

Title: Concept of Balanced Diet in Ancient India – A Comprehensive Study from The Perspective of Ayurveda and Its Validation Through Modern Science

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ABSTRACT:

Background: The concept of a balanced diet has been an integral component of *Ayurveda* for thousands of years, in which food (*Ahara*) is regarded as one of the three fundamental pillars (*Trayopastambha*) essential for the preservation of health. Unlike the modern nutrient-centric definition of a balanced diet, *Ayurveda* emphasises individualised dietary planning based on *Agni* (digestive capacity), *prakriti* (constitution), *dosha* equilibrium, *dhatu* nourishment, seasonal variations, and appropriate dietary conduct. Contemporary nutritional science increasingly recognizes the importance of personalized nutrition, preventive healthcare, and dietary diversity, creating opportunities for meaningful integration with *Ayurvedic* principles. **Objective:** To critically analyse the *Ayurvedic* concept of a balanced diet described in *Charaka Samhita*, evaluate its components and physiological rationale, and examine its concordance with contemporary nutritional science and the latest Indian dietary recommendations. **Methods:** A comprehensive narrative review was conducted using classical *Ayurvedic* literature, primarily *Charaka Samhita* with *Chakrapani's* commentary, alongside contemporary scientific evidence from peer-reviewed biomedical literature and the Indian Council of Medical Research–National Institute of Nutrition (ICMR–NIN) dietary guidelines. Classical dietary concepts, food classifications, and the recommended balanced dietary components were critically interpreted and correlated with current evidence regarding nutritional composition, physiological functions, and health benefits. **Results:** The review demonstrates that the balanced diet described in *Charaka Samhita* comprises a diverse combination of cereals, legumes, fruits, milk, ghee, meat, honey, rock salt, and water, collectively representing multiple food groups and all six rasas (tastes). This dietary model is designed to promote *dosha* equilibrium, *dhatu* nourishment, *Agni* optimisation, *Srotas* integrity, and *Ojas* enhancement while preventing disease. Comparative evaluation revealed substantial concordance between the *ayurvedic* dietary model and the ICMR–NIN recommendations, including dietary diversity, adequate intake of cereals and legumes, fruits, healthy fats, moderation in salt and sugar consumption, avoidance of ultra-processed foods, and adequate hydration. Modern nutritional evidence further supports the nutritional adequacy and functional health benefits of many of the individual dietary components recommended in *Ayurveda*. **Conclusion:** The *Ayurvedic* concept of a balanced diet represents a holistic and scientifically relevant nutritional framework that extends beyond nutrient adequacy to encompass individualised nutrition, digestive efficiency, metabolic homeostasis, disease prevention, and health promotion. The remarkable convergence between classical *ayurvedic* dietary principles and contemporary nutritional recommendations suggests that these knowledge systems are complementary rather than contradictory. Integrating *ayurvedic* dietary wisdom with modern nutrition science may facilitate the development of culturally appropriate, personalised, and evidence-based dietary strategies for preventive healthcare and sustainable nutrition.

KEY WORDS: *Ahara*, Ancient Indian diet, *Ayurveda*, Balanced diet, *Charaka Samhita*, Personalized nutrition, Preventive nutrition, Traditional Indian diet.

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INTRODUCTION:

Ahara i.e. food is regarded as one of the three fundamental pillars (*Trayopastambha*) of life in Ayurveda, the other two being *Nidra* i.e. sleep and *Brahmacharya* i.e. regulated sexual act ^[1]. Among these, *Ahara* occupies a unique position because it is indispensable for the maintenance of life, growth, reproduction, immunity, and longevity. The classical Ayurvedic texts described food as the primary source of strength (*Bala*), complexion (*Varṇa*), vitality (*Ojas*), enthusiasm (*Utsaha*), and mental well-being. Acharya Charaka states that the body is a product of food (*Ahara Sambhava*), emphasizing that the quality and quantity of food consumed directly influence physical, physiological, and psychological health ^[2]. The concept of an ideal diet extends beyond the mere consumption of nutrients. Ayurveda considers food as a holistic entity possessing *Rasa* (taste), *Guna* (qualities), *Virya* (potency), *Vipaka* (post-digestive effect), and *Prabhava* (specific action), all of which determine its effect on the body. Equally important are the digestive capacity (*Agni*), individual constitution (*Prakriti*), age (*Vayah*), season (*Ritu*), habitat (*Desha*) etc. The principles of *Pathya* (wholesome diet) and *Apathya* (unwholesome diet), along with the concepts of *Ashta Ahara Vidhi Visheshayatana* and *Dwadasha Ashana Pravacharana*, provide a scientific framework for selecting and consuming food in accordance with one's physiological needs.

Modern nutritional science defines a balanced diet as one that supplies all essential nutrients in appropriate proportions to meet the body's energy requirements and maintain normal physiological functions. It includes adequate amounts of carbohydrates, proteins, fats, vitamins, minerals, dietary fiber, and water while preventing both nutrient deficiencies and excesses. A balanced diet supports optimal growth, immune competence, cognitive function, physical performance, and the prevention of chronic diseases. However, the nutritional requirements of an individual vary according to age, sex, physiological state, physical activity, and environmental conditions, making dietary planning a dynamic and individualized process.

