

Diet and Yogic Practices: Ideal Ways to Kindle Agni and Prevent Lifestyle Disorders

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Abstract

The lifestyle disorders are increasing exponentially throughout the world with India as the capital city. Lifestyle modification is the only answer for the prevention and management of this epidemic. Diet or food is the most important component of life. It is responsible for the sustenance of *Prana*. Conducive food taken in proper amount at proper time helps in maintenance of *Agni* and enhancement of *Ojas*, consequently resulting in better health and longevity. Yogic practices undoubtedly help in reduction of stress, along with bringing about harmony of internal and external environment thus helping in physical, mental as well as spiritual wellbeing of an individual. Thus a holistic approach would result in efficient management and prevention of a variety of lifestyle disorders in a cost effective manner without any side effects.

Keywords: Diet, Yogic practices, Agni, Lifestyle, Lifestyle disorders.

Lifestyle disorders like obesity, hypertension, diabetes mellitus, and cardiovascular diseases are wreaking havoc in the world with large scale morbidity and mortality. The basic cause for all these disorders is impaired metabolism due to faulty lifestyle. Even though a variety of medicines are available, the management is incomplete without lifestyle modifications. Lifestyle is the typical way of life of an individual, group, or culture. Healthy lifestyle includes various activities performed by an individual with an objective of physical and mental health along with longevity by means of proper hygiene, exercise for fitness, diet regulation etc.

Ayurveda emphasizes on Agni for maintenance of health and considers diminished Agni and Ama as the chief etiological factor for causation of all diseases. The Agni is responsible for life, complexion, strength, health, enthusiasm, nourishment, and luster. Ojas, Prana etc. all are dependent on Agni. If Agni cools down, the person dies whereas if Agni is in proper condition the person will always be healthy and have a long life. Its derangement leads to emergence of diseases. 1

Role of *Agni* in the causation of metabolic abnormalities &lifestyle disorders

Lifestyle disorders like obesity, diabetes mellitus, dyslipidemia and cardiovascular diseases etc. are produced mainly due to impairment of *Medodhatvagni*, despite of normal *Jatharagni*. This impairment of *Dhatvagni* is due to faulty lifestyle, erroneous dietand mental factors like stress, anger, grief etc. which result in abnormality of minute channels in the body or *srotovaigunya* due to *Dosha Prakopa* either *Vata* or *Kapha*.

Hence the *Agni* should be maintained in normal state for health and longevity. The *Agni* is influenced by factors like diet, exercise, environment, suppression of natural urges, vitiation of *Vata* and aggravation of *Kapha*, mental trauma, tension, sorrow etc. Hence a healthy lifestyle is mandatory for normal *Agni* and prevention of disorders due to vitiated *Agni*. Diet and *Yoga* form the inseparable components of healthy lifestyle.

Importance of healthy diet in maintenance of *Agni*

Pachakagni is the leader of *Agnis*. It is responsible for increase or decrease of *Dhatus*, so it has to be maintained properly by correct intake of food for the enhancement of strength and longevity. It is always considered important to consume food at proper time.² Hence one has to consume food having pleasant smell and taste, ³ at a proper time, according to place, body, season, and age. One should also avoid suppression of natural urges.⁴

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Decrease in *Dhatus* is nothing but malnutrition and Elderly Nutrition Program of the Older Americans Act indicates that 67% to 88% of participants are at moderate to high nutritional risk.⁵ The body is made up of food and the diseases are also produced due to Ahara; if one consumes conducive food it results in Sukha or health if one consumes non- conducive food it leads to diseases or Dukha.6 Acharya Kashyapa gives highest priority to food; no medicine is equivalent to food as it is possible to cure the disease just by means of proper diet. Shashtika (variety of rice), Shali (variety of rice), Mudga (green gram), rock salt (Saindhavalavana), Indian gooseberry (Amalaka), Barley (Yava), Rain water (Antarikshajala), milk (Payas), ghee (Sarpi), meat soup of terrestrial animals (Jangalamamsa rasa), Honey (Madhu) should be consumed daily to prevent diseases.8,9

Dietetic Rules to enhance Agni

1. Time of intake of food

यथोक्त गुणसंपन्नं नरः सेवेत भोजनम्। विचार्य दोषकालादीम्न्कालयोरुभयोरपि ॥भा प्र प् ५/११५॥

- One has to take food having good qualities after analyzing *Dosha*, *Kala*ie. Dosha, time, season etc. factors in the morning and evening like *Agnihotri*. ¹⁰
- One should not eat food again within first Yama (3 hours) following prior food intake. One should not fast for more than 2 Yamas (6 hours), as it leads to loss of strength.
- The ideal time for intake of food is after appearance of signs of digestion of food.

