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Homotoxicology

Homotoxicology

<http://www.integrativemedicine.co.za/homotoxicology.html>

Homotoxicology was developed over 50 years ago by a German medical doctor Hans-Heinrich Reckeweg. Today it is also l

The word Homotoxicology is derived from three words; "Homo" meaning man," toxico"from toxin or poison and "ology" fi medicinal products influence the bioregulation processes, acknowledging the complexity of human physiology. The product processes to induce homoeostasis (it literally means to remain in the same condition, to remain as close as possible to a stea

A good holistic history and a thorough physical examination are invaluable. Knowledge of pathology and a workable convey unfolding pathological process. Homotoxicologists see symptoms as an expression of the blockages to eliminate toxins and

In the definition of Homotoxicology, disease is explained as the expression of an appropriate response against "homotoxins" follows a dysregulation of the normal physiological phenomena. Examples of external toxins are infective organisms, allerg molecules, solvents, vapours, glues and radiation to name a few. Endogenous toxins come from waste products of metabolic

Regulation of homoeostasis is a result of interaction between different systems. This is now known as Psycho-neuro-endocr hypothalamus-pituitary-adrenal axis, the immune system, the gut and liver, the autonomic nervous system and the connectiv homoeostasis.

The disease processes is classified according to the embryonic layer involved and the evolution of the specific disease. This inflammation, deposition, impregnation, degeneration and de-differentiation. Pathologically disease development is very specific. When healing occurs the process moves back through the stages described above (health evolution). A person can have various diseases. The illness is what surfaces after the defence system has reacted to the threat. The physiological response to the reaction of the disease is the presentation. This informs the doctor to choose appropriate medication in a correct homotoxicological way.

In choosing a medicinal product we want to treat the various components of the greater defence system in maintaining homeostasis. This will support the physiological response in the specific disease stage in order to support healing and symptom reduction. It also offers treatment modalities for chronic diseases.

In contrast to conventional medications, antihomotoxic medications contain Micro or even Nano doses of active component medications. It is safe and effective in supporting the person's physiological responses to resolve the disease process. The approach is

Modern scientific research confirms the interaction between the components of the greater defence system and the fact that it is based on the physiological mode of action of this type of medications. Comparisons between Homotoxicology products and conventional medicine show Homotoxicology an acceptable approach in modern integrative medicine.

Dr. Reckeweg did indeed build a bridge between conventional and complementary medicine and by this created an integrative approach to many other approaches as well as allopathic medication.

Information provided by Dr F Badenhorst www.drfbadenhorst.com

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Intramuscular Stimulation Therapy (IMS)

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Research

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RESEARCH

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ARC Bolster Support Pillow

Research for ARC Bolster Support Pillow

ARC Bolster Support Pillow Research

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Sleep and Sleep Patterns

Sleep and Sleep Patterns

Is Your Sleep Loss Making You Depressed

Is Your Sleep Loss Making You Depressed?

http://www.webmd.com/sleep-disorders/features/sleep-position-and-sleep-quality?ecd=wnl_slw_0919

Sleep Problems It Could Be Depression

Sleep Problems? It Could Be Depression

http://www.webmd.com/sleep-disorders/features/sleep-position-and-sleep-quality?ecd=wnl_slw_0919

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Cultivation Zones

I dreamed about the two words 'cultivation zone'

Cultivating ...

<http://warhammeronline.wikia.com/wiki/Cultivating>

Cultivating

Cultivators grow plants and fungi for Apothecaries. Plants and fungi are grown from seeds and spores, respectively. The quality and quantity of plants a cultivator reate potions and dyes.

Plants have a designated growth cycle separated into three phases. During each of these phases the cultivator has a chance to increase the chance for a favorable outcome when a plant is harvested.

As the cultivator gains skill, they will gain access to more plots to grow plants in. A cultivator can have up to 4 plots. They

Seeds and plants can essentially be broken down according to the key part of their name (ignoring "seed" and the description) by rank of seed and combined with the key part of the name shows what herb will be grown.

Most seeds are cultivated from basic Rank 1 seeds buyable from merchant vendors. The exception to this rule are hybrid seeds when cultivated (even if cultivation fails). The plants grown from them cannot be reaped.

There are many plants and each has a specific effect when used by an apothecary. Plants also have different base growth times

Cultivation Time

The amount of time required to cultivate a plant is strictly governed by the rank of the plant. The minimum time is 20 seconds

Additives

There are three phases to plant growth. During each phase a specific type of additive can be added to the plot for certain effects and/or better products. They will reduce the time of a phase by either a percentage of the time left or a fixed amount of time

You can obtain 4 outcomes when planting: success, critical success, special moment and critical failure.

1. A critical failure will return only a wilted weed. The chance of this occurring can be reduced, but not completely eliminated.
2. Success gives you 2 Plants/Fungi. The chance of this occurring can be increased by using Nutrients to reduce the chance of failure.
3. Critical success gives you 3 Plants/Fungus. The chance of this occurring can be increased by using Soil.
4. A special moment gives you 3 Plants, plus an extra plant of a higher rank (or the same rank if rank 200 already), plus a dye and/or Rhya's Fertile Loam.

Phase 1: Germinating

The first stage of growth allows the cultivator to add soil to the plot.

The second phase of growth allows the cultivator to add water to the plot.

Phase 3: Flowering

The third and final phase of growth allows the cultivator to add a nutrient to the plot.

Special moments come from special moments in cultivating seeds. The chance of special moment is the sum of the special moment chances of all seeds. A special moment can be turned into a special moment by an apothecary on a seed.

Reaping

With patch 1.2, plants and fungi grown from cultivating may be reaped. You do not need to be a cultivator to do this. Reaping returns a single seed/fungi of the same type and rank and an Arboreal Resin of the same rank as well. Reaping allows the Cultivator to get two resin. This multiplication is particularly useful for financing apothecaries.

By getting a special moment on a cultivation and then reaping the higher level plant, a cultivator can begin to produce higher quality plants. A successful cultivation will return at least 2 plants and these can be reaped to return at least 2 seeds total. The only thing that

Note that you cannot reap (ctrl-right-click) a plant while visiting a vendor.

Cultivating Add-ons

Cultivating add-ons are available from Curse.com.

- The third and final phase of growth allows the cultivator to add a nutrient to the plot.
- The first stage of growth allows the cultivator to add soil to the plot.
- The second phase of growth allows the cultivator to add water to the plot.

Categories:

- Χυλιτωατινγ
- Τραδε Σκιλλσ
-

Shifting cultivation ...

http://en.wikipedia.org/wiki/Shifting_cultivation

Shifting cultivation

Part of a series on

Economic, applied and development

anthropology

Basic concepts, Provisioning systems, Major theorists, Social and cultural anthropology

Shifting cultivation is an agricultural system in which plots of land are cultivated temporarily, then abandoned and allowed

The period of cultivation is usually terminated when the soil shows signs of exhaustion or, more commonly, when the field

The length of time that a field is cultivated is usually shorter than the period over which the land is allowed to regenerate by

Of these cultivators, many use a practice of slash-and-burn as one element of their farming cycle.

Others employ land clearing without any burning, and some cultivators are purely migratory and do not use any cyclical met

Sometimes no slashing at all is needed where regrowth is purely of grasses, an outcome not uncommon when soils are near

One land-clearing system of shifting agriculture is the slash-and-burn method, which leaves only stumps and large trees in th

Cultivation of the earth after clearing is usually accomplished by hoe or digging stick and not by plough.

Political ecology of shifting cultivation

Shifting cultivation is a form of agriculture in which the cultivated or cropped area is shifted regularly to allow soil properties at any particular point in time a minority of 'fields' are in cultivation and a majority are in various stages of natural re-growth a relatively long time. Eventually a previously cultivated field will be cleared of the natural vegetation and planted in crops cyclically. This type of farming is called jhumming in India.

Fallow fields are not unproductive. During the fallow period, shifting cultivators use the successive vegetation species widely and medicines. It is common for fruit and nut trees in fallows to be planted in fallow fields to the extent that parts of some fallows are slashed or burning in fallows. Many of these species have been shown to fix nitrogen. Fallows commonly contain plants that protect soil against physical erosion and draw nutrients to the surface from deep in the soil profile.

The relationship between the time the land is cultivated and the time it is fallowed are critical to the stability of shifting cultivation. A system in which there is a net loss of nutrients over time will eventually lead to irreversibly exhausted (including erosion as well as nutrient loss) in less than a decade.

The longer a field is cropped, the greater the loss of soil organic matter, the reduction in the cation-exchange-capacity and infiltration capacity is reduced and the greater the loss of seeds of naturally occurring plant species from soil seed banks. In state that it was in before it was cleared, and for the soil to recover to the condition it was in before cropping began. During fallow becomes closed again, nutrients are extracted from the subsoil, soil fauna increases, acidity is reduced, soil structure, texture

The secondary forests created by shifting cultivation are commonly richer in plant and animal resources useful to humans than the agricultural landscape of fields at various stages in a regular cycle. People unused to living in forests cannot see the fields for randomly and so they characterise shifting cultivation as ephemeral or 'pre-agricultural', as 'primitive' and as a stage to be passed. Shifting cultivation is highly variable, closely adapted to micro-environments and are carefully managed by farmers during both the cropping and fallow local environments and of the crops and native plant species they exploit. Complex and highly adaptive land tenure systems integrated into some shifting cultivation systems.

Shifting cultivation in Europe

Shifting cultivation was still being practised as a viable and stable form of agriculture in many parts of Europe and east into late 1860s a forest-field rotation system known as Reutbergwirtschaft was using a 16 year cycle of clearing, cropping and fallow. Swidden farming was practised in Siberia at least until the 1930s, using specially selected varieties of "swidden-rye" (Steen: flax, rye, wheat, oats, radishes and millet. Cropping periods were usually one year, but were extended to two or three years (Steen: in 1949, Steensberg (1993, 111) observed the clearing and burning of a 60,000 square metre swidden 440 km north of Helsinki. Alder (Alnus) was encouraged to improve soil conditions. After the burn, turnip was sown for sale and for cattle feed. Shifting cultivation was practised in the industries of the towns. Steensberg (1993, 110-152) provides eye-witness descriptions of shifting cultivation being practised in Switzerland, Austria and Germany in the 1930s to the 1950s.

That these agricultural practices survived from the Neolithic into the middle of the 20th century amidst the sweeping changes that were massively destructive of the environments in which they were practised. This raises the question: if shifting cultivation did not

The earliest written accounts of forest destruction in Southern Europe begin around 1000 BC in the histories of Homer, Theophrastus, and Pliny. The development, the manufacture of casks, pitch and charcoal, as well as being cleared for agriculture. The intensification of trade and the export of forest products. Although goat herding is singled out as an important cause of environmental degradation, a more important cause was the clearing of forests and brought the land into permanent cultivation. Evidence that circumstances other than agriculture were responsible for forest destruction in the Roman empire from 400 BC to around 500 AD following the collapse of Roman economy and industry. Darby observes that by 400 AD that in many places "cultivated land became forest". (Darby 1956, 186). The other major cause of forest destruction in the Middle Ages was human interference in the forests.

In Central and Northern Europe the use of stone tools and fire in agriculture is well established in the palynological and archaeological records. The invention of the plough, trading, mining and smelting, tanning, building and construction in the growing Middle Ages were behind the destruction of the forests than was shifting cultivation.

By the Middle Ages in Europe, large areas of forest were being cleared and converted into arable land in association with the rise of iron smelters for charcoal, increasing industrial developments and the discovery and expansion of colonial empires as well as increasing demand for timber to deforest Europe. With the loss of the forest, so shifting cultivation became restricted to the peripheral places of Europe, with the use of draught animals or tractors. It has disappeared from even these refuges since 1945, as agriculture has become increasingly mechanized and themselves have been revalued economically and socially.

Simple societies, shifting cultivation and environmental change

A growing body of palynological evidence finds that simple human societies brought about extensive changes to their environments. Large scale mining, smelting or shipbuilding industries. In these societies agriculture was the driving force in the economy and the relationships between social and economic change and agricultural change in these societies, insights can be gained on shifting cultivation in those relationships.

As early as 1930 questions about relationships between the rise and fall of the Mayan civilization of the Yucatán Peninsula and the development of Mayan society and economy began around 250 AD.

A mere 700 years later it reached its apogee, by which time the population may have reached 2,000,000 people. There followed a decline in jungle vegetation. The causes of this decline are uncertain; but warfare and the exhaustion of agricultural land are commonly cited. In suitable places, developed irrigation systems and more intensive agricultural practices (Humphries 1993).

Similar paths appear to have been followed by Polynesian settlers in New Zealand and the Pacific Islands, who within 500 years of their arrival a process caused the elimination of numerous species of birds and animals (Kirch and Hunt 1997). In the restricted environments of the islands presumed to have been caused by shifting cultivation on slopes. Soils washed from slopes were deposited in valley bottoms and fields. The change from shifting cultivation to intensive irrigated fields, occurred in association with a rapid growth in population. In temperate latitude, islands of New Zealand the presumed course of events took a different path. There the stimulus for population growth was destroyed by burning, followed the development of intensive agriculture in favorable environments, based mainly on sweet potatoes. These changes, as in the smaller islands, were accompanied by population growth, the competition for the land (Kirch 1997).

The record of human induced changes in environments is longer in New Guinea than in most places. Agricultural activities and environments, are believed to have occurred in the central highlands of the island within the last 1,000 years, in association with the most striking signals of the relatively recent intensification of agriculture is the sudden increase in sedimentation rates in simple societies that have intensified their agricultural systems in association with increases in population and social complexity and environments. Rather it is why simple societies of shifting cultivators in the tropical forest of Yucatán, or the highlands hierarchies?

At first sight, the greatest stimulus to the intensification of a shifting cultivation system is a growth in population. If no other land must be cultivated. The total amount of land available is the land being presently cropped and all of the land in fallow cropping period must be extended or the fallow period shortened.

At least two problems exist with the population growth hypothesis. First, population growth in most pre-industrial shifting cultivation known where people work only to eat. People engage in social relations with each other and agricultural produce is used in the nexus between human societies and their environments, one an explanation of a particular situation and the other a general e

In a study of the Duna in the Southern Highlands, a group in the process of moving from shifting cultivation into permanent agriculture. The trigger to the changes was very slow population growth. The feedback loop, the "use-value" loop. As more forest was cleared there was a decline in wild food resources and protein production. Domestic pigs required a further expansion in agriculture. The greater protein available from the larger number of pigs incre

The outcome of the operation of the two loops, one bringing about ecological change and the other social and economic change. Population growing at an increasing rate and expanding geographically and a society that is increasing in complexity and structure. Their environments is that of Ellen (1982, 252-270). Ellen does not attempt to separate use-values from social production. How they are obtained through social relations of production and that these relations proliferate and are modified in numerous ways. They are arrangements and not from the objects themselves, a restatement of Karl Sauer's dictum that "resources are cultural appraisals." The translation by the Duna of the pig into an item of compensation and redemption. As a result, two fundamental processes underlie their alteration and circulation through social relations, and second, the giving of the material a value which will affect how social relations.

Transitions in ecological systems and in social systems do not proceed at the same rate. The rate of phylogenetic change is constant. For example, the domestication of a wild species. Humans however have the ability to learn and to communicate their knowledge. As the complexity they will, sooner or later, come into conflict with, or into "contradiction" (Friedman 1979, 1982) with their environment. Environmental degradation that will occur. Of particular importance is the ability of the society to change, to invent or to innovate, to continue environmental degradation, or social disintegration.

An economic study of what occurs at the points of conflict with specific reference to shifting cultivation is that of Esther Boserup. She argues that shifting cultivation has lower labor costs than more intensive farming systems. This assertion remains controversial. She also argues that given a choice between the highest yield and the lowest labor cost, farmers will choose the highest yield. But at the point of conflict, yields will have become unsatisfactory. Boserup argues, contra Malthus, that farmers will not adopt a technique or adopt an existing innovation that will boost yields and that is adapted to the new environmental conditions if it increases labor costs. Examples of such changes are the adoption of new higher yielding crops, the exchanging of a digging stick for a hoe, and the proposal is in part over whether intensive systems are more costly in labor terms, and whether humans will bring about change.

Shifting cultivation in the contemporary world and global environmental change

The estimated rate of deforestation in South-east Asia in 1990 was 34,000 km² per year (FAO 1990, quoted in Potter 1993). In Sumatra and 3,770 km² from Kalimantan, of which 1,440 km² were due to the fires of 1982 to 1983. Since those estimates were made, there has been a drought.

Interdisciplinary project

Shifting cultivation used to be the backbone of smallholder agriculture throughout the tropics, but today it is abandoned in many places. It is not well documented because shifting cultivation land rarely appears on official maps and

census data seldom identifies shifting cultivators. Moreover, the consequences of these changes for livelihoods (e.g. food security) are not well understood. The project will study changes in shifting cultivation by combining meta-analyses of existing studies and census data with case studies in selected areas. The project will address two main objectives:

1) Trends in change in shifting cultivation landscapes and demography and 2) Changes in livelihoods due to these changes. The project will compile data for eight countries (Mexico, Brazil, Laos, Vietnam, Malaysia, Thailand, Zambia and Tanzania) to study land use and land cover change and land management.

