



A NEW DIMENTION IN DIETETICS – MATRAVAT AHARA

Dr. Shamna T. V.*¹ and Dr. Venkatakrishna K. V.²

¹3rd Year Post Graduate Scholar, Department of PG Studies in Swasthavritta, Government Ayurveda Medical College, Mysuru, Karnataka.

²Professor and HOD, Department of PG Studies in Swasthavritta, Government Ayurveda Medical College, Mysuru, Karnataka.

Corresponding Author: Dr. Shamna T. V.

³rd Year Post Graduate Scholar, Department of PG Studies in Swasthavritta, Government Ayurveda Medical College, Mysuru, Karnataka.

Article Received on 20/02/2021

Article Revised on 11/03/2021

Article Accepted on 31/03/2021

ABSTRACT

Introduction: ‘*Ahara sambhavam vasthu rogasthu ahara sambhava:*’ mentioned in *Charaka Samhitha* itself unwrap the importance of *Ahara* (food) in formation of healthy body. The concept of *Ahara* explained in *Ayurveda* cannot be correlated with the concept of nutrition of contemporary science in all terms. The principles of *Ahara*, method of intake, quantity etc are incorporated in *Vimanasthana* (Third section) has its root in *Sutra sthana* (first section) of *Charaka samhita*. Even though there is *Annapana chathushka* (Group of four chapters dealing with food and drinks) separately mentioned in *Charaka Samhitha*, the *Swastha chathushka* (Group of four chapters dealing with health) starts with *Matrashiteeya Adhyaya* (Chapter on consuming food in proper quantity) which shows the importance of *Matra pramana* (proper quantity) of *Ahara* in maintaining the health - the prime aim of *Ayurveda*. *Acharya Chakrapanidatta* has tried to magnify the encapsulated keys with his insightful clinical observation for enhanced forward transmission of knowledge in such a way, which definitely explore various thoughts and applicability. The present paper attempts to gather the knowledge scattered in *Sutra* and *Vimana sthana* and investigate the elaborated meaning behind a single *Sutra* (aphorism) “*MATRASHEE SYAT*” of *Sutrasthana* 5th chapter to explore its significance. **Materials and Method:** Literature review. **Conclusion:** *Matrapramana* of food is individual based and it varies according to *Agnibala* of the person. Thus the food undergoes digestion within stipulated time without creating changes in the normalcy of body.

KEYWORDS: *Ahara, Diet, Matra pramana, Matrashee, Ahara matra, Principles of food.*

1. INTRODUCTION

Ahara sambhavam vasthu rogasthu ahara sambhava:^[1] that is the human body and disease afflict to it are the products of food - mentioned in *Charaka Samhitha* itself unwrap the importance of *Ahara* (food) in formation of healthy body. Anything that is taken for the nourishment and maintenance of the body to sustain the life in the form of solid or liquid is called as *Ahara* or food.^[2] *Ahara* has been described as prime among *Thrayopasthamha*-the three pillars of life “*Ahara, Nidra and Brahma chaya*”. *Ayurveda* always emphasizes on consuming healthy and nutritious diet for maintaining good health. Balanced diet in *Ayurveda* may be defined as “the diet enriched with *Shat Rasa* (All the six tastes), required all the *Gunas* (properties), *Veerya* (potency) and is given to the individual after considering his *Prakruthi* (constitution), *Agni* (Digestive fire) and *Koshtha* (Digestive system) and *Ritu* (Season variation).^[3] The concept of *Ahara* explained in *Ayurveda* can be correlated with the concept of Nutrition of Contemporary

science to an extent but many times it has a vivid meaning with totally different concept. It is difficult to understand the concept of *Ayurvedic* nutrition from the western point of view, where the quantity is determined on the basis of caloric intake.^[4] The contemporary science described *Ahara* according to the nutritional value considering a reference women or man for daily requirement or according to Age and not described for each individual specific. *Ayurveda* described a wide range of dietetics and nutrition including the *Matra* of *Ahara, Ashta Ahara Vidhi Visheshayathana* (Eight factors pertaining to food intake), *Ahara vidhi vidhana* (Rules of food intake) etc., which is individual specific considering their *Agni bala*. Thus the approach of *Ayurveda* to food is entirely different and is strong contrast to conventional western approach.^[5]

2. MATERIALS AND METHORD

Literature review and interpretation of *Ayurvedic* text books such as *Charaka samhitha* wsr to

Chakrapaniteeka on *Matrashitheeya adhyaya*, *Rasavimana* and *Thrividha kushheeya Adhyaya*, text books on preventive and social medicine, text books on Nutrition and research articles related to the topic specific.