उद्गारशुद्धिरुत्सहो वेगोत्सर्गो यथोचितः । लघुता क्षुत्पिपासा च जीर्णाहारस्य लक्षणम् ॥भा प्र पू ५/११९॥

One should have clear belching, enthusiasm, proper manifestation of natural urges, lightness of the body, hunger, and thirst after previously ingested food gets digested.¹²

2. Mental Factor influences Agni

• One should take food peacefully in a calm place. 13

3. Container of food

- Golden container destroys Doshas, improves vision and is conducive to all.
- Silver vessels are conducive for eyes; alleviate *Pitta*, *Kapha* and *Vata* disorders.
- Bronze containers enhance intelligence, taste and alleviate *Raktapitta*.
- Iron and glass vessels are good for vision and alleviate Pandu, Kamala and Shotha.
- Bamboo vessels give taste; leaf vessels give taste, enhance Agni and destroy poison.

4. Concept of Appetizer and its significance

भोजनाग्रे सदापथ्यं लवणार्द्रक भक्षणम्। अग्निसंदीपनं रुच्यं जिह्वाकण्ठविशोधनम् ॥भा प्र पू ५/१३०॥

- Always one has to take Saindhava Lavana (rock salt) and ginger before taking food to enhance Agni and taste and to clean the tongue and throat. Here rock salt alleviates Tridoshas, enhances taste, kindles Agni (digestive fire), digests food, enhances virility and is also conducive to eyes.
- Ardraka despite of having Katu
 Rasa as it is Madhura in Vipaka
 does not aggravate Pitta. It is Guru
 (heavy), Tikshna (piercing), Ushna
 (hot), Agnideepaka (enhances Agni)
 and Kaphavatashamaka in nature.
 Further ginger in combination with
 Saindava Lavana, will not deplete
 Pitta.

5. Rules regarding intake of different *Rasas*

- One should take food with full concentration. First *Madhura* (sweet) should be consumed. In the middle *Amla* (sour), *Lavana* (salt) tastes followed by *Katu* (pungent), *Tikta* (bitter) and *Kashaya* (astringent) *rasas*. 15
- Madhura Rasa in the beginning reduces Vata and Pitta aggravated due to hunger and Amla and Lavana Rasa in the middle stimulates Agni in Pittashaya and Katu, Tikta and

Kashaya Rasa in the end alleviate the Kapha produced due to Madhu, Amla and Lavana Rasa in the initial phase.¹⁶

विदाहीन्यन्नपानानि यानि भुंक्ते हि मानवः।

तद्विदाहप्रशान्त्यर्थ भोजनान्ते पयः पिबेत् ॥भा. प्र. पू. ५/१६३॥

• Intake of milk after taking food helps to alleviate burning sensations produced due to *Vidahi* food. The *Kapha* produced by the intake of milk alleviates *Pitta* aggravated by the intake of *Katu*, *Amla*, *Lavana Rasa* and ultimately attains normalcy and does not cause *Agnimandya* or diseases.¹⁷

6. Rules regarding intake of food according to nature of food

- One should consume fruits like pomegranate; vegetables like lotus stem (*Bisa*), *Shaluka Kanda* and sugarcane before taking food.¹⁸
- After feeling of hunger one has to take heavy, starchy food like rice, Prithuka (parched rice) in optimum quantity.
- One has to eat hard food like *Roti* along with side dishes and ghee, followed by soft items like rice with soup. Finally, end with liquids like curd butter milk or milk.²⁰
- Reference of Swadishta Anna and its quantity is unique. This food brings about pleasantness of mind, strength, nourishment, enthusiasm, growth longevity and taste. On the contrary tasteless food has opposite properties.²¹
- The food that is in the form of lumps or improperly moistened by liquids does not get digested properly.²²
- Very dry food should be adequately moistened by adding generous amount of liquids; otherwise it is not properly digested as dry food is *Niruddha* and *Vishtambhi* and causes *Srotorodha* (obstruction to channels).²³

