This journal is the official publication of Bangladesh Society of Physiologists (BSP) Web URL: www.banglajol.info/index.php/JBSP

Abstracted/indexed in Index Copernicus, Director of Open Access Journal, HINARI Index Medicus for South East Asia Region, Google Scholar, 12OR, infobse index, Open J gate, Cite factor, Scientific indexing services

pISSN-1983-1213; e-ISSN-2219-7508

### Review

### Article information:

Received: April 2025 Accepted: June 2025

DOI:https://doi.org/10.3329/jbsp.v20i1.75479

### Corresponding author:

Mariya Husain, Department of Kriya Sharir, Parul Institute of Ayurved and Research, Parul University, Vadodara, Gujarat, India. Email:drmariya24 @gmail. com

### Cite this article:

Athira V, Husain M. Proper eating conduct as a pathway to disease prevention: A systematic review. J Bangladesh Soc Physiol 2025; 20(1): 39-44

This article is open access licensed under CC BY NC SA which allows readers copy, distribute, display, and perform the work and make derivative works based on it only for noncommercial purposes.



# Proper eating conduct as a pathway to disease prevention: A systematic review

### Athira V, Mariya Husain

Department of Kriya Sharir, Parul Institute of Ayurved and Research, Parul University, Vadodara, Gujarat,India

### **Abstract**

In today's productivity-obsessed, fast-paced environment, where everyone is consumed with achieving success, maintaining a balanced diet often gets overlooked, resulting in various lifestyle-related health issues. Different factors might affect one's health and susceptibility to the disease. A traditional system of medicine, Ayurveda gives a deep, comprehensive insight into health and food based on certain unique conceptual and theoretical positions. Beyond the ingestion of food, the concept of diet in Ayurveda has a broader view. It suggests approaches for consuming food, considering its quality and quantity based on an individual's digestive capacity. If the rules for having the food are properly followed, it helps maintain health and enhance life span. While consuming food, time, place, quantity, quality & manner are also necessary. When food is consumed correctly, it supports the body's proper growth; however, improper consumption can lead to various health issues. So, according to Ayurveda, the concept of the rules to have food is one of the most beneficial for reducing the disorders in the noble goal of maintaining health. Unhealthy food habits, such as overeating, consuming a high-protein diet, excessive spice and oil, harmful food combinations, and eating without considering one's digestive capacity, are major contributors to disease. To fully reap the benefits of food, one should adhere to the guidelines outlined in Ayurveda, which specify the what, when, where, and how of food consumption. In this article, various aspects of the rules for having food according to Ayurveda are explained.

**Keywords:** Dietary guidelines, Dietary rules, Food, Health, Prevention

### Introduction

he optimal health according to Ayurveda is "to be established in one's natural state". To reach this objective, it is essential to maintain a harmonious balance between structural and physiological elements, ensure the proper functioning of metabolic and excretory systems, keep body tissues and senses in a healthy state, foster a sound mind, and cultivate a sense of self-awareness and inner contentment<sup>1</sup>. Our body is nourished by food & it is the most essential for the sustenance of life, and everyone in the world looks for it<sup>2</sup>. In Ayurveda, it is believed that when consumed correctly, food plays a vital role in enhancing complexion, improving voice quality, promoting longevity, and fostering wisdom, happiness, contentment, growth, strength, and intelligence<sup>3</sup>. It not only provides nourishment to the body but also protects against infections, accelerates growth and development, stimulates the functioning of the senses, and enhances both physical and mental well-being. Food is considered the ultimate medicine that promotes health in both unhealthy and healthy ones. Research evidence suggested that ingestion of food sends a large number of interacting signals to the brain, loaded with sensory, nutritive and various information. [4] The digestion and metabolism are not only limited to ingestion of food; but it is also affected by how our nervous system including brain receives and integrate information. The digestive fire, which fuels metabolic processes in the body, plays a crucial role in overall health. It operates through three key stages: Starting from the digestion in the gastrointestinal tract followed by tissue-specific metabolism, and finally, the metabolism at the subcellular level. Because of lifestyle changes, nowadays people are placing less importance on their food and dietary guidelines. Along with the complexity of food processing and diversity in the source, the consumption of fast food and readily available packaged food, etc., reflects these changes. The dietary practice of current

