

Aahaar Kranti

UTTAM AHAAR, UTTAM VICHAAR

AYURVEDIC BALANCED DIET

A holistic diet for healthy living

Advisory Board

Jayant Sahasrabudhe
Yelloji-Rao K Mirajkar
Srinivas Rao
Praful Krishna
Nandkumar K Palkar

Editorial Board

Nakul Parashar
Nimish Kapoor
Sumita Mukherjee

Design

PealiDezine

Address for Correspondence

Vigyan Prasar, A-50, Institutional
Area, Sector-62, Noida-201 309,
U.P., India
Tel: +91-120-2404430, 35

E-MAIL

aahaarkranti@vigyanprasar.gov.in

WEBSITE

www.vigyanprasar.gov.in

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EDITORIAL

Planning Communication Channels for Aahaar Kranti

Nakul Parashar

Aahaar Kranti was successfully launched on 13 April this year, the Varsha Pratipada, when the country celebrated New Year day like Bihu, Ugadi, and many others in different states. Aahaar, food is one of the basic elements of our existence. Thus, from time immemorial evidences and documents available not only highlight the importance of food, but appropriate food.

Chandogya Upanishada says from purity of food follows the purity of the internal organ. An ancient Chinese proverb emphasizes on diet versus medicine — he who takes medicine and neglects diet wastes the skill of his doctors. George Bernard Shaw said there is no sincerer love than the love of food. Sanskrit phrase from ages — *Sarvam Annam* clearly indicates the universality of food (everything is food).

Yet, with so much of information about food available all over the world, we still struggle with associated disorders and malnourishment. Reasons galore; the imbalance in the volume and kind of food that is produced and consumed is quite evident. Thus, the need to create awareness at all levels about it in a holistic manner is important and urgent. The question is big – how? To map the size of the nation with a huge population and so much diversity in terms of language, weather and climate, culture and much more, challenges to create awareness are humongous. This, thus, forced some committed people to come forward and turn this into a revolution like what we have seen in the past – the green and the white revolution. If we compare the times of green and white revolution, we are in a far more advanced era of mass communication. With tremendous speed of data transfer, costs of communicating have drastically come down thereby making the entire communication process easy, cost-effective and efficient. Thus, at Vigyan Prasar, we have applied mass outreach strategies for propagation of Aahaar Kranti through all media: print, electronic, social, and digital. In addition to this monthly newsletter, several articles have started appearing in leading printed dailies and monthlies. India Science Wire, nation's leading science news syndicate from Vigyan Prasar, has also been entrusted to ensure that Aahaar Kranti gets due importance in its releases for the print and electronic media. Vigyan Prasar's flagship monthly newsletter DREAM 2047 has planned to dedicate its July issue to Aahaar Kranti. India Science, India's S&T OTT Channel, has created a number of promo-films for Aahaar Kranti and plans to make many more.

Indeed a lot more in the offing; please stay tuned. ■



Email: nakul.parashar@vigyanprasar.gov.in

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Ayurvedic Balanced Diet

Neha Tripathi

Healthy eating is a habit that we learn continuously. Ayurvedic eating habits have several dynamics. Ayurveda is a combination of two Sanskrit words. Ayurveda = Ayu (life) + veda (science or knowledge). Thus, Ayurveda translates to science of life or knowledge of Life.

As we know the motto of Aahaar Kranti is Uttam Aahaar - Uttam Vichaar or 'Good Diet-Good Cognition', it focuses on the unique knowledge of Ayurveda.

A balanced diet is one which includes foods from all food groups, which in turn become nutritionally adequate. The quantities and proportions of these foods should be in such a ratio, which fulfils our daily requirements of all the nutrients and energy. Ayurveda explains the concept of balanced diet in *Nitya Sevaniya Ahara Dravya*, i.e., wholesome daily foods.

Food articles, which are enlisted in this group encompass cereals, millets, vegetables, fruits, oils etc. However, it is not advisable to have 50-60% energy from carbohydrates without knowing the specific type of carbohydrates. All cereals and millets are rich source of carbohydrates, but not all of them are good and compatible for everyone. Selection of carbohydrates varies according to the habitat, body constitution, age, occupation, appetite etc. This selection criterion is equally true for proteins and fats.