3. UNIQUE CONCEPT OF AYURVEDA IN DIETETICS WSR TO MATRA

3.1 MATRA

In *Ayurvedic* classics, *Matra* (The proper quantity) is being given greater importance. The amount and proportion of food is significant in contemporary science too.

3.2 TYPES OF QUANTUM OF FOOD^[6]

The only possible variations of the food quantum/Rashi are *Matravathwam*. Intake in proper quantity and *Amatravathwam*/Intake in improper quantity. The food quantum of *Matravathwam* depends on three *vibhagas* (portion) of stomach and *Amatravathwam* is again of 2 types. They are Heena matra or quantity deficient and Atimatra or quantity abundance.

3.3 DIVISION OF STOMACH FOR DECIDING MATRA^[7]

Stomach capacity is divided into 3 parts for the purpose of consuming food. One part must be filled with *Murtha Ahara*/solid food, the second part with liquid, and the third part must be left for *Vata*, *Pitha* and *Kapha*. That is, 2 parts of the three parts of the stomach should be filled with both solid and liquid food, including drinks and likable, and the third part should be left for the three *Dosas* (humours). Unless the portion of stomach is left empty for *Dosas* the food itself will get vitiated by them. The division of the stomach capacity into 3 here does not mean that they should all be equal. In fact, it must be based on the actual requirement for each of the three variables, the solid food, liquid food and *dosas*. The biggest part of the stomach should be filled by solid food. *Dosas* have various abodes in the body, but their space requirement is very limited in comparison to solid food. Thus an individual who is taking food keeping in view the three parts of the stomach capacity, will not become prey of any disease due to the intake of improper quantity of food. Still there is a chance to be subjected to other ailments due to other factors, like *prakrithi* /nature of the food etc.^[6]

3.4 MATRAVAT AHARASYA LAKSHANAM/

(Signs and symptoms of intake of proper quantity food)^[6]

Kuksheraprapedanam Aharena (No excessive pressure on the stomach due to the food taken), *Hridayasya Anavarodha* (No obstruction to proper functioning of heart), *Parswayoravipatanam* (No pressure in the sides of the chest), *Anathi gouravamadarasya* (No excessive heaviness in the abdomen), *Preenam indriyanam* (Proper nourishment of the senses), *Kshutpipasoparama* (Free from hunger and thirst), *Sthanasana shayana gamanochwasa praswasa hasya samkadhasu sukhanuvrithi* (Feeling of comfort in standing, sitting,

sleeping, walking, exhaling, inhaling, laughing and talking), *Sayam prathashcha sukena parinanam* (Food taken in the evening should get digested by next morning and vice versa), *Balavarnopachayakarathwam* (Promotion of strength, complexion and plumpness) are the Signs and symptoms of intake of proper quantity food

3.5 AMATRAVAT AHARASYA LAKSHANAM/

(Signs and symptoms of intake of improper quantity food)^[6]

HEENA MATHRA AHARA RASHI

(Signs and symptoms of intake of less quantity food)

Balavarnopachaya kshayakaram (Impairment of strength complexion and plumpness), *Athriphikaram* (Not satisfied), *Udavarthakaram* (Distention and misperistalsis in the abdomen), *Anayushyam-Avrishyam* – *Anoujasyam* (Impairment in longevity, virility and Ojas), *Shareera mano budhi indriya upakhatakaram* (Affliction in the body, mind, intellect and senses), *Saravidhamana alakshmyavahamasheethecha* (Impairment of the excellence of *dhatus*, Manifestation of inauspicious condition), *Vatha vikara* (Causation of 80 varieties of *vata*vikara)

ATHI MATHRA AHARA RASHI^[6]

(Signs and symptoms of intake of excess quantity food)

