

EIGHT FACTORS OF DIETETICS Caraka Vi. I.21

(With Contributions from Suśruta, Vāgbhaṭa, Bhāva Prakāśa, Śārṅgadhara, the oral tradition, and this author)
(See also Bhela Vi. I.21-24)

Also, note the relevance of The Best of Foods Ca Su. XXV.36 etc.

There are eight factors relating to dietetics—nature, processing, combination, quantity, place, time, rules for use and the consumer.

I. Prakṛti or svabhāva, the natural attributes in a substance used as food or medicine, such as black gram being heavy and green gram being light, pork as heavy and venison as light.

- Āyurveda says that to know the qualities and actions of a substance is to know it truly. Meat is heavy compared to grains or fruit. These attributes bring about the result promised in their name—heavy promotes heaviness and light promotes lightness. We must study foods on this basis first.
- This category brings attention to the qualities of foods and medicines in another way--vitamin and mineral content. Supplementation has been the nagging issue in the West for several decades now. While the concept of vitamin is absent in the classical literature of Āyurveda there is much ancient knowledge of the therapeutic value of metals and minerals. But modern experience with these food values has helped. But the point is raised that just because we have an apple in hand, can we say truthfully that we know it? There are at least three aspects to this issue.
 1. Recent investigations by the Kushi Institute of Becket, MA around organic versus non-organic grown foods. Researchers from the University of Copenhagen recently reported that organically grown produce has higher levels of nutrients when compared with conventional produce. A 1999 study out of the University of Wisconsin found that three decades of the overuse of nitrogen in US farming has destroyed much of the soil's fertility. Modern practices of farming, pest control, soil management, distribution, handling, storage, etc. have significantly altered the nutrient value of food (by damaging the soil itself) according to recent research findings.
 2. Foods are picked in an unripe condition and some are treated to bring about a kind of ripening while in the transit and storage phases. Gassing has its own qualities that surely must have some negative effects of the final food values.
 3. Almost all foods are stored for days, weeks, and months before they are consumed. This leads to know degradation of certain "innate" food values. Āyurveda arose when farming methods were drastically different. This is why Āyurveda is silent about nutrients in the food. But Āyurveda does say that foods should be picked fresh, prepared and eaten immediately.
- The most important consideration about nutrients, from the perspective of Āyurveda, is that nutrition is the end result of digestion, absorption, and assimilation. Nutrition from the perspective of food supplementation is worthless if absorption and assimilation are defective. Further, if supplementation occurs in some inappropriate form it may actually feed the imbalance or disease it is intended to improve. Persons taking mega-doses of Vitamin C and Vitamin B complexes, for example, may have increased inflammatory symptoms associated with this mega-dosing. Taking calcium and vitamin E supplements at the same time is thought to bind the Ca in the oil and to make the Ca insoluble /indigestible—resulting as calcium deposits in the joints. One must always ask: What supplement, when, how much, and for whom, etc.?
- There is considerable quandary about recent genetically engineered food. While there is not conclusive research the Āyurvedic point of view settles on the side of what is Nature's way. There is considerable concern that new, forced mutations will produce untoward effects in the body and environment. Accidental cross-breeding in nature may be catastrophic for all life forms.

II. Karaṇa is processing as in the production or refining of natural products which gives new attributes to them.

- Where the vessel has not been said for preparation of medicines assume earthen. Śārṅgadhara Ch 1.38
- Cookware which favors clay, iron, glass, or stainless steel is best. There is a prevailing belief that some minute amounts of the cooking surface are imparted into the cooked food. Vāgbhaṭa (Aṣṭ Hṛ Su. VII.29-44) warns against eating ghee stored for more than 10 days in bronze vessel and proscribes cooking foods with wood of castor and other similar proscriptions are found. An interesting caveat from a modern psychic—Edgar Cayce—avoid cooking tomatoes in aluminum. We further suggest than one avoid Teflon coated cookware. Sushruta gives the following advice for serving dishes (Su. Su. XLVI.142): clarified butter on kātaloḥa (steel), peyā in a silver bowl, fruits and confections on leaves, meats as pariśuṣka and pradigdha on gold, fluids and soups in silver cups, katvaras and kharas in stone utensils, cool-boiled milk in copper, other drinks, wines and cordials in earthenware, rāgaśādavās and sattakas in glass bowls or crystal vessels and vaidurya gems.
- Cooking is a crucial part of the process of transforming food molecules into the elements of tissues like muscle and bone. The modern understanding that the cell walls of many foods may need heat and fluid to enable their contents to be released from the encasing cellular membranes supports the Āyurvedic understanding.
- Vegetables should be cooked until they are “just tender.”
- Cooked food should be discarded after 5 hours as it has little vitality (prāna) left.
- As to the manner of cooking--boiling makes food more vāta-balancing; baking makes it more kapha-balancing; stir-frying balances vāta and if with ghee pitta is also balanced; steaming helps balance pitta and kapha; roasting which causes charring is considered carcinogenic even that it reduces fat content; raw foods tend to aggravate vāta and are hard to digest; cooking with flame avoids introducing harmful electromagnetic field affects into the living environment associated with electric wiring and electric stoves.
- On microwave ovens—research in the former Soviet Union led to that government banning the use of microwaves as early as 1976. Their findings revealed that mutagenic effects leading to cancer were observed in: 1) the food, 2) the environment, and in 3) individuals exposed the microwave radiation. Vaidyas have stated that the basic prana of food is disturbed in microwave cooking. Don't use it for cooking or re-heating, if possible.
- This category of processing also includes storage—sealed / airtight, darkness, cool, and rodent and bug safe are prudent cautions. While these concerns are more valid for medicines they are important for food.
- Whether items are prepared in water, oil, self-generated alcohol, and so on really mostly concern the medicine makers but mentioned here for completeness.

