



A General Review on Ahaara Pak and its Importance in Physiology.

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Abstract-

The oldest science of life, ayurveda, focuses on maintaining a healthy individual's wellbeing as well as preventing and treating disease. According to Ayurveda, the three primary pillars of life are Ahara, Nidra, and Brahmacharya. The most significant aspect of life is ahara. The phrase "ahaara paaka" is broad and comprises a number of digestion, absorption, assimilation, and metabolism processes that have been scientifically elucidated. According to Ayurvedic scriptures, the ahaara paaka process starts with deglutition after eating and finishes with bhutagni paaka and dhaatwagni paaka (metabolic transformation). In the Ayurvedic medical philosophy, Agni best symbolises the body's digestive and metabolic fire. The material in the body's secretions is what causes digestion and other chemical changes in the body. Food that has been ingested needs to be digested, absorbed, and assimilated; this process is carried out by the Agni and is necessary for the maintenance of life. Therefore, having ahaara paaka in proper working order is essential for maintaining a condition of health. This article aims to emphasise the key points of the ahaara paaka theory and to provide scientific support for it.

Keywords- Ayurveda, Aharpaka, Digestion, Stages of Aharpaka.

Introduction-

Ayurveda is the science of life, and its primary goal is to preserve the state of a healthy living being, including the prevention and treatment of disease.¹ Ahara (diet) is regarded as one of the Upastambhas of life, along with Nidra and brahmcharya, which together make up the triupastambha of human existence. Body functions are altered as a result of a poor diet. This is the rationale behind the emphasis placed on dietary components (apathya) while describing the causes of diseases. According to Acharya Charak, a food can maintain life if it is consumed properly and with discipline. Ahara plays a crucial part in both preserving health and treating a variety of diseases.²

Ahara paka refers to the entire chapter on digestion and metabolism. In traditional Ayurvedic writings, a number of diverse processes including deglutition, digestion, absorption, assimilation, adsorption, and metabolism are together explained under the category of ahaara paaka. Dosha, dhatu, and mala, among other fundamental body tissues, are created at various stages of ahaara paaka.³ The foundation of ayurvedic science is the pancha maha bhoota theory, the tridoshas theory, and other concepts that are all expertly presented in the ahaara paaka. Here, agni plays a critical role in transforming ingested ahara, or vijatiya dravya (heterogeneous form), into sajatiya dravya (homogenous form), which is suited for forming various body tissues.⁴ In order to maintain good health, Acharya Charak recommended a number of dietary plans. It has to do with the kinds and amounts of food to be eaten. One should divide his stomach's complete capacity into three parts: one third should be set aside for solid food items, one third for liquid food items, and the last third should be left open for the flow of vata, pitta, and kapha. Acharyas provided a number of guidelines for eating habits, and everyone should abide by these fundamental golden standards to maintain good health.⁵

Concept of Agni-

The human body is made of food. When the body is in a healthy state, Agni aids in the appropriate digestion and absorption of the food consumed. The body receives the following from Agni: Bala, Arogya, Ayu, Prana, Swasthyam, Varnam, Utsaha, Prabha, Oja, and Teja.⁶ The proper transformation of food, Dhatus, and Malas is catalysed by Agni, which is responsible for all bodily transformations. If Agni is compromised, this will result in an accumulation of waste products in the body. Most diseases have Agni Dusti as their primary cause.

Type of Agni-

Acharya charaka has described about 13 Agnis (Jatharagni – 1, Bhutagni – 5, Dhatvagni – 7)

According to Sushruta, five types of Agnis are identified, (Pachakagni (concerned with digestion), Ranjakagni (concerned with coloration of bile-pigments), Alochakagni (concerned with vision), Sadhakagni (as concerned with accomplishment of intellectual levels of brain) and Bhrajakagni (as concerned with digestion of skin application and luster).

