



## DIETETICS IN AYURVEDA – A VAST SPHERE

## Ayurveda

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## ABSTRACT

Ayurveda defines health as a balance of Dosha-Dhatu-Mala along with proper function of agni (digestive fire) and it comprises of a wealth of knowledge on health sciences. Ahara is considered as the most important among the tryo-upstamba (sub-pillars) of life. It is the prime factor to sustain life and is solely responsible for health and illness, sorrow and happiness and therefore known as "Maha-bhaisajya". Ahara is as beneficial to humans as AMRITA to Gods.

Lord Krishna says that he himself resides in the living being in the form of agni, which helps in digestion when there is normalcy of prana and apana vayu.

This review article introduces the concept of food and nutrition according to the Ayurvedic science. Ayurveda considers food in a deeply comprehensive understanding, attaching to it notable emotional and spiritual significance, in addition to it, also explains Annapanavidhi, Concept of aama and agni, Pathya-apathya, Prakriti analysis, etc. It is a science which works on uniqueness of an individual whereas modern science works on disease-based approach. The most trending word "DIETING" means practice of eating in a regulated and supervised fashion to maintain body weight, prevent and treat diseases instead of restricting oneself to small amounts or special kind of foods. Therefore one should assess an individual before prescribing ahara dravyas and certain points should always be kept in mind, which are elaborated in this article.

## KEYWORDS

Ayurveda, Ahara, Dietetics, Agni.

## INTRODUCTION AND HISTORY OF AHARA (DIETETICS):-

Ayurveda which is based on philosophical and scientific backgrounds, is one of the most ancient medical systems of the world. Modern medical science is based on lab experiments while Ayurveda has been developed on keen observation and personal experiences of rishis contrary to objective approach and presents holistic solution for various health related problems.

**Ahara, swapna and brahmacharya** are the three supporting pillars of the body<sup>1</sup>. Ahara is 1/3<sup>rd</sup> part of this and has been given the prime importance to maintain health. It is considered as the best sustainer of life<sup>2</sup>. It is called the vital force by which human beings survives. The distinction between health and disease is correlated with wholesome and unwholesome diet because both body and disease are the products of food<sup>3</sup>.

In today's era, everybody wants to live healthy and stress-free life. But illness arrives and only we are responsible for that. Pragyaparadha (Intellectual blasphemy) is the main cause of illness<sup>4</sup>. We are practicing a lifestyle which demand struggle for existence at every step of walk. Competitions are thought to be an essentiality. But this lifestyle is producing hatred, envy, fear, depression and stress and the human being is getting involved in this vicious cycle of stress, prosperity and illness. So many socio-economic problems are leading the world towards dangerous directions.

The significance of ahara can be well appreciated during intrauterine life, even from the very day of conception. Acharyas also mention that diet containing five bhautika elements play an active role in the formation and development of the complexion of child<sup>5</sup>. Then after labour, breast milk is the first and well balanced food for newly born. This milk has got all its nutrients from food taken by mother. The word "maa" has been defined as "humanity is nourished at whose breast and cradles in whose lap".

Lord Krishna says that he himself resides in the living beings in the form of agni, which helps in digestion when there is normalcy of prana and apana vayu<sup>6</sup>. The importance of ahara in human life has been well appreciated in history since the inception of life:-

1. Rigveda- Purusha is all that contains past, present and future. He is also the governor of amrita and that is manifested by anna<sup>7</sup> (diet).
2. Sukla-Yajurveda- It explains about sacred diet of vedic period, which were being offered to Gods<sup>8</sup>.