- III. Saṃyoga is combination of two or more substances. This combination will exhibit new properties different from the individual ones. This is seen in the combination of honey and ghee and with honey, fish, and milk.
- A) Avoid eating foods having opposite energy (virya) incompatible food combinations (mityāhāra / viruddhāhāra) for example, milk and fish. V. 24.5
- Caraka disdains food taken from emaciated animal, dried meat, dried vegetables, lotus tubers and stem, constant diet of some milk products, pork, beef, buffalo, fish, curd, black gram, and yāvaka (Su. V.10-11). Finally, Caraka notes (Vi. II.8) that not only excess food by quantity gives rise to āma but also food and drink which are heavy, rough, cold, dry, disliked, distending, burning, unclean, antagonistic, and taken untimely and while afflicted with emotional disturbances such as passion, anger, greed, confusion, envy, bashfulness, grief, conceit, excitement, and fear. Note with this verse that Caraka condemns both poor diet and dietary regimen. We shall take up the other factors—qualitative incompatibility—in detail now.
 - The more important consideration for the purposes of this section relates to qualitative relations between foods taken in the same meal. There is considerable discussion about the fact that some foods do not combine well with others. Vāgbhaṭa declares that incompatible foods should be considered similar to poison and artificial poisoning (A.H. Su. VII.29). Poison (viruddha) is defined as any thing that causes increase (utkleśya) of the doṣas without eliminating them from the body. He describes treatment as both śodhana and śamana (eliminative and palliative). Su. VII.45-46
 - Caraka gives a listing of bad combinations:
 - a. Milk with fish (both having sweet rasa and vipāka which is potentially channel obstructing (mahābhiṣyandi) but from the opposites virya the blood is vitiated and blocking to all channels.
 - b. Meat of domestic, marshy, and aquatic animals with honey, sesame, jaggery, milk, black gram, radish, lotus stalk, or germinated grains
 - c. Puṣkara or rohiṇī or pigeon fried in mustard oil and eaten with milk, honey
 - d. Radish, garlic, śigru, arjaka, basil with milk
 - e. Jātuka, or fruit of nikuca with honey and milk
 - f. Nikuca with black gram, pulse, jaggery, and ghee
 - g. Āmra, āmrātaka, mātuluṅga, kikuca, karamarda, moca, dantaśaṭha, bacara, kośmra, bhavya, jambu, nārikela, dāḍima, āmalaka and all sour liquids or non-liquids with milk
 - h. Kaṅgu, vanaka, makuṣṭhaka, kulattha, black gram and niṣpāva with milk
 - i. Padmottarikā (kusumbha), śārkara and maireya (wines), and madhu, all used together (vitiates pitta)
 - j. Pāyasa (rice cooked with milk) taken after drink of mantha (a drink prepared from roasted grain flour) (increases kapha)
 - k. Balākā (crane) wine vāruṇī (wine), or kulmāṣa (grains soaked in water and fried) same fried with lard
 - l. Peacock skewered with castor stick, cooked over wood of castor, and mixed with castor oil
 - m. Hāridra (fowl) skewered with wood of hāridra and cooked over same wood
 - n. Hāridra mixed with ash and dust and honey
 - o. Pippalī fried with fish-cooking media and kākamācī mixed with honey
 - p. Honey and ghee in equal quantity
 - q. Honey and rain water in equal quantity
 - r. Honey and lotus seed
 - s. Hot water after eating honey
 - t. Hot water after eating bhallātaka, kampillaka cooked with lassi
 - u. Stale kākamācī and bhāsa roasted on iron

Caraka lists with examples the categories of antagonistic entities—

- Place—if in arid area rough and sharp substances and in marshy unctuous and cold substances