Ayurveda paves the way for appropriate selection of right kind of food items. Prof. Sanjeev Sharma, Director, National Institute of Ayurveda says, Ayurveda recommends to select grains, especially *Godhuma* (Wheat), *Shali* (Paddy, *Oriza sativam*), *Yava* (Barley, *Hordeum Vulgare Linn*), and *Shastika Shali* (Paddy harvested in 60 days) when it comes to fulfilling the daily energy intake with carbohydrates. Additionally, Ayurveda advocates use of *Mudga* (Green gram, *Vigna radiata*) among pulses, cow milk and ghee, *Jangala Mamsa* (meat of arid region) viz. Aja Mamsa (goat meat) etc. While selecting fruits, *Amalaki* (Indian Gooseberry, *Embilica officinalis*), *Dadima* (Pomegranate, *Punica granatum*), *Pathya* (*Terminalia chebula*), and *Mridvika* (Grapes) are to be consumed which supply the required vitamins and minerals (Micronutrients). Vegetables like *sunishannaka* (*blepharis edulis*), *Bala Mulaka* (Tender radish, *Raphanus sativus*), *Patola* (Pointed Gourd, *Trichosanthes dioica*), *Jeevanti* (*Leptadenia reticulata*), *Vastuka*

(*Chenopodium murale*) etc. are good source of fibres. For fat supplement consumption of cow milk and ghee are suggested.

Principles of Ayurvedic Diet

An ayurvedic diet does not limit its concept to the selection of food items alone but also extends it to food preparation and modulation (*Ahara Sanskara* and *Ahara Kalpana*). Prof. Sharma listed some principles of Ayurvedic diet, which are

- Food items are to be chosen, prepared and catered depending on the individual's body and mind.
- The mind and body must be prepared before having the meal with *bhojana purva karma* (food rituals before food intake).
- The quantity and quality of the food for an individual is based on their vital factors like digestive fire, age, time of eating (day/night), occupation etc.
- To enhance the process of digestion, absorption, and



assimilation of the consumed food Ayurveda recommends performing *Bhojanottara Karma* (food rituals after food intake) like walking hundred steps, eating betel leaves, herbal smoking etc.

- Ayurveda categorises the individuals based on their *prakriti*, i.e., body constitution, viz., *Vataja*, *Pittaja*, *Kaphaja*.
- A person belonging to a particular *prakriti* should strive to take foods, which are opposite to their *prakriti* to maintain the balance of the *Dosha* or bio-energies and *Dhatu* or body tissues.
- Ayurveda proposes intake of food according to the habitat and season.

Ayurvedic Diet Based on Body Types

Ayurveda follows the concept of understanding the body types or *doshas* in order to heal oneself. There are three Ayurvedic body types or *doshas*: *Vata*, *Pitta* and *Kapha*.

A human body can be divided into seven different body types: *vata*, *pitta*, *kapha*, *vata-pitta*, *pitta-kapha*, *vata-kapha* or *tri-dosha*. Dr Vikram Chauhan, CEO and Founder of Planet Ayurveda helped us decode the basic three body types.

Properties of Vata Dosha

तत्र रुक्षो लघु शीतः खरः सूक्ष्म चंचल अनिलः॥
(अ ह १/ ११)

[Vata has properties like light, rough, cold, subtle, changeable and moving.]

Properties of Pitta Dosha

पित्तम ससनेह तीक्ष्ण उष्णं लघु विस्त्रं सरं द्रवम॥
(अ ह १/ १२)

[Pitta has properties like oily, sharp, hot, light, fleshy, spreading and liquid.]

Properties of Kapha Dosha

सिग्ध शीतो गुरु मन्द शलक्षणो मृत्प्र स्थिरः
कफः॥ (अ ह १/ १३)

[Kapha has properties like moist, cold, heavy, slow, smooth, dense, dull and static.]

People have *prakriti* which has a predominance of one particular dosha. Dr Chauhan explains how a diet should be selected according to the predominant dosha. "In Ayurveda it is clearly stated that सर्वदा सर्व भावानं सामान्य वृद्धिकारणाम्। (च सू १/ ४४). This means that food articles having similar properties to predominant dosha in a person will increase that dosha resulting in onset of diseased condition. On the other hand, हास हेतु विशेषश्च प्रवृत्ति रुभायसस्य तू॥ (च सू १/ ४४), which means intake of food articles having opposite properties to predominant dosha help in keeping everything balanced. So, people having kapha dosha should avoid excessive intake of sour, salty, and sweet food; in case of pitta dosha pungent sour and salty food articles must be avoided; and in vata dosha astringent, pungent and bitter food articles must be minimized."

