



# A CONCEPTUAL STUDY ON PHYSIOLOGICAL ROLE OF AGNI IN HUMAN DIGESTION

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## ABSTRACT

The Ayurvedic idea of Agni, is crucial to our general health. Each cell, each tissue, and each system in the body contain the intellectual power known as Agni. Agni's discernment ultimately decides which chemicals enter our cells and tissues and which ones should be eliminated as trash. Agni is the guardian of life in this sense. In actuality, Ayurveda claims that when the Agni is extinguished, death quickly follows. While Agni is directly responsible for a wide variety of activities, according to Ayurveda, Agni is also the fundamental cause of all imbalances and illnesses. According to Ayurveda, the body has 13 different subtypes of Agni, each of which is identified by a unique physiological function. Jathara Agni, the principal digestive fire that controls food absorption and digestion, is the mother of all of them. However, there are several more fire-related elements in the cells, tissues, and organs of the body that control processes like sensory perception and the nutrient intake of certain tissues. Which compounds can pass through cell membranes and preserve cellular memory in our DNA are determined by localized manifestations of Agni. Poor nutrition, an unhelpful lifestyle, and unresolved emotions may all make Agni more difficult by stifling any of these properties throughout the body. Similar to this, cultivating Agni's attributes broadly has the ability to strengthen Agni's influence across the body. Thus, a knowledge of Agni is one of the key ideas for comprehending the nature of disease as well as for formulating therapeutic philosophies.

**KEYWORDS** - Jatharagni, Agni, Physiological Agni, Ayurveda etc.

## INTRODUCTION

An Agni is revered in its divine form as the originator and sustainer of life, according to the Vedas, the ancient Indian literature and Ayurveda. Biological fire is the ideal metaphor for the name Agni. Both normal and pathological levels require agni. Similar to how we consume food to fuel our bodies with nourishment, our digestive systems similarly require regular fuel in order to carry out the different biochemical processes taking

place within them. The bulk of ailments are caused by malfunctions of the Agni, which suggests that Agni is the source of all maladies.<sup>1</sup>

The pathology and diagnoses of Ayurveda are founded on its unique ideas of Triguna (Sattva- Raja-Tama), Tanmatra, Panchamahabhuta, Tridosha (Vata- Pitta-Kapha), and AGNI. The entire underlying physics and biology of Ayurveda are very distinct from the present basic sciences. The term "Agni" in Ayurveda refers to the process of digesting food and producing metabolic by products. Agni transforms food into energy, which is in charge of all the essential bodily processes. Food may be taken in a variety of ways, such as eatables, drinks, linctus (licked) foods, and masticable foods. Food is healthy if it is ingested in an appropriate proportion and is free of contamination. Because of the influence of Jatharagni, Bhutagni, and Dhatvagni, these compounds go through metabolic change. Because food ingested is Panchabhautika, Jatharagni first stimulates the Bhutagni because only after the individual Bhutagnis have transformed the food can Dhatvagnis more easily perform tissue metabolism. The Vata dosha then aids in the continued circulation of processed metabolic products inside the srotas. This promotes tissue growth as well as tissue development, strength, complexion, and happiness. After acquiring the appropriate nutrients from digested dietary items, dhatus continue to function normally.<sup>2</sup>

The key ingredient in charge of both health and sickness is jatharagni. Longevity, complexion, strength, health, enthusiasm, well-built, luster, immunity (ojas), temperature, other Agnis (bhutagni and dhatvagni), and other essential functions are all reliant on jatharagni when it is functioning normally. As a result, the agni's condition determines whether the body is healthy or sick.<sup>3</sup>

### Types of Agni

Agni' classified into 13 subtypes- ,

- Dhatvagni - 7
- Bhutagni - 5
- Jatharagni - 1

### DETAILED DESCRIPTION OF TYPES OF AGNI

#### JATHGANI

The term "jatharagni" refers to the whole digestive tract's process of digesting. The gastro-intestinal tract is involved, breaking down the large food particles into smaller ones that may be absorbed. Jatharagni alters the food ingredients, which are composed of the five fundamental components, so that each Dhatus Paramanus may use them (tissues). Jatharagni is also in charge of our bodies' ability to separate food into its purest form, known as Prasad, and its waste products, known as Kitta. Once more, the Prasad Bhaga is split into three halves. The first part either creates or feeds the Sthanika Dhatu (local tissue). The Poshaka Dhatu is made up of the second piece (The supporting tissue or tissue responsible in the formation of its subsequent Dhatu). The third section aids in the development of Upadhatu's (sub-tissues). The Kitta Bhaga is eventually expelled from the body together with the other major metabolic waste products of digestion as tissue wastes. Heat and energy that are utilized for bodily processes are released during the Dhatu Paka procedure.<sup>4</sup>