7. Quantity of intake of food

 Heavy food like Masha (black gram), Pishtanna (ground cereals) should be taken till half of capacity, light foods like Mudga (green gram) should be taken to one's satisfaction and liquids like *peya*, buttermilk when consumed with rice are not heavy, even if consumed in slightly excess amounts.²⁴

गुरूणामधं सौहित्यं लघूनां तृप्तिरिष्यते।
 द्रवो द्रवोत्तरश्चापि न मात्रगुरुरिष्यते ॥भा
 प्र प् ५/ १४५॥

One should take heavy food up to half of one's capacity, while light food should be taken up to one's satisfaction. Liquids can be consumed more as they are not heavy.

 Two parts of stomach should be filled with solids, one part with liquid and remaining one fourth should be left empty for movement of *Vatadi Doshas*. In between one should take little amount of water to clean the tongue as excess of water diminishes *Agni*.²⁵

Importance of Yogic practices in maintenance of *Agni*

 पृथ्व्याप्तेजोऽनिलखेसमृत्थितेपञ्चात्मकेयोग गुणेप्रवृत्ते। नतस्यरोगोनमृत्युःप्राप्तस्ययोगाग्निमयंश्चरीरम् ।। भा. प्र. पू. 2/12।।

The practice of *Yoga* results in attainment of higher state of *Pachamahabhutas* (*Prithvī*, *Ap*, *Teja*, *Vayu*, *Akasha*) and *Siddhis* along with arousal of *Yogagni*, a specific fire which removes all ailments, ceasing ageing and death.

- Physical exercise produces lightness in the body, work efficiency, sturdiness, and sustenance power, alleviation of *Doshas* and enhancement of *Agni*.²⁶
- Regular practice of integrated Yogic practices like Asanas, Pranayama, Dhyana, help in the physical, mental and spiritual wellbeing of an individual. They also help to control the mind thus resulting in reduced stress and thus enhance immunity and prevent a variety of disorders.

Yoga schedule

- Joint loosening exercises
- Padahastasana-5 times
- Ardhakatichakrasana-5 times
- Tadasana-5 times
- Vajrasana-5 minutes

- Paschimothasana-5 times
- Shithiladandasana
- Padothasana-5 times
- Ardhanavasana-5 times
- Pavanamuktasana- 5 times
- Makarasana, Bhujangasana-5 times
- shalabhasana-5 times
- Shavasana-15 minutes
- Pranayama-Nadishodhana Pranayama-10 cycles
- Bhastrika Pranayama-20 cycles
- Meditation-10 minutes

Discussion

The concepts mentioned in Ayurveda are very scientific and some studies have proved that the facts mentioned in our ancient texts are true. The natural appetizer Lavanardraka helps to enhance digestion and taste. Among them, ginger has about 477 constituents. It contains ascorbic acid, caffeic acid, capsaicin, beta-sitosterol, beta-carotene, curcumin, lecithin, limonene, selenium and tryptophan. It is very difficult to isolate each "active" element from ginger.²⁷ The gingerols present in ginger increase the motility of the gastrointestinal tract and have analgesic, sedative, antipyretic and antibacterial properties in experimental animals and are effective in diarrhea, nausea and vomiting.²⁸ Active principle zingibain helps to enhance digestive power. It also improves assimilation of food and enhances transportation of nutrients to targeted body tissues and also clears the microcirculatory channels of the body to promote absorption of food and removal of wastes.²⁹ Ginger extract consumption reduces plasma cholesterol, inhibits LDL oxidation, and attenuates development of atherosclerosis in atherosclerotic, apolipoprotein E-deficient mice.³⁰ Ginger reduces hyperglycemia-evoked gastric dysrhythmias in healthy humans: possible role of endogenous prostaglandins.³ Multiple mechanisms are involved in 6-gingerol-induced cell growth arrest and apoptosis in human colorectal cancer cells.³² Studies in Montreal and Tokyo in1955 and 1979 concluded that ginger also enhances immunity. 33 Saindhava Lavana enhances taste. Rock salt is a source of minerals essential for our body. Salt promotes water absorption, maintains pH and helps in the movement of nutrients from tissue fluid and cells.

