface of the skin. Chemicals in feverfew are thought to prevent blood components called platelets from releasing inflammatory substances. Feverfew may also reduce the body's production of prostaglandins, hormone-like substances made in the body and involved in regulating a number of body functions including blood pressure, blood vessel tone, and temperature, as well as inflammation. All of these effects could help relieve fever, arthritis, and migraines.

Additional benefits include lower blood pressure, less stomach irritation and a renewed sense of well-being. Feverfew has been used to stimulate appetite, and improve digestion and kidney function. It may also relieve dizziness, tinnitus, and painful or sluggish menstruation. Its extracts have been claimed to relieve asthma, coughs, dermatitis and worms.

25 million Americans spend \$5 billion a year on medication for migraines. But many of the over-the-counter and prescription pain killers have a "rebound effect" after a period of use. The unfortunate consequence is that the drug actually begins to cause the headache. Feverfew does not have this problem and is recommended by experts such as Dr. Andrew Weil as an effective alternative for headache sufferers. Since Feverfew is a fraction of the cost of the pharmaceutical drugs and has been shown to be effective for over two-thirds of those who use it consistently, the savings could be enormous.

<http://www.herbwisdom.com/herb-echinacea.html>

#### **Echinacea purpurea**

#### **Echinacea purpurea Benefits**

Echinacea should be of particular interest during the cold and flu season when you are exposed to these illnesses on a regular basis. When used correctly it is the closest thing to a cure for the common cold.

Echinacea stimulates the overall activity of the cells responsible for fighting all kinds of infection. Unlike antibiotics, which directly attack bacteria, echinacea makes our own immune cells more efficient at attacking bacteria, viruses and abnormal cells, including cancer cells. It increases the number and activity of immune system cells including anti-tumor cells, promotes T-cell activation, stimulates new tissue growth for wound healing and reduces inflammation in arthritis and inflammatory skin conditions.

The most consistently proven effect of echinacea is in stimulating phagocytosis (the consumption of invading organisms by white blood cells and lymphocytes). Extracts of echinacea can increase phagocytosis by 20-40%.

Echinacea also stimulates the production of interferon as well as other important products of the immune system, including "Tumor Necrosis Factor", which is important to the body's response against cancer.

Echinacea also inhibits an enzyme (hyaluronidase) secreted by bacteria to help them gain access to healthy cells. Research in the early 1950's showed that echinacea could completely counteract the effect of this enzyme, helping to prevent infection when used to treat wounds.

Although echinacea is usually used internally for the treatment of viruses and bacteria, it is now being used more and more for the treatment of external wounds. It also kills yeast and slows or stops the growth of bacteria and helps to stimulate the growth of new tissue. It combats inflammation too, further supporting its use in the treatment of wounds.

<http://www.herbwisdom.com/herb-cranesbill-geranium.html>

#### **Cranesbill/Geranium**

#### **Cranesbill/Geranium Benefits**

The roots of Cranesbill (*Geranium maculatum*) contain a powerful ingredient called tannin. Tannin is responsible for soothing the digestive tract, and it is useful in preventing and treating frequent diarrhoea.

Many people turn to harsh over-the-counter liquid medications and horse pills to deal with gastrointestinal problems. Patients with gastrointestinal ailments are increasingly looking for ways to naturally treat their conditions without the use of synthetic medications. Cranesbill has been used for centuries as a way to treat such problems. The raw plant was used in the past but it is available today in easy-to-use supplements.

### **Facts**

Cranesbill is indigenous to the North-eastern United States, where the herb has been utilized as a natural remedy for centuries. The plant is most commonly referred to as a geranium, and it features small flowers in a variety of colors. Many people feature the flowers in their gardens without even realizing the potential healing powers that the plants possess when used as herbs.

### **Active Ingredients**

Geraniums look pretty, but the roots of cranesbill contain a powerful ingredient called tannin. Tannin is responsible for soothing the digestive tract, and it is useful in preventing and treating frequent diarrhoea. The primary active ingredient can also act as a natural astringent to reduce inflammation and redness related to skin conditions, such as sores.

Cranesbill contains other active ingredients that can potentially interact with other herbs that have the same features. The ingredients include calcium oxalate, gallic acid and potassium. Take care in combining herbal treatments to reduce the possibility of interactions.

### **Health Benefits**

Cranesbill best benefits those with mild gastrointestinal ailments. The presence of tannin in the herb may help alleviate diarrhoea, inflammation in the bladder and other symptoms related to Chron's disease. Cranesbill may also be applied topically to help treat haemorrhoids. Less common uses of the herb are for the treatment of eye conditions, such as conjunctivitis and moderate retina irritations. Diabetic patients may turn to cranesbill as a possible natural treatment for vision problems.

Historically, cranesbill was also used in folk medicine to stop abnormal bleeding, including that related to menstruation and uterine problems. However, this potentially life-threatening problem is best addressed with an emergency medical professional. Herbal remedies like cranesbill are most appropriate for the use of mild to moderate health ailments. Never replace emergency medical treatment with a herbal remedy.

### **Instructions**

Like many herbs, the healing power of cranesbill is derived from the roots. Capsules are the most common forms of the herb today, and they are best taken once or twice a day with a glass of water. Experienced herb users might opt for a tea version, which is brewed with hot water and consumed throughout the day. Tincture versions of cranesbill can be more powerful than tea and capsules, so it is important to take extra care. Generally, users take ½ a teaspoon at a time, twice a day.

<http://www.herbwisdom.com/herb-holly.html>

### **Holly**

#### **Holly Benefits**

It may surprise some to learn that the leaves of certain types of holly are used for medicinal purposes. They are utilized to combat issues such as digestive maladies, rheumatism, fever, high blood pressure and more. When it is taken in the correct dosage and format, the plant can serve as an invaluable remedy for an assortment of health conditions.

*Which varieties of Holly are used?* Many people only think of holly as a decorative plant used during winter holidays. Others are aware that its berries can be highly toxic when ingested. Only the leaves of certain species of holly plants are employed for medicinal use. Examples of some of the types used include *Ilex vomitoria*, which is also known as Yaupon holly, and *Ilex aquifolium*, which is commonly referred to as European holly. *Ilex opaca* is another kind of holly that is utilized for herbal supplementation, and it is commonly called American holly.

Yaupon holly is a native species of the south-eastern part of the North American continent. It can grow in various types of soil, and it is fairly resistant to many pest species. While European holly was originally grown in the central and southern parts of Europe, it is now grown in the north-western regions of Canada and the United States. The European variety grows well in densely wooded places. American holly originates from the eastern part of the United States, and it thrives in coastal and wetlands areas.

*Holly Berries* Although holly berries have been used by some in a purgative capacity, they can also cause excessive diarrhoea, vomiting and dehydration. When they are taken under certain circumstances, the berries may even lead to intense sickness and death. The leaf is the part of the plant that is typically used for medicinal purposes.

*Holly Leaves* After they have been dried, the leaves can be implemented in the form of a tea. While there is not a set standard of how much to take at one time, a common dosage is a few teaspoonfuls of dried leaves per cup of water. The beverage is often taken a few times per day. Another method used to ingest holly leaves is to swallow a liquid extract. When it is taken in this form, several drops may be ingested over the course of a day.

*Active Ingredients* The primary active ingredient in holly is caffeine, and this should be taken into consideration by those who use it as a health aid. The berries typically contain a higher concentration of caffeine than is found in the leaves. The amount found in some holly leaves is undetermined, but Yaupon leaves can contain as much as .65 to .85 percent of caffeine.

*Ailments* Holly Leaves are used for Holly leaves are utilized to offset a variety of health disorders. One common ailment they are used to remedy is hypertension, which is also referred to as high blood pressure. The leaves can have a calming effect, and they have been known to facilitate better arterial function and blood circulation in some individuals.

Other ailments that the leaves are used to treat include fever, rheumatism and digestive issues. Some species are utilized for their emetic properties, and others are employed to assist with symptoms such as joint pain and swelling. Holly leaf extract is sometimes used to combat jaundice, dizziness and emotional problems. In some cases, holly is even utilized as a method of fighting heart disease.

While it is true that holly is widely utilized for its aesthetic qualities, it is also valued for its medicinal properties. When they are used properly, holly leaves may offer people an alternative to modern medical treatments. In other cases, the leaves may be implemented to enhance medical treatments that are currently in use. The plant has been employed for centuries as an herbal remedy, and it is likely that people will continue to use it in such a capacity.

<http://www.herbwisdom.com/herb-goldenseal.html>

## **Goldenseal (*Hydrastis canadensis*)**

### **Goldenseal Benefits**

Goldenseal is one of the most popular herbs sold on the American market and has recently gained a reputation as a herbal antibiotic and immune system enhancer. American Indians used goldenseal as a medication for inflammatory internal conditions such as respiratory, digestive and genito-urinary tract inflammation induced by allergy or infection. The Cherokee used the roots as a wash for local inflammations, a decoction for general debility, dyspepsia, and to improve appetite. The Iroquois used a decoction of the root for whooping cough, diarrhoea, liver disease, fever, sour stomach, flatulence, pneumonia, and with whiskey for heart trouble. They also prepared a compound infusion with other roots for use as drops in the treatment of earache and as a wash for sore eyes.

It was not until 1798 that its medicinal virtues began to attract attention. From then on its reputation as a powerful healing herb spread, both in England and America, and by about 1850 it had become an important article of commerce. It was popularly used as a bitter stomach digestive (to help stimulate digestion and improve appetite), to treat skin inflammations, and those of the eyes such as conjunctivitis. It was also used for inflammation of the mucous membranes of the throat and digestive system. Its traditional uses also include the treatment of peptic ulcers, gastritis, dyspepsia and colitis. It is said to stimulate appetite and generally have a toning effect on the whole body has also been used for anorexia nervosa. It is also said to be effective for treatment of catarrhal conditions of the upper respiratory tract and inflammations of the urinary tract.

Goldenseal's numerous uses are attributed to its antibiotic, anti-inflammatory and astringent properties. It soothes irritated mucus membranes aiding the eyes, ears, nose and throat. Taken at the first signs of respiratory problems, colds or flu, Goldenseal helps can help to prevent further symptoms from developing. It has also been used to help reduce fevers, and relieve congestion and excess mucous.

Goldenseal cleanses and promotes healthy glandular functions by increasing bile flow and digestive enzymes, therefore regulating healthy liver and spleen functions. It can relieve constipation and may also be used to treat infections of the bladder and intestines as well.

Goldenseal contains calcium, iron, manganese, vitamin A, vitamin C, vitamin E, B-complex, and other nutrients and minerals. The roots and rhizomes of goldenseal contain many isoquinoline alkaloids, including hydrastine, berberine, canadine, canadoline, and l-hydrastine as well as traces of essential oil, fatty oil and resin. It is believed that the high content of these alkaloids gives its antibiotic, anti-infective and immune stimulating qualities.

In particular it is the alkaloid berberine that is most likely responsible for Goldenseal's effectiveness against bacteria, protozoa, fungi, Streptococci and it also promotes easier removal of the bacteria by inhibiting their ability to adhere to tissue surfaces. Berberine is also anti-fungal and strongly anti-diarrhoeal. It aids against the infection of mucous membranes such as the lining of the oral cavity, throat, sinus, bronchi, genito-urinary tract and gastrointestinal tract. Clinical studies have shown it is effective in the treatment of diarrhoea cause by *E. coli* (traveller's diarrhoea), *Shigella dysenteriae* (shigellosis), *salmonella paratyphi* (food poisoning), *giardia lamblia* (giardiasis), and *vibrio cholerae* (cholera).

Goldenseal may also help with allergic rhinitis, hay fever, laryngitis, hepatitis, cystitis, and alcoholic liver disease.

It has proven its value in cases of diarrhoea and haemorrhoids. Its astringent properties have also been employed in cases of excessive menstruation and internal bleeding. Externally, a wash can be prepared to treat skin conditions such as eczema and ringworm, as well as wounds and badly healing sores, or used as drops in cases of earache and conjunctivitis. The decoction is also said to be effective as a douche to treat trichomonas and thrush. As a gargle it can be employed in cases of gum infections and sore throats. The application of a paste or poultice containing goldenseal root is sometimes recommended for boils, abscesses and carbuncles on the grounds that Goldenseal helps to kill bacteria and reduce inflammation.

<http://www.herbwisdom.com/herb-ginkgo-biloba.html>

### **Ginkgo biloba**

#### **Ginkgo biloba Benefits**

Ginkgo biloba has been traced back nearly 300 million years making it the oldest surviving tree species on earth! The Chinese have used the plant medicinally for eons but many of the modern applications come from the research of German scientists. Ginkgo is a prescription herb in Germany.

Ginkgo Biloba is especially good when combined with Panax Ginseng.

Ginkgo extract has proven benefits to elderly persons. This ancient herb acts to enhance oxygen utilization and thus improves memory, concentration, and other mental faculties. The herbal extract has also been shown to significantly improve long-distance vision and may reverse damage to the retina of the eye. Studies have also confirmed its value in the treatment of depression in elderly persons. The ginkgo extract may provide relief for persons with headache, sinusitis, and vertigo. It may also help relieve chronic ringing in the ears known as tinnitus.

In studies, Ginkgo biloba has been reported as demonstrating anti-oxidant abilities with improvements of the platelet and nerve cell functions and blood flow to the nervous system and brain. It has also been reported as reducing blood viscosity. Its ability to increase vascular dilation, may help reduce retinal damage due to macular degradation and may reverse deafness caused by reduced blood flow.

Recently, extensive research on the herb has been conducted on the healing properties of the leaf extract. Germany and France have run literally hundreds of studies on the leaf extract. These studies along with similar studies in America, have shown significant results. The extract of Ginkgo biloba has been studied for its effectiveness in the treatment of Acrocyanosis, Alzheimer's disease, Cerebral atherosclerosis, Cerebral insufficiencies, Cochlear deafness, Dementia, Depression, Menopause, Peripheral and cerebral circulatory stimulation, Peripheral vascular disease, Raynaud's syndrome, Retinopathy, Senility, Short-term memory loss, Tinnitus, Vascular Diseases, and Vertigo.

It is said to be effective in improving the blood flow to the hands and the feet as well as stimulating the brain and reducing short-term memory loss. It increases blood flow to the brain, the uptake of glucose by brain cells, and has been said to improve the transmission of nerve signals.

*Depression:* Patients suffering from varying degrees of vascular insufficiency also noted an improvement in mood while taking ginkgo biloba extract. This has prompted a surge of interest in its use as a treatment for depression, especially in the elderly. Many people have found GBE to enhance other depression treatments and to often even prevent the need for pharmaceutical treatments in mild cases of depression. Those under the age of fifty may also benefit from ginkgo biloba's antidepressant effects. So far though, the greatest level of improvement has been noted with older patients.

*Alzheimer's & Mental Function:* As more than 300 studies demonstrate, ginkgo facilitates better blood flow through out the body, most notably the brain, where it both protects and promotes memory and mental function, even for people with Alzheimer's disease. It also offers a wealth of possibilities in the treatment of many other common ailments.

*\*\*Alzheimer's:* \*\*Since doctors are still not sure what causes Alzheimer's disease, we do not have a definite idea of how ginkgo works to stabilise, and in some cases, improve the quality of life for those suffering from this degenerative disease. Scientists have noted that Alzheimer's is marked by a major loss of nerve cells in the brain, particularly those in areas controlling memory and thinking. Since doctors have found antioxidants to help slow the destruction of nerves, it is not a stretch to see ginkgo's antioxidant properties helping in this area. The disease is also believed to have a connection to decreased blood flow to the brain. If so, ginkgo's vasodilating effects may be a big help in the treatment process. Either way,

prominent doctors and scientists believe ginkgo to be the supplement of choice to help hold off and possibly treat Alzheimer's.

*Antioxidant Properties:* Although oxygen is essential for life, it can have adverse effects on your body. Unstable oxygen molecules can often be created during our body's normal break down and use of oxygen or can form in response to external factors and pollutants. These unstable molecules, called free radicals, can damage cells and structures within cells. If the genetic material in cells is affected and not repaired, it can replicate in new cells, contributing to cancer and other health problems. These free radicals may also weaken artery walls, allowing fatty deposits that can lead to heart disease. As an antioxidant, ginkgo biloba combats free radicals and repairs molecular damage. A great deal of research suggests that antioxidants such as GBE may play important roles in preventing or delaying heart disease, cancer and other ills. Antioxidants may even halt the damage to cells, thereby slowing the effects of aging.

*Impotency:* Another use for ginkgo biloba is in the treatment of impotency. The main cause of male impotence is poor circulation and impaired blood flow through the penis, which is often the result of atherosclerosis. Since ginkgo biloba increases blood flow, it's been found to help up to fifty percent of patients after six months of use.

*Raynaud's disease:* Raynaud's disease is believed to be caused by blood vessels that over react to the cold and spasm, reducing blood flow and there by depriving extremities of oxygen. Ginkgo biloba may help this condition by widening the small blood vessels, which would keep these spasms from completely blocking the blood flow.

*\*\*Parkinson's Disease:* \*\*The lack of dopamine is believed to produce the progressive stiffness, shaking and loss of muscle coordination typical in Parkinson's disease. Doctor's theorise that along with other treatments, Ginkgo biloba may help symptoms by increasing the brain's blood flow and there by allowing more of the depleted dopamine to be circulated to the areas that need it most.

*Other Conditions:* Other uses for which ginkgo biloba extract is often recommended include depression, diabetes related nerve damage and poor circulation, allergies, vertigo, short-term memory loss, headache, atherosclerosis, tinnitus, cochlear deafness, macular degeneration, diabetic retinopathy, and PMS.

*Strokes:* Scientists continue to study the prevention and treatment benefits to stroke patients that are attributed to GBE. It's believed that by preventing blood clots from developing and increasing the blood flow to the brain, ginkgo biloba may help stop strokes from occurring. It's also believed that the herb inhibits free-radical damage of brain cells after a stroke.

*Multiple sclerosis & Organ transplant:* GBE also appears to have an anti-inflammatory action that may make it valuable in the future for conditions such as multiple sclerosis and organ transplants.

<http://www.herbwisdom.com/herb-liverworth.html>

## **Liverwort**

### **Liverwort Benefits**

Also known as American Liverwort and by its scientific name, *Anemone hepatica*, this perennial herb has a long history of medicinal herbal use especially for liver ailments. References to Liverwort can be found in the pages of Maude Grieve's 1931 *Modern Herbal* and in the *Physician's Desk Reference for Herbal Medicine*.

**Habitat and Cultivation** Liverwort prefers deciduous forests with loamy soil, but the plant has been found in clay soils, lime soils, and in grasslands. It is indigenous to the eastern United States, ranging as far north as Iowa and south to the Florida pan-handle. Typically a lowland plant, it has been spotted in the Allegheny mountain range. Many variations of the species *hepatica* exist around the world, including those on the Asian and European continent. At least one variation is indigenous to Japan. Taxonomists continue to argue over liverwort's standing in relation to these relatives.

Liverwort is a deep-rooted and hardy plant. It requires good drainage and can survive in most soils that meet this requirement. Unlike other medicinal herbs, this one actually prefers a rich, porous soil and shelter, hence its profusion in lowland, deciduous forests.

The leaves are the medicinal part and should be harvested while the plant is in bloom and dried in the shade.

The Liverwort plant is considered to be endangered in many areas, though its broad, dark-green leaves can still be found in temperate forests and grasslands across the world. Many early herbalists treated the plant dismissively, and modern science has yet to widely investigate the qualities ascribed to it centuries past.

*Historic and Modern Uses* This herb was first identified by the Doctrine of Signatures and has been mistaken numerous times over the centuries for other herbal remedies. The first pharmaceutical reference comes from Tournefort's 1708 *Materia Medica*. It has been classified as an astringent, gentle herb suitable for topical applications in healing wounds and biliary complaints, from gallstones to jaundice. Grieve considered *hepatica* as an expectorant useful in bronchial conditions. Due to conflicts between authors, who were promoting their own herbal remedies through publication of herbal lists, liverwort appears prominently in some texts and is utterly ignored in others.

Preparations of liverwort are now primarily used for liver ailments. Herbalists may occasionally provide a topical rinse or liniment of the herb for skin conditions. Owing to the lack of scientific evidence confirming the actions of liverwort, it may be best thought of as a gentle tonic for the liver, instead of a primary remedy.

**Active Constituents** Primary constituents of prepared *hepatica* include flavonoids and saponins. Saponins are also found in a number of more widely known medicinal herbs including ginseng, soy bean and onions. Saponins have shown immuno-modulating, anti-inflammatory, and expectorative properties. This suggests early uses of Liverwort in lung illnesses were correct.

Flavonoids are considered the active constituents of Liverwort and include flavo-glycosides, anthocyan, and lactone-forming glycosides. Anthocyanins are what give red fruit its colour. They have been investigated extensively for anti-inflammatory action with positive results. The flavo-glycosides in hepatica include quercimeritrin, isoquercitrin, and astragalin.

Astragalin has shown some efficacy in treating dermatitis.

Isoquercitrin is a superior form of quercetin, due to better absorption, and both have been proven to aid capillary health by strengthening vessel walls.

Quercimeritrin is broken down to quercetin and glucose during digestion.

The plant must be prepared carefully prior to use, because the fresh plant contains the precursor ranunculins, which produce protoanemonines on contact with the skin and mucous membranes. These compounds can cause blisters, which heal slowly. Severe irritation of the digestive tract follows ingestion of the unprocessed plant.

**Dosage Forms and Amounts** No side effects have been reported from therapeutic dosage of liverwort. The fresh plant should be avoided, due to irritating constituents that are destroyed through drying and preparation. There is no defined dosage for liverwort rinses or liniments. Alcohol, oils, and fats have been used successfully as topical carriers.

Internal dosage has traditionally been through infusion or extract of the herb. Dosage should not exceed 3.8 grams of the dried herb, which is roughly the equivalent of 4 teaspoons of a 3-6 percent infusion. Tinctured extracts may be more precisely calculated, depending on the reputability of the source. Capsules of powdered liverwort are now available to simplify dosage.

<http://www.herbwisdom.com/herb-ginseng-asian.html>

**Ginseng (Panax ginseng)**

**Ginseng Benefits**

Asian Ginseng is one of the most highly regarded of herbal medicines in the Orient, where it has gained an almost magical reputation for being able to promote health, general body vigour, to prolong life and treat many ailments including depression, diabetes, fatigue, ageing, inflammations, internal degeneration, nausea, tumours, pulmonary problems, dyspepsia, vomiting, nervousness, stress, and ulcers.

Asian Ginseng has a history of herbal use going back over 5,000 years. It is one of the most highly regarded of herbal medicines in the Orient, where it has gained an almost magical reputation for being able to promote health, general body vigour and also to prolong life. The genus name Panax is derived from the Greek word meaning "panacea" or "all-healing"; the species ginseng is said to mean "wonder of the world".

*Both terms refer to the medicinal virtues of the plant. In the last decade it has gained popularity in the West and there is extensive literature on the beneficial effects of ginseng and its constituents.*

Ginkgo Biloba is especially good when combined with Panax Ginseng.

Ginseng has been listed by some as useful in the treatment of anaemia, cancer, depression, diabetes, fatigue, hypertension, insomnia, shock, effects of radiation, effects of morphine and cocaine use, environmental, physical and mental stress, and chronic illness. It has been said to act as a stimulant, promote endurance, increase life expectancy, relax the nervous system, improve mental awareness, encourage proper hormonal functions, improve lipid levels, lower cholesterol, improve nerve growth, and increase resistance to disease. It has been used to increase the appetite and bodily energy, regulate menses, ease childbirth, increase fertility of women, and treat periodontal disease

Research has shown that Ginseng may have the ability to act as an "adaptogen", prolonging life by combating viral infections and *Pseudomonas aeruginosa*. Research continues to support ginseng's protective role against anti-cancer treatments and drugs, perhaps even countering the side effects of chemotherapy.

There is some thought that Ginseng may be useful for the prevention of abuse and dependence of opioids and psycho-stimulants.

Ginseng has been used to both stimulate and relax the nervous system. It increases capillary circulation in the brain and decreases the effects of stress. Though there are many kinds of ginsengs in the world but they cannot rival Asian Ginseng in ingredients and medicinal effects. It contains as many as 29 different ginsenosides while the others contains 8-9.

Asian Ginseng contains anti-ageing substances such as anti-oxidants and insulin-like substances which are not found in any other type of ginseng.

Ginsenosides are a diverse group of steroidal saponins, which demonstrate the ability to target a myriad of tissues, producing an array of pharmacological responses. However, many mechanisms of ginsenoside activity still remain unknown. Since ginsenosides and other constituents of ginseng produce effects that are different from one another, and a single ginsenoside initiates multiple actions in the same tissue, the overall pharmacology of ginseng is remains remarkably complex and esoteric.

In western herbal medicine, Panax ginseng's regulating effects on the immune system have been studied for potential effectiveness in preventing colds, flu, and some forms of cancer. In clinical studies, Panax ginseng has been shown to lower blood levels of both sugar and cholesterol, therefore it may help treat type 2 diabetes and high cholesterol. Its other potential uses are not as well defined, however. In separate studies of laboratory animals and humans, Panax ginseng had a relaxing effect on muscles in the lungs. The resulting airway expansion may help relieve asthma symptoms and other lung conditions that result from constricted airways.

In other studies, a combination of Panax ginseng and ginkgo is believed to boost memory and thinking processes. Early results from laboratory study may show that chemicals in Panax ginseng promote the growth of blood vessels, which could be valuable in treating extensive

Recent reports on the pharmacology of ginseng indicate a wide range of effects, including influence on the central nervous system, endocrine and adrenocortical systems, internal, organs, metabolism, blood pressure and sugar, gonadotropic activity, cellular ageing, tumours, and stress. Ginseng appears to relieve stress, increase sexual activity, and facilitate mating in laboratory animals. The herb has been reported to be effective in prolonging survival time during cardiac arrest. It is reported to show hypoglycemic activity. Asian Ginseng has also been identified to protect the testis against 2,3,7,8-tetrachloro-di-benzo-di-p-DIOXIN inducing testicular damage. This particular dioxin is the most dangerous of perhaps the most toxic chemical group known to science. Dioxins are known to cause cancer in humans.