## **DHATVAAGNI**

The metabolism of tissues. The nutrients that the Jatharagni have digested and absorbed are subsequently distributed to the appropriate places. These nutrients must be further digested with the aid of Dhatvagni since the Dhatus are not in the stage of absorption at which they can be absorbed. Each Dhatu that we have seen would have a unique Dhatvagni to digest whatever is given to them and ingest the nutrients given. For the Dhatus to survive and develop, Dhatvagni is necessary. Dhatvagni mostly serves two purposes. The synthesis of new tissue is one. To provide energy for tissue function comes second. Both of these would suffer if Dhatvagni is compromised. Dhatvagni plays a critical function in the management of a number of chronic illnesses.<sup>5</sup>

## **BHUTAGNI**

Each of the five Bhutagnis breaks down a certain amount of the food's element. Following food digestion by the Bhutagni, items that were digested had ingredients and attributes that were identical to each Bhuta, nourishing each Bhuta's unique Bhoutika constituents. All foreign chemicals must thus undergo Bhutagni Paka in order to become endogenous, resulting in proper tissue hydration. It alludes to the liver's final phase of digestion. The five elements that make up the cosmos are known as Panchabhutas. We would also consume panchamahbhovatic cuisine, which has all five elements. Each of us needs their own Panchamahbhoot Agni, which can digest all components in our bodies to provide us ideal energy, in order to digest food into perfect energy.<sup>6</sup>

## **JATHARAGNI HAVING 4 SUBTYPES –**

### **VISHMAAGNI**

Vata in this situation disturbs the digestive fire. Vata is unpredictable, thus there are times when strong appetites alternate with loss of appetite and forgetting to eat. Constipation and abdominal gastric dilation are alarming symptoms. The results of Vishama Agni include cholera, diarrhea, dysentery, an enlarged spleen, an abdominal tumor, colic, gas, wind, and eructation.<sup>7</sup>

### **TEEKSHAAGNI**

Pitta in this situation disturbs the digestive fire. In these situations, Agni is frequently high and Pitta and Agni have similar characteristics. In these circumstances, illness immunity is favorable. Pitta can vary, and thus periods of overeating can occur. The likelihood of experiencing diarrhea, bleeding-related diarrhea, and toxemia is rising (toxins in the blood). The effects of Teekshna Agni include abdominal colic, anemia, burning, diarrhea, hemorrhaging, hemophilia, hepatitis, hepatomegaly, hyperacidity, jaundice, pain, pyuria, sour belching, tuberculosis, urinary illnesses, vertigo, and yellow skin.<sup>8</sup>

### **MANDAGNI**

Kapha in this situation disturbs the digestive fire. There are times when you have a weak appetite, a sluggish metabolism, and a predisposition to gain weight even when you're eating enough. This is due to the fluctuation in Kapha. Congestion and excessive production of phlegm or mucus are notable characteristics. Poor blood

circulation makes it simple to suffer from sinusitis and chest congestion episodes. The hallmarks of Manda Agni are exhaustion, nausea, bronchial asthma, bronchitis, coughing, and excessive mouth salivation.<sup>9</sup>

## SAMAAGNI

The hallmark of a healthy digestive fire is a strong, alluring hunger that may be readily sated by eating typical fare. There are no bouts of gas, colic, or constipation; digestion is normal. Samaa Agni is mostly in charge of providing the human body with sustenance and constructing a solid foundation for its seven tissues.<sup>10</sup>

## PHYSIOLOGICAL ROLE OF AGNI IN DIGESTION

The concept of Agni, or biological fire, is crucial to Ayurveda. One of the key elements in evaluating ideal health and internal hemostasis is agni. Ama, on the other hand, is a reaction to a toxin or pathogen, the cause of all illnesses. The primary cause of Ama creation is Agni's impairment, which ultimately results in Agni's destruction. As a result, a vicious cycle of weak Agni and Ama production is generated. In order to effectively cure the illnesses, it is crucial to comprehend the fundamental link between Ama and Agni. In order to ignite the digestive fire and stop the development of Ama, the main cause of all illnesses, it is crucial to maintain a healthy appetite, employ digestive stimulants, and ensure regular bowel movements.<sup>11</sup>

Ama is produced when Agni is not operating properly (undigested foods that remains in tract and acts as antigens and are responsible for production of various diseases and autoimmune diseases). The amount of Jatharagni (inadequate digestion in the digestive system), Bhutagni (liver dysfunction), or Dhatvagni (disturbed tissue metabolism) may be where the production of Ama can take place.<sup>12</sup>

The digestive system's ability to function properly is demonstrated by the normal tone of the circulatory and digestive systems, as well as by healthy tissue growth, strong immunity or resistance to disease, and, most importantly, a healthy complexion. This description more effectively conveys the physiological significance of Agni. The other kinds of Agni under Jatharagni's supervision are likewise in equilibrium if Jatharagni is righteous, balanced, and healthy.<sup>13</sup>

As a result, maintaining and safeguarding our gut fire is essential for our overall health. Eating meals that are readily digested, freshly prepared, Satvika (Pure), and suitable at the right times is essential for maintaining a healthy Agni. Lethargy, a coated tongue, and bad breath are all signs of ama, which is thought to be the underlying cause of all illnesses.<sup>14</sup>