time includes overconsumption of high-energy, high-density, and ultra-processed foods, fast food and takeaways, irregular and inadequate meal times, and frequent snacking between meals.<sup>5</sup> Many health issues originates solely from poor eating habits and can be prevented by adhering to proper dietary guidelines. Most people today lead a sedentary lifestyle and prefer dry, cold meals over freshly prepared ones. Having food even if they haven't fully digested their previous meal, they often eat more at inappropriate times and places. Many aren't eating mindfully. For instance, some person eats slowly while watching TV or movies, or are busy with their mobile or work, or while driving too. Barely paying attention to what they're consuming, while others rush through their meals due to busy schedules. All these bad food habits disturbed the biological clock too. The study, titled "Organ Sudden Death Study," focused on individuals below 39 years of age and revealed that excessive consumption of fast food significantly contributes to unnatural deaths, particularly due to heart attacks. This study identified excessive fast food consumption as a primary factor in heart disease. Autopsy findings showed the presence of undigested food, including fried meat, in the stomachs of the deceased, suggesting unhealthy eating patterns and meal timings. 6 In the same way, frequent rapid eating was linked to a higher risk of MASLD (metabolic dysfunction-associated steatotic liver disease). 7 Dietary recommendations suggest consuming food based on individual energy needs, considering factors such as age, gender, physical activity level, and physiological conditions like menstruation, pregnancy and lactation, to achieve and maintain a healthy body weight and perfect nutritional health. According to Ayurveda, all disease has their origin in the digestive tract. Every meal we have either affects our ability to maintain health or causes disease. A methodically and scientifically described diet plan consists of eight dietary guidelines that can be followed for healthy and diseased conditions.8

### Dietary rules-

### 1. One should eat warm food <sup>9</sup>

Warm food, when consumed, is tasty, but it doesn't soothe the digestive fire; it is easily digested, aids the downward flow of wind, and assists in the release of phlegm. The warmth of food increases the saliva and gastric juice, it will take more time and energy to digest the cold food, which may lead to lethargy. Fresh and warm food has highest bioavailability of nutrients. Also, it is recommended to drink warm water, as it will stimulate the digestive fire, and help in digestion. So, while having one, it is preferable to warm food. The warmth of food helps to prevent the growth of bacteria and other organisms, which cause contamination, helps to extend the shelf life of food products, and minimizes the risk of food-borne disease

### 2. One should eat unctuous food

One should consume rich, oily foods, as they are flavourful and stimulate the digestive fire. It digests quickly, aids in the downward movement of gas, nourishes the body to enhance its fullness, strengthens the sensory faculties, and promotes vitality and a healthy complexion. 10 A sufficient amount of fat in the diet serves as a concentrated energy source and supplies essential fatty acids necessary for growth, development, and the formation of nerve cells and the brain. Fat is very essential for the absorption of Vitamins A, D, E, and K. High-density lipoprotein helps to reduce the risk of heart disease. Monounsaturated fatty acids help in stabilizing blood sugar levels .11 The food consumed dry remains hard mass and it will be difficult to digest, causing constipation, tiredness, and retention of urine, resulting in upward movement. 12. Unsaturated fats are considered the healthiest type of fat, offering numerous benefits, particularly for heart health. While saturated fats can be beneficial in moderation, trans fats negatively impact overall health.13

3. One should take food in the proper quantity When consumed in the right amount, it supports

longevity and is efficiently passed into the rectum. It won't impair the power of digestion, and the food will be digested without any difficulty. According to Ayurveda, the quantity of food taken is taken in two ways, the total amount and the amount of each item separately. Consuming the right amount of food ensures no stomach discomfort, satisfaction of the senses, no heart issues, and a feeling of ease while standing, sitting, lying down, walking, breathing, and speaking. Proper quantity does not impair the power of digestion and it ensures proper peristalsis and comfortable passage of food. Consumption of more quantity impairs digestion and less quantity leads to depletion of strength, colour, and valour of the body. 14

