



GOOD THINGS COME IN SMALL PACKETS

NAMASKARA,

Millets are the wonder food. India has always been a millet consuming nation with different varieties of millets growing in rain fed un-irrigated farms across the land. Due to a variety of reasons wheat and paddy rice have become a staple diet for most people and millets have taken a back seat. But these highly nutritious grains are, according to some food scientists, "the answer to India's food security".

This booklet is an attempt to increase people's awareness about millets and give it pride of place on our dining tables and food plates. It's time to change our palate.

Team
MERATERAH RUN



MILLET-OGRAPHY

Found in: Africa, India, China, Europe

and even the Americas

As early as: Stone Age - grown by pastoral and

possibly even hunting communities,

lake dwellers in Switzerland, and records dating as

far back as 2700 BC

Popular in: Folk songs, literature, local art, and religious rituals

Cultivated even today in India:

Rajasthan, Gujarat, Maharashatra - Pearl Millet (Bajra); Maharashtra, Telangana, UP etc. - Sorghum (Jowar); Southern Karnataka, AP, Tamil Nadu - Finger Millet (Ragi);

Across the country -Foxtail, Little, Kodo, Barnyard Millets;

AP, Tamil Nadu, Bihar, Jharkhand - Proso Millet;

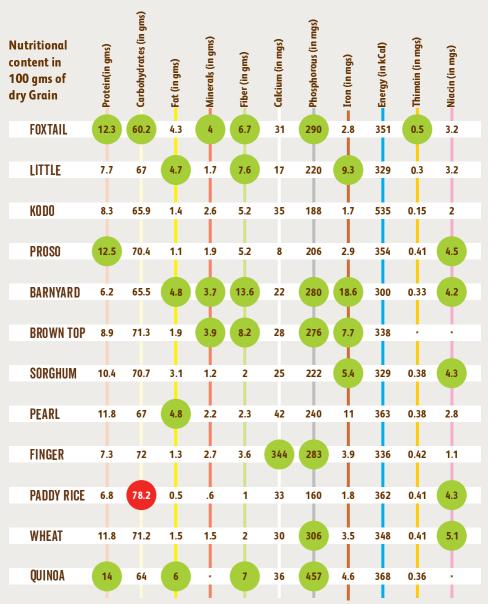
Extremely dry parts of Karnataka, AP, MP, UP, Rajasthan - Brown top millet.



THE CAST OF MILLETS

NAMES IN ENGLISH	LOCAL NAMES	COMMONLY EATEN AS	
FOXTAIL MILLET	Kangani/ Rala, Thinai, Navane, Korra, Thina	Roti, dosa, rice, idli	
PROSO MILLET	Chena, Baragu	Porridge, sweet dishes, dosα, idli	
KODO MILLET	Kodon/ Kodra, Harka, Varagu, Arikelu, Koovaragu	Rice, dosa, idli,roti	V.
BARNYARD MILLET	Jhangora, Kuthiravali, Oodhalu, Odalu, Kavadapullu	Rice, dosa, idli,roti	THE STATE OF THE S
LITTLE MILLET	Kutki, Saamai, Saame, Sama, Chama	Bread, roti, dosa, rice	
BROWNTOP MILLET	Korale, Andu korra, Fikara	Flat breads, porridge, rice	
SORGHUM	Jowari, Jola, Cholam, Jonna, Cholam	Flat breads, porridge	
PEARL MILLET	Bajra, Sajje, Kambu, Sajjalu, Kambalam	Rotis, rice, porridge	
FINGER MILLET	Ragi, Nachani, Mundua, Kezhvaragu, Ragula, Panji Pullu	Porridge, roti, dosa, mudde, payasam	

"LOOK MA, I'M STRONG."



Compiled from a study published by National Institute for Nutrition, Hyderabad and other sources for Quinoa and Brown top millet.

MILLETS ARE BETTER, WAY BETTER

Here are a few reasons why:

High mineral content helps keep our metabolism in good shape

High fibre content eases movement of food through the GI tract, helps maintain steadier blood sugar levels, decreases tendency to over eat

High calcium, iron, beta carotene compared to paddy rice and wheat

Can grow in saline, acidic or sandy soils, reclaimed soils or basically problem soils

No fertilizers needed — chemical or organic; will improve quantity of yield when used, though nutritional quality of the harvested grains might be compromised

Stored as grains they are usable for decades, may be even centuries - do not need fumigants and are pest-free

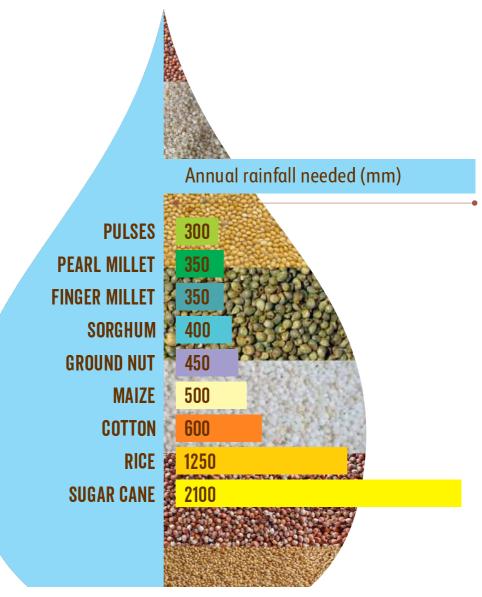
Millet fields are biodiverse — 6 to 20 crops can be planted in the same space at the same time

Provide multiple securities — food, fibre, nutrition, health, fodder, livelihood and ecology

Capable of growing under drought conditions, low rainfall regions, non-irrigated areas, and can survive floods better than other cereal crops

MILLET CROPS NEED VERY LITTLE WATER

Comparison of Annual rainfall needed for different crops (in mm)



PROCESSING MILLETS

The three most widely available millets - Sorghum, Pearl Millet and Finger Millet — are naked grains, i.e. they do not have a husk layer. Once cleaned and graded, they are either ground into flour or into grits and they are ready to be cooked.