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- Time—rough and cold in winter or pungent and hot in summer
 - Agni—when food and drinks are of similar nature to the 4 types of agni (viśama, tikṣṇa, manda, sama)
 - Dose—honey and ghee in equal quantity
 - Suitability—taking sweet, cold etc. when a person is accustomed to pungent, hot, etc.
 - Doṣa—drug, behavior, diet similar to doṣas in attributes but opposite to the person's actions
 - Processing—edible becoming poisonous as peacock skewered and cooked on castor wood
 - Potency—cold and hot virya substances combined and taken together
 - Bowels—when too little, mild potency, and non-breaking drug is used in case of hard bowels; or heavy, breaking, and abundant in soft bowels
 - Health condition—when vāta increasing substance is given to person of excess work, sex, and exercise or kapha increasing substance given to person accustomed to day sleep and laziness
 - Order—taking food before excreting and feces and urine or without hunger or excessive hunger
 - Indication / Contra-indications—hot things taken after intake of pork or ghee taken after intake of cold things
 - Cooking—cooking on putrid or bad fuel; non-cooking of grains, overcooked or burnt
 - Combination—sour things taken with milk
 - Palatability—taking non-liked things
 - Richness (in properties)—when substances possess under mature, over mature, or damaged rasa
 - Rules of eating—food not taken in privacy Ca. Su XXVI.86-101
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- Treatment is with purgation, emesis, palliation or prior use of wholesome substance. The antagonism becomes inert due to suitability, small quantity, strong digestive power, young age, person with unctiousness, physical exercise, and strength. Ca. Su. XXVI.105-106
 - Suśruta describes numerous categories of incompatibility (Su. XX.9-22): combination, preparation, proportion, tastes, potencies, chemical actions, contrasts. Āyurvedic pharmacology is studied on the basis of a sophisticated scheme which looks at the whole range of transformations and actions that take place. While these will not be discussed at length here they are important—
 1. quality or attribute (guṇa = 20 types),
 2. taste (rasa = 6 types),
 3. energy or potency (vīrya = 2 types most important although some say 8 types exist),
 4. chemical action or post-digestive effect (vipāka = 3 types),
 5. special effect (prabhāva).

Generally speaking incompatibility stems from opposite qualities and actions of the food, which yields conflicting instructions to physiology or it produces toxic chemical reactions during or following the digestive process.

- Incompatibility may occur during the cooking process itself caused by chemical changes of the ingredients and even with the cooking materials and the foods themselves. For example, one modern psychic, Edgar Cayce, noted that cooking tomatoes in aluminum pans is toxic. The acid of the tomato reacts with the aluminum—aluminum is considered toxic except in minute amounts.
- Other incompatibility occurs when grains or other foods, which have different cooking times, are prepared in the same pot. Improper cooking results if all items are not fully cooked and this leads to toxic substances being formed in the body, too.
- Certain tastes do not combine well—sweet, bitter, and salty.
- Foods having oily and dry quality do not combine well.

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- Also, foods having opposite energy (hot and cold) or opposite post-digestive effect (sweet/sour/pungent) give the body conflicting or stalemating information. These latter two conditions are not easily knowable but can be found by consulting the Qualities of Food Substances listing in *Ayurvedic Cooking for Self Healing*. by Dr. Vasant Lad.

Incompatibility by Combination (Su. Su. XX.9-10)

- flesh of any domestic or aquatic beast or bird, or marshy area, should not be eaten with boiled rice prepared from paddy which has commenced sprouting, or with lard, honey, milk, treacle or māsha pulse.
- pot herbs, rohini and jātu-śāka, should not be partaken of in combination with milk and honey
- flesh of heron with kulmāśa and the liquor called Vāruṇi.
- black pepper and long pepper should not be eaten in combination with herbs nadima
- siddhi should not be eaten with curd and flesh of cock
- honey should not be taken immediately after drinking hot water
- meat and bile should not be taken together
- surā (wine), krisharā and pāyasa should be avoided
- souviraka and sesame paste, fish and modifications of sugarcane juice, treacle, kākamāchi, honey and mulakam, treacle and flesh of a wild boar, honey and boar's flesh should be avoided.
- Milk and mulakam,
- mango fruit and jamboline fruit
- flesh of godhā, porcupine and hog should not be eaten together
- all fish should not be taken with milk.
- Fruit of a plantain tree should not be taken with tāla fruit, milk, or whey
- Lakucha (a fruit) not with milk, curd, meat soup, honey, ghee, nor before or after drinking milk.

Incompatible Preparations of Food (Su. Su. XX.11-12)

- Flesh of pigeon fried with mustard
- Flesh of kapinjala, peacock, lāva, tittira, godhā, boiled with castor oil
- Ghṛtam kept in a vessel of Indian bell metal for ten days or more is toxic
- Honey should never be used in cooking with any substance nor in the seasons of spring and autumn
- Herbs known as kākamāci boiled in a utensil in which fish or ginger had been previously boiled or prepared it toxic
- Herbs known as upokikā should not be eaten by boiling with levigated paste of sesame
- Flesh of heron prepared with pork lard should not be combined with coconut
- Flesh of bhāsa bird, roasted on a spit over charcoal fire would not be eaten

Incompatible by Proportions (Su. Su. XX.13)

- Two oily substances such as oil and ghṛtam (ghee) mixed in equal proportions (Ca. Vi. I.21)
- Rain water should not be taken immediately after drinking honey and ghṛtam

Incompatible Tastes (rasa), Potencies (vīrya) and Chemical Actions (vipāka) (Su. Su. XX.14-16)