Excess quantity of food intake aggravates all the three *dosas*

If a person fills the stomach with solid food and then takes excess quantity of liquid food, all the *dosas* (*samana vayu*, *pitha* and *kapha*) residing in the stomach become compressed and aggravated. This affects and is blended with undigested food and then obstructs a portion of the stomach and immediately travels separately through up and down ward tracts to generate the diseases due to excess food consumption such as:

Shula (Colicky pain), *Anaha* (Constipation), *Angamarda* (Malaise), *Mukha shosha* (Dryness of mouth), *Murcha* (Fainting), *Bhrama* (Guidiness), *Agnivaishamyam* (Irregularity in power of digestion), *Parswa prishtha katigraha* (Rigidity of sides, back and waist), *Sira akunjana* and *Sthambhana* (Contraction and hardening of vessels) produced by *Vata*. *Jwara* (Fever), *Athisara* (Diarrhoea), *Anthardaha* (Internal burning sensation), *Thrishna* (Thirst), *Mada* (Intoxication), *Bhrama* (Guidiness) and *Pralapa* (Delirium) produced by *Pitha*. *Chardi* (Vomiting), *Arochaka* (Anorexia), *Avikpaka* (Indigestion), *Sheetajwara* (Cold fever), *Alasya* (Laziness) and *Gathragourava* (Heaviness of the body) produced by *Kapha*. When the person is afflicted with *chintham* (grief), *Shoka* (fear), *Bhaya* (fear), *Krodha* (anger), *Dukha* (sorrow), *Shayya* (excessive sleep) and *prajagara*, even the wholesome food taken in proper amount will also be not get digested properly (excessive vigil).

3.6 MATRA -UNDER ASHTAHARAVIDHI VISHESHAYATHANA

Ayurveda promotes many concepts about food, its method of ingestion, its mechanism, etc. *Ashtaaharavidhi visheshayathana*, *Aharavidhi vidi vidhana* etc are the unique concepts of *Ayurveda*. *Rashi* is the special term comes under *Ashta Ahara Vidhi Visheshayathana* which is closely related to *Matra*.

RASHI^[6]

Rashi is a significant factor among 8 factors that decide the utility of the quantity of food. It is the *Sarvagraha* (quantum of total) or *Parigraha* (quantum of individual) and is explained in 1st chapter of *Vimana sthana* in order to determine the effect of intake of food in proper and improper quantities ie '*Ahara rashimadhikrithya matra-Amatra phala vinishchayartham*'.^[6] That is the total quantity of all types of food together and the respective quantity of each component of food (sweet, sour, etc. taken separately). *Sarvagraha* is to be considered because the other is likely to be used incorrectly and may contribute to abnormality in *Dhatus*(body tissues). The quantity of the food which include *Anna*(Main meal especially rice, *Mamsa*(Meat), *Supa* etc taken in entirety as *Ekapinda* (all together as a single measurement) is *Sarvagraha* and the quantity of each of the ingredients is taken ie *Anna/ rice* in *Kudava pramana*(192 grams), *Supa/soup in Pala*(1pala = 48g), *Mamsa/meat* in *dwipala*(2 pala = 96g) etc are considered as *Parigraha*. Thus *Sarvagraha* is considered as *Sampoorna Ahara Matra*(the complete meal).

3.7 MATRA ACCORDING TO TYPE OF FOOD

Guru (heavy) foods should be consumed in small quantity and *Laghu* (light) foods should be just enough for contentment. Proper quantity is desirable in respect of foods and proper digestive fire is desirable in respect of quantity of food. It is clearly stated that even if the food for digestion is heavy or light by nature, sufficient quantity are needed for proper digestion. For example though food prepared from *shali* (Rice), *shastika* (Rice getting matured in 6 months), *mudga* (green gram), meet of *Lava*, *ena*, *sasa*, *sarabha*, *sambara* (meat items) etc are *laghu* by nature still necessitate proper quantity for digestion. Likewise foods prepared from flour of corns, sugar cane products, milk products, *thila* (sesmum), *Masha* (black gram) etc though *guru* by nature also require proper quantity.^[8] Therefore, while *Laghu* food is suitable for health, it requires a sufficient quantity to yield its characteristics, and *guru* food, although inappropriate if consumed in the correct quantity, becomes suitable for health. *Laghu food* improves digestion by its natural quality of having *vayu* and *agni mahabhutha* predominance if consumed in proper quantity. *Laghu* food do not cause *Dosas* to be greatly aggravated and give the sense of contentment even if the quantity varies, where as varied quantity of *guru* food causes great aggravation of *Dosas* because of having qualities contrary to digestive fire.

