

Conclusion

Millets are excellent sources of carbohydrates, protein, fatty acids, minerals, vitamins, dietary fiber and polyphenols. Pearl millet (Bajra) has the highest content of macro and micronutrients such as iron, zinc, magnesium, phosphorus. Finger millet (ragi) is an extraordinary source of calcium. Millets are a rich source of magnesium, which relaxes blood vessels and is an important mineral for reducing blood pressure and minimize the risk of cardiovascular diseases. Millets improve gastrointestinal system because of high fibre content and eliminate problems like constipation, excess gas, bloating, and cramping by regulating digestive process and reduce chances of serious conditions like peptic or colon cancer. Millets have lower Glycemic index (GI) as compared to most other cereals and are beneficial for diabetic patients. Gluten sensitivity and celiac disease have become common problems these days. Millets being deficient in gluten, provide protection against people affected by celiac disease, non-celiac gluten sensitivity and wheat allergy sufferers.

CONTACT US

Head Office

Mount Valley Development
Association
Village - Doni Palli, Post
Office - Megadhar,
Subdivision - Ghansali,
District - Tehri Garhwal,
Uttarakhand (249155)
Email :
contact@mvda.org.in,
M - +91 83929 55511

Admin Office

Village - Molno Maya Paukhal,
Shrinagar Road, Subdivision -
Ghansali,
District - Tehri-Garhwal,
Uttarakhand (249161)

State Office

Lane No. 7A, Block - E,
Saraswati Vihar, Dehradun
City,
District - Dehradun,
Uttarakhand (248001)

FINGER MILLET



BARNYARD MILLET



FOXTAIL MILLET

MILLETS' ROLE
AS A
FUNCTIONAL
FOOD



INTRODUCTION

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. These are important crops in the semiarid tropics of Asia, Africa (specially in India, Nigeria, Niger) and favoured due to high productivity and short growing season under dry, high temperature conditions. Millets are nutritious, non-glutinous (non-sticky) and alkaline foods, thus very easy to digest. These are excellent sources of carbohydrates, protein, fatty acids, minerals, vitamins, dietary fibre and polyphenols. The four major types are Pearl millet (*Pennisetum glaucum*), which comprises 40% of the world production, Foxtail millet (*Setaria italica*), Proso millet or white millet (*Panicum miliaceum*), and Finger Millet (*Eleusine coracana*). Protein content of millets varies between 7.3-12.5g, fibres 1.3-10.1g and minerals 1.5-4.4 g per 100g of millets. Pearl millet is the richest source of iron (16.9 mg). Whereas calcium is highest in finger millet (344 mg). These acts as functional foods against diabetes, heart diseases, gastrointestinal disorders and for patients allergic to gluten (Celiac disease).

Millets for cardiovascular diseases

- Millets are a rich source of magnesium, which is an important mineral for reducing blood pressure and the risk of heart attacks, It helps to relax blood vessels, enhances nutrient delivery by improving the blood flow and protects the cardiovascular system.
- Millets are also a great source of potassium, which further keeps blood pressure low by acting as a vasodilator.

Millets for Gastrointestinal and Celiac disease

- Being rich in fiber contents, millets can help to improve gastrointestinal system and eliminate problems like constipation, excess gas, bloating, and cramping.
- Millets being deficient in gluten, provide protection against people affected by celiac disease, non-celiac gluten sensitivity and wheat allergy sufferers.

Millets for Diabetes

- The diabetes-preventing effect of millet is primarily attributed to high fibre content and some antioxidant.
- Millets have a low Glycemic index compared to most other cereals. Since millets have a low Glycemic index they increase satiety by decreasing hunger because it slows the rate of digestion.
- They reduce the risk of type 2 diabetes because these are rich in magnesium. Magnesium is considered one of the most important minerals for increasing the efficiency of insulin and glucose receptors in the body, thereby preventing this disease.

Nutrient Content of Various Millets in comparison to Rice and Wheat

Crop	Nutrients				
	Protein (g)	Fibre (g)	Minerals (g)	Iron (mg)	Calcium (mg)
Pearl millet	10.6	1.3	2.3	16.9	38
Finger millet	7.3	3.6	2.7	3.9	344
Foxtail millet	12.3	8	3.3	2.8	31
Proso millet	12.5	2.2	1.9	0.8	14
Kodo millet	8.3	9.0	2.6	0.5	27
Little millet	7.7	7.6	1.5	9.3	17
Barnyard millet	11.2	10.1	4.4	15.2	11
Rice	6.8	0.2	0.6	0.7	10
Wheat	11.8	1.2	1.5	5.3	41