- Sweet and acid (sour) tastes—potency (vīrya) and inherent qualities (guṇas)
- Sweet and salty—potency(vīrya) and qualities(guṇas)
- Sweet and pungent—potency(vīrya), qualities(guṇas), chemical actions(vipāka)
- Sweet and bitter—by taste (rasa) and chemical actions(vipāka)
- Sweet and astringent—by taste and chemical actions(vipāka)
- Sour and salty—by tastes (rasa)
- Sour and pungent—taste (rasa) and chemical action(vipāka)

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- Sour and bitter—tastes (rasa), potency(vīrya), chemical actions (vipāka)
- Pungent and astringent—tastes(rasa) , potency(vīrya), chemical actions (vipāka)
- Salty and pungent—taste (rasa), chemical transformation (vipāka)
- Salty and bitter— tastes (rasa), potency(vīrya), chemical actions (vipāka)
- Salty and astringent— tastes (rasa), potency(vīrya), chemical actions (vipāka)
- Pungent and bitter—taste and digestive transformation
- Pungent and astringent— tastes (rasa), potency(vīrya), chemical actions (vipāka)
- Bitter and astringent— tastes (rasa), potency(vīrya), chemical actions (vipāka)
- Fish, honey, and milk (Ca. Vi. I.21)

Incompatibility by Extremeness &/or Contrast (Su. Su. XX.17)

- Substances that are incompatible with or antagonistic to the system in the manner of intensity
- Substances of extreme dryness
- Substances of extreme oiliness
- Extreme cold or warmth

Suśruta comments further that foods or substances which are incompatible to one another in their tastes, energy, and post-digestive effect are absolutely unwholesome and to be avoided. Taking these foods, the greedy or intemperate person develops disease, weakness of senses, and ultimately meets with doom. Anything that increases the doṣas and leads to stagnation of wastes in the body, while not performing vitalization is the source of disease. However, such diseases are amenable to treatment through purgatives, emetics, and pacifying measures/drugs. When such a poor diet is unavoidable the meal should be preceded by substances neutralizing the harmful effects. It is notable that some meat eaters, by virtue of bodily adjustments, youth, exercise, strong appetite, and so on, fail to manifest symptoms (Su. Su. XX.18-22).

Vāgbhaṭa's Contribution Aṣṭ Hṛ Su. VII.29-44

Vāgbhaṭa's commentary on this subject is introduced with a description of the vaidya's duties attending the Raja—health maintenance generally, and poisoning prevention, specifically. Thus there are numerous verses describing methods for detecting poisoned food. Then follows a listing of items that are incompatible, which will be shown below. Following the list Vāgbhaṭa describes the manner of making adjustments in diet and lifestyle (these will not be considered here).

- Flesh of animals from marshes taken with black gram, honey, milk, germinated grains, molasses, jaggery, especially the fish with milk (especially a cilicima type fish)
- All sour substances with milk including all fruits (kulattha, varaka, kaṅgu, valla, makuṣṭaka, esp)
- Green leafy vegetables followed by milk
- Boar with porcupine
- Spotted deer and cock with curds or yogurt
- Uncooked meat with bile
- Mulaka with soup of māṣa (black gram)
- Sheep with leaves of kusumbha
- Germinated grains with bisa
- Fruits of lukuca with soup of black gram
- Jaggery, milk, curds, yogurt, ājya
- Fruit of tāla with curds/yogurt
- Kaṇa and uṣaṇa with honey
- Kākamācī with honey or with jaggery/molasses or prepared in vessel used for cooking fish or for cooking nāgara or in any vessel stored overnight
- Pippali together with an oil intended for frying fish

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- Sarpi (ghee) stored for more than 10 days in bronze vessel
- Heat or hot materials along with aruṣkara
- Bhāsa (white headed vulture) which is roasted is inedible
- Kampilla with buttermilk
- Mixture of pāyasa (milk pudding), surā (beer), and kṛśara (rice with green gram)
- Mixture of equal parts of honey, ghee, muscle fat (vasā), oil and water in combination of two or three or all
- Mixture of honey and ghee (even if in unequal proportions) followed by rain water as an after drink
- Honey with seeds of puṣkara
- Wine from honey mixed with wine made from dates is incompatible
- Drinks made from milk and a preparation of corn flour (mañtha)
- Hāridrā (turmeric or bird?) and mustard oil
- Upodakā leaves processed with sesame paste yields diarrhea
- Balākā (crane) with vāuñī (supernatant fluid of wine) green gram and other pulses cooked over steam
- Balākā (crane) cooked in fat of boar
- Black partridge, peacock, iguana, quail, gray partridge cooked over wood fire of castor and processed in castor oil
- Kāridra pierced with wood of turmeric (*Berberis aristata*) and cooked with same wood
- Kāridra smeared with ash and sand (method for cooking) and taken with honey

Additional Commentary

The important factor here is that āma often is produced because of incompatibility. Āma is a toxic, sticky material detrimental to physiology (see article *Āma and Physiology*). Āma may be experienced as gas, sense of heaviness, dullness, generalized body aches, loss of taste, lack of appetite, malaise, lethargy, and a coating on the tongue. Āyurveda suggests simple meals of few tastes, especially for those having digestive difficulties. Generally speaking incompatibility stems from opposite qualities and actions of the food, which yields conflicting instructions to physiology or it produces toxic chemical reactions during or following the digestive process. We have examined the concept of unwholesomeness from the perspective of dietary regimen, diet, and the food itself. We have seen that the ancient writers extol the value of food as medicine but are quick to decry certain eating habits and food combinations. The unwholesome practices both create āma and vitiate all the governing principles of the physiology. In the long term this may lead to rheumatoid arthritis and other autoimmune disorders.

