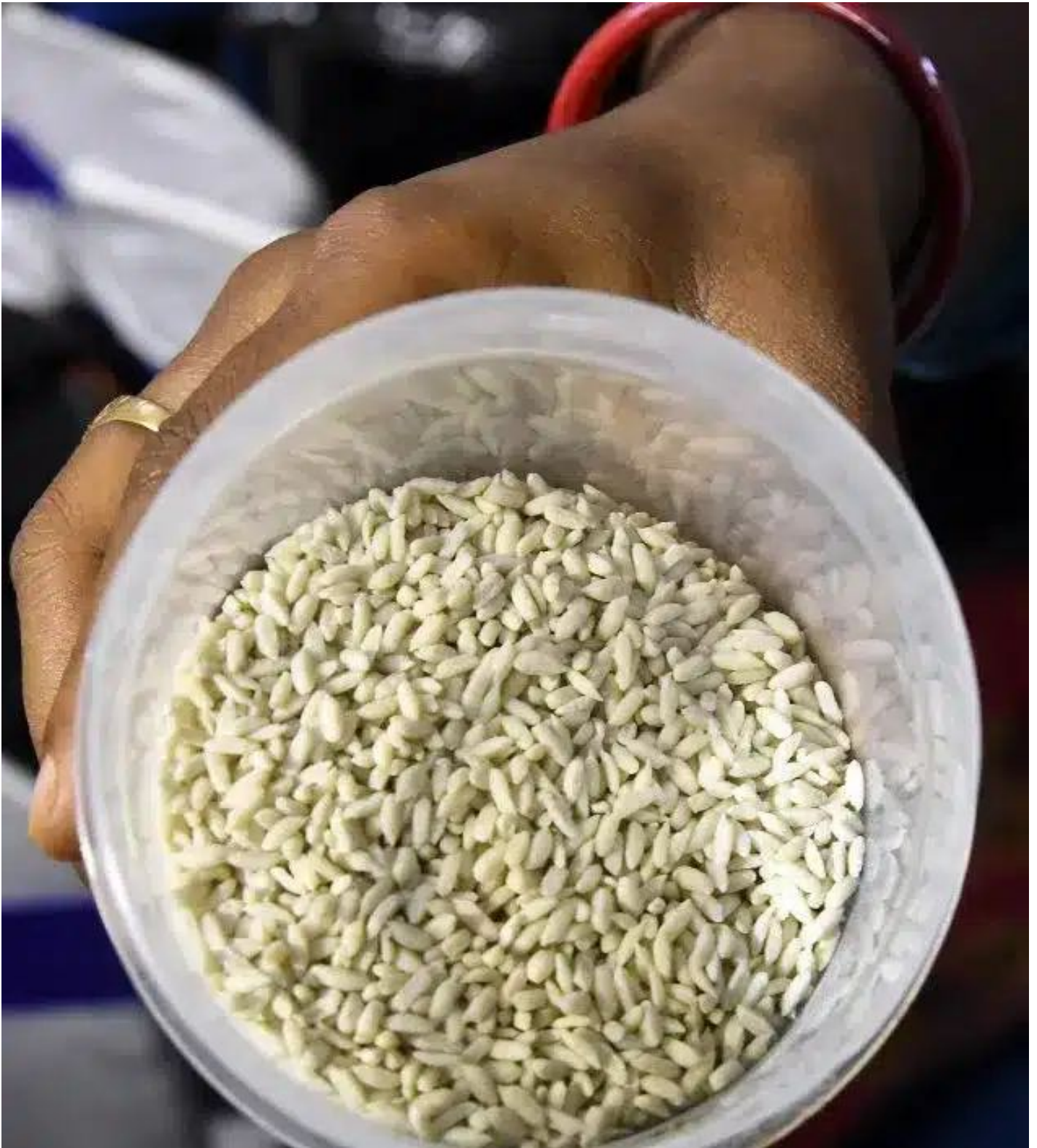


Centre Defends Fortified Rice as Safe for Everyone

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What's in today's article?

- Why in News?
- Rice fortification
- Fortified rice is safe for consumption for everyone

Why in News?

The Centre defended its initiative to supply fortified rice, aimed at combating micronutrient deficiencies, amid safety concerns and claims that it benefits multinational companies.

The Union Food Ministry emphasized that iron-fortified rice is safe, following [World Health Organization \(WHO\)](#) guidelines, and is globally recognized.

Rice fortification

• About/definition

- The Food Safety and Standards Authority of India (FSSAI) defines fortification as the deliberate addition of essential micronutrients to food to improve nutritional quality and provide public health benefits, with minimal health risks.

