

MILLET GRAINS : THE SUPERFOOD IN HUMAN DIET

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Abstract :

Millets are among the oldest food cultivate by human kind. Millet grains, once considered a staple crop in many ancient civilization, are regaining popularity as a super food in today's in today's modern diet due to their numerous health benefits and sustainable cultivation practices. This research paper explores the nutritional composition, historical significance, health advantages, & potential environmental impact of millet grains. It also discusses the incorporation of millet into various diets and culinary applications, highlighting their role in promoting human health and sustainable food systems.

Introduction :

Millets considered a poor man's food is the staple diet for majority of population in Asian and African continent but unfortunately it lost its importance in the past decades. Not much effect was seen in expansion of area under millet cultivation and millet cropping system. According to FAP estimates, india is the world's largest producer of millets, accounting for 40% of world's production, followed by china. It has also been reported that over past 30 years, millet food consumption was stable globally, but consumption of all other cereals doubled (www.fao.org) indicating negligence of millets.

Small seeded millet, which belongs to the graminea and poaceae families, is used worldwide for food and fodder. They have a rounded form. A member of the grass family, millet is a small grain crop grown annually in temperate, tropical, subtropical and dry regions. It can also be grown on marginal lands. It is frequently raised as a catch crop.

Nutritional composition of Millet grains :

Millet are gaining recognition in the modern diet for their exceptional nutritional value and potential health benefits. Millets are rich in nutrients such as protein, dietary fiber, vitamins and minerals and are gluten free. They have been recognized as a 'superfood' due to their nutritional value, and are an important source of food for many populations, especially in developing countries. Millet grains including species such as pearl millet, finger millet, foxtail millet and prose millet, are known for their rich nutritional composition. They are excellent sources of carbohydrates, dietary fiber, protein, vitamins (specially B vitamins) and minerals (including iron, magnesium and phosphorus) millets are gluten free and have a low glycaemic index, making them suitable for individuals with gluten sensitivities and those seeking to

manage blood sugar levels.

Historical Significance :

Millet grains have played a crucial role in the diets of various ancient civilizations, such as those in Africa, Asia and Europe. They were a staple food source due to their adaptability to different climatic conditions and resistance to pests and diseases. Millet has cultural and historical significance in many resistance, often used in traditional rituals and celebrations.

Archaeological evidence shows that these tiny grains were first cultivated in Asia and Africa around 10,000 years ago, during the Neolithic Revolution. Ancient cultures such as the Harappan and Indus valley had already adopted Millets as staple foods. There are about 6000 varieties of Millet found across the world.

Health benefits of Millets have Grains :

Millets have potential health benefits and epidemiological studies have showed that consumption of millets reduce risk of heart disease, protects from diabetes, improves digested system, lowers the risk of cancer, detoxifies the body, increases immunity in respiratory health, increases energy levels and improves muscular and neural systems and are protective against several degenerative diseases such as metabolic syndrome and parkinson's disease..

- A) Cardiovascular Health ; Millets grains are rich in heart healthy nutrients like magnesium and potassium, which contributes to lower blood pressure. The fiber content helps reduce cholesterol levels, lowering the risk of heart disease.
- B) Digestive Health : the Dietary fiber in millets aids in maintaining a healthy digestive system, preventing constipation and promoting gut health.
- C) Weight Management : Millets are satiating due to their high fiber and protein content, making them an excellent choice for those looking to manage their weight.
- D) Debates Management : Millets have a low glycemic index and can help regulate blood sugar levels, making them suitable for diabetics. Finger Millet based diets have fiber content and also alpha amylase inhibition Properties which are known to reduce starch digestibility and absorption.

Environmental Impact :

Millets are environment friendly grains and require less water and pesticides to grow and survive. Increasing Millet production and consumption can be a great way to promote sustainable agriculture and reduce the carbon foot print on the environment. Addition ally Millets can thrive in poor soil conditions making them an eco friendly choice for farming. They can grow in almost any soil, whether sandy or acidic. They don't require much fertilizes or irrigation.

Conclusion :

Millet grains are a superfood with immense nutritional value and a rich historical legacy. Their health benefits, sustainable cultivation practices and culinary versatility make

them an attractive addition to modern diets. Incorporating Millets into our meals can contribute to improved health outcomes and promote environmentally responsible food systems. Further research and promotion of millets can play a vital role in achieving global food security and improving public health. They also contain good amount of dietary fiber and phytochemicals which impart them with therapeutic properties and therefore they are rightly said to be nutraceuticals or superfoods.

Eventually the eco friendly small millet with high nutritional and therapeutic properties have been recognized and efforts are being made to popularize millets both at production and consumption levels. Various initiatives are being taken to remove the constraints in cultivation and usage of small millets so as to combat food and nutritional insecurity. Thus, there is a need to bring millets the forgettable crop into the mainstream for addressing various environmental, nutritional and health issues.

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