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#### **Research Paper**

# Concept of Agni and Its Importance in Ayurveda: A Review

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#### **ABSTRACT**

Agni, as described in Ayurveda, indeed holds a central role in digestion, metabolism and overall health. The concept of Agni encompasses much more than mere physical digestion; it extends to the transformation of both food and thoughts into energy and consciousness. When Agni is balanced and functioning optimally, it supports the body's ability to extract nutrients from food efficiently, eliminate waste effectively, and maintain overall vitality. The classification of Agni into Jatharagni, Bhutagni, and Dhatvagni helps understand its multifaceted nature and its involvement in various physiological processes. Jatharagni, the digestive fire located in the stomach, initiates the digestion of food, while Bhutagni, the elemental fire, governs the transformation of nutrients into the body's tissues. Dhatvagni, on the other hand, regulates the metabolic processes within the tissues, ensuring their proper nourishment and functioning. The balance of Agni is crucial for overall health and longevity, as imbalances can lead to various health issues and diseases. Ayurveda emphasizes the importance of maintaining Agni in a state of equilibrium through proper diet, lifestyle and herbal remedies. When Agni is strong and balanced, it not only supports physical health but also contributes to mental clarity, emotional stability, and spiritual well-being. The teachings of Ayurveda regarding Agni underscore the interconnectedness of the body, mind and spirit, emphasizing the importance of harmony and balance in all aspects of life for optimal health and longevity.

KEYWORDS: Agni, bhutagni, dhatvagni, jatharagni, digestion, absorption

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#### I. INTRODUCTION

Ayurveda's perspective on Agni as a cornerstone of health underscores its fundamental role in maintaining overall well-being. The understanding of Agni in Ayurveda is deeply rooted in its own framework of physics and biology, which differs from modern scientific concepts. Instead, Ayurveda relies on principles like Triguna (Sattva-Raja-Tama), Tanmatra, Panchamahabhuta, Tridosha (Vata-Pitta-Kapha) and Agni to explain the structure, function, pathology and diagnostics of the human body. In Ayurveda, Agni is not merely a physical fire but is conceptualized as a liquid form, referred to as "Pitta." Charaka, one of the ancient Ayurvedic scholars, asserts that there is no Agni apart from Pitta, indicating the close relationship between Agni and Pitta in metabolic processes<sup>1</sup>. The process of food consumption and metabolism involves the interaction of various Agnis, including Jatharagni, Bhutagni, and Dhatvagni. Jatharagni initiates the digestion of food, stimulating Bhutagnis responsible for transforming food into elemental components. These processed nutrients are then metabolized by Dhatvagnis to nourish the body's tissues, facilitated by the circulation within the srotas (channels). The proper functioning of Jatharagni is crucial for maintaining health and preventing disease. When Jatharagni is in balance, it supports longevity, strength, complexion, immunity (ojas) and various vital functions of the body. Imbalances in Jatharagni can lead to a host of health issues and diseases. Ultimately, Ayurveda emphasizes that the healthy state of the body and the onset of disease are intricately linked to the status of Agni. Therefore, maintaining the balance and strength of Agni through proper diet, lifestyle, and Ayurvedic treatments is essential for promoting health and well-being according to this ancient system of medicine<sup>2</sup>.

#### II. MATERIAL AND METHODS

The functions of Kosthagni or the digestive fire located in the gastrointestinal tract, play a crucial role in the transformation of ingested food. When food enters the body, it encounters Kosthagni and Pachaka Pitta, a subtype of Pitta responsible for digestion. Together, Kosthagni and Pachaka Pitta work to cook the ingested food properly, resulting in the formation of two substances:

- 1. **Sarabhaga or Ahara Rasa:** This is the essence of food, which undergoes further changes under the influence of Bhutagnis (elemental fires) to produce Rasadhatu, the first tissue of the body. The Sarabhaga contains the essential nutrients derived from the food.
- 2. **Kitta Bhaga:** These are the waste products of food that are not assimilated by the body and are eventually eliminated as feces.