In our Samhitas, utmost importance is always given for *Mitahara* (restricted diet). Certain scientific studies on rodents reveal that restricted diet reduces weight, blood pressure, total serum cholesterol, leukocyte count, fasting glucose, and triglyceride levels.³⁴ Similarly National Institute

on Aging (NIA) in 2007 under a research program called CALERIE (Comprehensive Assessment of Long-Term Effects of Reducing Calorie Intake) conducted research on reduced calorie intake. In the first phase of study, the CALERIE research team found that 25% Calorie Restriction with or without exercise decreased cardiovascular disease risk, reduced DNA damage and preserved the calcium intake confirming that this diet does not have any negative consequences on bone health. This shows that Mitahara certainly benefits all individuals. Further it is observed that low calorie intake accompanied with increased physical activity levels are responsible for CR phenotype in older Okinawans. This phenotype is responsible for low BMI, comparatively high plasma levels of DHEA at older ages, reduced mortality from agerelated diseases, and increased average and maximum survival.35 Caloric restriction (CR) and a reduced growth hormone (GH)-insulin-like growth factor (IGF-1) axis are associated with an extension of lifespan across taxa.³⁶

The emptying rate is determined by the balance between driving and resistive forces (Vassallo and others 1992; 4 Schulze 2006). Liquid meals empty from the stomach fast as the speed is directly proportional to the volume present in the stomach, as per the theory of first order kinetics. The stomach empties solids completely in approximately 3- 4 hours. Hence one has to fill 1/4th of stomach with liquids by taking some amount of liquid in between the meals so as to facilitate gastric emptying.

The gastric emptying depends upon total calories, composition and size of the meal. Meals taken in larger quantity with high kcal content take more time for emptying (Horowitz and others 1986; Hadi and others 2002). Fat is emptied slower than carbohydrates and proteins as it has high caloric density. Increasing the viscosity of liquid meals, delays gastric emptying and increases satiety (Benini and others 1995). The physical properties such as size, density, texture and microstructure of the food are important in determining how easily it can be fragmented in the stomach. Hence Ayurveda advocates moistening hard food substances with generous amounts of liquids so that it is digested properly. Further it is clearly stated that otherwise food is not properly digested and it attains Vidagdhavastha.

When incompatible food combinations are taken it results in indigestion, flatulence, and acidity simultaneously producing Ama or toxin which leads to a variety of disorders. Hence Agni should be protected by all means.

Yoga helps to establish control over the mind and relieve the stress and strain, thus helping in prevention of a wide variety of disorders including metabolic disorders. Yoga decreases the activity of sympathetic and autonomic nervous system and thus is effective in hyperglycemia. Researches have proved that Yogic practices cause reduction in total serum lipids and choline- esterase. Yoga has found to reduce catecholamines in the blood. This increases the glucose utilization by the tissues. Bujatti and Reiderer (1976) found significant decrease in catecholamine metabolite VMA in meditators associated with reciprocal increase of serotonin metabolite 5 HIAA, which supports rest and fulfillment response, thus resulting in mental wellbeing. There is significant decrease in blood lactate concentration to about 33% during meditation which is enhanced in case of anxiety and blood pressure.

Conclusion

Wholesome diet along with Ayurvedic dietetic rules help to enhance Agni. Administration of Lavanardraka before food and its significance, rules regarding intake of different *Rasas*, nature of food and optimum quantity of intake of food are important for kindling of Agni and prevention of disorders. Yogic practices play an invariable part in reducing stress, enhancing immunity and thus preventing a variety of disorders. Thus, diet and Yogic practices play a key role in prevention of lifestyle disorders. Both are non-pharmacological, devoid of side effects and cost effective, hence can be applied at the community level without any financial burden to the individual or society.

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