IMPACT FACTOR 5.473(SJIF)
UPA NATIONAL E-JOURNAL
Interdisciplinary Peer-Reviewed Indexed Journal
Special Issue : Volume -9 : Issue - 2 (October-2023)
ISSN 2455-4375

EAT MILLETS AND STAY HEALTHY

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Introduction :

Millets are sometimes referred to as "nutri-cereals" due to the abundance of vitamins, minerals, amino acids that include sulphur, and phytochemicals. Millets are among the earliest foods that humans have discovered and consumed. They were staple foods in many Asian and African households, particularly in India, Nigeria, and Niger. They may have been among the first cultivated crops being grown in the "Hoe Age," preceding the "Plow Age."

Millets are a group of highly variable small seeded grasses, widely grown around the world as cereal crops or grains for fodder and human food. They do not form a taxonomic group, but rather a functional or agronomic one. Millets are important crops in the semi-arid tropics of Asia and Africa (especially in India and Nigeria), with 97% of millet production in developing countries. The crop is favoured due to its productivity and short growing season under dry, high-temperature conditions. The most widely grown millet ispearl millet, which is an important crop in India and parts of Africa. Finger millet, Proso millet, and Foxtail millet are also important crop species. In the developed world, millets are less important. For example, in the United States only Proso millet is significant, and it is mostly grown for bird seed. While millets are indigenous to many parts of the world, it is believed that they had an evolutionary origin in tropical western Africa, as that is where the greatest number of both wild and cultivated forms exist. Millets have been important food staples in human history, particularly in Asia and Africa. They have been in cultivation in East Asia for the last 10,000 years.

Its importance continued until wheat and rice cultivation were perfected. Due to urbanization, industrialization, and the "green revolution," millets were discarded and instead wheat and rice were promoted. Before the green revolution, 40 percent of the cultivated grains were millets (contributing more than rice and wheat). However, since the revolution, the production of rice has doubled and the production of wheat has tripled. This led to the loss of

Vernacular Names of Millets

English	Sorghum	Pearl Millet	Finger millet	Little millet	Kodo millet	Foxtail/ Italian millet	Barnyard millet	Proso millet
Hindi	Jowar	Bajra	Mandua	Kutki	Kodon	Kangni, Kakum	Sanwa, Jhangon	Barre
Sanskrit	-	-	Nandimukhi, Madhuli	-	Kodara	Kanguni	Shyama	Chiná
Kannada	Jola	Sajjai	Ragi	Same	Harka	Navane	Oodalu	Baragu
Tamil	Cholam	Kamboo	Kelvaragu	Samai	Varagu	Tenai	Kuthiravaali	Panivaragu
Telugu	Jonna	Sajjalu	Ragulu	Samalu	Arikelu, Arika	Korra, Korralu	Udalu, Kodisama	Varigulu, Varagalu
Malayalam	Cholam	Kamboo	Moothari	Chama	Varagu	Thina	-	Panivaragu
Marathi	Jcwari	Bajri	Nachni	Sava	Kodra	Kang, Rala	Shamul	Vari
Gujarati	Juar	Bajri	Nagli, Bavto	Gajro, Kuri	Kodra	Kang	Sama	Cheno
Bengali	Juar	Bajra	Mandua	Kangani	Kodo	Kaon	Shamula	Cheena
Punjabi	-	Bajra	Mandhuka, Mandhal	Swank	Kodra	Kangni	Swank	Cheena

indigenous crops like millets. This led to a sharp decline in millet production and changed the food habits of the population, which led to a loss of importance both in farming and in consumption. Poor dietary habits such as non-millet-based cereals (rice and wheat) consumption are one of the major contributing factors to rising malnutrition in India. In addition to being nutritionally poor, these cereals have a high glycemic index, which leads to an increase in the blood glucose level, resulting in hyperglycemia. Nowadays, millet is gaining popularity among consumers. With increasing awareness of several lifestyle diseases, their causes, and consequences, there is an increase in demand for nutritious foods such as millets to address the public health challenge of global burden.

Nutritional Importance of Millets:

Sorghum and millets namely, Pearl millet, Finger millet, Kodo millet, Proso millet, Foxtail millet, Little millet, and Barnyard millet are important staples to millions of people world-wide. Generally, these are rain fed crops grown in areas with low rainfall and thus resume greater importance for sustained agriculture and food security. Almost all the millets are used for human consumption in most of the developing countries but their use has been primarily restricted to animal feed in developed countries. Millets are nutritionally comparable to major cereals and serve as good source of protein, micronutrients and phytochemicals. Processing methods like soaking, malting, decortications, and cooking affect the anti-oxidant content and activity (Saleh et al., 2013). While sorghum and most of the millets contains about 10% protein, 3.5% lipids, finger millet contains 12-16% protein and 2-5% lipids. Sorghum and millets are very good sources of micronutrients such as vitamins and minerals. Major portion of sorghum protein is prolamin (kaffirin) which has a unique feature of lowering digestibility upon cooking whereas, the millets have a better amino acid profile. It has been reported that sorghum proteins upon cooking are significantly less digestible than other cereal proteins, which might be a health benefit for certain dietary groups. On the other hand, millets contain

fewer cross-linked prolamins, which may be an additional factor contributing to higher digestibility of the millet proteins.

Millet is a low maintenance and drought-resistant grain. People often use it to feed livestock, but consumer interest is growing. This grain provides various health benefits and has multiple uses in cooking. As a result of increased land being used for wheat and rice production, the cultivation area for millets has decreased considerably since 1956. Millets are considered to be the sole crop that will handle critical challenges in the future such as food, fuel, malnutrition, health, and climate change.

Millet grows extremely quickly and matures in almost half the time required for rice and wheat. This makes it the ideal crop, contributing to its rapid spread across Asia and into Europe. Millet is now the sixth most important cereal grain in the world. It is **GLUTEN FREE** and a good source of **PROTEIN, FIBER AND MICRO-NUTRIENTS**. It also provides multiple benefits to physical and mental health, requires few inputs to grow, and is resistant to drought.

- Helping the digestive system
- Supporting the cardiovascular system
- Improving mood
- Reducing the risk of diabetes
- Managing obesity
- Reducing oxidative stress Suppressing cancer cell growth
- Promoting wound healing
- Maintaining bone health
- Supporting antifungal and antimicrobial activity

Millet is available in many supermarkets and health food stores in several different forms. It's common to see millet sold dried, puffed like rice, or ground like wheat flour. Millet in any form can be a healthy addition to most diets. So, gear up for a healthy and satisfying diet plan which includes millets.

How to prepare and eat millets :

Millets are a versatile ingredient that makes a good rice replacement when cooked

whole.To prepare it, just add 2 cups (480 mL) of water or broth per 1 cup (174 grams) of raw millet. Bring it to a boil, then simmer it for 20 minutes.Remember to soak it overnight before cooking to lower its antinutrient content. You may also toast it in a pan before cooking to enhance its nutty taste.Millets are also sold as a flour.In fact, research suggests that making baked goods with millet flour significantly enhances their nutritional profile by increasing their antioxidant content .Additionally, this grain is processed to make snacks, pasta, and nondairy probiotic beverages. In fact, fermented millet acts as a natural probiotic by providing live microorganisms that benefit your health .

You can enjoy millets as a breakfast porridge, side dish, salad add-in, or cookie or cake ingredient.

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