



Millets

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- Millets are mostly grown in drought prone regions, in extreme conditions and are resistant to diseases, hence can be grown easily.
- In India, main types of millets are Sorghum, Pearl millet, Finger millet, Kodo millet, Proso millet, Fox millet, Barnyard millet, little millet.
- Millets are important source of essential nutrients and are also called nutritious cereal. Millets are rich in protein, minerals and vitamins. And are gluten free. Millet consumption results in lower risk of lifestyle diseases like diabetes and low glycemic index. This is the reason world demand in surging among nutritionists and health enthusiasts as it gives healthy choices of traditional cereals like wheat and rice which are resulting in diabetes and other diseases.
- Global market of millets is valued at \$12.6 billion in 2025 and expected to be at \$56.07 billion in 2034 with CAGR of 13.4%.
- 46.1% of Africa consumes millets.
- 29.30 million metric ton of Millets are produced worldwide, out of which India contributes most with 40% following by Niger and China with 13% and 9% respectively

Millets				
Cultivation	<ul><li>Grown in drought prone regions</li><li>extreme conditions</li><li>resistant to diseases</li></ul>			
Types	<ul> <li>Major :- Sorghum, Pearl millet, Finger millet,</li> <li>Minor :- Foxtail, Proso, Kodo, Barnyard, Little millet</li> </ul>			
Nutritional and health benefits of milets	<ul> <li>protein, minerals and vitamins.</li> <li>gluten free</li> <li>lower risk of lifestyle diseases like diabetes</li> </ul>			
Global market	Valued at \$12.6 billion in 2025 and expected to be at \$56.07 billion in 2034 with CAGR of 13.4%.			
Consumption	<ul> <li>46.1% of Africa consumes millets.</li> <li>India produces 40% of world millets followed by Niger and China with 13% and 9% respectively</li> </ul>			

	Protein(g)	Fibre(g)	Minerals(g)	Iron (mg)	Calcium(mg)
Sorghum	10	4	1.6	2.6	54
Pearl millet	10.6	1.3	2.3	16.9	38
Finger millet	7.3	3.6	2.7	3.9	344

Recipes



# Sorghum : Market

White Sorghum (Sorghum bicolor), also known as Jowar in India, is a highly versatile and nutrient-rich cereal grain that has been a staple in diets across Asia, Africa, and the Americas for centuries. Known for its mild flavor and gluten-free properties, White Sorghum is an excellent alternative to wheat and rice, especially for healthconscious and gluten-intolerant individuals. It is widely used in whole grain, flour, and puffed forms for diverse culinary applications.

- Sorghum market values at \$23.19 billion in 2024, projected to hit \$31.77 billion by 2030 (CAGR: 5.5%).
- Worldwide sorghum consumption reached 61 million metric tons in 2024, an 8.6% increase compared to the previous year
- India produces 40% of total worldwide sorghum production

# Sorghum: Benefits and Usage

#### 100 Grams of sorghum conatains

- 330 calories
- 72 grams of carbohydrates
- 3.5 grams of fat
- 7 grams of fiber
- 11 grams of protein

- Iron: 4.1mg (23% of RDI)
- Calcium: 13mg
- Rich in: Antioxidants, Vitamin B3 (Niacin),
   Magnesium, and Phosphorus

## Health Benefits:

- 1. Supports Heart Health
- 2.Aids in Digestive Health
- 3.Boosts Energy, Rich in Antioxidants
- 4.Helps Manage Diabetes

## Popular White Sorghum Millet Recipes:

- 1.Sorghum Flour Rotis
- 2.Sorghum Porridge
- 3.Sorghum Pilaf
- 4.Sorghum Salad
- 5. Popped Sorghum Snacks



Finger Millet (Eleusine coracana) - Ragi, is an staple ancient and highly nutritious grain in Asia and Africa. Known for its small, reddishbrown grains, Finger Millet is packed with essential nutrients, including calcium, iron, and fiber, an excellent addition to a balanced diet. It is versatile and can be used in various forms such as flour, porridge, and even as a base for fermented beverages



Global fingermillet
production:
~3-3.7 million
tonnes/year



India (ragi / finger millet):
 ~1.38 million
tonnes (2023-24)
historic yearto-year numbers
 ~1.3-2.2 Mt.