Other data shows it works not only in preventing adult diseases including cancer, diabetes, hypertension, and impotence but can also aid in treatment.

German Commission E monograph and WHO support the use of ginseng as a prophylactic and restorative agent for enhancement of mental and physical capacities, in cases of weakness, exhaustion, tiredness, and loss of concentration, and during convalescence (WHO, 1999). In general, ginseng is used as a tonic, stimulant, aphrodisiac, immune booster, blood pressure modulator (lowers and raises, depending on needs), and a modulator of blood sugar level (lowers or raise, depending on needs).

<http://www.herbwisdom.com/herb-horny-goats-weed.html>

### **Horny Goats Weed**

#### **Horny Goats Weed Benefits**

The herbal plant known as Horny Goat Weed gets its name from the Latin term "Epipedium" (often mis-spelt as: Epimedium). Legend in China claims that this weed was ingested by some goats. The herder observed the behavior of the animals after consuming the plant and decided that this plant must contain certain properties associated with aphrodisiacs. After many hundreds of years of use, the specific properties of the plant were identified and their methods of action better understood.

#### **Active Ingredients**

One of the principal active ingredients in Horny Goats weed is "icariin". The concentration may determine much of the potency of each particular species of Epimedium. The icariin works by relaxing smooth muscle tissue, which is different from skeletal muscle tissue. The significance of this is that involuntary tension in the internal tissues can be relaxed, which many believe cause the central nervous system to shift from the so-called fight/flight mode into the rest/restore mode. When this change occurs, many elements of a disease tend to reverse because the body is no longer in a stressed condition. Although this may not cure many problems, especially the ones that are in advanced stages, many people use herbs to manage their condition and obtain some relief.

#### **Habitat**

Horny goats Weed is found growing all over the southern areas of China, but can also be found in the Asian countries that immediately border China, as well as some neighboring European countries. The Chinese name is Yin Yang Huo, or Xian Ling Pi, and it is used extensively in Traditional Chinese Medicine (TCM). It has become popular in the field of Western alternative medicine for use in treating multiple conditions.

One should realize that although the plant may bear the same name, there are close to 60 species of Epimedium plants and over 15 in China that bears the name "Yin Yang Huo." It might be difficult for the layperson to determine the strength and properties of the plant based on the name alone.

#### **Benefits and Conditions**

Horny Goat Weed is often used to treat osteoporosis and various sexual dysfunctions. However, other uses of the plant include the treatment of hypertension, bronchitis, coronary heart disease, polio and more. This makes sense because the active ingredient works on smooth muscle tissue. This is the tissues that surround the heart. When the heart muscles are under strain, it is easy to visualize how this can cause other problems in the surrounding affected systems.

Secondary benefits can also occur when the smooth muscle tissues relax. The health benefits could extend to relieving fatigue in both the mind and the body, as this herb is employed for this purpose in TCM. It has been used to treat joint pain, numbness, memory problems, painful or cold low back and/or knees, as well as irregular menstrual cycles, spermatorrhea, and impotence. It has been cited as producing an anti-aging effect and can improve the immune system as well as the endocrine system.

### **Potency and Doses**

Although there are many natural concentrations of icariin found in this plant in nature, during the process of cultivation, it is possible to regulate the dose for individual consumption. The individual dose will be partly determined by height, weight and other medical conditions. As always, it is highly recommended for anyone with a medical condition to speak with their appropriate health care professionals about the use of this herb in treating their condition. Overdoses should be avoided, and the potency of the herb is difficult to determine unless provided by a trained professional.

The leaves of this plant are edible, but are known to be extremely bitter and are sold most frequently in capsule form. However, some herbal outlets will also sell it in a prepared form that can be used to make a medicinal tea. The leaves will have been cooked, soaked and re-boiled before packaging to remove the excessive bitterness.

<http://www.herbwisdom.com/herb-melatonin.html>

### **Melatonin**

#### **Melatonin Benefits**

Melatonin is one of the many hormones produced by the body. This particular hormone is produced and released by the pineal gland, one of the body's other hormone producing glands besides the pituitary, thyroid, adrenal, and pancreas. Melatonin helps control all of the other hormones as well as sustaining the natural "circadian" rhythm in the body.

Circadian refers to any biological process that occur every 24-hours. Our circadian rhythm is like a clock in our system that comes in to play for our sleep process. It determines when we fall asleep and when we wake up. When the sun goes down and it gets dark, more melatonin is produced. Conversely, with the presence of the sun, the production decreases. Exposure to a lot of light in the evenings or not enough light during the day can upset this natural cycle of melatonin production.

*Some examples that can cause this kind of disruption are:*

*Jet lag* – This usually results from flying from one time zone to another and is most severe when traveling across many time zones.

*Shift work* – People who work at night and must sleep during the day are very likely to have their circadian rhythm disrupted.

*Poor vision* – Certain vision problems can upset the melatonin cycle.

*Aging* – It is believed by some that aging can affect melatonin levels. That is why many older adults have difficulty sleeping.

*Melatonin Supplements and Their Uses* Non-prescription melatonin supplements have been on the market for years and are used to treat numerous different medical conditions. Most are related to sleep problems but there is some scientific evidence to support that they work for some non-sleep related issues as well.

## **JET LAG AND SLEEP-RELATED USES FOR MELATONIN**

*Jet lag* – Clinical trials have shown that melatonin supplements can significantly reduce jet lag. The melatonin should be taken on the first day of travel at approximately the bedtime of the destination and then every night for the next several days. This can decrease the days needed to get into a normal sleep routine, cut down on the time it takes to get to sleep (known as sleep latency), and decrease fatigue during the day.

*Delayed Sleep Phase Syndrome (DSPS)* – This refers to the difficulty getting to sleep at night even when the natural sleep process has not been disrupted by things like jet lag or too much light in the evenings.

*Insomnia in the Elderly* – Melatonin taken at the same time every evening, approximately 30 to 60 minutes before bedtime, can cut down on the amount of time to get to sleep that often plagues elderly people.

*Enhancement of sleep for healthy people* – Melatonin taken regularly can even help healthy people who occasionally have sleep issues.

## **OTHER USES FOR MELANTONIN SUPPLEMENTS**

There are conditions for which melatonin may be used that have been studied in trials where the results, while appearing to be positive, are not completely conclusive as to their effectiveness. In many of these cases further studies are planned or are currently on-going.

*Macular degeneration* – Melatonin does have some antioxidants what are thought to possibly have some positive affects on the eyes by protecting the retina and delaying the onset of macular degeneration.

*Anti-inflammatory* – There is some indication that melatonin acts as an anti-inflammatory agent.

*Anxiety* – There have been some positive results when melatonin supplements are used as anti-anxiety medication prior to surgery.

*Cancer treatment* – There have been some clinical trials on patients with early stage cancer of different types to discern its usefulness in reducing chemotherapy side effects or in fighting the cancer itself. Results are still inconclusive but more studies are under way.

*Glaucoma* – There are theories that melatonin taken in high doses may possible increase the risk of glaucoma and other age-related eye problems. But these theories are being discounted because of some evidence that melatonin in fact may be useful as a treatment for glaucoma. Until this is more conclusively proven, people with glaucoma should check with their doctor before taking melatonin.

Other studies are trying to prove the usefulness of melatonin for treating headaches, high blood pressure, high cholesterol, irritable bowel syndrome, and numerous other health issues.

<http://www.herbwisdom.com/herb-glucosamine.html>

**Glucosamine**

**Glucosamine Benefits**

Glucosamine supplements are one of the most popular in the Western World, vastly outselling Vitamin C.

As some people get older they develop a degenerative condition known as osteoarthritis which is characterized by pain, stiffness, swelling of the joints and a general inability to move about easily. The condition, which is irreversible, is caused by the deterioration and eventual loss of bone cartilage, the soft connective tissue that protects joints and keeps bones from directly rubbing against each other. Some studies suggest that most people over 60 have osteoarthritis though the severity of the symptoms can vary greatly among individuals. Arthritis affects nearly 70 million Americans.

Numerous allopathic and natural remedies are touted as treatments for the symptoms of osteoarthritis. Among them are nutritional supplements based on a substance called Glucosamine. Glucosamine is a naturally occurring amino sugar in the body that plays a vital role in keeping cartilage and other body tissues healthy. As people get older their bodies start producing less Glucosamine. This gradual diminishing of Glucosamine causes the bone cartilage to lose some of its elasticity and become stiff and inflexible, eventually resulting in osteoarthritis. Glucosamine supplements are designed to slow this process by compensating for the loss of the amino sugar that occurs with age. Glucosamine supplements are believed to help in the production of glycosaminoglycan, a molecule that helps repair and rebuild damaged cartilage.

### **Glucosamine Defined**

Our bodies naturally make glucosamine as part of its way of keeping our joints lubricated and flexible for maximum mobility. Glucosamine is needed to react with hydrochloric acid in the stomach to eventually produce Hyaluronic Acid, which is a glycosaminoglycan. Hyaluronic acid is found naturally in cartilage, tendons, ligaments and synovial fluid around the joints. It helps with elasticity. Hyaluronic acid is unique among glycosaminoglycans in that it is nonsulfated, and can be very large, with its molecular weight often reaching the millions. It is one of the main components of the extracellular matrix. The extracellular matrix provides structural support to animal cells. The extracellular matrix is the most important feature of connective tissue in animals.

Since glucosamine is naturally occurring in the human body, many find it a viable alternative to over the counter or prescribed pills known to erode the digestive tract or cause internal bleeding or liver problems.

Glucosamine is also known as glucosamine sulfate, glucosamine sulphate, glucosamine hydrochloride, N-acetyl glucosamine, and chitosamine.

### **The Glucosamine Market**

The common dosage for the supplement is 1,000 mgs. It is also available in 300, 500 or 750 mgs. as well. It can be taken in one of three ways; as an injection, in solid or pill form, or in liquid form.

In most cases, Glucosamine supplements are taken along with supplements based on another naturally occurring substance in the body called chondroitin. Chondroitin is a complex carbohydrate that helps cartilage retain water. Supplements based on chondroitin are believed to slow down the production of certain enzymes that are known to destroy cartilage.

Glucosamine supplements are typically made from crab, lobster and shrimp shells, though some supplements are based on vegetables. Chondroitin supplements meanwhile are made from the cartilage of cows. Glucosamine is commercially available in either sulfate or in hydrochloride form each of which have very different chemical compositions.

## **Research**

Although it has only been tracked since the early 80's, research shows that it is generally safe for most people.

Though Glucosamine along with chondroitin supplements have been fairly widely used for some time now, there is still considerable discussion about the extent of their effectiveness in treating osteoarthritis. Previous clinical studies have suggested for instance that the effectiveness of a Glucosamine supplement is dependent on whether it is a Glucosamine hydrochloride or Glucosamine Sulfate.

Some research suggests that Glucosamine sulfate is more effective at alleviating osteoarthritis symptoms because it is more bio-available, or most easily absorbed by the body compared to hydrochloride supplements. Other studies however suggest that Glucosamine hydrochloride supplements are more concentrated, and are absorbed more rapidly in the gastrointestinal tract than other Glucosamine supplements. A third school of thought holds that Glucosamine supplements are most effective only when they are taken along with chondroitin supplements.

Sufferers of osteoarthritis who are looking for some clarity on the subject unfortunately have little to go by. The most solid research to date on the effectiveness of Glucosamine was conducted by the University of Utah, School of Medicine on behalf of the National Institutes of Health (NIH). The study, which was called Glucosamine/chondroitin Arthritis Intervention Trial (GAIT), was designed to test the short-term effectiveness of Glucosamine and chondroitin sulfate in reducing pain associated with osteoarthritis.

The study of 1583 patients suggested that patients with moderate to severe pain did indeed obtain statistically significant pain relief when they took Glucosamine combined with chondroitin sulfate. The results were somewhat less clear in the case of osteoarthritis sufferers with only moderate pain. The NIH study however looked only at the effectiveness of Glucosamine hydrochloride supplements and not Glucosamine Sulfate based ones.

Meanwhile, a much earlier three-year clinical study conducted in the Prague Institute of Rheumatology, showed Glucosamine Sulfate to be effective in slowing the progression of knee osteoarthritis. The results of this study were very similar to those from a previous clinical study investigating the effectiveness of Glucosamine sulfate. What appears less clear though is the effectiveness of Glucosamine when it is taken by itself. The GAIT study for instance, showed that Glucosamine alone fared little better than a placebo in relieving osteoarthritis symptoms.

## **Glucosamine and TMJ**

The pain of Temporomandibular Joint pain (TMJ) is termed an arthritic condition and sufferers can attest to the enormous amount of pain the condition causes. Glucosamine has been labeled as "possibly effective" for this condition.

## **The Mayo Clinic's Findings**

In connection with glucosamine sulfate which is found in cartilage fluid, The Mayo Clinic's opinion is that available evidence does support the use of glucosamine sulfate to strengthen cartilage and that only this form of the supplement is helpful, not non-sulfated glucosamine.

The Mayo Clinic also reported that glucosamine is common in patients with osteoarthritis, and may be helpful in reducing the need for NSAID's. (non-steroidal anti-inflammatory agents) This is of course good news for those trying to reduce the number of such pills ingested on a daily

As a final grade, the Clinic gave glucosamine an "A" for good evidence to support its benefit for mild to moderate knee osteoarthritis. A "B" grade was issued for glucosamine's benefit when treating osteoarthritis in general. (The Mayo Clinic's report was last updated December 1, 2010)

The National Institute of Health's Findings

Perhaps the final words about glucosamine should come from the United States National Institute of Health (NIH):

- Likely effective for osteoarthritis
- Takes 4-8 weeks to reduce pain compared to 2 weeks with standard treatment.
- Glucosamine slows break down of joints, if taken long term.
- Knee replacement surgery is less likely with glucosamine users.

Natural health enthusiasts advocate its use and its advantages over prescribed pills as being:

- Less costly
- More natural and therefore gentler on the stomach so less side effects.
- Proven effective for treating gout, joint pain, and rheumatoid arthritis

As is often the case with natural supplements and natural remedies the best advice might be to do your research, weigh the pros and cons, and consult your doctor for his or her opinion. The apparent fact that Glucosamine supplements have no side effects associated with their use has been one major factor driving growing adoption of the remedy. For the moment at least clinical studies have shown the use of Glucosamine to have no long term downsides. For many osteoarthritis sufferers, that alone may be benefit enough to choose Glucosamine.

<http://www.herbwisdom.com/herb-lobelia.html>

## **Lobelia**

### **Lobelia Benefits**

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Lobelia inflata is an herb that is used to treat asthma, allergies, whooping cough, congestion, and bronchitis. In the past, it was also useful for tobacco withdrawal as an herbal remedy to quit smoking. It is found in the south-eastern part of Canada from Nova Scotia to South-east Ontario and British Columbia. It is also present in the eastern half of the United States (excluding the state of Florida).

Lobelia is a fragile flower described as light bluish to violet in color with a touch of yellow that can grow to a height of about three feet. It is a very popular garden plant that also has pale green or yellowish leaves. It is categorized as an annual or biennial plant meaning that it reseeds every year or two. The stem is smooth towards the top and hairy and rough towards its bottom. The flowers are asymmetrical and bisexual. The main parts used of the Lobelia plant are the flowering parts and the seeds. The seeds are the most potent because they contain lobeline, a piperidine alkaloid.

Named after Matthias de Lobel, a 17th century botanist, Lobelia is known as Indian Tobacco because it contains lobeline. Lobeline is believed to have a chemical make up similar to nicotine and was therefore used as an alternative to tobacco. In the 19th century, Lobelia was also used as a medicinal herb to induce vomiting, thus removing harmful poisons from the body.

The name Indian Tobacco was assigned because the Aboriginal people smoked dried leaves of the plant. Historically, the Aboriginal people were very creative and efficient in using the Lobelia plant for medicinal purposes. The Iroquois used the root to treat leg sores, venereal diseases and ulcers. The Cherokees used a poultice of the root for body aches. They also used the plant for boils, sores, bites and stings. Considered a plant to cure asthma, phthisic (lung disease), croup and a sore throat, it was also used to discourage the presence of gnats. The Crows made use of it in religious ceremonies.

### **Dosage**

Lobelia is considered to be a toxic herb because of its lobeline affiliation. It is important to begin with lower dosages and increase the dosage over a period of time. It is also imperative that you never surpass a dosage of 20 mg per day. If you consume a dosage higher than 500 mg, it could be fatal. Lobelia can be taken in a few different forms. It can be given as a vinegar tincture or a regular tincture, as a fluid extract, or as a dried herb for teas or in capsules. It is preferred that the dried herb be mixed in eight ounces of water with other herbs but not necessarily recommended as the best way of consuming it due to its pungent taste.

*A few facts:*

*Latin Name:* Lobelia inflata

*Common Names:* Lobelia, pukeweed, Indian Tobacco, gagroot, asthma weed, vomitwort, rapuntium inflatum, bladderpod

*Indicated for:* bronchitis, whooping cough, congestion, asthma, tobacco withdrawal, allergies, colds, soother for inflamed conditions, pain reliever in elevated amounts and as a sedative.

*Properties:* expectorant, emetic, anti-asthmatic, stimulant antispasmodic, diaphoretic, diuretic, nervine

<http://www.herbwisdom.com/herb-horse-chestnut.html>

**Horse Chestnut (Aesculus hippocastanum)**

**Horse Chestnut Benefits**

Horse chestnut is a traditional remedy for leg vein health. It tones and protects blood vessels and may be helpful in ankle oedema related to poor venous return. Utilised extensively throughout Europe as an anti-inflammatory agent for a variety of conditions, in addition to being used for vascular problems. The plant is taken in small doses internally for the treatment of a wide range of venous diseases, including hardening of the arteries, varicose veins, phlebitis, leg ulcers, haemorrhoids and frostbite.

Horse chestnut is an astringent, anti-inflammatory herb that helps to tone the vein walls which, when slack or distended, may become varicose, haemorrhoidal or otherwise problematic. The plant also reduces fluid retention by increasing the permeability of the capillaries and allowing the re-absorption of excess fluid back into the circulatory system.

The seeds are decongestant, expectorant and tonic. They have been used in the treatment of rheumatism, neuralgia and haemorrhoids. A compound of the powdered roots is analgesic and has been used to treat chest pains. Extracts of the seeds are the source of a saponin known as aescin, which has been shown to promote normal tone in the walls of the veins, thereby improving circulation through the veins and promoting the return of blood to the heart.

Veins that are either weak and/or under chronic stress are more likely to fail and therefore more likely to allow leakage of fluid from the vessels into the tissue space leading to swelling.

Fluid accumulation is more common in the legs and far more likely in individuals who stand for extended periods of time. Prolonged standing and obesity can increase pressure within leg veins causing weak veins to swell, leak and deteriorate into varicose veins. Aescin, performs an antioxidant function and has a general vasoprotective role by protecting collagen and elastin (the two chief proteins that form the structure of veins). By protecting these key vessel proteins, veins and capillaries stay strong and maintain their structural integrity when exposed to stress.

A study out of West Germany, reported in the early 1980s, showed one commercial horse chestnut product affected both the collagen content and architecture of the varicose vein and helped make the veins more normal.

Horse chestnut contains several triterpene glycosides, with aescin predominating in the seeds. Coumarin glycosides aesculin, fraxin, and scopolin and their corresponding aglycones, aesculetin, fraxetin, and scopoletin, are also found, along with flavonoids such as quercetrin. Allantoin, leucocyanidins, tannins, and the plant sterols sitosterol, stigmasterol, and campesterol have also been identified. The whole extract made from the Horse Chestnut is probably superior to the isolated Aescin. This is a commonly overlooked mechanism of most herbs. The combination of the entire plant components synergistically can often produce superior results as compared to a refined, isolated active ingredient of the herb.

Horse chestnut has also been taken internally for leg ulcers and frostbite, and applied externally as a lotion, ointment, or gel. In France, an oil extracted from the seeds has been used externally for rheumatism. The topical preparation has also been used to treat phlebitis. Most studies have looked at the plant's use internally. But there is some evidence that applying an ointment to the affected area may also help.

Randomised double-blind, placebo-controlled studies have shown that horse chestnut can reduce oedema (swelling with fluid) following trauma, particularly those following sports injuries, surgery, and head injury. A clinical study compared horse chestnut extract to compression stockings and placebo for varicose veins. Both the herbal medicine and the stockings significantly reduced oedema of the lower legs compared to placebo. Feelings of tiredness and heaviness, pain, and swelling in the legs were alleviated by the extract, in comparison to placebo. In addition, common symptoms which accompany lower leg swelling; such as leg pain, heaviness and fatigue, are typically reduced in individuals taking horse

Trial studies suggest that Horse Chestnut may also be of value in treating lung conditions of infarction, embolisms and thrombosis.

<http://www.herbwisdom.com/herb-wild-yam.html>

**Mexican Wild Yam (*Dioscorea villosa*)**

**Mexican Wild Yam Benefits**

Mexican Wild Yam is a very good antispasmodic so is good for menstrual cramps, relaxing muscles, soothing nerves, relieving pain, poor circulation and neuralgia, for the inflammatory stage of rheumaty arthritis and for abdominal and intestinal cramping.

It has long been used for its benefits in women's reproductive health, including pre-menstrual syndrome and menopausal problems. It can be taken in capsules or in tea (though there are mixed opinions on the flavour). The powder can be added to creams or vaginal ointments.

Wild Yam's traditional use is for easing menstrual cramps. Its antispasmodic property is beneficial for any kind of muscular spasm and colic, such as intestinal and bilious colic, flatulence, ovarian and uterine pain; for poor circulation and neuralgia; for the inflammatory stage of rheumatoid arthritis; and for abdominal and intestinal cramping. Wild Yam can be very beneficial for nervousness, restlessness and other nervous conditions.

As a stimulant for increased bile flow, it can help to relieve hepatic congestion, bilious colic and gallstones.

Also known to have a therapeutic action on overall liver health, it is believed that wild yam root's ability to lower blood cholesterol levels and lower blood pressure indirectly helps the liver by increasing its efficiency and reducing stress.

Its steroidal saponins are also anti-inflammatory, making it a useful herb when treating rheumatoid arthritis and inflammatory conditions of the bowel. Its diuretic effect, combined with the antispasmodic action, soothes painful conditions of the urinary tract.

Wild yam contains alkaloids, steroidal saponins, tannins, phytosterols and starch.

<http://www.herbwisdom.com/herb-reishi-mushrooms.html>

#### **Reishi Mushrooms**

#### **Reishi Mushrooms Benefits**

Reishi mushrooms are not often used in cooking because they are hard and have a bitter taste, although some people do use them in the same dishes that you might use shitake mushrooms. But you are unlikely to find them at your favorite market. They are mainly used for purely medicinal purposes and have a number of health benefits. In fact, it is known among practitioners of Chinese medicine as the "king of herbs."

All mushrooms are the "fruit" of fungi as well as the reproductive part. Reishi mushrooms can be found growing up from underground networks called mycelium near organic waste and logs, which are both a good nutrient source. Given the right conditions, reishi can actually be cultivated and used in medicine.

The Eastern world has been using reishi for thousands of years, particularly in China and Japan. Even the ancient kings and emperors drank reishi tea because it was believed that its properties encouraged vigor and long life. They also thought that the tea would increase their wisdom and happiness.

The use of reishi has reached the Western world where these days people are making elixirs from the mushroom for the purpose of promoting vitality and longevity. It is also used to treat certain medical conditions.

#### **Benefits of Reishi Mushrooms and Supplements**

The benefits of reishi mushrooms are so well known and proven that you can get them in forms that are much convenient than slicing them up and cooking with them. You can buy them dried, in concentrated tablets, capsules, or even as an extract. In any of these forms reishi mushrooms can be used as a dietary supplement.

*Here is a list of the benefits that reishi mushrooms have as a daily dietary supplement or in helping to treat certain medical conditions:*

- These mushrooms are very strong antioxidants. Antioxidants protect the body from the negative effects of free radicals that are formed inside the body by daily exposure to the sun, chemicals, and pollutants. Reishis are proven to boost the immune system, especially when taken with other antioxidant supplements.
- It is believed that reishi mushrooms can suppress the growth of tumors in people with cancer. It can reinforce the membranes in cancerous cells to keep the tumor from spreading. For this reason, they are often used in efforts to prevent cancers.
- Reishis are also beneficial for people suffering from asthma and other respiratory conditions because it seems to have a healing effect on the lungs. They are good for building respiratory strength and curbing a cough.
- Reishi mushrooms have anti-inflammatory properties and are therefore used sometimes for patients who have Alzheimer's and heart disease. This is based on the idea that inflammation plays a part in each of these conditions. The pain that accompanies other inflammatory conditions like neuralgia and arthritis may also be lessened by reishi mushroom supplements.
- As far as benefits for the heart, reishi mushrooms can improve the flow of blood to the heart and reduce the amount of oxygen the heart consumes. It can help to lower cholesterol and some of the ingredients may help combat high blood pressure.

### **Ingredients in Reishi Mushrooms**

So exactly what is it in reishi mushrooms that give it so many health benefits? Scientists have learned one active ingredient is polysaccharides, which contain beta glucan. Beta glucan is known for its ability to enhance the immune system – in fact it is one of the strongest immune system supplements there is.

Another ingredient in reishi is triterpenes. The type found in reishi mushrooms is a ganoderic acid that has been proven in studies to ease the symptoms of allergies by stopping the release of histamines. It also can improve the body's use of oxygen and help the liver function better.

### **How Much Reishi to Take When Using As A Supplement**

The recommended dose when using reishi mushrooms as a dietary supplement is 150 to 900 mg if taken in tablet or capsule form or 1.5 to 9 grams of the dried variety. There have rarely been any side effects reported from reishi, but some people who take them for a period of several months may experience dry mouth, dizziness, stomach discomfort, or nosebleeds.

