

**AHARA PARINAMKAR BHAV – A CRITICAL REVIEW**

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**ABSTRACT**

With today's lifestyle and modern ways of living and duties human race is feeling and getting much ill and developing new forms of diseases. The biggest possible cause of this increase in disorders is the way we eat food which effect the digestive process in many ways. These six factor needed to digest food as per ayurveda. In ayurveda weak digestive fire is considered as the main cause of all diseases, knowing much more about the digestive fire and its components and factors affecting it would help us to deal with it in much more effective way. For todays era it is really very important to prove the concepts of ayurveda and establish them with scientific approach in modern world, so that we could dela with modern problem more efficiently. With this

study we would try to put much more light on this concept and will try to bring best conclusions that how these bhava affect digestion and how can we relate them to modern concept of digestion. Our objective would be to find out the significance of Ahara Parinam bhav in digestion of food. For this study we'll collect the data from ancient ayurveda literature like Charak Samhita, Sushrut Samhita, Ashtang Hridya, Bhavprakash etc. and the research articles.

**KEYWORDS:** Ahara, Dosha, Food, Digestion, Gastric juices, Parasympathetic system, Agni, Fat, Mucus.

## INTRODUCTION

Ahara Parinamakar Bhava is a concept in Ayurveda, the ancient Indian system of medicine. It is one of the fundamental principles of Ayurveda that states the effect of food on our body and mind. Ahara means food, Parinama means transformation, and Kar means cause. So, Ahara Parinamakar Bhava literally means the principle that describes the transformation of food into the human body. This article would relate the ayurvedic concept of food digestion with modern concept of food digestion and would establish the ancient principals in scientific, which in turn help to educate society with the right way of dietary lifestyle.

## MATERIAL AND METHOD

- This is a critical review study which is a type of observational study. With the proper study of ancient text and modern researches this review has been written.
- 1) Collection of ayurvedic literature
- All data is collected from following ancient text and ayurevda research articles  
Charak Samhita, Sushrut Samhita, Ashtang Hridya, Bhavprakash
- Modern data collected from medical textbooks and Medical Research articles.
- 2) Critical review of collected data

**As mentioned by acharya charak, Ahara parinamkar bhava are six in number<sup>[1]</sup>**

- 1) Ushma
- 2) Vayu
- 3) Kleda
- 4) Sneha
- 5) Kala
- 6) Samyoga

### What is ushma?

Ushma is a Sanskrit term used in Ayurveda, an ancient system of medicine from India, to describe the warming or heating quality of anything. The Sanskrit term "Ushma" is derived from the root word "ush" which means to burn, heat or inflame. The term "Ushma" is formed by adding the suffix "-ma" which signifies a quality or property. Therefore, the term Ushma can be derived as the quality or property of heating, burning or inflaming.

### ‘उष्मा पचति’

The Sanskrit term "पचति" is derived from the root word "पच्" (pac) which means “to cook, digest, or ripen”. The term "पचति" is the third person singular present tense form of the root word "पच्" and refers to the action of cooking, digesting or ripening.

So, this quotation implies that ushma helps in pachan, means the heat or fire helps in digestion.

This ushma is the property of fire and fire in our body is the digestive fire the jatharagni, which is considered as the most important and the most powerful agni of all 13 types of agni explained by acharya Charak in Charak Chikitsa.<sup>[15]</sup>

### HCL and Heat

Hydrochloric acid (HCl) is a strong acid that is naturally produced in the stomach and plays an important role in the digestive process. HCl helps to break down the food we eat, making them easier to digest and absorb. In Ayurveda, the concept of "Ushma" or heat is associated with the digestive fire or "Agni" which is responsible for breaking down the food we eat. Similarly, the acidic environment in the stomach created by HCl is also considered to be a form of digestive fire or heat. This could be understood more clearly when we put HCL in water, the hydrogen binds with the atom of oxygen in water molecule which in turn a very strong bond and it liberates lots of energy, followed by increasing the temperature of water. Hence HCL can increase the temperature inside our body also.<sup>[2]</sup>

HCl works by lowering the pH of the stomach, making it more acidic, which in turn activates digestive enzymes and helps to break down the food. This acidic environment also helps to kill harmful bacteria and pathogens that may be present in the food. The acidic environment created by HCL helps in activation of pepsinogen to pepsin which having the proteolytic activity promotes breakdown of proteins. To maintain this acidic environment of stomach tremendous amount of energy is need, about 1500kcal for 1 litre of digestive juice having such an acidic environment. Therefore increasing the BMR of body, increasing the temperature or heat of body.<sup>[3]</sup>

Therefore, we can correlate HCl with heat or Ushma in Ayurveda, as both play an important role in the digestive process and help to break down food into its basic components, making them easier to digest and absorb.