The Indian dietary pattern is characterized by remarkable diversity owing to variations in geography, culture, religion, socioeconomic status, agricultural practices, and food habits. Traditional Indian diets are predominantly cereal-based and incorporate pulses, legumes, milk and milk products, vegetables, fruits, nuts, oilseeds, spices, and region-specific foods. Such dietary diversity offers immense nutritional potential; however, modernization, urbanization, changing lifestyles, increased consumption of processed foods, and reduced physical activity have significantly altered food habits. Consequently, India today faces the dual burden of undernutrition and overnutrition,

with increasing prevalence of obesity, type 2 diabetes mellitus, hypertension, cardiovascular diseases, metabolic syndrome, micronutrient deficiencies, and lifestyle disorders. Recognizing these challenges, national organizations such as the Indian Council of Medical Research (ICMR) and the National Institute of Nutrition (NIN) have formulated dietary guidelines based on scientific evidence. The concept of an ideal Indian balanced diet recommends the inclusion of foods from all major food groups in appropriate proportions to meet the Recommended Dietary Allowances (RDA) while considering local food availability, affordability, cultural acceptability, and sustainability. Such a diet emphasizes adequate cereals and millets, pulses and legumes, milk and dairy products, fruits, vegetables, nuts, healthy fats, and sufficient water, while limiting excess salt, sugar, saturated fats, and ultra-processed foods. The balanced Indian diet is not merely a combination of nutrients but a reflection of the harmonious integration of traditional wisdom and modern nutritional science. It seeks to provide adequate nourishment while respecting individual variability, cultural diversity, economic feasibility, and ecological sustainability. Such an approach is particularly relevant in contemporary healthcare, where nutrition is increasingly recognized as a cornerstone of preventive medicine and lifestyle management. Interestingly, many recommendations of contemporary nutrition science resonate with the dietary principles described in Ayurveda. From an Ayurvedic perspective, ideal nutrition aims not only to satisfy hunger but also to preserve *Agni*, maintain *Dosha* equilibrium, nourish *Dhatus*, facilitate proper formation of *Ojas*, and ensure efficient elimination of waste products. The ultimate objective of an ideal diet is the preservation of health (*Swasthasya Swasthya Rakshanam*) and the prevention of disease (*Aturasya Vikara Prashamanam*), which constitute the primary goals of Ayurveda ³. Therefore, understanding the concept of an ideal Indian balanced diet through the combined perspectives of Ayurveda and modern nutrition is essential for promoting health, preventing nutritional disorders, and addressing the growing burden of lifestyle diseases. A comprehensive appreciation of these principles may facilitate the development of culturally acceptable, scientifically sound, and individualized dietary recommendations for the Indian population, thereby contributing to improved public health and quality of life.

DISCUSSIONS:

Principles of an Ideal Indian Balanced Diet – ICMR & NIN Guidelines:

The Indian Council of Medical Research (ICMR), in collaboration with the National Institute of Nutrition (NIN), periodically publishes evidence-based dietary

guidelines to promote optimum nutritional status and prevent both deficiency disorders and lifestyle-related diseases. The latest dietary guidelines for Indians (2024) emphasize healthy eating patterns that are nutritionally adequate, culturally acceptable, economically feasible, and environmentally sustainable. These recommendations are intended for healthy individuals and may require modification according to age, physiological condition, disease status, and physical activity. A balanced diet is defined as one that provides all essential nutrients in adequate amounts and appropriate proportions to meet the physiological requirements of the body while maintaining ideal body weight and promoting overall health. The guidelines encourage diversity in food selection, moderation in energy intake, and regular physical activity as fundamental principles of healthy living, which can be summarized as ⁴: 1. Consume a variety of foods, 2. Ensure adequate intake of cereals and millets, 3. Include adequate pulses and legumes, 4. Consume adequate quantities of milk and milk products, 5. Increase consumption of vegetables and fruits, 6. Include nuts and oilseeds regularly, 7. Prefer healthy fats, 8. Limit salt intake, 9. Reduce Free Sugar Consumption, 10. Avoid ultra-processed foods, 11. Maintain adequate hydration, 12. Practice safe food hygiene, 13. Balance energy intake with physical activity. The ICMR–NIN recommends that a healthy Indian meal should approximately consist of: 1. Half of the plate: *Vegetables and fruits*, 2. One-quarter of the plate: *Whole cereals and millets*, 3. One-quarter of the plate: *Pulses, legumes, eggs, fish, or lean meat*, 4. Moderate quantity of *milk or curd*, 5. Small quantity of *healthy oils and nuts* & 6. Adequate *drinking water*.

Role of Balanced Diet – Perspective of Charaka Samhita:

According to Charaka Samhita, an ideal balanced diet should serve two principal purposes: 1. It should regulate the normal homeostasis of body i.e. it will be conducive to maintenance of health; & 2. It should have preventive role against possible diseases ⁵. Divulging the above roles of an ideal balanced diet, commentator Chakrapani Dutta wrote, good health can be maintained in two ways, i.e. by replenishing the used up *Dhatus* of the body by proper diet & regimen, and by removing the obstacles in the path of good health. The maintenance of the flame of a lamp may be cited here in this connection. The flame of the lamp is maintained by providing oil and wick to it and also by removing its extinguishing factors like insects, wind etc. The obstacles in the path of good health are of two kinds, i.e. those vitiated *Vata Dosha* etc. due to *Buddhi Dosha* (impairment of intellect), *Vishama Sharira Abhyasa* (improper physical activities) and also those natural factors which are difficult to overcome like exposure to *Hemanta* or winter season which vitiates

Kapha. Thus, an ideal balanced diet should serve its two principal functions by means of maintenance of good health as well as removal of obstacles in the way of achieving good health ⁶.