## 4. One should eat when the previous meal is digested

If food is consumed before the previous meal is fully digested, the undigested remains from the earlier meal mix with the new food, causing an immediate disruption in the body. If food is taken after the previous meal gets digested, then the digestive fire works properly, there is a good appetite, unimpaired cardiac function, the downward passage of wind, a proper manifestation of the urges for voiding flatus, urine and stool, the product of the digestion does not vitiate the tissues of the body, and also it promotes longevity. Food should not be ingested within three hours before the previous meal gets digested. But in today's busy schedule, one may not pay attention to this leads to discomforts like hyperacidity, indigestion, Irritability of the bowel, etc.<sup>15</sup>

# 5. One should take food consisting of the items non-antagonistic in potency

One should consume food that does not have opposing qualities, as eating such food prevents the onset of diseases that may result from combining foods with conflicting potencies. Therefore, it is important to choose food without contradictory properties. Every substance has a power (*Virya*) through which the action takes

place<sup>.16</sup> Eating incompatible food causes various skin disorders, Irritable Bowel Disease, swelling, fever, erysipelas disease, etc, and even may cause death.<sup>17</sup>

# 6. Consuming food in places that are pleasant to mind and with required cookery

One should eat in a suitable place that is properly equipped, as doing so helps avoid emotional stress that may arise from eating in an inappropriate setting lacking necessary amenities. Therefore, it is essential to eat in a place with all the required accessories. Having food in an uncomfortable place without proper accessories may lead to some psychic agitation and in turn result in inflicting the mind. 18 Even if the person takes the food in proper quantity, the mind is affected by factors like fear, anger, shyness, jealousy, etc, which may lead to indigestion. 19 Eating in a relaxed, calm, and joyful state is always advantageous, as digestion is primarily a parasympathetic process that works most efficiently when a person feels comfortable and at ease with all necessary conditions.20 Nowadays people are forced to have food in a stressful premise, and that increases the urge to have more sweet items, which in turn leads to obesity, which is a major risk factor for type 2 diabetes and various heart disease. Another bad habit is buffet. According to an expert, drinking water in a standing position and eating in a standing position is dangerous for the digestive system.21

### 7. Do not eat in hurry

One should avoid eating too quickly, as doing so may cause the food to go down the wrong passage, leading to discomfort and improper entry into the stomach. In this situation, one cannot determine the taste of food and also won't notice any foreign body if it gets mixed up in the food. This one should not take food in too hurry.<sup>22</sup> Physiologically, the salivation and proper functioning of the enzyme are hampered. If the food is not chewed properly, it remains a large particle, so they do not undergo proper action of

the digestive juice. As we all know, the process of digestion starts in the stomach. The brain takes a few minutes, around 20 minutes to recognize that the stomach is full, so eating at an optimum speed can prevent overeating. Eating too quickly can trigger the sympathetic nervous system, activating the fight or flight response, which reduces digestive function and redirects blood flow from the central body to the extremities, ultimately causing improper digestion 23 and reducing the body's metabolism, which is said to increase the bad cholesterol and decrease the good cholesterol. A rapid rise in bad cholesterol levels puts strain on your heart and raises the likelihood of heart-related conditions such as stroke and heart attack.24

### 8. Do not eat very slowly.

One should avoid eating too slowly, as it may lead to dissatisfaction, cause overeating, and result in the food cooling down, which can disrupt digestion. Therefore, it's important not to eat too slowly.<sup>25</sup> People who have food while watching television are stressed out, worried, depressed, or preoccupied with other ideas and are unlikely to be conscious of the speed at which they are eating. So typically, they will consume more quantity of food and are least bothered about the good and bad quality of the food.<sup>26</sup>

## 9. Eat with concentration without talking and laughing

One should not talk or laugh or be unmindful while taking food, if so, the person will get into difficulty, the same as when he takes food in a hurry. So, one should not talk, laugh, or be unmindful while taking food.<sup>27</sup> Even wholesome food won't be digested properly because of anxiety, sorrow, fear, sadness, unsuitable bedding, and also improper sleeping habits.<sup>28</sup> This leads to indigestion, obesity, malnutrition, and depression.