Each type of dosha has a unique set of characteristics, and the body type of a person depends on their physical and emotional attributes. The constitutions may change based on their physical, mental and emotional conditions. A lifestyle must be created based on one's dosha.

Ayurveda, being a holistic life science, focuses on preservation and promotion of the balance between the mind and body.



Healthy and Wise Choices

Include fruits and vegetables, carbohydrates and proteins, dairy foods, whole grains and oils in your diet and limit fats, added sugars, and sodium. Ayurveda, being a holistic life science, focuses on preservation and promotion of the balance between the mind and body. Prof. Sanjeev Kumar advocates that following Ayurvedic diet principles makes you physically, mentally, and spiritually fit. Consume food after considering the *Prakriti* (constitution); *Desha* (Habitat); *Kala* (time); *Bala* (strength); *Agni* (digestive fire); *Satmya* (compatibility); *Ayu* (Age) etc.

Digestion Perspective in Ayurvedic Diet

Food we eat needs to be digested well to enrich us with its nutrients, phytonutrients, and essential oils. Common digestive issues that people face are acidity, gas, indigestion with a choked gastrointestinal tract, constipation, and frequent liquid stools. Dietician Dr Dharini Krishnan suggests to



have a few ingredients in your diet that improves digestions. These include:

Amla: It can be used as a pickle, in dried form, as powder, spice etc. Apart from being a very good antioxidant because of its high Vitamin C content, it also helps in digestion, managing blood sugar levels and in curing respiratory diseases.

Cumin and Pepper: Both help in digestion as cumin water or cumin and pepper rasam.

Cardamom: It contains chemicals that might treat intestinal spasms, kill some bacteria, reduce swelling, and help the immune system. We use cardamom in desserts. In summer, we can make a cool drink with jaggery, cardamom and lime juice. It is full of antioxidants and helps beat the heat which can also affect digestion.

Ajwain: A component called thymol in ajwain seeds acts as a strong fungicide and germicide. For a choked gastrointestinal system, the best medicine is a combination of betel leaf with ajwain.

Dr Krishnan suggests some relieving tips like:

- For preventing acidity, one can take raw ash gourd juice for 10 days in the morning on empty stomach.
- Problem of gas formation and feeling of heaviness in the stomach can be prevented with a combination of ginger, cumin and pepper.
- Constipation can be prevented by taking a lot of fibre in the diet such as guava, papaya, banana stem, and a lot of warm water in the morning.
- Frequent liquid stools can be stopped by consuming neem flowers fried in ghee in a low fire, added to warm rice.

What Not to Eat as per Ayurveda?

This list can be endless and full of 'conditions apply'! As already discussed, the various *doshas* come in the way of decision making. Ayurveda mentions many food combinations which are to be avoided because of the dosha vitiation they cause. Dr Chauhan gives examples of some foods that are *Guna virudha* (opposite in properties), e.g., combination of fish and milk; *Kal virudha* (opposite due to seasons), e.g., cold and dry food items in winters; *Matra virudha* (opposite to proportion), e.g., equal quantity of ghee and honey etc. that are harmful for the body.

In the end, key to good health which we all know but often forget are

सर्वमन्यम परित्यज्य शरीरमनुपालिये।
तद्भावे हि भावनाम सर्वाभावः शरीरिणाम्।।
(च नि ६/७)

[One should take care of her/his body by neglecting all other things, because if the body is not healthy nothing exists.] ■

The author is a science journalist, writer and filmmaker. neha_tripathi@icloud.com

10-POINT STRATEGY FOR A HEALTHY LIFESTYLE

01 Waking up early in morning.

02 Having lukewarm water empty stomach after passing stool and brushing your teeth.

03 Having a bath with lukewarm water in summers and warm water in winters.

04 You must have a nutritious breakfast.

05 Have frequent and short meals according to your appetite for keeping your digestive fire balanced.

06 Eat a meal only when the previous is digested.

07 Avoid having cheesy, greasy and heavy food articles.

08 Exercise daily, at least once, in the morning or evening and never with an empty stomach.

09 Have a light dinner and sleep on time.

10 A good sleep is very important in relaxing our body and mind.



Aahaar Kranti

Food as Medicine

A webinar was organised jointly by Hindu University of America and team Aahaar Kranti on May 15. The panellists for the webinar were Dr Yelloji Rao Mirajkar, convener of the GIST-USA; Shri Praful Krishna, Silicon Valley Executive in AI; and Dr Rashmi Pradyumna Kulkarni, entrepreneur in hydroponics as Managing Partner at Integrated Group, Qatar and a GIST volunteer for Aahaar Kranti.