My mentor, Dr. Lad has discussed a category of incompatibility that is generally known by modern nutritionists—fruits eaten with other foods are incompatible. When they are taken together it appears that the different rates of digestion find the stomach contents leaving before the heavier, non-fruit items have been digested. Another scenario might be that the differential rates of digestion find the fruit leaving first and taking digestive enzymes with it so that the remaining food never gets digested properly. In either case indigestion results in a toxic substance. There is another common area that involves mixing grains in a common cooking process. While there is a general awareness of different cooking times for various grains, what is not appreciated is that indifference to this is unhealthy. The list below is a more practical guide to incompatible foods from *Ayurveda Today*, 1990.

- melons with grains, starch, fried foods, cheese
- radish with milk, banana, raisins
- lemon with yogurt, milk, cucumber, tomato
- corn with dates, raisins, banana
- mango with cheese, cucumber
- eggs with milk, meat, yogurt, melons, cheese, fish, banana
- yogurt with milk, sour fruits, melons, hot drinks, meat, fish, starch (grains), cheese

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- starches with eggs, chai, milk, banana, dates, persimmon
- milk with banana, meat, fish, melons, curds, sour fruits, kitchari, cherries, breads having yeast
- potato, tomato, eggplant, with yogurt, milk, melon, cucumber
- peaches with rice
- melons with grains
- fruits with potato, tapioca, other starches
- poultry, fish with yogurt or lassi
- chicken with cheese
- honey and ghee in equal amounts by weight
- seed oils with animal oils in cooking

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IV. Rāśi is quantity and relates to sarvagraha (total by quantity) and parigraha (by individual quality) which examines the results of food ingested as to proper or improper quantity.

Suśruta states Su. Ut. LXIV.15-20

- Those suffering from thirst, heat, alcoholism, burning sensation should be given cool food.
- Those suffering from kapha and vāta and already treated with oleation and purgation and full of kleda should be given warm food.
- Those suffering from vāta, sexual excess, and parched should be given oily food.
- Those suffering from meha and previously treated with oily foods should be given dry food and drink.
- Weak, parched, thirsty person should be given liquids, while those suffering from meha and ulcers should be given dry food.
- One meal per day for those suffering from weak agni is proper, while two meals per day is proper for person having good agni.

V. Deśa relates to place (such as geography) which factor affects growth and the qualities of the food living there. Suitability is determined by the nature of the place itself.

- Herbs growing on ant hills, dirty places, marsh, cemeteries, salty soil, on roads, infested by worms, affected by fire, and snow do not yield the desired effect. Śārṅgadhara Ch 1.38
- Herbs grown in the Viṇḍhya mountains are āgneya while those of the Himalaya are saumya (cooling). Plants growing in other forests will have qualities of that place. Śārṅgadhara Ch 1.38
- Favor foods grown in your local area as they will have more value specific to you in that climate.
- Researchers around organic versus non-organic grown foods have found that organic foods are up to 85% more nutrient-rich than their non-organic counterparts. Modern practices of farming, pest control, soil management, distribution, handling, storage, etc. have significantly altered the nutrient value of food according to recent research findings.
- The item which is suitable for place and the inhabitants due to habitual use should not be totally / suddenly avoided, even if unwholesome, because it reduces happiness in the person. Persons as the Bāhlikas, Pahlavās, Cīnas, Śūlīkas, Ya anas and Śakas are habituated to meat, wheat, mādhvīka (a wine), carrying weapons and fire. The inhabitants of Prācyadeśa (Eastern region), are suited to fish, those of sindhu to milk, those of aśmaka and avanti regions are suited to oily and sour preparations. Inhabitants of Malaya region are accustomed to tubers, roots, and fruit. Liquid gruel is suitable in South, while churned drink in Northwest. In madhya deśa (central region) barley, wheat and milk products are suitable. For these patients drug should be prescribed along with the items suitable to them because the suitable thing provide strength quickly and does not harm even if taken abundantly. Ca. Ci. XXX.315-319 (Note: RK Sharma comments that this feature of satmya has two facets—persons living in an area who eat the food of that area and a person of any area eating food of a type predominantly—both acquiring accommodation, so to speak)

VI. Kāla is time and implies its eternal nature with cycles of change. Regularity is related to suitability and the distorted one to disorder.