<http://www.herbwisdom.com/herb-horsetail.html>

### **Horsetail (Equisetum arvense)**

#### **Horsetail Benefits**

Horsetail is a member of the Equisetaceae family; the sole survivor of a line of plants going back three hundred million years. It is a descendant of ancient plants that grew as tall as trees during the carboniferous period of prehistoric times and members of this family gave rise to many of our coal deposits. Since being recommended by the Roman physician Galen, several cultures have employed horsetail as a folk remedy for kidney and bladder troubles, arthritis, bleeding ulcers, and tuberculosis. The Chinese use it to cool fevers and as a remedy for eye inflammations such as conjunctivitis and corneal disorders, dysentery, flu, swellings and haemorrhoids.

Because of its content of silica, this plant is recommended when it is necessary for the body to repair bony tissues that are in not well condition, as a result of some traumatism or because of their own corporal decalcification. Silica helps to fix calcium, so that the body can store more quantity of this mineral and it is able to form stronger bones or tendons.

It will be advisable in those cases when an abnormal calcium intake or a bad fixation of it takes places, just as it happens in osteoporosis. Because of its mineral content horsetail is recommended for anaemia and general debility. It has also been used to treat deep-seated lung damage such as tuberculosis or emphysema.

Horsetail is an astringent herb and has a diuretic action. It has an affinity for the urinary tract where it can be used to soothe inflammation, haemorrhaging, cystic ulceration, ulcers, cystitis and to treat infections. It is considered a specific remedy in cases of inflammation or benign enlargement of the prostate gland and is also used to quicken the removal of kidney stones.

Its toning and astringent action make it of value in the treatment of incontinence and bed-wetting in children. It may be applied to such conditions as urethritis or cystitis with haematuria, reducing haemorrhage and healing wounds thanks to the high silica content. This local astringent and anti-haemorrhagic effect explains the application of horsetail to such conditions as bleeding from the mouth, nose and vagina, its use to check diarrhoea, dysentery and bleeding from the bowel, and for slow-healing wounds, chilblains and conjunctivitis.

The horsetail constitutes one of the most diuretic species in all the plants. That is to say that it possesses a great capacity to eliminate water from the body, in such a point to increase urination up to 30% more than what is habitual. This fact makes that its scientific name *Equisetum arvense* generally appears in the composition of most of products that habitually are sold to reduce weight. This property is due to the action of several components, among which it is necessary to highlight equisetin and potassium, but there are another ones that also take part such as calcium, magnesium, ascorbic acid and caffeic acid.

As a diuretic it is particularly suited to metabolic or hormonal oedema during the menopause. The diuretic action is thought to be due partly to the flavonoids and saponins. *Equisetum* is restorative to damaged pulmonary tissue after pulmonary tuberculosis and other lung disease, as the silicic acid is said to stabilise the scar tissue.

It may be taken internally to stop bleeding from ulcers or curb heavy menstrual bleeding. It may also be used as a gargle and mouth rinse for sore throat and bleeding gums or mouth ulcers. Externally it is a vulnerary and may also be applied as a compress to fractures and sprains, wounds, sores, skin problems and a gargle for mouth and gum inflammations.

It has been established that administration of silicic acid causes leucocytosis (a temporary increase in white blood cells). *Equisetum*'s silica content encourages the absorption and use of calcium by the body and also helps to guard against fatty deposits in the arteries. Its influence on lipid metabolism leads to potential benefit for cardiovascular problems.

Recent research in Russia has apparently demonstrated that horsetail is effective in removing lead accumulations in the body.

<http://www.herbwisdom.com/herb-nettle.html>

**Nettle (*Urtica dioica*)**

**Nettle Benefits**

Nettle has been used for centuries to treat allergy symptoms, particularly hay fever which is the most common allergy problem. It contains biologically active compounds that reduce inflammation. Dr. Andrew Weil M.D. author of Natural Health/ Natural Medicine says he knows of nothing more effective than nettle for allergy relief. And his statement is backed up by studies at the National College of Naturopathic Medicine in Portland, Oregon.

Decongestants, antihistamines, allergy shots and even prescription medications such as Allegra and Claritin treat only the symptoms of allergies and tend to lose effectiveness over a period of time. They can also cause drowsiness, dry sinuses, insomnia and high blood pressure. Nettle has none of these side effects. It can be used on a regular basis and has an impressive number of other benefits most notably as a treatment for prostate enlargement.

Nettle has been studied extensively and has shown promise in treating Alzheimer's disease, arthritis, asthma, bladder infections, bronchitis, bursitis, gingivitis, gout, hives, kidney stones, laryngitis, multiple sclerosis, PMS, prostate enlargement, sciatica, and tendinitis! Externally it has been used to improve the appearance of the hair, and is said to be a remedy against oily hair and dandruff.

In Germany today stinging nettle is sold as an herbal drug for prostate diseases and as a diuretic. It is a common ingredient in other herbal drugs produced in Germany for rheumatic complaints and inflammatory conditions (especially for the lower urinary tract and prostate). In the United States many remarkable healing properties are attributed to nettle and the leaf is utilized for different problems than the root. The leaf is used here as a diuretic, for arthritis, prostatitis, rheumatism, rheumatoid arthritis, high blood pressure and allergic rhinitis.

The root is recommended as a diuretic, for relief of benign prostatic hyperplasia (BPH) and other prostate problems, and as a natural remedy to treat or prevent baldness

An infusion of the plant is very valuable in stemming internal bleeding. It is also used to treat anaemia, excessive menstruation, haemorrhoids, arthritis, rheumatism and skin complaints, especially eczema. Externally, the plant is used to treat skin complaints, arthritic pain, gout, sciatica, neuralgia, haemorrhoids and hair problems.

Taken orally, products made from nettle's aerial parts may interfere with the body's production of prostaglandins and other inflammation-causing chemicals. Consequently, nettle may have an anti-inflammatory effect. It may also enhance responses of the immune system. Chemicals in nettle's aerial parts are also thought to reduce the feeling of pain or interfere with the way that nerves send pain signals. All of these effects may reduce the pain and stiffness of arthritis and other similar conditions.

In addition, nettle's aerial parts may reduce the amount of histamine that is produced by the body in response to an allergen. An allergen is a substance such as pollen that may provoke an exaggerated immune response in individuals who are sensitive to it. Through this potential action, the aerial parts of nettle may help to reduce allergy symptoms. Results from one human study are promising, but more research is needed to be conclusive.

A solution of the extract may be applied to the skin to relieve joint pain and muscle aches. Astringent properties of nettle aerial parts may also help to lessen the swelling of haemorrhoids and stop bleeding from minor skin injuries such as razor nicks. An astringent shrinks and tightens the top layers of skin or mucous membranes, thereby reducing secretions, relieving irritation, and improving tissue firmness. It may also be used topically for dandruff and overly oily hair and scalp.

This herb should be used for a minimum of 30 days for full effects. Our Nettle is organically grown and cryogenically ground (minus 70 degrees) to preserve potency.

<http://www.herbwisdom.com/herb-maca.html>

## **Maca**

### **Maca Benefits**

Maca root (*Lepidium meyenii*) has many health benefits. Known for their advanced knowledge of healing and the body's connection with nature, the Incan civilization used the maca root in many of their natural remedies. According to ancient Incan history, the maca root was known to have special properties which were believed to enhance energy and stamina. It is also believed to increase the sexual desire and endurance. Maca is often termed as Peruvian Ginseng due to its natural stimulating qualities that are similar to the benefits found in the commonly known ginseng-related herbs.

The maca root can be found growing in the Andes Mountains, mainly in Peru. The environment which is deemed ideal for its growth is in uncongenial locations which are located high in the mountains. Maca flourishes in such climates due to its ability to thrive in spite of harsh temperatures and frost.

Maca is related to the mustard plant, and has similarities in appearance. The flowers of the maca resemble those of the mustard plant. It is not uncommon for farmers and /or those who are knowledgeable in horticulture to mistake the identity of either plant at first glance.

Medicinally, the part of the maca that holds the active nutrients is the flesh of its root. The nutritional contents of the maca root are impressive. The root or tuber is high in protein, natural sugars, iron, potassium, iodine, magnesium, calcium, and fibre. Due to maca's high nutritional content, it is often referred to as having "super food" properties.

*Libido & Fertility* Culturally, the ancient Peruvians ingested this powerful root to boost the potency of the male libido. Its natural properties help to create an aphrodisiac-like response in men who have suffered from impotency, low sex-drive, and fertility problems. The maca root is known to improve the quality and quantity of sperm in men who have lower than normal sperm counts, which helps to increase the level of fertility.

*Endurance* Athletically speaking, the main ingredients and naturally occurring substances in maca are becoming widely used by today's amateur and professional athletes alike. The main action of this powerful super food is to strengthen endurance and energy levels, which gives the athlete a natural advantage. Testosterone also seems to be increased as well.

*Menopause* Over time, other uses for maca have also shown promising benefits to health such as relief of fatigue and the reduction of menopausal symptoms in women. One of the most troublesome symptoms of menopause is hot flashes. The active ingredients in the maca root appear to lessen the severity and frequency of hot flashes that occur due to hormonal changes in a woman's body as they reach middle age. Maca root helps to bring back into balance the body's natural hormone levels without the use of synthetic hormone replacements that are typical treatments for menopausal symptoms.

*Menstruation* Menstrual problems that often plague women of child-bearing age such as cramping, heavy or irregular periods, as well as PMS, have found that the maca root alleviates many of the uncomfortable symptoms.

*Skincare* For both men and women alike, skin problems such as acne have been drastically improved with the use of maca.

*Depression* Another essential benefit of the maca root is its known ability to relieve mild depression. There is an increase in the body's levels of serotonin in individuals using maca. Common treatments for depression are antidepressant medications which tend to have uncomfortable side effects such as weight gain, fatigue, and dulled senses. Maca has none of the side effects that are found in pharmaceutical antidepressants. In fact, the active ingredients in the maca root boost energy and lift depression naturally.

The benefits of the ancient Peruvian maca root continue through the present day as a leading super food health enhancer. For those who have benefited from its health properties, maca comes highly recommended as a time-tested source of health.

*Dosage* The strength of the active ingredients in maca varies, yet the typical dosage is 500mg. twice daily. Maca generally comes in capsule form. However, many herbalists prefer maca in powder form. The powdered maca preparation is one tablespoon per 5 gram.

<http://www.herbwisdom.com/herb-rosemary.html>

## **Rosemary**

### **Rosemary Benefits**

Rosemary (*Rosmarinus officinalis*) is a very popular shrubby, evergreen herb. Its small, drought-resistant leaves are widely used for their various medicinal properties as well as to season food. They are highly aromatic, which means they contain high concentrations of essential/volatile oils, hence their wide use for flavouring food and also as an airborne substance.

Rosemary was originally cultivated on the shores of the Mediterranean. In fact, the herb's Latin name, *rosmarinus*, is derived from the words "ros", which is translated to dew, and "marinus", which means sea, as Rosemary can survive on just the spray in the sea air. It is a plant well suited to growing in poor or sandy soil, high salt, high wind areas such as the conditions found by the sea.

Rosemary's symbolic uses are deeply inlaid within many cultural traditions including weddings, funerals, and during religious ceremonies. The herb is seen by many as a gift by the gods and as a symbol of love, friendship, and trust. In modern times rosemary is grown throughout the world and is widely used as a medicinal herb and to season food.

Rosemary is a member of the Mint family (Lamiaceae). The first records of rosemary's use as a medicinal herb date back to ancient times in the civilizations surrounding the Mediterranean Sea. The herb was thought to have strong effects on memory and in strengthening the mind. Later accounts include that of Queen Elisabeth of Hungary, who claimed that drinking rosemary water led to her longevity as she lived beyond 70 years old while suffering from both gout and rheumatic disorder. Additional historic uses of the herb include its burning to purify the air near ill people to ward off infection during the plague, and it was also used by the French to kill germs during World War II (by utilising its aromatic/essential oil properties).

Rosemary is known to contain several chemicals that promote good health in human beings. The two primary active ingredients found in the herb are carnosic acid and rosmarinic acid. Carnosic acid is a preservative and antioxidant found in both rosemary and common sage. The compound has demonstrated its ability to prevent damage to skin cells by UV-A radiation and is accepted as a very powerful antioxidant. Studies have also shown that carnosic acid offers protection against harmful carcinogens. Rosmarinic acid is found in a variety of herbs other than rosemary, these include thyme, oregano, and peppermint. The compound exhibits properties as an antioxidant, anti-inflammatory, antiviral, and antibacterial.

The rosemary herb is used in modern times to treat a variety of symptoms and illnesses. The most prominent modern use of rosemary is as an antioxidant. The primary goal of the herb in this use is to prevent the damage caused by oxidative stress that occurs during many diseases. The brain is particularly susceptible to the effects of oxidative stress, as demonstrated by the condition's role in diseases such as Parkinson's disease and Alzheimer's disease. Studies have shown that the antioxidants in rosemary, such as the carnosic and rosmarinic acids, are highly effective in combating this problem.

Studies have also shown that rosemary is a potent anti-carcinogen and may play a role in treating cancer in the near future. One such study was conducted on rats and showed that rosemary, when administered in a powdered format, prevented the effects of carcinogens by 76% and decreased the incidence of tumors in mammary glands. In addition, by reducing the damage caused by ultraviolet radiation, the herb also decreases the chances of developing skin cancer.

Rosemary has been thought of as a memory booster throughout history. Recent advances in the science surrounding the herb have shown that it inhibits the breakdown of acetylcholine, which is a compound that plays a role in sections of the brain responsible for memory and reasoning. Rosemary may also promote memory function by increasing blood flow to the brain.

The herb is used by many as a natural antibacterial and antiviral. Rosemary is touted for its ability to eliminate several harmful forms of bacteria while leaving helpful bacteria undamaged. This use of the herb is particularly effective in fighting yeast infections or candida.

Since it is also commonly used as a seasoning, there are many ways to incorporate rosemary into the typical diet. The most common method is to simply season prepared food with the herb to taste. A tea can also be made by adding two teaspoons of the rosemary leaves to hot water and allowing it to steep for 10 to 15 minutes. Herb butters and oils are made by adding the leaves or oil of the plant to the butter or oil and mixing thoroughly. Rosemary is also available in capsule form.

The leaves of the rosemary herb are used to make seasoning. When making rosemary oil nearly every part of this shrubby herb is used. Oil extract from the flowers is considered to be the best in quality. The leaves are often used to make tinctures that are applied directly to the skin to treat maladies such as muscle soreness and sprained ankles.

<http://www.herbwisdom.com/herb-sasparella.html>

### **Sasparella**

#### **Sasparella Benefits**

Sasparella is the common name for smilax regelii, which has been used medicinally to treat everything from chronic pain to toe fungus. It has likely been used for thousands of years by indigenous tribes of South America but was first introduced to Europe near the end of the Dark Ages. Today, it is still a popular supplement ingredient and medicinal treatment for a wide variety of internal and external health conditions.

## **Description of the Plant**

This prickly vine is native to Mexico, the Caribbean and Central and South America. It climbs well and can grow to be over 50 yards long. The berries of sasparella come in lustrous black, purple-blue and a red so rosy it could almost be called fuchsia. This beautiful fruit is popular among wild birds as well as humans. Certain varieties of sasparella can also be found in India and China. The common name is derived from the Spanish zarzaparilla which means "little grape vine shrub", a relatively accurate description of the outward appearance of the plant. Sasparella is a member of the lily family and includes over 300 unique species.

A sarsaparilla root typically measures between six and feet in length. It's tuberous in shape and has no particular smell or taste. It has been used medicinally for hundreds of years by the people native to Central and South America who found it relieved rheumatism, general physical weakness, sexual impotence, headaches, colds, joint pain and skin problems.

## **\*Uses\***

Sarsaparilla root is globally recognized for medicinal properties. Since it was first introduced to the Western world, sarsaparilla has been used to treat gout, gonorrhoea, open wounds, arthritis, cough, fever, hypertension, pain, a lack of sexual desire, indigestion, and even certain forms of cancer. More serious conditions have also been treated with sarsaparilla root. In the Amazon, some tribes used it as a treatment for leprosy by ingesting it as well as using it externally.

Sarsaparilla first came to Europe in the 1400s as a medicine discovered in South America and brought back via boat. Europeans used the root to encourage sweating and urination as well as to purify blood, a common practice during the Dark Ages. During the 1800s, sarsaparilla was on the books in both Europe and the young United States for its blood purifying properties and recommended as a treatment for the sexually transmitted condition syphilis.

Sarsaparilla is also consumed for pleasure in drink and pickled form. Stores in some parts of Oceania stock a popular drink named simply Sarsaparilla that uses the plant to increase foaminess. In the past, it was also popular in the United States as part of a drink made with sassafras. In India, too, sarsaparilla is eaten for more than medicinal purposes. As well as soft drinks, southern Indians enjoy pickled sarsaparilla with curd rice.

Today, sarsaparilla roots is available most readily in health food stores. The capsules, tinctures and supplements of sarsaparilla usually include other herbs for a specific result. It is a common ingredient in hormone balancing, skin care and sex drive increasing natural products. These modern sarsaparilla products are primarily produced from plants grown in Latin America and China.

## **Active Ingredients**

The studies that have been done on sarsaparilla as a medicinal herb suggest that the benefits come from antioxidant properties and plant steroids beneficial to human health. Sarsaparilla also contains flavonoids, a pigmentation chemical that gives many plants their leaf, stem, flower and even root color. In the past decade, flavonoids have garnered more widespread recognition for their use in treating autoimmune conditions and inflammation.

One of the most fascinating ingredients in sarsaparilla root are saponins, a chemical compound. Saponins, usually bitter to the taste, are named after soap because of the foam-like reaction they have when placed in water. In the plants where they originate, saponin chemical compounds help deter fungi and insects from eating their leaves. This could be one of the possible reasons that sarsaparilla has anti-fungal properties.

## **Preparation**

The best way to prepare raw or dried sarsaparilla root is to boil it into an infusion and take a cup of it several times a day. With capsules and supplements, read the instructions on the bottle. Usually, it takes less than half a teaspoon of ground root powder to have the desired effect. In the case of tincture, half a teaspoon twice daily is a recommended dose.

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<http://www.herbwisdom.com/herb-valerian.html>

### **Valerian (*Valeriana officinalis*)**

#### **Valerian Benefits**

Valerian is well known for its sedative qualities and its ability to relax the central nervous system and the smooth muscle groups. It has been used as a sleeping aid for hundreds of years especially when there is excitation or difficulty in falling to sleep due to nervousness. Over 120 chemical components are found in valerian and although a very complex herb, it has not been found to have any negative side effects with moderate use.

It is calming without exerting too sedative an effect and is practically non-addictive. It is a valuable treatment for insomnia, the sedative effect due to the valepotriates and the isovaleric acid.

At least two double-blind studies have demonstrated that valerian extract can significantly reduce the amount of time it takes people to fall asleep without changing the normal stages of

Documented research has noted a mild hypnotic action in both normal sleepers and insomniacs, indicated by a beneficial effect on sleep latency, wake-time after sleep, frequency of waking, nocturnal motor activity, inner restlessness and tension and quality of sleep. Sleepiness and dream recall the morning after were unaffected. The valepotriates have a regulatory effect on the autonomic nervous system; research suggests that they have a calming effect on agitated people but are also a stimulant in cases of fatigue.

Valerian is used in Europe as an antispasmodic, particularly for abdominal cramps due to nervousness and for uterine cramps and menstrual agitation. It helps relieve dysmenorrhoea and it can be of benefit in migraine and rheumatic pain. It may also be applied locally as a treatment for cramps and other muscle tensions.

Valerian is also used as a mild tranquilizer for people experiencing emotional stress, much as anti-anxiety drugs are prescribed and has been prescribed for exhaustion. Valerian has occasionally been tried as part of a program to take a patient off antidepressants or benzodiazepines, and is sometimes used as a muscle relaxant to treat pain.

Valerian does not impair driving ability and produces no morning hangover effect. It is a gentle relaxant and an effective sleep aid.

Millions of people have difficulty sleeping and the pharmaceutical industry has cashed in on the problem to the tune of billions of dollars. But herbal sleep aids can be as effective as the powerful prescription sedatives such as valium and other narcotic type drugs.

<http://www.herbwisdom.com/herb-yerba-mate.html>

**Yerba Mate (*Ilex paraguariensis*)**

**Yerba Mate Benefits**

Woman's World writer Barbara Tunick reports; "A drink from South America has hit U.S. shores-and experts say it's the ticket for those who love the boost of coffee but hate it's side effects."

In addition to its standing as a popular beverage, yerba mate is used as a tonic, diuretic and as a stimulant to reduce fatigue, suppress appetite and aid gastric function in herbal medicine systems throughout South America. It also has been used as a depurative (to promote cleansing and excretion of waste). In Brazil, mate is said to stimulate the nervous and muscular systems and is used for digestive problems, renal colic, nerve pain, depression, fatigue, and obesity. It also has bitter qualities which help stimulate digestion. It has been used traditionally as a tonic, nervine, mild diuretic and stimulant.

Yerba mate has been used as a beverage since the time of the ancient Indians of Brazil and Paraguay and is considered a national drink in several South American countries.

In Europe it is used for weight loss, physical and mental fatigue, nervous depression, rheumatic pains and psychogenic and fatigue related headaches. In Germany it has become popular as a weight-loss aid. Yerba mate is the subject of a German monograph which lists its approved uses for mental and physical fatigue.

In France yerba mate is approved for the treatment of asthenia (weakness or lack of energy), as an aid in weight-loss programs and as a diuretic.

It also appears in the British Herbal Pharmacopoeia (1996) and indicated for the treatment of fatigue, weight loss and headaches. In the U.S., Dr. James Balch, M.D. recommends yerba mate for arthritis, headaches, haemorrhoids, fluid retention, obesity, fatigue, stress, constipation, allergies and hay fever, and states that it "cleanses the blood, tones the nervous system, retards aging, stimulates the mind, controls the appetite, stimulates the production of cortisone and is believed to enhance the healing powers of other herbs."

Millions of South Americans drink Mate on a daily basis where weight problems are uncommon. Researchers think that Yerba Mate may be an important factor. A couple of cups a day may just set you on the course to your goals.

Yerba Mate contains xanthines, chemicals that boost your metabolic rate by 10% and is rich in pantothenic acid, which prevents over-stimulation of the nervous system. Yerba Mate has a host of anti-oxidants that boost immunity and protect against colds and flu. Studies show it is as powerful a cell protector as vitamin C, reducing the effects of aging as well as protecting against cancer and other disease. Furthermore, researchers say that Yerba Mate is a rich source of magnesium that has been proven to ease anxiety: unlike the herbal formulas such as Metabolife that reduce appetite by overstimulating the central nervous system. Drinking 8 oz before a meal can be as effective as diet drugs in taking the edge off your appetite!

<http://www.herbwisdom.com/herb-soy-isoflavones.html>

**Soy Isoflavones (Glycine)**

**Soy Isoflavones Benefits**

For more than five thousand years China has been using soy beans as an additional nitrogen supplement for soil during crop rotation. Found in many East Asian and Hawaiian dishes, green baby soy beans are commonly known as edamame (Japanese for twig bean) or as maodou (Chinese for hairy bean).

Brought to America in the 1930s, soy beans have proved to be useful in a variety of ways. Soy products are derived from soy beans that are labeled as field or vegetable types. Also classified as oil, field types are generally grown to produce soy oil. High in Omega fatty acids, soy is also used in feed for livestock and fowl. Vegetable soy beans known as garden types are higher in protein than field types and are used to produce soy milk, tofu, and other soy based food products. It is important to cook the beans before use -they cannot be eaten raw.

Soy is used to make a wide range of vegan and vegetarian products like soy vegetable oil, soy milk, soy lecithin, and tofu. Miso, soy sauce, and tempeh, are some fermented food products made from soy. Textured vegetable protein is made from fat free soy flour that can be used as a meat substitute to make high protein, fat free meals.

Processed soy is used in various dairy free products such as ice cream, cheese, yogurt, milk, cream cheese, and margarine. Although they are high in protein, soy based dairy products do not contain large amounts of calcium. To manufacture products like sprouted soybeans, tofu, soy concentrate, or soy protein isolates, dissoluble soy carbohydrates are broken down as the

For babies who may be allergic to the proteins in pasteurized cows milk, or for vegetarian and vegan families, soy companies offer soy based infant formulas that the Food and Drug Administration have concluded as safe to use for sole or supplemental nutrition. Soy based infant formulas should not be used if there is an indication of food allergies.

The United States Food and Drug Administration declares that supplemental vitamin products must have a source of full protein. Full, or complete protein contains adequate amounts of essential amino acids that is required by the human body. Soy products offer complete protein for those who would like to replace or reduce their consumption of meat. Animal based food products are high in protein, but are also very high in saturated fat. Soy products offer high protein with no fat.

Since 1990, protein quality has been measured by The Protein Digestibility Corrected Amino Acid Score. Their primary focus is the evaluation of protein quality according to human amino acid requirements, and how well they can be digested. According to score criteria, soy protein products are nutritionally equivalent to eggs and meat, and includes casein, which promotes health and human growth.

Concentrated soy protein absorbs nearly all of the fibre from the initial soy bean. Soy's high protein content makes it an extensively used ingredient for manufactured cereals and baked goods, and for protein powders and beverage drinks.

Not only high in protein, soy based products offer other healthy benefits such as Omega-3 fatty acids that contribute to numerous body actions, and isoflavones that are considered useful in the prevention of prostate, uterine and breast cancer. There is still some medical doubt regarding isoflavones ability to prevent any type of cancer.

Soy is rich in isoflavones, which are the most active phytoestrogens in the human diet. These may help to relieve menopausal symptoms. After the menopause, the level of oestrogen in a woman's body falls and it is thought that phytoestrogens may provide a substitute for the body's own oestrogen, relieving symptoms such as hot flushes and dry skin. The interest in phytoestrogens has developed because of the evidence that women in Japan and Asia who consume diets rich in these compounds, do not appear to suffer the same way with hot flushes and sweats as in the western world. In these countries, the diet is rich in soya containing foods, and menopausal symptoms are reported much less. Amongst the main phytoestrogens in the human diet are the isoflavones, which are found primarily in legume type plants such as soya.