'*Matra amatra phala vinishchayartham*' (Determination of the outcome of intake of proper and improper quantity of food) indicates that *Matravat Ahara* and *Aushadha* (Food and Medicine in proper quantity) results in *Shubham* /good and *Amatratvat* in terms of *Heena* and *Athi Matravat Ahara* and *Aushadha* (Improper quantity in terms of less or excess volume of food and medicine) results in *Ashubham*/ not good. Knowing *Rashi* thus means knowing *Uchitha Pramana* (quantity sufficient or acceptable) and *Anuchitha Pramana*^[9] (Unsuitable or unacceptable quantity).

3.8 MATRA- UNDER AHARAVIDHIVIDHANA^[10]

Matravat Ahara is also mentioned under *Ahara vidhi vidhana* ie rules for taking Food. When food is taken by following the rules and in proper quantity, it promotes longevity in its entirety without afflicting *Vata*, *Pitha* and *Kapha*(the three humors of body), get digested easily without impairing the power of digestion and passed down easily to the rectum by it's *Sara guna*(quality of mobility). This *Prashastha matra*^[9] (best quantity) doesn't does not do the *Dosapeedana* (compression of *Dosas*) because it is *Anathimatra* (not excess quantity) and therefore, without aggravation, the *Dosas* remains in its own position.

3.9 MATRA IN MATRASHITHEEYA ADHYAYA^[11]

Matra pramana is the amount of food that is digested within a given time (*Yadha kaalam jaranam gachathi*) without causing changes in body normalcy (*Prakrithim Anupahatya*), and does not cause any harm (*Anapayi parimanam*). However, some foods though in the proper quantity and undergone proper digestion can generate abnormalities due to the nature of the food, effect of various processing like soaking, frying etc eg: *Mantaka*, *Lakucha phala* (*Artocarpus lacucha*) though get digested within the usual time but produces aggravation of *Dosas* and so it is not considered as their quantity.

Matrashee is the person who consume food in proper quantity or *Matra* which includes all kinds of food which are *Khadya* (eatables), *Prashya*, *Lehya* (Lickables), *Peya* (Drinkables).^[9] In *Matrashitheeya adhyaya* (Sutra sthana chapter 5) the term *Matra* include only *matra* of *Ahara* and excludes the quantity of *Medicine* and *vyayama*(Exercise). This *matra* is depends on *Agnibala* (Power of digestion) of the person.^[9] This *Agnibala* is of 3 types^[9] such as *Utkrishta* (strong), *Madhya* (moderate) and *Alpa* (poor)

Matra of *Bheshaja*(Medicine) depends on the strength of the disease and patient (*Vyadhi athura balapekshini*) where as quantity of *vyayama* depends on mitigation of *Dosas*, increase of digestive fire, relief of exertion, exhaustion etc. (*Doshakshaya- agni vridhyadi utpada and shrama klamadi anutpada*).

3.10 INDIVIDUALITY IN MATRA^[9,12]

Quantity must be determined for each person separately time to time because Strength of digestion varies from person to person, from season to season, according to *Vaya:*/ age of the person etc. Thus it vary may even in the same person from time to time in a day. Some times increases and sometimes decreases such as very strong in *Hemantha* and youth (*Bala*) whereas week in *Varsha* and old age. Merely the quantity does not provide full benefit of food. Benefits are based on 8 factors such as *prakruti* etc.

4. CONCEPT OF MATRA IN CONTEMPORARY SCIENCE

Food is classified as Macro and Micro nutrients. Macro nutrients include proteins, carbohydrates and fats needed by the body in larger quantities, where vitamins and minerals required in very small amounts by the body are included as micro nutrients. All of these are needed to a definite extent to make a balanced Diet.