### **Process of development of ushma during digestion**

After consuming food, it really gets mix well with the help of muscular movement of stomach, presence of food stimulated gastrin hormone present in pyloric part of stomach which stimulate histamine and which in turn influence release of HCL. As we discussed above HCL plays major role in digestion and utilizes lots of energy increasing the BMR and temperature of body. Other than HCL many other digestive activities happen with the help of other enzymes also, which also increases the temperature. The digestion of food is a hydrolytic, exothermic, chemical reaction that in the digestive tract releases heat.<sup>[4]</sup>

### **The thermic effect of food<sup>[5]</sup>**

The thermic effect of food is the increase in metabolic rate that occurs after consuming food. The body uses energy to digest, absorb, and metabolize the nutrients from food. Different macronutrients have different thermic effects, with protein having the highest TEF, followed by carbohydrates and fats.

When we consume warm or hot food, it can increase the thermic effect of food by raising our body's core temperature. This can help to stimulate the metabolic rate, which can aid in the breakdown and absorption of nutrients from the food. Similarly, consuming cold or chilled food can have the opposite effect by lowering the body's core temperature and reducing the thermic effect of food.

### **Importance of vayu**

वायुरायुर्बलं वायुर्वायुर्धाता शरीरिणाम्।

वायुर्विश्वमिदं सर्वं प्रभुर्वायुश्च कीर्तितः॥<sup>[6]</sup>

This shloka highlights the importance of Vayu, or air, in the human body. It states that Vayu is responsible for the strength and support of all bodily tissues and is necessary for sustaining the body. It also emphasizes that Vayu is all-pervading and the lord of all, and thus, it is highly renowned.

**वायु प्राणः** – Vayu is the vital energy.<sup>[7]</sup>

अन्नमादानकर्मा तु प्राणः कोष्ठं प्रकर्षति तद्रवैर्भिन्नसंघातं स्नेहेन मृदुतां गतम् ॥  
समानेनावधूतोऽग्निरुदर्यः पवनोद्वहः काले भुक्तं समं सम्यक् पचत्यायुर्विवृद्धये ॥ एवं  
रसमलायान्नमाशयस्थमधःस्थितः | पचत्यग्निर्यथा स्थात्यामोदनायाम्बु तण्डुलम् ॥

When vayu is inside body it is known as vata and vata is classified into 5 types- parana, udan, vyan, saman, apana. Prana is considered the most important out of these five and it has a very crucial step towards digestion of food, i.e it help the food to move or it takes the food to the site of digestion and that's what it means when acharya says **वायु अपकर्षति**. Another type of vayu i.e samana vata help to make digestive fire strong and hence plays another crucial role in digestion of food.

In Ayurveda, Vata is one of the three doshas and is often associated with the nervous system. This is because Vata governs movement and communication throughout the body, which includes the nervous system. Parasympathetic stimulation has large impact on digestion as on activation it promotes release of digestive enzymes like HCL and pepsin, along with release of these enzymes it increases the motility of GIT which helps in proper mixing and movement of food.<sup>[8]</sup>

### Role of kleda in digestion

**'क्लेदः शैथिल्यम् अपादयति'**

"Kleda" is a Sanskrit word that can be translated to mean "moisture," "wetness," or "dampness." In some contexts, it can refer to sweat, tears, or any other kind of bodily secretion that is moist or wet. According to Ayurveda, kleda helps in digestion by lubricating the digestive tract, facilitating the movement of food through the intestines, and preventing constipation. Kleda also helps to prevent excessive heat in the body, which can lead to digestive imbalances such as acid reflux or ulcers. In addition, kleda is said to nourish and protect the delicate lining of the digestive system, which can be easily irritated by harsh or spicy foods. Due to fluid nature of kleda it helps to breakdown the foods structure and mix it well into a semisolid part, which helps food to get involved with digestive juices well and allow them to digest food.<sup>[9]</sup>