Phytoestrogens can be consumed by purely increasing dietary intake, but this involves eating large amounts of legume food plants, such as peas and beans, with variable phytoestrogen content. Supplements of Soya Isoflavones are a convenient alternative.

Cholesterol reduction is another healthful advantage that comes with soy protein and soy based foods. Diets high in cholesterol and saturated fats are primary targets for heart disease. Fat free textured vegetable protein and processed soy products contain no added cholesterol or saturated fat.

<http://www.herbwisdom.com/herb-watercress.html>

**Watercress**

**Watercress Benefits**

Watercress (*Nasturtium officinale*) has a long history of its many medicinal uses, and a long history in general, dating back to the ancient times of the Greeks. It is an herb native to Europe but grown perennially all over the world. It is cultivated in water and often used in salads as greens.

*Skin Health*

Watercress is a good source of lutein and beta-caratene, two important components in preventing UV-damage and maintaining skin health, which is key to an anti-aging regime. It also helps in treating eczema, acne, and generally problematic skin.

*Antioxidants*

Watercress is heavy in antioxidants, a key ingredient in the prevention of cancer. Antioxidants prevent damage to cells by stopping dangerous free radicals from running rampant and causing cancerous harm. These active antioxidants include vitamins C, A, E, and several B vitamins. The antioxidant properties of watercress especially help in preventing the damage to cells caused by smoking, thus helping lower the cancer risk for lung and throat cancers.

#### *Liver*

Watercress is very rich in glucosinolates, which are water soluble phytochemicals that contain sulfur. The liver, the body's filtration system, serves to clean the blood of impurities that pass through the body. It also controls synthesis, creates and breaks down proteins, and plays a key part in maintaining a healthy metabolism. It is a vital organ that effects many systems, and watercress can help keep it healthy by regulating its enzymes.

#### *Weight Loss*

Watercress is loaded with potassium, which acts as a diuretic and draws out excess water weight from the body. Watercress has a lot of fiber as well, which treats and prevents constipation and other bowel troubles. A healthy digestive system is imperative to maintaining a healthy weight. Watercress also contains iodine, which helps maintain a healthy thyroid gland, which in turn keeps the body's metabolism healthy and active.

#### *All round Multivitamin*

There are many more health benefits to watercress than the ones listed above, and it really is something of nature's multivitamin.

*It is host to a number of beneficial vitamins and minerals, including:*

Vitamin A, K, D, E and several B vitamins

Iron

Potassium

Calcium

Glycosides

Protein

Omega-3 Fats

Antioxidants

Leucine

Iodine

Fiber

Sulfur

#### **How to take**

The leaves or stem of watercress are often taken fresh rather than in capsule form to get the most benefits. It is most nutritious when freshly picked and eaten raw. Use it for a salad or a sandwich for a quick shot of nutrition. It is available all year round.

<http://www.herbwisdom.com/herb-uva-ursi.html>

**Uva Ursi (Arctostaphylos uva-ursi)**

#### **Uva Ursi Benefits**

The leaves of this small shrub have been used as an herbal folk medicine for centuries as a mild diuretic and astringent, and in the treatment of urinary tract infections such as cystitis, urethritis and nephritis, pyelitis and in pyelonephritis. Uva ursi can help to reduce accumulations of uric acid and relieve the pain of bladder stones. Uva Ursi is also helpful for chronic diarrhoea. As a nutritional supplement and muscle relaxant, Uva Ursi soothes, strengthens, and tightens irritated and inflamed tissues.

Uva Ursi has a history of medicinal use dating back to the 2nd century. It has been widely used as a diuretic, astringent, and antiseptic. Folk medicine around the world has recommended Uva Ursi for nephritis, kidney stones, and chronic cystitis. The herb has also been used as a general tonic for weakened kidneys, liver or pancreas. Native Americans used it as a remedy for headaches, to prevent and cure scurvy and to treat urinary tract infections. In fact, until the discovery of sulfa drugs and antibiotics, Uva Ursi was the treatment of choice for such bladder and related infections. Through modern day scientific research in test tubes and animals, Uva Ursi's antimicrobial properties, which can help fight infection, and diuretic effects have been

Uva Ursi may be of great value in diseases of the bladder and kidneys, strengthening and imparting tone to the urinary passages. The diuretic action is due to the glucoside Arbutin, which is largely absorbed unchanged and is excreted by the kidneys. During its excretion, Arbutin exercises an antiseptic effect on the urinary mucous membrane. Therefore, it is used in inflammatory diseases of the urinary tract, urethritis, cystitis, etc.

This herb helps prevent postpartum infection. Uva Ursi is also helpful for chronic diarrhoea. As a nutritional supplement and muscle relaxant, Uva Ursi soothes, strengthens, and tightens irritated and inflamed tissues. The herb neutralizes acidity in the urine, increasing urine flow, therefore reducing bloating and water retention, making it beneficial for weight loss. Uva Ursi's astringent properties may also assist in the treatment of some bed wetting problems.

Uva Ursi also contains allantoin which is well known for its soothing and tissue-repairing properties. Externally, it has been used as an astringent wash for cuts and scrapes and applied externally for back sprain.

#### *Urinary Tract Infections*

Uva Ursi contains chemicals, primarily hydroquinone and hydroquinone derivatives, that make it potentially useful for urinary conditions and is used to treat infections such as cystitis, urethritis and nephritis. The hydroquinone derivative, arbutin, is the chief active compound in Uva Ursi. It is absorbed in the stomach and converted into a substance with antimicrobial, astringent, and disinfectant properties. During urination, as it passes out of the body, it acts on the mucus membranes of the urinary tract to soothe irritation, reduce inflammation, and fight infection. Interestingly, arbutin taken alone is not as effective as the whole Uva Ursi plant in controlling urinary tract infections. That's because intestinal bacteria can break down arbutin, but they are less likely to do so in the presence of other Uva Ursi compounds.

Uva Ursi has been approved for treating inflammation of the lower urinary tract by Commission E of the German Federal Institute for Drugs and Medical Devices, which is the German governmental agency that evaluates the safety and effectiveness of herbal products. An astringent shrinks and tightens the top layers of mucous membranes, thereby reducing secretions, relieving irritation, and improving tissue firmness.

Uva Ursi also contains diuretic chemicals, including ursolic acid, powerful astringents, and a chemical that helps promote the growth of healthy new cells, allantoin. In addition to its antiseptic and astringent actions, Uva Ursi may help to flush out bacteria by promoting urination. It has been used to reduce the accumulation of uric acid and relieve pain of bladder stones. The diuretic action may relieve the bloating feeling associated with menstruation.

*E. Coli*

Uva Ursi has been reported to be effective against E. coli. Preparations made from bearberries act anti-bacterially in vitro against Proteus vulgaris, E. coli, Ureaplasma urealyticum, Mycoplasma hominis, Staphylococcus aureus, Pseudomonas aeruginosa, Friedländer's pneumonia, Enterococcus faecalis, and Streptococcus strains, as well as against Candida albicans. The anti-microbial effect is associated with the aglycone hydroquinone released from arbutin (transport form) or arbutin waste products in the alkaline urine.

#### *High Blood Pressure*

Diuretics are often prescribed to treat high blood pressure. However as they also deplete the body's potassium, it is advisable to increase your intake of fresh vegetables and bananas. Diuretics are also prescribed for congestive heart failure. However, consultation with a doctor before using Uva Ursi for these reasons is advisable.

#### *Wounds/Infections*

Allantoin contained in Uva Ursi is an active ingredient in many over the counter creams to treat cold sores, herpes, and vaginal infections.

#### *Diarrhoea*

Astringent tannins found in this herb are binding and help relieve diarrhoea.

<http://www.herbwisdom.com/herb-whey-isolate.html>

#### **Whey Isolate**

#### **Whey Isolate Benefits**

Whey isolate is one of the most complete forms of protein available and because it lacks carbs, fats, cholesterol and lactose, it is commonly used as a health supplement. A single serving of many brands of whey isolate may provide your body with all of the amino acids it needs to promote ideal health results from workout and fitness efforts. Further, it contains a high level of leucine, cysteine and amino acids. These elements, in combination with the high levels of pure protein it provides to your body with practically zero fats and lactose, make it ideal for those who want to nourish their body and promote a healthy lifestyle.

#### **What Is Whey Isolate?**

Whey isolate, otherwise known as whey protein isolate, is natural by-product from the cheese production process. It is typically a dry, powdery substance that may be used in the making of various products that range from meats to candies and certain types of beverages. Because of its unique health benefits, whey isolate is also widely used as a health supplement. Through the whey isolate manufacturing process, this powder provides you with one of the most pure forms of complete protein available. It generally has a higher concentration of protein than other forms of whey, such as concentrated whey protein. Further, the manufacturing process removes excess fats and lactose from the powder. Some types of whey isolate on the market are also cholesterol free and carb free. See also our article on Whey Protein

#### **A Closer Look At Its Benefits**

After learning that whey isolate is a complete form of protein that is also rich in amino acids, leucine and cysteine, the question arises of what results you might expect to enjoy when you take a whey isolate supplement on a regular basis. The benefits are varied, and they include the promotion of muscle growth, the loss of body fat, a boost to the body's immune function, a reduction in the risk for breast cancer in women, an improvement in the control of blood glucose levels and prevention for muscle and bone loss in aging adults. Through a review of the benefits whey isolate can provide, you can see that this substance is ideal for use as a health supplement to enhance workouts as well as for the general health and well-being it provides.

### **How to Get the Best Results**

There are several different types of whey isolate available on the market, and the supplement can be found both online and in numerous local and chain stores. The most common type is a powder that is designed to be added to water or milk to prepare a health drink. You may also find whey isolate in an already prepared drink that is ready for immediate consumption. Both the powder mixes and prepared drinks may be found in a variety of flavors like chocolate, vanilla and more. The best results for muscle growth are usually enjoyed when the whey isolate enters your body either immediately before or immediately after a workout. Instructions and recommendations may vary, so the manufacturer's dosage and intake instructions should be carefully read and followed.

<http://www.herbwisdom.com/herb-whey-protein.html>

### **Whey Protein**

#### **Whey Protein Benefits**

Whey protein can be a healthy addition to many diets. It can be used as a food supplement or consumed with meals. Athletes and body-builders are associated with using whey protein because it helps to increase lean muscle mass. However, anyone wanting to build, retain and repair muscle tissue may benefit. Due to the variety available, it is an accessible source of protein for many people. Receiving adequate protein is essential for good health. Though other forms of protein are also high quality, whey protein is a safe and natural form which offers many health benefits in addition to retaining muscle.

*Athletic Performance* Athletes may use whey protein in their training regimen to enhance their performance and increase lean muscle mass. When the body is exposed to physical stress, such as exercise, muscle is naturally broken down and repaired. Whey protein optimizes muscle repair by speeding the time it takes to regenerate tissue. The production of glutathione is increased, assisting the process of muscle building and repair. Fat oxidation is improved to produce greater energy and oxidative cell damage that may occur from training is reduced.

*Muscle Wasting Diseases* Whey protein may benefit those with cachexia because it helps to prevent muscle wasting. Cachexia occurs in patients with certain diseases such as the AIDS virus or those with cancer. Consuming whey protein may also benefit senior citizens and others who may be losing muscle mass due to natural aging. A healthy musculoskeletal system increases strength, benefits immune function and improves health.

*Improved Digestion* Whey protein may improve digestion. It can help to regulate bowel movements and in certain forms, may be consumed by those who are lactose intolerant. It is often used in milk-based formulas for infants.

### **So What exactly is Whey Protein?**

Whey is the liquid portion of milk that separates after manufacturing cheese. It is a globular protein composed of beta-lactoglobulin, alpha-lactalbumin, bovine serum albumin and immunoglobulins. The chemical composition is similar to human breast milk and the branched chain amino acids in human skeletal muscle.

**Good Source of Amino Acids** Whey protein is a good source of amino acids such as glutamine, leucine, and cystine. The high concentration of branched chain amino acids are specifically responsible for the whey protein's optimal maintenance and repair of muscle tissue. Glutamine and leucine stimulate protein synthesis after exercise and are responsible for reducing tissue damage and improving endurance. Cystine helps to produce glutathione, an antioxidant which helps to maintain muscle mass. [\(See also our article on N-Acetyl Cysteine/NAC\)](#)

*Whey Protein is Available in a Variety of Forms* Whey protein may be consumed as a protein concentrate, an isolate or in a hydrolyzed form. See also our article on Whey Isolate. Whey protein concentrate is usually found in protein powder supplements and is approximately 80% protein. Whey protein isolate is the purest form of whey protein and is approximately 90-95% protein. The isolate form contains minimal lactose, making it suitable for those who are lactose intolerant. Hydrolyzed whey protein is the most easily absorbed because the protein has already been broken down into peptides. Because of its ease on the digestive tract, hydrolyzed whey protein is used in infant formulas and products for medical and specialized sports

Whey protein is available in snack and energy bars, pre-made shakes and sports drinks. It can be consumed in powders and be added to smoothies or mixed with food. Whey protein can also be taken in capsules.

<http://www.herbwisdom.com/herb-yarrow.html>

**Yarrow (*Achillea millefolium*)**

**Yarrow Benefits**

*Achillea millefolium*, or yarrow, originates from Europe and has adapted to the regions of North America as well as other moderate regions. The word "Achillea" refers to Achilles, an ancient hero. He said that he used yarrow for himself and for his soldiers. "Millefolium" means "coming of a thousand leaves". This refers to the very small, fine and feathery leaves of this plant. The yarrow plant carries several other names: bloodwort, common yarrow, carpenter's weed, knight's milfoil, noble yarrow, old man's pepper, nosebleed and staunch grass.

This herb plant was first used by ancient Greeks over 3,000 years ago for treating external wounds on the skin. The flowers and leaves of yarrow were eaten and also made into a tea-like drink. The fresh leaves were used to stop bleeding wounds, treat gastrointestinal problems, fight fevers, lessen menstrual bleeding and better circulation. The fresh leaves were also chewed on to relieve tooth aches. Scientists have credited yarrow for its benefits relating to almost every

Native Americans used yarrow for wounds, infections and bleeding. Chinese medicine gives it praise for the ability to affect the kidney, spleen, liver and energy channels throughout the body. Animal studies have also shown support for the use of yarrow in cleansing wounds and controlling the bleeding of wounds, cuts and abrasions. Many times yarrow is categorized as a uterine tonic, which supports the circulation in the uterine. Many studies show that it helps the uterine by improving the tone, increasing menstrual flow and reducing spasms in the uterine.

*There are many other benefits of yarrow:*

Fights bacteria. Yarrow has an antiseptic action. The bitter parts and fatty acids encourage bile flow out of the gallbladder, known as the cholagogue effect. The free-flowing action improves digestion and prevents gallstones from forming.

Decongestant. Yarrow contains a drying effect and seems to improve coughs and sinus infections with sputum formation.

Astringent. Very helpful with allergies where nasal secretions and watery eyes are caused by molds, dust, pollen and dander. Yarrow is also known to cause sweating in cases of flu, fevers and colds, helping to cure simple infections.

Infusion. Yarrow is used to aid in healing skin conditions, such as eczema. The essential oils are used and rubbed onto the affected area.

Anti-inflammatory. The oil found in the yarrow has been used to treat arthritis.

Expectorant. Helps to cure colds.

Promotes digestion. Helps in the secretion of enzymes and digestive juice and increases appetite; both help in digestion.

Yarrow is highly known and widely used in herbal medicines and supplied either externally or internally. The entire plant is used, both dried and fresh and is best when gathered while in flower. It is recommended to use caution when this herb is used in large or frequent doses taken for a long period of time. This can possibly be harmful and may cause rashes or make the skin sensitive to sun.

The leaves of the yarrow can be used cooked or raw. They have a bitter flavor but are good in mixed salads and best used when they are young. The leaves may also be used as a preservative or flavoring for beer. The flowers and leaves can be made into an aromatic tea and the essential oils found in the flowering heads can be used as flavor for soft drinks. Its basic components are Alpha Pinene, Acetate, Borneol, Beta Pinene, Borneol, Cineole, Camphene, Camphor, Gamma Terpinene, Isoartemisia Ketone, Chamazulene, Limonene, Sabinene and Tricyclene.

*Recommended dosage and administration of yarrow for adults*

*~Yarrow flowers or equal preparations:* 3g in one day as tea or infusion *~Extract (1:1, 25 ethanol):* 1-4 ml three times in a day *~Dried herb:* 2-4 g of infusion or capsules three times in a day *~Tincture (1:5; 40 ethanol):* 2-4 three times in a day

<http://www.herbwisdom.com/herb-ashwagandha.html>

**Ashwagandha (Winter Cherry)**

**Ashwagandha Benefits**

Ashwagandha root is a herb of the ages. It is the 'ginseng' of Ayurvedic medicine, the traditional medicine of India and is considered an 'adaptogen', a term used to describe herbs that improve physical energy and athletic ability, increase immunity to colds and infections and increase sexual capacity and fertility.

One reason for ashwagandha's reputation as a general energy-promoting, disease-preventing tonic may be its effect on the immune system. A number of studies have shown significant increases in white blood cell counts and other measures of strengthened immunity in rodents given ashwagandha or certain chemicals extracted from the herb. Ashwagandha may also have a mild sedative effect on the central nervous system and in animal studies it has been shown to be a muscle relaxant. It is commonly used to increase vitality, particularly when recovering from chronic illnesses and pain management for arthritic conditions. Ashwagandha may also help regulate blood sugar which aids in suppressing sugar cravings. Research shows ashwagandha may be a promising alternative for cancer treatment and prevention. Ashwagandha seems to show positive effects on the endocrine, cardio, and central nervous systems. It is one herb that could help your body produce its own thyroid hormones.

Ashwagandha is used to restore male libido, cure impotence and increase male fertility. It is widely used in southern Asia as a male sexuality tonic.

Preliminary studies indicate that the herb helps to reduce the negative effects of stress, slow tumour growth, treat anxiety and insomnia, and reduce cholesterol in addition to increasing sexual performance.

Ashwagandha is generally safe at the doses recommended on the packaging. In high doses it may have steroidal activity similar to Creatine.

Research on ashwagandha has concluded that extracts of the plant has a direct spermatogenic influence on the seminiferous tubules of immature rats presumably by exerting a testosterone-like effect<sup>1</sup>. It could also be a potential source of hypoglycemic, diuretic and hypocholesterolemic agents.

Because ashwagandha has traditionally been used to treat various diseases associated with nerve tissue damage related to the destructive molecules known as free radicals, some researchers have speculated that the herb may have antioxidant properties. Free-radical damage plays a role in normal ageing and in such neurological conditions as epilepsy, Parkinson's disease and Alzheimer's disease.

<http://www.herbwisdom.com/herb-slippery-elm.html>

**Slippery Elm**

**Slippery Elm Benefits**

Slippery Elm is a species of elm tree that has been used as an herbal remedy in North America for hundreds of years. It is extremely versatile, providing relief from a number of ailments, including Irritable Bowel Syndrome (IBS) and sore throats. Slippery Elm is also known as *Ulmus fulva*, Red Elm, Sweet Elm, Moose Elm, Indian Elm, Gray Elm, and Soft Elm.

### **Habitat**

Native to North America, Slippery Elm is a deciduous tree that can grow up to about 65 feet in height and 20 inches in diameter. It grows mostly in the Appalachian Mountains and the damp forests of eastern North America and south-eastern Canada. As mentioned previously, another name for the tree is "Red Elm." This is due to its reddish heartwood. With long, slender, and green leaves, the branches grow downward and also present densely-clustered flowers. A great thing about the tree is that it is very resistant to Dutch elm disease, which plagues other elms. However, it does have problems with Elm Leaf Beetles.

### **Slippery Elm Uses**

Native Americans used Slippery Elm to create balms or salves to heal wounds, burns, ulcers, psoriasis and other skin conditions. They also used it orally to soothe sore throats, relieve coughs, and help with diarrhoea and stomach issues. Slippery Elm was used during the American Revolution to help treat and soothe the wounds of soldiers. The tree is mentioned quite a bit in older literature and today it is widely discussed in alternative medicine writings and reports. Currently, there is little scientific research regarding Slippery Elm and its uses, but it is widely recommended to patients with various conditions.

### **Active Ingredients**

Slippery Elm contains a substance called mucilage, which is a polysaccharide that becomes a gel when mixed with water. The mucilage comes from the inner bark of the tree and is a bit slippery and slimy, hence the name "Slippery Elm". The mucilage does a good job of soothing and coating the mouth, throat, stomach, and intestines, causing much relief from things like Gastroesophageal Reflux Disease (GERT), Crohn's Disease, ulcerative colitis, diarrhoea, diverticulitis, and Irritable Bowel Syndrome (IBS).

### **Protect from Gastric Ulcers**

Since many experts think it causes extra mucus production in the gastrointestinal tract, Slippery Elm may protect the tract from ulcers due to excess acid. It is rich in nutrients, including beneficial antioxidants that help relieve inflammation.

### **Slippery Elm Bark**

The inner bark of the Slippery Elm is the part that is used to treat all of the mentioned ailments and even more. It is dried, ground, powdered, and used for medicinal purposes.

<http://www.herbwisdom.com/herb-ginseng-russian.html>

**Russian Ginseng (*Eleutherococcus senticosus*)**

### **Russian Ginseng Benefits**

Russian Ginseng, a relatively new addition to Western natural medicine, has quickly gained a reputation similar to that of the better known and more expensive Korean Ginseng. Unlike many herbs with a medicinal use, it is more useful for maintaining good health rather than treating ill-health. Research has shown that it stimulates resistance to stress and so it is now widely used as a tonic in times of stress and pressure. Regular use is said to restore vigour, improve the memory and increase longevity. It has been used during convalescence and in the treatment of menopausal problems, geriatric debility, physical and mental stress and a wealth of other ailments

Russian Ginseng or Eleuthero has been used in China for 2000 years as a folk remedy for bronchitis, heart ailments, and rheumatism, and as a tonic to restore vigour, improve general health, restore memory, promote healthy appetite, and increase stamina. Referred to as ci wu ju in Chinese medicine, it was used to prevent respiratory tract infections as well as colds and flu. It was also believed to provide energy and vitality. In Russia, eleuthero was originally used by people in the Siberian Taiga region to increase performance and quality of life and to decrease

Eleuthero's ability to increase stamina and endurance led Soviet Olympic athletes to use it to enhance their training. Explorers, divers, sailors, and miners used eleuthero to prevent stress-related illness. After the Chernobyl accident, many Russian citizens were given eleuthero to counteract the effects of radiation.

Although a relatively new addition to Western natural medicine, it has quickly gained a reputation similar to that of the better known and more expensive Korean Ginseng. Unlike many herbs with a medicinal use, it is more useful for maintaining good health rather than treating ill-health. Research has shown that it stimulates resistance to stress and so it is now widely used as a tonic in times of stress and pressure. Regular use is said to restore vigour, improve the memory and increase longevity. It has been used during convalescence and in the treatment of menopausal problems, geriatric debility, physical and mental stress.

They are classified to the group of adaptogens, which raise resistance to various negative factors: physical, chemical, biological and psychological. The preparations stimulate physical and mental ability, raise the organism resistance at various kinds of sicknesses, poisoning, irradiation. They stimulate central nerve system, sex glands activities, decrease sugar and cholesterol level in blood, improve appetite, sharpen sight and hearing.

Eleuthero produces a comprehensive strengthening and toning impact; it has been recommended in treating various neural diseases, impotence, lung ailments, medium forms of diabetes mellitus, and malignant tumours.

The results of pharmacological investigations of Eleuthero have been summarised by I. V. Dardymov and E. I. Khasina (1993) in their book. The authors postulate Eleuthero's effects on the body, which involve an energy-mobilizing impact primarily through intensified utilization of glucose and a stress-protective effect conditioned by change in central nervous system and hormonal regulation. In an alarming situation, the adrenal glands release corticosteroids and adrenaline which prepare the organism for the fight or flight reaction. When these hormones are depleted, the organism reaches an exhaustive phase. Eleutherococcus delays the exhaustive phase and can allow a more economical and efficient release of these hormones.

Another way that eleuthero reduces stress on the body is to combat harmful toxins. Eleuthero has shown a protective effect in animal studies, against chemicals such as ethanol, sodium barbital, tetanus toxoid, and chemotherapeutic agents. Eleuthero can also reduce the side effects of radiation exposure.

Eleuthero has been shown to have immunoprotective effects against breast (mammary gland) carcinoma, stomach carcinoma, oral cavity carcinoma, skin melanoma and ovarian carcinoma. It was found to have a pronounced effect on T lymphocytes, predominantly of the helper/inducer type, but also on cytotoxic and natural killer cells. Its active ingredients may also be of use in combating herpes simplex type II infections.

Germany's Commission E approved eleuthero as a tonic in times of fatigue and debility, declining capacity for work or concentration, and during convalescence. Other uses for eleuthero are for chronic inflammatory conditions and traditionally for functional asthenia (Bruneton, 1995). Eleuthero has also been reported to increase stamina and endurance and protect the body systems against stress-induced illness and fatigue.

Eleuthero has been shown to enhance mental acuity and physical endurance without the let down that comes with caffeinated products. Research has shown that eleuthero improves the use of oxygen by the exercising muscle. This means that a person is able to maintain aerobic exercise longer and recovery from workouts is much quicker.

Other findings that are more positive have resulted from animal and human studies of eleuthero's other potential effects. Chemicals in eleuthero appear to produce moderate reductions in blood sugar and blood cholesterol levels and modest improvements in memory and concentration. Eleuthero may also have mild estrogenic effects. In laboratory studies, various chemicals found in eleuthero have also shown antiviral and anticancer properties, but these effects have not been well studied in humans.

Several studies were conducted to evaluate the effects of eleuthero on eye conditions and color distinction. One study evaluated the pre and post-operative effects of eleuthero extract (1.5 ml twice daily) on 282 male or female patients suffering from primary glaucoma (102 cases) and eye burns (58 cases). Beneficial effects were noted in both treatments. Eleuthero was also found beneficial in 122 cases of myopia treatment (Zaikova, 1968).