4.1 MATRA IN MORDERN PERSPECTIVE WSR TO BALANCED DIET

A balanced diet is defined as one which contains a variety of foods in such quantities and proportions that the need for energy, amino acids, Vitamins, minerals, fat, carbohydrate and other nutrients is adequately met for maintaining health, vitality and general well being and also makes a small provision for extra nutrients to withstand short duration of leanness. Balanced diet must be constructed by following the principles.

1. The daily requirement of protein should be met i.e. 10 to 15% of the daily energy intake
2. Fat requirement should be limited to 15 to 30% of daily energy intake
3. Carbohydrates rich in natural fiber should constitute the remaining food energy i.e. 50-80%
4. The requirements of micronutrients should be met.^[13]

5. DISCUSSION

5.1 CRITICAL ANALYSIS OF NITHYASEVANEYA DRAVYAS (FOOD RECOMENDED FOR DAILY INTAKE) WITH BALANCED DIET

Ayurveda recommends a specific combination of different varieties of food for daily intake and they are termed as "*Nithyasevaneeya Aharas*". This *Pathya Ahara* or food to be used constantly and is compatible to all includes –*Shashtika* (Paddy maturing in 60 days), *Shali* (Rice), *Mudga* (Green gram), *Saindhava* (Salt), *Amalaka* (Myrobalan), *Yava* (Barley), Rain water, Milk, Ghee prepared from milk of animals of arid region (*Jangala mruga*).^[8] When this concept is analyzed in detail, it is found that this group fulfills all the criteria of balanced diet with larger nutritive, health promotive and health preserving values along with disease preventing qualities. It is also found that some items have even rejuvenating effect and can be termed as

Nithyarasayanans (Food recomended daily for rijuvination).

Variety of food: There are many verities of food starting from *Shashtika shali* to *Madhu*.

Proper quantity and proportion: *Ayurveda* also advocate the concept of *Sarvagraha* and *Parigraha* which is nothing but total quantity of all kinds of food together and quantity of each component of food respectively.

Adequate nutrients: Carbohydrate requirement is fulfilled by *Shashtika shali*, *Mudga* and *Shali*.

Protein requirement is fulfilled by *Mudga* and *Mamsa*. Fat requirement is fulfilled with *Sarpi*, *Shali* and *Mamsa*. Similarly *Amalaka*, *Shali* and other items provide adequate vitamins and minerals by *Saindhava*. Thus all the criteria of balanced diet is met by *Nithyasevaneeya ahara* reveals the keen observation of ancient *Acharyas* in formulating each *Yogas*(Formulations). Because nutrients are not administrating as such but administering as food, it will contain many other nutrients and properties apart from specified things. It is well known that *Amalaki*, *Anthareeksha jala*, *madhu*, *sarpi* etc are also having rejuvenating properties too.

5.2 CRITICAL ANALYSIS OF UNIQUENESS OF MATRA IN AYURVEDIC PERSPECTIVE

Ayurveda advocate quantity of food to be taken by an individual in a different manner. It is individual specific and depend on the digestive capacity of that particular person. Even this stipulated quantity will vary according to time, season, age etc of a person. This indicates the peculiarity of quantity of food from person to person and also in a single person. *Ashta Ahara Vidhi Visheshayathanas* are the codes and conducts for taking diet with physiological and functional consideration.

The modern day dietetics advocate calorie specific diets for a day taking an Indian reference woman or man. Based on the energy intake for a day, the intake of nutrients are divided then. Modern science has particularly described food according to the nutritional value of its components irrespective of *Agnibala* (Power of digestion) or assimilation or metabolism. When the balanced diet mentioned in modern day dietetics is analyzed, a huge gap in concept of food can be noticed when compared with *Ayurvedic* dietetics.

The modern dietetic science emphasizes more on *Parigraha* aspect of *Matra*, as it specifies the quantity of Carbohydrate, Fats, Proteins etc in *Ahara*, whereas *Ayurveda* gives equal importance to both types of *Matra* i.e. *Sarvagraha* and *Parigraha*.^[14] More over for achieving maximum benefits of the consumed *Ahara* there is special mentioning of Method of processing, intake etc. The classification *Ahara* according to *Guru*(Heavy) and *Laghu*(Light) *Guna* is having mutual

relation between *Matra* of that particular *Ahara*. Whatever may be the type of *Ahara*, it should be in proper quantity and that quantity depends on the *Agnibala* of the person and is Individual specific.