Shifting cultivation was assessed by the FAO to be one of the causes of deforestation while logging was not. The apparent discrimination against shifting cultivation who saw the FAO supporting commercial logging interests against the rights of indigenous people (Potter 1993, 108). Other factors such as the dominance of a political elite in the logging industry, the causes of deforestation are more complex. The loggers have provided rapid population growth among indigenous groups of former shifting cultivators that has placed pressure on their traditional areas by planting cash crops, such as rubber or pepper as noted above. Increased cash incomes often are spent on chain saws and other machinery, cropping periods extended. Serious poverty elsewhere in the country has brought thousands of land hungry settlers into the country, which is in fact a one-cycle slash and burn followed by continuous cropping, with no intention to long fallow. Clearing of forest and loss of nutrients may cause rapid degradation of the fragile soils.

The loss of forest in Indonesia, Thailand, and the Philippines during the 1990s was preceded by major ecosystem disruption. Defoliants, thousands of rural forest dwelling people uprooted from their homes and moved and roads driven into previously inaccessible areas. The possible outcomes described by Ellen (see above) when small local ecological and social systems become part of larger systems are being realized rapidly. Similar descriptions of the loss of forest and

destruction of fragile ecosystems could be provided from the Amazon Basin, by large scale state sponsored colonization for the destabilizing rural settlement and farming communities on a massive scale.

Comparison with other ecological phenomena

In the tropical developing world, shifting cultivation in its many diverse forms, remains a pervasive practice. Shifting cultivation world suggests that it is a flexible and highly adaptive means of production. However, it is also a grossly misunderstood practice. Shifting cultivation systems are particular around them. The blame for the destruction of forest resources is often laid on shifting cultivators. But the forces bringing about the destruction of the forests of Europe, urbanization, industrialization and the application of the latest technology to extract ever r

Studies of small, isolated and pre-capitalist groups and their relationships with their environments suggests that the roots of competition and conflict can be identified as the main force driving them into contradiction with their environments.

Alternative practice in the pre-Columbian Amazon basin

Slash-and-char, as opposed to slash-and-burn, may create self-perpetuating soil fertility that supports sedentary agriculture.

•□

Dryland farming ...

http://en.wikipedia.org/wiki/Dryland_farming

Dry land farming

Dry land farming is an agricultural technique for non-irrigated cultivation of dry lands.

Locations

Dry land farming is used in the Great Plains, the Palouse plateau of Eastern Washington, and other arid regions of the West and in other grain growing regions such as the steppes of Eurasia and Argentina.

Dry land farming was introduced to southern Russia and Ukraine by Russian Mennonites under the influence of Johann

In Australia, it is widely practiced in all states but the Northern Territory.

Crops

Winter wheat is the typical crop although skilled dry land farmers sometimes grow corn, beans or even watermelons. Successful dry land farming is possible with as little as 9 inches (230 mm) of precipitation a year; higher rainfall increases the

Native American tribes in the arid South-west subsisted for hundreds of years on dry land farming in areas with less than 10

The choice of crop is influenced by the timing of the predominant rainfall in relation to the seasons. For example, winter wheat is more suited to summer growing crops such as sorghum, sunflowers or cotton.

Process

Dry land farming has evolved as a set of techniques and management practices used by farmers to continually adapt to the p

In marginal regions, a farmer should be financially able to survive occasional crop failures, perhaps for several years in succ

Survival as a dry land farmer requires careful husbandry of the moisture available for the crop and aggressive management o

System

Dry land farming is uniquely dependent on natural rainfall, which can leave the ground vulnerable to dust storms, particular

The fact that a fallow period must be included in the crop rotation means that fields cannot always be protected by a cover cr

Key Elements

Capturing and Conservation of Moisture - In regions such as Eastern Washington state, the average annual precipitation must be captured until the crop can utilize it.

Techniques include summer fallow rotation (in which one crop is grown on two seasons' precipitation, leaving standing s

"Terracing" is also practised by farmers on a smaller scale by laying out the direction of furrows to slow water run off down

Moisture can be conserved by eliminating weeds and leaving crop residue to shade the soil.

Effective Use of Available Moisture - Once moisture is available for the crop to use, it must be used as effectively as possi

Seed planting depth and timing are carefully considered to place the seed at a depth at which sufficient moisture exists, or w

Farmers tend to use crop varieties which are drought and heat-stress tolerant, (even lower-yielding varieties). Thus the likeli

Soil Conservation - The nature of dry land farming makes it particularly susceptible to erosion, especia

Some techniques for conserving soil moisture (such as frequent tillage to kill weeds) are at odds with techniques for conserv

Since healthy topsoil is critical to sustainable dry land agriculture, its preservation is generally considered a citation need

Erosion control techniques such as windbreaks, reduced tillage or no-till, spreading straw (or other mulch on p

Control of Input Costs - Dry land farming is practised in regions inherently marginal for non-irrigated agriculture. Because (regardless of money or effort expended).

Dry land farmers must evaluate the potential yield of a crop constantly throughout the growing season and be prepared to de yield due to insufficient moisture.

Conversely, in years when moisture is abundant, farmers may increase their input efforts and budget to maximize yields and

Rice ...

http://www.kew.org/plant-cultures/plants/rice_landing.html

Rice

Rice is a staple food of South Asia and its cultivation is a major employer.

A wide range of growing methods have evolved all over South Asia which easily matches its diverse range of uses as a food. There are some surprising facts about rice too, from cosmetics and crafts to medicines and mythology.

Thanks to the Green Revolution, world rice production increased from 21:

Different methods of ricecultivation have evolved in different regions according to their climate and geogr:

Special varieties of 'golden rice' are being genetically modified so they contain chemicals that are claimed t

Annapurna is the Hindu god of rice. Her name comes from the Sanskrit word for

Did You Know?

'Wild rice' sold in supermarkets is a completely different species to true rice.

The History of Rice

http://www.kew.org/plant-cultures/plants/rice_history.html

Rice is as important to the cultures of South Asia as it is in China and other parts of south-east Asia.

Early History

Descended from wild grasses, rice is a staple food in South Asia.

Historians believe that it was first domesticated in the area covering the foothills of the Eastern Himalayas (north-eastern In

Remains of early cultivated rice have been found in the Yangtze valley dating to about 8500 BC.

From this region, it spread in all directions and human selection created numerous varieties.

Different rices cross-breed easily and there are now thousands of varieties including wild rices.

The earliest remains of cultivated rice in the sub-continent have been found in the north and west and date from around 2000

Perennial wild rices still grow in Assam and Nepal. It seems to have appeared around 1400 BC in southern India after its do

Rice is first mentioned in the Yajur Veda (c. 1500-800 BC) and then is frequently referred to in Sanskrit texts, which disting

Shali or winter varieties were most highly regarded. About 2000 years ago, rice was well-established as the main cereal of tl

Greek visitors noted the popularity of rice amongst Indians.

The Greek emissary Megasthenes, visiting Pataliputra (modern Patna) in 315 BC, wrote that they ate it ceremonially, boiled

Hundreds of years later, the Portuguese in the 15th century observed cooked rice being eaten in much the same way.

The 17th century traveller Francois Bernier described fields of rice in Kashmir and Bengal, irrigated by endless channels.

The Muslim rulers of India created famous rice and meat dishes such as pilafs and biriyanis.

The number of dishes made with rice was by this time legion.

Types of Rice

Over the centuries, three main types of rice had developed in Asia, depending on the amylose content of the grain.

They were called indica (high in amylose and cooking to fluffy grains to be eaten with the fingers), japonica (low in amylose content and stickiness).

Rice is further divided into long, medium and short-grained varieties, and in the sub-continent different regions grow and consume different varieties.

Basmati rice is probably the best-known variety of rice from the sub-continent. Basmati denotes 'queen of fragrance' and this variety is grown in the north-western part of India.

The dominant food crop in Bangladesh is rice which accounts for at least 70% of the land under agriculture.

The best varieties are rice grown in shallow, slowly moving water and so irrigation is crucial to the success of rice-growing.

Slash and burn methods of creating rice fields in some parts of India have placed tremendous pressures on the environment.

Rice finds applications in the arts and crafts of India.

Rice paste is employed in the resist-dyeing techniques of creating patterns on cloth.

In traditional homes, decorative features frequently consist of wall paintings and floor patterns.

It is usually women who paint renditions of folklore and mythology on domestic spaces, passed on from mother to daughter.

In many parts of India, as part of daily ritual, ephemeral, abstract designs created by women are traced in rice powder or paste.

These are known by various names, alpana in Bengal, mandana in Rajasthan and kolam in South India, for instance. The designs are usually made on the floor.

Rice - plant profile

http://www.kew.org/plant-cultures/plants/rice_plant_profile.html

The plant

The rice plant is a grass which can grow to over 1 m tall or to 5 m long in deep water.

Stem - upright and composed of a series of joint-like nodes. A leaf grows from each node.

Seed (or grain) - grow on branch-like spikes which arch over.

The grain is the most economically important part of the rice plant, and its endosperm is the final product consumed.

Rice should not be confused with 'wild rice' which is the North American *Zizania aquatica*, also in the grass family but not in the same sub-family.

Rice - spiritual

http://www.kew.org/plant-cultures/plants/rice_spiritual.html

Rice is primarily a symbol of fertility and prosperity.

Hindus particularly associate rice with Lakshmi, the goddess of wealth.

Paddy (rice) stalks or unhusked paddy are worshipped as embodying the goddess.

Rice and religion

In peninsular India, there are numerous festivals connected with the sowing, planting and harvesting of rice.

Major harvest festivals include Pongal in Tamil Nadu, Onam in Kerala, Huthri in Coorg (Kodagu). Rice, tinted with the auspicious colors of saffron and turmeric, is used in the celebrations.

It is offered to the deities and used as an oblation in the sacred fire of Hindu ritual.

Rice features in many legends about the Buddha's life.

In a famous tale, he was offered a bowl of milk and rice by a young woman named Sujata, which gave him renewed strength.

Sweetened rice thus forms part of offerings to the Buddha in Buddhist ceremonies.

Rice cooked in ghee or clarified butter is said to have been the favourite food of the Prophet Muhammad.

Rice – production and trade

http://www.kew.org/plant-cultures/plants/rice_production__trade.html

Rice is the staple food of 65% of India's population and its cultivation is a major source of employment in South Asia.

India, Bangladesh and Pakistan supply almost 30% of the world's paddy rice.

Production in South Asia

India is the second biggest grower of paddy rice in the world.

In 2003 it produced over 132 million tonnes. Bangladesh is also one of the top producers, growing over 38 million tonnes. F

Together, India, Pakistan and Bangladesh grow about 30 % of the global total of paddy rice.

Indian states of the south and the east are very strong rice cultivation areas. These include the highly populated states of West Bengal and Tamil Nadu and midsized states with distinct

Rice is also grown to an extent across much of the rest of India. Rice fields can even be found up to moderate elevations in I

Green Revolution

Until the 1950s, few rice farmers in Asia were using modern agricultural methods; they were using unimproved cultivars of rice. These cultivars were tall, weak-stemmed and late-maturing; yields were relatively low.

The International Rice Research Institute (IRRI) was set up in 1960 to look at ways to improve rice crops.

Breakthroughs in breeding have produced remarkable rice plants which, together with improved cultivation techniques, yielded

World rice production increased from just over 215 million tonnes in 1961 to almost 590 million tonnes in 2003.

Local rices

There are thousands of local rice varieties. Scientists divide rice into two main groups, tropical indica and temperate japonica. Within each type are varieties that are grown under different environmental conditions.

The most basic distinction is between wet- and dry-rice varieties.

Wet-rice is most commonly grown in Asia, frequently in paddy fields where rice is cultivated on irrigated or flooded land.

Dry varieties are typically grown on hillsides and aren't submerged in water and only account for a small percentage of rice

Rice - food

http://www.kew.org/plant-cultures/plants/rice_food.html

Rice is a major food of India, Pakistan, and Bangladesh.

It is a good source of vitamin B, fibre, and protein, but its main constituent is starch. This starch provides energy, which makes

Varieties

Rice varieties are variable in their culinary qualities.

Long grain, short grain, white, brown, red, black, basmati or jasmine are some of the choices that face shoppers in even Britain.

Every part of Asia has its own favourite varieties and characteristics.

The colour of rice comes from its outer shell or 'bran' which holds much of its nutritional value.

When rice is processed (milled) much of the nutritional value is lost when the bran is removed.

The result is pure white rice which is high in energy and low in micro-nutrients.

Because milled rice has lots of energy but few vitamins and minerals, it must be eaten with other foods so that people can get a balanced diet.

Where people have a diet very high in white rice and low in other foods they can suffer from thiamine (Vitamin B1) deficiency.

To raise the nutritional value of white rice, it is soaked and steamed before milling, and some of the nutrients 'stick' to the inner layer of bran.

This parboiled rice is less easy to cook as the processing has made it harder.

Cooking

White boiled rice is the main way in which rice is eaten in Asia.

After, winnowing to remove impurities, the rice is usually soaked, and then boiled with water in a pan, left to rest, and then drained.

The method of cooking (right through from soaking to resting) varies depending on the type of rice, and how it will be used.

Brown rice is cooked in the same way as white (processed) rice, but remains tough after cooking.

In the region, rice is not just served cooked and as a main dish, but is often cooked again to create interesting foods from snacking.

Rice pancakes (dosa) are commonly eaten in the south of India and are made from ground rice which is then fermented for a few days.

This is often done the day before, and dosa are often eaten for breakfast.

They can be eaten plain but often include hot chillies, herbs such as coriander or spices such as cumin or turmeric in its mixture.

A favourite in Bangladesh is the spicy rice (bhuna kichuri) which is mixed with cinnamon, ginger and chillies, and served with a spicy sauce.

In Pakistan, rice is ground into flour, mixed with milk and nuts and cooked to make a sweet rice pudding (firini).

http://www.kew.org/plant-cultures/plants/rice_production__trade_cultivation.html

Rice - cultivation

Rice is a major crop grown in most tropical and semi tropical regions. Different systems of growing rice have evolved to suit different environments.

Rice landscapes

Beneath the water level along the coastal canals and lagoons of Kerala lie mile after mile of fertile rice fields. This has been the case in Tamil Nadu, the landscape is divided according to classical Tamil philosophy into five ecological zones. One of these zones is the marutham zone, rice according to some Hindi texts, was considered the appropriate deity for temples in the marutham agricultural lands. It is dependent on rainfall (all Hamilton, 2003). Since nearly half of the land used to grow rice is rain fed, production is erratic. Lack of irrigation can lead to crop failure.

Wet rice cultivation

With wet-rice cultivation, seeds or seedlings are planted out by hand in rows in slightly drained, or puddled, fields. Through ensure there's enough water for the plants to grow. This is done by either flooding during the rainy season, or by planting the temporarily drained for weeding and fertilising.

Deep water rice

Deep-water rice is a rare and remarkable system of cultivation practised in Bangladesh where annual flooding deeply inundates with the rising water level. Here rice plants bear their grain above the surface of the water, sometimes to depths of 5 m.

Harvesting

Grains are harvested before they are fully mature, about 30 days after the rice plants have flowered. The rice plants are cut h

bundled for processing. The commonest method is harvesting by hand, which is very labour intensive. A sickle is used. Mec

Processing

Harvested grains are threshed to separate the grain from the stalk and enclosing husk. This is usually done by bashing bundl machines are becoming more popular.

Winnowing is usually done by shaking or tossing the rice on a basketwork tray. The grain falls onto the mat and husk, chaff dried in the sun ready for hulling or transport to the mill.

Husked or hulled rice is usually called brown rice. This is then milled to remove the outer layers, which is polished to produ the rice grains before milling. The nutrient value of the kernels is improved with parboiling.

http://www.kew.org/plant-cultures/plants/rice_food.html

Rice - food

Rice is a major food of India, Pakistan, and Bangladesh. It is a good source of vitamin B, fibre, and protein, but its main cor

Varieties

Rice varieties are variable in their culinary qualities. Long grain, short grain, white, brown, red, black, basmati or jasmine ar favourite varieties and characteristics.

The colour of rice comes from its outer shell or 'bran' which holds much of its nutritional value. When rice is processed (mil high in energy and low in micro-nutrients.

Because milled rice has lots of energy but few vitamins and minerals, it must be eaten with other foods so that people can ge suffer from thiamine (Vitamin B1) deficiency. To raise the nutritional value of white rice, it is soaked and steamed before m processing has made it harder.

Cooking

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http://www.kew.org/plant-cultures/plants/rice_grow_it.html

Rice - grow it

Rice grows only in hot climates, although some strains are cultivated at high altitudes, and cannot be grown outside in the B
The flowers are carried in loose tufts and are yellowish or brownish in colour. Rice which grows in cooler places has seeds v

Hardiness

If you can find seeds, you can grow mountain rice in a greenhouse in summer in the UK. Plants will die in the winter as the temperature 10°C.