In 50 patients with normal trichromatic vision a single dose of eleuthero extract (2 ml) stimulated color distinction (red and green) within 30 to 60 minutes after ingestion. Maximum effect was reached in six to seven hours and persisted for a minimum of 29 hours (Sosnova, 1969).

### **Immune System**

Evidence is also mounting that eleuthero enhances and supports the immune response. Eleuthero may be useful as a preventive measure during cold and flu season. Recent evidence also suggests that eleuthero may prove valuable in the long-term management of various diseases of the immune system, including HIV infection, chronic fatigue syndrome, and autoimmune illnesses such as lupus.

In perhaps the most convincing study carried out so far, B. Bohn and co-workers in Heidelberg, West Germany looked at immune parameters in 18 individuals in a randomised, double-blind fashion for a total of four weeks. The subjects in this study had venous blood drawn both before and after *Eleutherococcus Senticosus* administration, and the samples were analysed by flow cytometry, which counted absolute numbers of immune cells present in their blood.

Overall, the *Eleutherococcus Senticosus* group showed an absolute increase in all immune cells measured. Total T-cell numbers advanced by 78 per cent, T helper/inducer cells went up by 80 per cent, cytotoxic Ts by 67 percent, and NK cells by 30 per cent, compared to the control group. B lymphocytes, which are cells that produce antibodies against infectious organisms, expanded by 22 per cent in the *Eleutherococcus Senticosus* subjects, compared to controls. Most importantly, no side effects were noted in the *Eleutherococcus Senticosus* subjects up to five months after *Eleutherococcus Senticosus* administration ended.

The researchers stated: 'We conclude from our data that *Eleutherococcus senticosus* exerts a strong immunomodulatory effect in healthy normal subjects.' The Bohn study has caused drug companies to spend millions of dollars in an effort to get *Eleutherococcus Senticosus* approved as a drug by the FDA in the States.

The increases in T, B, and NK cells in people given *Eleutherococcus Senticosus* suggest that it could be very useful in alleviating the immune suppression associated with strenuous exercise. In addition, one might speculate about a positive effect of *Eleutherococcus Senticosus* in the very early stages of HIV (AIDS-virus) infection. In an HIV-infected patient, *Eleutherococcus Senticosus* might prevent or retard the spread of the virus, thanks to the synergistic positive actions of elevated numbers of both helper and cytotoxic T cells.

Supporting these findings, *Eleutherococcus Senticosus* is now used in the support of cancer patients undergoing radiation and chemotherapy, especially in Germany. Studies have shown that ES, when administered to patients, drastically reduces the side effects of radiation and chemotherapy (e.g., nausea, weakness, fatigue, dizziness, and loss of appetite). Other research with cancer patients has linked *Eleutherococcus Senticosus* with improved healing and recovery times, increased weight gain, and improved immune cell counts. In Russia, the administration of *Eleutherococcus Senticosus* to cancer patients seemed to permit larger than normal doses of drugs utilised in chemotherapy, thus speeding treatment periods.

How does *Eleutherococcus Senticosus* actually spur the immune system to greater activity? At present, there is no consensus. Some researchers believe that *Eleutherococcus Senticosus* induces increased interferon biosynthesis (interferon is a powerful chemical which boosts immune-system activity), while others believe that polysaccharides (long-chain sugar molecules) naturally found in *Eleutherococcus Senticosus* stimulate the activity of special white blood cells called macrophages. These macrophages play a number of roles in the immune system, including the breakdown of infected cells and the stimulation of other immune cells. However, the polysaccharides are probably 'non-specific' immune stimulants, which means that their effectiveness fades fairly quickly and that they must be administered continuously or at regular intervals in order to produce a positive effect.

### **Athletes & Antibiotics**

Why should athletes try to stimulate their own immune systems, rather than rely on antibiotics and other remedies to control infections? Obviously, prevention of infection can promote more consistent, high-quality training and lower the risk of missed competitions. In addition, many micro-organisms are now resistant to many of the commonly used antibiotics. That means that an infection picked up during heavy training may be more difficult to shake off than ever before.

Some of the more notable antibiotic-resistant organisms include *Streptococcus pyogenes*, which causes 'strep throat', upper respiratory infections, and is reported to be resistant to both penicillin and chloramphenicol. Another common bacterial species, *Hemophilus influenzae*, which produces both ear and upper-respiratory tract infections, is now resistant to a variety of antibiotics, including chloramphenicol, ampicillin, and tetracycline. *Staphylococcus aureus*, which causes 'staph infections' of the skin, especially around surgical wounds, is resistant to erythromycin, tetracycline, and the so-called B-lactam antibiotics. Finally, certain strains of *Escherichia coli*, which have caused deaths in recent incidents when customers of restaurants have consumed contaminated or poorly cooked meat, are resistant to a variety of different drugs.

Investigators in the US recently completed a pilot study in which *Eleutherococcus Senticosus* extract was given to AIDS patients in hopes of improving their immune-system functioning and overall survivability. The results were very promising, and so a four-city, randomised, double-blind, clinical trial will be carried out with *Eleutherococcus Senticosus* in the near future.

Extracts of *Eleutherococcus senticosus* appear to have the ability to prevent immune suppression in vigorously training athletes and may limit the risk of infection. By boosting recovery following hard workouts, *E. senticosus* may also downgrade athletes' chances of over-

There is a relatively small number of controlled clinical trials performed with eleuthero. A single-blind, placebo-controlled, crossover trial lasting eight days investigated the effect of eleuthero extract (2 ml, twice daily) on working capacity and fatigue of six male athletes, ages 21-22. Oxygen uptake, heart rate, total work, and exhaustion time were measured. Significant results were observed in all parameters, particularly the 23.3% increase in total work noted in the eleuthero test group compared with 7.5% of the placebo group (Asano, 1986).

An eight-week double-blind, placebo-controlled study evaluated the efficacy of eleuthero extract (3.4 ml daily) on sub-maximal and maximal exercise performance of 20 highly trained distance runners. No significant difference was observed between test and control groups in heart rate, oxygen consumption, expired minute volume, respiratory exchange ratio, perceived exertion, and serum lactate levels (Dowling, 1996).

<http://www.herbwisdom.com/herb-goji-berry.html>

**Goji Berry/Wolfberry**

**Goji Berry/Wolfberry Benefits**

Goji Berry (Lycium) is also commonly known as Wolfberry. Like many of the herbs and natural supplements that have been found in Asia, Goji Berry is known to have many positive effects for people who want to promote total body health. Goji has been around for more than 6,000 years and during that time, the virtues have been explored in various tests. Scientists have found that people can benefit greatly from the use of Goji in a number of different areas, which confirms some of the suspicions of the Chinese herbalists who have used the berry for decades to treat people with a host of different ailments. One of the most important tests for Goji Berry was run in 1994, when scientists finally used humans in some experiments with the berry. They found that patients suffering from cancer were more receptive to their treatments and showed better results from those treatments when they had eaten the berries. This makes sense because the primary draw of Goji is the fact that it has antioxidants that are known to fight off cancer and other infectious diseases. Other tests have been done in test tubes over the course of time and those tests had similar findings as the one done in 1994.

The test tube experiments found that Goji Berry was good for promoting proper cell growth and the antioxidants found within it were very powerful in disease prevention. One of the interesting finds was that Goji could help lower glucose levels in individuals and also lower cholesterol in some people. There are many things that are not yet known about Goji Berry, but all of the tests up to this point indicate that it can be a very good item for those people looking to get healthier and ward off potential disease in the future. It makes sense for those folks who just want to take a holistic approach to their health.

#### **What things does Goji Berry improve specifically?**

There are many different areas that have shown improvement because of the use of this treatment, which comes with a pretty high price tag in China. The price is justified by the fact that Goji does so much for the body and most people see it as an investment in their long term health. The antioxidants within Goji are most well known for fighting off disease within the liver. For people who want to protect their liver in the face of alcohol or drug use, the berry supplements can be especially helpful.

Likewise, there are some small, subsidiary effects that have come along with Goji Berry. Improved eyesight is thought to be a positive effect, while increased leg strength is, as well. This promotes the theory that the berry helps to improve the body as a whole, instead of just helping to improve any one particular area. With this knowledge, people have been much more likely to try Goji as a part of their daily routine. Those who use it daily have found that Goji increases their energy levels to a point where they feel more able and much more refreshed than in the past.

#### **Goji Berry as a sexual enhancer**

Though its primary role is in preventing disease, Goji Berry has also been found to help increase fertility in women and help improve sexual function in men. One reason for this is that it improves circulation throughout the body, allowing people to perform at their peak in a host of different activities. Sexual activity is one of those and although it is a nice side effect, it is not the focus of Goji Berry in any shape or form.

Improving immune function and longevity are two items that most people cite when they use Goji Berry. They want to ward off not only things like cancer through the antioxidants, but they also want to stay healthier on a day to day basis. Having to constantly fight off things like a cold or the flu can weigh on the body and it can make life difficult for people during their routine. In order to stay healthy for longer, the body has to stay sharp and this can only happen when you are free of disease. In this way, vitality and long term function is increased by Goji Berry.

All in all, Goji is popular not just for one purpose, but because it helps to improve the body in lots of different ways. The tests have shown that it has significant power to both prevent and help cure diseases such as cancer, while other tests have proven Goji to be an effective holistic treatment. Total body health and keeping in tune for the long run is a concern for most, so it figures that those people would want to use Goji to not only lengthen life, but improve the quality of their life.

<http://www.herbwisdom.com/herb-senna.html>

**Senna (Cassia senna)**

### **Senna Benefits**

Senna is a herb that is generally used for its laxative properties. Senna is also known as cassia senna, wild senna, cassia marilandica, or locust plant. It works by interacting with the bacteria in the digestive track, resulting in intestinal contractions. These contractions are caused by the anthraquinone that is contained in senna. These dimeric glycosides anthraquinone derivatives are known as Senna glycosides or sennosides. They are named after their abundant occurrence in these plants of the genus Senna. The main forms of these glycosides are often referred to by: A, B, C & D. Both leaves and pods of the senna plant are used for their laxative effects. The pods are less potent than the leaves.

Senna is found in many tropical countries. The plant has been used in India for thousands of years as a laxative. It can be found in capsule and tablet form, tea bags and loose tea, as well as liquid extracts. The undiluted dried root can be found in health food stores.

### **How Does Senna Work?**

Senna contains glycosides, which are a group of organic compounds that are commonly found in plants. These compounds work as a laxative by smoothing the muscles as digested food moves through the intestines. This helps to enhance the stool volume and move it out of the colon. The process is caused by the chain of fatty acids that promote digestion, fermentation, and successfully converting the glycosides into a purgative agent.

### **How to Use Senna**

Senna is generally used by people suffering from constipation. For relief, a person should take ½ teaspoon of the liquid, or one 50 or 100 mg capsule or tablet. After taking the Senna, a bowel movement should occur within six to 12 hours. There is also a tea available, but since Senna has an unpleasant taste naturally, it is good to mix the tea with another flavor of tea.

Senna is the ingredient in the commercial laxative suppository called Senokot. The suppositories are inserted into the rectum for constipation relief.

### **Senna Tea**

Many people like to take herbal preparations in the form of a tea. Senna tea comes in teabags and can be found in health food stores, but some people like to use the loose leaves of Senna and brew the tea themselves. Steep the leaves in a pot of boiling water for approximately ten minutes. The leaves can also be put in cold water and steeped for 10 to 12 hours. Using cold water to steep the leaves will leave less resin in the tea, so the chances of abdominal cramping will be reduced. Regardless of the method used, once the tea is ready, strain and drink. When relieving constipation with Senna tea, it will take up to 12 hours to get relief. It is recommended to take before bedtime, so that relief can occur in the morning.

A common preparation is to boil 100 grams of the tea leaves in distilled water with 5 grams of fresh ginger that has been sliced. Cover and steep for 15 minutes, strain, and drink while hot. Make only the amount to drink, as the Senna tea gets stronger if it sits, and can lead to abdominal cramping. Other carminative herbs that mix well with Senna are peppermint and fennel. When sensitive stomachs are an issue, making the tea from the Senna pod rather than the leaves produces a milder tea as the pods are less potent than the leaves.

<http://www.herbwisdom.com/herb-royal-jelly.html>

## **Royal Jelly**

### **Royal Jelly Benefits**

Royal Jelly is a substance that is secreted by the honey bee. It is used to feed the larvae and the adult queens. Royal Jelly is made up of 60-70 percent water, 12 percent protein, 12-15 carbohydrates and five to six percent lipid. It also has vitamin B1, vitamin B2, vitamin B6, niacin, pantothenic acid, folic acid and trace amounts of vitamin C. The recommend serving of royal jelly is between 500 and 3000 mg per day.

Researchers have been studying Royal Jelly for quite some time and have found that it has many health benefits.

*Below are some of the health benefits of Royal Jelly:*

#### *Lower cholesterol level*

High cholesterol is a condition that affects nearly 40 percent of the adult populations. If it is left untreated, it can cause a stroke and/or heart attack. There was a study done that involved two groups of volunteers. Half of the volunteers were given six grams of royal Jelly while the other half were given a placebo. The results of the study were that the volunteers who were given the royal jelly were able to reduce their total cholesterol and LDL by several points.

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#### *Helps aid female fertility*

Infertility is a problem that affects approximately 10 percent of women. Ovulatory dysfunction is the most common cause of female infertility. Royal Jelly can help boost a woman's fertility by increasing the quality of her eggs and improving her overall reproductive health.

#### *Eases the symptoms of PMS*

Pre-menstrual syndrome, which is also referred to as PMS, is a condition that affects over 50 percent of women. Mood swings, bloating, headaches and fatigue are some of the most common symptoms of PMS. There has been evidence to suggest that royal jelly can help ease some of the symptoms of PMS.

#### *Can help treat bacterial infections*

Antibiotics are a class of medication that is commonly prescribed to treat bacterial infections. Royal Jelly contains 10-Hydroxy-Dgr2-decenoic acid, which is a natural antibiotic. Additionally, royal jelly has also been shown to boost inflammation.

#### *Has anti-inflammatory properties*

Inflammation is a natural process that occurs when the body detects a harmful stimulus. Chronic inflammation can lead to a number of health problems if it is left unchecked. Royal Jelly has anti-inflammatory properties.

### *Can help slow down the aging process*

Most people look forward to living longer, but no one wants the wrinkles, age spots and fine lines that come along with getting older. Royal Jelly can help slow down the aging process. It has been shown to boost collagen production and promote healthier skin. Royal jelly can also help wounds on the skin heal faster when it is applied topically.

### *Lower blood sugar*

Diabetes is a condition that affects roughly eight percent of the population. The key to controlling diabetes is to keep one's blood sugar within a healthy range. Royal jelly has been shown to help lower blood sugar. There was a study done in Germany that involved 20 volunteers. The volunteers underwent an oral glucose tolerance test and were given a 20 grams of royal jelly. After they were given the jelly, they underwent a second oral glucose tolerance test. The results of the study were that the participants' blood sugar was much lower after the oral glucose tolerance test.

### *Reduce the risk of breast cancer*

Breast cancer is a condition that affects approximately 12 percent of women. Researchers have not been able to identify the exact cause of breast cancer. However, they have found that excess oestrogen can make a woman or man more susceptible to developing it. Royal Jelly has been shown to suppress the growth of breast cancer cells.

Royal Jelly has a number of health benefits. Side effects from Royal Jelly are rare, but have been reported. Royal Jelly can cause skin irritations and may also interact with certain

<http://www.herbwisdom.com/herb-saw-palmetto.html>

### **Saw palmetto (Serenoa repens)**

#### **Saw palmetto Benefits**

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Saw palmetto is an extract derived from the deep purple berries of the saw palmetto fan palm (*Serenoa repens*), a plant indigenous to the coastal regions of the southern United States and southern California.

Saw palmetto is a remarkable herb for both men and women and is used by natural health practitioners to treat a variety of ailments such as testicular inflammation, urinary tract inflammation, coughs and respiratory congestion. It is also used to strengthen the thyroid gland, balance the metabolism, stimulate appetite and aid digestion. This wonderful herb is becoming famous for its uses in hair restoration, prostate health, sexual vigour, breast enhancement and as a nutritive tonic.

Saw palmetto berry also tones the urethra and it may be used to uphold the healthy function of the thyroid gland and urinary system.

In the United States, its medicinal uses were first documented in 1879 by Dr. J.B. Read, a physician in Savannah, Georgia, who published a paper on the medicinal benefits of the herb in the April 1879 issue of American Journal of Pharmacy. He found the herb useful in treating a wide range of conditions. "By its peculiar soothing power on the mucous membrane it induces sleep, relieves the most troublesome coughs, promotes expectoration, improves digestion and increases fat, flesh and strength. Its sedative and diuretic properties are remarkable," Read wrote. "Considering the great and diversified power of the saw palmetto as a therapeutic agent, it seems strange that it should have so long escaped the notice of the medical profession."

Since the 1960s, extensive clinical studies of saw palmetto have been done in Europe. A review of 24 European trials appeared in the November 1998 issue of the Journal of the American Medical Association. The trials involved nearly 3,000 men, some taking saw palmetto, others taking Proscar and a third group taking a placebo.

The men taking saw palmetto had a 28% improvement in urinary tract symptoms, a 24% improvement in peak urine flow and 43% improvement in overall urine flow. The results were nearly comparable to the group taking Proscar and superior to the men taking a placebo.

There is much scientific documentation outlining the effectiveness of the herb in treating irritable bladder and urinary problems in men with benign prostate hyperplasia (BPH), an enlargement of the prostate gland. BPH results in a swelling of the prostate gland that obstructs the urethra. This causes painful urination, reduced urine flow, difficulty starting or stopping the flow, dribbling after urination and more frequent night time urination. In addition to causing pain and embarrassment, BPH can lead to serious kidney problems if undiagnosed and left untreated. It is a common problem in men over the age of 40. Estimates are that 50-60% of all men will develop BPH in their lifetimes.

Saw palmetto does not reduce prostate enlargement. Instead, it is thought to work in a variety of ways. First, it inhibits the conversion of testosterone into dihydrotestosterone (DHT). BPH is thought to be caused by an increase in testosterone to DHT. Secondly, saw palmetto is believed to interfere with the production of oestrogen and progesterone, hormones associated with DHT production.

In a controlled clinical trial with patients with enlarged prostate glands, 50 patients who received saw palmetto (320 mg per day - 4 tablets taken in two separate doses with meals) were compared to 44 patients receiving placebo. Patients treated with saw palmetto urinated less frequently, produced a better flow rate and amount of urine and had less pain and discomfort in urinating than control subjects. There were actually fewer adverse side effects in patients receiving saw palmetto than in controls.

Presently, saw palmetto is being evaluated by the U.S. Food and Drug Administration (FDA) for treatment of BPH. If approved, it would become the first herbal product to be licensed by the agency as a treatment for a specific condition.

<http://www.herbwisdom.com/herb-sea-buckthorn.html>

### **Sea Buckthorn**

#### **Sea Buckthorn Benefits**

The Sea Buckthorn is becoming increasingly popular for its impressive range of healing properties! Sea Buckthorn is a thorny shrub that grows near rivers and in sandy soil along the Atlantic coasts of Europe and throughout Asia, where it has been used for centuries in traditional medical applications. The leaves, flowers, fruits and oils from the seeds are all used

#### **About The Plant**

There are seven varieties of the Sea Buckthorn, the most common of which is the *Hippophae rhamnoides* L. Sea Buckthorn, or *Hippophae rhamnoides* L. is commonly known by a plethora of names including: Argasse, Argousier, Buckthorn, Chharma, Dhar-Bu, Espino Amarillo, Espino Falso, Finbar, Grisset, *Hippophae rhamnoides*, Meerdorn, Oblepikha, Purging Thorn, Rokitnik, Sallow Thorn, Sanddorn, Sceitbezien, Sea-Buckthorn, Seedorn, Star-Bu and Tindved.

Most of the world's sea buckthorn plantations are located in China. There, the shrub is used for soil and water conservation in addition to its healing properties. The fruit of the Sea Buckthorn is difficult to harvest, due to the thorny nature of the shrubs themselves. The harvested fruit is quite acidic and its juices are often combined with those of sweeter fruits, such as grape or pear, to make it more palatable.

## Uses

In natural medicine, there are many uses and indications for the Sea Buckthorn. Leaves and flowers are utilized for arthritis, GI ulcers, gout and skin rashes and irritations. Tea made from the leaves contains vitamins and minerals, antioxidants, amino acids, and fatty acids. The tea is typically used for lowering blood pressure and serum cholesterol, prevention and treatment of diseases of the blood vessel, and for increasing immunity. Sea buckthorn berries are used for preventing skin infections, improving sight, and slowing the aging process. The tea is commonly applied to sunburns to reduce swelling and irritation while promoting healing.

Seed or berry oil is used for asthma, angina, hyperlipidemia (high cholesterol), as an antioxidant and as an expectorant. Sea Buckthorn oil is used in traditional medicine to slow the reduction of mental agility associated with aging and to reduce the side effects of cancer and cancer treatments. It may be used to treat GI tract diseases including ulcers, GERD, upset stomach, dyspepsia and constipation.

Sea Buckthorn is a supplemental source of vitamins C, A, and E, beta-carotene, minerals, amino acids, and fatty acids. One recent study suggests that Sea Buckthorn seed oil may be effective for assisting in weight loss. Chinese researchers have completed a study suggesting that Sea Buckthorn oil extract can lower cholesterol, reduce angina and improve heart function in patients with cardiac disease. Research on Sea Buckthorn as it relates to weight loss, cardiac disease and cholesterol levels are ongoing and appear to be promising based on initial results.

Sea Buckthorn tea, oil or berries can be used for a variety of skin conditions and to heal wounds of the skin, and scientific studies indicate it may have some antibiotic properties. Extracts can be used for acne, rosacea, insect bites and sunburn.

<http://www.herbwisdom.com/herb-red-clover.html>

**Red clover (*Trifolium pratense*)**

**Red clover Benefits**

Red clover is considered to be one of the richest sources of isoflavones (water-soluble chemicals that act like oestrogens and are found in many plants). It is used for hot flashes/flushes, PMS, lowering cholesterol, breast enhancement and breast health, improving urine production and improving circulation of the blood. It is also used to help prevent osteoporosis, reduce the possibility of blood clots and arterial plaques and limiting the development of benign prostate hyperplasia.

Red clover is a source of many valuable nutrients including calcium, chromium, magnesium, niacin, phosphorus, potassium, thiamine, and vitamin C. Red clover is also considered to be one of the richest sources of isoflavones (water-soluble chemicals that act like oestrogens and are found in many plants).

Several studies of a proprietary extract of red clover isoflavones suggest that it may significantly reduce hot flashes in menopausal women. Also, menopause increases a woman's risk for developing osteoporosis (significant bone loss) and some studies suggest that a proprietary extract of red clover isoflavones may slow bone loss and even boost bone mineral density in pre and peri-menopausal women. The oestrogen-like effect of red clover isoflavones may be involved, and red clover also may have a direct effect by preventing the breakdown of existing bone.

However, this possible bone-strengthening effect has not been seen in men and post-menopausal women.

Because it contains chemicals called isoflavones, which belong to a larger class of plant chemicals known as phyto (plant-derived) oestrogens, red clover is often taken to relieve symptoms of premenstrual syndrome (PMS). Isoflavones are similar in shape to the female hormone, oestrogen. Therefore, they may attach to oestrogen receptors throughout the body particularly in the bladder, blood vessels, bones, and heart.

For women with normal oestrogen levels, red clover isoflavones may displace some natural oestrogens, possibly preventing or relieving oestrogen-related symptoms, such as breast pain, that are associated with PMS. This effect may also reduce the possibility of developing oestrogen-dependent cancer of the endometrium (the lining of the uterus). In addition, results from a review of nearly 1000 women suggest that red clover may interfere with an enzyme known to promote the progression of endometrial cancer.

Red clover may also block enzymes thought to contribute to prostate cancer in men. It has shown a definite limiting effect, however, in the development of benign prostate hyperplasia (BPH), which is a non-cancerous enlargement of the prostate gland. An enlarged prostate may cause men to experience a weak or interrupted urine stream, dribbling after urinating, or the urge to urinate even after voiding. For most men, BPH is a normal part of aging.

It is believed that red clover may help to prevent heart disease in several ways. Although results from human studies are not definite, some show that taking red clover may lower the levels of 'bad' low-density lipoprotein cholesterol (LDL) and raise the levels of 'good' high-density lipoprotein (HDL) cholesterol in the body. In addition, red clover may also promote an increase in the secretion of bile acid. Because cholesterol is a major component of bile acid, increased bile acid production usually means that more cholesterol is used and less cholesterol circulates in the body. Additionally, red clover contains small amounts of chemicals known as coumarins, which may help keep the blood from becoming thick and gummy. Therefore, the possibility of forming blood clots and arterial plaques may be reduced. Plaques are accumulations of blood cells, fats, and other substances that may build up in blood vessels, possibly reducing or blocking blood flow. Red clover may also help the arteries remain strong and flexible (a quality often called 'arterial compliance'), which may also help to prevent some of the plaque deposits that may lead to a heart attack or a stroke.

It has been found to be helpful in quitting smoking.

<http://www.herbwisdom.com/herb-squill.html>

**Squill/Scilla**

**Squill/Scilla Benefits**

Squill (Scilla) is a bulb-forming herbaceous perennial plant in the hyacinth family that grows along the sandy coastline of the Mediterranean Sea. Squill plants have a large bulb root, 15cm across, looking similar to an onion. This bulb can weigh up to four pounds. It is normally harvested after the base leaves have withered, a time when the medicinal properties of the bulb are at their highest levels.