- Eat at regular times in order to culture regular functioning of the nervous system.
- Śarat (October, November) is best time for collection of herbs of all type preparations; but those for emesis and purgation bet collection time is in spring (vasanta—February, March) Śārṅgadhara Ch 1.38
- Generally, medicinal drugs loose their potency after one year, for curṇas 2 months, pills and confections after one year, ghṛtas and taila after four months; recipes that are digested easily loose potency after one year; āsavas and metal or mineral formulations increase potency with age
- Foods are picked in an unripe condition and some are treated to bring about a kind of ripening while in the transit and storage phases. Almost all foods are stored for days, weeks, and months before they are consumed. Āyurveda arose when farming methods were drastically different. This is why Āyurveda is silent about nutrients in the food. But Āyurveda does say that foods should be picked fresh, prepared and eaten immediately.
- Time relating to the administration of drug is tenfold (Ca. Ci. XXX.298-300)
- Nature brings environmental changes to all parts of the globe. In most areas these changes promote or discourage different kinds of food. Wild life may be abundant when plant thrives. Fruits come at certain times and likewise vegetables, nuts, etc. It is felt that nature promotes balance in life by producing the rights foods at the right times. Thus it is felt that one should favor the foods growing in the natural season. Eat cooling fruits in the summer and nourishing grains in the fall, for example. World markets have been made accessible to all with advances in transporting, handling, and storage techniques. However, this availability is not necessarily a health-promoting one.
- Foods which are fatty, sour, and salty, though said to be good during cold season, are not so at the beginning and end of that season. (AS Su.7.240)

VII. Upayogasamsthā are the rules for eating (described below) Ca. Vi. I.22-28

Food is the source of life. And digestion is the root of all health. It nourishes, maintains, and cures. Āyurveda holds that we are what we eat--literally. The ancient authorities say that food is our medicine and no amount of medicine can overcome the effects of a poor regimen of diet. Quoting Caraka--The body is the product of food. Diseases occur as the result of poor diet. The difference of health/happiness and illhealth/unhappiness is based on the difference between wholesome food and unwholesome food (Su. 25.29). One should offer regularly the oblations of wholesome food and drinks to antaragni with due consideration of quantity and time. The person who after offering oblation to fire offers the wholesome oblations to the internal fire, always concentrates on Brahman, donates, knows the suitability of food and drinks ins endowed with perfect bliss and does not suffer from any disease in present or future. One taking wholesome food with controlled self lives healthy for 1036 night (100 years) liked by the good men. Food is the vital breath of living beings thus people rush to the food. Complexion, cheerfulness, good voice, life, imagination, happiness, contentment, corpulence, strength, intellect are all dependent upon food. The worldly activities done for livelihood, the Vedic ones done for attainment of heaven, and those for emancipation also depend on food. Ca. Su. 27. 345-350

What is not appreciated, however, is that how one eats is just as important as what one eats. Specifically, the quality of digestion is related to what is going on in the mind, in the body, in our environment, and in our emotions. The autonomic nervous system takes charge of digestion automatically but since it has two aspects, sympathetic and parasympathetic, which operate in a contrary manner, the results of digestion can be good or even bad. When one is not focused in the mind while eating--thinking about work or other things--the energy of digestion is diverted away from the activity of digestion. If one is emotionally charged while eating then the sympathetic nervous system functioning dominates--blood supply is shunted to the peripheral muscles away from the stomach, etc., digestive juices stop flowing, and the peristalsis of elimination stops. When the body-mind is at rest then the parasympathetic nervous system dominates and digestion and elimination proceed normally. Caraka describes it thusly (Ca. Sa. VI.13-15): The factors responsible for the transformation of food are: heat, vāyu, moisture, unctuousness, time and balanced use. The heat digests, the vāyu absorbs, moisture produces looseness, unctuousness creates softness, (proper) time ensures satisfactory outcome, balanced use brings about equilibrium of tissues—the product of digestion. Above it was stated that heat comes from the digestive juices, whose secretion are a function of vāyu (vāta) or the nervous system. Thus the mind body connection is described. Read below for more specific health promoting suggestions from Caraka and others in the oral tradition of Āyurveda:

Caraka **Ca. Vi. I.22-28**

Caraka says eat warm, unctuous food of proper quantity, after digestion of previous meal, not incompatible, in a favorable place, with favorable accessories, not too fast, not too slow, not while talking, laughing, with full concentration and due consideration of self. Verse 24

- B) Warm food tastes good and helps stimulate the digestive agni, it digests quickly, helps promotes elimination of flatus, and reduces mucus. V. 24.1
- Avoid all ice-cold food or drink--the digestive process slows in a cold environment and this strains the digestive process.
 - Sip hot water (with lemon or lime) during the meal to aid digestion.
 - Always eat only fresh food--no leftovers, no canned food, no frozen food, these are hard to digest and lack the vitality of fresh foods.
 - Favor organic foods.
 - There is no concept of desert in Ayurveda sweets, however, should be taken first (if taken at all), because they are hard to digest and they have the affect of reducing appetite and the possibility of overeating. [Khīr is vikṛti of milk (increase in stage of development/evolution) and is easy to digest.]

