



AYURVEDIC PERSPECTIVE OF MILLETS AND ITS CLINICAL SIGNIFICANCE

Ayurveda

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ABSTRACT

Millet is always been an eternal part of food plate in India. They have a strong nutritional profile with the variety of health benefits. Unhealthy lifestyles (*Apathya Aahar* and *Vihar*) are the root cause of all the diseases especially the metabolic disorders. *Ayurveda*, an ancient Indian science that emphasizes the importance of a balanced diet for maintain good health. It deals not only with the symptoms of the diseases but also the root cause of the disease. *Ayurveda* is the *Upaveda* of *Atharveda* ¹ is known for its exceptional regimes such as *Dinacharya*, *Ritucharya*, *Satvritta*. Millets have been considered under all the above regimes of *Ayurveda* and it is not only used for providing the nutritional demand but also for the treatment of diseases. Hence, healthy eating habits such as millets is an indispensable part of *Ayurvedic* approach.

KEYWORDS

Ayurveda, Dinacharya, Ritucharya, Satvritta, Disorders

INTRODUCTION-

Millets are group of small seeded cereals with different varieties such as pearl millet (*bajra*), kodo millet (*kodrava*), little millet (*kutki*), finger millet (*ragi*), buckwheat (*kuttu*), foxtail millet (*priyangu*), barnyard millet (*ghangora*), sorghum (*yavanaala*) and adlay millet (*gaveduka*) ². It is often called the poor people crop as its cultivated all over the world. Also, as these are multi cereals which are highly nutritious and are known to have high nutrient content such as protein, essential fatty acids, vitamins, minerals (Calcium, Iron, Zinc, Potassium and Magnesium). Along with that, it also provides a significant supply of phytochemicals and micronutrients. *Ayurveda* giving immense importance to diet of both healthy and diseased person, has explained millets under the *Kudhanya varga* or *Trina Dhanya varga* (group of grains produced by grass like plants) ³. As per the *Ayurvedic* texts, Millets generally have *Kashaya- Madhur Rasa, Katu Vipaka, Sheeta Veerya* and *Laghu, Ruksha Guna* ⁴. Its general *Karma* are *Lekhana, Vrishya, Kledashoshana, Baddhmalakara*. Also, millets generally have *Kapha shaamaka, Vata Pitta prakopaka* and *Rakta shaamaka* effect on *Tridoshas*. Thus, an attempt is made to comprehend the qualities and purposes of millets.

In *Ayurveda*, millets are one of the most important grains for human nutrition. One of the best therapeutic indication of these grains is that they are considered under the *Pathya* in various diseases as per the *classics* ⁵. *Acharya Charak*, have mentioned Millets in *Charak Samhita* under the *Shookdhanya varga* of '*aampavidhi adhayay*' ⁶. These *Shookdhanya* is further divided into 15 types with different *gunas* as per *Acharya Charak*. Generally all of these *dhanya* are *sheeta in virya, bhrihan* and *shukramutrale*. They all possesses different qualities and used in different disease as per the *guna* (properties) and *mahabhoota* (constituents) present in them.

Millets have been used as food as well as a therapeutic diet in *Ayurveda* since *Samhita Kala*. Over the past few decades, there has been a notable decrease in the direct consumption of millet as a food source. However, given that millets are extremely healthy, there is unquestionably a pressing need to promote them. Recognizing the potential key of millets in improving health status of a significant portion of malnourished and diseased population globally, united nation has decided to declare 2023 as the 'International year of Millets', resolution sponsored by India and supported by 70 countries. Also, this year in the international summit of G20, India promoted the Millets in the form of different cuisines. Its aim is to raise the awareness regarding the health benefits of millets in not only in a diseased individual but in healthy individual too. *Ayurvedic* texts have explained specific *Guna* and functions of particular millets, which is as follows -

- Paspalum scrobiculatum is Kodo millet (*kodo*) is *sheeta* and *sangrahishoshan* in nature and particularly used in Diabetes due to its *Ruksha, Kledashoshana* and *Lekhana Guna* ⁷. Also, it improves *Agni* and thus improves metabolism, hence can be beneficial in *Pandu Roga* where *Agni vikriti* leads to impaired *Rasa* formation.

It enhances *Vata* and pacify *Pitta* and *Kapha doshas* in the body.

Each 100 gm of Kodo millet contains- Carbohydrate-77 gm, Protein-12 gm, Fibre-1 gm and Moisture-10 gm.