There are two varieties of squill distinguished by herbalists, 25 varieties distinguished by horticulturists, each with slightly different chemical properties. Red squill, often referred to as Indian Squill, contains a toxin called Scilliroside. This toxin is harmful to all creatures and deadly to those unable to rid itself of the toxin through vomiting. This is why red squill is commercially prepared for use as a rodent poison. White Squill, known as European squill, is the most common used for herbal supplements. White squill is not known to contain the toxin scilliroside, although some have been found to have trace amounts. This is believed to be the

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The compounds that make squill desirable for medicinal purposes are found in the inner layers of the bulb. Just as an onion is peeled, squill's outer layer is removed and discarded. The inner layers are finely sliced, dehydrated and ground in to a powdered form to use in medicines. Squill can be distilled as vinegar. It is often prepared in liquid form as an extract or juice. The bulb can also be mashed to use in poultices.

Ancient physicians surrounding the Mediterranean Sea used squill as a remedy for coughs, as an expectorant and as a diuretic. It is also believed they used a tonic containing squill to assist the function of a patient's heart. These ancient physicians were aware of the poisonous affect on animals, including humans, from the over consumption of any remedy containing squill. Writings describing squill, its' usage and effects , can be found in Egyptian writing dating from 1500 BC and in various writings from the ancient Greeks.

Squill is found in remedies used to treat various lung diseases. Tonics are prepared for persons suffering with asthma, chronic bronchitis and those with whooping cough. The addition of squill to the body stimulates the production of phlegm, thinning the thickened mucus found in the patient's airways and allowing it to be expelled more easily.

Medications containing squill are still used in some countries by traditional physicians to treat irregular heartbeats, mild heart failure and other heart-related issues. The bulb contains glucosamides, aiding the stimulation of the heart. Squill extract's affect on the heart is both slowing the beats per minute and increasing the force of each individual beat. It has been found to take affect faster than that of Digitalis extract, which is more commonly used and is more readily absorbed.

<http://www.herbwisdom.com/herb-chlorella.html>

**Chlorella (Chlorella pyrenoidosa)**

**Chlorella Benefits**

Chlorella is a fresh water, single-celled algae that grows in fresh water. Chlorella emerged over 2 billion years ago, and was the first form of a plant with a well-defined nucleus. Because Chlorella is a microscopic organism, it was not discovered until the late 19th century, deriving its name from the Greek, "chloros" meaning green and "ella" meaning small. In fact that chlorella contains the highest amount of chlorophyll of any known plant.

It is thought to boost the immune system and help fight infection. It has been shown to increase the good bacteria in the gastrointestinal (GI) tract, which helps to treat ulcers, colitis, diverticulosis and Crohn's disease. It is also used to treat constipation, fibromyalgia, high blood pressure and high cholesterol. Chlorella has been used to treat cancer and also help protect the body from the effects of cancer radiation treatment.

The algae, which is a popular food supplement in Asia and has been used as energy-producing food for centuries, is often used to prevent or curb the spread of cancer, enhance immunity, promote a good balance of bacteria in the gut, and lower blood cholesterol. In Japan, it is traditionally used as a treatment for duodenal ulcers, gastritis, hypertension, diabetes, hypoglycaemia, asthma, and constipation. More recently, it has been touted as an effective therapy for elevated cholesterol levels, a prophylactic to ward off infections and, and adjunct treatment for cancer.

Chlorella is now used as an adjunct supplement during radiation treatment for cancer. Its abundance of chlorophyll is known to protect the body against ultraviolet radiation.

It is a nutrient-dense super food that contains 60% protein, 18 amino acids (including all the essential amino acids), and various vitamins and minerals. One of its unique properties is a phytonutrient called CGF.

Chlorella provides all of the dietary-essential amino acids in excellent ratios. It is also a reliable source of essential fatty acids that are required for many important biochemical functions, including hormone balance. Chlorella also contains high levels of chlorophyll, beta-carotene and RNA/DNA. More than 20 vitamins and minerals are found in chlorella, including iron, calcium, potassium, magnesium, phosphorous, pro-vitamin A, vitamins C, B1, B2, B5, B6, B12, E and K, biotin, inositol, folic acid, plus vitamins C, E and K.

Although the algae grow naturally in fresh water, Chlorella destined for human consumption is generally cultivated outdoors in mineral-rich freshwater ponds under direct sunlight. The entire process from strain maintenance in the laboratory to harvesting of the final product is monitored by microbiologists to ensure optimal nutrient value and product purity. It is often combined with other natural green foods such as spirulina, wheat grass, barley greens, and sometimes

Chlorella has been the focus of many medical and scientific research projects. Based on very early research, it appears that chlorella may play a role in fibromyalgia, hypertension, or ulcerative colitis and has an effect on the immune system. More studies are needed to confirm initial findings.

Research conducted in Japan suggests that chlorella may have anti-tumour activity against breast cancer. However, its main use in cancer therapy is to help remove radioactive particles from the body after radiation treatment.

So far, the bulk of evidence for chlorella's long list of medicinal powers comes from animal studies. Studies in mice have shown that Chlorella vulgaris can protect against the development and spread of cancer, and other rodent studies have shown that it lowers cholesterol and helps organisms get rid of toxic chemicals, such as dioxins.

<http://www.herbwisdom.com/herb-cats-claw.html>

## **Cats Claw (*Uncaria tomentosa*)**

### **Cats Claw Benefits**

Cats Claw is a vine commonly known as Una de Gato and is used traditionally in Peruvian medicine for the treatment of a wide range of health problems, particularly digestive complaints and arthritis and to treat wounds, stomach problems, cancer, and more. It has only recently caught the attention of western herbalists and researchers. Today, mainly by word of mouth, it has become one of the best selling herbs in the USA.

Since the 1970s, studies and research have been carried out by scientists in Peru, Germany, Austria, England and other countries, to find out more about the powerful healing properties of Cat's Claw. Today, mainly by word of mouth, it has become one of the best selling herbs in the USA. Not since quinine was discovered in the bark of a Peruvian tree during the seventeenth century had any other rainforest plant ever prompted worldwide attention.

The most attention was given to the oxindole alkaloids found in the bark and roots of Cats Claw, which have been documented to stimulate the immune system. It is these seven different alkaloids that are credited with having a variety of different medicinal and healing properties. The most immunologically active alkaloid is believed to be Isopteropodin (Isomer A), which increases the immune response in the body and act as antioxidants to rid the body of free radicals. Compounds found in Cat's Claw may also work to kill viruses, bacteria, and other micro-organisms that cause disease, and they work to inhibit healthy cells from becoming cancerous.

It has been suggested that Cat's claw extracts exert a direct anti-proliferative activity on MCF7 (a breast cancer cell line). This has led to its use as a adjunctive treatment for cancer and AIDS as well as other diseases that negatively impact the immunological system. In addition, the presence of glycosides, proanthocyanidins and beta sitosterol help provide anti-viral and anti-inflammatory support for the body. These alkaloids also exert a beneficial effect on memory. Cat's claw is considered a remarkably potent inhibitor of TNF-alpha production.

This herb's anti-inflammatory properties may help to relieve arthritis, gout, and other inflammatory problems. The primary mechanism for Cat's claw anti-inflammatory actions appears to be immunomodulation via suppression of TNF-alpha synthesis.

Cat's Claw may help create support for the intestinal and immune systems of the body, and may also creates intestinal support with its ability to cleanse the entire intestinal tract. This cleansing helps create support for people experiencing different stomach and bowel disorders, including: colitis, Crohn's disease, irritable bowel syndrome, and leaky bowel syndrome.

In addition, in one study, human volunteers who took Cat's claw for 8 weeks showed improved DNA repair.

*Cat's Claw can often be found combined with other 'immune' herbs with similar healing properties such as Echinacea and may:*

reduce pain and inflammation of rheumatism, arthritis and other types of inflammatory problems.

have anti-tumor and anti-cancer properties that inhibits cancerous cell formation.

promote the healing of wounds.

be useful for treatment of gastric ulcers and intestinal complaints

help to relieve chronic pain.

enhance immunity by stimulating the immune system.

help people experiencing stomach and bowel disorders, including colitis, Crohn's disease, irritable bowel syndrome, leaky bowel syndrome, gastritis and duodenal ulcers, intestinal help fight both viral and fungal infections such as Herpes and Candida

<http://www.herbwisdom.com/herb-black-cohosh.html>

**Black Cohosh (Cimicifuga racemosa)**

**Black Cohosh Benefits**

Black Cohosh has been used by Native Americans for more than two hundred years, after they discovered the root of the plant helped relieve menstrual cramps and symptoms of menopause. These days it is still used for menopausal symptoms such as hot flashes/flushes, irritability, mood swings and sleep disturbances. It is also used for PMS, menstrual irregularities, uterine spasms and has been indicated for reducing inflammation associated with osteoarthritis, rheumatoid arthritis and neuralgia.

Herbal researcher Dr. James Duke has this to say about Black Cohosh; "Black cohosh really should be better known in this country, especially with our aging population and the millions of women who are now facing menopause. Recognized for its mild sedative and anti-inflammatory activity, black cohosh can help with hot flashes and other symptoms associated with that dramatic change of life called menopause. It's also reported to have some oestrogenic activity. Herbalist Steven Foster refers to a study that compared the effects of conventional oestrogen replacement therapy with black cohosh. That study looked at 60 women, younger than 40 years old, who had had complete hysterectomies and were experiencing abrupt menopause. In all groups, treatment with black cohosh compared favorably with conventional treatment."

"Native Americans used the roots and rhizomes of this member of the buttercup family to treat kidney ailments, malaria, rheumatism, and sore throats. Early American settlers turned to it for bronchitis, dropsy, fever, hysteria and nervous disorders, lumbago, rattlesnake bites, and yellow fever. It's also reportedly well known for easing PMS and menstrual irregularities."

This oestrogenic activity, notes Dr. Duke, can contribute to a 'mastogenic' effect; the natural enlargement of the breasts. Black Cohosh has also been used to induce labour and should not be used during pregnancy.

A dozen studies or more conducted throughout the 1980s and 1990s confirm that the long-standing use of black cohosh for menopausal symptoms has scientific validity. For example, in a German study involving 629 women, black cohosh improved physical and psychological menopausal symptoms in more than 80% of the participants within four weeks. In a second study, 60 menopausal women were given black cohosh extract, conjugated oestrogens, or diazepam (a leading anti-anxiety medication) for three months. Those who received black cohosh reported feeling significantly less depressed and anxious than those who received either oestrogens or diazepam. In another study, 80 menopausal women were treated for 12 weeks with black cohosh extract, conjugated oestrogens, or placebo. Black cohosh improved anxiety, menopause and vaginal symptoms. In addition, the number of hot flashes dropped from 5 to less than 1 average daily occurrences in the black cohosh group compared to those taking oestrogen in whom hot flashes dropped from 5 to 3.5 daily occurrences.

Given these examples, and results of other studies, some experts have concluded that black cohosh may be a safe and effective alternative to oestrogen replacement therapy (ERT) for women who cannot or will not take ERT for menopause.

Preliminary studies also suggest that black cohosh may help reduce inflammation associated with osteoarthritis and rheumatoid arthritis. In a review of scientific studies, researchers concluded that a combination of black cohosh, willow bark (*Salix* spp.), sarsaparilla (*Smilax* spp.), guaiacum (*Guaiacum officinale*) resin, and poplar bark (*Populus tremuloides*) may help relieve symptoms of osteoarthritis.

<http://www.herbwisdom.com/herb-avena-sativa.html>

**Avena sativa (Oats)**

**Avena sativa Benefits**

Are you feeling stressed, tired, depressed, fed-up, run down or even lacking your usual sexual desire? If so, have you considered a daily dose of Avena sativa (also known as Oats or Oatmeal)?

This wonderful herb is thought to be soothing to the brain and nervous system, whilst at the same time increasing sexual desire, and performance, in both men and women!

Avena sativa is quickly becoming a popular natural alternative to pharmaceutical erection enhancers without the dangerous side effects. Also known as Oats Milky Seed or Oatstraw, Avena Sativa is used to stimulate both men and women quickly and effectively. It is often described as the "Natural Viagra"! Its stimulating effects are well known in the animal world, especially with horses where it is widely known that if you feed them oats their behaviour will be wild and energetic! And we've all heard the term "sowing your oats".

Dr. Larry Clapp has studied alternative virility medicines extensively and concludes that "ten drops, under the tongue, twice a day works very powerfully to enhance erectile function." Other studies have also suggested powerful results in both sexes.

In women, the effect seems to be that of increasing sexual desire rather than physical performance. Avena sativa contains compounds which are both sedative and soothing to the brain and nervous system, hence it is said to be a good herb as a nerve restorative. In women the aphrodisiac effect seems to work by relaxing the body which in turn allows a natural increase in desire.

In men it appears to be effective for treating impotence and premature ejaculation, probably by increasing healthy blood flow.

As a food, oats are known to be good for the heart because they keep blood fats under control. They also have other medicinal properties.

Avena sativa seeds are not only a rich source of carbohydrate and soluble fibre, they also have the highest content of Iron, Zinc and Manganese of any grain. It is said to be useful as a nerve restorative.

Avena sativa has no known side effects, unlike the sometimes dangerous sexual prescription drugs. It is used as a nervous system general tonic as well as a general health tonic.

Avena sativa is often the primary ingredient in expensive sexual formulas and in the popular alternatives Herbal V, Cobra and Biogra. There is no need to purchase expensive herbal formulas. The pure herb is more powerful and is not expensive to use.

Avena sativa does not appear to interact with drugs so it is often used as a safe alternative to other herbs that are used for anxiety, such as St John's wort, which cannot be taken with many prescription medications. Avena sativa may also be of use in helping with drug withdrawal and is often combined with valerian and skullcap.

Oats are sometimes added to the bath as a topical treatment for the skin condition eczema. Generally, there are no side effects or contra-indications from using avena sativa herbal supplements.

<http://www.herbwisdom.com/herb-bilberry.html>

**Bilberry (Vaccinium myrtillus)**

**Bilberry Benefits**

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Bilberry has a long medicinal history in Europe. It has been used to treat anything from kidney stones to Typhoid fever. During World War 2 British pilots noted that Bilberry jam before a flight dramatically improved night vision. Modern research now supports these claims.

Bilberry contains anthocyanosides which are potent antioxidants which strengthen blood vessels and capillary walls, improve red blood cells, stabilize collagen tissues such as tendons, ligaments and cartilage and has cholesterol lowering effects. They also increase retinal pigments that allow the eye to tolerate light. In addition, it helps to maintain the flexibility of red blood cells, allowing them to pass through the capillaries and supply oxygen. The herb has been shown to be a vasodilator that opens blood vessels and lowers blood pressure. Since the eyes have a high concentration of capillaries, bilberry may be particularly helpful in improving eyesight. The herb has been shown to improve night vision, slow macular degeneration, prevent cataracts and diabetic retinopathy. Scientific studies have shown improvement in the eyesight, circulation, angina, stroke and atherosclerosis. It is also used to improve varicose veins and has anti-aging effects on collagen structures.

Individuals with hardening of the arteries, diabetes, high blood pressure or other conditions that increase the likelihood of damage to the small blood vessels in the eyes are more likely to have serious vision problems as a result of blood vessel damage. Note that bilberry is taken by mouth to treat eye problems. It is not used as an eye drop.

Oral bilberry preparations are also used to prevent and treat a condition known as chronic venous insufficiency, which occurs when valves in the veins that carry blood back to the heart are weak or damaged.

Blood may collect in the veins of the legs and lead to varicose veins, spider veins, or sores on the legs. More serious results can include blood clots in the legs. Because bilberry may strengthen the walls of all blood vessels in the body. It may also relieve haemorrhoids.

In the past, dried bilberries have been used to treat diarrhoea because the tannins it contains (1.5% and as much as 10%) act as an astringent to the gastrointestinal tract. An astringent shrinks and tightens the top layers of skin or mucous membranes thereby reducing secretions, relieving irritation, and improving tissue firmness. Tea brewed from dried bilberry fruits has also been used to soothe a sore throat or sore mouth tissue.

In folk medicine, bilberry leaf has been used to treat a number of conditions including diabetes. Limited evidence from a few animal studies shows that it may have a decreasing effect on blood sugar. Additionally, in at least one study, an extract of bilberry leaves may also have lowered cholesterol levels in laboratory animals. Other laboratory and animal studies have tested potential anticancer effects of bilberry. In a laboratory study, bilberry stopped the growth of both leukaemia and colon cancer cells. While preliminary results suggest that anthocyanosides obtained from bilberries may also block the effects of an enzyme and other chemicals that promote tumor growth, much more study is needed. To date, no human clinical studies have confirmed any of these results from bilberry.

Recent research showed that Bilberry extract has promising anti-ulcer activity, both preventive and curative. It also has shown anti-cancer properties in animal experiments. When administered to diabetes patients, Bilberry normalised capillary collagen thickness and blood sugar levels in humans and animals.

<http://www.herbwisdom.com/herb-burdock.html>

**Burdock (Arctium)**

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In the United States, many people may be surprised at the thought of eating the Burdock plant. However, in many countries across the globe, the burdock plant is widely used as a food source and also for its medicinal properties.

In many parts of Asia, young burdock roots, flower stems and even very young leaves are consumed eagerly. The long thin root of the burdock is only a few centimetres wide but can reach over a meter in length are crisp and the taste is mild. They are best after thinly sliced and soaked in water to remove any bitter taste. There have been studies that the fibre of the burdock is a good aid to digestion. In the United Kingdom, it is combined with dandelion to make traditional soft drink that is quite popular today.

The burdock in appearance is sometimes confused with cockle burr or even rhubarb, both members of the same family of plants, as is the artichoke. Dark green leaves shaped like hearts or large ovals often up to twenty eight inches in length jut from the hollow stems that can reach over a yard in length. The burdock flowers from June until October, turn into green or silver buds and purple blooms. After blooming, the seeds are enclosed inside the burr, which is equipped with sharp hooks. After the burrs are dispersed, the plant dies down.

In the early 1940's, a Swiss inventor, George de Mestral was hiking with his dog and became intrigued by the burrs that clung tenaciously to his clothing and the dog's fur. The interaction of the sharp hooks of the burdock and loops of thread in his clothes inspired him to invent Velcro. The roots of the burdock are dark brown, gray or even black in appearance. The undersides of the leaves are covered with a downy like fuzz and can pose allergy problems for those allergic to marigolds and ragweed.

The burdock is also known by many other names, most having to do with the characteristics of the seeds or traditional herbal uses; beggar's buttons, love leaves, clot-bur. Herbalists and others have long known that burdock is often used as a dietary aid to help cure different ailments such as sore throats, colds, blood purifiers, to combat hair loss and dandruff, to name a few. It also increases the flow of urine and is used as a tonic in mild doses and will increase sweating to remove toxins from the body.

Traditionally, the use of burdock as a medicine in China included the treatment of skin disorders, cleansing of the blood, as an effective treatment of impotence and barrenness in women. The use of the burdock root in Russia and India has also included treatment of certain types of cancer. The burdock is also a plant used in the treatment of burns, as it reduces pain and promotes healing.

The burdock is mentioned in several of Shakespeare's plays as in Tolstoy's writings as well as other authors of historical fiction who describe the use of burdock to treat various ailments. Caution should be used if you are childbearing or nursing, burdock is could cause problems with both conditions. The properties of the burdock plant are still being researched and it is very important not to obtain plants from the wild unless you are entirely sure of what you are doing. The roots and leaves of nightshade which are poisonous if ingested, as are the leaves of the rhubarb plant; both of these plants are members of the same family of plants as the burdock. It is vital that you make sure that the source of the parts of the burdock plant you are using be from a reputable source which has an excellent reputation of delivering high quality plants for

<http://www.herbwisdom.com/herb-collagen.html>

## **Collagen**

### **Collagen Benefits**

Collagen is a substance that is naturally produced by the body. However, the production of this substance diminishes as people grow older. The results of the low production include wrinkles, thinning skin and brittle hair among others. There are a number of collagen supplements available in the market that can restore the amount of collagen in the body. Many individuals use collagen supplements to reduce lines or wrinkles.

### **What is Collagen?**

Collagen is a protein found in connective tissues of the body. It is significant in making certain parts of the body such as nails strong and is also an important factor in joint health. Collagen supplements come in various forms. One of the most common is called Gelatin. For a long time Gelatin has been used in collagen replacement and has been thought to strengthen nails and hair. Individuals suffering from conditions such as osteoarthritis and rheumatoid arthritis often take collagen supplements to replace collagen in the joints. The collagen supplements mostly used in such a case has chicken collagen as an active ingredient. There are also collagen creams that are applied on the skin to help reduce wrinkles and lines.

### **How Collagen Works**

Collagen is a form of fibrous protein that is normally present in the bodies of humans and even mammals. It provides a supportive structure for various body tissues such as muscles, bones and ligaments and prevents them from falling apart. It works with another compound called Elastin to provide strength and firmness to the tissues. Collagen also works to keep the skin looking firm, tight, flexible and youthful looking. Young people naturally produce more collagen than older people. With age, the collagen in the body breaks down leading to wrinkles and folds around the mouth. As such, collagen stimulation leads to a more youthful looking skin. The substance has been used for a long time in combating signs of aging.

### **Collagen in Plastic Surgery**

Collagen works to reduce the signs of aging by plumping up the skin, making it firm and flexible due to the fibrous and stable structure of the substance. Many plastic surgeons use the substance to give their clients a youthful appearance. In this case, the collagen is injected directly to the skin in the areas with depressions created by wrinkles. The collagen plumps up the wrinkles making them less noticeable. The collagen injections may last up to six months after which one has to go through the same procedure to refill wrinkles. The procedure may take a few hours or minutes depending on the extent of wrinkles.

Collagen has various other uses including artificial skin construction for burn victims. The collagen used in this procedure is normally obtained from bovine or equine sources to replace lost skin as a result of third party burns. Recently, collagen from human sources has become available for skin replacement in case of burns though it is more expensive.

### **Benefits of Collagen Supplements**

Many people take collagen supplements because of the substantial health benefits it has on the body. Anecdotal reports state that there are certain improvements when taken. However, little research has been done to support the effectiveness of these supplements. The substance is purported to assist individuals with arthritis and other illnesses affecting the joints or bones. Collagen helps to increase mobility and reduce pain. Collagen is also believed to improve the appearance of the skin, nails and hair. There are various topical health products that are available for enhancing the look of skin. Collagen injections are normally administered by plastic surgeons to correct skin indentations and plump up the skin.

### **Collagen for Arthritis**

Various studies indicate that chicken collagen supplements can be effective in the treatment of pain, swelling as well as stiffness around joints. This type of collagen is mostly used by people suffering from rheumatoid arthritis. Studies also indicate that collagen supplements used with protein and amino acids supplements help in improving mobility and flexibility in athletes.

<http://www.herbwisdom.com/herb-euphrasia.html>

### **Euphrasia/Eyebright**

#### **Euphrasia/Eyebright Benefits**

Herbal use of Eyebright, or *Euphrasia officinalis*, dates to the 14th century when it was described as a cure for all eye maladies. By the 16th century, eyebright was hailed by well-regarded herbalists such as Fuchsius and Tragus. It is found and used in Europe, North America, Western Asia, and Northern Asia. The name *Euphrasia* originates in Greece from the word for gladness. Other names for the plant are "Euphrasia" in English, "Augentröst" in German, and "Casse-lunette" in French. The first mention of this herb is in 1305 in Gordon's

#### **The Euphrasia Plant**

This annual herb grows two to eight inches tall with deep cut leaves and white or purple blooms that have yellow variegations. It is a member of the Figwort family of plants. It has a bloom season between July and September. There are opposite branches on an erect stem with leaves that will be up to 1/2 an inch long. Flowers are on terminal spokes with a two-lipped corolla. Seeds are in tiny flat capsules. It needs to be near grass to grow in a cultivated environment due to its parasitic nature.

*What Parts Are Used*

When the plant is in full flower stage, around July or August, a fluid extract is prepared. The plant is cut right about the root for preparation. It has several chemical compounds such as the tannin Euphrasia-Tannin acid, glucose, and mannite, which is a crystalline water-soluble sweet-tasting alcohol.

#### *What Eyebright Does for the Eyes*

This plant has a long history of use for eye problems, hence the name of Eyebright. When used appropriately, eyebright will reduce inflammation in the eye caused by blepharitis (inflammation of the eyelash follicles) and conjunctivitis (inflammation or infection of the membrane lining the eyelids). It can be used as an eye wash, as eye drops, or plant infusions taken internally for ophthalmic use.

#### *What Eyebright Does for the Respiratory Tract*

It is used as an anti-inflammatory for hay fever, sinusitis, upper respiratory tract infections, and catarrh (inflammation of the mucous membranes). As an astringent, it is used for dry congestion. There is an herbal smoking mix of the dried herb that is used for bronchial colds. It also can be used for seasonal allergies and other nasal irritations.

#### *What Eyebright Does for Skin Wounds*

As an astringent, the herb is used to aid in the healing on skin wounds. It is made into a poultice and used on the wound topically. It can also be used to treat acne and aid in skin inflammation. A cold eyebright poultice can help tighten skin.

#### *Dosages*

Traditionally, an adult dosage of eyebright is two to four grams of the herb, dried, up to three times a day. This can be in tea form with 5 ounces of boiling water. For eye drops, one to five times a day of a single drop appears the norm. These eye drops, when used for pinkeye, can be taken for three to seventeen days.

#### *Preparations*

Eyebright is able to be purchased in the forms of teabags, loose dried leaves, capsules, liquid, tablets, powder, tincture, and oil. It is also in several over-the-counter and online herbal supplement combinations. It is an ingredient in some cough and cold remedies, in skin lotions, acne medications, and other mixtures.

<http://www.herbwisdom.com/herb-fenugreek.html>

### **Fenugreek (*Trigonella Foenum-graecum*)**

#### **Fenugreek Benefits**

Fenugreek has a long history as a breast enlarger and contains diosgenin which is used to make synthetic oestrogen. It has been found to promote the growth of new breast cells and increase the size and fullness of the breasts. Of all the herbs used for breast enlargement fenugreek has the highest concentrations of the effective plant compounds. Diosgenin, a steroid sapogenin is the starting compound for over 60% of the total steroid production by the pharmaceutical industry. Other sapogenins found in fenugreek seed include yamogenin, gitogenin, tigogenin, and neotigogens.