### 10. Eating after analyzing one's needs

One should consume food in the recommended way, paying attention to their well-being.

Proper eating conduct Athira V & Hussain

Understanding the benefits or drawbacks of different foods is crucial for maintaining one's health and well-being. So, one should take food in a prescribed manner with due regard to his or herself, knowing well about the suitability or the unsuitability of food. Consuming food without considering the body's constitution, accustomed food, digestive power, and one's strength may lead to various diseases.<sup>29</sup>

#### Discussion

Today, in this busy life schedule, people don't follow the proper dietary rules while having food. Ayurveda gives more importance to diet and has rules about food. These are the structure, method, approach, system, plan, guideline, principle, regulation, directive, order, behaviour, state, or declaration for dietary consumption. People are taking food without considering the state of digestion of the body. Our body is nourished and sustained by food. So, if not taken properly, it may cause disease too. So, these rules help both for a healthy one to maintain health and for a diseased one to get rid of the disease. In some situations, we may not have time to cook our food all the time, then we can prefer the food according to our health, body, digestive fire state, season, etc. Infertility, diabetes, obesity, cardiovascular disease, anaemia, GIT disorders, and metabolic irregularities are only a few diseases that can be prevented by following the above-mentioned rules to have food. Maintaining good health is easy when we focus on proper eating habits, while poor eating habits can give rise to various metabolic disorders.

### Conclusion

Considering the above-discussed topic, it can be concluded that food to be taken according to the rules mentioned, which are genuinely scientific. These are some of the most important rules and regulations put forth by Ayurvedic classics to attain the main aims, i.e., to maintain the health of a healthy individual and cure the disease in a diseased individual, these rules are to be applied with proper diet. A wholesome diet, if taken improperly, and an improper diet taken adequately can lead to disease. Hence, equal importance should be given to both diet and dietary rules in maintaining the body's physiology.

### **Conflict of interest**

There was no conflict of interest

### References

- Payyappallimana U, Venkatasubramanian P. In: Verotta L, Pia Macchi M, Venkatasubramanian P, editors. Principles of Ayurveda for Food, Nutrition, and Health in Connecting Indian Wisdom and Western Science – Plant Usage for Nutrition and Health. New York: CRC Press; 2015. pp. 15–36.
- Sashtri K. Charakasamhita Charaka Sutrasthana,25/ 40, Chaukambha Bharti Academy;2015p.468
- Charak Samhita, Sutra Sthana, Chapter no. 27/349, Annapanvidhi Adhyaya, Vaidya Yadavaji Trikamji, Chaukhanba Surbharati Prakashan, Varanasi, reprint, 2021, p. 174
- Institute of medicine of National Academies. Relationships Among the Brain, the Digestive System, and Eating Behavior: Workshop Summary. Washington:National academies press;2015 [Internet] [cited 7th March 2025] Available from https://www.ncbi.nlm.nih.gov/books/NBK279985/ pdf/Bookshelf NBK279985.pdf
- Sproesser G, Ruby MB, Arbit N, Akotia CS, Alvarenga MS, Bhangaokar R, et al. Understanding traditional and modern eating: the TEP10 framework. BMC Pub Health. 2019; 19:1606. doi: 10.1186/s12889-019-7844-4
- 6. Jose AM.Fast food and premature death among youth: A medical survey report. 21 Jan 2025; [Internet] [Cited?] Available from https://www.linkedin.com/pulse/fast-food-premature-death-among-youth-medical-survey-report-m-jose-rwiic
- Zhang et al. Association between fast eating speed and metabolic dysfunction-associated steatotic liver disease: a multicenter cross-sectional study and meta-analysis.Nutr Diabetes 2024;14(1):60 doi: 10.1038/s41387-024-00326-x.
- National Institute of Nutrition. Dietary guidelines for Indians-A manual.2<sup>nd</sup> ed. Hyderabad: National