Propagation

In a 9 cm pot, just cover the grains with compost, then keep warm and damp at 20°C. Be patient, as germination may take fi

Cultivation

As the seedlings germinate, first pot up into a 15cm pot, and then move to a 30cm pot. Transplants should be placed slightly

Plants should be put in full sun and kept well watered. They will need support such as canes or twigs to stop them falling ov
on each plant in turn to help fertilise the flowers (pollen would normally be transferred by the wind when grown outside.)

As the grains develop, continue frequent waterings until they are fully formed, when you should begin to keep the plants dri

Pests

Very few in the British Isles.

Plant sources

Plant sources: None listed in the United Kingdom.

Plant safety

There are no safety concerns.

http://www.kew.org/plant-cultures/plants/rice_other_uses.html

Rice - other uses

Although the main use of rice is as a food, it can also be put to other uses such as bedding for animals and as building board

Husks and oil

In some parts of the world, the husks and grains of rice are used for bedding, fuels and building board. It can be charred as f

Bran oil is used in cooking, and it has anti-corrosive properties. It is also used as a textile and leather finisher. India is one o
and board pulp. It is also used in the horticulture trade as a mushroom growing medium, organic manure and a mulch. More

http://www.kew.org/plant-cultures/plants/rice_plant_profile.html

Rice - plant profile

Names

Rice, paddy rice, chowdhury rice (English)

Dhanya, vrihi, nivara, syali (Sanskrit)

Dhan, chaval (Hindu)

Chal (Bengal)

Dangar, choka (Gujarat)

Nellu, arisi (Tamil),

Botanical name: *Oryza sativa*

Family: Poaceae, the grass family, also known as the Gramineae.

The plant

The rice plant is a grass which can grow to over 1 m tall or to 5 m long in deep water.

Stem - upright and composed of a series of joint-like nodes. A leaf grows from each node.

Seed (or grain) - grow on branch-like spikes which arch over. The grain is the most economically important part of the rice

*Rice should not be confused with 'wild rice' which is the North American *Zizania aquatica*, also in the grass family but not c*

http://www.kew.org/plant-cultures/plants/rice_traditional_medicine.html

Rice - traditional medicine

The uses of rice in traditional medicine are closely interwoven with its use as a food. **The main rice-products used as medicines are made from brown rice and rice oil from rice bran. Some of its traditiona**

Rice remedies

Rice can be used to treat skin conditions. The rice is boiled, drained and allowed to cool and mashed. The rice is made into :

Other herbs are sometimes added to the rice balls to increase their medicinal effects. Sticky glutinous rice is often taken to t and stomach cancer and warts. They have also been used to treat indigestion, nausea and diarrhoea.

This information is provided for general interest only. It is not intended as guidance for medicinal use. Further information

http://www.kew.org/plant-cultures/plants/rice_western_medicine.html

Rice - western medicine

Despite the importance of rice as a staple food, interest in its health benefits have only recently attracted attention. Laborato conditions such as diabetes, kidney stones and heart disease.

Properties

The medicinal properties of rice vary depending on the types used. Many of the beneficial compounds present in brown rice known to assist the absorption of fats in the gut . It also decreases levels of cholesterol in the blood. Fibre also aids digestior

have **antioxidant** properties and these compounds could explain some of the **traditional medicinal** uses of rice, particu

This information is provided for general interest only. It is not intended as guidance for medicinal use. Further information

http://www.kew.org/plant-cultures/plants/rice_production__trade.html

Rice - production & trade

Rice is the staple food of 65% of India's population and its cultivation is a major source of employment in South Asia. India

Production in South Asia

India is the second biggest grower of paddy rice in the world. In 2003 it produced over 132 million tonnes. Bangladesh is also. Together, India, Pakistan and Bangladesh grow about 30 % of the global total of paddy rice.

Indian states of the south and the east are very strong rice cultivation areas. These include the highly populated states of West Bengal and Tamil Nadu and mid-sized states with distinct of India. Rice fields can even be found up to moderate elevations in India's Himalayan states.

Green revolution

Until the 1950s, few rice farmers in Asia were using modern agricultural methods; they were using unimproved cultivars of

The International Rice Research Institute (IRRI) was set up in 1960 to look at ways to improve rice crops. Breakthroughs in yield three times more rice than before. World rice production

increased from just over 215 million tonnes in 1961 to almost 590 million tonnes in 2003.

Local rices

There are thousands of local rice varieties. Scientists divide rice into two main groups, tropical indica and temperate japonica. Basic distinction is between wet- and dry-rice varieties. Wet-rice is most commonly grown in Asia, frequently in paddy fields aren't submerged in water and only account for a small percentage of rice grown.

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Floral cultivation zones

Floral cultivation zones help exports hit a record high Staff Writer, with CNA

<http://www.taipeitimes.com/News/taiwan/archives/2012/01/11/2003522967>

The nation's floral exports hit a record NT\$5.18 billion (US\$173 million) last year thanks to the establishment of floral cultivation zones.

The agency said the figure represents 18 percent growth from 2010.

The 19 floral cultivation zones for phalaenopsis, dancing-doll orchids and eustoma, chrysanthemum and flamingo flowers, saw exports worth NT\$650 million.

“This shows that the establishment of floral cultivation zones has produced cluster effects, resulting in the upgrading of both production and marketing.”

It also displayed new varieties of eustoma, chrysanthemum and gladiolus.

To promote floral exports, the agency started to set up floral demonstration zones in major floral production areas in 2007 and 2008.

Meanwhile, Chen Kuo-ming, the head of a flower production and marketing group in Huwei Township, Yunlin County, spoke about the benefits of the zones.

He said the species has shown steady growth in exports.

“Taiwan exported 1.26 million stems of eustoma five years ago, a number that increased to 6.4 million stems last year,” Chen

Chen predicted that this year’s exports could reach between 8 million and 9 million stems, with Japan the largest market.

The agency said it would continue to introduce sophisticated and environmentally friendly automated production equipment markets.

The agency said it would stabilize the major export markets of Japan, the US, the Netherlands and South Korea, while tappi

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Hardiness Zones

Hardiness zone

http://en.wikipedia.org/wiki/Hardiness_zone

Temperature scale of hardiness zones, showing the average annual **minimum** temperature in degrees Celsius. The main fact

Zone	°C
11	+10
10	+4
9	-1
8	-7
7	-12
6	-17
5	-23
4	-29
3	-35
2	-40
1	-45
	-51

A **hardiness zone** (a subcategory of Vertical Zonation) is a geographically defined area in which a specific category of plant minimum temperatures of the zone. For example, a plant that is described as "hardy to zone 10" means that the plant can wi

A more resilient plant that is "hardy to zone 9" can tolerate a minimum temperature of -7°C.

First developed for the United States by the Department of Agriculture (USDA), the use of the zones has been adopted by

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USDA Hardiness Zones

Benefits and drawbacks

The hardiness zones are informative: the extremes of winter cold are a major determinant of whether a plant species can be grown. However, there are drawbacks if used without supplementary information.

The zones do not incorporate summer heat levels into the zone determination; thus sites which may have the same mean winter minimum but different summer maxima. An extreme example of this phenomenon is seen when comparing the Shetland Islands and southern Alabama, which are both on the boundary of zones 8 and 9 and share the same winter minima, but little more than 10 degrees Celsius hotter than the temperate maritime climate of Shetland, and there are few similar plants that can be grown in Alabama (hotter than 30 degrees Celsius) according to the AHS (American Horticultural Society), whereas Alabama is in Zones 7 to 9 (61 to 150 days hotter than 30 degrees Celsius). A better understanding of what can be grown in a particular location.

Another issue is that the hardiness zones do not take into account the reliability of the snow cover. Snow acts as an insulator and the actual temperature to which the roots are exposed will not be as low as the hardiness zone number would indicate. As an example, in Montreal, located to the southwest in zone 5, it is sometimes difficult to cultivate plants adapted to the zone because of the unreliable snow cover.

Owing to the moderating effect of the North Atlantic Current on the Irish and British temperate maritime climate, Britain, and Ireland even more so, have milder winters than their northerly neighbors. Britain and Ireland are quite high, from 7 to 10, as shown below.

- 7. In Scotland the Grampians, Highlands and locally in the Southern Uplands, in England the Pennines and the Cotswolds.
- 8. Most of England, Wales and Scotland, parts of central Ireland, and Snæfellsnes on the Isle of Man.
- 9. Most of western and southern England and Wales, western Scotland, also a few narrow coastal strips in northern Spain, London, most of Ireland, and most of the Isles of Man.
- 10. Few low lying coastal areas of the southern-western Ireland and the Isles of Sicily.

Central Europe Hardiness Zones

Central Europe's climate is a good example of a transition from an oceanic climate to a continental climate, which can be noticed immediately when looking at the hardiness zones, which tend to vary in this region have a significant impact on how cold it might get during winter. Generally speaking, it is not as high as in the Shetland Islands where zone 9 extends to over 60°N. In Central Europe, the relevant exception of some of the Frisian Islands (notably Vlieland and Terschelling), the island of Heligoland and Suwałki, Podlachia on the far eastern border between Poland and Lithuania. Some isolated, high elevation areas are cold sinks. Funtensee, Bavaria which is at least in zone 3 and maybe even in zone 1 or 2. Another notable example is 35°C during winter on calm nights when cold and heavy air masses from the surrounding Gorce and Tatras are 10°C colder than nearby Nowy Targ or Białka Tatrzańska, which are both higher up in elevation. Wąskmund is in zone 3b while nearby Kraków prove that local topography can have a pronounced effect on temperature and thus on what is possible.

Insertion: **Nowy Targ** is a town in southern **Poland** with 34,000 inhabitants. It is the historical capital of the Podhale region.

Or

Białka Tatrzańska, is a village in the administrative district of Gmina Bukowina Tatrzańska, within Tatra County, Lesser Poland Voivodeship.

Wąskmund is a village in the administrative district of Gmina Nowy Targ, within Nowy Targ County, Lesser Poland Voivodeship, south of the regional capital Kraków.

Kraków also Cracow, or Krakow is the second largest and one of the oldest cities in Poland. Situated on the Vistula River.

Northern Europe Hardiness Zones

Scandinavia lies at the same latitude as Alaska or Greenland, but the effect of the warm North Atlantic Current is even more pronounced. Karasjok, Norway which is in zone 2, nowhere in the Arctic part of Scandinavia does it get below zone 2. Tromsø, a coastal city in Norway at 70°N, is in zone 7, and even Longyearbyen, the northernmost true city in the Arctic, is in zone 7. The climate is common, though, which are cold, damp summers, with temperatures rarely exceeding 20°C, or 15°C in winter. This is a good understanding of what may or may not grow.

Insertion: **Kárásjohka or Karasjok or Kaarasjoki** is a municipality in Finnmark county, **Norway**. The administrative centre is Karasjok and Válgjohka.

Lofoten is an archipelago and a traditional district in the county of Nordland, Norway. Though lying within the Arctic Circle, it is relatively mild relative to its high latitude.

The Faroe Islands is an archipelago and autonomous country within the Kingdom of Denmark, situated between the North Atlantic and the Arctic Ocean.

Tromsø is a city and municipality in Troms county, Norway. The administrative centre of the municipality is the city of Tromsø, which is the northernmost city in the Arctic Circle in Sápmi.

Longyearbyen is the largest settlement and the administrative centre of Svalbard, Norway. As of 2008, the town had a population of 464.

In Sweden and Finland generally, at sea level to 500 metres, zone 3 is north of the Arctic Circle, including cities like Karesuando. Zone 4 lies between the Arctic Circle and about 64-65°N, with cities such as Oulu and Jokelampi. Zone 5 lies between 65-66°N, with cities such as Östersund. Zone 6 covers the south of mainland Finland, Sweden north of 60°N, and the high plateau of Lapland. Zone 7 covers the south of Sweden, including Helsinki. The Åland Islands, as well as coastal Southern Sweden, and the Stockholm area are in zone 6. The south east coast of Sweden has a colder winter due to the absence of the Gulf Stream, therefore being friendly to some hardy exotic species (found, for example, in the Gothenburg Botanical Garden).

Karesuando is the northernmost locality situated in Kiruna Municipality, Norrbotten County, Sweden, with 303 inhabitants in 2010.

Pajala is a locality and the seat of Pajala Municipality in Norrbotten County, Sweden, with 1,958 inhabitants in 2010.

Rovaniemi is a city and municipality of Finland. It is the administrative capital and commercial centre of Finland's north.

European cities

The table herein provides hardiness zone data for some European cities (based on climatological data):

City
Amsterdam, The Netherlands
Belfast, Northern Ireland
Bratislava, Slovakia
Cardiff, Wales
Copenhagen, Denmark
Dublin, Ireland
Edinburgh, Scotland
Glasgow, Scotland
Helsinki, Finland
Kaliningrad, Russia
Kraków, Poland
Ljubljana, Slovenia
Madrid, Spain
Marseille, France
Minsk, Belarus
Munich, Germany
Nicosia, Cyprus

Simferopol, Ukraine
Paris, France
Prague, Czech Republic
Riga, Latvia

Rovaniemi, Finland
Sarajevo, Bosnia and Herzegovina
Simrishamn, Sweden

Sofia, Bulgaria
Strasbourg, France

Tuapse, Russia

Tromsø, Norway
Umeå, Sweden
Vilnius, Lithuania
Valletta, Malta
Zürich, Switzerland

Insertion: **Antwerp** is a city and municipality in **Belgium** and the capital of the Antwerp province of Belgium. With a po

Berlin is the capital city of **Germany** and one of the 16 states of Germany. With a population of 3.5 million people, Bei

Bucharest is the capital municipality, cultural, industrial, and financial centre of **Romania**. It is the largest city in Romæ

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Sketch

2012 update of the Hardiness zone map

In 2003, the American Horticultural Society (AHS) produced a draft revised map, using temperature data collected fr especially in the eastern U.S.A. The 2003 map placed many areas approximately a half-zone higher (warmer) than the 1990 zone delineations. The 2003 AHS draft map purported to show finer detail, for example, reflecting urban heat islands by Baltimore, Maryland, Washington, D.C. and Atlantic City, New Jersey) as a full zone warmer than outly zones introduced in the 1990 map, an omission widely criticized by horticulturists and gardeners due to agency stated it would create its own map in an interactive computer format. As of August 2010 the A

In 2006, the US National Arbor Day Foundation completed an extensive update of U.S. Hardiness Zones. It used essentially reflecting the generally warmer recent temperatures in many parts of the country. The Foundation's 2006 map appears to val zone delineations.

In 2012 the USDA updated their plant hardiness map to reflect the warmer observed temperatures in the past thirty years.

U.S. Cities hardiness zones

The USDA plant hardiness zones for U.S. cities as based on the 2012 map are the following:

City

Albuquerque, New Mexico

Anchorage, Alaska

Atlantic City, New Jersey

Atlanta, Georgia

Baltimore, Maryland

Nantucket, Massachusetts

Boston, Massachusetts

Burlington, Vermont

Chicago, Illinois

Charlotte, North Carolina

Columbus, Ohio

Dallas, Texas

Denver, Colorado

Detroit, Michigan

Fairbanks, Alaska

Hartford, Connecticut

Honolulu, Hawaii

Houston, Texas

Las Vegas, Nevada

Los Angeles, California

Memphis, Tennessee

Miami, Florida

Minneapolis, Minnesota

Nashville, Tennessee

New Orleans, Louisiana

New York, New York

Virginia Beach, Virginia

than the USDA system. For example, Australian zone 3 is roughly equivalent to USDA zone 9. The higher Australian zone

There are problems with classifications of this type: the spread of weather stations is insufficient to give clear zones and too more than ten years (one station per 98,491 hectares), though more populated areas have relatively fewer hectares per station. Mount Isa has three climatic stations with more than a ten year record. One is in Zone 4a, one in Zone 4b and the other is in similar problems. Different locations in the same city are suitable for different plants, making it hard to draw a meaningful r allow best use of local conditions.

AHS Heat Zones

In addition to the USDA Hardiness zones there are the American Horticultural Society (AHS) Heat Zones.

The criterion is the average number of days per year when the temperature exceeds 30°C (86°F). The AHS Heat Zone Map :

http://en.wikipedia.org/wiki/Hardiness_zone

Hardiness zone

From Wikipedia, the free encyclopaedia

Zone	°C
11	+10
10	+ 4
9	- 1
8	- 7
7	-12
6	-17
5	-23
4	-29
3	-35
2	-40
1	-45
	-51

Temperature scale of hardiness zones, showing the average annual **minimum** temperature in degrees Celsius. The main fact

A hardiness zone (a subcategory of Vertical Zonation) is a geographically defined area in which a specific category of plant minimum temperatures of the zone (see the scale on the right or the table below). For example, a plant that is described as "1 plant that is "hardy to zone 9" can tolerate a minimum temperature of -7°C . First developed for the United States by the Dep

USDA Hardiness Zones

Benefits and drawbacks

The hardiness zones are informative: the extremes of winter cold are a major determinant of whether a plant species can be grown. However, there are drawbacks if used without supplementary information.

The zones do not incorporate summer heat levels into the zone determination; thus sites which may have the same mean winter minimum but different summer maxima. An extreme example of this phenomenon is seen when comparing the Shetland Islands and southern Alabama, which are both on the boundary of zones 8 and 9 and share the same winter minima, but little more than 30 degrees Celsius hotter than the temperate maritime climate of Shetland, and there are few similar plants that can be grown in Alabama (hotter than 30 degrees Celsius) according to the AHS (American Horticultural Society), whereas Alabama is in Zones 7 to 9 (61 to 150 days hotter than 30 degrees Celsius). A better understanding of what can be grown in a particular location.