3. Atharveda- It also indicates about the prepared diet. The rice cooked with water, ghee and mixed with the juice of soma is the diet of brahman (which is also called as brahmodan)<sup>9</sup>.
4. Charak Samhita- In the origin of purusa and his diseases, the concluding remark of Punarvasu Atreya is to accept the diet as a causative factor for both, carries a historical importance of dietetics<sup>10</sup>.
5. Sushruta Samhita- He requested to Lord Dhanwantri, regarding the applicability and importance of diets on the part of physicians<sup>11</sup>.
6. Taittiriyaopnishad- It is "Anna" which precipitates and maintain the life<sup>12</sup>.
7. Chandogyopnishad- It lays more emphasis on purity of food and its effect on the body and mind<sup>13</sup>.
8. Manusmriti- It lays more emphasis on the importance of food and advocates certain psychic discipline on the part of its user.
9. Yajnavalkysmriti- It states that one should think the diet as nectar and take it with devotion. Thus it will maintain the body and destroy the sins<sup>14</sup>.
10. Bhagvad Geeta- It elaborates three types of diet i.e. Sattvika, Rajsika and Tamasika<sup>15</sup>.
11. Much authentic traditional dietetic evidences are available in some of the old temples of India. Lord Jagannatha temple at Puri, Orissa and Goddess Annapurna temple at Kasi are the places where traditional annabhoga (divine diet) is being used to be offered to the deities from time immemorial.
12. During the period of Mahabharat, there have been many development in the field of dietetics. A famous king Nala, has established a science of dietetics named "Nalapakavidhi".
13. Gupta Period- Different kinds of foods with specific cooking methods and combinations had been used in the courts of Royal and Aristocrat people.
14. Aine Akbari- There is a detailed account of Akabar's kitchen and there is a detailed account of thirty types of dishes among hundred which would be kept ready for Akabar in his kitchen<sup>16</sup>.

Modern view<sup>17</sup>:-

1. Nutrition as a science can be said to have been established by Lavoisier towards the end of eighteenth century.
2. Hippocrates frequently gave his patients advice about what food they should eat. In his book "Treatise on Ancient Medicines" (460 B.C.) described that man has gained knowledge of dietetics by their personnel observation from time to time.
3. The famous scientist Galen (130-200 AD) classified diets among various groups.

- In England Dr. Jemsheart and Thomas Benor, followed the Galenian law and aided much more in the dietetics.
- Discoveries in the field of nutrition between the two world wars added a new dimension to dietetics. The role of vitamins, minerals, trace elements, proteins and other nutrients in the prevention came to be recognized.
- In 20<sup>th</sup> century, Government begin to assume responsibility for seeing that the poorer and under privileged sections of society receive enough of the right type of food. Industrial revolution produced multitude of a new urban and slum dwellers who were uprooted from their rural origin and packed around the factories in bad houses. Due to their fewer resources and more numerous in the industrial countries, the problems are bigger. Due to tremendous increase of World population and crowding around the cities, the traditions are lost but replaced by so called development. Spread of infectious diseases may precipitate through poor diet, especially due to non-consumption of milk and remaining more dependent on drugs. Poor nutrition is one aspect of urban poverty.

Affluent society, all over the world, present nutritionists facing new sets of challenges, the whole picture is different. In place of under-nutrition, they are more worried by over-nutrition. Though they are free of the fear of crop failure but now more worried about their food being too refined or adulterated by fertilizers, insecticides and food additives. The family tends to eat in hurry in different places and mothers may not know what her children are eating, instead they have instant and convenience foods. CHD, DM, Gall stones, diverticulosis and some cancers may each be partly determined by diet. Instead of lack of basic education and no nutritional advice, people have to face changes of nutritional breakthrough and threats.

By the efforts of United States, WHO is doing dietetic and nutritional survey and researches throughout the World on the basis of hospitals, hotels, jails, medical society, private nursing homes, practitioners etc. and further imposing the beneficial outcomes through mother and child welfare societies by conducting awareness programs.

#### IMPORTANCE OF AHARA:-

- Dosha-dhatu-mala are the three basic constituents of human body which are merely transformation of the diet which a person takes<sup>16</sup>.
- Food is supreme or Brahma. It is responsible for life of all living beings in the form of food sheath *annamayakosha*<sup>19</sup>.
- No medicine is equivalent to food. It is possible to make a person disease free with just proper diet<sup>20</sup>.
- "Ahara" has the prime importance to maintain health, is best sustainer of life, vital force, best preventive medicine and solely responsible for health and illness, sorrow and happiness, thus called as "MAHABHAIJAYA"<sup>21</sup>.
- The food enhances vitality, strength and makes the body sturdy. Food increases enthusiasm, memory, agni, life span, lusture and ojas<sup>22</sup>.
- Food helps in sustenance of the life of living beings. All living beings in the world require food. Complexion, clarity, good voice, longevity, intelligence, happiness, satisfaction, nourishment, strength, intellect are all present in food. Professional activities leading to happiness in this world, vedic procedures leading to heaven and observance of truth, abstinence leading to liberation are all dependent on food<sup>23</sup>.