While Fenugreek is considered the finest herb for enhancing feminine beauty it also aids in sexual stimulation, balances blood sugar levels, and contains choline which aids the thinking process. Fenugreek has been the focus of several studies concerning the treatment of diabetes and the prevention of breast cancer. Its ability to balance hormone levels aids in treating PMS and menopause. Its antioxidants slow ageing and help prevent disease.

The plant has also been employed against bronchitis, fevers, sore throats, wounds swollen glands, skin irritations, diabetes, ulcers, and in the treatment of cancer. Fenugreek has been used to promote lactation and as an aphrodisiac.

Fenugreek contains an amino acid called 4-hydroxyisoleucine, which appears to increase the body's production of insulin when blood sugar levels are high.

Higher insulin production may decrease the amounts of sugar that stay in the blood for many individuals. In some studies of animals and humans with both diabetes and high cholesterol levels, fenugreek lowered cholesterol levels as well as blood sugar levels.

However, no blood-sugar lowering effect was seen in non-diabetic animals. Similarly individuals with normal cholesterol levels showed no significant reductions in cholesterol while taking fenugreek.

Fenugreek contains an amino acid called 4-hydroxyisoleucine, which appears to increase the body's production of insulin when blood sugar levels are high. Higher insulin production may decrease the amounts of sugar that stay in the blood for many individuals. In some studies of animals and humans with both diabetes and high cholesterol levels, fenugreek lowered cholesterol levels as well as blood sugar levels.

<http://www.herbwisdom.com/herb-green-lipped-mussels.html>

### **Green Lipped Mussels**

#### **Green Lipped Mussels Benefits**

The green lipped mussel, or perna canalicula, hails from New Zealand and is speculated to be a treatment option for a variety of different health issues including osteoarthritis, rheumatoid arthritis, joint pain caused by cancer treatments, asthma and daytime wheezing. The oil extracted from these miracle muscles acts as an anti-inflammatory agent that is totally natural and very powerful.

#### **Active Ingredients**

The oil extracted from green lipped mussels is rich in Omega 3s, an extremely powerful health supplement. The nutrients of these mussels can also be extracted in a powder form which is equally as effective at treating inflammatory illnesses and joint pain, with many other accompanying health benefits.

Some of the most powerfully marketed forms of green lipped mussel oil contain only three ingredients, those being the green lipped mussel oil as well as grape seed extract powder and kiwi fruit seed oil. The oil may be combined with a variety of omega-3 oils including linseed oil, hemp seed oil, sesame oil, sunflower oil, evening primrose oil, soy bean oil, walnuts and canola seeds. Other marine sources of omega-3 oils are often paired with the green lipped mussel oil, such as fish oil, krill oil, cod liver oil and marine algae. These are all effective anti-inflammatory treatments as well which boost the efficacy of the mussel oil itself. There is actually no need to pair green lipped muscle oil or powder with any other supplement, because it is one of the most effective sources of nutrition and supplementary vitamins available. On its own, it can do the same amount of work of an average multivitamin, if not more.

### **Anti-inflammatory Pain Relief**

As the body metabolizes the natural omega-3s found in green lipped mussel oil, they go to work on restoring and soothing inflamed joints, muscles and tissues. This can cause a great deal of pain relief for people suffering from rheumatoid arthritis, osteoarthritis, fibromyalgia, lupus and other illnesses which cause severe joint pain. It is also of great benefit to people who suffer from asthma, chronic bronchitis or respiratory issues, as it helps lung tissue to regain strength and restore normal breathing ability.

### **Habitat in New Zealand**

Green lipped mussels have often been hailed as a miracle food because no matter how you consume them, be it as a delicious seafood itself or as oil or powder, their health benefits are absolutely amazing. The restorative powers found in the omega 3s of these mussels have restorative abilities that have created a high demand for the seafood, powder, oil and extract. One reason that these mussels are in such high demand is that they only occur naturally on the New Zealand coast. The green lipped mussels have been cultivated off the New Zealand coast since the 1970s, and are currently experiencing annual growth in a median range of 18%, a huge expansion per year, based on the demand for the seafood and its extracts. Green lipped mussels are considered to be one of the top two ecologically sound types of seafood worldwide, something which may contribute to their beneficial health capabilities.

### **How To Take**

Green lipped mussel oil is typically produced in a supplement form within an easy to swallow capsule. It is sold in bottles in most health food stores. Selling the oil in the capsule is the most effective way to ship it while preserving its natural healthy qualities and also making the oil palatable to the person who is taking it. Green lipped mussel powder is, like its oil counterpart, sold in capsule form for the preservation of the integrity of the product and to maintain a taste that is acceptable to the purchaser. The oil, powder and the mussels themselves all contain a variety of proteins, minerals, vitamins, omega 3s, healthy enzymes, polypeptides, chondroitin sulphates, glycosaminoglycans, polysaccharides and glycoproteins. These supplementary nutrients aid in the preservation of mobility and joint health, functional cartilage, a healthy heart, glowing skin and overall health concerns. Because of the wide range of issues that can be treated with green lipped mussel oils and powders, it is one of the best selling supplements on the market.

<http://www.herbwisdom.com/herb-damiana.html>

**Muir Puama (Liriosma ovata)**

**Muir Puama Benefits**

Used to improve psychological and physical aspects of libido and sexual function, menstrual cramps and PMS, neurasthenia, to tonify the nervous system and for treating cases of mild exhaustion. Helps with gastrointestinal and reproductive disorders, stress and trauma. It is known in some circles as "the Viagra of the Amazon" and in fact, many people now consider it the new Yohimbe but with considerably less possible side effects.

Muir Puama is one of the most active botanicals with a long history of traditional use as an energy tonic, general health improver and remedy for impotence & sexual insufficiency. It is known in some circles as "the Viagra of the Amazon" and in fact, many people now consider it the new Yohimbe but with considerably less possible side effects.

The roots of this Amazonian tree were the subject of a study conducted by the UCLA School of Medicine.

The study showed a significant improvement in both erectile function and sexual desire. The Amazon natives have known this for centuries, as this herb has been widely used as an aphrodisiac by both men and women, and is commonly known as "potent wood".

The short term effects of Muira Puama include increasing blood flow to the pelvic area, aiding erections in men as well as sensation and orgasm in women. Longer term use enhances the production of sex hormones in both sexes. It has no noted side effects though, as with many sexual stimulants, it can slightly raise blood pressure.

Muir Puama has also been used for stress management, nervous system stimulation and for general overall health. Two French studies showed that Muira Puama seemed to improve libido and sexual function. Scientists also believe that this herb increases testosterone levels, though this has not yet been clinically proven.

It has been used to tonify the nervous system and to treat cases of mild exhaustion. It can also help with gastrointestinal and reproductive disorders, while it's anti-rheumatic properties have been used for treating stress and trauma.

A clinical study with 262 patients complaining of lack of sexual desire and the inability to attain or maintain an erection demonstrated Muira Puama extract to be effective in many cases. Within 2 weeks, at a daily dose of 1 to 1.5 grams of the extract, 62% of patients with loss of libido claimed that the treatment had dynamic effect while 51 percent of patients with "erection failures" felt that Muira Puama was of benefit. Primary chemical constituents of Muira Puama include alkaloids (specifically muirapuamine), esters, plant sterols, free fatty acids and phytosterols. Presently, the exact mechanism of action of this herb is still under investigation. From the preliminary information, it appears that it works on enhancing both psychological and physical aspects of sexual function.

Muir Puama is still employed around the world today in herbal medicine. In Brazil and South American herbal medicine, it is used as a neuromuscular tonic, for asthenia, paralysis, chronic rheumatism, sexual impotency, grippe, ataxia, and central nervous system disorders. In Europe, it has been used to treat impotency, infertility, neurasthenia, menstrual disturbances and dysentery. Because of the long history of use of Muira Puama in England, it is still listed in the British Herbal Pharmacopoeia, a noted source on herbal medicine from the British Herbal Medicine Association, where it is recommended for the treatment of dysentery and impotence. It has been gaining in popularity in the United States where herbalists and health care practitioners are using Muira Puama for impotency, menstrual cramps and PMS, neurasthenia and central nervous system disorders.

While so-called "aphrodisiacs" have come and gone in history, Muira Puama has risen above this class of products and may well provide the most effective natural therapeutic approach for loss of libido in both sexes.

<http://www.herbwisdom.com/herb-milk-thistle.html>

**Milk Thistle (*Silybum marianum*)**

**Milk Thistle Benefits**

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Milk Thistle is unique in its ability to protect the liver and has no equivalent in the pharmaceutical drug world. In fact, in cases of poisoning with Amanita mushrooms, which destroy the liver, milk thistle is the only treatment option. It has been so dramatically effective that the treatment has never been disputed, even by the traditional medical community.

Milk thistle acts in a similar fashion to detoxify other synthetic chemicals that find their way into our bodies, from acetaminophen and alcohol to heavy metals and radiation.

Milk thistle was approved in 1986 as a treatment for liver disease and it is widely used to treat alcoholic hepatitis, alcoholic fatty liver, cirrhosis, liver poisoning and viral hepatitis. It has also been shown to protect the liver against medications such as acetaminophen, a non-aspirin pain reliever.

The active ingredient, or liver-protecting compound in milk thistle is known as silymarin. This substance, which actually consists of a group of compounds called flavonolignans, helps repair liver cells damaged by alcohol and other toxic substances by stimulating protein synthesis. By changing the outside layer of liver cells, it also prevents certain toxins from getting inside. Silymarin also seems to encourage liver cell growth. It can reduce inflammation (important for people with liver inflammation or hepatitis), and has potent antioxidant effects. Antioxidants are thought to protect body cells from damage caused by a chemical process called oxidation. Our Milk Thistle is not standardized to an exact amount (as it is made from pure dried natural herbs. Milk Thistle naturally contains about 70 - 80% Silymarin (and many other constituents thought to work in harmony).

This herb benefits adrenal disorders and inflammatory bowel syndrome, and is used to treat psoriasis (increases bile flow).

Milk thistle has some oestrogen-like effects that may stimulate the flow of breast milk in women who are breast-feeding infants. It may also be used to start late menstrual periods. Milk thistle's oestrogen-like effect may also have some usefulness for men with prostate cancer.

In animal studies and one small study in humans, milk thistle produced modest reductions in total cholesterol. However, these results have not been demonstrated in larger human studies.

This herb is a must for cleansing and for anyone with any sort of liver dysfunction or exposure to toxins. (e.g. alcohol).

A comprehensive review by the U.S. Agency for Healthcare Research and Quality (AHRQ) recently identified 16 scientific studies on the use of milk thistle for the treatment of various forms of liver disease. A European standardized extract of milk thistle was used in most of the trials. Problems in study design (such as small numbers of participants, variations in the causes of liver disease, and differences in dosing and duration of milk thistle therapy) made it difficult to draw any definitive conclusions. However, five of seven studies evaluating milk thistle for alcoholic liver disease found significant improvements in liver function. Those with the mildest form of the disease appeared to improve the most. Milk thistle was less effective for those with severe liver disease such as cirrhosis. Cirrhosis is characterized by scarring and permanent, non-reversible damage to the liver. It is often referred to as end-stage liver disease.

*Viral hepatitis*

Despite the fact that milk thistle is widely used in the treatment of hepatitis (particularly hepatitis C), results from four viral hepatitis studies were contradictory. Some found improvements in liver enzyme activity while others failed to detect these benefits. None of the studies compared milk thistle with interferon or other medications for viral hepatitis.

#### *Cancer*

Preliminary laboratory studies also suggest that active substances in milk thistle may have anti-cancer effects. One active substance known as silymarin has strong antioxidant properties and has been shown to inhibit the growth of human prostate, breast, and cervical cancer cells in test tubes. Further studies are needed to determine whether milk thistle is safe or effective for people with these forms of cancer.

#### *High cholesterol*

One animal study found that silymarin (an active compound in milk thistle) worked as effectively as the cholesterol-lowering drug probucol, with the additional benefit of substantially increasing HDL ("good") cholesterol. Further studies in people are needed.

<http://www.herbwisdom.com/herb-cardamom.html>

#### **Cardamom**

##### **Cardamom Benefits**

Cardamom is well known as a spice used in Indian cooking, and is one of the primary constituents of Garam Masala. What many people don't realize is that cardamom is also medicinal, and helps relieve digestive problems induced by garlic and onion, making it more than merely an aromatic addition to the stomach-challenging cuisine it accompanies. Cardamom is considered one of the most valuable spices in the world due to its rich aroma and therapeutic properties.

Many varieties of cardamom exist, but there are two genera which include cardamom plants. The first, known scientifically as *Ellataria* and commonly referred to as green or true cardamom, is found mainly in India. Cardamom grown in Asia is part of the genus *Amomum*, and goes by an assortment of common names, such as brown cardamom, Java cardamom, Bengal cardamom, Kravan, white cardamom, Siamese cardamom, and red cardamom.

*Both Ellataria and Amomum are part of the Ginger family (Zingiberaceae).*

Cardamom is farmed in only a few places in the world, including Sri Lanka, China, Laos, Nepal, Vietnam, pockets of India, and Guatemala. It grows uncultivated more rarely, limited to the rich, dense soils of certain South Asian forests. Despite these limitations, the ground seeds of cardamom, as well as intact seeds often within pods, are widely available for purchase.

As a member of the ginger family, cardamom grows perennially and produces vast, fleshy root structures known as rhizomes. It has large leaves, green and white flowers, an edible but slightly bitter fruit, and large seeds. The seeds of the cardamom plant contain a variety of important minerals such as calcium, sulfur, and phosphorus. They also contain volatile oil composed of acetic and formic acids. This volatile oil, which makes up about 5 percent of the seed's mass, has aromatic and medicinal properties, and it is what makes cardamom so valuable.

Studies confirm that cardamom oil acts as an analgesic and antispasmodic in rats and rabbits, producing relief and lowered distension and writhing within digestive systems reacting negatively to uncomfortable stimuli. This effect is the primary medicinal quality of cardamom, and Eastern cultures have been taking advantage of it for centuries.

*Cardamom has been used to relieve the following medical problems:*

#### *Bad Breath*

Cardamom is one of the most effective remedies against halitosis. Simply chewing on the seeds eliminates bad odors. Cardamom is even used in some chewing gums because of its effectiveness, billed as a sure fire cure to the most offensive breath.

#### *Tooth, Gum, and Oral Disorders*

Cardamom is widely used in South Asia to fight tooth and gum decay and disease. It can also be used to help soothe a sore throat and relieve hoarseness of voice.

#### *Digestion*

The volatile oil in cardamom has been proven to soothe the stomach and intestines, making cardamom an ideal solution for a host of digestive problems, such as constipation, dysentery, and indigestion. Cardamom can be used aromatically to increase or encourage appetite, and also assists in soothing gas and heartburn. Generally, cardamom relieves most upset stomachs. To use Cardamom for digestive problems, consume seeds alone, serve ground seed with food, or serve as a tea.

#### *Urinary problems*

South Asians use cardamom's relieving properties to help with the discomfort of passing gall and kidney stones. Cardamom, combined with banana leaf and alma juice, can act as a diuretic, soothing a variety of kidney, bladder, and urinary problems like nephritis, burning or painful urination, and frequent urges to urinate. The relief from uncomfortable symptoms provided through cardamom should not be considered a cure to underlying diseases and disorders.

#### *Depression and Aromatherapy*

Cardamom oils can be added to baths as a form of aromatherapy that fights depression and reduces stress. Ground Cardamom seeds can be made into a tea for similar benefits.

#### *Cancer Prevention*

Cardamom contains IC3 (indole-3-carbinol) and DIM(diindolylmethane). These phytochemicals are well-known cancer fighters, helping to specifically ward off hormone-responding cancers like breast cancer, ovarian cancer, and prostate cancer. Early research suggests that consuming cardamom regularly may help with preventing these forms of cancer.

In addition to these specific medicinal uses, cardamom contains an abundance of antioxidants, which protect the body against aging and stress, and fight common sicknesses and bodily strife. In rat studies, cardamom has been shown to increase glutathione, an antioxidant enzyme found naturally in our bodies.

Cardamom volatile oil has only recently come under the scrutiny of scientists curious about its therapeutic properties, but Asian and Indian cultures have reliably used it for ages as a remedy for discomfort and depression, and still rely upon it today. It is now being discovered to have amazing health benefits, and early science confirms its medicinal effectiveness.

<http://www.herbwisdom.com/herb-rhodiola.html>

**Rhodiola (Rhodiola rosea)**

**Rhodiola Benefits**

Rhodiola rosea is a remarkable herb that has a wide and varied history of uses. It is thought to strengthen the nervous system, fight depression, enhance immunity, elevate the capacity for exercise, enhance memory, aid weight reduction, increase sexual function and improve energy levels. It has long been known as a potent adaptogen. Adaptogens are natural plant substances that increase the body's non-specific resistance and normalise the functions of the body.

Rhodiola has a legendary history dating back thousands of years. In 77 A.D., the Greek physician Dioscorides documented the medical applications of the plant, which he then called rodia riza, in his classic medical text De Materia Medica. The Vikings depended on the herb to enhance their physical strength and endurance, while Chinese emperors sent expeditions to Siberia to bring back "the golden root" for medicinal preparations. The people of central Asia considered a tea brewed from Rhodiola rosea to be the most effective treatment for cold and flu. Mongolian physicians prescribed it for tuberculosis and cancer.

Research on Rhodiola rosea and other medicinal herbs was part of the Soviet Union's great push to compete with the West in military development, the arms race, space exploration, Olympic sports, science, medicine, and industry. It is a popular plant in traditional medical systems in Eastern Europe and Asia, with a reputation for stimulating the nervous system, decreasing depression, enhancing work performance, eliminating fatigue, and preventing high altitude sickness.

#### *Stress*

Rhodiola rosea has long been known as a potent adaptogen. Adaptogens are natural plant substances that increase the body's non-specific resistance and normalise the functions of the body. When a stressful situation occurs, consuming adaptogens generates a degree of generalised adaptation (or non-specific resistance) that allows our physiology to handle the stressful situation in a more resourceful manner. It is believed that adaptogens work by increasing the ability of cells to manufacture and use cell fuel more efficiently.

Since Rhodiola rosea administration appears to impact central monoamine levels, it might also provide benefits and be the adaptogen of choice in clinical conditions characterised by an imbalance of central nervous system monoamines. This is consistent with Russian claims for improvements in depression and schizophrenia. It also suggests that research in areas such as seasonal affective disorder, fibromyalgia, and chronic fatigue syndrome, among others, is warranted.

There have also been claims that this plant has great utility as a therapy in asthenic conditions (decline in work performance, sleep disturbances, poor appetite, irritability, hypertension, headaches, and fatigue) developing subsequent to intense physical or intellectual strain, influenza and other viral exposures, and other illness. Two randomised, double-blind, placebo-controlled trials of the standardised extract of Rhodiola rosea root (SHR-5) provide a degree of support for these claimed adaptogenic properties.

#### *Muscle Recovery*

Rhodiola rosea has been shown to shorten recovery time after prolonged workouts, to increase attention span, memory, strength, and anti-toxic action. Rhodiola rosea extract increases the level of enzymes, RNA, and proteins important to muscle recovery after exhaustive exercise. It also stimulates muscle energy status; glycogen synthesis in muscles and liver; muscle protein synthesis and anabolic activity.

#### *Memory*

Studies using proofreading tests have demonstrated that Rhodiola rosea enhances memorisation and concentration ability over prolonged periods. It increases the bio-electrical activity of the brain which improves memory and brain energy.

In one study, forty students were randomised to receive either 50 mg standardised Rhodiola extract or placebo twice daily for a period of 20 days. The students receiving the standardised extract demonstrated significant improvements in physical fitness, psycho-motor function, mental performance, and general well-being. Subjects receiving the Rhodiola rosea extract also reported statistically significant reductions in mental fatigue, improved sleep patterns, a reduced need for sleep, greater mood stability, and a greater motivation to study. The average exam scores between students receiving the Rhodiola rosea extract and placebo were 3.47 and 3.20, respectively.

#### *Cardiac Problems*

Rhodiola has also been shown to be effective for cardiac problems caused or aggravated by stress. Its action for these conditions is in its ability to decrease the amount of catecholamines and corticosteroids released by the adrenal glands during stress. The abnormal presence of these stress hormones will subsequently raise blood pressure, cholesterol, potassium levels and increase risk factors for heart disease. Rhodiola has been found to decrease harmful blood lipids and thus decrease the risk of heart disease. It also decreases the amount of cyclic-AMP (c-AMP) released into cardiac cells. Cyclic AMP is related to ATP (adenosine triphosphate), the body's primary energy molecule. C-AMP acts as a 'second messenger' or liaison between the outer and inner environments of the cell. It assists in the uptake of more intracellular calcium into the heart thus promoting a greater potential for heart muscle contraction. Rhodiola thus regulates the heart beat and counteracts heart arrhythmias.

#### *Cancer*

Rhodiola has been shown to increase anti-tumour activity by increasing the body's resistance to toxins. A range of anti-oxidant compounds have been identified in Rhodiola rosea and related species and significant free-radical scavenging activity has been demonstrated for alcohol and water extracts of Rhodiola. Rhodiola rosea might be useful in conjunction with some pharmaceutical anti-tumour agents. According to the information from Russian researchers have found that the oral administration of Rhodiola inhibited tumour growths in rats by 39% and decreased metastasis by 50%. It improved urinary tissue and immunity in patients with bladder cancer. In other experiments with various types of cancer, including adenocarcinomas, the use of extracts of Rhodiola Rosea resulted in significant increased survival rate.

#### *Immune System*

Rhodiola both stimulates and protects the immune system by reinstating homeostasis (metabolic balance) in the body. It also increases the natural killer cells (NK) in the stomach and spleen. This action may be due to its ability to normalise hormones by modulating the release of glucocorticoid into the body.

#### *Depression*

In animal studies, extracts of rhodiola, seem to enhance the transport of serotonin precursors, tryptophan, and 5-hydroxytryptophan into the brain. Serotonin is a widely studied brain neurotransmitter chemical that is involved in many functions including, smooth muscle contraction, temperature regulation, appetite, pain perception, behavior, blood pressure and respiration. When balanced, it imparts a sense of contentment and mental ease. Either too much or too little serotonin on the other hand has been linked to various abnormal mental states such as clinical depression. Thus rhodiola has been used by Russian scientists alone or in combination with antidepressants to boost one's mental state, a boon in countries and seasons where one is deprived of adequate sun over prolonged periods of months. This leads to a condition known as SAD or Seasonal Affective Disorder, common to Northern European countries.

#### **Other Benefits**

Many other benefits from the use of Rhodiola has been found including its ability to improve hearing, to regulate blood sugar levels for diabetics and protect the liver from environmental toxins. It has been shown to activate the lipolytic processes (fat breakdown) and mobilise lipids from a dipose tissue to the natural fat burning system of your body for weight reduction. It can also clinically enhance thyroid function without causing hyperthyroidism, enhance thymus gland function and protect or delay involution that occurs with ageing. It can also improve your adrenal gland reserves without causing hypertrophy. Throughout the years it has shown to substantially improve erectile dysfunction and/or premature ejaculation in men and normalises their prostatic fluid.

<http://www.herbwisdom.com/herb-st-johns-wort.html>

**St. John's Wort (*Hypericum perforatum*)**

**St. John's Wort Benefits**

St. John's Wort has become popular again as an antidepressant. It is the number one treatment in Germany and has been extensively studied by Commission E, the scientific advisory panel to the German government. It contains several chemicals, including hypericin, hyperforin, and pseudohypericin, which are thought to be the major sources of antidepressant activity. In several studies of laboratory animals and humans, one or more of the chemicals in St. John's wort appeared to delay or decrease re-absorption of the neurotransmitters dopamine, nor-epinephrine, and serotonin by nerve cells.

Neurotransmitters are chemicals that carry messages from nerve cells to other cells. Ordinarily, once the message has been delivered, neurotransmitters are re-absorbed and inactivated by the cells that released them. Chemicals in St. John's wort may keep more of these antidepressant neurotransmitters available for the body to utilise. Multiple studies have shown that St. John's wort may be effective in relieving mild to moderate depression, although maximum antidepressant effects may take several weeks to develop.

St. John's Wort is an MAO inhibitor and should not be used with alcohol and some other foods.

St. John's wort has also been studied for the treatment of other emotional disorders such as anxiety, obsessive-compulsive disorder (OCD), menopausal mood swings, and premenstrual syndrome. In laboratory studies, it has shown some effectiveness for lessening the symptoms of nicotine withdrawal and for reducing the craving for alcohol in addicted animals. It is believed that chemicals in St. John's wort may act like other chemicals that are associated with relieving emotional conditions.

Possible antiviral effects of St. John's wort are being investigated for the treatment of HIV/AIDS, hepatitis C, and other viral illnesses. It is thought that hypericin, pseudohypericin, and other chemicals in St. John's wort may stick to the surfaces of viruses and keep them from binding to host cells. Another theory is that St. John's wort may contain chemicals that interfere with the production or release of viral cells. This antiviral activity is enhanced greatly by exposure to light. However, the doses needed for active antiviral effect from St. John's wort may be so high that unbearable side effects may limit its usefulness as an antiviral.

It has also been used to treat hypothyroidism and a salve made with the extract can be used topically to treat bruises, burns, insect bites and scabies.

<http://www.herbwisdom.com/herb-tarragon.html>

**Tarragon**

**Tarragon Benefits**

Tarragon (*Artemisia dracunculus*) is an aromatic herb that is considered one of the four finest seasoning ingredients in traditional French cooking. Also commonly known as estragon and dragon herb, this perennial plant is native to most of the Northern Hemisphere including Europe, Asia, India, western North America and parts of northern Mexico. Averaging about four feet in height when mature, the slender green leaves produced from branched stems of this herb contain aromas and flavors similar to anise. Both the leaves and stems are can be used, either fresh or dried, as seasoning in a wide variety of dishes. They are also often steeped in vinegar and soft drinks to impart their unique flavors into the surrounding liquids. There are written records of tarragon cultivation dating back to 500 B.C.

