SUNSHINE AGRICULTURE
e-Newsletter

ISSN (E): 2583 – 0821

Sun. Agri.:e- Newsletter, (2023) *3*(11), 33-35

Article ID: 246

Millets on the Rise: A Modern Twist to Traditional Staples

Aakriti Singh Sisodiya*,
Leena Preeti Lakra,
Soumitra Tiwari

Department of Food Processing and Technology,
Atal Bihari Vajpayee Vishwavidyalaya Bilaspur,
Chhattisgarh

Open Access

*Corresponding Author
Sisodiya A.S.*

Available online at
http://sunshineagriculture.vitalbiotech.org/

Article History
Received: 15. 11.2023
Revised: 21. 11.2023
Accepted: 25. 11.2023

INTRODUCTION

Millets are highly nutritious, non-glutinous and non acid forming foods. Millets have many Nutraceuticals and health promoting properties especially the high fibre content. Millets act as a probiotic feeding for micro - flora in our inner ecosystem. Millets hydrate our colon to keep us from being constipated.

Fig. Millets

Nutritional composition of millets:

Millets are high in nutrition and dietary fibre. They serve as good source of protein, micronutrients and phytochemicals. The millets contain 7-12% protein, 2-5% fat, 65-75% carbohydrates and 15-20% dietary fibre. The essential amino acid profile of the millet protein is better than various cereals such as maize. Millets contain fewer cross-linked polyamines, which may be an additional factor contributing to higher digestibility of the millet proteins. Similar to cereal proteins, the millet proteins are poor sources of lysine, but they complement well with lysine - rich vegetables (leguminous) and animal proteins which form nutritionally balanced composites of high biological value. Millets are more nutritious compared to fine cereals. Small millets are good source of phosphorous and iron. Millets contributes to antioxidant activity with phytates, polyphenol, tannins, Anthocyanins, phytosterols and pinacosanols present in it having important role in aging and metabolic diseases. All millets possess high antioxidant activities.

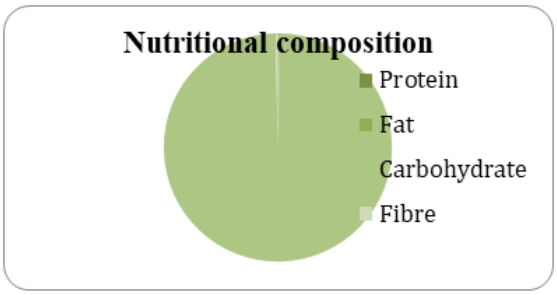

Fig. Nutritional composition of Millets

Different types of Millets:

Major Millets:

- Sorghum (Jowar)
- Pearl Millet (Bajra)
- Finger Millet (Ragi)

Minor Millets:

- Foxtail millet (Kakum)
- Kodo Millets
- Barnyard Millets
- Little millets (Kutki/Shavan)
- Proso Millets
- Buckwheat

Sorghum (Jowar)

- Major portion of sorghum protein is prolamin (kaffirin) which has a unique feature of lowering digestibility upon cooking which might be a health benefit for certain dietary groups.
- Sorghum proteins upon cooking are significantly less digestible than other cereal proteins, which might be a health benefit for certain dietary groups.
- It is rich in protein, fibre, thiamine, riboflavin, folic acid, and carotene.
- It is rich in potassium, phosphorus and calcium with sufficient amounts of iron, zinc and sodium.

Pearl Millet (Bajra)

- Contains considerably high proportion of proteins (12-16%) as well as lipids (4-6%).
- It contains 11.5% of dietary fiber. It increases transit time of food in the gut. Hence, reduce risk of inflammatory bowel disease.
- The niacin content in pearl millet is higher than all other cereals.
- It also contains folicate, magnesium, iron, copper, zinc and vitamins E and B- complex. It has high energy content compared to other millets.
- It is also rich in calcium and unsaturated fats which are good for health.

Finger Millet (Ragi)

- Finger millet is the richest source of calcium (300-350 mg/100g)
- Ragi has the highest mineral content.
- It contains lower levels of protein (6-8%) and fat (1.5-2%)
- Finger millet proteins are unique because of the sulphur rich amino acid contents.
- The grains have excellent malting properties and are widely known for its use as weaning foods.
- It has high antioxidant activity.

Millets: Rediscovering a Nutrient-Rich Staple for Sustainable Diets

Millets, a group of small-seeded grains, are emerging as a nutritional powerhouse and a sustainable alternative to traditional staple foods. This article delves into the nutritional benefits of millets and their potential to transform our approach to staple foods.

1. Diverse Nutrient Profile

Millets, including varieties like finger millet (ragi), pearl millet, and foxtail millet, offer a diverse nutrient profile. They are rich in essential nutrients such as iron, magnesium, phosphorus, and B-vitamins. Incorporating millets into the diet can contribute

significantly to meeting daily nutritional requirements.

2. Gluten-Free and Low Glycemic Index

Millets are naturally gluten-free, making them an excellent alternative for individuals with gluten sensitivity or celiac disease. Additionally, millets have a low glycemic index, providing a sustained release of energy and making them suitable for managing blood sugar levels.

3. Rich in Dietary Fiber

The high fiber content in millets supports digestive health and can aid in preventing constipation. Including millets in the diet may contribute to a feeling of fullness, potentially assisting in weight management and promoting a healthy gut.

4. Climate-Resilient Crops

Millets are known for their adaptability to diverse climates and require fewer resources compared to traditional cereal crops. Their ability to thrive in harsh conditions makes them a sustainable option for agriculture, potentially contributing to global food security.

5. Culinary Versatility

Millets are incredibly versatile in the kitchen, suitable for a range of dishes from porridges and bread to salads and desserts. Their adaptability in various cuisines makes them a valuable addition to diverse culinary traditions.

CONCLUSION

The revival of millets as a staple food holds promise for addressing both nutritional and environmental challenges. By embracing millets in our diets, we can contribute to a healthier lifestyle and promote sustainable agricultural practices.