Another issue is that the hardiness zones do not take into account the reliability of the snow cover. Snow acts as an insulator, so the actual temperature to which the roots are exposed will not be as low as the hardiness zone number would indicate. As an example, in the north-east of the United States, in the year 2000, making it possible to cultivate plants normally rated for zones 5 or 6. But, in Montreal, located to the south-west in zone 5, it is sometimes difficult to cultivate plants adapted to the zone because of the unreliable snow cover.

Other factors that affect plant survival, though not considered in hardiness zones, are soil moisture, humidity, the number of frost days, and the frequency of getting a particularly severe low temperature – often would be more useful than just the average conditions.

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Alternative Therapies

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Some of the alternative therapies studied with grants from NIH

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Evidence-based Medicine

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Evidence-based medicine ...

Evidence-based medicine

http://en.wikipedia.org/wiki/Evidence-based_medicine

Evidence-based medicine (EBM) (sometimes called evidence-based health care or EBHC to broaden its application to allied best evidence in making decisions about the care of individual patients." Trisha Greenhalgh and Anna Donald define it more quality research on population samples, to inform clinical decision-making in the diagnosis, investigation or management of

EBM seeks to assess the strength of the evidence of risks and benefits of treatments (including lack of treatment) and diagn

Evidence quality can be assessed based on the source type (from meta-analyses and systematic reviews of triple-blind random wisdom at the bottom), as well as other factors including statistical validity, clinical relevance, currency, and peer-review and value-of-life judgments, which are only partially subject to quantitative scientific methods. Application of EBM data the input from personal, political, philosophical, ethical, economic, and aesthetic values.

Because EBM is used in allied fields, including dentistry, nursing and psychology, evidence-based practice (EBP) is a more

Background and definition

Evidence based medicine (EBM) has evolved from clinical epidemiology, a discipline promoted by the creation of the Journal of Clinical Epidemiology in 1988. Clinical epidemiology aims to bridge the gap between clinical practice and public health using population health sciences to inform clinical practice. Thus, the methodology that underpins EBM applies methods used in the field of epidemiology to the clinical context (i.e. clinical epidemiology). In essence, EBM incorporates this quantitative (as well as qualitative) methodology in the "art" of clinical practice, so as to make the framework for clinical decisions more objective by better reflecting the evidence from research. By introducing scientific In 1996 David Sackett wrote that "Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients." This definition, put forward by one of the original proponents of evidence-based medicine, has since been adopted by major organizations, including the Cochrane

Evidence-based health service

An evidence-based health service tends to generate an increase in the competence of health service decision makers and is the practice of evidence-based medicine at the organizational or institutional level. It strengthens the motivation of any health service decision-maker to use scientific methods when making a decision and details of this approach to health services and public health has been discussed in a book titled evidence-based healthcare & public health.

Evidence-based decision making

The results of population-based research form the foundation of evidence-based medicine. It aims to use the experience of a population of patients reported in the research literature to guide decision making in practice. This practice of evidence-based medicine (EBM), which later evolved to evidence-based health care (EBHC), requires the application of population-based data to the care of an individual patient. In the past, we have we have relied on the experience of physicians or other health care workers to make decisions about therapy. In the current information era, this approach would be suboptimal as health care workers rapidly find themselves unable to cope with the influx of a huge variety of new information, from the irrelevant to the very important. Therefore, Evidence-based decision making gradually emerged as a solution to integrate the best research evidence with clinical expertise and patient values and expectations as practised by the individual health care provider. The concepts and ideas attributed to and labeled collectively as EBM/EBHC have now become a part of

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Process and progress - Evidence-based medicine

Process and progress

http://en.wikipedia.org/wiki/Evidence-based_medicine

The five steps of EBM in practice were first described in 1992 and the experience of delegates attending the 2003 Conference of Evidence-Based Health Care Teachers and Developers was summarized into five steps and published in

1. Translation of uncertainty to an answerable question and includes critical questioning, study design and levels of
2. Systematic retrieval of best evidence available
3. Critical appraisal of evidence for internal validity that can be broken down into aspects regarding:

Systematic errors as a result of selection bias, information bias and confounding

Quantitative aspects of diagnosis and treatment

The effect size and aspects regarding its precision

Clinical importance of results

External validity or generalizability

4. Application of results in practice

5. Evaluation of performance

Using techniques from science, engineering and statistics, such as the systematic review of medical literature, meta-analysis, risk-benefit analysis, and randomized controlled trials (RCTs), EBM aims for the ideal that healthcare professionals should make "conscientious, explicit, and judicious use of current best evidence" in their everyday practice. Ex cathedra statements by the "medical expert" are considered to be the least valid form of evidence. All "experts" are now The systematic review of published research studies is a major method used for evaluating particular treatments. The Cochrane Collaboration is one of the best-known, respected examples of systematic reviews. Like other collections of systematic reviews, it requires authors to provide a detailed and repeatable plan of their literature search and evaluations of the evidence. Once all the best evidence is assessed, treatment is categorized as "likely to be beneficial", "likely to be A 2007 analysis of 1016 systematic reviews from all 50 Cochrane Collaboration Review Groups found that 44% of the reviews concluded that the intervention was "likely to be beneficial", 7% concluded that the intervention was "likely to be harmful", and 49% concluded that evidence "did not support either benefit or harm". 96% recommended further research. A 2001 review of 160 Cochrane systematic reviews (excluding complementary treatments) in the 1998 database revealed that, according to two readers, 41.3% concluded positive or possibly positive effect, 20% concluded evidence of no effect, 8.1% concluded net harmful effects, and 21.3% of the reviews concluded insufficient evidence. A review of 145 alternative medicine Cochrane reviews using the 2004 database revealed that 38.4% concluded positive effect or possibly Generally, there are three distinct, but interdependent, areas of evidence-based medicine. The first is to treat individual patients with acute or chronic pathologies with treatments supported in the most scientifically valid medical literature. Thus, medical practitioners would select treatment options for specific cases based on the best research for each patient they treat. The second area is the systematic review of medical literature to evaluate the best studies on specific topics. This process can be human-centred, as in a journal club, or technical, using computer programs and information techniques such as data mining. Increased use of information technology turns large volumes of information into practical guides. Finally, evidence-based medicine can be understood as a medical "movement" in which advocates work to popularize the

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Assessing the quality of evidence - Evidence-based medicine

Assessing the quality of evidence

http://en.wikipedia.org/wiki/Evidence-based_medicine

Evidence-based medicine categorizes different types of clinical evidence and rates or grades them according to the strength of their freedom from the various biases that beset medical research. For example, the strongest evidence for therapeutic interventions is provided by systematic review of randomized, triple-blind, placebo-controlled trials with allocation concealment and complete follow-up involving a homogeneous patient population and medical condition. In contrast, patient testimonials, case reports, and even expert opinion (however some critics have argued that expert opinion "does not belong in the rankings of the quality of empirical evidence because it does not represent a form of empirical evidence" and continue that "expert opinion would seem to be a separate, complex type of knowledge that would not fit into hierarchies otherwise limited to empirical evidence alone") have little value as proof because of the placebo effect, the biases inherent

US Preventive Services Task Force (USPSTF)

Systems to stratify evidence by quality have been developed, such as this one by the U.S. Preventive Services Task Force for ranking evidence about the effectiveness of treatments or screening:

Level I: Evidence obtained from at least one properly designed randomized controlled trial.

Level II-1: Evidence obtained from well-designed controlled trials without randomization.

Level II-2: Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one

Level II-3: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled trials might also be regarded as this type of evidence.

Level III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert

UK National Health Service

The UK National Health Service uses a similar system with categories labeled A, B, C, and D. The above Levels are only appropriate for treatment or interventions; different types of research are required for assessing diagnostic accuracy or natural history and prognosis, and hence different "levels" are required. For example, the Oxford Centre for Evidence-based Medicine suggests levels of evidence (LOE) according to the study designs and critical appraisal of prevention.

Level A: Consistent Randomised Controlled Clinical Trial, cohort study, all or none (see note below), clinical decision rule validated in different populations.

Level B: Consistent Retrospective Cohort, Exploratory Cohort, Ecological Study, Outcomes Research, case-control study; or extrapolations from level A studies.

Level C: Case-series study or extrapolations from level B studies.

Level D: Expert opinion without explicit critical appraisal, or based on physiology, bench research or first principles.

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Categories of recommendations - Evidence-based medicine

Categories of recommendations

http://en.wikipedia.org/wiki/Evidence-based_medicine

In guidelines and other publications, recommendation for a clinical service is classified by the balance of risk versus benefit of the service and the level of evidence on which this information is based. The U.S. Preventive Services Task

Level A: Good scientific evidence suggests that the benefits of the clinical service substantially outweigh the potential risks. Clinicians should discuss the service with eligible patients.

Level B: At least fair scientific evidence suggests that the benefits of the clinical service outweighs the potential risks. Clinicians should discuss the service with eligible patients.

Level C: At least fair scientific evidence suggests that there are benefits provided by the clinical service, but the balance between benefits and risks are too close for making general recommendations. Clinicians need not offer it unless there are

Level D: At least fair scientific evidence suggests that the risks of the clinical service outweighs potential benefits.

Clinicians should not routinely offer the service to asymptomatic patients.

Level I: Scientific evidence is lacking, of poor quality, or conflicting, such that the risk versus benefit balance cannot be assessed. Clinicians should help patients understand the uncertainty surrounding the clinical service.

GRADE working group

A newer system was developed by the GRADE working group and takes into account more dimensions than just the quality of medical research. It requires users of GRADE who are performing an assessment of the quality of evidence, usually as part of a systematic review, to consider the impact of different factors on their confidence in the results. Authors of GRADE tables, grade the quality of evidence into four levels, on the basis of their confidence in the observed effect (a numerical value) being close to what the true effect is. The confidence value is based on judgements assigned in five different domains in a structured manner. The GRADE working group defines 'quality of evidence' and 'strength of Systematic reviews may include Randomized Controlled trials that have low risk of bias, or, observational studies that have high risk of bias. In the case of Randomized controlled trials, the quality of evidence is high, but can be downgraded

Risk of bias: Is a judgement made on the basis of the chance that bias in included studies have influenced the estimate of

Imprecision: Is a judgement made on the basis of the chance that the observed estimate of effect could change completely.

Indirectness: Is a judgement made on the basis of the differences in characteristics of how the study was conducted and how the results are actually going to be applied.

Inconsistency: Is a judgement made on the basis of the variability of results across the included studies.

Publication bias: Is a judgement made on the basis of the question whether all the research evidence has been taken to

In the case of observational studies, the quality of evidence starts of lower and may be upgraded in three domains in addition to being subject to downgrading.

Large effect: This is when methodologically strong studies show that the observed effect is so large that the probability of it changing completely is less likely.

Plausible confounding would change the effect: This is when despite the presence of a possible confounding factor which is expected to reduce the observed effect, the effect estimate still shows significant effect.

Dose response gradient: This is when the intervention used becomes more effective with increasing dose. This suggests that a further increase will likely bring about more effect.

Meaning of the levels of Quality of evidence as per GRADE

High Quality Evidence: The authors are very confident that the estimate that is presented lies very close to the true value. One could interpret it as: there is very low probability of further research completely changing the presented conclusions.

Moderate Quality Evidence: The authors are confident that the presented estimate lies close to the true value, but it is also possible that it may be substantially different. One could also interpret it as: further research may completely change the
Low Quality Evidence: The authors are not confident in the effect estimate and the true value may be substantially different. One could interpret it as: further research is likely to change the presented conclusions completely.
Very low quality Evidence: The authors do not have any confidence in the estimate and it is likely that the true value is substantially different from it. One could interpret it as: New research will most probably change the presented conclusions
Guideline panelists may make Strong or Weak recommendations on the basis of further criteria.

Some of the important criteria are:

Balance between desirable and undesirable effects (not considering cost)

Quality of the evidence

Values and preferences

Costs (resource utilization)

Despite the differences between systems, the purposes are the same: to guide users of clinical research information on which studies are likely to be most valid. However, the individual studies still require careful critical appraisal.

Note: The all or none principle is met when all patients died before the Rx became available, but some now survive on it; or when some patients died before the Rx became available, but none now die on it.

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Statistical measures - Evidence-based medicine

Statistical measures

http://en.wikipedia.org/wiki/Evidence-based_medicine

Evidence-based medicine attempts to express clinical benefits of tests and treatments using mathematical methods. Tools used by practitioners of evidence-based medicine include:

Likelihood ratio

Main article: Likelihood ratios in diagnostic testing

The pre-test odds of a particular diagnosis, multiplied by the likelihood ratio, determines the post-test odds. (Odds can be calculated from, and then converted to, the [more familiar] probability.) This reflects Bayes' theorem. The differences in likelihood ratio between clinical tests can be used to prioritize clinical tests according to their usefulness in a given clinical

AUC-ROC

The area under the receiver operating characteristic curve (AUC-ROC) reflects the relationship between sensitivity and specificity for a given test. High-quality tests will have an AUC-ROC approaching 1, and high-quality publications about clinical tests will provide information about the AUC-ROC. Cut-off values for positive and negative tests can influence

Number needed to treat / harm

Number needed to treat or Number needed to harm are ways of expressing the effectiveness and safety of an intervention in a way that is clinically meaningful. In general, NNT is always computed with respect to two treatments A and B, with A typically a drug and B a placebo (in our example above, A is a 5-year treatment with the hypothetical drug, and B is no treatment). A defined endpoint has to be specified (in our example: the appearance of colon cancer in the 5 year period). If the probabilities p_A and p_B of this endpoint under treatments A and B, respectively, are known, then the NNT is computed as $1/(p_B - p_A)$. The NNT for breast mammography is 285; that is, 285 mammograms need to be performed to diagnose one. An NNT of 1 is the most effective and means each patient treated responds, e.g., in comparing antibiotics with placebo in the eradication of *Helicobacter pylori*. An NNT of 2 or 3 indicates that a treatment is quite effective (with one patient in 2 or 3 responding to the treatment). An NNT of 20 to 40 can still be considered clinically effective.

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Quality of clinical trials - Evidence-based medicine

Quality of clinical trials

http://en.wikipedia.org/wiki/Evidence-based_medicine

Evidence-based medicine attempts to objectively evaluate the quality of clinical research by critically assessing techniques reported by researchers in their publications.

Trial design considerations. High-quality studies have clearly defined eligibility criteria and have minimal missing data.

Generalizability considerations. Studies may only be applicable to narrowly defined patient populations and may not be generalizable to other clinical contexts.

Follow-up. Sufficient time for defined outcomes to occur can influence the study outcomes and the statistical power of a study to detect differences between a treatment and control arm.

Power. A mathematical calculation can determine if the number of patients is sufficient to detect a difference between treatment arms. A negative study may reflect a lack of benefit, or simply a lack of sufficient quantities of patients to detect

Limitations and criticism

Although evidence-based medicine is regarded as the gold standard of conventional clinical practice, limitations of EBM produce quantitative research, especially from randomized controlled trials (RCTs). Accordingly, results may not be relevant for all treatment situations.

RCTs are expensive, influencing research topics according to the sponsor's interests.

There is a lag between when the RCT is conducted and when its results are published.

Certain population segments have been historically under-researched (racial minorities and people with co-morbid diseases), and thus the RCT restricts generalizing.

Not all evidence from an RCT is made accessible. Treatment effectiveness reported from RCTs may be different than that achieved in routine clinical practice.

Published studies may not be representative of all studies completed on a given topic (published and unpublished) or may be unreliable due to the different study conditions and variables.

EBM applies to groups of people but this does not preclude clinicians from using their personal experience in deciding how to treat each patient. One author advises that "the knowledge gained from clinical research does not directly answer the primary clinical question of what is best for the patient at hand" and suggests that evidence-based medicine should not discount the value of clinical experience. Another author stated that "the practice of evidence-based medicine means In areas where frames (contextual and presentational influences on perceptions of reality) obscure facts, hypocognition has been blamed for preventing the practical application of EBM.[clarification needed]

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Assessing the teaching of evidence-based medicine ...

Assessing the teaching of evidence-based medicine

http://en.wikipedia.org/wiki/Evidence-based_medicine

Two instruments, the Berlin questionnaire are the most validated. These questionnaires have been used in diverse settings.

In psychiatry

Standard descriptions about mental illnesses, such as the Diagnostic and Statistical Manual of Mental Disorders, have been criticized as incompletely justified by evidence. In many cases, it is unknown whether a particular "disease" has one, several, or no underlying biological causes, with controversy arising over whether some diseases are merely an artifact of the attempt to construct a unified classification scheme, rather than a "real" disease.

While some experts point to statistics in support of the idea that a lack of adoption of research findings results in suboptimal treatment for many patients, others emphasize the importance of the skill of the practitioner and the customization of the treatment to fit individual needs. There is some controversy over whether mental illnesses are too

History

Traces of evidence-based medicine's origin can be found in ancient Greece. Although testing medical interventions for efficacy has existed since the time of Avicenna's *The Canon of Medicine* in the 11th century, it was only in the 20th century that this effort evolved to impact almost all fields of health care and policy.