Considering the fundamental principles of Ayurveda, we can assume that, to achieve the aforesaid two principal functions, an ideal balanced diet conjointly should serve the following activities: 1. *Dosha Shaman* i.e. pacification of vitiated *Doshas*, 2. *Dhatu Vardhan* i.e. replenishing the used up *Dhatus* of the body, 3. *Srota Shuddhi* i.e. clearance of obstacles within circulatory channels, 4. *Agni Dipana* i.e. ignition of *Agni* as *Agni* plays the most crucial role in *Ahara Paka* (digestion & absorption) and *Dhatu Paka* (metabolism), 5. *Oja – Vala Vardhana* i.e. enhancement of *Oja* (nectar of all *Dhatus*) and *Bala* (immune power) as they play the pivotal role in prevention of diseases. So, the examples of ideal balanced diet which were provided by Charaka Samhita should also be analyzed in respect of above factors.

Components of Balanced Diet – Perspective of Charaka Samhita:

Charaka Samhita has classified all types of *Ahara* i.e. edible items into twelve different categories ⁷. An ideal Ayurvedic balanced diet should comprise representatives from majority of these categories. Also, as per Ayurvedic principle, this whole body is composed of five basic elements known as *Pancha Mahabhuta*; so, an ideal balanced diet should also be composed of these five *Mahabhutas* – which will be conducive to overall growth and development of body. According to Charaka, habitual intake of all the six *Rasas* i.e. *Madhura, Amla, Lavana, Katu, Tikta & Kashaya* – leads to enhancement of *Bala* ⁸. This term '*Bala*' can be interpreted in two principal ways: *physical strength*, contributed by formation of optimum *Dhatus*, and *immune strength*, contributed by proper regulation of *Doshas* along with formation of *Ojas*. As both these aspects confirm the basic role of an ideal diet, it can be said that, an ideal balanced diet should consist all the six *Rasas* in appropriate portion to achieve these two primary goals. Along with that, the components of an ideal balanced diet should possess the pacifying properties of different vitiated *Doshas*, as *Dosha* vitiation leads to disturbance in body homeostasis, which subsequently gives rise to different diseases ⁹.

Example of Ideal Balanced Diet - Perspective of Charaka Samhita:

In this section, we will try to evaluate the significance of Charaka's example of an ideal balanced diet through the basic understandings of Ayurveda as well as modern science. In Charaka Samhita, eleven food items were advised to intake on daily basis which will help in sustenance of health as well as prevention of

diseases. If we notice then will find that, these eleven food items conjointly create a full platter of Indian traditional meal or principal meal where every component of an ideal balanced diet has been included. Majority of the twelve categories of foods have been included from Ayurvedic view point as well as all the principal sources of macronutrients and micronutrients were also found their places. The best representative of different *Ahara Varga* was included in the example, which gives the idea that, Charaka considered this example of balanced diet as the most ideal one. To understand this unique approach of Charaka Samhita regarding balanced diet, we will now evaluate each of these eleven food items qualitatively: **Shashtika & Shali Dhanya:** Both these cereals belong to *Shukadhanya Varga* of *Ahara Dravya*, mentioned in Charaka Samhita. All the members of this cereal group are rich in *Prithvi* and *Jala Mahabhuta*, having *Madhura Rasa*, *Madhura Vipaka* and *Shita Virya* in common. Specifically, *Shali Dhanya* pacifies all the three vitiated *Doshas* along with alleviation of thirst. Whereas, *Shashtika Dhanya* possesses *Snigdha* and *Aguru (Laghu) Guna*, *Madhura Rasa*, *Shita Virya* and pacifies all the three vitiated *Doshas*. In addition, it contributes to the stability and compactness of body. Thus, both these cereals on one hand regulates the health by nourishing the body, on the other hand prevents the onset of diseases by pacifying all the vitiated *Doshas* ¹⁰.

From the perspective of modern science, both these cereals can be compared with sub species of rice (*Oryza sativa* L.) which belongs to the genus *Oryza*, family Poaceae. Rice is the main staple food for half of the world's population. Consumption of rice provides one fifth of calories ¹¹. The health benefits of rice can be summarized as follows: 1. Rice is the excellent source of complex carbohydrates, 2. Rice has no fat, no cholesterol and is sodium free. Rice lipids, which include fatty acids, are predominantly located in rice bran which is removed during milling, 3. Rice is an important source of protein, it has a high proportion of lysine and high protein digestibility, 4. The B-complex vitamins, especially thiamin, riboflavin and niacin are available in good contents in natural brown rice, 5. It is also a good source of different minerals like iron and zinc ^{12, 13}.

Mudga: This variety of pulse belongs to *Shamidhanya Varga* of *Ahara Dravya*, mentioned in Charaka Samhita. *Mudga* is *Kashaya & Madhura* in *Rasa*, having *Ruksha*, *Vishada & Laghu Guna*, *Shita Virya* and pacifies the vitiated *Pitta* and *Kapha*. *Mudga* is one of the *Vayu Mahabhuta* dominant foods which is considered as the best among all the varieties of *Supya* i.e. pulses which can be made into soup ¹⁴.

From the perspective of modern botanical science, *Mudga* can be compared with mung bean (*Vigna*

radiata L.) belonging to family Fabaceae (also known as Leguminosae or Papilionaceae). The mung bean is reasonably priced and a suitable source of protein for people who are vegetarians or cannot afford animal proteins. Additionally, compared to other legumes, the protein in mung beans is more quickly digested. It has been suggested that eating mung beans with cereals will greatly improve the protein's quality. Because of its high protein content and hypoallergic qualities, the mung bean has been suggested in numerous studies as a supplement for weaning food preparation ¹⁵. The health benefits of mung bean can be summarized as follow: 1. The seeds, sprouts, and hulls of mung beans contain an enormous amount of macro (protein, polypeptides, oligo, and polysaccharides) and micronutrients (flavonoids, phenolic acids, organic acids, sterols, triterpenes, aldehydes), which exerts potent antioxidant properties, 2. The consumption of mung bean has been reported as a potential antidiabetic agent. Based on the bean's slow digestibility and release of carbohydrates, they are recognized as low glycemic index (GI) foods, 3. The regular intake of beans in the food is known to be beneficial for healthy and hypercholesterolemic which subjects by decreasing in the serum Total Cholesterol, Triglycerides & LDL and increase HDL, 4. Mung beans have exhibited potent anti-microbial property ¹⁶.