6. CONCLUSION

The principles of *Aahara*, method of intake, quantity etc are incorporated under *Ahara vidhi visheshayathana*, *Aharavidhi vidhana* and *Thrividha kukshi vibhaga* in *Vimanasthana*. When all these concepts are analyzed, it is found that the proper benefits are attained on the basis of quantity of food and which is depend on *Agnibala*. This quantity is individual specific and must be determined for each person separately time to time. This quantity or *Matra* has been explained in the very beginning *sthana* (*Sutra sthana*) of *Charaka Samhitha*. Even though there is *Annapana chathushka* (The session related to food and drinks) mentioned separately in *Charaka Samhitha*, the *Swastha chathushka* (The session related to health) starts with *Matrashiteeya Adhyaya* which shows the importance of *Matra pramana* of *Ahara* in maintaining the health - the prime aim of *Ayurveda*. "*Matrashee syat*" is the *sutra* (aphorism) seen at the commencement of the chapter also convey the same. Thus all the concepts of *Ahara* scattered over different *sthanas* (Parts) of *Charaka samhitha* has its root in a single *Sutra* "*MATRASHEE SYAT*" of *Sutrasthana* 5th chapter.

REFERENCES

1. K.R. Shrikantha Murthy, Charaka Samhitha Sutrasthana, Ayurveda deepika vyakhyana, Vol 1, Choukambha Orientalia, Varanasi, 1st Edition 2004, P 500, SI no 45.
2. Singh, Satyapal. "Principle and Practice of Nutrition and Dietetics in Ayurveda." *International Journal of Research* 1 (2015).
3. Mahajon Bidhan, Nath Rupashri, Remadevi R. A Scientific Review on Dietetics in Ayurveda According To Prakriti (Innate Constitution). *IAMJ*, 2014; 2(6): 1031-1036.
4. Guha, Amala. "Ayurvedic concept of food and nutrition." (2006).
5. Singh, Satyapal. "Principle and Practice of Nutrition and Dietetics in Ayurveda." *International Journal of Research* 1 (2015).
6. Dr.Ram Karan Sharma, Vaidya Bhagavan Dash, Charaka Samhitha Vimana sthana, Vol 2, Choukambha Sankrit series office, Varanasi-1, Edition Reprint 2003.
7. Vaidya Yadavji Thrikamji Acharya, Ayurveda deepika commentary, Charaka samhitha, Choukambha Orientalia, Varanasi, Reprint 2015, P238, SI No 3.
8. K.R. Shrikantha Murthy, Charaka Samhitha Sutrasthana, Ayurveda deepika vyakhyana, Vol 1, Choukambha Orientalia, Varanasi, 1st Edition 2004, P 480, P 94,96.
9. Vaidya Yadavji Thrikamji Acharya, Ayurveda deepika commentary, Charaka samhitha, Choukambha Orientalia, Varanasi, Reprint 2015.
10. Dr.Ram Karan Sharma, Vaidya Bhagavan Dash, Charaka Samhitha Vimana sthana, Vol 2, Choukambha Sankrit series office, Varanasi-1, Edition Reprint 2003, P128, SI no 3.
11. K.R. Shrikantha Murthy, Charaka Samhitha Sutrasthana, Ayurveda deepika vyakhyana, Vol 1, Choukambha Orientalia, Varanasi, 1st Edition 2004, P 92, SI no 4.
12. K.R. Shrikantha Murthy, Charaka Samhitha Sutrasthana, Ayurveda deepika vyakhyana, Vol 1, Choukambha Orientalia, Varanasi, 1st Edition 2004, P 92, SI no 4.
13. K. Park, Text Book of Preventive And Social Medicine. 25th Edition 2019, P694.
14. Dangayach, R., Vyas, M., & Dwivedi, R. R. (2010). Concept of Ahara in relation to Matra, Desha, Kala and their effect on health. *Ayu*, 31(1): 101.