In 1967, the American physician and mathematician Alvan R. Feinstein published his ground-breaking work *Clinical Judgment*, which together with Archie Cochrane's famous book *Effectiveness and Efficiency* (1972) led to an increasing acceptance of clinical epidemiology and controlled studies during the 70s and 80s and paved the way for the institutional development of EBM in the 90s. Cochrane's efforts were recognized by the fact that an international network for efficacy assessment in medicine - the Cochrane Collaboration - was posthumously named after him. However, Cochrane himself did not live to see the foundation and institutionalization of the EBM movement and Feinstein became later in his life one of the explicit methodologies used to determine "best evidence" were largely established by the McMaster University research group led by David Sackett and Gordon Guyatt. Guyatt later coined the term "evidence-based" in 1990. The term "evidence-based medicine" first appeared in the medical literature in 1992 in a paper by Guyatt et al. Relevant journals include the *British Medical Journal's Clinical Evidence*, the *Journal Of Evidence-Based Healthcare* and *Evidence Based*

Experimental or risky treatments and the evidence based model**EBM and ethics of experimental or risky treatments**

http://en.wikipedia.org/wiki/Evidence-based_medicine

Insurance companies in the United States and public insurers in other countries usually wait for drug use approval based on evidence-based guidelines before funding a treatment. Where approval for a drug has been given, and subsequent evidence-based findings indicating that a drug may be less safe than originally anticipated, some insurers in the U.S. have reacted very cautiously and withdrawn funding. For example, an older generic statin drug had been shown to reduce mortality, but a newer and much more expensive statin drug was found to lower cholesterol more effectively. However, evidence came to light about safety concerns with the new drug which caused some insurers to stop funding it even though marketing. Some people are willing to take their chances to gamble their health on the success of new drugs or old drugs in new situations which may not yet have been fully tested in clinical trials. However insurance companies are reluctant to take on the job of funding such treatments, preferring instead to take the safer route of awaiting the results of clinical testing and. Sometimes caution errs in the other direction. Kaiser Permanente did not change its methods of evaluating whether or not new therapies were too "experimental" to be covered until it was successfully sued twice: once for delaying in vitro fertilization treatments for two years after the courts determined that scientific evidence of efficacy and safety had reached the "reasonable" stage; and in another case where Kaiser refused to pay for liver transplantation in infants when it had already been shown to be effective in adults. on the basis that use in infants was still "experimental." Here again, the

Application of the evidence based model on other public policy matters

There has been discussion of applying what has been learned from EBM to public policy. In his 1996 inaugural speech as President of the Royal Statistical Society, Adrian Smith held out evidence-based medicine as an exemplar for all public policy. He proposed that "evidence-based policy" should be established for education, prisons and policing policy and all

ORGANIC LIFE**ORGANIC LIFE**

<http://organiceyourlife.com/garlic-health-benefits>

What is Non-Western Culture**What is Non-Western Culture?**

<http://www.westerncultureglobal.org/what-is-NONwestern-culture.html>

Introduction and Description

Non-western culture is a body of ideas and values derived fundamentally from mysticism or subjectivism, as opposed to

Consequently, it is characterized essentially by anti-individualism, self-sacrifice, tyranny, the view that humanity is depraved and / or helpless, and a hostility or indifference to economic progress, science and technology.

Non-western culture can also be referred to as uncivilized culture. This is because its essential ideas and values are fundamentally opposed to the ideas and values that lead to the development and sustainment of civilization.

Non-western Culture and Race

Non-western culture, as well as all culture, is intellectually determined — not racially or geographically determined. In other words, non-western culture need not be the culture of non-whites or non-Europeans. By the same token, whites or Europeans are not incapable of embracing non-western culture. For example, the European Dark Age was a time when non-western culture dominated in Europe. For more explanation on culture and race, see *What Is Western Culture*.

Core Ideas and Values***View of Reality***

Non-western culture usually regards reality, that is, the world man perceives, to be merely a manipulation and distortion of "true" reality. This "true" reality is regarded as largely beyond human perception and understanding and is the product of

Non-western culture may also regard reality to be ultimately a product of human consciousness. In other words, it may view reality to be the product of the hopes, wants, wishes and desires of a particular group (a race, nation, class, gender, etc.) and every group at least partially creates its own reality and truth.

In either case, non-western culture does not regard the reality that humanity perceives to be primary, independent, and absolute -- but rather subordinate, dependent and flexible.

View of Knowledge

Non-western culture holds that human knowledge is acquired primarily through non-rational means. Consequently, reason and its products are devalued in the culture.

View of Humanity

Non-western culture views man as an unthinking being who survives, not primarily by reason and production, but by physical strength and / or gifts from God. Humanity is often regarded as depraved, weak and helpless.

View of the Individual

God or / and the group (the society, the state, the tribe, etc.), not the individual, is considered sovereign and the primary value in non-western culture. Consequently, the individual is viewed as having relevance and value only insofar as he knows his place—that is, only insofar as he submits to, depends on and serves the will of God or / and the group.

View of Worldly Happiness

Non-western culture holds that personal happiness must be sacrificed for the sake of duty to God and / or the group (the society, the state, the tribe, etc.). Attempting to achieving one's own worldly happiness is generally viewed as immoral, futile and reckless: life is regarded as something to be endured, not enjoyed.

View of Rights and Government

In non-western culture, individual rights, the only kind of valid rights, are not recognized or protected. Consequently, the individual acts only by permission, not right, while the government has total freedom to control and dispense with the

View of Economic Progress, Science and Technology

Non-western culture, at root, embraces poverty, privation, ignorance and primitivism and, as a result, opposes economic progress, science and technology. The culture could not achieve economic progress, science and technology even if it wanted to because it does not value what makes such things possible.

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History of Nonwestern Culture ...

Brief History of Nonwestern Culture

<http://www.westerncultureglobal.org/what-is-NONwestern-culture.html>

Non-western culture as described above has had at least some presence in all civilizations everywhere throughout history, past and present. The general but not necessarily unavoidable historical pattern is that non-western culture has little presence and influence during the formative or rebuilding years of a civilization; sooner or later, non-western culture gains increased presence and influence which slows the civilization's progress: then ultimately it dominates a civilization's

The presence and influence of non-western culture is not the only possible cause of a civilization's end; natural disasters including disease as well as invasion / war can cause a collapse. However, the presence and influence of non-western culture can make these events more likely to occur and do great harm because non-western culture weakens a civilization's

For example, Rome grew and developed as it did because it generally held pro-civilization, western ideas and values. As centuries went by, Rome became increasingly non-western, specifically mystical and otherworldly. This irrationality would eventually weaken Rome to a point in which barbarian invasion and disease could and would bring about its fall.

Where Non - western Culture Is Today

In addition to being the highly dominant culture for primitive, prehistoric-like tribes that still exist in small pockets on some continents, non-western culture has at least some presence, and often a substantial presence, in all of the world's nations currently. It is especially present and influential in most of Africa, the Middle East and substantial parts of Asia.

However, in some parts of Asia, especially China and India, non-western culture, which in the fairly recent past has dominated in these nations, appears to be on the decline as these civilizations attempt to significantly develop and grow.

Non-western culture has, relative to the rest of the world, the least presence and influence in Europe, America and other nations settled by Europeans and their descendants. However, non-western culture's presence and influence is currently rising in these parts of the world and has been for at least 100 years.

It should be noted that non-western culture does not and cannot exist anywhere in undiluted form, that is, with no degree of Western, civilized culture mixed with it. Given the irrational, destructive nature of non-western culture, any nation that even attempted to become fully non-western would quickly collapse into anarchy, starvation, abject poverty, and savagery. Even the most primitive of nations today have some degree of Western culture which keeps a semblance of civilization

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Western culture is a body of knowledge derived from reason

Western culture is a body of knowledge derived from reason

<http://www.westerncultureglobal.org/what-is-western-culture.html>

This foundation of reason has made possible a vast accumulation of understanding related to reality or nature, including

This understanding is represented in several core ideals and values, which include individualism, happiness, rights, capitalism, science and technology.

Western culture can also be referred to as advanced culture; this is because its ideas and values promote the development and sustainment of advanced civilization.

Brief History

Western culture began in Ancient Greece. There and in the Roman civilization it developed until the start of the Middle Ages when it largely vanished from Europe. During the Middle Ages, Western culture resided, instead, in the Arab /

Then the rediscovery of Western culture in Europe in the Late Middle Ages prompted the Renaissance. Western culture's continuing development then led to the Scientific Revolution, the Enlightenment, the American Revolution, the Industrial Revolution and to what is considered today as modern civilization.

Where Western Culture Is

Today, Western culture has at least some presence in nearly all nations of the world. It does not currently exist, however, anywhere in a perfect and complete form. Wherever Western culture exists, it is at least partially mixed—and often largely

Western culture currently dominates in many Western and Central European nations and several nations settled by Europeans and their descendants. Western culture also significantly exists in many Asian nations, such as Japan, South Korea, Taiwan and Singapore, and it is increasingly influential in India and China.

It has only a modest presence in most of the rest of Asia as well as Latin America and Eastern Europe. In much of both Africa and the Middle East, Western culture currently has little meaningful presence.

Western Culture Transcends Geography and Race

Since Western culture is based on objective reality and universal human nature, it is open to everyone, transcending both

In other words, Western culture is humanity's culture. Contrary to conventional belief, one does not need to be Caucasian or of European descent to admire Western culture or, indeed, even help to build it. Any individual or society on earth can

Indeed, millions of people each year with no ancestral ties to Europe recognize the universal appeal of Western culture. They do so by immigrating to and immersing themselves in nations where Western culture has meaningful presence. Or they personally embrace and promote Western culture in the nations where they live.

These adopters of Western culture understand that truth is truth, ideals are ideals and values are values—and it does not matter from where such things come or who originally discovered or identified them. In other words, adopters of Western culture know, on some level, that culture is an intellectual matter, not an issue of geography or race—or, for that matter, an

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Race and Culture ...

Race and Culture... No Connection

<http://www.westerncultureglobal.org/what-is-western-culture.html>

The fact that Europeans or Caucasians largely developed Western or advanced culture does not mean that they are innately superior or only they are capable of creating it.

One needs simply to know that North African, Near Eastern and Middle Eastern individuals developed the first civilizations or civilized cultures. And while these cultures flourished, Europeans or Caucasians had generally not yet

Further, significant elements of Western culture came from other parts of the world, including the first civilizations and Asia. Also, individuals of all races, ethnicities and many national origins have contributed to the development of Western

And if current trends continue, Western culture may be taken to new heights in Asia in this century or the coming centuries rather than in areas dominated by Caucasians or people of European ancestry.

It is also worth noting that the Aztec and Inca cultures of Central and South America, respectively, were in some ways nearly as advanced as European culture at the time, despite the fact that they were relatively young. Had the Aztec and Inca civilizations not been conquered and had more time to develop, it is conceivable that their cultures may have come to

All of this is to show that race has nothing (or at most virtually nothing) to do with a culture's level of development. A certain race may appear to be more advanced at a given time, but, over the broad view of history, it is clear that no race is

Individuals of any race could have conceivably created the first civilized cultures—and individuals of any race could have conceivably first developed Western or advanced culture. In other words, Western culture is in no way inherently

The level of a culture's development is ultimately explained, not by race, but by the fundamental ideas of the culture—particularly by the degree to which reason is embraced as the guide to thought and action.

Western Culture Superior?

Many people strongly disagree with the belief that a culture can be considered better than others. They do so because they view a culture's level of development as a product of race. As a result, they view any claim of cultural superiority as a claim of racial superiority—and, accordingly, condemn the idea of cultural superiority as racist. However, as we have seen,

People also object to the idea of cultural supremacy because they do not believe that culture can be judged objectively. This, too, is incorrect. The proper standard for objectively evaluating a culture is by the degree to which its core values are for or against human life. A pro-human life culture recognizes the requirements of proper human survival, namely the

In other words, pro-human life culture is Western culture. And the extent to which a nation embraces Western culture is the extent to which it is free, prosperous, modern and peaceful—that is, supportive of human life. One need only look at

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Life expectancies in nations

Life expectancies in nations

Source: CIA World Factbook 2006

<http://www.westerncultureglobal.org/what-is-western-culture.html>

Life expectancy in nations where Western culture dominates (abbreviated list)

Australia 81

United States 78

Japan 81

Israel 79

Italy 80

Life expectancy in nations where non-western culture dominates but Western culture still has modest presence

Philippines 70

Russia 67

Honduras 69

Pakistan 63

Senegal 59

Life expectancy in nations where non-western culture overwhelmingly dominates and Western culture has little or no

Liberia 40

Nigeria 47

Angola 39

Zimbabwe 40

Laos 55

Objectively judging cultures is not only legitimate and possible; it is ultimately a life and death issue. And when cultures are judged, it is clear that Western culture, with its life-giving and life-sustaining magnificence, is the greatest

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Thailand women - culture beauty diet

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Aro-healing Website

The website is an informative website

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Website

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Web archive

<http://web.archive.org/web/20100116042021/http://www.aro-healing.com/wproducts.php>

ATTENTION - THE SPECIAL SENSES - - due to the urgency of education on this sit...

ATTENTION 1 - THE CHILD AND HIS WORLD - The great dictator - Parents are only hu...

AVERY - CLEAR YOUR BODY OF UNNECESSARY TOXINS. VERY EFFECTIVE IN A COMBINED TR...

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ESTATO - FIRE UP YOUR LOVE LIFE! A SENSUAL OIL WITH AMAZING RESULTS!ALTHOUGH M...

EXERCISES - Hydrotherapy Hydrotherapy is the form of physiotherapy w...

HAMSTRING INJURIES: The hamstrings are muscles at the backs of the thighs. - Unfortunately for athletes, they are prone to injury. But prompt treat...

HEALTHY EATING HABITS1 - Vitamin E-how much do you need? Q Should I give my fa...

HOT OR COLD MASSAGE THERAPY - HEALTH FOODS Health foods are becoming popular because, increasingly,...

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JASMINE FOR MEN - A UNIQUE MASSAGE OIL WITH A MASCULINE TOUCH.ALSO AVAILABLE AS A

LARISION - TREAT THE LOVE IN YOUR LIFE TO A GIFT WORTH EVERY CENT!ALSO AVAILABLE ...
LIGAMENT INJURIES - HEALING Healing is the amazing and sometimes mysterious p...
LYMPHATIC DRAINAGE - Fats Fats are foods with a bad reputation-their name has been ...
MEN - THE MALE REPRODUCTIVE ORGAN THE URINARY TRACT AND THE REPRODUCT...
MOBILITY EXERCISES - Hydrotherapy Hydrotherapy is the form of physiotherapy where p...
MUSCULAR SPASMS - Heat treatment Applying heat to relieve pain is a traditional and ...
PERMONLIE - A REJUVENATING OIL TO FEED YOUR SKIN DURING BATHTIME.JUST ADD A FEW DR...
POOR BLOOD CIRCULATION - Aro-T Product used when caring for the pressure points is Gerapatch...
ROSAGE - A MASSAGE OIL FOR THE SICK AND FRAIL.ALSO AVAILABLE AS A BARRIER CREAM...
SENSUAL TOUCH is a form of touch therapy - I want to inform you that from years of experience mainly...
SEXUAL EDUCATION FOR ADULTS - ...
SEXUAL EDUCATION FOR CHILDREN - ...
STIFFNESS AFTER EXERCISE - Living Body - Action! Every movement you make can be analysed ...
TENDER LOVING CARE - WHAT MAKES A MOTHER? Many women worry that they do not have ...
TENDER LOVING CARE1 - DYSLEXIA One of the first real tasks children are faced with at school...
TENDER LOVING CARE1 - HOSPICES The goal of medicine is to preserve life but, unfortunately...
THERAPEUTIC VALUE - Drawing vitality from stress Stress, in itself, is not a bad thing...
TO BUILD SELF-ESTEEM1 - HOPE FOR THE HANDICAPPED CHILD London's Franklin Delano Roosev...
TO CALM THE MIND - Selye's concept of stress - due to the urgency of education o...
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Free Shipping Aro-healing

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For the benefit of our customers, Aro-healing offers free shipping on any pre-tax order totaling \$75.00 or more. This shipping offer applies to all states within the contiguous United States. This excludes Hawaii and Alaska. Aro-healing will ship to any location across the globe, so for rates outside of the contiguous United States, call or e-mail for a shipping quote. For all orders less than \$75.00 or 950 ZAR. a flat rate of \$12.99 or 150 ZAR is applied. This flat rate only applies

Given the nature of glass bottles, orders routinely require multiple boxes be used to package an entire shipment. Foam Factory understands this and does not place a cap on the number of boxes required to ship a full order. Whether one box is required or 50, if the single order totals more than \$75.00, it ships for free. Aro-healing offers shipping services through Postnet, FedEx and USPS?, as well as common carrier pick-ups for oversize orders.