Saindhava Lavana: This variety of mineral salt belongs to *Aharopayogi Varga* of Charaka Samhita and considered as the best among all varieties of salt. *Saindhava Lavana* possesses the crucial properties of *Rochana* (initiates delicacy in food), *Dipana* (ignites digestive fire), *Vrishya* (promotes vigor), *Chakshusya* (beneficial for eyes), *Avidahi* (not a gastric irritant)), *Tridoshaghna* (pacifies all three types of vitiated *Doshas*) ¹⁷. Traditionally *Saindhava Lavana* has been considered as the most beneficial among all types of salt and part of holistic and religious diet across different Indian cultures. Based on the properties described above it can be concluded that, *Saindhava Lavana* helps in proper regulation of body homeostasis by igniting *Agni* and pacifying the vitiated *Doshas*, which results in overall growth and development of body and promotes vigor.

Now a days, *Saindhava* is widely known as rock salt which is found all over the world. But considering the Ayurvedic perspective, *Saindhava* should be compared with rock salt those are found in mainly Indian subcontinent. Rock salt contains natural impurities having calcium sulfate (CaSO₄) and potassium chloride (KCl) as impurities. Among the essential micro-nutrients, rock salt contains iron with a range of 12 mg/g to 273 mg/kg, zinc with a range of 4mg/kg to 9 mg/kg, manganese (Mn) with a range of 14 to 26 mg/kg. Depending on the recommended daily allowance, rock salt can be considered as good source

of iron and rich source of zinc and manganese. Among the non-essential micro-nutrients rock salt contains cadmium, nickel and copper¹⁸.

Amalaki: *Amalaki* or Indian gooseberry is one of the most important fruits mentioned in Ayurvedic literatures and widely used in Indian society over several thousands of centuries. *Amalaki* has been considered as the best anti-ageing fruit by Charaka Samhita. *Amalaki* consists five types of *Rasas* except *Lavana Rasa* and possesses *Shita Virya* and *Madhur Vipaka*. Charaka has much praised *Amalaki* for its curative properties against different diseases. Also, *Amalaki* has been considered as one of the prime *Rasayana Dravya* i.e. which promotes the overall nourishment of *Dhatus*¹⁹.

Indian gooseberry (*Phyllanthus emblica* L.) fruit is a very rich source of vitamin C according to most references. A repeated laboratory test showed that every 100 g of fresh fruit provides 470 - 680 mg of vitamin C. The vitamin value of amla increased further when the juice was extracted from the fruit. The dehydrated berry provided 2428-3470 mg of vitamin C per 100 g. The low molecular weight hydrolysable tannins (<1,000), namely Emblicanin A and Emblicanin B, along with pedunculagin and punigluconin are the key ingredients in Emblica. Its mineral and vitamin contents include calcium, phosphorous, iron, carotene, thiamine, riboflavin, and niacin. The seeds of the Indian gooseberry contain a fixed oil, phosphatides, and an essential oil. The fruits, bark, and the leaves of this tree are rich in tannin. The fruits, leaves and bark are rich in tannins²⁰. Potential health benefits of *Amalaki* fruit include anti-oxidant activity, cardio protective activity, anti-diabetic activity, hepato protective activity, anti-cancer activity, anti-inflammatory activity, digestive tract protection, neurological protection, nephron-protective activity as well as anti-microbial activity^{21, 22}.

Yava: *Yava* belongs to *Shuka Dhanya Varga* of Charaka Samhita. Traditionally in Indian society, *Yava* occupies one of the central positions in diet chart in form of fine powder, which is used to make *Chapati* i.e. Indian bread. Charaka has considered *Yava* to be having *Ruksha*, *Shita & Laghu Guna*, *Madhura & Kashaya Rasa* and having tenancy of vitiating *Vata* and producing stool. Also, *Yava* has been attributed with providing compactness of the body and strength as well as alleviating *Kaphaja* diseases²³.

Yava i.e. barley (*Hordeum vulgare* Linn.) is one of the earliest domesticated cereal grain crops that has served as a sustaining food source in the evolution of humans, primarily due to its rich carbohydrate and fiber contents. The barley grain consists of starch - 65-68%, protein - 10-13.6%, β -Glucan - 4-9%, lipids - 2-3%, minerals - 1.5-2.5%, total dietary fiber - 11-34% and soluble dietary fiber - 3-20%. Y2. Carbohydrates

constitute the bulk of the total dry matter of the barley grain. The proteins of barley can be divided into four solubility groups: albumins (water-soluble); globulins (soluble in dilute saline); prolamins (soluble in alcohol/water mixtures); and glutelins (soluble only in dilute acid or alkali). The major constituents of the mineral fraction of barley are magnesium, phosphorus, potassium, calcium, and sodium. The amino acid composition of barley protein is quite similar to the other cereal grains. Barley contains a group of natural antioxidants called flavonoids^{24, 25}.

Antariksha Jala: *Antariksha Jala* i.e. rain water belongs to *Jala Varga* of Charaka Samhita and considered to be the best form of water. Property of rain water as described by Charaka are six-fold i.e. *Shita*, *Shuchi*, *Shiva*, *Mishta*, *Vimala* and *Laghu*²⁶. When rain water falls on earth, it changes its property according to the form of soil on which it drops. Other Ayurvedic classical texts have described difference of property of rain water depending on the storing material.