C) On should eat unctuous food because it tastes good, it stimulates and awakens the digestive agni, it digests quickly, develops the body, strengthens the senses, increases strength, and promotes good complexion. V. 24.2

D) One should eat the proper quantity—this is that amount of food that does not disturb vāta, pitta, or kapha in their functioning to promote long life, passes easily through the intestines, does not disturb agni of digestion, and yields satisfaction. V. 24.3

- Caraka describes (Su. V.3-8) the proper quantity of diet as that food taken which gets digested in the proper amount of time. Thus the proper quantity of food depends upon the power of digestion. He describes different foods by the quality of lightness—such as varieties of light rice, pulses, fruits, and certain meats—that though light by nature are really to be considered in light of the weight or total amount eaten. And conversely, certain heavy items such as flour products, sugarcane, milk, sesame, black gram, and meats though heavy must be considered in light of their total amount consumed in a meal. Light foods have, according to Caraka, as part of their natural lightness a natural propensity for kindling agni (digestive fire) by having vāyu and agni elements. While the heavy foods have predominance of earth and water elements which are depressing to agni. In light of these properties Caraka says that, with all things equal, one can eat light foods to the full feeling but not heavy foods because the light foods will actually help in their digestion while the heavy foods will not. Caraka suggests eating heavy foods to ½ of saturation point and light ones with consideration of strength of agni. The crucial point here is that overeating by quantity and quality is potentially unwholesome.

Food in excessive quantity vitiates all doṣas simultaneously. These vitiated doṣas mix with the undigested food and in the stomach lead to distention, and sudden exodus from the body—upward or downward. Symptoms of vāta vitiated are: colic pain, hardness of belly, body-ache, dryness of mouth, fainting, giddiness, irregularity of digestion, stiffness in side, back and waist, constriction and spasm in blood vessels. Pitta symptoms include fever, diarrhea, internal heat, thirst, narcosis, giddiness, and delirium. Kapha produces vomiting, anorexia, indigestion, fever with feeling of cold, lassitude and heaviness.

(See also Bhāva Prakāśa Ch 5.141-153 for other details about these and related issues such as timing. He who takes food earlier than proper time will have his body incapable of work and becomes a victim of many diseases and even death—144. Food does not get digested well by drinking too much water; the same applies when drinking no water; man should drink water frequently and moderately—147. Drinking water before food gives rise to emaciation and low agni, between meals kindles digestion and after meals produces obesity, etc.—149. Person who is thirsty should avoid food and hungry should avoid water; by doing so thirsty person gets abdominal swelling and hungry person gets ascites—150.)

E) Eat only if hungry. Skip a meal rather than eat with incompletely digested food still in the stomach. Eating would produce toxic materials, ama, which degrades physiology and health. V. 24.4

- Eat the biggest meal at noontime to take advantage of the body's greatest digestive capacity.
- No snacking—this introduces confusion in the nervous system about the timing of secretions and other digestive activities. The nervous system likes regularity.
- No food within 3 hours of bed time. Food in the stomach interferes with sleep, which affects digestion.
- Fast on a liquid diet one day or more per week—the same day of the week is best. This gives the digestive and eliminative systems opportunity to rest and clean.

Āyurvedic Concordance

- F) One should eat in a favorable place with favorable appliances. While eating in such a place one does not fall victim to mental disturbances from bad places. V. 24.6
- During the meal soft, gentle, healing music is ok to listen to (Gandharva music is best).
 - Eat in a settled atmosphere to promote parasympathetic nervous system functioning.
 - Have a clean, well-equipped kitchen--this means utensils and condiments are important.
- G) One should not eat too quickly as food may enter the wrong passage. One can not properly evaluate the food for quality, and quantity (suitability). V. 24.7
- Chew food well. Some Vaidyas say this means chewing 32 times for each bite. Research suggests that the incidence of stomach cancer is related to not chewing food properly. Salivary amylase, a digestive secretion in the saliva, begins digesting carbohydrates while in the mouth and the longer food stays there the more complete this activity can be.
- H) Don't eat too slowly as this prevents satisfaction, promotes eating too much, food tends to become cold and this dampens digestion. V. 24.8
- I) Don't talk or laugh unnecessarily while eating (and not at all when food is in the mouth). Food enters the wrong passage otherwise. V. 24.9
- Don't read or watch television while eating--focus on the meal. This improves digestion through awareness.
- J) One should eat after due reflection upon his being. What one really needs at this time can only be known by this behavior. V. 25
- Eat with awareness--recognize and enjoy the tastes, the appearance, the smell, the textures, and even the sounds, if any. This produces emotional satisfaction and balance.
- K) The person eating should make room for food according to three portions: one portion of stomach for solid, one for liquids, and one for the doṣas (VPK.). Ca. Vi. II.3
- Eat about that amount of food which would fit into the hands when they are cupped together.
 - In another area (Vi. II.3-8) Caraka gives the suggestion for giving equal space for vāta, pitta, and kapha = the three-fold stomach. (another authority, Bhāva Prakāśa Ch 5.145, suggests that solids get 2 parts, liquids 1 part and air 1 part).
 - Avoid drinking lots of fluids with meals as the digestive juices are diluted and the stomach has to work harder.
- L) One should not eat chronically too little food. This yields loss of strength, complexion, development, upward movement of vāta, reduction of life span, potency, and immunity. Ca.Vi. II.7
- Bhāva Prakāśa Ch 5.145 notes further the problems of both deficient and excessive quantities of food. Deficient eating (note that nutrient deficiency is also included in this concept) is cause of: loss of strength, complexion, and development, emaciation, retrograde movement of vāyu, lowered life span, reduced virility and immunity, damage to body, mind, intellect, sense organs, afflicting tissue excellence, boding inauspiciousness and leading to the causative factors of the 80 vāta disorders enumerated in his text.
- M) Eat without attachment (or aversion) or ignorance. One should eat wholesome foods only as body is product of food. Ca. Su. XXVIII.41
- N) The use of all tastes is superior in sātmya (suitability) and the use of only one taste is inferior. Ca. Vi. I.20
- O) One should take regularly ṣaṣṭika (60 days-fast maturing rice), śāli (a red rice), mudga (pulses/dals), saindhava (a type of rock salt that is tri-doṣic), āmalaka (indian gooseberry), barley, (pure) rain water, milk, ghṛtam (ghee), and honey. Ca. Su. V.12 These foods are sattvic, nourishing, good on digestion and elimination.