Vagbhata has described different 18 types

(Bhutagnis –5, –Dhatvagnis–7, Dhoshagni – 3 and Malagni–3),

Agnis are also classified into four categories according to how they manifest in the human being.⁷

(1)Tikshnagni (2)Mandagni (3)Vishamagni (4)Samagni

Correlation between Agni and Pitta-

According to Acharya Sushruta, Pitta is necessary for the presence of Agni because when Pitta's Ushna guna causes the body to have greater digestion and combustion, Agni-like therapy results. Tapasantape is the source of the word "Pitta." All thermodynamic and chemodynamic bodily functions, including agni function, are governed by the Pitta factor. The pitta's heat is an indication of agni within the body. In a healthy state, it promotes good digestion, vision, joy, and happiness and preserves a regular body temperature and complexion. It causes an aberrant state that includes indigestion, blurred eyesight, dread, rage, perplexity, abnormal body heat, and an unnatural complexion. both few similarities and differences with pitta. Dahana, pachana karmas, and similar responses to sheetala and ushna are commonalities between agni and pitta. Both people have agni mahabhoota moieties.

Different Stages of Ahara paka:

Avasthapaka-

Ahara Dravya that has been consumed goes through many Pakakriya stages. Avasthapaka, in other words, is the term used to describe the several stages of food digestion in the Kosta. Prapaka and Vipaka are two words that Acharya Charaka defined. Prapaka has been described as the first result of Paka, or chemical activity, or Prathama Paka. According to one definition, Vipaka is the result of Jatharagni's activities towards the Ahara after it has already been subjected to Prathama Paka. This Vipaka is assessed based on the Rasa that Madhura, Amla, and Katu, the byproducts of gastrointestinal digestion, have taken. All Dravya have been said to have a Pancabhautika origin; this is the number in which there are several Bhuta Paraman varieties. There are three different types of avasthapaka.⁸

Madhura Avastha Paka-

The Bodhaka Kapha, which is primarily fluid, is in contact with the food as soon as it enters the mouth, which causes the experience of taste. Without the presence of the fluid Bodhaka Kapha, the sensation of taste would not be perceptible. At this point, the Kledaka Kapha present in the Urdhwa Amasaya is sufficiently soluble and mixed with the insoluble Madhura portion of the food. When it is mixed with Kledaka Kapha particles, the portion of Ahara Dravya that is intended to transit via Amlabhava still stays in this stage. As a result, once Aharadravya of all kinds reach Adho Amashaya, they achieve Madhurabhava..⁹ This stage can be compared to the digestion of carbohydrates because when we eat, the first step in the process is the breakdown of carbohydrates, which is initiated by salivary amylase. The final products of carbohydrate digestion are monosaccharides, such as glucose, fructose, and galactose, which have a sweet taste.

Amla Avastha Paka-

It is Avasthapaka's second phase or step. Accha Pitta secretion in the Amashaya is what causes this. This level was referred to as Vidagdha Avastha by Acharya Charaka. This phrase was translated as Pakvapakvama or Kinchidpakvama by Acharya Chakrapani. The Ahara at this stage is not suitable for Bhutagni Paka or Dhatvagni Paka absorption and usage.¹⁰ When we eat, after the development of a bolus, the food becomes acidified and breaks down into tiny particles due to the activity of HCL. When chyme travels further into the second half of the duodenum, pancreatic juices and bile juice mingle here, completing the digestion of proteins and fats.¹¹ Most of the amino acids i.e. end product of protein digestion have pH around 6 means they are slightly acidic, can be compare with acidic chyme.¹²

Katu Avastha Paka-

When the food reaches Pakvashaya, the heat of the Jatharagni causes it to dry up and turn into lumps. During this phase, the Ahara assumes the Katubhava state and Vayu is formed. The aforementioned was clarified by Acharya Chakrapani in the phrase "Paripindita Pakvashaya." This feature has to do with the acidic and sour reactions that take place in the large intestine during the creation of faces. Avasthapaka's three stages demonstrate how all carbohydrates, proteins, and fats have been completely digested. The last step also reveals the development of faces.¹³

Nistha Paka-

Although the Charaka Samhita and Susruta Samhita do not provide a clear definition of this, they do provide a lengthy description. The word "Vipaka" itself denotes a Paka that is distinct from other Pakas a Vipaka. The Rasa that is transformed into another Rasa following Jatharagni Paka is known as Vipaka, according to Acharya Vagbhata in Astanga Hrudaya.¹⁴

In context of vipak, there are two different conceptual theories. According to aatreya sampradaya vipaka are of three types i.e. madhura vipak, amla vipak and katu vipaak. According to Dhanwantari sampradaya there are two types of vipak i.e. guru vipak and laghu vipak. Here action of bhutagni and dhatwagni occurs under the name bhutagni paka and dhaatwagni paka.