The quality of the rainwater can vary depending on the atmospheric pollution, harvesting method and storage. While the quality of collected rainwater may vary, on the whole, harvested quality is found to be equal to that of the regular treated water supplied through the public mains²⁷.

Paya: Charaka Samhita has described eight types of milk under *Gorasa Varga*, not all of those belong to regular diet platter. Traditionally, in Indian society, as part of normal daily diet, mainly cow milk are being consumed. *Go Kshira* or cow milk has been considered as best among eight types of consumable milks due to its ten different properties like *Swadu*, *Shita*, *Mridu*, *Snighdha*, *Bahala*, *Shlakshna*, *Picchila*, *Guru*, *Manda* and *Prasanna*. It has been considered as '*Pravara Jivaniyanama*' i.e. the most potent promoter of vitality. Also, it has been termed as one of the optimum *Rasayana*²⁸.

Milk, especially whole cow milk, has long been celebrated for its rich nutritional profile and myriad health benefits. This dairy product is more than just a source of hydration; it acts as a potent ally in promoting health and preventing disease, underscored by its remarkable medicinal properties. Cow milk represents a distinct combination of lipids, proteins, amino acids, vitamins, and minerals essential for the growth and development of young animals and humans alike. In India, cow milk typically comprises approximately 4.6% lactose, 4.65% fat content, 0.54% minerals, 3.4% proteins, and 86% water. The proteins in cow milk are primarily composed of β -casein (27%), κ -casein (9%), α -casein (36%), and peptides (27%). Additionally, cow milk contains phospholipids such as cephalin, lecithin, sphingomyelin, and vitamins A, B2, B3, and K. Cow's milk serves as an

abundant source of immunoglobulins, hormones, growth factors, cytokines, nucleotides, peptides, polyamines, enzymes, and numerous bioactive peptides. It also contains lactoferrin, which exhibits microbicidal properties. Among the various proteins present, casein, a phosphoprotein, constitutes the highest quantity, accounting for approximately 80% of the total protein content in cow's milk. Casein is a primary source for the provision of all essential amino acids. Cow's milk plays a significant role in human health, providing approximately 8 grams of protein per serving, which is comparable to that found in soy milk, while other plant-based milks contain noticeably less. Recent studies indicate that consumption of cow's milk and dairy products is linked to a decreased risk of childhood obesity. In adults, dairy intake has been associated with improvements in body composition and enhanced weight loss during energy restriction. Furthermore, it appears to offer a neutral or reduced risk of type 2 diabetes and cardiovascular diseases, particularly stroke. Additionally, evidence suggests that milk and dairy consumption may positively affect bone mineral density^{29,30}.

Sarpi: *Sarpi* or *Ghrta* is considered as the best among four primary forms of *Sneha Dravya* by Charaka Samhita. It belongs to *Gorasa Varga*. *Ghrta* promotes *Smriti* (memory), *Buddhi* (intellect), *Agni* (digestive fire), *Shukra* (reproductive hormones), *Oja* (nectar of all *Dhatus*, responsible for immunity), *Kapha Dosha* and *Meda Dhatu*. It pacifies vitiated *Vayu* and *Pitta* and alleviates several diseases like *Visha*, *Unmada*, *Sosha*, *Jwara* etc. It has *Shita Virya*, *Madhur Rasa* and *Madhur Vipaka*³¹.

Milk fat is one of the complex forms of lipids existing in nature. Ghee is processed milk fat and basically known as clarified butter fat or anhydrous milk fat. It is mainly composed of glycerides (usually mixed), and other minor constituents found, are free fatty acids, phospholipids, sterols, sterol esters, fat-soluble vitamins, carbonyls, hydrocarbons, carotenoids (only in milk fat derived from cow). It also contains small amounts of charred casein and traces of calcium, phosphorus, iron and so on. The moisture content in ghee is very negligible (0.3%) and the major part composed of glycerides (~98 % of the total matter). Of the remaining constituents about 2 %, sterol (mostly cholesterol) occurs to the extent of about 0.5%. Ghee may also contain good amount of conjugated linoleic acids, a reported anti- cancer agent (Clement et al, 1994). Ghee can be served to the people of all age groups for their nourishment. It is a good carrier of fat-soluble vitamins (A, D, E and K) along with essential fatty acids (linolenic and arachidonic acid) which are responsible for wellbeing. The only concern of ghee is of its cholesterol level (0.2–0.4%) which makes appreciable contribution to cholesterol intake when

consumed at high level. G2. Several recent modern studies have verified its cognitive benefits, gastrointestinal health benefits, rejuvenating & immunomodulatory benefits, cardiovascular health benefits; it's positive effect on bone health, skin health & wound healing mechanism³².

Jangala Mamsa: *Jangala Mamsa* refers to meat of several forest animals, which are no more used as food now a days due to various reasons. Rather, in Indian society, goat meat is still widely used as principal source of animal meat. So, we should consider goat meat in place of *Jangala Mamsa*, as both of them belongs to same category of food i.e. *Mamsa Varga* in Charaka Samhita. Charaka has mentioned the properties of *Aja Mamsa* i.e. goat meat like *Nati Shita Guru Snigdha* (not excessively cold, nor heavy, nor fatty in nature), and also mentioned some important functions of this goat meat like *Sharira Dhatu Samanyad* (it helps in homeostasis between different *Dhatus*), *Anabhishtyandi* (it doesn't create any obstruction within channels) and *Brimhana* (it over all promotes growth and development of body)³³.