Āyurvedic Concordance
Classification of Foods

According to Suśruta Ut. LXIV.14 foods are of 12 categories:

- | | | |
|------------------|----------------------|-----------------------------|
| 1. Cold | 5. Liquid | 9. Taken with medicine |
| 2. Hot | 6. Dry | 10. Taken in small quantity |
| 3. Demulcent | 7. Taken once a day | 11. Taken for pacification |
| 4. Non-demulcent | 8. Taken twice a day | 12. Taken for subsistence |

Caraka categorizes foods as Ca. Su. XXVIII.5:

1. Eatables
2. Drinkables
3. Lickables
4. Chewables

and Suśruta Su. Sa. IV.19

1. Chewed
2. Swallowed
3. Drunk
4. Licked

Bhāva Prakāśa Ch. 5.135 each successively harder to digest

- | | |
|----------------------|---------------------------------|
| 1. Cūṣya (suckables) | 4. Bhojya (eatables) |
| 2. Peyā (drinks) | 5. Bhakṣya (eatables as snacks) |
| 3. Lehyā (lickables) | 6. Carvya (chewables) |

Additional Comments

- Always eat only while sitting--this means that sitting and driving is out.
 - Pray before eating. This calms the mind and body and gives direction for use of the food.
 - Eat with your cleaned fingers--prana circulates and goes into the food with touch.
 - Remove shoes before eating--releasing pressure on the nerves here promotes better digestion.
 - Sit in a cross-legged fashion on the floor.
 - Brush teeth after eating--traditionally in Ayurveda a neem stick is used for this purpose.
 - Lie on the left side after eating for about ten minutes. Digestion is improved with this action.
 - Take a short walk of 100 steps after the meal.
 - Thoughts, emotions, frustrations, much like material things are energies, which influence the quality and action of food, therefore never criticize food while preparing or eating it.
 - Never waste food
- Never eat alone—this means that sharing food with others is sacred and beneficial

VIII. Upayoktā is the person who consumes the food. Suitability is related to him alone.

- This category recognizes the uniqueness—prakriti-vikriti of the individual. This more than any other criterion must be honored when considering the suitability of any food, medicine, behavior, and so on.
- Here are a couple verses from Caraka on generally suitable guidelines. The use of all tastes is superior in sātmya (suitability) and the use of only one taste is inferior. Ca. Vi. I.20
- One should take regularly ṣaṣṭika (60 days-fast maturing rice), śāli (a red rice), mudga (pulses/dals), saindhava (a type of rock salt that is tri-doṣic), āmalaka (indian gooseberry), barley, (pure) rain water, milk, ghr̥tam (ghee), and honey. Ca. Su. V.12 These foods are sattvic, nourishing, good on digestion and elimination.
- Suśruta describes the manner for collecting rain water (Su. XLV.4)—a broad piece of clean and white linen should be hung out in the open air (with weight in middle). The rain water thus collected should be kept in a vessel. As an alternative, rain water flowing from the waterspouts of a house should be collected in a clean receptacle, and subsequently poured into a gold or silver or earthen vessel. The water collected this way may be taken at all times, and may be substituted by any other terrestrial water in case of unavailability—well, river, lake, tank, fountain, spring, cūnti (well accessed by stone steps).
- Suśruta states that water should be drunk from vessels of gold, silver, copper, earthenware, bell metal, and precious stones XLV.8
- Pure water is: devoid of smell or taste, cool, limpid, transparent, refrigerant, pleasant.