

Millets and their special nutrient value

December 4, 2020

In news

Agricultural and Processed Food Products Export Development Authority (APEDA) is formulating a strategy for promoting millets and its products with Indian Institute of Millet Research (IIMR)

What are millets?

- Millet is a cereal grain that belongs to the Poaceae family, commonly known as the grass family
- Millets are coarse grains and a repository of protein, fibre, vitamins and minerals. They include jowar (sorghum), ragi (finger millet), korra (foxtail millet), arke (kodo millet), sama (little millet), bajra (pearl millet), chena/barr (proso millet) and sanwa (barnyard millet).
- Since ages, these small crops were used for human consumption as well as a fodder for animals.
- **Majorly cultivated in the semiarid tropical regions of Africa and Asia**, around 97 percent of world's overall millet production happens in these regions.

What is their special nutrient value?

- It has gained popularity in the West because it's gluten-free and boasts high protein, fiber, and antioxidant contents
- Like most cereals, millet is a starchy grain – meaning that it's rich in carbs. Notably, it also packs several vitamins and minerals
- Like most cereals, millet is a starchy grain – meaning that it's rich in carbs. Notably, it also packs several

vitamins and minerals

FROM THE NUTRITIONAL ANGLE

The profile of various grains (In 100g)

Foodgrain	Carbohydrates (g)	Protein (g)	Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)
Sorghum	72.6	10.4	1.9	349	25	41
Bajra	67.5	11.6	5	361	42	8
Finger millet	72.0	7.3	1.3	328	344	3.9
Foxtail millet	60.9	12.3	4.3	331	31	2.8
Kodo millet	65.9	8.3	1.4	309	27	0.5
Proso millet	70.4	12.5	1.1	341	14	0.8
Barnyard millet	65.5	6.2	2.2	307	20	5
Little millet	67.0	7.7	4.7	341	17	9.3
Wheat (whole)	71.2	11.8	1.5	346	41	5.3
Rice (raw, milled)	78.2	6.8	0.5	345	10	0.7

GRAPHIC: VPU, SHARMA/MNT

Source: National Institute of Nutrition Hyderabad

Health benefits

Millet is rich in nutrients and plant compounds. Therefore, it may offer multiple health benefits. Such as;

- Rich in antioxidants: Millet is rich in phenolic compounds, especially ferulic acid and catechins. These molecules act as antioxidants to protect your body from harmful oxidative stress
- The millet grain contains about 65% carbohydrate, a high proportion of which is in the form of non-starchy polysaccharides and dietary fibre which help in prevention of constipation, lowering of blood cholesterol and slow release of glucose to the blood stream during digestion.
- Lower incidence of cardiovascular diseases, duodenal ulcer and hyperglycemia (diabetes) are reported among regular millet consumers.
- Millet grains are also rich in important vitamins viz., Thiamine, riboflavin, folic acid and niacin.
- Millets are comparable to rice and wheat or rich in some of the minerals as well as fatty acids.
- Millets vary largely in composition of carbohydrates as proportion of amylose and amylopectin content vary from 16-28% and 72-84%, respectively.

- The nutrient composition of Millet grain indicates that it is a good source of energy, protein, vitamins and minerals including trace elements