All the actions beneficial for worldly happiness, sacrifice leading to heaven and spiritual salvation is obtained by food. Ahara is as beneficial to humans as AMRITA to Gods. Consumption of pure food i.e. satvika ahara makes mind clear. When mind is devoid of blemishes, memory power enhances<sup>24</sup>. Most of the incurable diseases are produced due to improper food. So intelligence and self-controlled man should consume conducive food in right quantity, at the right time to prevent disease<sup>25</sup>.

Acharya Charaka also mentioned in special reference to maintenance of health, considering the diets and drinks, if taken in accordance with the rules represent the very life of living beings, they provide fuel to the fire of digestion, promote mental as well as physical strength enrich the tissue elements and complexion and are pleasing to senses otherwise harmful<sup>26</sup>.

In modern prospective, food as a whole serves three main functions<sup>27</sup> i.e.

- Growth providing
- Energy and heat providing

- Protection and regulation

#### CLASSIFICATION OF AHARA-DRAVYAS:-

A. According to Acharya Charaka<sup>28</sup>-

- On the basis of yoni – Sthavara and Jangama
- On the basis of prabhava – Hita and Aahita , Sama and Visama
- On the basis of upyoga – Pana, Ashan, Bhakshya and Leha
- On the basis of pancha-mahabhuta – 5 types
- On the basis of rasa – 6 types
- On the basis of guna – 20 types
- On the basis of vikalpa – Infinite

On the basis of mental efficacy<sup>29</sup> – Satvika, Rajsika and Tamasika

B. Acharya Charaka classified ahara-dravyas in to 12 vargas<sup>30</sup>

Acharya Sushruta classified ahara-dravyas in to 21 vargas<sup>31</sup>

C. According to modern<sup>32</sup>:-

- Five types (on the basis of nutrients) – Carbohydrates, Proteins, Fats, Vitamins, Minerals and Water
- Four types (on the basis of function) – Energy providing, Body building, Protective and others such as cold drinks, coffee, tea, spices etc.

#### AHARAVIDHI VISHESHAYATANA (SPECIFIC DIETARY RULES):-

It is the deliciousness of the food which encourages the person to take more or less food. In *Charak samhita*, 8 dietary rules are described which determine the utility of food<sup>33</sup>. These factors are: - Prakriti, Karana, Samyoga, Rashi, Desha, Kala, Upayoga sanstha and upyokta<sup>34</sup>. Each and every rule has its own importance for maintenance of healthy body for example.

- Samyoga – Combination of two or more substances result in manifestation of new qualities. Ex. – Both honey and ghee are nutritious but their combination in equal quantity is fatal.
- Rashi – The proper amount of food is important for proper digestion which kindles the agni. Both excess amount of food and incompatible in nature leads to vitiation of doshas and ama formation in body and further causes pathogenesis for disease like visuchika, alsaka etc. as explained by our acharyas<sup>35</sup>.

#### DETERMINATION OF QUANTITY OF FOOD-

The quantity of food which do not produces harm to one's own nature and gets digested and metabolized in proper time. Charaka describes 3 parts of stomach in relation to food – One for solid, one for liquid and the last one should be left empty for the circulation of tridoshas<sup>36</sup>. In normal adults, empty stomach have capacity of 90ml only which can be distended up to 2-4 litres on consumption of food<sup>37</sup>. Now, the amount of food which a person consumes, depend upon the status of agni<sup>38</sup>. This agni, in turn, is affected by various factors. That is why; one should take food in adequate quantity according to the status of one's own agni.

*Laghu and guru ahara* – laghu ahara have predominance of vayu and agni, so they increase the digestive fire. But they should not be consumed in excess. Guru ahara should be taken in only 1/3 or 1/2 part of stomach. Since, it has the predominance of jala and prithvi, it diminishes the digestive fire<sup>39</sup>.

- Kala – It is of two types<sup>40</sup> - Nityaga (passing time in years, months, days and hours) and Avasthika (stage of disease in patient). The seasonal regimen and the individual regimen in the stage of health and disease must be followed to remain healthy.

*Dincharya*<sup>41</sup> – Ideally food should be taken twice a day. In persons of vatika prakriti, three meals can be fed. There should not be fasting for more than 2 yama (6 hours) said by Kshema Kotuhil but only light food like liquids and fruits can be taken. Acharya vagbhat has also mentioned the kala for food digestion i.e. 4 yama and for aushadha i.e. 2 yama in his literature<sup>42</sup>.