The nutritional composition of goat meat varies widely according to variety of breeds and their age at time of slaughter. On an average, each 100 gm of goat meat produces 143 Kcal and composed of 27 gm protein, 3.1 gm fat, 0.9 gm saturated fat and 75 mg cholesterol. Goat meat is also a good source of different micro nutrients like potassium, sodium, magnesium, zinc, iron, manganese, calcium, different amino acids and vitamins like B₃, B₅, B₆, D & E³⁴.

Madhu: *Madhu* or honey is one of the most frequently used biological products in Ayurveda as well as in Indian society. Charaka Samhita placed *Madhu* in *Ikshu Varga* although it has no direct relationship with sugarcane and its product, but may be due to dominance of *Madhura Rasa* in it. *Madhu* possesses *Guru & Shita Guna*, *Madhura & Kashaya Rasa* and also alleviates *Raktapitta & Kapha*. It also promotes *Sandhana Karma & Chhedana Karma*³⁵.

Honey is a natural sweet substance prepared by honey bees - *Apis florea* F. and *Apis mellifera* L. by collecting pollen, nectarines, and excrement of insects living on the plants. Honey is a nutritious, healthy, and natural food, to which antioxidant, anti-inflammatory, antimicrobial & immunomodulating properties have been attributed, mainly due to its content of phenolic compounds. It is composed of various sugars, vitamins, minerals, amino acids, and a wide range of bioactive compounds, each contributing to its unique properties and health benefits. Sugars form the bulk of honey's composition, primarily consisting of monosaccharides and disaccharides. The most abundant sugars in honey are glucose and fructose, which account for its characteristic sweetness and provide an immediate source of energy. The vitamins

found in honey include Vitamin C and several B vitamins, such as B2, B3, B5, and B6. The mineral content of honey includes important elements such as calcium, iron, magnesium, potassium, phosphorus, and zinc. Amino acids are another important component of honey, with free amino acids, particularly proline, being the most abundant. M4. One of the most significant aspects of honey's nutritional composition is its array of bioactive compounds, which include phenolic compounds and enzymes. Phenolic compounds, such as flavonoids and phenolic acids, are among the most potent antioxidants found in honey. Despite its sweetness, honey has been found to have a relatively low glycemic index compared to refined sugars, making it a more suitable option for individuals with diabetes or those at risk of developing the condition. Regular consumption of honey has been associated with improved cardiovascular health, particularly through its effects on lipid profiles and blood pressure. Honey's antioxidant and anti-inflammatory properties, combined with its ability to modulate cellular pathways, suggest that it may play a role in preventing the development and progression of cancer^{36, 37}.

Table no. 1: Properties and functions of components of an ideal balanced diet mentioned by Charaka Samhita:

<i>Aha ra Dra vya</i>	<i>Ahar a Varg a</i>	<i>Ras a</i>	<i>Gun a</i>	<i>Vi ry a</i>	<i>Vip aka</i>	<i>Karma</i>
<i>Shas htik a & Shal i</i>	<i>Shuk a Dhan ya Varg a</i>	<i>Ma dhu ra</i>	<i>Sneh a, Lag hu</i>	<i>Sh it a</i>	<i>Ma dhu ra</i>	<i>Tridosh aghna, Sthirat maka</i>
<i>Mud ga</i>	<i>Sham i Dhan ya Varg a</i>	<i>Ma dhu ra, Kas hay a</i>	<i>Ruks ha, Vish ada, Lag hu</i>	<i>Sh it a</i>	<i>Ma dhu ra</i>	<i>Pitta- Kapha Nashak a</i>

<i>Sain dhav a</i>	<i>Ahar opay ogi Varg a</i>	<i>Lav ana</i>	<i>Lag hu</i>	<i>Sh it a</i>		<i>Tridosh aghna, Rochan a, Dipana, Vrishya , Chaksh usya</i>
<i>Ama laki</i>	<i>Phal a Varg a</i>	<i>Five Ras as exc ept Lav ana</i>		<i>Sh it a</i>	<i>Ma dhu ra</i>	<i>Tridosh aghna, Rasaya na, Vayasth apana, effectiv e against multipl e disease s</i>
<i>Yava</i>	<i>Shuk a Dhan ya Varg a</i>	<i>Ma dhu ra, Kas hay a</i>	<i>Ruks ha, Shit a, Lag hu</i>	<i>Sh it a</i>		<i>Vatakrit a, Sthairy akrita, Balya,S hleshm aja Roga Nashak a</i>
<i>Anta riks ha Jala</i>	<i>Jala Varg a</i>	<i>Ma dhu ra</i>	<i>Lag hu</i>	<i>Sh it a</i>	<i>Ma dhu ra</i>	

<i>Pay a</i>	<i>Gora sa Varg a</i>	<i>Ma dhu ra</i>	<i>Mri du, Snig dha, Bah ala, Shla kshn a, Picc hila, Gur u, Man da</i>	<i>Sh it a</i>	<i>Ma dhu ra</i>	<i>Pravar a Jivaniy a, Rasaya na, Jati Satmya</i>
<i>Sarp i</i>	<i>Gora sa Varg a</i>	<i>Ma dhu r</i>	<i>Gur u, Snig dha, Mri du</i>	<i>Sh it a</i>	<i>Ma dhu r</i>	Promot es <i>Smriti, Buddhi, Agni, Shukra, Oja, Meda Dhatu; Vata Pitta Shamak a, Kapha Vardha ka</i>
<i>Aja</i>	<i>Mam sa Varg a</i>	<i>Ma dhu r</i>	<i>Nati Gur u, Nati</i>	<i>N at i Sh</i>	<i>Ma dhu ra</i>	<i>Sharira Dhatu Samany ad, Anabhi</i>