Trade & exports
- Global millet
trade value (HS
family): OEC
reports ~USD
260M in 2023



millet HS)
(WITS/WBG): India
(top by value ~USD
42.93M and volume
~103,058 t),
followed by
Uzbekistan, USA,
Ukraine, France in
the HS millet
category.

Top exporters (2023,



Top importers
Indonesia, Belgium,
Germany, Mexico,
Italy, USA, UK,
Brazil, Netherlands
- markets mixing
demand for whole
millets and
processed millet
products.

Nutritional Values (Per 100g of Finger Millet)

Calories: 336 kcal

Protein: 7.3g

Carbohydrates: 72g

Dietary Fiber: 3.6g

Fat: 1.3g

Iron: 3.9mg (22% of RDI)

Calcium: 344mg (34% of RDI)

Rich in: Magnesium, Potassium, Phosphorus, and Antioxidants

# **Health Benefits:**

- 1.Rich in Calcium
- 2. Supports Heart Health
- 3. Supports Weight Loss
- 4. Boosts Skin Health
- 5.Improves Digestive Health

# **Popular Finger Millet Recipes:**

- 1.Ragi Roti
- 2.Ragi Porridge
- 3.Ragi Mudde
- 4.Ragi Idli
- 5.Ragi Cookies





Nutritional Values (Per 100g of Pearl Millet)

Calories: 378 kcal

Protein: 11g

Carbohydrates: 73g
Dietary Fiber: 8.5g

Fat: 4.2g

Iron: 8.6mg (48% of RDI)

Calcium: 42mg

Rich in: Magnesium, Phosphorus, Potassium, and Vitamin B Complex

# Health Benefits:

- 1.Rich in Nutrients
- 2.Supports Heart Health
- 3.Aids in Digestion
- 4. Improves Bone Health
- 5.Boosts Immune System

- Popular Pearl Millet
   Recipes
- 1.Pearl Millet Khichdi
- 2.Pearl Millet Roti
- 3.Pearl Millet Porridge
- 4.Pearl Millet Salad
- 5.Pearl Millet Pilaf



- Significance
- Oilseed & food security crop: groundnut is a major source of edible oil (groundnut oil), protein, and cash income for millions of smallholders.
- Uversatile commodity: used for edible oil, direct consumption (roasted/fresh), peanut butter, confectionery, animal feed (cakes), and industrial products.
- Ualue chain importance: oil extraction, blanching, ready-to-eat snacks, confectionery and peanut processing industries rely on steady supplies and grades. (Policy pushes on oilseed production have direct effects on farmer
- Exportesdata for 2023-24 shows India exported 680,698.61 metric tonnes of groundnuts (raw, processed, or other varieties)
- The export value for that volume was  $\sim ₹7,135.35$  crore ( $\approx US$ 860.68$  million) in 2023-24.

Energy:  $\sim 560-590$  kcal

Protein:  $\sim 25-27$  g

Fat: ~44-49 g (predominantly unsaturated fatty acids - oleic & linoleic

acids)

Carbohydrate: ~16-20 g Dietary fibre: ~8-10 g

Minerals: Good source of magnesium, phosphorus, potassium, iron, and B-

vitamins (niacin, folate).

 Key health notes: heart-healthy unsaturated fats (when consumed in moderation), protein-rich (plant protein), and source of niacin & magnesium.



## • PRODUCT OVERVIEW

• Soybean (Glycine max) is a globally significant oilseed valued for its high protein, rich oil profile, and versatile industrial and food applications. We supply export-quality soybeans sourced from India's top producing regions, cleaned and graded for international buyers.

# TOP EXPORTERS (Soybeans):

- Brazil: 95-100 million tonnes exported annually.
- USA: 55-60 million tonnes.
- Argentina: 5-10 million tonnes (lower due to domestic crushing).
- Paraguay: ~6 million tonnes.
- Canada: ~4 million tonnes.