*Ritucharya*<sup>43</sup> – The seasonal dietary regimen practiced by a person in the prescribed way, promotes his vigour and complexion. There are 6 seasons in Indian subcontinent. It is divided in to 2 parts based on the amount of heat and light obtained from sun i.e.<sup>44</sup>

- Adana kala (period of absorption) - The fire element is prominent during first 3 seasons which weakens the living beings.
- Visarga kala (period of liberation) - The water element is prominent during last 3 seasons which strengthens the living

beings.

Accordingly food quantity shall be decided, lesser amount to be consumed at end of Adana kala and beginning months of visarga kala.

The proper time of food is when the previous meal is digested or not, before having next meal or if individual is doing samsashana, visamashana, adhyaashana which ultimately leads to pathogenesis of disease or death.

#### **AHARAVIDHIVIDHANA<sup>45</sup> (DIETARY RULES):-**

- Eat at right time considering your prakriti
- Only when hunger is present
- Wash hands and feet before taking food
- Accept the food happily and should not crib even if the food is not as per taste
- Eat only after the guests, elders and younger have taken
- Offer a part of food to birds and animals
- Preferably face east while taking food
- Best type of food is the one i.e. snigdha, laghu and ushna having all six tastes etc.

#### **AHARA PARINAMAKARA BHAVA<sup>46</sup> (TRANSFORMATION OF FOOD):-**

There are six factors responsible for transformation of food called as ahara parinamakara bhava i.e. Ushma, Vayu, Kleda, Sneha, Kala and samyoga.

#### **CONCEPT OF BALANCED DIET:-**

According to WHO, balanced diet is defined as a diet that contains the proper proportions of carbohydrates, fats, proteins, vitamins, minerals and water necessary to maintain good health.

In our samhitas, Acharya Charaka emphasizes on food which are wholesome to the body like rice, green-gram, rock salt, gooseberry, barley, rain water, milk, ghee, meat and honey. These should be consumed regularly for maintenance of health and prevention of diseases<sup>47</sup>. These aahara dravyas, if taken in to consideration in terms of their sources of nutrients i.e. carbohydrates (rice, barley), proteins (green gram, meat), fats (ghee), sugars (honey), minerals (rock salt), vitamins and minerals both (milk, gooseberry), then whole of dravyas constitute balanced diet.

Water has been given special importance in Ayurveda. It serves as a vehicle for the solution and dilution of the solid foods whereby, these are more easily digested and assimilated and also plays an essential role in eliminating the waste products of the body. Maharishi Charaka, Sushruta and Vagbhata have appraised the necessity of water among all dietetic articles, due to its soothing effect. Vagbhata has recognized it best among all the food articles<sup>48</sup>. The relation of water and food is very close. But it is difficult to consider when the water should be taken and in what quantity. Acharya sushruta also mentions the indications of different forms as well as quantity of water in different clinical conditions<sup>49</sup>. Nowadays in modern era everyone advises more and more water to drink in order to facilitate the health. But both excessive and less use of water during meal is likely to cause indigestion. Hence a wise man should adjust the intake of water as per his need. Generally a normal adult requires approximately 1-3 litres of water in 24 hours<sup>50</sup>.

#### **Dwadasha Ashana Pravacharana<sup>51</sup> (indication Of 12 Dietary Preparation In Pathological Conditions):-**

1. Cold food – thirst, heat intoxication etc.
2. Hot food – kapha-vataj disorders etc.
3. Oily food – vata prakriti, after sex and exercise.
4. Rough food – kaphaja disorders, prameha etc.
5. Liquid food – emaciation, debility and thirst.
6. Dry food – persons having excess fluid, wounds etc.
7. Once a day meal – weak digestive power
8. Twice a day meal – to maintain normal digestion
9. Food mixed with drug – having aversion to drug
10. Insufficient diet – poor digestion
11. Food acc. To season – vitiation of doshas for its pacification
12. Food for maintenance of body – food having all six tastes

#### **VIRODDHA AHARA<sup>52</sup> (INCOMPATIBLE DIETS):-**

Food-food interaction is a serious issue and it is said to be the cause of many systemic disorders. Acharya charaka defines that certain diets and its combinations, which interrupt the process of dhatu paka (tissue

metabolism), inhibit tissue formation and having antagonistic property (guna) to the tissues are called as viruddha ahara. He also explained 18 factors responsible for incompatible diet like inherent qualities, combination, mode of preparation etc.