Bhutagni paka-

According to this mechanism, the cosmos as a whole is composed of pancha mahabhoota, and the universe's constitution and the human body are identical. Pancha mahabhoota makes up both the human body and the food we eat. Five distinct bhutagnis by the names of prithvi agni, aapya agni, vayva agni, tejo agni, and akash agni act on the bhotika ansha of the ahara rasa, respectively, and transform its heterogeneous form into homogenous form during this stage of nisthapaaka.¹⁵ The five bhutagni each digest a specific amount of an element included in food. All foreign substances must be submitted to bhutagni paaka to become endogenous because once food is digested by the

bhutagni, digested materials holding the elements and attributes identical to each bhuta nourish their own unique bhoutika elements of the body.¹⁶

Dhaatwagni paka-

The activity of sapta dhaatwagni only commences after the conclusion of bhutagni paka. Dhaatwagni Paaka is related to four main theories. One of these, known as "ek kaal dhatu poshana paksha," states that all seven of the dhaatwagnis, namely, rasa, rakta, mamsa, meda, asthi, majja, and shukra, act collectively on the ahara rasa to produce their respective dhatus, upadhatu, and malas.¹⁷ Each dhaatwagni has got speciality to synthesize and transform the constituents suitable to its particular dhatu.

Modern point of view-

According to contemporary physiology, the small intestine is where the majority of the digestive and absorption processes are finished. Absorption of any residual water and electrolytes begins as soon as the contents enter the large intestine. A maximum of 5-8 litres of fluid and electrolytes can be absorbed by the large intestine per day. The bacteria in pakvashaya are active (colon). They are able to break down small amounts of cellulose, giving the body an extra few calories of nourishment. Vitamin K, vitamin B12, thiamine, riboflavin, and other gases that cause flatulence in the colon, particularly carbon dioxide, hydrogen, and methane, are other compounds produced as a result of bacterial activity. Fecal matter has an unpleasant smell because it contains odoriferous (katu bhava) substances such as indole, sketole, mercaptans, and hydrogen sulphide. The traditional Ayurvedic description of what happens in the large intestine and the generation of faeces with the development of pungent Vayu is observed to be confirmed as well as amplified by the aforementioned modern contribution. Three different pathways exist for gases to reach the digestive system: 1) through inhaled air, 2) through gases created in the stomach by bacterial activity, or 3) via gases that permeate from the blood into the digestive system. These foods, especially the fermentable forms of unabsorbed carbohydrates, offer a favourable environment for gas-forming bacteria. Taking beans as an example, they include an indigestible carbohydrate that travels to the colon and serves as a nutritious food source for colonic bacteria. Gases are expelled excessively from the large intestine due to irritation, which encourages rapid peristaltic ejection of gases through the anus before they can be absorbed.¹⁸

Discussion-

The management of health is approached scientifically in ayurveda. A healthy person's health should be preserved, and diseases should be treated as their primary goals in yurveda. Diet and exercise routines that are good for the body and make people happy. The diet receives a lot of scrutiny in terms of its processing, quality, quantity, and other factors. The preservation of a person's "Swasthya" depends on the actions of Hara, Swapna (Nidra), and Brahmacharya. In healthy, ill, and recuperating stages, hara plays a significant role. This matters more than the

medication itself. A healthy diet is essential for the body's growth and development, while an unwholesome diet contributes to a number of disorders. Acharya Charaka stated that the ideal diet is that, which rebuilds the worn-out systems, nourishes *dhatus* and maintains equilibrium of the body constituents.

When salivary amylase reacts with starch at the first stage of digestion, Madhura bhava, carbohydrates are broken down into more easily absorbed forms of glucose. Chyme, a semi-fluid combination created when food and gastric secretions mingle in the stomach, Chyme is a semi-fluid combination that is produced in a similar way to how phenbut is formed. The Ahara is said to go through intense pachhmanasaya digestion in the second stage (Amla Avasthapa). Amlabhava (pH 2-3), which results in sourness, arises as a result of the chyme's acidic medium. The pachymanasaya digests and absorbs partially digested food vigorously, paralleling human physiology. The large intestine is where water and electrolytes are absorbed during the third phase (Katu Avasthapa). The pakwasaya typically absorbs 5-8 litres of water and electrolytes every day. The phrase "Pari pindita Pakwasaya" refers to the bolus of faeces remaining after the body has absorbed all of its water. The generation of noxious gases like carbon dioxide, methane, and hydrogen is referred to as vayusyath katubhavatah.

