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Finger Millet as Dietary Supplements in Human Health (\*Mohana Sundaram K<sup>1</sup> and Kumar R<sup>2</sup>) Department of Plant Breeding and Genetics, Krishna College of Agriculture and Technology, Usilampatti, Madurai, Tamil Nadu \*Corresponding Author's email: <u>kmsagri@gmail.com</u>

Finger millet (*Eleusine coracana* L.), commonly known as Ragi is native to Africa and the secondary centre of origin is India. They are small seeded, annual cereal grasses, many of which are adapted to tropical and arid climates and are characterized by their ability to survive in less fertile soil (Hulse, Laing, & Pearson, 1980). Fingermillet was a well-domesticated plant in various states of India and popularly called as nachni (dancer) in the state of Maharastra, "umi" in Bihar, "kali" in Tamil, *etc.*,



# Botany

Finger millet is having fibrous root system, hallow and internode hallow stem, leaves are arranged alternately on either side of the compresses culm and is gren in colour. Inflorescence or panicle is borne at the end of the vegetative shoot. Spikelets about 70 arranged alternately on rachis, each containing 4 to 7 seeds.

# **Nutritional factors**

Nutritional potential of finger millets contains 5–8% protein, 65–75% carbohydrates, 15–20% dietary fiber and 2.5–3.5% minerals (Chethan and Malleshi 2007a). It has the highest calcium content among all cereals (344 mg/100 g). Though low in fat content, it is high in PUFA (polyunsaturated fatty acids). The lower fat contents could be one of the contributing factors for the extremely good shelf life of finger millet

Nutritional factors (100 gram)	
Energy (K cal)	328
Carbohydrate (g)	72.6
Protein (g)	7.7

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Calcium (mg)	350
Potassium (mg)	708
Iron (mg)	3.9
Sodium (mg)	11
Fat (g)	1.5
Ash (g)	2.6
Thiamin (mg)	0.42
Niachin (mg)	0.19
Riboflavin (mg)	1.1

Sources: Hulse and others (1980); FAO (2012)

#### **Finger millet uses**

Finger millet is normally consumed in the form of flour based foods such as roti and stiff porridge. The grains were gently roasted (sometimes after it was sprouted and dried), ground, sieved. The pinkish flour (from red finger millet) was eaten as a ball or gruel, either sweetened or salted. Finger millet was also popular as weaning foods (Achaya, 2009).

## Health benefits of finger millet

Weight loss agent: Ragi has high amount of dietary fibre in it that keeps stomach. This helps in weight loss.

**Lower blood sugar:** Finger millet lowers sugar in blood in those with diabetes mellitus (high sugar patient) for using their daily diet

**Improve anemia level:** Iron deficiency affect countless Indian men, women and children every year. Which leading to excessive fatigue and productivity levels.

**Boost bone strength**: Rich source of calcium, it is used to strengthen bones in growing children and also restore optimum bone density in older people

**Improve heart health:** Finger millet is completely devoid of cholesterol and sodium, so recipes made with ragi flour can safety be consumes by those with heart ailments

**Prevent colon cancer:** Finger millet is known to help prevent cancer. Because it contains fibre and phytonutrients that prevent the risk of colon cancer.

## Conclusion

Finger millet is a millet crop that adapts to climate change that can be grown all year round. It is well-known that chronic food and lifestyle-related disease pose a significant social and economic burden to the country.

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