

Combating Malnutrition using Millets

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Abstract:

Malnutrition is one of the most critical health challenges affecting huge population worldwide. Plagued by such a serious problem of malnutrition, India has found a revolutionary solution in the resurgence of millets. These modest grains, which were frequently disregarded in favor of rice and wheat, are regaining popularity and garnering attention for their enormous potential to combat malnutrition while assisting farmers.

Keywords: malnutrition, health

Introduction:

India has a special opportunity to address its nutritional issues and bring about a positive change in agriculture by embracing the resurgence of millets. Millets are a group of nutritiously rich, drought tolerant and typically grown in the arid and semi-arid regions of India. They are an important source of food and fodder for many poor farmers and play a major role in ecological and economic security of India. Millets are also known as “Coarse Cereals” or “Cereals of the poor”.

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With an intention to create awareness and increase production & consumption of

millets, United Nations, declared 2023 as the “International Year of Millets”. In this regard, Government of India has initiated various programmes with an aim to achieve its popularity and usage among the people. Honorable Prime Minister by respecting the sentiment of the people of Karnataka said that the millets will now be known as “Sri Anna” across the country which means best among all the food grains.

Initiatives and Efforts:

In July 2018, India participated in 26th session of FAO Committee of Agriculture

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(FAO COAG) meeting being held at FAO, Rome, Italy. The Government of India approved the delegation of Dr. S. K. Malhotra, the then Agriculture Commissioner as Head of delegation. He in consultation with the Ministry of Agriculture and Farmers' Welfare took the initiative to take forward the International Year of Millets agenda from India. The FAO COAG (1-5 October, 2018) reviewed the proposal presented by the Government of India to establish observance of the International Year of Millets 2023. On the recommendation of FAO COAG, FAO council and FAO conference the UN General Assembly (UNGA) adopted by consensus a resolution sponsored by India and supported by 70 nations declaring, 2023 as International

Year of Millets (IYOM-2023) on 3rd March, 2021.

The year 2023 has been celebrated on a large scale all over the world as the "International Year of Millets". To raise awareness of nutritious importance of Millets among the farmers, a series of programs and initiatives were organized by the Ministry of Agriculture and Farmers Welfare at the launch of "International Year of Millets 2023", under which many programs were started like- 'India Wealth, Millets for Health', Millets Startup Innovation Challenge, Mighty Millets Quiz and slogan competition etc. Increased research work is being undertaken by ICAR institutes in the direction of developing advanced varieties of nutritious grains.



In past few years, the finger millet consumption has increased in plains and as well in hilly areas due to its high nutritive value.

Status of Malnutrition in India:

Through National Family Health Survey (NFHS) conducted by the Ministry of Health and Family Welfare the data on nutritional indicators in the country are captured periodically. As per the recent NFHS-5 (2019-21) report, the nutrition indicators for children under 5 years have improved as compared with NFHS-4 (2015-16) as given in the table 1.

health. Millets are a powerhouse of nutrition and an effective tool to address malnutrition.

Nutritional Importance of Millets:

There are different types of millets available like sorghum, bajra, finger millet, kodo millet, porso millet, foxtail millet, little millet and barnyard millet. Millet value addition technologies have contributed a lot in bringing millets back to our plate. It has also gained popularity among farmers because it is easy to grow and process as compared to other millets. It has become a part of the diet in most households in India due to its impressive nutritional value. Its value can't be understood

Table 1: Nutrition indicators for children under 5 years

Indicators	NFHS-5 (2019-21)	NFHS-4 (2015-16)
Stunting	35.5%	38.4%
Wasting	19.3%	21.0%
Under weight	32.1%	35.8%

Additionally, to strengthen the efforts to end hunger and malnutrition by 2030, the central government launched the Prime Minister's Overreaching Scheme for Holistic Nourishment, also known as POSHAN 2.0. Under this scheme, major prominence is being given to promote dietary diversity and food fortification, nurturing traditional systems of knowledge and mainstreaming millets. The scheme promotes regional food culture to bridge dietary gaps and develop sustainable

until it is consumed regularly. It was always considered poor man's food but now it is even accepted by people living in urban areas. Researchers examining the nutritional benefits of millets have found that these "smart foods" can boost growth in children and adolescents by 26-39% when they replace rice in standard meals. The results suggest that millets can significantly contribute to overcoming malnutrition as shown in Table 2 and Figure 1 & 2.

Table 2: Nutrient composition of Millets in comparison with Rice and Wheat

	Sorghum	Peal Millet	Finger millet	Kodo millet	Proso millet	Foxtail millet	Little millet	Barnyard millet	Wheat	Rice
Carbohydrate (g)	67.6	61.7	66.8	66.1	70.4	60	65.5	65.5	64.7	78.2
Protein (g)	9.9	10.9	7.1	8.9	12.5	12.3	10.1	6.2	10.6	7.9
Fat (g)	1.73	5.43	1.92	2.55	1.1	4.3	3.89	2.2	1.47	0.52
Energy (K.cal)	334.1	347.9	320.7	331.7	341.1	331	346.3	307.1	321.9	356.4
Dietary fibre (g)	10.2	11.5	11.2	6.4	-	-	7.7	-	11.2	2.8

