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Millets: An Emerging Source of Nutriment

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Millets is a collective term referring to a number of small seeded annual grasses that are cultivated as Grain Crops, primarily on marginal lands in dry areas in Temperate, Subtropical and Tropical regions. There are different words to describe millets i.e Sorghum (Jowar), pearl millets (Bajra), Foxtail millets (Kangni / Italian millets), Little millets (Kutki), Kodo millets, Finger millets (Ragi / Mandus), Proso millets (Cheena / Common millets), Barnyard millets (Sawa / Sanwa / Jhangora), and Brown top millets (Korale). Proso millets are among the healthiest millet grains available.

Millets are now grown in more than 130 countries and are traditional food for more than half a billion people in Asia and Africa. Globally Sorghum is the biggest millet crop. The major producer of jowar are US, India, Australia, Argentina, Nigeria, & Sudan. Bajra is another major millet crop. India and some African countries are major producers. In India, millets are mainly a kharif crop. Foxtail millets is a C₄ plant species that can convert CO₂ into carbohydrate with a higher photosynthetic efficiency than C₃ plant.

In India, millets growing status are given as follows:

India is the global leader in production of millets with a share of around 15% of the world total production. In India, millets are mainly cultivated in 21 states in an area of 12.53 million hectares, producing 15.53 million tones with a yield of 1237 kg / ha. India is among the top 5 exporters of millets in the world. The major millets producing states in India are Rajasthan, Uttar Pradesh, Haryana, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh and Telangana. Currently together these ten states accounts for around 100% in millets production in India. Three states namely Rajasthan, Uttar Pradesh and Haryana accounts for more than 81% share in total millets production. Rajasthan contributes half of the total millet production in India's total millet production.

Origin of Different Types of Millets

The origin of millets from Neolithic China has generally been accepted, but it remains unknown whether Common millets (*Panicum miliaceum*) or Foxtail millets (*Setaria italica*) was the first species domesticated. According to reports as given, the discovery of husk phytoliths and biomolecular components identifiable solely as common millets from newly excavated storage pits at Neolithic Cishan site, China dated to between CA 10,300 and CA 8,700 calibrated years before present. The increased production of millets will help fight against hunger and mitigate climate change effects in the long run. As per Prime Minister Narendra Kumar Modi, India needs to work on the Millets Revolution in order to ensure a nutritious diet and good health. The cultivation of Millets on a broad scale has the potential to assist farmers in safeguarding their livelihood in the face of climate change. Widespread

adoption of Millets can also help address the lifestyle disease like diabetes due to their nutritional value.

MILLETS in India



Nutritional Facts About Millets

The Foxtail Millets contains 30.10 mg / 100 mg calcium and 3.73 mg / 100 mg iron whereas Barnyard Millet contains 23.16 mg / 100 mg calcium and 6.19 mg / 100 mg of iron .

Millets are considered to be ' Powerhouse Of Nutrients ' . On April 10 , 2018 , The Agriculture Ministry declared Millets as "Nutri Cereals " . Jowar , Bajra , Ragi , the minor millets - Kangani , Cheena , Kodo , Sawa and Kutki and the Pseudo millets buckwheat (Kuttu) and Amaranth (Chaulai) which have "High Nutritive Value " are now regarded as "Nutri Cereals " for the purpose of production , consumption & trade . The story of Millets are published by the Karnataka Department of Agriculture in association with ICAR - INDIAN INSTITUTE OF MILLETS RESEARCH , Hyderabad says , Millets contains 7 - 12 % Protein , 2- 5 % Fat , 65 - 75 % Carbohydrate , 15 - 20 % Dietary Fibre , 44 mg of Magnesium , 0.161 mg of copper , 100 mg of Phosphorus and 0.272 mg of Mangnese . The fibre in Millets contribute to Digestive Health and help to regulate Bowel Movement . Small Millets are more Nutritious compared to Fibre Cereals . They contain higher Protein , Fat , and Fibre content . The potential health benefits of millets include protecting Cardiovascular health , preventing the onset of Diabetes , helping people achive and maintain a healthy weight and managing inflammation in gut . Millets grow extremely quickly amd matures in almost half the time required for rice and wheat. They require much less water than rice & wheat and are mainly grown in rainfed areas . This makes it Ideal Crop, contributing to its rapid spread across Asia , and into Europe .

Health Benefits of Millets

- Millets are rich in Niacin , which helps body manage more than 400 enzyme reactions. Niacin is also important for healthy skin and organ function . In Fact , it 's often added to processed foods to enrich them .

- Millets , especially the darker varieties , is also an excellent source of beta – carotene . This natural pigment acts as both an antioxidants and as a precursor to vitamin A , helping your body fight off free radicals and supporting the health of your eyes .
- It helps in weight loss as the calorie content of millet is low , and they are an excellent food product for weight loss .
- It helps to keep your blood sugar level low as it has glycaemic index .
- Millets provide a great source of protein and can help develop and strengthen our immunity . stronger immunity means fewer chances of you catching diseases .
- Millets reduces cardiovascular risks as it contains essential fats , which provide our bodies with good fats which prevent excess fat storage as well as effectively lowers the risk of high cholestrol , strokes , and other heart complaints

On March 3, 2021 the United Nation General Assembly (UNGA) AT ITS 75th session , adopted a resolution to declare 2023 as the "INTERNATIONAL YEAR OF MILLETS " (IYM 2023). FAO is the lead agency for celebrating the year in the collaboration with other relevant stakeholders. The proposal was moved by India, and was supported by 72 countries. It is an ideal solution for countries to increase self - sufficiency and reduce reliance on imported cereal grains. Several events and activities, including conferences and field activities , and the issuing of stamps and coins are expected as part of the celebration aimed at spreading awareness about millets inspiring stakeholders to improve production and quality and attracting investment

Millets as a fibre: Millets are a type of grain that provides various health benefits to the body by containing vitamins and minerals. Also, it is rich in dietary fibre , both soluble and insoluble , which helps to keep the digestive system healthy .Ithe Insoluble fibre in millets is known as “Prebiotic” , which means it supports good bacteria in your digestive system . It can also be used as a good substitute for rice and wheat .This type of fibre is also good and important for adding bulk to stools , which helps keep you regular and reduces your risk of colon cancer .

Conclusion

It is now well acknowledged that fiber-free foods pose significant health risks for the entire world. Also, it is evident to thousands of patients that all lifestyle disorders can By consuming millets for breakfast, lunch, and supper and avoiding refined foods like rice, wheat, refined flours, processed meats, refined oils, packaged & ready-to-eat foods, and milk, one can make themselves disappear. The use of millets, an old treasured grain-like seed, in our daily diet has numerous health benefits. Most cultured people have never even heard of millet, much less are aware of its nutritional advantages.

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