Today, symptoms of this undigested material include high cholesterol, fibromyalgia, candida, diabetes, constipation, obesity, depression, anxiety, etc. According to Ayurveda, Ama, whether it be physical or mental, is the product of Agni's dysfunction and is the cause of all sick states. The Dhatvagni also work normally in accordance if Agni (Jathara Agni) is operating regularly. Poor digestion, altered blood circulation, a bad complexion, low energy, flatulence, and a weak immune system are all signs that the digestive fire is not working correctly. According to Ayurvedic teachings, addressing the disease's fundamental cause entails encouraging the digestive fire's healthy operation. The Dhatvagni will be hyperactive if the Jatharagni is hyperactive. Tissue depletion results from this (Dhatukshaya). All of the other Agnis in the body are disturbed

when Jatharagni becomes vitiated. This causes a decrease in cellular immunity and the development of systemic Ama.<sup>15</sup>

Dhatugata Ama is the name of this (cellular toxins). The cells become feeble and drowsy. The metabolism becomes affected if this fire is extinguished. In turn, this results in a series of pathological occurrences that cause a number of systemic diseases. Many illnesses can easily develop when weak Jatharagni, weak Dhatu-Agni (cellular fire), and production of systemic and cellular Ama occur in that order. However, if the Jatharagni is weak, the Dhatvagni will also be weak. This depleted Dhatvagni won't have the capacity to effectively digest the nutrients at their disposal. Unprocessed food (Ama), inadequately processed and created Dhatu, and poisons have accumulated in the tissue's cells.<sup>16</sup>

## SIGNIFICANCE OF AGNI

Agni's role in the universe affects everything from bala (strength) to varna (color) to swasthya (health), utsaha (enthusiasm), upacaya (body development), prabha (complexion), ojas (strength), tejas (valour), vaya (age), and even ayu (life) (fire-like activity). When agni is healthy, a man can live a long, healthy life; when agni is lost, a person dies. Only after being cooked (digested) thoroughly by the Agni can foods that contain the nutritional components of the dhatus be helpful to the dhatus.<sup>17</sup>

## DISCUSSION

According to Ayurveda, the entire process of energy release through digestion at the level of the digestive system and metabolism at the level of tissues is referred to as agni. The name "Agni" stands for digestion, metabolism, and assimilation, or the entire biological conversion and energy usage process. Agni is a descendant of Tejas (fire) Mahabhuta; it is responsible for metabolic processes, which have change as their defining characteristic.<sup>18</sup>

When the Agni is extinguished, a man dies. When a man is suitably induced with it, he lives a long time in excellent health. When it is disarranged, a man starts getting ill. As a result, it is stated that Agni's function is what sustains life. The food that is said to be the source of nourishment for the Sharira, Dhatu, Ojas, Bala, Varna, and other things depends on the Jatharagni for its nutritious activity since the Sharira Dhatu cannot be created from food that has not been digested.<sup>19</sup>

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Jatharagni is the most important form of agni among all others since it is dependent on the function of both the bhutagni and the dhatvagni. Jatharagni's deterioration or improvement is accompanied by bhutagni and dhatvagni's deterioration or improvement. Because life and strength depend on an agni that is in a healthy state, it is imperative that one take all necessary precautions to safeguard jatharagni. On the other hand, someone who consumes an unwholesome food out of avarice falls prey to illness brought on by the vitiation of grahani.<sup>21</sup>

## CONCLUSION

Agni is a fundamental component of life and has demonstrated human development as well as being the cause of several advancements over the millennia. Even now, Agni still plays a significant role in many of our daily routines. The mechanics of life require fire in the human body as well, and the quantity and quality of fire in the system determine how long those mechanisms can function. Every cell has an activity, and according to Ayurveda, this activity is somewhat influenced by the fire, both in terms of quality and quantity, in each of these cells. The life ends at an unavoidable death when Agni is diminished or extinguished. This is demonstrated by the fact that humans typically retain warmth while still alive (a sign of life), and the body cools down when a person has passed away (sign of death). These two symptoms represent the presence of an Agni that is actively working and its absence, respectively. The Agni unconditionally supports life when it is in a normal state (qualitative and quantitative balance).

This Agni becomes a source of several ailments when it becomes morbid or polluted (disturbed in the form of either a pathological rise or abnormal decline). It is also claimed that all illnesses stem from a disrupted Agni, which is the main factor in the development of all psychosomatic illnesses. The body's tissues, which serve as the foundation for defense, immunity, and the maintenance of health, are known to be the target of morbid Dosha attacks and disruptions, which result in illnesses. The condition of Agni is always a determining factor in the morbidity of these Doshas, whether it manifests as a pathological rise or reduction. When Agni is operating correctly, the Doshas likewise maintain their original state and sustain our body, mind, and life. The opposite is also true; if the Agni is disturbed, the Doshas will also be upset and assault the body's defenses, resulting in a variety of ailments. Therefore, comprehending the notion of Agni is crucial to understanding the progression of disease as well as the suggested methods of therapy.

**CONFLICT OF INTEREST –NIL**

**SOURCE OF SUPPORT –NIL**

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