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Given the nature of glass bottles, orders routinely require multiple boxes be used to package an entire shipment. Foam Factory understands this and does not place a cap on the number of boxes required to ship a full order. Whether one box is required or 50, if the single order totals more than \$150.00, it ships for free. Aro-healing offers shipping services through Postnet, FedEx and USPS?, as well as common carrier pick-ups for oversize orders.

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LIQUEURS

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LIQUEURS

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List of liqueurs

List of liqueurs

http://en.wikipedia.org/wiki/List_of_liqueurs

see List of national liquors.

A selection of liqueur bottles.

Liqueurs are alcoholic beverages that are bottled with added sugar and have added flavors that are usually derived from Liqueurs are distinct from eaux-de-vie, fruit brandy, and flavored liquors, which contain no added sugar. Most liqueurs range between 15% and 55% alcohol by volume.

Berry liqueurs

A bottle of Chambord

99 Berries

Chambord (raspberry)

Crème de cassis (blackcurrant)

FAIR. Goji Liqueur

Guavaberry (guavaberry)

Hideous (potato neutral spirit, with added natural flavors derived from berries grown in the state of Washington [including raspberries and other berries] and citrus fruits)

Lakka (cloudberry)

Lillehammer (lingonberry)

Lubelskie urawinówka (cranberry)

Lubelskie Wi niówka (cherry)

Murtado (Ugni molinae berries)

Polar Cranberry

Prunelle (sloe berry)

Razzmatazz (raspberry)

Sloe gin (sloe)
VeeV (açai)
Whidbeys (loganberry)
XUXU (strawberry)

Chocolate liqueurs

Main article: Chocolate liqueur

Coffee liqueurs

Allen's Coffee Brandy
Aruba Arehucas
Bahia Coffee Liqueur
Bols Coffee Liqueur
Café Aztec
Café Britt Coffee Liqueur
Café Oriental
Café Marakesh
Café Rica
Caffè Borghetti
Coloma
Copa De Oro
Duchalet Café Liqueur
Dwersteg's Organic Coffee Liqueur
The Evil Monk
FAIR. Café Liqueur
Galliano Ristretto
illy Espresso Liqueur
Jamaica Blue Mountain Mist from J. Wray & Nephew
Kahlúa
Kaloré
Kamora
Kapali
Keuck Türkisch Mokka
Kona Gold
Kosaken Kaffee
De Kuyper Crème de Café
Lauterer Luft
Leroux Coffee-Flavored Brandy.
Mokatika
Mr. Boston Coffee-Flavored Brandy.
Onyx Liqueur
Patron XO CAFE
Sabra
Sabroso
Sheridan's
Starbucks Coffee Liqueur
Tia Maria
Toussaint Coffee Liqueur

Vibe Robusta Coffee Liqueur
Vok Coffee Liqueur
Walders Scotch and Coffee Creamy Liqueur

Cream liqueurs

Main article: Cream liqueur

A bottle and glass of Carolans
Advocaat
Amarula (sugar, cream, and the fruit of the African marula tree)
Baileys Irish Cream
Baja Rosa
Cape Velvet
Carolans
Creme de la Creme Maple Cream Liqueur
Cruzan_Rum Cream
Dooley's
Drumgray Highland Cream Liqueur
Dulce de Leche Liqueur (Caribbean rum, caramel and cream)
Dwersteg's Organic Coffee Cream Liqueur
Emmets Classic Cream: Irelands Cream Liqueur
Hare Turkish Coffee Cream Liqueur
Heather Cream (A Scottish Cream Liqueur)
Kēkē Beach Key Lime Cream Liqueur
McCormick's Irish Cream
Merlyn Cream Liqueur
Mozart Gold Chocolate Cream
Mozart White Chocolate Cream
O'Leary's Irish Cream
Ponche Caribe
Ponche crema
Ponche Diva
Ponche Kuba
Rompope
Sangster's
Saint Brendan's Irish Cream Liqueur
Starbucks Cream Liqueur
Tequila Rose
Vana Tallinn Cream
Vermeer Dutch Chocolate Cream Liqueur
VOODOO classique cream liqueur
Voyant Chai Cream (a chai-flavoured liqueur containing oak-aged rum, cream, black tea, vanilla, and spices)
Walders Scotch and Coffee Creamy Liqueur
Walders Vodka and Vanilla Creamy Liqueur
Wray & Nephew Rum Cream

Crème liqueurs

Main article: Crème liqueur

A bottle and glass of Crème de cassis

Crème de banane

Crème de cacao

Crème de cassis

Crème de Cerise

Crema di Fragole

Crème de menthe

Crème de mûre

Crème de Noyaux

Crème de Rose

Crema de violette

Parfait d'Amour

Flower liqueurs

A bottle of Crème de Violette

Bulgarian rose liqueur—from the Valley of the Roses

Crème de Rose (rose)

Crème de violette (violet)

Crème Yvette (violet, vanilla)

Fior d'Alpi (alpine flowers, herbs)

Lavender Liqueur (lavender)

Liqueur de Rose (rose)

Meikueilu Chiew (Mey Kwei Loo Liqueur) (rose)

My Rose (rose, with a whole rose in the bottle) (Christian di Marco My Rose Liqueur)

Rosolio (rose)

St-Germain (elderflower)

Shan Hibiscus (hibiscus, coconut)

Shan Lotus (lotus, passion fruit)

Shan Rose (rose, lychee)

Xaica (Hibiscus)

Fruit liqueurs

A bottle of homemade limoncello

Amabilli (banana)

Amarula African liqueur (marula fruit)

Aurum (rum, tea, and tangerines)

Bajtra—Maltese liqueur (prickly pear)

Cherry Heering (cherry)

Cosa Gialla (citrus fruits)[citation needed]

Cointreau (orange)

Cuarenta Y Tres/Licor 43 (citrus, vanilla)

Curaçao (bitter orange)

Damson gin (Damson)

DeKuyper Pomegranate (pomegranate)
Destinee (tropical fruit)
Dwersteg's Organic Orange Liqueur
Espiritu del Ecuador (20 Ecuadoran fruits, including peach, chocolate, cherry, and almond)
Ginjinha (cherry)
Grand Marnier (orange)
Grapèro (pink grapefruit)
Guignolet (wild cherry)
Hare Vi ne (sour cherry)
Hideous (potato neutral spirit, with added natural flavors derived from berries grown in the state of Washington [including raspberries and other berries] and citrus fruits)
HpnotiQ (tropical fruit)
KeKe Beach (lime cream)
Kruškovac (pear)
Kwai Feh (lychee)
Lichido (vodka, cognac, lychee and guava essences, and white peach juice)
Jaboticaba liqueur
Limoncello (lemon liqueur)
Ly Shan (lychee)
Mandarine Napoleon (mandarin)
Manzana verde (green apple)
Maraschino (cherry)
Medronho (strawberry tree/arbutus)
Midori (melon)
99 bananas (99-proof banana-flavored schnapps)
Noyau de Poissy (apricot)
NUVO (fruit nectars and sparkling chardonnay and pinot noir wines)
PAMA (pomegranate)
Passoã (passion fruit; also comes in mango, pineapple, and coconut flavors)
Pisang Ambon (banana)
Pucker (apple)
Slivovitz (plum)
Rhythm
TY KU (yuzu, honeydew, mangosteen, ginseng, green tea, goji berry)
Triple sec (orange)
X-Rated Fusion Liqueur (blood orange, mango and passion fruit)
Van der Hum (tangerines, herbs, spices, seeds and barks)
Vok Banana Liqueur
Vok Melon Liqueur

Herbal liqueurs

Note: the exact recipes of many herbal liqueurs (which may contain up to 50 or more different herbs) are often closely guarded trade secrets. The primary herbal ingredients are listed where known.

Anise-flavored liqueurs

A bottle of ouzo

Note: Absinthe, Arak, Rakı, and similar anise-flavored beverages contain no sugar and thus are flavored liquors rather than liqueurs.

Aguardiente/Aguardente—Brazil, Chile, Colombia, Mexico, Portugal
Anís—Spain
Anisetta—Italy
Anisette—France
Alpestre—Italy
Arquebuse de l'Hermitage—France
Centerba—Italy (infusion of 100 high mountain herbs)
Cosa Nera—Italy
Dimmi—Italy (infusion of Italian Absinthe, Anise, Vanilla, Ginseng, Rhubarb, Bitter Orange, Apricot and Peach Blossom)
Galliano—Italy
Hierbas de Mallorca—Majorca
Herbsaint—United States
Mastica—Greece
Mistrà—Italy
Ogidiga—Nigeria
Ouzo—Greece
Pastis—France
Passione Nera—Italy
Patxaran—Spain
Pernod Fils
Pernod Ricard
Rakı—Turkey
Sambuca—Italy
Vespetrò—Italy
Xtabentún—Mexico
See also Category:Anise liqueurs and spirits

Other herbal liqueurs

"Altvater" by Gessler, originally from Austrian Silesia
Agwa de Bolivia (37 Herbs)
Altvater
Amaro
Angelika Bitter (11 herbs, especially Angelica archangelica)
Appenzeller (42 herbs)
Becherovka (anise seeds, cinnamon, and other herbs)
Beirão (seeds and herbs from around the world)
Bénédictine (27 plants and spices)
Black Forest Devil, called Schwarzwald-Teufel in Germany, uses over 42 herbs including St.John's wort 102 proof
Calisaya (liqueur) (cinchona calisaya bark, Seville orange extract and other botanicals)
Canton (spirits, brandy, six varieties of ginger, ginseng, and honey)
Chartreuse (130 herbal extracts)
Demänovka (14 herbs and honey)
Everglo (tequila, vodka, caffeine, and ginseng)
Fernet (myrrh, rhubarb, chamomile, cardamom, aloe, and saffron)
Galliano (30 herbs)
Danzig Goldwasser (gold leaf, roots, and herbs)
Goldschläger (cinnamon, with gold leaf)
Jaan Paan Liqueur (sweet paan flavored)
Killepitsch (combination of 90 fruits, berries, herbs, and spices)

Jägermeister (56 herbs)
Marburger Nachtwächter, 38 herbs, made since 1799 in Marburg, Germany
Fläminger Jagd (38 herbs)
Krupnik (honey and up to 50 different herbs)
Kümmel (caraway seed, cumin, and fennel)
Mastichato (mastic resin)
Menta (peppermint liqueur)
Metaxa
Minttu (peppermint)
Paan (betel leaf, betel nuts, saffron, cardamom, sandalwood, and other herbs and spices)
Riga Black Balsam (Rigas Melnais Balzams)
Strega (70 herbs, including mint, fennel, and saffron)
St. Hubertus (liqueur) (several herbs, caramel and citric acid)
Underberg a German digestif bitter
Underground (liqueur) America's Herbal Spirit made from an undisclosed number of herbs from around world.
Unicum (more than 40 herbs)
Zen (matcha green tea from Kyoto, Japan, with lemon grass and other herbs. Manufactured by Suntory)

Honey liqueurs

Bärenjäger
Brandymel
Drambuie
Ron Miel
Yukon Jack
Tennessee Honey—Jack Daniel's
Evan Williams Honey Reserve — Evan Williams

Nut-flavored liqueurs

Amaretto (almonds, or the almond-like kernels from apricots, peaches, cherries, or similar stone fruits)
Bellota (acorns)
Disaronno (almonds)
Dumante (pistachio)
Dwersteg's Organic Amaretto Liqueur (organic liqueur with distillate from almond kernels)
Frangelico (hazelnuts and herbs)
Kahana Royale (macadamia nut)
Nocello (walnut and hazelnut)
Nocino (unripe green walnuts)
Castries Peanut Rum Creme (peanut)
Peanut Lolita (peanut)
Ratafia (brandy flavored with almonds, fruit, or fruit kernels—also a flavored biscuit)

Whisky liqueurs

Atholl Brose (Scotch whisky, Benromach single malt spirit, honey, secret spice recipe, from Gordon & Macphail)
Bruadar (Scotch whisky, honey, sloe)
Cock o' the North (single malt, blaeberry)
Drambuie (Scotch, heather honey, herbs, and spices)
Eblana (Irish whiskey, coffee, honey, almond, peanut)

Famous Grouse liqueur (Scotch, bourbon, citrus, spices)
Fireball Cinnamon Whisky (Canadian whisky, cinnamon, spices)
Glayva (Scotch, Seville oranges, herbs, and honey)
Glenfiddich Malt liqueur (Scotch, citrus, pear, brown sugar)
Glenturret Malt liqueur (Glenturret single malt, honey, spices)
Irish Mist (aged Irish whiskey, heather and clover honey, aromatic herbs, and other spirits)
Jeremiah Weed (Bourbon whiskey, orange, vanilla)
Lochan Ora (Chivas, honey, herbs and spices)
Murray Scottish Highland Liqueur (Scotch, honey, sloe)
Old Pulteney liqueur (Old Pulteney single malt, prune, spices)
Orangerie (Scotch, oranges, spices)
Rock and Rye (American rye whiskey, citrus, rock candy)
Sortilège Maple Whiskey Liqueur
Stag's Breath (Speyside malts and fermented comb honey)
Sundakanchi (rice-based)[citation needed]
Wallace Liqueur (Deanston single malt, Scottish berries, French herbs)
Wild Turkey American Honey (Wild Turkey (bourbon), honey, spices)
Yukon Jack (Canadian whisky, honey)
[edit]Other liqueurs

Advocaat (egg yolks and vanilla)
After Shock (several varieties, the most popular of which is cinnamon)
Agnes (orange peels, apples, vanilla and caraway seeds)
Aurum (rum, tea, and tangerines)
Baczewski
Bärenfang (honey) One export version is named Bärenjäger
Bloody Oath (vodka, herbs and spices)
Campari (bitter and aromatic herbs, plants, and fruit)
Cynar (artichoke and other herbs and plants)
Damiana (herb of the same name)
Gabriel (cinnamon, apple, black pepper and peppermint)
Génépi (alpine flower of the same name)
Izarra (numerous herbs and other flavorings)
Jumbie (rum liqueur)
Licor de oro (whey, saffron and lemon peel)
Lubelska Miodówka (honey)
Kajmir (vanilla, brandy, and vodka)
Kännu Kukk
Krupnik (honey)
Mesi (honey)
Patxaran (sloe berries, coffee beans, and vanilla pod)
Pimento (not the peppers stuffed into olives, but Allspice. Made in Jamaica by Wray and Nephews)
Qi (lapsang souchong tea, fruits, spices, and Chardonnay brandy)
Qi White (orange, ginger, clove, other herbs and spices, and white tea)
Rumpleminze (peppermint)
Salmiakki Koskenkorva (Salmiakkikossu, salmari) (salmiakki—Originally Turkish Pepper salty licorice)
Sève Fournier—Champagne cognac, cocoa sap, vanilla, iris, and plant extracts
Southern Comfort (neutral grain spirits with whiskey, peach, orange and spice flavorings)
Tsipouro
Tuaca (brandy, vanilla, and citrus)

TY KU (Asian spirit base (sake and soju), with yuzu, honeydew, mangosteen, green tea, wolfberry, and ginseng)
Vana Tallinn (rum, citrus oil, vanilla, cinnamon, and other spices)
Vov (egg yolk, sugar and marsala wine)
Voyant Chai Cream (a chai-flavoured liqueur containing oak-aged rum, cream, black tea, vanilla, and spices)
Y Chilli (cinnamon, chili peppers, and other ingredients)
Palm wine (coconut wine)

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Pitted Spanish Manzanilla Olives

Pitted Spanish Manzanilla Olives

<http://www.lindsayolives.com/our-products/spanish-manzanilla/pitted-spanish-manzanilla.html>

Time to break out of the same old routine and put a little romance into your life. Spanish olives bring the magic back to your olive recipes, or make your snack routine anything but routine. Experience the flavor of love. When these Spanish olives come to do the flamenco onto your plate—there's no holding back.

A Better Way to Snack

With heart-healthy fats and surprisingly few calories, olives are the perfect snack.

NUTRITION FACTS

Ingredients: Manzanilla olives, water, salt, and lactic acid.

Serving Size: 5 olives (15g)

Amount Per Serving

Calories: 25 Calories from Fat 20

% Daily Value

Total Fat: 2.5g 4.00%

Saturated 0g

Trans Fat 0g

Polyunsaturated Fat 0g

Monounsaturated Fat 1.5g

Cholesterol: 0mg 0.00%

Sodium: 240mg 10.00%

Total Carbohydrate: <1g 0.00%

Not a significant source of dietary fibre, sugars, vitamin A, vitamin C, calcium and iron. Percent Daily Values are based on

Nuevo Cubano Chicken with Spanish Olive Picadillo Salsa

Prep Time: 20 minutes

Cook Time: 25 minutes

Servings: 4

Ingredients:

2 tablespoons olive oil
4 (4 to 5 oz.) boneless, skinless chicken breast halves
1 tablespoon Jamaican or Caribbean jerk seasoning
1 medium onion, chopped
1 red or green bell pepper, chopped
2 cloves garlic, minced
1 (10 oz.) can diced tomatoes and green chilies, undrained
3/4 cup halved Lindsay® Pimiento Stuffed Spanish Manzanilla Olives
1/2 cup golden or dark raisins
1 tablespoon drained Lindsay® capers
1 tablespoon Worcestershire sauce
Optional toppings: minced plum tomato, chopped fresh basil

Directions:

Heat oil in a large non-stick skillet over medium heat until hot. Add chicken; sprinkle half of the jerk seasoning over chicken. Cook 4 minutes. Turn; sprinkle remaining jerk seasoning over chicken. Continue to cook 4 minutes. Transfer to a

Add onion, bell pepper and garlic to same skillet; cook 3 minutes, stirring occasionally. Add tomatoes, olives, raisins, capers and Worcestershire sauce. Increase heat to medium-high and simmer 5 minutes. Return chicken to skillet, turning to coat. Continue cooking until chicken is no longer pink in centre. about 5 minutes. Transfer chicken to serving plates; top

Nutrients Per Serving:

Calories: 326
Calories from fat: 109
Total fat: 12g
Mono-unsaturated fat: 8g
Cholesterol: 66mg
Sodium: 956mg
Total Carbohydrates: 28g
Dietary Fibre.: 4g
Protein: 28g

Get stuffed: with Spanish olives. On a slice of pizza. In potato salad. On a cocktail pick. Or our personal favorite, straight out of the jar. Yes, Spanish olives are the flavorful snack that wear many hats. Besides the obvious Spanish one, that is.