- *Setaria Italica* is Foxtail millet (*Priyangu* or *Kangu*) is found in four forms or colours. It is *Guru, Ruksha, Bhrihana* in nature ⁸ and it is rich in micronutrient such as iron and zinc. It heals fracture, aggravates *Vata* and particularly pacifies the *Kapha dosha* in the body. Each 100 gm of Foxtail millet contains Carbohydrate-70 gm, Protein-12.3 gm, Fat-4.3 gm, Fibre-8 gm, Moisture-11.2 gm, Minerals-3.3 gm, Calcium-26 mg, Phosphorus-215 mg and Iron-1.67 mg.
- *Panicum frumentaceum* is Barnyard millet (*Shayamaka*) is *Shoshan, Ruksha* ⁹. Also, it aggravates the *Vata* and pacify the *Kapha* and *Pitta dosha* in the body. Each 100 gm of Barnyard millet contains, Carbohydrate-66 gm, Protein-6 gm, Fat- 2 gm Moisture-12 gm and Minerals-4 gm. *Panicum miliaceus* is Proso millet/ Indian millet (*Cinaka*) is *Ruksha* and *Kapha hara* ¹⁰, hence it is best suited for *Medo Rogas* (Obesity). Each 100 gm of Proso millet contains Carbohydrate-69 gm, Protein-13 gm, Fat-1 gm Fibre-2 gm and Moisture-12 gm.
- *Hordeum vulgare* (*Yava*) is Commonly known as Barley. Its astringent and sweet in taste. It can be used to cure the diseases of throat, skin, *Kapha, Pitta, Meda* ¹¹. Also, they alleviate chronic cold, dyspnoea, cough and diseases of *Rakta*. It increases brain power and appetite too. Each 100 gm of Barley contains Carbohydrate-70 gm, Protein-11.5 gm, Fat-1.3 gm, Minerals -1.2 gm, Fibre-4.0 gm Moisture-12.5 gm, Calcium-26 mg, Phosphorus-15 mg and Iron-1.67 mg.
- *Sorghum vulgare* (*Yavanaala*) is astringent in taste and reduces the *Rakta, Kapha* and *Pitta doshas* in the body ¹². It increases the watery secretions and light to digest (*Laghu*). And it is used as a staple diet in diabetes mellitus. Each 100 gm of Sorghum vulgare contains Carbohydrate-72.6 gm, Protein-10.4 gm, Fat-1.9 gm, Minerals-1.6 gm, Fibre-1.6 gm, Moisture-11.9 gm, Calcium-25 mg, Phosphorus-222 mg and Iron-4.1 mg.
- Finger millet is an important millet. Due to its *Balya* and *Vrishya Gunas*, it can be used for *Dhatu vardhan* and hence useful in *Pandu Roga*. It is *Pittashamaka* hence useful in *Pittapradhana Pandu Roga*.

Therefore, all the millets are a wholesome diet and highly advantageous from a health perspective.

MATERIAL AND METHODS-

As a source, various *Ayurvedic* classics like *Brihatrayee* (*Charak Samhita, Susurut Samhita*), *Laghutrayee* (*Bhavprakash Samhita*) and Modern literature were consulted. In addition to this, various peer-reviewed research journals and published research papers have been studied.

RESULT-

As we all know that *Ayurveda* encourages "*Swasthasaya swasthye rakshnam*" and "*Aturasasye vikar prasaman*" ¹³. Both of the aim is promoted by as different types of millets, as it can be used by healthy

and diseased individual as per the requirement. It implies towards the fact that we need to encourage such practice among the public. Millets can be used as preventive measure in healthy and therapeutic one in diseased.

DISCUSSION-

Millets is highly nutritious and at the same time it has a lots of health benefits as per the *Ayurveda*. Generally they are used in *Kaphaja vikara* and avoided in the *Vataj vikara*. Millets can often be used by doing the appropriate *Samskara karma* as per the disease. Although specific indications of each millet are not mentioned but on basis of *Guna* their specific indication can be derived which is as follows-

- As Millets are gluten free food, highly nutritious and have low glycemic index, all these properties of millets make it an excellent choice for the patients with Diabetes mellitus. As per the *Achaya Sushrute* Millets such as "*Shayamaka*" is indicated in the treatment of *Prameha roga*¹⁴.
- Millets in the form of '*yavgodhumbhojan*' have been included by *Achaya Charak* in the treatment of *santarpanjanje vyadi* such as in *Prameha*¹⁵.
- Few millets such as *yavan* has been mentioned by *Achayas* under continuously used eatables in *classics*, which signifies towards the importance of millets¹⁶.
- *Saktuh* (Powder of dry *yava*) is often recommended in many diseases. *Manthe* is one of the important *Kalpana* which is prepared by *Saktuh* usually recommended in *grishme kala* as per the *Acharyas* in *Ayurvedic classics*¹⁷. *Yava* is also a good source of iron which is essential for the production of haemoglobin in the body.
- Being an excellent source of calcium, millets such as *Yavanaala*, *Yava*, *Priyangu* and *Ragi* helps in the growth of bones and muscles.
- *Priyangu* (Foxtail millet) is mentioned under *Sandhaniya*, *mutrevirajaniya* and *shodhitsthan mahakashya* as per the *Achaya Charak*¹⁸.
- Most of the millets are rich in dietary fibre and thus helps to lower the cholesterol level in the body.
- Based on the *Samanye gunas*, millets can be used in lifestyle disorders such as Obesity, Skin diseases, Diarrhoea etc.

CONCLUSION-

Nutritional and healing benefits of millets make them valuable addition to any *Ayurvedic* diet. Millets can be best used in the lifestyle disorders such as obesity, Diabetes mellitus, Cardiac disorders etc. And as millets are *Vatakarak* in nature, so it is better to restrict their uses in the *Vataj Vyadi*¹⁹. We need to add these in our plate in today's word too. Millets can be used to make a variety of *Pathya Kaplanas* as per the *Roga* and *Rogi Pariksha* to reap all of the nutritional benefits. There is need of current era to promote Millets as a complete food by the government and practitioners.

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