#### TOP IMPORTERS:

- China: \*\*95-100 million tonnes per year\*\* (~60% of global imports).
- EU (Netherlands/Spain/Germany): 14-18 million tonnes combined.
- Mexico: 6-7 million tonnes.
- Thailand: 3-4 million tonnes.
- Indonesia: 2.5-3.5 million tonnes.

- B. Nutritional Specifications (per 100g):
   Energy: 446 kcal
   Protein: 36-40 g
   Total Fat: 19 g
   Carbohydrates: 30 g
   Fibre: 9 g
   Calcium: 277 mg
   Iron: 15 mg
   Potassium: 1600 mg
   Magnesium: 280 mg
   Isoflavones: High
- . APPLICATIONS
- Food Industry:
- - Tofu, Soymilk, Flour, Protein Isolate, TVP, Vegan Meat Products
- Feed Industry:
- - Soymeal for Poultry, Cattle, Aqua Feed
- Industrial:
- - Biodiesel, Cosmetics, Ink, Adhesives, Bioplastics



quality white onions that undergo cleaning, slicing, controlled dehydration, and milling. It offers strong flavour, extended shelf life, and excellent consistency—making it a key ingredient in the global food processing industry. India is the world's leading exporter, and Gujarat (Mahuva & Bhavnagar) is the world's largest processing hub.

- Global market size: \*\*USD 2.1-2.4 billion\*\* (combined dehydrated onion products)
  - Forecast CAGR: \*\*5% (2024-2030) \*\* driven by rising packaged food consumption
  - India exports \*\*70-75%\*\* of world dehydrated onion supply
  - Gujarat contributes \*\*80%\*\* of India's dehydration output (Mahuva, Bhavnagar belt)
  - Annual global dehydrated onion output exceeds \*\*750,000-800,000 MT\*\*
  - Major importing countries:
    - USA (largest importer)
    - Germany, UK, Russia, Japan, Brazil, South Korea, UAE
  - India's dehydrated onion export value: \*\*USD 350-420 million per year\*\*





Guar Gum Powder is derived from guar seed endosperm and functions as a natural thickener, stabilizer, emulsifier, and binder. India produces \*\*80-90% of the world's guar gum\*\*, making it the global leader in supply. Applications span food, pharmaceuticals, cosmetics, paper, textile, and especially oil drilling (hydraulic fracturing).

#### • GLOBAL MARKET INSIGHTS (DETAILED WITH NUMBERS)

- • Global guar gum market value: \*\*USD 1.1-1.3 billion\*\*
  - Expected CAGR: \*\*6-7%\*\* (2024-2030)
  - India produces \*\*2.2-2.5 million tonnes\*\* of quar seed annually
  - This yields \*\*350,000-450,000 MT\*\* of quar gum powder after processing
  - India supplies \*\*80-90%\*\* of global guar gum exports
  - Major importing countries:
    - USA (\*\*imports ~120,000 MT/year\*\* for shale gas drilling)
    - China, Germany, Norway, Russia, Japan, Netherlands
  - Oil drilling sector accounts for \*\*60% of global guar gum usage\*
  - Food industry demand rising by \*\*8-10% annually\*\* due to gluten-free trends
  - India's guar gum export value: \*\*USD 600-800 million annually\*\*
  - Prices highly influenced by:
    - Crude oil market cycles
    - Monsoon patterns in Rajasthan (main guar belt)

- High viscosity (3500-8000 cps depending on grade)
- Excellent hydration & thickening ability
- Works in hot & cold systems
- Gluten-free, non-GMO
- Stable emulsification & suspension properties

Appearance: Off-white fine powder

Mesh Size: 200 mesh

Moisture: ≤ 12%

Ash: ≤ 1.5%

pH: 5.5-7.0

Protein: 5-7%

Viscosity (1% solution): 3500-8000 cps

- Food Industry:
  - Ice creams, dairy, instant soups, sauces, gluten-free foods Industrial:
  - Oil drilling (fracking), textile printing, paper strengthening, cosmetics, adhesives