The process of Ahara Paka or digestion of food, is the combined action of Kosthagni and Bhutagnis. This process ensures that the nutrients from the food are extracted and transformed into Rasadhatu, which serves as the foundation for the nourishment and growth of all other tissues (dhatus) in the body. Rasadhatu, enriched with vital nutrients, circulates throughout the body, supplying essential materials to support the metabolism and functioning of various tissues. This circulation of nutrients ensures the proper growth, maintenance and vitality of the body's tissues, contributing to overall health and well-being<sup>3</sup>.

#### Importance of Agni

The significance of Agni in Ayurveda extends beyond mere digestion; it is intricately linked to various aspects of health and well-being. As stated, strength (Bala), complexion (Varna), health (Swasthya), enthusiasm (Utsaha), body development (Upachaya), complexion (Prabha), immunity (Ojas), vitality (Tejas), age (Vaya) and even life itself (Ayu) are all dependent on the proper functioning of Agni. When Agni operates normally, it facilitates the efficient digestion and metabolism of food, ensuring that the nutrients necessary for the nourishment and maintenance of the body's tissues (dhatus) are extracted. These nutrients contribute to the overall health and vitality of an individual, manifesting in various aspects such as strength, complexion and immunity. However, when Agni is impaired or imbalanced, it can lead to a decline in these vital aspects of health. Loss of Agni disrupts the body's ability to properly digest and assimilate nutrients, resulting in poor health and potentially life-threatening conditions. Ayurveda emphasizes the importance of consuming foods that are easily digestible and supportive of Agni's function. Only when food is properly cooked (digested) by Agni can it provide nourishment to the dhatus and support the maintenance of health and vitality. In essence, the state of Agni is paramount in Ayurveda, as it governs not only digestion but also the overall balance and functioning of the body<sup>4</sup>. By nurturing and supporting Agni through appropriate diet, lifestyle and Ayurvedic therapies, one can promote health, longevity and vitality according to this ancient system of medicine.

# Concept of PITTA & AGNI in Ayurveda

The relationship between Pitta and Agni in Ayurveda is indeed a subject of debate and interpretation. While some texts assert that Pitta itself is Agni, others maintain that Pitta possesses Agni-like properties and functions as the internal fire (antaragni) within the body. According to Sushruta, one of the ancient Ayurvedic scholars, there is no separate Agni apart from Pitta. He suggests that the hot and transformative properties of Pitta, such as burning and cooking, are synonymous with Agni. Therefore, during its diminished state, treatments aimed at enhancing Pitta-like qualities may be employed, while during its increased state, cooling therapies are recommended. In terms of function, Pitta plays a crucial role in the digestion and metabolism of food. It aids in the breakdown of large food molecules into smaller ones through both mechanical and chemical processes<sup>5</sup>. Additionally, Pitta facilitates the transportation of these smaller molecules across the intestinal wall, promoting absorption into the body. Finally, Pitta is involved in the elimination of undigested portions of food and waste products from the body. While the exact nature of the relationship between Pitta and Agni may vary among Ayurvedic texts and practitioners, the fundamental concept remains consistent: Pitta, with its fiery properties, is intimately involved in the digestive processes and is essential for maintaining optimal health and vitality.

# **Types of Agnis**

The enumeration and classification of Agnis (digestive fires) in Ayurveda vary among different classical texts and scholars. These variations reflect the diverse perspectives and interpretations within the Ayurvedic tradition. Here's a summary of the different classifications mentioned in various classical Ayurvedic texts:

**Charaka Samhita :** Charaka mentions 13 Agnis: Jatharagni (1), Bhutagni (5), Dhatvagni (7)<sup>6</sup>

**Sushruta Samhita :** Sushruta illustrates five types of Agnis: Pachakagni, Ranjakagni, Alochakagni, Sadhakagni, Bhrajakagni (possibly indirectly referenced as one of the Bhutagnis)<sup>7,8</sup>