Antipasto Salad

Prep Time: 25 minutes
Other Time: Chill 1 hour
Servings: 8

You'll love the color and texture of this make-ahead classic. So-easy-to-assemble black and green olives marinate with salami, cheese, marinated vegetables and red wine garlic vinaigrette for a tasty take on everybody's Italian favorite. You can make individual bites by skewering a few morsels on a toothpick and presenting them decoratively on a serving tray, or simply serve it in a festive bowl and allow your guests to serve themselves. Either way, they'll keep coming back for

Ingredients:

8 oz. salami, cubed
8 oz. aged Gouda cheese, cubed
1 pint cherry tomatoes
1 (6 oz.) can Lindsay® Ripe Pitted Olives, drained
1 (5.75 oz.) jar Lindsay® Pimiento Stuffed Manzanilla Spanish Olives, drained
2 cups drained, quartered marinated artichoke hearts

1 cup bottled Peppadew peppers or sliced roasted red peppers
*Red Wine Vinaigrette
1/4 cup red wine vinegar
1 teaspoon honey
2 cloves garlic, minced
1/2 teaspoon salt
1/4 teaspoon freshly ground black pepper
3/4 cup olive oil

Directions:

In a large bowl, combine all ingredients except vinaigrette. Toss with 1/4 cup vinaigrette to coat. (Refrigerate remaining vinaigrette up to 2 weeks.) Chill salad at least 1 hour or up to 2 days ahead. Let sit at room temperature for 30 minutes

In a medium bowl, combine the vinegar, honey, garlic, salt and pepper. Slowly whisk in the olive oil.

Kitchen Tips:

For a beautiful presentation, arrange the antipasto on a white platter or bowl and garnish at opposite corners with bunches

Nutrients Per Serving:

Calories: 402
Calories from fat: 303
Total fat: 34g
Mono-unsaturated fat: 8g
Cholesterol: 90mg
Sodium: 1454mg
Total Carbohydrates: 9g
Dietary Fibre: 2g
Protein: 14g

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Carrot Coconut Delight

Carrot Coconut Delight

<http://www.amritaveda.com/recipes/carrot-curry.html>

Amrita Veda

Nectarean Foods for Mind & Body

Preparation Time: 45-50 minutes

Kitchen Equipment: Blender

Serves 4-5

Ingredients:

2 cups carrot, peeled and thin sliced
1 cup coconut milk - fresh, canned or packet mix.
1 Tbsp. rice flour
3 pinch saffron
1 tsp. rosewater
1 Tbsp. cucumber seeds
1 Tbsp. Pumpkin seeds
1 tsp. coriander seeds
1/4 cup white pumpkin, chopped medium
1 cup onion, chopped medium

1/2 tsp. fresh garlic paste
1/2 tsp. fresh ginger paste
1/4 tsp. fresh nutmeg shavings
1/2 cup water
2 Tbsp. sunflower oil
2 cardamom pods
1 bay leaf
1 green chilli
1/2 tsp. garam masala
1/2 tsp. salt
1/2 tsp. lemon juice
1/2 tsp. raw sugar can, jaggery, Raksha & Martina.

Method:

Clean, peel and slice or chop the vegetables.

Fine chop or pound garlic cloves and fresh ginger root to make paste.

Soak saffron threads in rosewater.

Prepare coconut milk. See recipe for fresh, or use directions for packet mix.

In a medium pan, bring a small amount of water to the boil and add sliced carrots. Cook until tender, about 15 minutes.

Mix chopped pumpkin and onion with cucumber, pumpkin and coriander seeds, garlic and ginger pastes, and nutmeg

Add mixture to blender with 1/2 cup water and grind to make gravy.

In the blender or a large bowl, blend coconut milk and rice flour into the gravy until the mixture is smooth.

In a deep pan, heat sunflower oil.

Add carrots, cardamom pods, bay leaf, garam masala powder and chilli. Mix well and simmer at least 5 minutes.

Remove the chilli.

Add gravy and stir over low heat.

Season with salt, lemon juice, saffron rosewater and sugar.

Let the curry simmer for a few more minutes until the gravy thickens and begins to coat the carrots.

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Pasta with Spinach

Pasta with Spinach

<http://www.amritaveda.com/recipes/pasta-spinach.html>

Amrita Veda

Nectarean Foods for Mind & Body

Ingredients:

Kamut or spelt pasta

500g fresh spinach

1 onion (finely chopped)

1 garlic

1/2 cup soya or rice milk

Pepper and rock salt

Ground nutmeg

Coriander powder

Method:

Bring some water to the boil and cook the pasta. (Try experimenting with corn, buckwheat or rice pasta, but be aware not to over cook them; unlike kamut or spelt, they can quickly turn into a mush!)

Place some ghee in a pan and gently sauté the spices, onion and garlic until golden brown.

Wash the spinach, add into the pot and cook until soft.
When the water from the spinach has evaporated add some soya or rice milk.
Toss the cooked pasta into the spinach and serve.

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Mixed Dal

Mixed Dal

<http://www.amritaveda.com/recipes/mixed-dal.html>

Amrita Veda

Nectarean Foods for Mind & Body

Preparation Time: 45-60 minutes

Kitchen Equipment: Pressure Cooker

Serves 6-7

Ingredients:

1/2 cup chana dal, yellow split peas
(Note* all dals available in Health Food Stores or Indian grocery stores)
1/2 cup mung dal
1/4 cup toovar dal, red gram dal
1 1/2 tsp. salt
10 curry leaves
2 medium potatoes, grated raw
1 cup grated raw pumpkin
1 onion, chopped
4 Tbsp. sunflower oil
1/2 tsp. mustard seeds
1/2 tsp. cumin seeds
1 pinch asafoetida, hing
1 green chilli
1 heaped tsp. sambhar masala - see basic recipes Masala
1/2 tsp. garam masala - see basic recipes Masala
1/2 tsp. turmeric powder
1 heaped tsp. coriander powder
1/2 tsp. lemon juice
1 Tbsp. cilantro, fresh coriander leaves, washed and chopped

Method:

Mix the beans together and wash twice in cold water.
Drain well and place in a pressure cooker with fresh water, _ tsp. salt and 5 of the curry leaves. Cook until tender, about 15 minutes, depending on your pressure cooker.
(Note: If you do not own a pressure cooker, you can prepare the beans by first washing them, then soaking in water overnight. Rinse, drain and simmer in a large pan with fresh water for about 1 hour.)
Shred the potato and pumpkin with a fine grater.
Peel and chop the onion. Place in a blender and grind to a liquid paste. Set aside.
In a blender, grind the cooked beans with 2 cups water.
Heat oil in a large saucepan. Add mustard seeds. When the mustard seeds pop, stir in cumin, asafoetida, chilli and the
Add onion paste and cook over low-medium heat until light brown.
Add sambhar masala, garam masala, turmeric and coriander powder. Stir well.
Add shredded pumpkin, potato and _ cup water. Cover and let simmer over medium heat until the vegetables are tender, about 10 minutes. Stir occasionally.
Mix in the blended beans plus an additional 1 cup water.

Season with lemon juice and 1 teaspoon salt.
Simmer the dal for several minutes more.
Garnish with chopped cilantro.

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known as Bioregulatory medicine.

from the Greek word logos that means to study. This is a biologically based medical system. These tests are developed according to homeopathic principles. It increases the regulation of the physiological state of the system) and health evolution.

Functional medical diagnosis, or a list of functional disturbances, will help the interpretation of the illness is caused by the body's reaction to the presence of these disruptive homotoxins.

' (internal and external in origin) by the defense mechanism to maintain homeostasis. The response to stressors such as tobacco, alcohol, smoke, drugs, pesticides, preservatives, artificial sweeteners, heavy metal pollutants, and environmental toxins leads to physiological processes and inappropriate hormonal and neuro-hormonal secretions.

in immunology. Reckeweg called this the Greater defence system which is made up of the connective tissue. This whole system will be engaged when the body is confronted with anything that disturbs the

can be located and followed on the DET (Disease Evolution Table).The stages are excretion, specific, moving from excretion through the above list to de-differentiation (disease evolution).When disease processes each at different stages of development .What we recognize as the clinical symptoms of defence mechanism against the homotoxin, will define the patient's clinical status and disease

homeostasis. Activating the immune response, metabolic cycles and glandular control is essential for healing. . Homotoxicology products were developed to induce a state of regulation and support the body in its

s. It is not toxic, has few contra indications or possible side effects and has no interactions with other approach in homotoxicology remains clinical.

the symptoms are an expression of the activation of various parts of the system. Research has been done in traditional medicine have also been researched. The outcome of this continued research makes

new platform in medicine that finds its way easily into daily medical practice. This is an excellent addition

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er can grow depends on their skill and the additives used. The products are then used by Apothecaries to c
o assist the growth by adding an additive. Additives reduce the time it takes for a plant to grow and
start with two and gain access to a new one every 50 skill points, culminating in 4 plots

n before the name). This key part of their name indicates its use in apothecary potions. The prefix varies

eds. These seeds are always Cultivation Rank 200, are bind on pick-up and will always return the seed

nes and special results.

ds per phase (for a total of 1 minute).

ects. The additives reduce the amount of time it takes to grow a plant and increase the chance of more
, whichever is smaller.

ed.

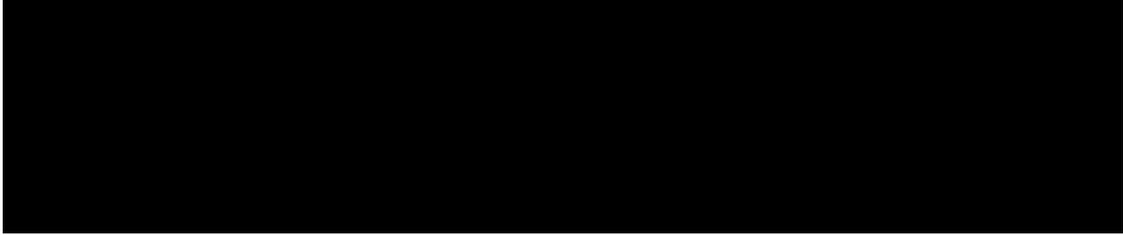
of critical failures.

ve pigment (varies by seed). The chance of this occurring can be increased by using Watering Cans

nt modifiers on the soil, watering can and nutrient used during growth (as seen in the tables above). A
cultivated seed. For example: Honeycomb Extract can be cultivated from any level 1 or level 25

ng is done by ctrl-right-clicking the plant or fungi to be reaped in your inventory bags. Reaping will
ltivator to increase their stock: in general one seed generates two plants, which generates two seeds and

er rank plants. Reaping is also useful for increasing the number of the same type and rank of seed. Each
can get in the way of this are critical cultivation failures, which will destroy your seed.



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l to revert to their natural vegetation while the cultivator moves on to another plot.

is overrun by weeds.

· lying fallow.

thod on a given plot.

exhaustion and need to lie fallow.

he field after the standing vegetation has been cut down and burned, its ashes enriching the soil.

es to recover under conditions of natural successive stages of re-growth. In a shifting cultivation system, h. Over time, fields are cultivated for a relatively short time, and allowed to recover, or are fallowed, for again. Fields in established and stable shifting cultivation systems are cultivated and fallowed

ly for timber for fencing and construction, firewood, thatching, ropes, clothing, tools, carrying devices fallows are in fact orchards. Soil-enhancing shrub or tree species may be planted or protected from at attract birds and animals and are important for hunting. But perhaps most importantly, tree fallows

ivation systems. These parameters determine whether or not the shifting cultivation system as a whole id to a degradation of resources unless actions are taken to arrest the losses. In some cases soil can be

n nitrogen and phosphorus, the greater the increase in acidity, the more likely soil porosity and a stable shifting cultivation system, the fallow is long enough for the natural vegetation to recover to the fallow periods soil temperatures are lower, wind and water erosion is much reduced, nutrient cycling e and moisture characteristics improve and seed banks are replenished.

ian primary forests, even though they are much less bio-diverse. Shifting cultivators view the forest as an or the trees. Rather they perceive an apparently chaotic landscape in which trees are cut and burned progressed beyond. Shifting agriculture is none of these things. Stable shifting cultivation systems are fallow stages. Shifting cultivators may possess a highly developed knowledge and understanding of their sometimes exist under shifting cultivation. Introduced crops for food and as cash have been skilfully

Siberia at the end of the 19th century and in some places well into the 20th century. In the Ruhr in the allowing with trees to produce bark for tanneries, wood for charcoal and rye for flour (Darby 1956, 200). sberg 1993, 98). In Eastern Europe and Northern Russia the main swidden crops were turnips, barley, on very favourable soils. Fallow periods were between 20 and 40 years (Linnard 1970, 195). In Finland inki. Birch and pine trees had been cleared over a period of a year and the logs sold for cash. A fallow of ng cultivation was disappearing in this part of Finland because of a loss of agricultural labour to the l in Sweden in the 20th century, and in Estonia, Poland, the Caucasus, Serbia, Bosnia, Hungary,

as that occurred in Europe over that period, suggests they were adaptive and in themselves, were not
not lead to the disappearance of European forests, what did?

Thucydides and Plato and in Strabo's Geography. Forests were exploited for ship building, and urban
trade and as a result of warfare, increased the demand for ships which were manufactured completely from
cause of forest destruction was the practice in some places of granting ownership rights to those who
; the major causes for forest destruction was the recovery of tree cover in many parts of the Roman
) AD "land that had once been tilled became derelict and overgrown" and quotes Lactantius who wrote
Mediterranean environment with its hot dry summers were wild fires that became more common following

Archaeological record from the Neolithic. Here, just as in Southern Europe, the demands of more intensive
towns and constant warfare, including the demands of naval shipbuilding, were more important forces

the development of feudal tenurial practices. From the 16th to the 18th centuries, the demands of iron
necessitant warfare that increased the demand for shipping to levels never previously reached, all combined
where permanent agriculture was uneconomic, transport costs constrained logging or terrain prevented
increasingly capital intensive, rural areas have become depopulated and the remnant European forests

movements before the establishment of any sort of state, feudal or capitalist, and before the development of
and shifting cultivation was the most common type of agriculture practised. By examining the
temporary social and economic change and global environment change, and the place of shifting

and shifting cultivation were raised and continue to be debated today. Archaeological evidence suggests

witnessed a precipitous decline that left the great cities and ceremonial centres vacant and overgrown with
as cited (Meggers 1954; Dumond 1961; Turner 1974). More recent work suggests the Maya may have, in

years of their arrival around 1100 AD turned substantial areas from forest into scrub and fern and in the
parts of the Pacific islands, including Fiji and Hawaii, early extensive erosion and change of vegetation is
as a rich, swampy alluvium. These new environments were then exploited to develop intensive, irrigated
agriculture and the development of elaborate and high stratified chiefdoms (Kirch 1984). In the larger,
agriculture growth was the hunting of large birds to extinction, during which time forests in drier areas were
potato (*Ipomoea batatas*) and a reliance on the gathering of two main wild plant species in less favorable
occupation of the best environments, complexity in social organization, and endemic warfare (Anderson

probably beginning 5,000 to 9,000 years ago. However the most spectacular changes, in both societies
tion with the introduction of a crop new to New Guinea, the sweet potato (Golson 1982a; 1982b). One of
1 small lakes. The root question posed by these and the numerous other examples that could be cited of
exity is not whether or how shifting cultivation was responsible for the extensive changes to landscapes
of New Guinea, begin to grow in numbers and to develop stratified and sometimes complex social

r changes occur within the system, for each extra person to be fed from the system, a small extra amount
w. If the area occupied by the system is not expanded into previously unused land, then either the

ultivator societies has been shown to be very low over the long term. Second, no human societies are
the conduct of these relationships. These relationships are the focus of two attempts to understand the
exploration of the problem.

field agriculture post sweet potato, Modjeska (1982) argued for the development of two “self
and the slow expansion of agriculture to meet the demands of this growth. This set in motion the first
luced from hunting, which was substituted for by an increase in domestic pig raising. An increase in
ased human fertility and survival rates and resulted in faster population growth.

nge, is an expanding and intensifying agricultural system, the conversion of forest to grassland, a
ratification. The second attempt to explain the relationships between simple agricultural societies and
e argues that almost all of the materials required by humans to live (with perhaps the exception of air)
The values that humans attribute to items produced from the environment arise out of cultural
als”. Humans frequently translate actual objects into culturally conceived forms, an example being the
lerlie the ecology of human social systems: First, the obtaining of materials from the environment and
important it is to obtain it, circulate it or alter it. Environmental pressures are thus mediated through

etermined mainly by natural selection and partly by human interference and adaptation, such as for
ge to each other and across generations. If most social systems have the tendency to increase in
ronments. What happens around the point of “contradiction” will determine the extent of the
ovate technologically and sociologically, in order to overcome the “contradiction” without incurring

oserup (1965). Boserup argues that low intensity farming, extensive shifting cultivation for example, has a choice, a human group will always choose the technique which has the lowest absolute labor cost rather than that rather than population always overwhelming resources, that humans will invent a new agricultural technique by the degradation which has occurred already, even though they will pay for the increases in higher labor cost, or a hoe for a plough, or the development of irrigation systems. The controversy over Boserup's theory is in their agricultural systems before environmental degradation forces them to.

