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IMPORTANCE OF MILLETS IN OUR DAILY LIFE

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ABSTRACT

Millets are natural grains found in South Asia and Sub-Saharan Africa. They are one of the oldest foods known to humans and may have been the first cereal grain utilised for domestic uses. Millets are gluten free and naturally rich in protein, iron, fibre, calcium, vitamins, and minerals. [1]They are a better alternative to rice and wheat since they have a low glycemic index and are gluten free. Millets safeguard our inside organs in a variety of ways. Millet crops include Foxtail millet *(Setaria italica*), proso millet (*Panicum miliaceum*), Kodo millet (*Paspalum scrobiculatum*), little millet (*Panicum sumatrense),* and barnyard millet (*Echinochloa frumentacea*). Millet is a nutritional staple and the primary source of protein in most underdeveloped countries. Millet is the sixth most grown grain in the world, following corn, rice, wheat, barley and sorghum. It thrives in drought circumstances and has a high level of natural biodiversity. It can be grown in a range of environments.

Keywords: Millets, Kodo millet, Barnyard millet, Foxtail millet, little millet.

INTRODUCTION

Millet is a collective term for a group of small-seeded annual grasses grown as grain crops, primarily on marginal soils in temperate, subtropical, and tropical countries. [2]The most important millet species are pearl millet, finger millet, proso millet and foxtail millet, Pearl millet accounts for about half of all millet output worldwide. It is the most important millet species in terms of planted area and contributions to food security in regions of Africa and Asia with little else to produce. Finger millet is commonly grown as a food crop and as a popular ingredient in traditional beer in cooler, higher-altitude parts of Africa and Asia. Proso millet is essential.Little millets, which are high in B-vitamins and minerals like calcium, iron, zinc, potassium, high Protein, fiber, Vitamins and Minerals can give critical nutrients that aid in weight loss. It is used in many traditional South Indian cuisines. Millet has the ability to protect cardiovascular health, reduce the onset of diabetes, assist people achieve and maintain is a good source of iron and is also important for the formation of a healthy immune system.

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Figure-1. Different types of Millets
(*Source: FSSAI, CG-DL-E-23022023-243823, 2023*)

Health Benefits & Nutritional Characteristics of Millets

1) **PEARL MILLET (*Cenchrus americanus*)** - [3]good source for isomnia - Pearl promotes relaxation and combats sleeplessness. Breakfast with pearl millet ensures a stress-free day free of headaches. There are various health benefits for children, such as increased vitality. Improves bowel movement, protects cell development, and so on.

2) **KODO MILLET (*Paspalum Scrobiculatum*)** - [4]good for diabetis,It has a high antioxidant content and is beneficial to diabetics. Kodo is high in protein and fibre. This Kodo millet recipe is sweet, simple, and healthful. Both of these are aware of how to combat and manage diabetes. So, in order to fight diabetes, eat this tasty and healthful cuisine.

3) **FOXTILE MILLET (*Setaria italica*)** - [5] good for Thyroid -Make recipes with foxtail millets for your child to help them grow up healthy and to teach them the value of these traditional grains. It is easily absorbed and digested by children. In actuality, the best source of anaemia and iron also has a high calcium content and helps constipation.

4) **SORGAM MILLET (*Sorghum bicolour*)** -[6] improves digestive health and prevent cancer -It can help prevent cancer and possibly control diabetes by improving intestinal health. The ability to develop healthy bones and promote red blood cell improvement. Excess fibre

consumption aids in the removal of harmful cholesterol such as LDL. Improve heart health and prevent the body against stroke, atherosclerosis, and heart attack.

5) **LITTLE MILLET (*Panicum Sumatrense*)** -[7] an indisepensable good fat - It is the best source of minerals and vitamin B, including potassium, calcium, and zinc. In south India, it is used in more traditional millets recipes. Above all, its high fibre content makes it a healthy substitute for rice. Little millet contains antioxidant qualities and is high in. Its dietary fibre helps to prevent hyperglycemia.

6) **PROSO MILLET (*Panicum miliaceum*)**-[8] Balance blood Sugar - The millet is really beneficial for controlling blood sugar levels. It is low glycemic index carbs that are also being developed around the world to cultivate millet and use as bird feed. Proso millet has a high concentration of lecithin. It is the substance that has an indirect effect on the neurological system and helps it to function properly. The robust nervous system is also known in this proso millet.

7) **FINGER MILLET (*Eleusine coracana*)** - [9]good for Strengthen bones - It is an important source of natural calcium that helps to strengthen bones in both elderly individuals and growing children. Ragi flour is recommended as a weaning food due to its high nutritional value. The southern areas of India, in particular. Finger millet is an excellent source of natural iron, and its ingestion aids in the recovery of anaemia. It is beneficial in cases of depression, anxiety, and insomnia, as well as migraines.

Millets Sustainable development:

Millets continue to be a planet-friendly crop, attracting the attention of climate change projects and sustainable environmental practises.[10] Millets require little to no pesticides because they are insect resistant. Excessive consumption is harmful to one's health.

Environmental impact of Millets :

Millets have a carbon footprint (CO2-eq) that is about 25% lower than wheat and somewhat lower than rice. Millets are a remarkable low-impact crop for all environmental metrics among cereal crops. Millets require little to no additional water, even in arid areas and high saline soils.

Millets are traditionally processed at home using a variety of procedures such as grinding, soaking, heating, roasting, germination, and fermentation. These processing processes have the potential to alter the polyphenol concentration of the final product.17-Jan-2022. 8)Cleaning, grading, hulling, milling, pounding, grinding, tempering, parboiling, soaking, drying, and sieving are all examples of primary cereal processing.

Mechanical Processing of Millets

Perfura Destoner may remove stones and other contaminants from grains. Weight is used to separate the grains. By altering the air flow and the working angle of the destoning deck, this machine can be used for multiple grains.

CONCLUSION

Millets may flourish in harsh situations such as drought, and some wild species can even thrive in flooded places and swampy locations. The inclusion of millets in commercial/packaged foods will motivate farmers to plant millets, creating new opportunities and revitalising farmers. Millets are small-grained, warm-weather cereals that belong to the grass family. They are rain-fed, resilient grains with low water and fertility requirements when compared to other common cereals. They can withstand drought and other harsh weather conditions. Millets should be consumed in moderation because excessive consumption can have negative consequences because the cereals contain substances that interfere with thyroid gland function. Millets can induce delayed digestion due to their slow digestibility and high fibre content. People with digestive issues may struggle. Millets are a wonderful source of amino acids, but a high amino acid concentration is not advised for the body," stated Anjali, nutrition consultant and founder of Starlite Wellness studio.

Conflicts of Interest

Authors declare that there is no conflict of interests regarding the publication of this paper.

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