**Ashtanga Hridaya (Vagbhata) :** Vagbhata describes different types of Agni: Aaudaryagni (1), Bhutagni (5)<sup>9</sup>, Dhatvagnis (7), Dhoshagnis (3), Malagnis (3)<sup>10</sup>, Pitta (5) (possibly included within Bhutagnis)

Sharangadhar Samhita: Sharangadhara recognizes five Pittas: Pachak, Bhrajak, Ranjak, Alochaka, Sadhak<sup>11</sup>

**Bhavamishra**: Bhavamishra follows the classifications of Charaka and Vagbhata<sup>12</sup>.

These variations in the enumeration and classification of Agnis underscore the richness and complexity of Ayurvedic thought. Each classification system offers unique insights into the functions and manifestations of Agni within the body. Despite these differences, the overarching principle remains the same: Agni is fundamental to digestion, metabolism, and overall health in Ayurveda.

According to Ayurveda, Agni has been classified into 13 types based on their function and site of action. These classifications are as follows:

- 1. **Jatharagni :** This is the primary Agni present in the stomach and duodenum, responsible for initiating the digestion of food.
- 2. **Bhutagni:** There are five Agnis corresponding to the five basic elements (Bhutas) earth, water, fire, air, and ether. Each Bhutagni is responsible for the digestion and metabolism of its respective element.
- 3. **Dhatvagni:** There are seven Agnis, one in each of the seven Dhatus (tissues) of the body. These Agnis are responsible for the metabolism and transformation of nutrients within their respective tissues.

These classifications into Jatharagni, Bhutagni, and Dhatvagni provide a framework for understanding the multifaceted nature of Agni and its role in digestion, metabolism, and tissue formation. By recognizing the specific functions and sites of action of each type of Agni, Ayurveda offers insights into the intricate processes involved in maintaining health and vitality.

#### (a) Jatharagni

Jatharagni, often considered the most vital Agni in Ayurveda, resides in the Jathara (stomach and duodenum) and holds significant importance in the digestive process. According to Ashtanga Hridaya, it is located in the grahani (duodenum), where it withholds food for a certain time to facilitate digestion. Dhanvantari views it as the Kala known as "Pittadhara," positioned at the entrance of the Pakvashaya (intestine), acting as a gatekeeper for the pathway of food. The strength and vitality of Jatharagni are crucial for various aspects of health and well-being, including the duration of life, overall health, valour, essence of the dhatus (ojas), and the strength of other Bhutagnis and Dhatvagnis. When Jatharagni becomes vitiated, it can lead to the onset of diseases<sup>13</sup>. Jatharagni is responsible for the initial digestion of food, breaking down the ingested nutrients composed of the five basic elements and transforming them for utilization by the body's tissues (Dhatus). It separates the food material into its essence portion (Prasad) and waste products (Kitta), ensuring efficient nutrient absorption and waste elimination<sup>14</sup>. The proper functioning of Jatharagni is essential for the harmonious operation of Dhatvagnis and overall tissue metabolism. Any imbalance in Jatharagni, whether hyperactive (Tikshna) or hypoactive (Manda), can disrupt the functions of Dhatvagnis, leading to various disorders<sup>15</sup>. Jatharagni acts as the primary regulator of all other Agnis, and their functioning is dependent on its status. Jatharagni is further classified into four categories based on its performance in digestion<sup>16</sup>:

- 1. **Vishamagni :** Erratic digestion
- 2. **Teekshnagni:** Hyperactive digestion, associated with elevated Pitta
- 3. **Mandagni :** Hypoactive digestion, associated with elevated Vata and Kapha
- 4. **Samagni**: Balanced digestion, dependent on the normalcy of Doshas (Vata, Pitta, Kapha)

Maintaining a balanced Jatharagni is essential for overall health and well-being, as it directly influences the functioning of all other Agnis and ensures proper digestion, metabolism, and tissue nourishment.