In Indonesia alone it was estimated 13,100 km² per year were being lost, 3,680 km² per year from forest fires made huge fires have ravaged Indonesian forests during the 1997 to 1998 El Niño associated

in many places in favor of large scale cash crop production – e.g. for biofuels. The extent of these changes

in security) are not well known. The aim of this project is to analyze the extent and consequences of change in land use. This interdisciplinary project focuses on:

i) and the outcome is expected to be relevant to planning and policy-making on land and forest

Deforestation against shifting cultivators caused a confrontation between FAO and environmental groups, and independent studies of the problem note that despite lack of government control over forests and the reduced paid employment to former subsistence farmers. One of the outcomes of cash incomes has been the abandonment of long fallow farming systems. Many farmers have taken advantage of the improved road access to urban areas, which have enabled larger areas to be cleared for cultivation. Fallow periods have been reduced and cut over forests along the logging roads. The settlers practice what appears to be shifting cultivation but the permanent cultivation of fragile soils in a tropical environment with little attempt to replace

Deforestation in Vietnam, Laos and Cambodia in the 1970s and 1980s caused by warfare. Forests were sprayed with herbicides in isolated areas. The loss of the tropical forests of South-east Asia is the particular outcome of the general trend. When the previous relatively stable ecological relationships are destabilized, degradation can occur

Deforestation of best land (Becker 1995, 61) or from the Central Africa where what endemic armed conflict is

ation was one of the very first forms of agriculture practised by humans and its survival into the modern
ctice. Many casual observers cannot see past the clearing and burning of standing forest and do not
ly susceptible to rapid increases in population and to economic and social change in the larger world
bout the rapid loss of tropical forests at the end of the 20th century are the same forces that led to the
nore resources from the environment in pursuit of political power by competing groups.

the contemporary problem lie deep in human behavioral patterns, for even in these simple societies,

but the society so sustained may still be overturned, as above (*see* article at Terra preta).

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s of North America such as in the Southwestern United States and Mexico, the Middle

n Cornies, making the region the breadbasket of Russia.

i.
he variety of crops.

0 inches (250 mm) of rain.[citation needed]

that is more suited to regions with higher winter rainfall while areas with summer wet seasons may be

presence or lack of moisture in a given crop cycle.

season.[citation needed]

of expenses to minimize losses in poor years.

ly if poor farming techniques are used or if the storms strike at a particularly vulnerable time.

top, which might otherwise offer protection against erosion.

ation available to a dry land farm may be as little as 8.5 inches (220 mm). Consequently moisture

stubble and crop residue to trap snow, and preventing runoff by terracing fields.

hill, usually by ploughing along either contour lines or keylines.

ible.

where it will exist when seasonal precipitation falls.

hood of a successful crop is hedged if seasonal precipitation fails.

lly wind erosion.

ring topsoil.

ed] the most important long-term goal of a dry land farming operation.

particularly susceptible ground), and strip farming are used to minimize topsoil loss.

e of this, there is an increased risk of crop failure and poor yields which may occur in a dry year

increase inputs to the crop such as fertilizer and weed control if it appears that it is likely to have a poor

l to offset poor harvests.

l.

5 million tonnes in 1961 to 590 million tonnes in 2003.

aphy. A remarkable type known as 'deep-water rice' is grown in flood-prone Bangladesh.

to reduce vitamin A deficiencies in developing countries. Some experts question its role.

rice, anna. She is often depicted with a rice spoon in her hand.

dia), and stretching through Burma, Thailand, Laos, Vietnam and Southern China.

0 BC.

mestication in the northern plains. It then spread to all the fertile alluvial plains watered by rivers.

gushed summer varieties from rainy season and winter varieties.

he sub-continent, with barley second and wheat a barely mentioned winter food.

l, placed in a bowl and then various other dishes added to it.

e and cooking to sticky masses suitable for eating as clumps with chopsticks), and javanica (intermediate
consume different varieties.

s fragrant rice is chiefly grown and exported by Pakistan and India.

in the sub-continent.

ste on domestic thresholds and floors.

signs are meant to bring good luck to the home.

closely related.

picious yellow colour of turmeric, is showered onto newly-married couples, and is part of numerous rites

h during his austerities in pursuit of Enlightenment.

Pakistan produces over 6 million tonnes.

ctive cultural traditions such as Kerala and Orissa.

India's Himalayan states.

rice.

d three times more rice than before.

a.

grown.

kes it a staple food.

ish supermarkets.

et a balanced diet.

ncy.

mer grain.

served.

once cooked.

acks to main meals or sweets.

about 8-10 hours.

with vegetables, meat or salad.

it specific environments and socio-economic conditions.

achieved by constructing dikes and draining vast areas of marsh since ancient times. In neighbouring
; encompasses agricultural lands called marutham. Indra, the deity who is responsible for the origin of
; perhaps not a coincidence that Indra is also the god of thunder and rain, for Tamil Nadu's rice fields
k of rain often leads to drought, while flash floods in eastern India can damage the crops.

Throughout growing, water levels in paddy fields are kept to a few centimetres deep to prevent weed growth and the rice in naturally swampy areas, or by irrigating using a series of canals or wells. Fields are sometimes

watered. The rice is seeded as the water is just beginning to rise and the growth of plants keeps up

halfway up the stem and either allowed to dry in the field or

mechanical harvesters are becoming more popular.

Sheaves of rice stems on a stone or other hard platform, or using animals to trample on the stems. Threshing

and dust are carried away by the wind. Hand winnowing machines are also available. The grain is then

cleaned to produce white rice. In India and Bangladesh, parboiling is common. This involves soaking, boiling and drying

starch. This starch provides energy, which makes it a staple food.

are some of the choices that face shoppers in even British supermarkets. Every part of Asia has its own

method) much of the nutritional value is lost when the bran is removed. The result is pure white rice which is

not a balanced diet. Where people have a diet very high in white rice and low in other foods they can suffer from malnutrition, and some of the nutrients 'stick' to the inner grain. This parboiled rice is less easy to cook as the

rice is soaked, and then boiled with water in a pan, left to rest, and then served. The method of cooking (right) is different from white (processed) rice, but remains tough after cooking. In the region, rice is used in sweets.

about 8-10 hours. This is often done the day before, and dosa are often eaten for breakfast. They can be found in Bangladesh is the spicy rice (bhuna kichuri) which is mixed with cinnamon, ginger and chillies, and also sweet rice pudding (firini).

British Isles. Rice grows tall for a grass, about 1 metre high, and has hairy leaves with a prominent midrib. Rice from the highland tropics has long awns or pointed hairs on, but rice from the lowland tropics has smooth seed.

In a northern climate has insufficient light to keep them alive, even if they have not flowered. Minimum

from 2 weeks to several months.

Push them deeper in the compost than they were previously growing, as this will help them produce side shoots.

Water. Feed with a liquid fertiliser every fortnight. If flowers are produced, run your fingers through those

flowers, to hasten ripening.

Use for houses.

Use as filtration material or for charcoal briquettes.

Some of the main rice bran processors. Rice straw is used for animal feed and bedding, and can be made into paper. Rice straw is rarely used for rope and thatch.

plant, and its endosperm is the final product consumed.

closely related.

al uses are supported by scientific studies.

a paste or moulded into balls and these can be applied to boils, sores, swellings and skin blemishes.

reat stomach upsets, heart-burn and indigestion. Extracts from brown rice have been used to treat breast

on using herbal medicines is available.

ry studies have shown that rice products may have anti-cancer properties and the potential to treat other

are absent from the highly refined white rice. Rice bran can contain up to about 25% fibre and fibre is
n and can be used as a mild laxative.

ilarly to treat cancer.

on using herbal medicines is available.

., Bangladesh and Pakistan supply almost 30% of the world's paddy rice.

so one of the top producers, growing over 38 million tonnes. Pakistan produces over 6 million tonnes.

tive cultural traditions such as Kerala and Orissa. Rice is also grown to an extent across much of the rest

rice. These cultivars were tall, weak-stemmed and late-maturing; yields were relatively low.

.breeding have produced remarkable rice plants which, together with improved cultivation techniques,

a. Within each type are varieties that are grown under different environmental conditions. The most
is where rice is cultivated on irrigated or flooded land. Dry varieties are typically grown on hillsides and

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ivation zones, the Agriculture and Food Agency said yesterday.

set up in Taichung and six other cities and counties last year, exported 40.82 million stems worth

1 quality and quantity,” the agency said in a statement.

nd expanded them into floral cultivation zones in 2009.

ke of his experience growing eustoma.

en said.

: to upgrade the zones' efficiency and step up its collection of information on international floral

ng into new emerging markets, such as Australia, China and Russia.

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ors determining average minimum temperature are elevation, latitude and proximity to the coast.

at life is capable of growing, as defined by climatic conditions, including its ability to withstand the
thstand a minimum temperature of -1°C .

ther nations.

cultivated outdoors at a particular location; however, the USDA hardiness zones have a number of

inter minima, but markedly different summer temperatures, will be accorded the same hardiness zone. An

example else in their climates. In summer, the humid subtropical climate of Alabama is about 20 degrees Celsius lower than in the UK. Due to its maritime climate, the UK is in AHS Heat Zone 2 (having 1 to 8 days

above 10 degrees Celsius). Users need to combine the hardiness zone with the heat zone to gain gr

protection against extreme cold, protecting the root system of hibernating plants. If the snow cover is reliable, the example, Quebec City in Canada is located in zone 4, but can rely on a significant snow cover every

year on snow cover.

position would otherwise entail. This means that the hardiness zones relevant to Britain

and in Wales the highest part of Snowdonia.

στην περιοχή της εασιτικής Σχοτλανδίας από νοτιο-εασιτική Αγγλικία (απαιτείται 5 κμ από την

d to decrease mainly eastwards instead of northwards. Also, the plateaux and low mountain peaking, the hardiness zones are high considering the latitude of the region, although in it zones decrease from zone 8 on the Belgian, Dutch and German North Sea coast, with some of the islands in the Rhine-Scheldt estuary, which are in zone 9, to zone 5 around as of the Alps and Carpathians may even go down to zone 3 or 4. An extreme example of a Waksmund, a small village in the Polish Carpathians, which regularly reaches - tra Mountains descend down the slopes to this low-lying valley, creating extremes which can be up to w, only 80 kilometres to the north and 300 metres lower is in zone 6a. These examples to grow in a specific region.

gion.

er Poland Voivodeship, in southern Poland, close to the border with Slovakia.

ivodeship, in southern Poland. It lies approximately 3 kilometres east of Nowy Targ and 80 km

iver in the Lesser Poland region, the city dates back to the 7th century.

more pronounced here than it is in Britain and Ireland. Save for a very small spot near : 3. The Faroe Islands, at 62-63°N are in zone 8, as are the outer Lofoten Islands at 68°N. city in the world at 78°N, is still in zone 5. All these coastal locations have one thing in n Longyearbyen. This shows the importance to take heat zones into account for a better

entre of the municipality is the village of Karasjok. Other villages include Dorvonjårga, Šuoššjávri,

ircle, the archipelago experiences one of the world's largest elevated temperature anomalies

Norwegian Sea and the North Atlantic Ocean, approximately halfway between Norway and Iceland,

Tromsø. Tromsø is the largest urban area in Northern Norway, and the second largest north of the

a population of 2,040.

suando, Pajala and Rovaniemi. Kiruna is the big exception here, which being located on a hill
 smokk, Zone 5 (south to 61-62°N) contains cities such as Tampere, Umeå and
 of Småland further south. Here one will find cities such as Gävle, Örebro, Sundsvall and
 the west coast of Sweden (Gothenburg and southwards) enjoys particularly mild winters and lies in
 of the Gulf Stream.

ants in 2010 and 350 in 2011. It is a church village of **Sweden**, located at the Muonio River on the

thernmost province, **Lapland**

Zone	City	Zone
	8 Antwerp, Belgium	8
	9 Berlin, Germany 7a	
7a	Bucharest, Romania 6a	
	9 Catania, Italy	10
7a	Cork, Ireland 9b	
	Düsseldorf, German	
	9 y	8
	8 Gdańsk, Poland	7
9a	Hamburg, Germany	7
5b	Istanbul, Turkey 8b	
	6 Kiev, Ukraine	5
	6 Lisbon, Portugal 10a	
	7 London, England 9a	
	08-Sep Málaga, Spain 10b	
	9 Milan, Italy	07-Aug
5 a	Moscow, Russia	4
	6 Murmansk, Russia	5
10b	Oslo, Norway	6

the same data as the AHS. Once the Foundation analyzed the new data, it revised hardiness zones, and updated the data used in the AHS 2003 draft. The Foundation also did away with the more detailed a/b half-

Zone	City	Zone
	Oklahoma City, Okl	
7a	ahoma	7a
4b	Omaha, Nebraska	5b
7b	Orlando, Florida	9b
	Owensboro, Kentuc	
8a	ky	6b
	Philadelphia, Penns	
7b/8a	ylvania	7a/7b
7b	Phoenix, Arizona	9b
	Pierre, South Dakot	
7a	a	4b
	Pittsburgh, Pennsylv	
5a	ania	6b
6a	Portland, Maine	5b
7b/8a	Portland, Oregon	8b
	Providence, Rhode I	
6a	sland	6b
	Raleigh, North Caro	
8b	lina	7b
5b	Richmond, Virginia	7a
6b	St. Louis, Missouri	6b
	Salt Lake City, Utah	
2a		7b
6b	San Antonio, Texas	8b/9a
	San Diego, Californ	
12a	ia	10b
	San Francisco, Calif	
9a	ornia	10a
	San Jose, California	
9a		9b
	Seattle, Washington	
10b		8b
7b	Tampa, Florida	9b
11a	Tucson, Arizona	9b
4b	Tulsa, Oklahoma	7a
7a	Washington, D.C.	7a/7b
9b	Wichita, Kansas	6b

7b Niagara Falls, New York **6a**

8a Trenton, New Jersey **7a**

numbers have no US equivalents.

many places with different climates are lumped together. Only 738 Australian stations have records of n. Local factors such as aspect, altitude, proximity to the sea also complicate the matter. For example, Zone 5a. Likewise, Sydney residents can choose between Zones 3a and 4b. Most other cities have nap. There may even be a case for publishing a list of weather stations and their zone classification to

for the US is available on the American Horticultural Society website.

Factors determining average minimum temperature are elevation, latitude and proximity to the coast.

Plant life is capable of growing, as defined by climatic conditions, including its ability to withstand the hardiness zone. A plant hardy to zone 10 means that the plant can withstand a minimum temperature of -1°C. A more resilient plant. In the United States Department of Agriculture (USDA), the use of the zones has been adopted by other nations.

Plants cultivated outdoors at a particular location; however, the USDA hardiness zones have a number of

plants that receive similar winter minima, but markedly different summer temperatures, will be accorded the same hardiness zone. An

example: In summer, the humid subtropical climate of Alabama is about 20°C warmer than the UK. Both have a similar winter minimum. Due to its maritime climate, the UK is in AHS Heat Zone 2 (having 1 to 8 days

above 5°C). Users need to combine the hardiness zone with the heat zone to gain a better understanding of the climate.

Protection against extreme cold, protecting the root system of hibernating plants. If the snow cover is reliable, the hardiness zone is not a problem. For example, Quebec City in Canada is located in zone 4, but can rely on a significant snow cover every

year.

Number of days of frost, and the risk of a rare catastrophic cold snap. Some risk evaluation – the probability of

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l health care professionals) has been defined as "the conscientious, explicit and judicious use of current
e specifically as "the use of mathematical estimates of the risk of benefit and harm, derived from high-
f individual patients."

ostic tests. This helps clinicians predict whether a treatment will do more good than harm.

omized clinical trials with concealment of allocation and no attrition at the top end, down to conventional
ceptance. EBM recognizes that many aspects of health care depend on individual factors such as quality-
erefore depends on patient circumstances and preferences, and medical treatment remains subject to

encompassing term.