- $\label{eq:continuous} Institute \quad of \quad Nutrition \quad ; \quad 2011.p.10-79 [Internet] [cited \ 2025 \ 7^{th} \ March]. Available from https://www.nin.res.in/downloads/DietaryGuidelinesforNINwebsite.pdf$
- Sashtri K, Charakasamhita Charaka, Charaka Vimansthan, 1/24, Chaukambha Bharti Academy;2015. p.683
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Chaukhanba Surbharati Prakashan, Varanasi, reprint, 2021, pp. 236-7
- Preeti, Mangal PC.Scientific exposition of ahar vidhi vidhan according to Ayurveda - a review. World J Pharm Res 2023; 12(3): 245-255
- Sharma S. Ashtanga Samgraha. SutraSthana 10/49.
  Varanasi, India: Chowkhamba Sanskrit Series Office;2008p. 108.
- Singh, Akanksha. (2022, December 30). The Benefits of Healthy Fats. News-Medical. Retrieved on March 06, 2025, from https://www.newsmedical.net/health/The-Benefits-of-Healthy-Fats.aspx
- Charaka Samhita, VimanaSthana, Chapter no. 1/ 24(3), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Chaukhanba Surbharati Prakashan, Varanasi, reprint, 2021, page no. 237
- Sashtri K Charaka Samhita with "Ayurvedeepika", Charak Sutra 25/40 commentary by Chakrapanidutta, Edi. By Vd. Acharya, Chaukhambha Samskrit Sansthana, Varanasi, 2001.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (6), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Chaukhanba Surbharati Prakashan, Varanasi, reprint, 2021, page no. 237.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (6), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji,
  Chaukhanba Surbharati Prakashan, Varanasi, reprint,
  2021, page no. 237.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (6), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Chaukhanba Surbharati Prakashan, Varanasi, reprint, 2021, page no. 237

- Charak Samhita, Vimana Sthana, Chapter no. 2/8-9, Trividhakukshiya Adhyaya, Vaidya Yadavaji Trikamji. Varanasi:Chaukhanba Surbharati Prakashan; reprint, 2021.p. 238.
- Dr. Sagar Sharma, Aahar Vidhi. Slideshare, [Jun 22, 2014]. [Internet][cited?] Available from: https:// www.slideshare.net/drsagarhk87/aaharvidhi.
- Times food. Reasons why eating while standing is a bad habit. Updated 2018 [Internet]. [cited ?]. Available from: https://recipes.timesofindia.com/ articles/health/reasons-why-eating-while-standingis-a-badhabit/photostory/65489773.cms, 2018.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (7), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Varanasi:Chaukhanba Surbharati Prakashan;, reprint, 2021. p. 237
- Dr. Sagar Sharma, Aahar Vidhi. Slideshare.2014 [internet] [Cited ?] Available from: https://www.slideshare.net/drsagarhk87/aaharvidhi, 2014.
- 24. Times of India This is the reason why you must never eat in a hurry! [Internet]. [Updated Dec. 18 2019] [Cited ?] Available from: https://timesofindia.indiatimes. com/life-style/food-news/this-is-the-reasonwhy-you-must-never-eat-in ahurry/photostory /72870518.cms, 2019.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (9), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji.
  Varanasi: Chaukhanba Surbharati Prakashan;
  reprint, 2021. p. 237.
- Chordia S. Evaluation of the Effect of Ahara VidhiVidhana in Annavaha and Purisavaha Srotogata Vyadhis with Special Reference to TanmanaBhunjita Basic Principle. Jamnagar, India: IPGT&R; 2002. p. 36.
- Charak Samhita, Vimana Sthana, Chapter no. 1/24
  (9), Rasvimana Adhyaya, Vaidya Yadavaji Trikamji, Varanasi:Chaukhanba Surbharati Prakashani; reprint, 2021.p. 237.
- Sashtri K, Charakasamhita Charaka, Charaka Vimansthan, 1/24, Chaukambha Bharti Academy; 2015. p.683
- Sharma RK and Dash VB. Agnivesa's Charaksamhita (Eng.Translation) Vol. II, Vimansthana, Chapter 1, Verse 25. Varanasi: Chaukhamba Sanskrit Series Office; Reprint, 2011.p. 131