#### (b) Bhutagni

Bhutagni refers to the digestive fire present within each of the five basic elements (Bhutas) - earth (Parthiva), water (Apya), fire (Tejas/Agni), air (Vayavya), and ether (Nabhasa). Just as each cell in our body is composed of these five elements, they also contain the corresponding Bhutagni. When we ingest nutrients from the external environment, whether through food or other sources, these nutrients are composed of the same five basic elements along with their respective Agni or bioenergy. Thus, there is a parallel between the elemental composition and the presence of Bhutagni within our body cells and the external nutrients we consume. According to Charaka, each of the five Bhutagni acts on its own part of the elemental composition present in the food materials. After digestion by Bhutagni, the digested materials contain elements and qualities corresponding to each Bhuta, nourishing the specific elemental components of the body<sup>17</sup>. In terms of modern physiological understanding, the action of Jatharagni in the stomach and duodenum can be likened to the initial digestion of food, while the action of Bhutagni can be compared to the conversion of digested materials in the liver. Just as Bhutagni acts on the elemental composition of food to facilitate its assimilation into the body, the liver plays a crucial role in processing and metabolizing nutrients after digestion. Understanding the role of Bhutagni underscores the intricate relationship between the elemental composition of nutrients and their transformation within the body, highlighting the holistic approach of Ayurveda to health and well-being.

# (c) Dhatvagni

Each of the seven Dhatus (elemental tissues) in the body possesses its own Agni or digestive fire, responsible for metabolizing the nutrient materials supplied to them through their respective Srotas (channels).

- 1. **Rasagni :** Present in the Rasa Dhatu (plasma/lymph), Rasagni synthesizes and transforms the essential Rasa Dhatu required for its particular tissue from the basic nutrients present in the diet.
- 2. **Raktagni :** Present in the Rakta Dhatu (blood), Raktagni metabolizes and transforms nutrients to produce blood tissue.
- 3. **Mamsagni :** Present in the Mamsa Dhatu (muscle tissue), Mamsagni processes nutrients to form muscle tissue.
- 4. **Medagni :** Present in the Meda Dhatu (adipose tissue), Medagni synthesizes and transforms nutrients into adipose tissue.
- 5. **Asthyagni:** Present in the Asthi Dhatu (bone tissue), Asthyagni metabolizes nutrients to form bone tissue.
- 6. **Majjagni :** Present in the Majja Dhatu (marrow tissue), Majjagni processes nutrients to produce marrow tissue.
- 7. **Shukragni :** Present in the Shukra Dhatu (reproductive tissue), Shukragni synthesizes and transforms nutrients into reproductive tissue.

Each Dhatvagni has its own specialization in synthesizing and transforming constituents suitable for its particular Dhatu. This selective action ensures that each tissue receives the necessary nutrients tailored to its specific requirements.

As mentioned by Acharya Charaka, these seven Dhatus, which form the support structure of the body, contain their own Agni. Through the action of their respective Agni, they digest and transform the materials supplied to them, producing substances similar to themselves for assimilation and nourishment, thereby contributing to the overall health and vitality of the body<sup>18</sup>.

#### Importance of Jatharagni

The discussion highlights the central importance of Jatharagni, the chief among all types of Agnis, in maintaining overall health and well-being. Both Bhutagni and Dhatvagni, responsible for the digestion and metabolism of nutrients within the body's tissues, depend on the proper functioning of Jatharagni. When Jatharagni is aggravated or diminished, it directly affects the functioning of Bhutagni and Dhatvagni. An imbalance in Jatharagni can lead to a corresponding imbalance in Bhutagni and Dhatvagni, disrupting the digestive and metabolic processes and potentially leading to various health issues. Therefore, it is essential to protect and maintain the balance of Jatharagni through suitable dietary choices and lifestyle behaviors. Consuming a wholesome diet that supports the natural functioning of Jatharagni and avoiding unwholesome foods driven by greed or desire is crucial for preserving health and longevity. By prioritizing the protection of Jatharagni and ensuring its proper functioning, one can support the optimal functioning of Bhutagni and Dhatvagni, thereby promoting longevity, strength, and overall well-being. Conversely, neglecting Jatharagni and consuming unwholesome foods can lead to the vitiation of grahani (duodenum) and the onset of diseases caused by digestive imbalances. Therefore, Ayurveda emphasizes the importance of nurturing Jatharagni as the foundation of good health and vitality<sup>19</sup>.