Dr Yelloji-Rao Mirajkar briefly described the workings of GIST (Global Indian Scientists and Technocrats Forum) and stated that how it thinks passionately about helping Bharat with its members' cumulative expertise. With the motto of Vasudhaiva Kutumbakam, they dream that their research will be used not only for Bharat but for the betterment of the entire world.

Acknowledging the COVID-19 situation in India he applauded all medical and non-medical personnel engaged in helping others, in spite of facing dangers. In the first wave of the pandemic, like the rest of the world, India was also impacted. However, considering the density of population, the numbers in India were nowhere close to anybody's expectations. It was thought that it had something to do with better immunity of its population. But the impact of the second wave is much more disturbing.

Dr Mirajkar stated that we need to have standards that are relevant for us. Treating the food as our friend, being aware about the positive and negative impacts of it on our body, the correct method of its preparation, portion size etc. also play important roles. International standards that specify the daily amounts of calories, carbohydrates, protein, fats etc. to be consumed are set mostly for people who consume meat products. However, about one-third of the population in India is vegetarian and we need to have standards relevant for us.



Aahaar Kranti is about increasing nutritional awareness in the Indian population.

Dr Rashmi Kulkarni stated that when we think about food, we think about what we eat, often ignoring the nutritional aspects of the food. We are not just our body but also the microorganisms inside us. A microbiome is the collective genome of the microorganisms that live inside our bodies. These are bacteria, viruses, fungi and protozoa, which are nearly 10 times the numbers of our body cells. These are important because their

unique genes are 100 times more than our own genes. This is what makes us unique. We are only 10% human in terms of cell count. Functionally, however, we are only 1% and the rest 99% of the functions are carried out by the microbes.

We keep accumulating these microbes right from birth. It depends on the mode of birth, being breastfed or formula-fed and everything that comes later in our life. These microbes train our immune system in identifying foreign objects entering our body. This training is extremely important and happens continuously till the immune system is mature. Invading pathogens are then recognized as foreign and the immune system is ready to fight it out.

In rural areas, where people do not use any of the antimicrobial products generally have a much healthier microbiome than people living in urban areas. Poor food choices cause inflammation in the gut and are not very friendly for the microbiome. On the other hand, phytonutrients in a plant-based diet are quite beneficial. Poor food choices lead to disturbances in the gut, causing severe infections or chronic diseases, autoimmunity, allergies, and even cancer.

There are signatures of microbes, "Psychobiome" for each of the neurological conditions such as anxiety, depression, OCD, Autism spectrum disorders, Parkinson's disease, Alzheimer's disease, and

several others along with our mood and cognition. The disturbed gut microbes produce harmful chemicals that affect our behaviour by directly affecting our brain.

According to the tenets of Ayurveda, our microbiome affects all systems in our body and improves our immunity, metabolism, and regulates the amount of undigested matter. There are many nutrients that we cannot assimilate on our own without the help of these microbes.

Ayurveda specifies that our body has different metabolic states during different times of the day. During the morning, we have a slow metabolic state (termed as “Kapha Pradhan kaal”) and we should eat light. In the afternoon, the digestive fire is most active (termed as “Pitta Pradhan kaal”). This is when we should consume our heaviest meal. As the metabolism starts slowing down again (termed as “Vaat Pradhan kaal”), we should eat a light meal before dusk. Modern science explains this as changes in the circadian rhythm with corresponding changes in the composition of our gut microbiome during different times of the day. Eating between the dawn and the dusk gives the most out of what we eat. However, these days many people have late meals which are well past dusk. The microbial population at that time is not in sync to properly help in digestion. If this continues for a long time, the microbial population becomes less healthy, the brain is out of sync, and the food remains undigested. We do not get the optimum nutrients from the food. The altered microbes are harmful and now start producing metabolites that cause damage and inflammation and a weakened immune system, in turn leading to chronic diseases.



Ayurveda specifies that our body has different metabolic states during different times of the day.

Ayurveda also gives importance to consumption of seasonal food because our metabolism changes in each season, and so does our gut microbiome. Our traditional eating habits have a clear scientific basis. Ayurveda aims to maintain health of people so that diseases do not manifest. In case of diseases, Ayurveda aims to cure, not just treat the disease.