The six other millets — Foxtail, Little, Kodo, Proso, Barnyard, and Brown Top — have a hard cellulose rich husk layer. This husk needs to be removed to make them edible. Once the husk is removed, we get the respective millets' rice that can be cooked like rice, ground to rawa or flour and used to prepare various dishes.

To remove the husk, one can use a stone grinding mill - manual or motor powered, rubber roller sheller, manual pounding, or centrifugal impact hullers. While the first three employ the shear force the last two use impact force to dehusk the grains.

The bran layer is just within the husk. The minerals, fine fibre and essential fatty acids reside in the bran layer. When a millet rice is polished this nutrient rich bran layer is removed. It is much easier and cheaper to polish the rice than to retain the bran when removing the husk. Hence polished millet rices are less expensive, but they are less nutritious too.

POLISHED OR ...?

Unpolished rice is nutrition packed (as its bran layer is retained during processing). Semi polished / polished millet rice is not as nutritious.

There are a few fairly simple ways to identify if the millet rice you are buying is polished or not.



Observe the colour of the millet rice kernels.

- Bright and shiny white? It's most likely polished
- Dull & off white color? Semi-polished millet rice are dull
- Dull & colorful? Least polished, very good nutritionally
- Shiny & colorful? Not processed, still has husk on; not edible.

Pick up a fistful of the material in one of your palms, pour the millet rice gradually into the other palm. Repeat the process a few times and observe your palm and fingers.

- Some dust? The millet rice is either semi polished or polished
- Negligible dust? The millet rice hαs not been polished

Hold a fistful of millet in one of your hands for approximately 15 seconds. Empty your hand and with the palm open, using a finger from the other hand, feel the area in which the millet rice was held.

- Feels as dry as a region that was not in contact with the rice?
 The millet rice is semi/polished.
- Feels a little oily? The millet rice is unpolished and has a good proportion of its bran intact.

TAKE ME HOME

Millets are available for you to buy, prepare, eat and live a healthy life. Please ask the store where you buy your monthly provisions to start stocking millets. It is reaching the mainstream supply chain and has already arrived in wholesale trading centres in parts of Tamil Nadu and Karnataka.

Many online stores do sell millets. Search online for a store that sells millets in your city/town.

We are listing a few here for your convenience.



Some of the pioneering organizations from where one can still buy millets are:

- Earth 360 Ecoventures Kadiri, Andhra Pradesh. http://earth360.in; order@earth360.in
- Timbaktu Organic products Call 08559 202149 / 202335 / 202339 to order
- Kaulige Foods Bangalore's Millet Store offers home delivery of millets throughout Bangalore.

 Visit http://www.kaulige.com or Call Arun at 9845490382. They also have a store at Brigade Road.
- Millets for Health offers home delivery of millets across Delhi/NCR. To order millets call 0120-457 4825 or 9212 791110. Shop No 21/C 74, Jasmine Market, Opposite Billabong School, Sector 34. Noida.
- Grameena Natural in Bangalore Sridhar +919738449133 ; mhs.sridhar@gmail.com
- Jaivik Mall near Lalbagh Double Road gate, Bangalore. Ph: 080 65624197
- The Green Path (greenpath.in) at Malleswaram, Bengaluru
- Svad Products -Email to svad.organic@gmail.com to order
- Navadarshanam products : at certain 'Namdhari's Fresh' stores in Bengaluru; details at http://www.navadarshanam.org ;
- reStore in Kottivakkam, Chennai http://restore.org.in
- Navdanya in Dilli Haat, New Delhi http://navdanya.org
- Foodlink, Solar Kitchen Complex, Auroville, Tamil Nadu. Email: foodlink@auroville.org.in Ph.: 0413-2622107

A FEW TIPS FOR COOKING MILLET RICE

- Good quality, unpolished millet rice when cooked with
 - 1:2.5 times of water results in a dry and fluffy consistency.
 - 1:3.5 times of water results in a wet and fluffy consistency.
- Try cooking a small quantity and see whether result is satisfactory. Make appropriate corrections to identify the proportion that works best for you and your family.
- Even for the same millet, the preferred water proportion might change when the source of the millet rice, especially the variety is changed. So when starting a new packet of millets, play it safe and do a trial.
- Fluff up the cooked rice after it has cooled down a bit mixing or using a ladle in a just cooked, hot millet rice will tend to mash it and give it a mushy consistency.
- After the millet rice is cooked, sprinkle a fist full of water and close the lid tight and let sit for about 30 min. This helps quench at least part of its thirst giving the cooked rice a softer texture.



THE MILLET FOUNDATION

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MILES FOR MILLETS

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