#### **MODE OF ACTION<sup>53</sup>-**

Viruddha ahara, if taken regularly may induce inflammation at molecular level, disturbing the eicosanoid pathway, creating more arachnoid acid leading to increased levels of prostaglandin-E2 and thromboxane-A2. This inflammatory effect causes a number of metabolic disorders which can be correlated with the concept of agnimandya and formation of ama in Ayurveda.

We have to identify new food incompatibilities, which are used in day to day life as per ayurvedic prospective. Such food combinations can prove harmful, which may be imparting its untoward effects on immune system, cellular metabolism, growth hormone and sex hormones<sup>54</sup>.

#### **For example:-**

1. Heating honey- Hot honey or intake of honey by a person afflicted with heat causes death<sup>55</sup>. It is also sanskar-viruddha.
2. Oil and food must not be reheated. Reheating of oil creates more free radicals and a toxin called 4-hydroxy-trans-2-nonenal (HNE). This toxin has been associated with increased risks of cardiovascular disease, stroke, parkinson's disease etc<sup>56</sup>.
3. Milk contains lactogen and certain fruits such as bananas, which also contain common allergens, may aggravate an asthmatic attack.
4. It has been regularly observed in that patients suffering from rheumatoid arthritis if consumes curd or sour food at night, complains of increased morning stiffness. Such type of Kala-viruddha diet would probably accelerate antigen and antibody reactions and exhibit an impact on WBC's<sup>57</sup>.

Charaka also mentioned that those people who exercise regularly, young and have a very good status of agni can even consume viruddha ahara with trivial disturbances<sup>58</sup>.

#### **CONCLUSION**

Ahara has been stated as one of the three main pillars of Ayurveda and aptly designated as "Maha-bhaisajya". The concept of health in Ayurveda is very comprehensive and a nutritious, wholesome ahara plays a pivotal role in maintaining health. In Indian mythology, utmost importance has always been given to taking proper diet and to value its importance in happy life. Lord Krishna has equated Agni to himself which teaches us to respect food as prime thing in life. Ayurveda advocates that we should maintain our body (sharir) more than any other thing in life as life depends on body only and without it nothing will exist. Proper food / diet is the prime support to maintain the body. Ahara has been equated as life force (prana) for all the human beings. The concept of Ayurveda for a proper diet for an individual incorporates multiple factorial approach including prakriti, bala, vata, kafa, and nature of disease. The regulations and rules to consume diet in a proper form, way and without any distraction have been well elaborated in vast in literature of Ayurveda. The factors which help in proper digestion and the incompatible combinations of different food items is also a unique contribution of Ayurveda. The overall approach of ayurvedic science towards ahara is much more comprehensive than modern science as it incorporates different contributing factors along with a multi factorial approach to customize diet according to each individual. Modern science relies more on 'disease-based' approach whereas Ayurveda stresses upon 'individual-based' customized approach. This individualised approach is need of the hour to efficiently tackle the ever increasing lifestyle disorders in present era. The torch bearers of Ayurvedic science needs to focus more on propagating this strong pillar of Ayurveda and serve the mankind by preventing the lifestyle disorders in more efficient way. We would conclude it by quoting a verse by Vaidya Lolimbaj here:-

पथ्ये सति गदारतस्य कि औषधि निषेवणः |

पथ्येऽसति गदारतस्य कि औषधि निषेवणः || (वैद्यजीवन 1/10)

There is no point in taking medicines without considering the proper ahara (pathya). The one who consume proper compatible food needs no medicine for disease.

*GENERAL RULE- It is beneficial to use those foods which are rich in gunas opposite to prakriti of individual. All the actions beneficial for*

worldly happiness, sacrifice leading to heaven and spiritual salvation is obtained by food. *Ahara* is as beneficial to humans as AMRITA to Gods. Ayurveda considers food in a deeply comprehensive understanding, attaching to it notable emotional and spiritual significance, in addition to it, also explains Annapanavidhi, Concept of aama and agni, Pathya-apathya, Prakriti analysis, etc. Therefore, *Ahara* which maintain health and have prophylactic potential should be consumed properly to maintain sound health and to alleviate diseases.

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