# Physiological and Pathological State of Agni<sup>20-23</sup>

# (a) Samagni

The first variety of Agni, known as Samagni, represents the ideal physiological state of Agni, characterized by its balanced and harmonious function. Samagni is not associated with any dosha (biological humors - Vata, Pitta, Kapha) imbalance and is considered the optimal state of Agni. In the Samagni state, digestion and assimilation of food occur efficiently and effectively at the appropriate times. This ensures that nutrients are properly absorbed and utilized by the body, thereby enhancing the quality and nourishment of the Dhatus, which are the supportive tissues of the body. Individuals who possess Samagni are typically in good health and wellbeing. Their digestive fire operates smoothly, allowing them to maintain a balanced metabolism and overall vitality. As a result, they are less prone to digestive disorders and other health issues associated with Agni imbalance. The presence of Samagni reflects a state of equilibrium and harmony within the body, where all physiological processes function optimally. Ayurveda emphasizes the importance of cultivating and preserving Samagni through appropriate diet, lifestyle, and Ayurvedic practices to support long-term health and well-being.

# (b) Vishamagni

Visamagni represents an irregular or erratic state of Agni, characterized by inconsistent digestion and metabolism. In this state, Agni functions intermittently, alternating between periods of normal function and abnormal function. This irregularity in Agni's performance can lead to various digestive disturbances and discomfort.

Some of the manifestations associated with Visamagni include:

- 1. **Flatulence:** Excessive gas production in the digestive tract, leading to bloating and discomfort
- 2. **Abdominal Pian :** Discomfort or pain in the abdomen, often related to digestive issues.
- 3. Upward movement of Vta inside the koshta: Vata, one of the three doshas, may move upward within the gastrointestinal tract, causing disturbances such as bloating or discomfort.
- 4. **Diarrhea:** Loose or watery stools, often accompanied by urgency and frequency.
- 5. **Heavines in abdomen :** Feeling of fullness or heaviness in the abdominal region, indicating incomplete digestion or stagnation of food.
- 6. **Intestinal gurgling:** Audible sounds or gurgles originating from the intestines, indicating digestive activity or disturbance.
- 7. **Straining exercise for evacuation of stools :** Difficulty or discomfort during bowel movements, often requiring straining or effort.

When Visamagni is affected by the Vata dosha, it can exacerbate these symptoms and lead to the manifestation of various Vata-related disorders (vatavyadhi). Vata imbalances may further contribute to irregular digestion, leading to a worsening of symptoms and overall discomfort. Addressing Visamagni involves restoring balance to Agni and mitigating Vata imbalances through appropriate dietary and lifestyle modifications, along with Ayurvedic treatments targeted at pacifying Vata dosha. By promoting regularity and stability in Agni's function, one can alleviate digestive disturbances and support overall well-being.

#### (c) Tikshnagni

Tikshnagni, or very sharp/fast digestion, refers to a state in which the digestive power is heightened, leading to rapid digestion of food regardless of its type. According to Acharya Sushruta, when the digestive capacity surpasses the normal level and becomes elevated, food is digested swiftly, often resulting in increased hunger or appetite. In individuals with Tikshnagni, digestion occurs rapidly, leading to a quick turnover of food in the digestive tract. This swift digestion process may manifest as dryness and a burning sensation in the throat, mouth cavity, and lips, a condition known as "Bhasmak Roga" in Ayurveda. While Tikshnagni accelerates the digestion of food, it can also give rise to certain manifestations of Vata imbalance, known as vatavyadhi in Ayurveda. Vata dosha, characterized by qualities of dryness, lightness, and mobility, may become aggravated due to the rapid digestion process, leading to various Vata-related disorders.