			<i>Snig dha</i>	<i>it a</i>		<i>shyandi , Brimha na</i>
<i>Mad hu</i>	<i>Ikshu Varg a</i>	<i>Ma dhu ra, Kas hay a</i>	<i>Gur u, Shit a, Ruks ha</i>	<i>Sh it a</i>	<i>Ma dhu ra</i>	alleviat es <i>Raktapi tta & Kapha; promot es Sandha na & Chheda na Karma.</i>

Analyzing the individual properties of each of above food items, we can assume that, Charaka Samhita's example of an ideal balanced diet is a complete wholesome platter of standard Indian meal with the following salient features:

1. This platter consists eleven food items from eight different Ahara Vargas which is an indicative of its diverse wholesome approach to accommodate majority of the food categories, 2. This platter is a perfect combination of foods having dominance of all the five Mahabhutas & six Rasas, which contributes in the overall structural and functional growth of body, 3. As discussed above, to achieve the two principal functions (regulation of health & prevention of diseases), an ideal platter of balanced diet conjointly should serve the objectives like: *Dosha Shaman* , *Dhatu Vardhan*, *Srota Shuddhi*, *Agni Dipana* & *Oja – Vala Vardhana* - which has been beautifully addressed in this combination of eleven food items (shown in table no. 2) & 4. From modern perspective also, this present example of balanced diet confirms the latest guidelines set by ICMR – NIN satisfyingly, which has been shown in the table no.3.

Table no. 2: Hypothetical functions of food items mentioned in balanced diet platter of Charaka Samhita:

<i>Ahar a</i>	<i>Dos ha</i>	<i>Dha tu Var</i>	<i>Srot a</i>	<i>Ag ni</i>	<i>Oja Vard hana</i>	<i>Bala Vard hana</i>
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<i>Drav ya</i>	<i>Sha man</i>	<i>dha n</i>	<i>Shu ddhi</i>	<i>Dip ana</i>		
Shashtika & Shali	<i>Vata</i> , <i>Pitta</i> , <i>Kap ha</i>	<i>Ras a</i>	-	-	++	++
Mud ga	<i>Pitt a</i> , <i>Kap ha</i>	<i>Ras a</i> , <i>Asth i</i> <i>Ma msa</i> ,	++	++	++	++
Saind hava	<i>Vata</i> , <i>Pitt a</i> , <i>Kap ha</i>	<i>Rakt a</i>	+++ ++	++ ++ +	+	+
Amal aki	<i>Vata</i> , <i>Pitt a</i> , <i>Kap ha</i>	All the seven <i>Dha tus</i>	+++	++ +	+++	+++
Yava	<i>Kap ha</i>	<i>Ma msa</i>	++	++	+	+++
Antariksha Jala	<i>Vata</i> , <i>Pitt a</i> , <i>Kap ha</i>	All the seven <i>Dha tus</i>	++	++	++	+++

Paya	<i>Vata</i> , <i>Pitt a</i>	All the seven <i>Dha tus</i>	+++	++ +	+++	+++
Sarpi	<i>Vata</i> , <i>Pitt a</i>	<i>Ras a</i> , <i>Med a</i> , <i>Shu kra</i>	++	++ +	+++	+++
Aja	<i>Vata</i>	<i>Ma msa</i> , <i>Majj a</i>	+	+	+++	+++ +
Madhu	<i>Pitt a</i> , <i>Kap ha</i>	<i>Asth i</i>	+	+	+	+

Table no. 3: Comparison between ICMR-NIN guidelines for an ideal Indian balanced diet and Charaka Samhita's classical example of an ideal balanced diet:

No.	ICMR-NIN guidelines for ideal balanced diet platter	Components of Charaka Samhita's balanced diet platter
1.	Consume a variety of foods	This platter represents eleven different food items from eight different <i>Ahara Vargas</i>
2.	Ensure adequate intake of	This platter consists three different cereals like <i>Shashtika Dhanya</i> , <i>Shali Dhanya</i> & <i>Yava</i>

	cereals and millets	
3.	Include adequate pulses and legumes	This platter consists one variety of pulse i.e. <i>Mudga</i> which is considered as the best variety among pulses
4.	Consume adequate quantities of milk and milk products	This platter consists milk in its crude form, which is considered as the best vitality promoting food
5.	Increase consumption of vegetables and fruits	This platter consists one fruit <i>Amalaki</i> , which is considered as best variety of fruit
6.	Prefer healthy fats	This platter consists <i>Sarpi</i> i.e. clarified butter which is regarded as the best form of edible fat
7.	Limit salt intake	This platter consists <i>Saindhava</i> , which is considered as the best variety of salt and has much lower amount of sodium than table salt
8.	Reduce free sugar consumption	This platter consists <i>Madhu</i> as sweetener substance which has low glycemic index than regular sugar
9.	Avoid ultra-processed foods	This platter is an ideal example of Indian homemade cook which

		doesn't consist any processed foods
10.	Maintain adequate hydration	This platter consists <i>Antariksha Jala</i> , which is considered as the best variety of water as per Charaka, capable of adequate hydration due to its unique six qualities

Table no. 4: Nutritive character of food items mentioned in balanced diet platter of Charaka Samhita:

Nutri ents (per 100 gm.)	Sh ali Dh an ya (<i>O ryz a sat iva L.)</i> 12, 13	M un g be an (<i>Vi gn a ra dia ta L.)</i> 16	Yav a (Ho rdeu m vulg are L.) 24, 25	Amal aki (Phyl lanth us embl ica L.) ²¹ , 22	Pa ya (c o w m il k) (1 00 m l) 29, 30	Aj a Ma ms a (go at me at) 34	Ma dh u (ho ne y) 36, 37
Energ y	38 4 Kc al	34 7 Kc al	354 Kca l	48 Kcal	54 C al	14 3 Kc al	30 4 Kc al
Crud e Ash	1.4 gm	3.3 2 gm	2.56 gm	-	-	-	-
Macro Nutrients							

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Carbohydrate	71.1 gm	62.62 gm	73-83 gm	14 gm	4.88 gm	-	82.4 gm
Protein	7.5 gm	23.86 gm	10-12 gm	1 gm	3.35 gm	27 gm	0.3 gm
Crude Fat	2.2 gm	1.15 gm	2-3 gm	0.5 gm	1.45 gm	3.1 gm	0
Dietary fiber	4.0 gm	16.3 gm	15-17 gm	3.2 gm	-	-	0.2 gm
Minerals							
Iron	0.2 - 5.2 mg	6.74 mg	2.5-6.6 mg	1.5-3 mg	0.03 mg	1.14 - 2.72 mg	0.03 - 4.0 mg
Zinc	0.6 - 2.8 mg	2.68 mg	1.5-7.0 mg	0.5 mg	0.42 mg	1.57 - 3.8 mg	0.05 - 2.0 mg
Calcium	10 - 50 mg	132 mg	-	17-28 mg	1134 mg	7.93 - 14.8 mg	3-31 mg
Magnesium	-	189 mg	-	-	11.1	12.5 - 29.	0.7 - 13 mg

					m g	5 mg	
Phosphorus	170-430 mg	367 mg	260 - 485 mg	-	84.4 mg	-	2-15 mg
Potassium	-	1246 mg	450 - 830 mg	40-65 mg	144.2 mg	61.8 - 25 mg	40-3500 mg
Sodium	-	15 mg	-	-	44.1 mg	15.18 - 85.2 mg	1.6 - 17 mg
Copper	-	0.941 mg	0.5 mg	-	0.01 mg	-	0.02 - 0.6 mg
Manganese	-	1.035 mg	1.3 mg	-	0.002 mg	0.021 - 0.052 mg	0.02 - 2 mg
Vitamins							
Vitamin C	-	4.8 mg	-	400-900 mg	-	-	2.2 - 2.5 mg
Thiamin	0.29 mg	0.621 mg	0.60 mg	-	0.04	-	0.0 - 0.0

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					m g		1 mg
Riboflavin	0.04 mg	0.233 mg	0.28 mg	-	0.18 mg	-	0.01- 0.02 mg
Niacin	4.0 mg	2.251 mg	4.6 mg	0.3 mg	-	5.2 - 6.7 mg	0.1 - 0.2 mg
Vitamin B6	-	0.382 mg	0.3 mg	0.1 mg	-	0.52- 0.64 mg	0.01- 0.32 mg
Folate	-	625 µg m	19 µg m	6 µgm	5 µg m	-	-
Vitamin A	0	114 IU	-	290 IU	28 µg m	-	-
Vitamin E	0.8 mg	0.51 mg	0.57 mg	0.17 mg	-	0.27- 0.33 mg	-
Vitamin K	-	9.0 mg	-	-	-	-	0.025 mg

Vitamin B5	-	-	-	-	0.38 mg	-	0.02- 0.11 mg
Vitamin D	-	-	-	-	1.2 IU	>0.1 mg	-

CONCLUSION:

The concept of a balanced diet has been an integral component of Ayurvedic philosophy since antiquity. Long before the development of modern nutritional science, Ayurveda recognized food as the foremost determinant of health and considered it one of the three fundamental pillars essential for the preservation of life. Charaka Samhita collectively described a scientifically structured dietary system aimed at maintaining Dosha equilibrium, nourishing the Dhatus, preserving Ojas, and preventing disease. These principles reflect a personalized approach to nutrition, emphasizing that the same food may produce different effects depending on the individual's physiological condition and digestive capacity. Such concepts closely parallel the modern understanding of personalized nutrition, nutrigenomics, chrono nutrition, and lifestyle-based disease prevention. The latest ICMR–NIN Dietary Guidelines for Indians (2024) embody many principles that resonate with Ayurvedic wisdom. Recommendations such as dietary diversity, preference for whole grains and millets, increased consumption of fruits and vegetables, moderation in salt, sugar, and fat intake, adequate hydration etc. reinforce the timeless relevance of Ayurvedic dietary concepts in contemporary public health. These similarities demonstrate that traditional Ayurvedic knowledge and modern nutrition are complementary rather than contradictory systems, each enriching the understanding of healthy dietary practices. In conclusion, the concept of a balanced diet described in Ayurveda is a comprehensive, rational, and scientifically relevant model of nutrition that extends beyond the mere provision of nutrients to encompass the multidimensional aspects of human health. Modern scientific evidence increasingly validates many of these classical principles, underscoring their enduring applicability in the prevention and management of chronic diseases. Future interdisciplinary research integrating Ayurveda, nutritional science, systems biology, and

clinical medicine is warranted to further elucidate the mechanisms underlying these traditional concepts and to develop personalized, evidence-based dietary strategies for improving individual and public health. The harmonious integration of ancient Ayurvedic wisdom with contemporary scientific knowledge has the potential to establish a robust framework for preventive healthcare and sustainable nutrition in the twenty-first century.

Photo 1 : Components of an Ideal Balanced Diet mentioned by Charaka Samhita

Photo 2 : AI generated image of an Ideal Indian Balanced Diet from the perspective of Charaka Samhita

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