Millets The Nutri Cereals

Popularising the consumption

DR PRABODH HALDE

History

- Mahabharata has mentioned the millets –
- Harappa: Foxtail millet (Setaria viridis, Setaria glauca), finger millet (Eleusine coracana), little millet (Panicum sumatrense), Italian millet (Setaria italica) and sorghum millet (Sorghum bicolor) were cultivated in large quantities
- Most of festival has incorporated millet eating
- Ayurveda has emphasized about millets

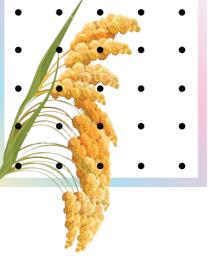
Can millets be called a Superfood?

Definition of Superfood:

Superfood is a marketing term for foods claimed to confer health-benefits resulting from an exceptional nutrient density

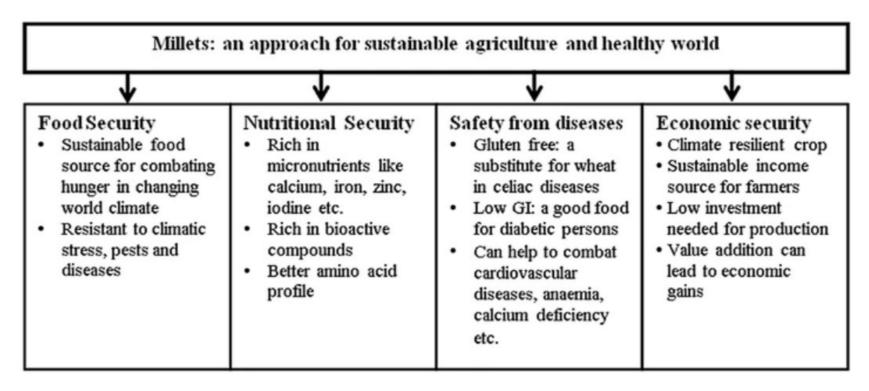
Multidimensional benefits associated with millets makes it a potential Superfood

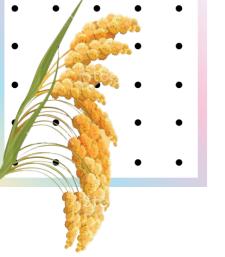
Millets are known to be **high in protein, dietary fibre**, and are a **powerhouse of nutrients and phytochemicals** including iron, folate, calcium, zinc, magnesium, phosphorus, copper, vitamins and antioxidants



Millets as Superfoods

As the government sets to achieve its agenda of a malnutrition-free India and doubling of farmers' incomes, the promotion of the production and consumption of nutricereals seems to be a policy shift in the right direction.





Overview on Millets

Millets are a group of highly variable small-seeded grasses, widely grown around the world as food and fodder.

Major millets



Pearl Millet (Bajra)



Sorghum (Jowar)



Finger Millet (Ragi)

Minor millets



Barnyard Millet (Sawai)



Little Millet (Kutki)



Proso Millet (Cheena)



Foxtail Millet (Kangni)



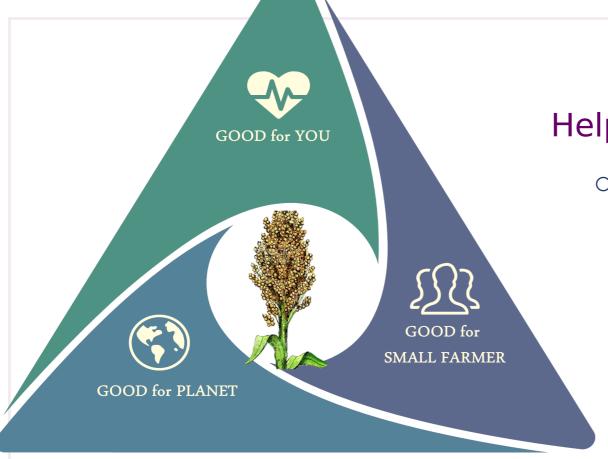
Kodo Millet



Browntop Millet







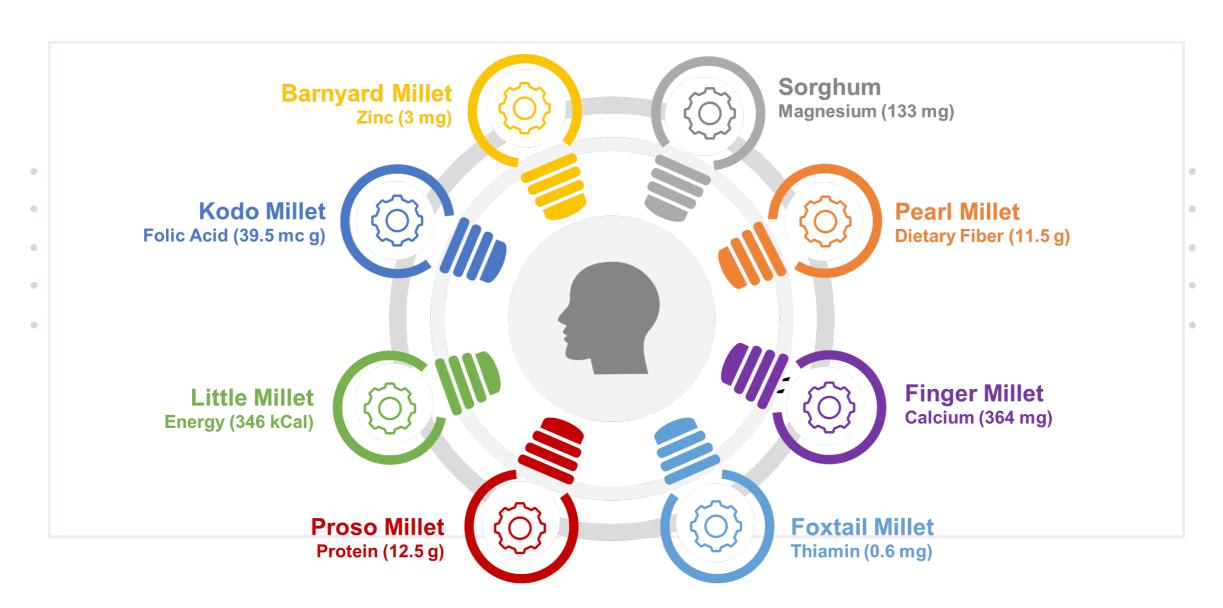
Helps in addressing:

Rural poverty

> Malnutrition
> Adaptation to climate change

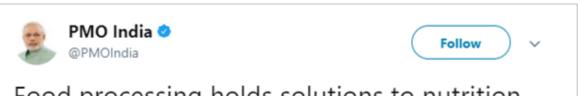
A glimpse of benefits

Millets & Nutrients Mapping





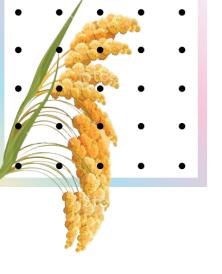
Hon'ble Prime Minister highlights the importance of millets



Food processing holds solutions to nutrition security. Our coarse grains & millets have high nutritional value. They can withstand adverse agro-climatic conditions. Can we take up a venture based on these? This will raise incomes of farmers & also enhance nutrition levels: PM

11:10 PM - 2 Nov 2017





India's Millets Mission Programme

- The Government of India's Millet Mission comes under the **National Food Security Mission (NFSM)**, launched in October 2007.
- NFSM-Coarse Cereals is divided into two parts and one of them is the submission on **nutri cereals** to be implemented in **202 districts of 14 states**.
- Before this, millets were being promoted under INSIMP (Nutritional Security through Intensive Millets Promotion) during 2011-12 to 2013-14.
- Currently, millets are being promoted through technology dissemination, quality seeds through millet seed hubs, awareness generation, minimum support price and inclusion in PDS



Solution - Nutritional Programmes of India: ::

Ministry of Rural Development

✓ Applied nutrition programme

Ministry of Social Welfare

- ✓ Integrated child development services scheme
 - ✓ Balwadi nutrition programme
 - ✓ Special nutrition programme

Ministry of Health and Family Welfare

- ✓ National nutritional anemia prophylaxis programme
- ✓ National prophylaxis programme for prevention of blindness due to vitamin A deficiency
 - ✓ National iodine deficiency disorder control programme
 - ✓ RCH,IMNCI, NRHM,RMNCH-A

Ministry of Education

✓ Mid-day meal programme

Millets & Health potential

Millets & Diabetes Management

Millets & Hypertension

Millets & Obesity

Millets & Cardiovascular diseases

Millets & Anaemia

Millets & Gut health

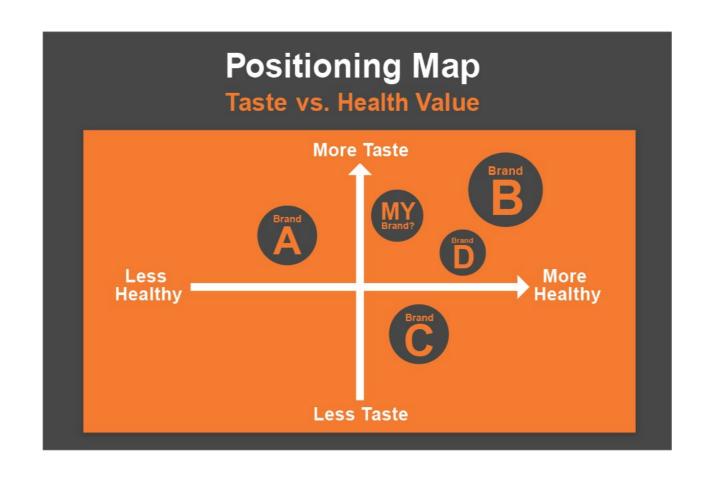
Today's R&D

R&D Technology Consumer Backward **Forward**

Consumer mapping
Un spoken needs
Market surveys

Extrusion Baking Low GI

TASTE VS HEALTH



Millets claims

High **Traditional High Fiber Protein/Multigrane** /cereal science Safe /New **Pre Biotic Sustainability** Vegan Packaging **Taste Bhi health Multigrain** High in Protein Bhi **Good carb Vs Bad Immunity fighter** Sugar Low GI carb management **Functional food, Mock meat Mental health Natural** nutraceuticals

Challenges

- Brand Millet
- QUALITY
- Supply chain
- Taste incorporation
- Processing
- R&D
- Consumer acceptance
- Health Claims



Innovation





"There is a way to do it better - find it"

-Thomas Edison

Future is Industry & Academia Synergy









Industry



Thank you!!



Dr. Prabodh Halde



prabodh1972@gmail.com



+91 9820278746



https://www.linkedin.com/in/dr-prabodh-shirish-halde-1802523/? originalSubdomain=in