The key characteristics of Tikshnagni include:

- 1. **Quick digestion:** Food is rapidly broken down and processed in the digestive system.
- 2. Increased hunger: Swift digestion may stimulate hunger or the desire for food shortly after a meal.
- 3. **Dryness & burning sensation :** Dryness and a burning sensation in the throat, mouth, and lips may occur due to the rapid digestion process, leading to Bhasmak Roga.
- 4. **Manifestation of Vatavyadhi :** Aggravation of Vata dosha due to Tikshnagni may result in the manifestation of Vata-related disorders.

Addressing Tikshnagni involves balancing and pacifying the aggravated digestive fire, as well as mitigating any associated Vata imbalances. Dietary and lifestyle modifications aimed at soothing and stabilizing Agni can help alleviate symptoms and restore balance to the digestive system. Ayurvedic treatments and therapies targeted at pacifying Vata dosha may also be beneficial in managing Tikshnagni and its associated symptoms.

### (d) Mandagni

Mandagni, characterized by slow digestive power or capacity, refers to a state in which the digestive fire operates at a sluggish pace. Individuals with Mandagni tend to consume small amounts of food and struggle to digest even modest quantities. According to Dhanvantari, Agni in this state digests minimal food over an extended period, leading to various symptoms and manifestations.

Key characteristics of Mandagni include:

- 1. **Slow digestion :** Food is digested at a sluggish pace, resulting in a prolonged digestive process.
- 2. **Inability to digest :** Individuals with Mandagni struggle to digest even small quantities of food, leading to discomfort and heaviness in the abdomen.
- 3. **Symptoms of indigestion :** Manifestations such as heaviness in the abdomen and head, cough, dyspnea (difficulty breathing), excessive salivation, vomiting, and weakness of the body may occur due to impaired digestion.
- 4. **Association with kapha imbalnce :** Mandagni is associated with the manifestation of Kapha-related disorders, known as kaphaja vikara in Ayurveda. Kapha dosha, characterized by qualities of heaviness, coldness, and sluggishness, may become aggravated in individuals with Mandagni, leading to the onset of various Kapha-related symptoms.

Addressing Mandagni involves balancing and stimulating the sluggish digestive fire to improve digestion and alleviate associated symptoms. Dietary and lifestyle modifications aimed at enhancing Agni, such as consuming warm, light, and easily digestible foods, incorporating spices and digestive herbs, and practicing regular physical activity, can help support optimal digestion and metabolism. Ayurvedic treatments and therapies

targeted at pacifying Kapha dosha may also be beneficial in managing Mandagni and its associated manifestations.

#### III. CONCLUSION

The comprehensive discussion on Agni underscores its pivotal role in maintaining good health and well-being in human beings. In clinical practice, Agni Pariksha (assessment of digestive fire) holds significant importance as it serves as a basis for determining the appropriate treatment plan for patients. The healthy or diseased state of the body is largely dependent on the status of Agni. Vata, one of the three doshas, plays a vital role in stimulating the digestive fire. Protecting Agni through proper intake of food is crucial, as it serves as the fuel for its function. Imbalances in food intake, such as deprivation or excessive consumption, can disturb Agni, leading to the development of diseases in the body. Jatharagni, located in the stomach and duodenum, is particularly important as it facilitates the secretion of various chemicals and enzymes necessary for proper digestion of food. Dhatvagni and Bhutagni further aid in the digestion, absorption, and assimilation of food substances into the body. Ayurveda emphasizes that the disturbed function of Agni is the root cause of all diseases. Therefore, maintaining the balance and proper functioning of Agni is essential for overall health and preventing the onset of various ailments. By understanding and addressing the status of Agni, Ayurvedic practitioners can develop tailored treatment plans to restore balance and promote optimal health in individuals.

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