### Modern concept of mucus in digestive system

Mucus plays an important role in the digestive process by protecting the lining of the digestive tract, lubricating food as it moves through the digestive system, and aiding in the absorption of nutrients. In the mouth, mucus is produced by salivary glands and helps to moisten food and make it easier to swallow. As food moves down the esophagus, mucus helps to protect the lining of the esophagus from acid reflux and other irritants. In the stomach, mucus is produced by specialized cells called goblet cells. The mucus helps to protect the stomach lining from stomach acid and digestive enzymes, which can cause damage to the lining over time. This protective layer of mucus also helps to prevent the development of stomach ulcers. In the small intestine, mucus lubricates and protects the lining of the intestine, allowing for the smooth passage of food and absorption of nutrients. In the large intestine, mucus helps to regulate bowel movements and promotes the growth of healthy bacteria in the gut. Overall, mucus plays an important role in the digestive process by protecting the delicate lining of the digestive tract, aiding in the absorption of nutrients, and promoting healthy bowel function.<sup>[10]</sup>

### Role of sneha in digestion

**स्नेहो मार्दवं जनयति।**

As this quotation says the Sneha helps in softening of food which further helps in digestion process. Sneha is compared with fat, the oil or ghee. Researches shows that food which is mixed with fat increases the metabolic rate and excels the digestion process for long term whereas food without fat only increases BMR and digestive process for short term, this proves the advantage of fat i.e Sneha in our diet.<sup>[11]</sup>

### Importance of kala in digestion

**कलहः पर्याप्तिम् अभिनिर्वर्तयति।**

In Ayurveda, Kala refers to time and its influence on bodily functions, including digestion. Ayurveda recognizes the importance of eating food at the right time of day, as well as the influence of the seasons and other natural cycles on digestion.

The following are some of the ways in which Kala (time) is considered important for digestion in Ayurveda:

1. **Eating at the right time:** Ayurveda recommends eating meals at the same time each day to promote healthy digestion. Eating meals at regular intervals helps to regulate the

digestive system and optimize the absorption of nutrients. During mid day digestive fire is at peak, because pitta is dominating at that time<sup>[12]</sup> and pitta is responsible for tikshan agni one should must eat at that time.<sup>[13]</sup>

2. **Eating manner:** Eating once the previous eaten food is digested and not to eat too fast or too slow. Signs of digested food include free belching, energetic feeling, timely excretion, lightness in body and development of thirst and appetite.<sup>[14]</sup> Two times a day is ideal to have meal.<sup>[15]</sup> One shouldn't eat 3hrs before meal and shouldn't fast for more that 6 hours a day.<sup>[16]</sup>
3. **Digestive fire:** Ayurveda considers the digestive fire or Agni to be strongest during the middle of the day, which is when the main meal is traditionally eaten. Eating a larger meal during this time can help to support the digestive process and promote optimal absorption of nutrients.
4. **Seasonal changes:** According to Ayurveda, the digestive system can be influenced by the changes in the seasons. In the winter, for example, the digestive fire tends to be stronger, while in the summer it can be weaker. Understanding these seasonal changes can help to optimize the timing and composition of meals for better digestion.
5. **Rest and Relaxation:** Ayurveda recommends allowing time for rest and relaxation after meals to promote healthy digestion. This can help the body to focus its energy on the digestive process and prevent the development of digestive issues such as bloating or indigestion.<sup>[17]</sup>

Overall, Kala (time) is considered an important factor in promoting healthy digestion in Ayurveda. Understanding the influence of time on the digestive process can help to optimize the timing and composition of meals for better health and well-being.