Source: ICAR-IIMR, Hyderabad

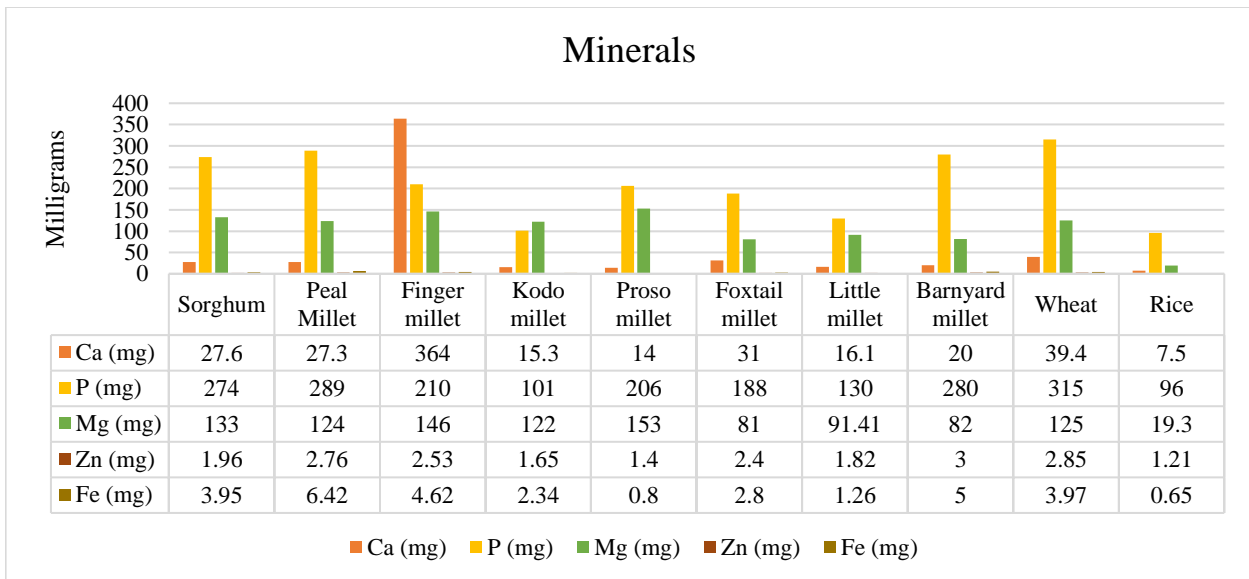


Figure 1: Mineral composition of millets in comparison to Rice & Wheat

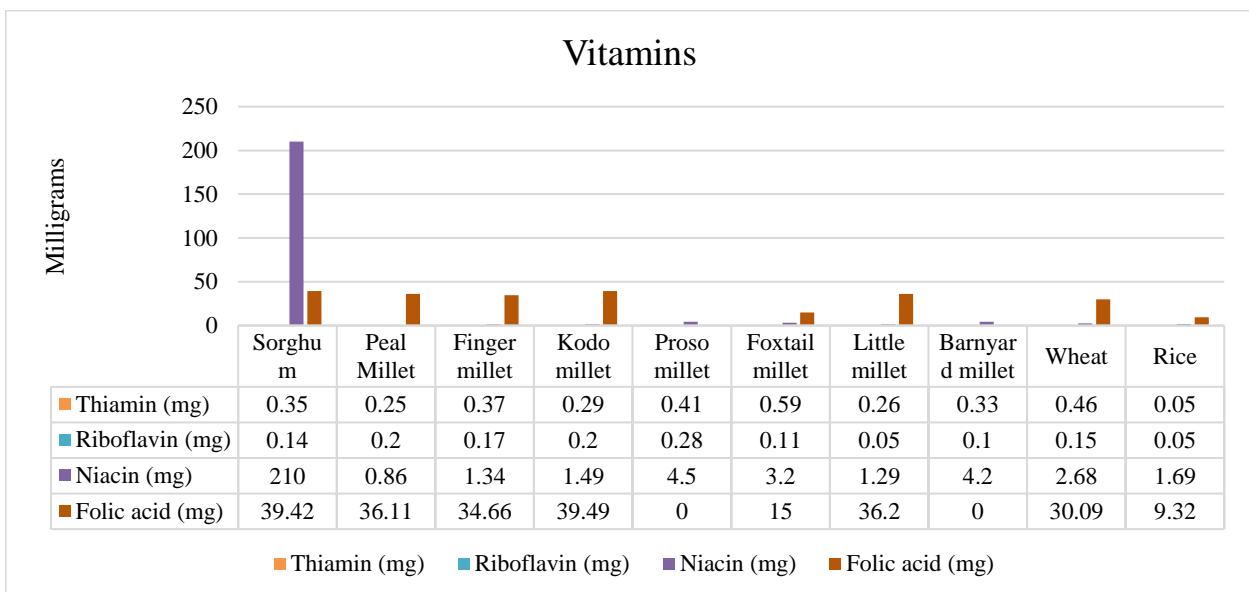


Figure 2: Vitamin composition of millets in comparison to Rice & Wheat

Conclusion:

These nutrient-dense food grains, in addition to providing essential vitamins and minerals, they also pave way towards resilience to changing climatic condition and making them more suitable for farmers. The malnutrition can be addressed by promoting millet cultivation, its consumption and fostering food security. Accepting millets as part of diet could be a strategy towards more healthier and nourished communities across the globe.