Conclusion-

Agni transforms food into energy, which is in charge of all the essential bodily processes. The three steps of digestion, Madhura avasthapa, Amla avasthapa, and Katu avasthapa, have been identified in Ayurveda. These avasthapa stages can be compared to current modern physiology. The constant agent in the ahara paka process is Agni (metabolic transformations). Food that has been ingested needs to be digested, absorbed, and assimilated; this process is carried out by the Agni and is necessary for the maintenance of life. Agni denotes a chemical that is in charge of metabolism and digestion. Thus, the idea of Aaharapaka/avasthapa in Ayurvedic sciences denotes its applicability to contemporary physiology of digestion and metabolism.

References-

1. Charaka Samhita Vol. 1, First edition. Varanasi: Chaukhamba Surbharti Prakashan; 2017. Sutrasthana, 30/26. p. 535. Tirpathi B, editor.
2. K. Pandey and G. Chaturvedi (2015). Eds. Charak Samhita and Matrashitiya Adhyaya. Chaukhamba Bharati Academy, Varansi, India, 105.
3. Merut: Uttkarsha Publication; 2016. p.11. Gupta GK. Ayurvediya kriyasharira vigyan, Vol. II. 1st ed.
4. Sarira-kriya-vidhana, Volume II, Second Edition, Varanasi: Chowkhamba Sanskrit Series Office, 2010, p. 208. Dhargalkar, N. D.
5. K. Pandey and G. Chaturvedi (2015). Eds. Charak Samhita and Trividhukshivimaniya Adhyaya. Chaukhamba Bharati Academy, Varansi, India, 686.

6. Sri Satya Narayana Sastri Charaka Samhita by Agnivesa, Vidyotin Hindi Commentary, Chaukhambha Bharati Academy, Varanasi, 2009, p. 452, chapter chikitsa-15.
7. Agnivesa's Sri Satya Narayana Sastri Charaka Samhita, Vidyotin Hindi Commentary, page 719, charak viman 6, Chaukhambha Bharati Academy, Varanasi, 2009.
8. Charaka Samhita, Volume 2. Editor Tirpathi.B., first edition Chaukhambha Surbharti Prakashan: 2017, Chikitsa sthana 15/10. Varanasi. p. 551.
9. Acharya J. T. Charaka Samhita by Agnivesa with Chakrapanidatta's Ayurvedic deepika teeka. Varanasi: Chaukhambha Surbharathi Prakashan, 2011, p.86. Reprint edition.
10. Charaka Samhita, Volume 2. Editor Tirpathi.B., first edition Chaukhambha Surbharti Prakashan: 2017, Chikitsa sthana 15/10. Varanasi. p.15
11. First edition of the Jain A.K. Textbook of Physiology, Himachal Pradesh: Avichal Publishing Company, 2006, pp. 278–279
12. Retrived from <https://biology.stackexchange.com> accessed on 10/02/18.
13. Charaka Samhita, Volume 2. Editor Tirpathi.B., first edition p.522 Chaukhambha Surbharti Prakashan, Varanasi, 2017, Chikitsa Sthana
14. Vagbhata. First edition of Astanga Hradyam Tirpathi.B, Editor Chikitsa sthana 15/10, Chaukhambha Surbharti Prakashan, 2009, Varanasi, p.154
15. Chakra Samhita, Volume II. 2017; Varanasi: Chaukhambha Surbharti Prakashan, Tirpathi B, editor. The Chikitsa Sthana, 15/13, p. 552.
16. Concept of Ama in Ayurveda, by Sreenivasulu, 1st edition, New Delhi: Chawkhamba Sanskrit Series, 2005, p. 46.
17. Gupta GK. Ayurvediya kriyasharira vigyan, Vol. II. 1st ed. Merut: Uttkarsha Publication; 2016. p.15.
18. John E. Hall (2010). E-book version of the Guyton and Hall Textbook of Medical Physiology with access to STUDENT CONSULT online. 19; 479, Elsevier Health Sciences.