While many people are familiar with the culinary uses for tarragon, most may not be aware of its unique medicinal qualities. This herb has been used by numerous cultures for centuries as a natural treatment for many ailments. In addition, it is a superb supplement to any diet because it is high in vitamins, potassium and other nutrients that have been proven to provide health benefits. Whether added to foods as a seasoning or taken as a supplement, there are many good reasons for making tarragon a part of an overall diet. Here are some of the ways tarragon has been proven to be such a beneficial herb.

#### *Antioxidant Properties*

Tarragon, especially the Turkish variety, has antioxidant properties that can help neutralize the actions of free radicals throughout the body. Free radicals, which are a by-product of metabolism, have been proven to damage cells unless they are quickly expelled as waste. Studies have found that tarragon oil works as a free radical scavenger to help stop or decrease the damage these radicals can cause.

#### *Toothache Remedy*

Throughout history, tarragon has been widely used as an aid for toothaches. The ancient Greeks chewed it because of its ability to numb the mouth. This pain relieving effect is due to the high levels of eugenol found in the plant. This is the same pain relieving compound contained in clove oil. It has also been proven that tarragon can also help decrease the sore gums that often occur along with toothaches.

#### *Appetite Stimulant*

Based upon several studies, tarragon appears to have chemicals that can help to increase appetites. Whether used as a seasoning herb in cooking or consumed raw as a small garnish, it may help people who have poor appetites due to age or illness.

#### *Digestive Aid*

Tarragon has long been used as a digestive tonic because it aids in the production of bile by the liver. Not only can it improve natural digestion, but it has also been found to relieve common digestive problems like an upset stomach, irritable bowels and dyspepsia. It has also been used in traditional folk remedies for ridding the bowels of intestinal worms.

#### *Sedative*

Tarragon can be used as a mild sedative to help relieve anxiety and stress. It is also beneficial in promoting a good night's sleep.

#### *Heart Health*

Tarragon contains chemicals that can help support cardiovascular health. These chemicals can assist in keeping blood platelets and other compounds from adhering and accumulating in the heart's blood vessels.

### *Female Health*

Tarragon has proven useful as a supplement for women who suffer from suppressed menstruation. It has also been promoted as a means for maintaining the overall health of the female reproductive tract. However, it has been found that tarragon should not be used for these reasons while pregnant or nursing.

### *Eye Function*

Because it is rich in potassium and the Vitamin A precursor beta carotene, tarragon can assist in the overall health and function of the eyes.

### *Building Muscle Mass/ Weight Control*

Recent studies have shown that tarragon, primarily the Russian variety, helps to increase muscle creatine absorption. This is similar to the muscle creatine adsorption that occurs when large amounts of carbohydrates are ingested. Since tarragon creates the same effect, consuming large amounts of carbohydrates is no longer necessary to increase muscle mass. Similarly, this property of tarragon can also be developed for use in weight control programs.

Today, the medicinal benefits of tarragon can easily become a part of any diet whether it is in the form of pills, powders, teas, used as a seasoning or consumed raw. The appropriate dosage will depend on several factors including age, overall health and other medical conditions.

100

## **697 Cannabis strains**

### **Cannabis strains**

[http://en.wikipedia.org/wiki/Cannabis\\_strains](http://en.wikipedia.org/wiki/Cannabis_strains)

Cannabis strains are either pure breeds or hybrid varieties of Cannabis, typically of the species *C. indica* or *C. sativa*. Varieties are developed to highlight a specific combination of properties of the plant or to establish marketing differentiation. Variety names are typically chosen by their growers, and often reflect properties of the plant, such as taste, color, smell, or the origin of the variety.<sup>[[citation needed](#)]</sup>

### **Variety ambiguity**

A variety may refer ambiguously to different forms of cannabis:

Clone-only variety – A cannabis grower may grow a cannabis seed into a plant and find that this plant is unique in some way. The grower may make genetically identical clones of the plant and distribute these. A clone is the only way to propagate the exact genetic make-up that makes a variety unique; however, growing conditions greatly affect the plant and the final consumable product.

Stable seed variety – For a cannabis breeder wishing to develop a new variety, the process is complicated and time consuming. It involves selectively choosing male and female cannabis plants and breeding them over the course of multiple generations. The final generation's seeds will have been stabilized by the breeder on the specific attributes chosen, though some genetic variation still exists among the seeds.

Unstable seed varieties – While these can be produced more quickly, plants grown from these seeds may have widely varying characteristics. Reputable seed shops will not distribute unstable seed varieties, though some amateur growers might. Third-party growers may produce unstable derivatives from well known varieties and misleadingly call them by their true variety name.

Wild varieties (landraces) – Some varieties, such as Colombian and Thai refer to cannabis plants found growing wild in certain regions. Typically, these plants are used as bases for the production of more specialized varieties (e.g. G-13 or Haze).

Additionally, black market Cannabis dealers may distribute marijuana that is misleadingly called by a variety name. For example, Skunk and G13 may be used, but a lower grade may

### **Major variety types**

*Cannabis indica*

*Cannabis ruderalis*

*Cannabis sativa*

The Cannabis genus is typically considered to have two species, Cannabis indica and Cannabis sativa. A third species known as Cannabis ruderalis differs from the other two species in a few key ways. C. ruderalis is very short, produces only trace amounts of tetrahydrocannabinol (THC) and flowers independently of the photoperiod and according to age.

Pure sativas are relatively tall (reaching as high as 4.5 meters), with long internodes and branches, and large, narrow-bladed leaves. Pure indica varieties are shorter and bushier, have wider leaflets, and are often favored by indoor growers. Sativas bloom later than indicas, often taking a month or two longer to mature. The subjective effects of sativas and indicas are said to differ, but the ratio of tetrahydrocannabinol (THC) to cannabidiol (CBD) in most named drug varieties of both types is similar (averaging about 200:1). Unlike most commercial drug varieties, indica landraces often consist of a mixture of plants with varying THC/CBD ratios. The relatively high CBD to THC ratio typical of hashish produced in regions where these landraces are grown (including Afghanistan and Pakistan) is useful for treating insomnia.

## **Varieties**

Indica

Lowryder

Royal Kush

White Widow

Sativa

Jack Herer (sativa-dominant)

In addition to "pure" indica, sativa, and ruderalis varieties, hybrid varieties with varying ratios of these three types are common. For example, the White Widow hybrid is purported to have about 60% "indica" and 40% "sativa" genetics. These hybrid varieties have combinations of traits derived from both parental types. There are also commercial crossbred hybrids which contain a mix of both ruderalis, indica and/or sativa genes (these hybrids are usually called auto-flowering varieties). "Lowryder" is the most famous auto-flowering hybrid and retains the auto-flowering characteristic of ruderalis plants, while also producing usable amounts of THC/CBD. Auto-flowering marijuana varieties are considered advantageous by some growers due to their discreet size, short growing periods, and the fact that they do not rely on a change in light schedule to determine when to flower.

## **Variety naming**

Varieties are often named by the breeder or grower to differentiate one from another. In competitive legal markets, such as in Amsterdam, there is significant pressure to create unique varieties that dominate the market. This results in a number of distinct variety names that may refer to very similar cannabis.

Likewise, when a variety becomes popular, many breeders and growers may produce variations of the same variety using the same or similar name. For example, Sour refers to a subset of sativa-dominant Cannabis strains.

## **Breeding new varieties**

Breeding involves pollinating a female cannabis plant with male pollen. This will happen naturally. However, the intentional creation of new varieties typically involves selective breeding in a controlled environment.

Often male plants, once identified by their ball-like stamen, will be separated from female flowers. This prevents accidental fertilization of the female plants, either to facilitate sinsemilla flowering or to provide more control over which male is chosen. Pollen produced by the male is caught and stored until it is needed.

The seeds produced by a germinated female will be F1 hybrids of the male and female. These offspring will not be identical to their parents. Instead, they will have characteristics of both parents. Advanced techniques can stabilize certain characteristics.

A common technique to stabilize a cannabis variety is called "cubing", in which the breeder will seek specific traits in the hybrid offspring (e.g. greater resin production, tighter node spacing, etc.) and breed said offspring with a parent plant. The same traits are sought in the new inbred offspring, which are then again bred with the original parent plant. This process is called cubing because it usually repeated across three (or possibly more) generations before a variety can be considered at least somewhat stable.

Seed shops sell both pure varieties that have specific aspects stabilized as well as unstabilized hybrids that may be of questionable quality.

Most cannabis varieties used today in North America are asexually propagated Indica varieties that were bred hydroponically to produce large amounts of "bud."[\[citation needed\]](#)

*100*

*Cannabis strains*

*101*

*empty*

*1 Touching Lives Title*

**ARO-HEALING REVISED COMPLEMENTARY**

**THERAPY (ARC)**

ARO-HEALING REVISED COMPLEMENTARY

THERAPY

AS A

WHOLE MEDICAL SYSTEM

**LYNETTE BARNARD**

*2 To make this Volume a novel or a study*



### **3 About the Author**

### **4 The advice and insight**

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changing or ceasing any recommended or

prescribed medication or other treatment

programme.

You are also advised to seek medical

advice from a suitably qualified practitioner

before adopting any other treatment programme.

### ***THREE PART MASSAGE AND HEALTH THERAPY SERIES:***

#### **THREE PART MASSAGE AND**

#### **HEALTH THERAPY SERIES. VOLUME 2**

#### **1 OVERVIEW**

THE FOUNDING HISTORY OF A WHOLE MEDICAL SYSTEM

#### **2 GENERAL INFORMATION**

ARO-HEALING REVISED COMPLEMENTARY

THERAPY AS A WHOLE MEDICAL SYSTEM

**4 ARO-HEALING REVISED COMPLEMENTARY**

**THERAPY AS A WHOLE MEDICAL SYSTEM —**

MASSAGE HEALTH THERAPY

*5 Market research questionnaire*

Once I was questioned by a market researcher. It was an experience!

I had to sit in front of a laptop and watch three ads. The object of the research was to examine what ads do to us.

Does a specific ad allow you to frown, smile, etc. Or do you do nothing?

Usually how they advertise the product has basically nothing in common with the product. You reckon? It has everything to do with the product! On a psychological level – yes!

Ads usually come and go. You would think the whole subject about ads is stupid, but let me tell you this. Ads impose on your subliminal reasoning. Unconsciously.

*6 Have a theme when marketing something*

**Volume 2 can be classified into 4 sections and 10 Chapters for ARC:**

## **VOLUME TWO**

### **PART 1 THE INTRODUCTION OF HERBOLOGY**

Naturopathy and Homeopathy

### **PART 2 OTHER WHOLE MEDICAL SYSTEMS**

Ayurvedic, Chiropractic, Tibetan, etc.

### **PART 3 MASSAGE HEALTH THERAPY**

ARC versus TCM

## PART 4 SCIENTIFIC SKEPTICISM

The Reasonable Feasibility Concept

## PART 1 THE INTRODUCTION OF HERBOLOGY

Naturopathy and Homeopathy

## PART 2 OTHER WHOLE MEDICAL SYSTEMS

Ayurvedic, Chiropractic, Tibetan, etc.

## PART 3 MASSAGE HEALTH THERAPY

ARC versus TCM

## PART 4 SCIENTIFIC SKEPTICISM

The Reasonable Feasibility Concept

*7 In this Volume and Volume 3 I will ...*

### **Section 1 Holistic, Natural, Therapeutic**

## PART 1 THE INTRODUCTION OF HERBOLOGY

Naturopathy and Homeopathy

## **Section 2 Whole Medical Systems**

### **PART 2 OTHER WHOLE MEDICAL SYSTEMS**

Ayurvedic, Chiropractic, Tibetan, etc.

## **Section 3 ARC versus TCM**

### **PART 3 MASSAGE HEALTH THERAPY**

ARC versus TCM

## **Section 4 Introduction to Psychology**

### **PART 4 SCIENTIFIC SKEPTICISM**

The Reasonable Feasibility Concept

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**Aro-healing      ARC      Arochology**

Massage Therapy    Naturopathy    Psychology

Lymphatic Drainage    Herbology    Behaviour Modification

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388 1 Alternative Medicine or Whole Medical System

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*127 Category talkAlternative medical systems*

Category talk: Alternative medical systems

[http://en.wikipedia.org/wiki/Category\\_talk:Alternative\\_medical\\_systems](http://en.wikipedia.org/wiki/Category_talk:Alternative_medical_systems)

**Terms and concepts in alternative medicine**

*The NCCAM name for this category is "whole*

*medical systems.*

Some people practice this category as Complementary

therapies, for example, they include mainstream

medicine; they are not recognized as complete systems

of health by the mainstream.

The use of the word 'whole' in this context refers to the ability of a medical system to treat every condition that it considers 'pertaining to one's health', not to whether or not it addresses psycho-social-spiritual conditions).

The first sentence in this article is incorrect as it refers to the NCCAM definition of a subcategory of CAM, namely whole medical systems.

NCCAM defines alternative medicine as:

"NCCAM defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine." Some CAMs are whole, many are not.

*Glossary of alternative medicine*

[http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

**A**

*Acupuncture* is the practice of inserting very thin needles into specific acupuncture points or combinations of points on the body.

*Alternative Medical Systems* is a NCCAM classification for alternative medicine that are built upon a complete system of ideas and practice. *It can include:*

Naturopathic medicine

Homeopathy

Ayurveda

Chiropractic

Osteopathy

Traditional Chinese medicine

*Anthroposophical medicine* is a holistic approach to healing developed in the early twentieth century by Rudolf Steiner and Ita Wegman. Practitioners supplement the uniquely anthroposophical approach with conventional and homeopathic therapies and remedies.

*Anthroposophical doctors* must have a recognized medical degree (M.D., D.O., or equivalent).

Anthroposophic Pharmacy is the discipline related to conceiving, developing and producing medicinal products according to the **anthroposophic**

understanding of man, nature, substance and pharmaceutical processing. Anthroposophic medicinal products are used within anthroposophic medicine but not only.

*Aromatherapy* is the use of essential oils and other aromatic compounds from plants to affect someone's mood or health.

*Attachment therapy* is a form of therapy aimed at children with alleged 'attachment disorders', usually fostered or adopted children. It is substantially based on outdated notions of suppressed rage due to early adverse experiences. Traditionally it uses a variety of confrontational and physically coercive techniques of which the most common form is holding therapy, accompanied by parenting methods which emphasize obedience.

Following implication in a number of child death and maltreatment cases in the USA there has been a recent move away from coercion by some leading theorists and practitioners. It is largely **unvalidated**.

## **B**

*Bates method* – an alternative approach to eyesight improvement and maintenance. It is based on the belief that errors in visual accommodation are due to mental strain, and that vision may be improved by appropriate relaxation techniques.

*"Biologically based therapies"*, is the precise name of a NCCAM classification, for alternative treatments that use substances found in nature and/or some other natural therapy. *It can include"*

*Chinese food therapy*

Naturopathy

Natural health

Natural therapy

Diet and Food

Exercise

Herbal therapy

Orthomolecular medicine

Fasting

Macrobiotic lifestyle

Dietary supplements

Urine therapy

*The Biomedical model* of health is a conceptual model of illness that excludes psychological and social factors and includes only biological factors in an attempt to understand a person's illness. According to this model, health constitutes the freedom from disease, pain, or defect, thus making the normal human condition health. The model's focus on the physical processes, such as the pathology, the biochemistry and the physiology of a disease, does not take into account the role of social factors or individual subjectivity. The model also overlooks the fact that the diagnosis (that will affect treatment of the patient) is a result of negotiation between doctor and patient.

*Body work is any therapeutic, healing, or personal development work that involves some form of energetic work, touching, or the physical manipulation of a practically oriented physical and somatic understanding of the body.*[\[citation needed\]](#)

## C

CAM is for complementary and alternative medicine, treatments and theories on the nature of health and illness, many of them unrelated, which have in common that they are not employed by the conventional medical establishment.

While in conventional medicine, *chelation therapy* is used only to treat heavy metal poisoning. Some alternative practitioners advocate the use of chelation therapy to treat coronary artery disease.

*Chinese medicine* – the group of philosophies embodied by Chinese medicine are, more accurately, referred to as Oriental Medicine with roots in many different Asian countries. This millennia-old Asian medical tradition works to bring balance to the body through acupuncture, massage, Eastern herbalism, diet; and lifestyle changes such as martial arts and meditation.

The practice of *Chiropractic* is a manual therapy involving the manipulation of the vertebral subluxation to restore proper motion, **biomechanics**,

and nerve flow from the brain to the body.

*Christian Science* is a denomination that teaches that Christian healing as practiced by Jesus of Nazareth and his followers for several centuries, was in fact not a short-term dispensation to induce faith, but had an underlying principle (specifically God) and method. While its practice is regarded within the denomination as incompatible with medical care, it also respects the philanthropy of the medical faculty and is non-compulsory. Resort to Christian Science may be private or involve the care of a Christian Science practitioner.

*Colorpuncture* is an alternative medicine practice asserting that light can be used to stimulate acupuncture points for the purpose of balancing energy in the body to promote healing and health. It is also known as color light acupuncture in North America. It is a form of color therapy.

Complementary medicine is treatments that are used alongside ("complementary to") conventional medicine.

## **D**

*Diet-based therapy* uses a variety of diets:

to improve health and longevity,

to control weight, and

to treat specific health conditions such as high cholesterol.

Breatharian

Fruitarianism

List of diets

Living foods diet

Macrobiotic lifestyle

Okinawa diet

Ovo-lacto vegetarian

Raw foodist

Vegan

Vegetarianism

Low-fat diet

Low-carb diet (Zone diet, Atkins diet)

*The Doctrine of signatures* was developed around 1500 and claims that a plant's physical appearance reveals its medical value. The Doctrine of Signatures is often associated with Western herbalism.

## E

*Eclectic medicine* was a nineteenth-century system of medicine used in North America that treated diseases by the application of single herbal remedies to effect specific cures of certain signs and symptoms.

*Energy medicine* is a NCCAM classification for alternative treatments that involve the use of veritable (i.e., that which can be measured) and putative (i.e., that which have yet to be measured) energy fields. It can include:

Magnet therapy

Reiki

Shiatsu

Therapeutic Touch

Eden Energy Medicine – approach developed by Donna Eden

*Exercise-based therapy* uses a variety of traditional physical movement

to improve health and longevity,

to increase, lengthen & tone muscle mass,

gain flexibility,

treat specific health conditions and

relieve stress. It can include:

Aerobic exercise

Aerobics

Bodybuilding

Feldenkrais method

Martial arts

Physical Culture

Pilates

PNF stretching

Stretching

Some forms of Qigong

T'ai chi

Walking

Weight training

Yoga

## **F**

*Feldenkrais Method* is an educational system centered on movement, and aim to expand and refine the use of the self through awareness.

*Flower essence therapy* is regarded by some as a sub-category of homoeopathy (which uses homeopathic dilutions of flowers). This practice was begun by Edward Bach with the Bach flower remedies, but is now practiced more widely.

*Folk medicine* is the collection of procedures traditionally used for treatment of illness and injury, aid to childbirth, and maintenance of wellness.

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## **G**

Grahamism, named for Sylvester Graham, recommended hard mattresses, open bedroom windows, chastity, cold showers, loose clothing, pure water and vigorous exercise.[citation needed]

## **H**

Herbalism is the practice of making or prescribing herbal remedies for medical conditions.

Heroic medicine is any medicine or method of treatment that is aggressive or daring in a dangerously ill patient. It generally includes the pre-scientific treatments of 18th-century doctors, such as bloodletting.

Holism is the study of wholeness in health, science, politics, or any other area of life.

Hydrotherapy is the external use of water in the medical treatment of disease, such as the use of baths, the application of hot and cold compresses or sheet packs, and shower sprays. These applications use water as a medium for delivery of heat and cold to the body, capitalising on the thermoregulatory properties of the body for therapeutic effect.

Homeopathy -

I

[http://en.wikipedia.org/wiki/Glossary\\_of\\_alternative\\_medicine](http://en.wikipedia.org/wiki/Glossary_of_alternative_medicine)

Integrative medicine as defined by National Center for Complementary and Alternative Medicine combines conventional medical treatments and CAM treatments for which there is some claimed scientific evidence of their safety and effectiveness.[ Integrative medicine also adopts the term "integrative health" which incorporates mental, spiritual and community wellness with personal health.

Iridology (known as iridodiagnosis) is an alternative medicine technique whose proponents believe that patterns, colors, and other characteristics of the iris can be examined to determine information about a patient's systemic health. Practitioners match their observations to iris charts which divide the iris into zones corresponding to specific parts of the human body. through intervention

## **L**

Life extension is a movement the goal of which is to live longer, and to increase maximum lifespan or average lifespan, especially in mammals. Researchers of life extension are a subclass of biogerontologists known as "biomedical gerontologists".

List of life extension related topics.

Lifestyle is the particular attitudes, habits, or behaviors associated with an individual.

Lifestyle diseases are diseases that increase in frequency as countries become more industrialized and people live longer.

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## M

Manipulative and body-based methods, is the precise

name of a NCCAM classification, for alternative treatments that are based on manipulation and/or movement of one or more parts of the body.

It can include:

Acupressure  
Alexander Technique  
Body work  
Bowen Technique  
Chiropractic  
Feldenkrais Method  
Manipulative therapy  
Massage therapy  
Medical acupuncture  
Metamorphic Technique  
Myofascial Release  
Naprathy  
Osteopathy  
Rolfing  
Shiatsu

Somatics  
Taijiquan  
Trager Approach

Tui na  
Zero Balancing

Manual Lymphatic Drainage (MLD) is a type of gentle

massage which encourages the natural circulation of  
the lymph through the body.

The mind-body connection idea says that the causes,

development, and outcomes of an illness are determined  
as much from the interaction of psychological and  
social factors as they are due to the biological factors of  
health. Many mind-body therapists take the definition  
of "mind-body connection" further and state that the  
root cause of illness is actually in the mind and spirit,  
and that for complete and permanent eradication of an  
illness, the cause must be addressed and cure focused  
there.

Mind-Body Intervention is the name of a NCCAM

classification, that covers a variety of techniques  
designed to enhance the mind's capacity to affect bodily  
function and symptoms.

*It can include:*

Aromatherapy

Art Therapy

Autosuggestion

Bach Flower Therapy

Buteyko method

Eutony

Feldenkrais method

Hatha yoga

Hypnotherapy

Metamorphic Technique

Journaling

Meditation

Music Therapy

Nia technique

Reiki

Self-hypnosis

Support groups

Taijiquan

Trager Approach

Visualization

Vivation

Yoga

**N**

"Nature cure" is the progenitor of naturopathy in Europe. It postulates that all disease is due to violations of nature's laws, and that true healing consists in a return to natural habits.

Natural health is an eclectic self-care system of natural

therapies that purports to build and restore health by working with the natural recuperative powers of the human body.

Naturopathy is the eclectic practice of Naturopathic

Doctors (N.D.) using many different natural therapies as treatment. The original method of treatment of Naturopathy was the water cure.

Natural therapy is the treatment method used by

advocatees of natural health.

NCCAM classifications – The National Center for

Complementary and Alternative Medicine, or NCCAM, has classified complementary and alternative therapies into five different categories, or domains:

1 Whole Medical Systems

2 Mind-Body Intervention

Biologically Based Therapy

Manipulative and body-based methods

Energy Therapy

### ***Immune System Control***

1 By relieving stress, Aro-healing strengthens

resistance to disease

2 Promotes wellness of mind and spirit

### ***Treatment Messages:***

1 Healing Art

2 Flow of Healing Energy

*Common conditions can be helped by Aro-healing Revised*

*Complementary Therapy. These include e:*

- 1 Insomnia
- 2 Headache and migraine
- 3 Depression
- 4 Digestive problems
- 5 Skin complaints
- 6 Poor circulation
- 7 Rheumatism
- 8 Sinusitis
- 9 Depression
- 10 Anxiety and stress

*In Aro-healing Revised Complementary Therapy I use:*

- 1 Touch Therapy
- 2 Electrical Vibration
- 3 Sports Massages
- 4 Infrared Therapy
- 5 Anti-ageing Therapy
- 6 Lymphatic Therapy (Cellulite  
Reduction)
- 7 Lymphatic Drainage Massages
- 8 General Lymphatic Drainage
- 9 Animal Massage Therapy
- 10 Baby Massage Therapy
- 11 Music Therapy
- 12 Consultation Therapy
- 13 Education and more

Aro-healing Revised Complementary Therapy also refers

people to conventional medical settings to help treat a wide variety of patients, including those with mental illness and muscular—skeletal problems.

- The healing touch of an Aro-health massage reduces

tension, increases circulation, and enables the body to

relax.

- Pain is relieved, the body is balanced and health is maintained.
- By relieving stress, Aro-healing strengthens resistance to disease and promotes wellness of mind and spirit.

### ***COMBINATION THERAPY***

1 Anti-ageing/ General Lymph Stimulation/Lymphatic Drainage  
(Cellulite Reduction)

2 Attention Deficit Syndrome/Hyperactivity/  
Dyslexia/ Touch Therapy (Babies, children, animals and adults)

3 Sports Injuries/ Sports Massage/ Sport Therapy  
(Psychology)/Infrared Therapy/ Music Therapy

4 Detoxification/Reflex Stimulation/ Toxic Conditions/  
Drug Abuse/Drug Dependency/ Sleep Therapy

### ***Effectiveness of Combination Therapy***

The best results are with a mixture of Therapies or Treatments. The guy who came for sessions of ‘drug craving’ treatments walked away with a flat stomach. **Ten minutes** of lymphatic drainage in every session made him the proud owner of abs!

### ***Consultation Therapy***

1 Depressive Conditions

2 Depression, Motivation

3 Sexual Disorders

4 Sexual Molestation

5 Sexual Behavior

6 Psychological Disorders

*‘I loved the ARC treatment—it really worked for me—and the Touch Therapy has been just amazing!’*

*‘I have never experienced anything similar to this before.’*

*‘A very personal and enlightening encounter’.*

























































































































































































































































































































































































































































