And the last one is संयोगस्त्वेषां परिणामधातु साम्यकरः।

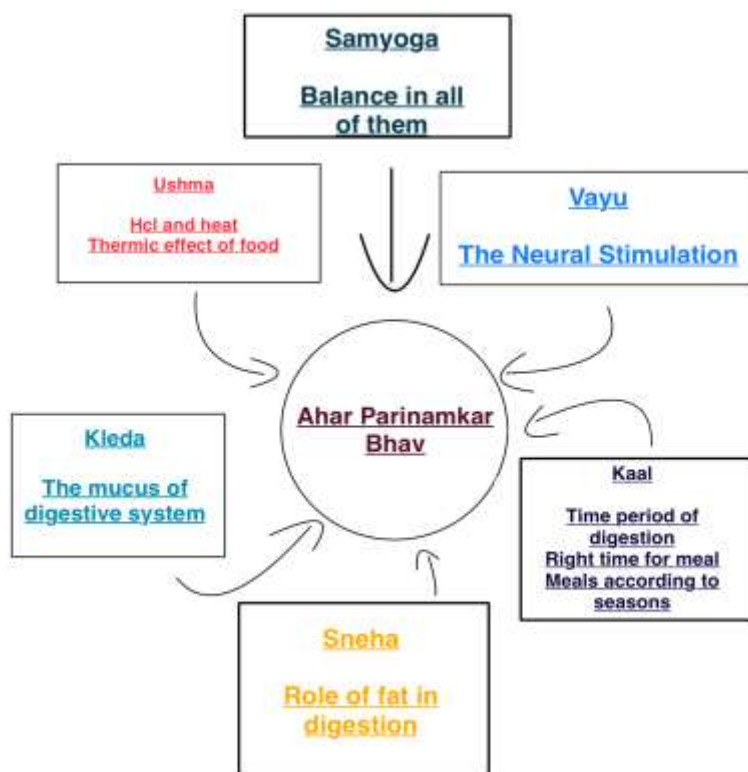
All of the five factors - Ushma, Vayu, Kleda, Sneha, and Kala - are collectively important for promoting healthy digestion. Each of these factors is interconnected and necessary for optimal digestion and overall well-being. Therefore, they are all needed in conjunction with one another for efficient and effective digestion.

## DISCUSSION

Ahara Parinamakar Bhava, which is one of the fundamental principles of Ayurveda, the ancient Indian system of medicine. The article explains the six different aspects of Ahara



Parinamakar Bhava, namely Ushma, Vayu, Kleda, Sneha, Kala, and Samyoga. The article explains Ushma as the property of heating, burning, or inflaming. It further explains that Ushma plays an important role in digestion, and digestive fire or Agni is responsible for breaking down the food we eat. Hydrochloric acid (HCl), which is produced in the stomach, is also associated with the concept of heat or Ushma in Ayurveda. HCl helps to break down the food and create an acidic environment in the stomach, which helps to activate digestive enzymes and kill harmful bacteria and pathogens. This ushma is really very important aspect in very dimension of ayurveda, if situated in its proper location with proper proportion helps to digest food and maintain body functioning optimal but if deviated from location or increased in proportion can causes disorders like jwar, amvata, antar vran (gastric ulcers) etc. and it is said that having diminished digestive fire which is basically the ushma, leads to every disorder. Ushma could also be understood as hot food or the fresh food having its constituents in alive or undegraded way. The article further explains that digestion is a hydrolytic, exothermic, chemical reaction that releases heat, and consuming warm or hot food can increase the thermic effect of food by raising the body's core temperature. Similarly, consuming cold or chilled food can reduce the thermic effect of food by lowering the body's core temperature. It has been already explained by Acharya Charak in Ahara vidhi vidhan to eat ushana ahara and now it has been scientifically proven by knowing the concept of thermic effect of food.





The article emphasizes the importance of Vayu, which is the Sanskrit term for air, and explains that it is responsible for the movement of food in the digestive tract and for the elimination of waste products from the body. The article highlights that maintaining a balance between Ushma and Vayu is essential for good digestion and overall health. Prana Vayu has duty of transportation of food to its digestive site and Saman Vayu to increase the intensity of digestive fire. This can be compared with the parasympathetic activity and the local hormones activation inside the stomach by the type and amount of food ingested by stretching and irritating property of food.

In samyoga, it just mean that all six of these bhav are required for proper digestion of food, not just having proper ushma is enough, vayu and other factors plays the same role. It is that each factor supports other to perform best in digestion process and not just these six, we can also add ahara vidhi vidhan in this, all 10 points of ahara vidhi vidhan explained by acharya charak play much important role in maintain these six bahva.

Overall, the article provides an insightful and informative overview of Ahara Parinamakar Bhava and explains the importance of Ushma and Vayu in the digestive process. The article highlights the relevance of Ayurvedic principles in understanding the role of food in our body and mind. It is an interesting and informative read for anyone interested in Ayurveda and the principles of traditional Indian medicine.

## CONCLUSION

With the above study in a collective way of information and correlation of ayurvedic aspects with modern concepts gives much insight that how much these six bhava are important and helps the process of digestion. This article also puts the light on how to keep these bhava optimal and hence keep digestive system healthy. With the help of this study ayurvedic concepts gets another authorization in the world of modern concepts. Still much more correlations and clarity is lacking which could be fulfilled in future studies.

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