Concluding her talk Dr Kulkarni talked on the importance of a balanced diet, having good carbohydrates including fibre, proteins, healthy fats, vitamins, and minerals. We should focus on getting all colours included in our daily diet to give us the vitamins and minerals needed for normal functioning of our body.

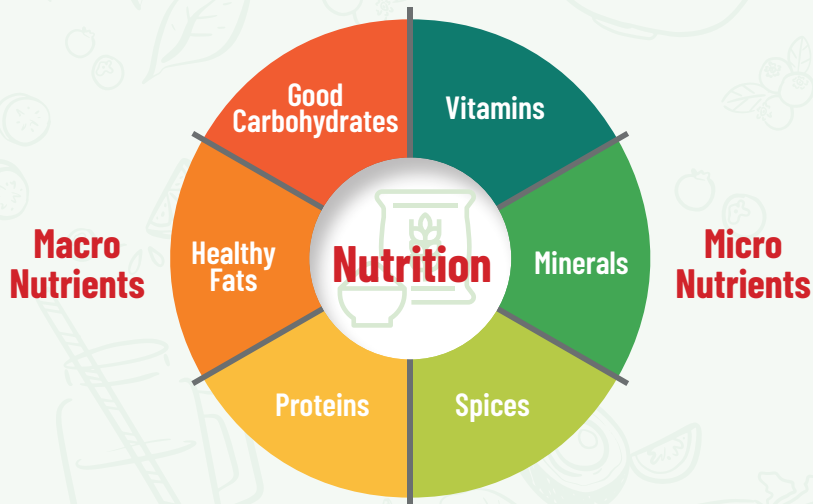
Shri Praful Krishna talked about how Aahaar, the food can be the aushadhi, medicines. He encouraged everyone to think food

in terms of their nutrition. Aahaar Kranti revolves around the idea of increasing awareness in people about good nutrition. Though we are producing way more than what we consuming, there is a mismatch between what we eat and what we are produce because of lack of awareness. The Indian diet is very starch-heavy and less of other food groups. Aahaar Kranti, like the previous two revolutions, Green revolution and white revolution, aims to focus on better nutrition, better health, longer life, leading to a better economy. We have 127 different geo-agro-climactic zones in India, each having its own produce rich in nutrition. The best way to start is to train the teachers and train the students, which will translate to their families. This will lead to better agricultural practices based on demand. We are reaching out to the teachers, NGOs, anganwadis, with the government already on-board. The content will be developed in all vernacular languages in addition to English and Hindi. Aahaar Kranti will put emphasis on agriculture, opportunities in food processing industry, and in making Bharat Samruddh. ■

Training Teachers Education Module 1

Balanced Nutrition

A diet that fulfills all nutritional requirements of our body
- Nothing less or nothing more



What is Nutritionally Balanced Diet? (K1-K6)



CARBOHYDRATES
Provide energy to the body



FATS
Help Nervous system development



PROTEINS
Help growth & in building a healthy body



VITAMINS
Help cell function, growth & development



MINERALS
Help growth & development

What is Nutritionally Balanced Diet? (K1-K6)

FRUITS AND VEGETABLES
Provide vitamins and minerals

- To help the growth of the body
- Keep both the body and the mind healthy and
- Prepare the body to defend against diseases

Why is it Important? (K7-K12)

RED

Vit A, C, manganese, antioxidants (quercetin, lycopene)



Reduce risk of cancer, heart disease, inflammation, increase immunity, good for eye, skin, hair health

GREEN

Vit K, B, folate, potassium, antioxidants (chlorophyll, carotenoids, lutein)



Promote eye health, lung, liver, healthy cells, reduce risk of cancer, increase blood clotting, lower blood pressure

YELLOW/ORANGE

Vit C, A, B6, potassium, folate, antioxidants (b-carotene, lutein, a-carotene)



Reduce risk of cancer & heart disease, promote eye/skin/hair health, increase immunity, decrease inflammation

BLUE/PURPLE

B-vitamins, antioxidants (anthocyanins, resveratrol, flavonoids)



Reduce risk of cancer and heart disease, protect cells from damage, improve memory, prevent aging

BROWN/WHITE

Vitamins C, K, folate, potassium, antioxidants (allucin, quercetin, anthoxanthins)



Lower cholesterol, reduce risk of cancer & heart disease, protect cells from damage, increase immunity, promote eye/skin/bone health