MINOR MILLETS AS SUPER FOODS

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For thousands of years, there has been a practice of growing coarse grains in India and including them in food, but for the last few years, these have been replaced by spicy foods in the market, due to which we and our health have to suffer. These coarse grains mainly include Bajra, Maize, Jowar, Ragi (Madua), Sawa, Kodo, Kangni, Kutki and Barley, which are beneficial for our health in every respect.

In the name of Green Revolution in the 1960s, we replaced them with wheat and rice. But now the world is once again returning to these coarse grains and they have been given the status of super food in the market. Let us know how much these coarse grains benefit our health. All coarse grains contain calcium, fiber, vitamins, iron and protein, which make our food nutritious.

RAGI (FINGER MILLET)

Ragi is believed to be of Indian origin and is a coarse grain with high nutritional value, containing 344 mg/100g of calcium. Such a high amount of calcium is not found in any other grain. The iron content of ragi is 3.9mg/100g, which is higher than all cereals except millet. Eating ragi is recommended for diabetic patients. Ragi is traditionally used as a food item like khichdi. Ragi vermicelli is now available in the market as a ready-to-eat food. Calcium intake in women in Asia and Africa is lower than the recommended amount. Children's bones become weak due to lack of calcium in women during pregnancy and lactation. In addition, inadequate calcium intake during pregnancy weakens the health of the mother, during which calcium from the mother's bones is used for fetal development and the production of breast milk.Due to the lack of calcium, the circulatory system of the mother is affected and the problem of high blood pressure arises.

Calcium supplementation in the second half of pregnancy reduces the incidence of gestational hypertension and pre-eclampsia. If we analyze the nutritional value of millets, ragi and jowar, we find that they are rich in calcium. it occurs.

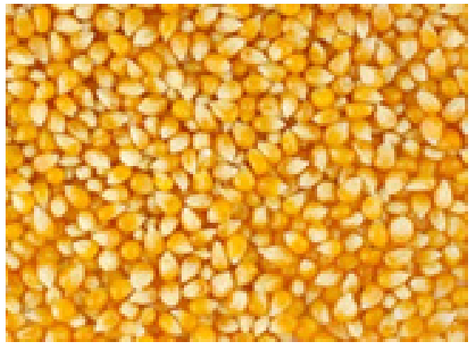
BAJRA (PEARL MILLET)

Bajra is used in many industrial products. 100 grams of bajra, About 11.6 g in an edible portion. Protein, 67.5 g. Carbohydrate, 8 mg of iron and 132 microgram of carotene are present, which protects our eyes. Although it contains some anti-nutritional inhibitors such as pytic acid, polyphenols, and amylase, its anti-nutritional elements are reduced by soaking in water and other cooking methods

JOWAR (SORGHUM)

Sorghum is the staple food of Nigeria. The industrial use of jowar is more than that of other millets. It is used in wine industry, bread production industry, wheat-sorghum combination. A combination of jowar chickpea and jowar soybean is used commercially in the baby food industry. It contains 10.4 g. Protein, 66.2 g. Carbohydrates, 2.7 g. Fiber and other micro and macro nutrients are present.

MAIZE–



Almost everyone will be aware of corn bread and whole roasted corn. Corn rich in vitamin A and folic acid is very beneficial for heart patients. There are many types of anti-oxidants present in it, which help in keeping us safe by fighting cancer cells. The amount of anti-oxidants in cooked maize increases up to 50 percent. It controls bad cholesterol.
Pregnant women should include maize in their diet. It removes anemia and works to keep the child growing in the womb healthy. However, people trying to lose weight should avoid it, because it is helpful in increasing weight. Carbohydrates and calories are found in excess in this.

BARLEY –

Nutrient-rich barley works to protect our body from many diseases. Barley contains more protein and fiber than wheat, which helps in reducing weight, controlling diabetes, balancing blood pressure. Eight types of amino acids are found in barley, which help in the formation of insulin in the body. Consuming barley is also beneficial for heart related diseases. It helps in increasing the amount of anti-oxidants in our body
It also has properties that reduce bad cholesterol. Apart from this, many important minerals like iron, magnesium, potassium, calcium are present in barley, which are essential nutrients for our health.

NUTRITIVE VALUE OF MILLETS (100 G)

Food name	Energy (Kcal)	Calcium (m.g.)	Iron element (m.g.)
Bajra	361	42	8.0
Sorghum	349	25	4.1
Maize	342	10	2.3
Ragi	328	344	3.9

Millets as rich source of Dietary fiber -

Fiber is defined as the components of plant cells that are present in our food. Dietary fiber has huge benefits. Dietary fiber has a tendency to absorb water and acts as a bulking agent. It induces faster movement of food through the gastrointestinal system and reduces the period of time stool is stored in the large intestine.
It increases cholesterol reduction by binding to bile salts and acts as a hypo-cholesteremic agent. That's why its use is beneficial in heart-vascular system diseases. Rice has the least amount of dietary fiber compared to other grains. The dietary fiber of jowar is 89.2%, 122.3% in bajra and 113.5% in ragi.

Processed food based on millets -

The production of maize, sorghum and other coarse cereals accounts for a quarter of India's total food production and contributes significantly to the country's economy. In addition, millets are used in traditional cuisine, in the baby food industry, and in the production of other foods. Jawar is used in the manufacture of glucose and other beverages. Now vermicelli made from a mixture of ragi and wheat is available in the market, which is used as a ready-to-eat food.

How to reduce anti-nutritional elements?

Some traditional methods such as aeration, roasting, sprouting, soaking and malting reduce the viscosity of coarse grains significantly. The greatest reduction in viscosity occurs during malting. Most of the unwanted enzymes are destroyed after the grain is germinated and dried in the sun. The viscosity and amylase content of the blend is much lower than non-malted grain blends. Malted coarse cereals are of great benefit in infant food formulas as well as in the nutrition of older persons.