• Need for fortification of rice

◦ Malnutrition in India

- India faces high levels of malnutrition, especially among women and children.
- According to the National Family Health Survey (NFHS-5), anaemia affects a significant portion of the population, with every second woman being anaemic and every third child stunted.
- Deficiencies in iron, Vitamin B12, and folic acid are widespread, affecting health and productivity.

◦ Fortification of Rice as a Solution

- Rice, a staple food for two-thirds of India's population, is considered an ideal candidate for fortification to address malnutrition.
- Per capita rice consumption in India is 6.8 kg per month, and fortifying it with micronutrients can help supplement the diet of the poor.

◦ Fortification Process

- Fortification technologies include coating, dusting, and extrusion, with extrusion being the most suitable for India.
- In extrusion, dry rice flour is mixed with micronutrients and water, then passed through an extruder to create fortified rice kernels (FRKs), which resemble regular rice.
- These kernels are blended with regular rice in a 10g FRK to 1 kg rice ratio to produce fortified rice.

◦ Nutrient Content in Fortified Rice

- According to FSSAI standards, 1 kg of fortified rice contains:
 - Iron: 28 mg-42.5 mg
 - Folic acid: 75-125 micrograms

- Vitamin B12: 0.75-1.25 micrograms
 - It may also be fortified with other micronutrients like zinc, vitamin A, and various B vitamins.
- **Cooking and Consumption of Fortified Rice**
 - Fortified rice is cooked and eaten just like regular rice, and it retains its micronutrient levels after cooking.
 - Packaging is marked with a logo ('+F') and labeled as "Fortified with Iron, Folic Acid, and Vitamin B12."
- **Progress of the Rice Fortification Initiative**
 - In 2015, PM Modi announced that rice distributed under government schemes, such as the Public Distribution System (PDS) and Mid-Day Meal Scheme, would be fortified by 2024.
 - The Centre implemented the initiative in phases:
 - **Phase 1:** Integrated Child Development Services and PM POSHAN by March 2022.
 - **Phase 2:** PDS and welfare schemes in 112 Aspirational Districts by March 2023.
 - **Phase 3:** Full nationwide coverage by March 2024.
- **Rice fortification ecosystem in India**
 - **Manufacturers and Premix Suppliers**
 - India has 1,023 rice kernel manufacturers producing 111 LMT of fortified rice annually, well beyond the 5.20 LMT required for the programme.
 - Additionally, 232 premix suppliers produce 75 LMT annually, far exceeding the 0.104 LMT needed.
 - **Expansion of Fortification Infrastructure**
 - The rice fortification ecosystem has expanded significantly, with over 21,000 out of 30,000 operational rice mills equipped with blending equipment.
 - This allows a monthly production capacity of 223 LMT of fortified rice.
 - **Distribution of fortified rice**
 - The distribution is taking place under schemes such as Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY), Integrated Child Development Service (ICDS), and PM POSHAN (erstwhile MDM).
 - Recently, in October 2024, the govt approved the continuation of the universal supply of fortified rice under all Union government schemes, including the PMGKAY, from July 2024 until December 2028.

Fortified rice is safe for consumption for everyone

- **About the news:**
 - In a statement, the Union Food Ministry said scientific evidence suggested that iron-fortified rice was safe for consumption for everyone.
 - It said that India was following World Health Organization (WHO) guidelines and fortification was a globally recognised practice.
- **Health Advisory for Fortified Rice Packaging**
 - The Food Ministry stated that, under the **Food Safety and Standards (Fortification of Foods) Regulations, 2018**, fortified rice packaging was initially required to include a health advisory for

individuals with Thalassemia and Sickle Cell Anaemia.

- However, a scientific committee questioned the necessity of this advisory, noting that no other country mandates such labeling.

- **Safety Assessment for Individuals with Hemoglobinopathies**

- A working group of the Ministry evaluated the safety of iron-fortified rice for people with hemoglobinopathies.
 - Hemoglobinopathies are inherited disorders affecting the structure or production of hemoglobin in red blood cells.
 - These lead to conditions like sickle cell anemia and thalassemia, causing abnormal oxygen transport and various health complications.
- They concluded that current scientific evidence does not indicate any safety concerns for such individuals consuming fortified rice.

- **Iron Intake in Thalassemia Patients**

- The Ministry clarified that the iron intake from fortified rice is minimal compared to the iron absorbed through blood transfusions in Thalassemia patients.
- Additionally, fortified rice undergoes chelation to manage any potential iron overload.

- **Iron Absorption in Sickle Cell Anaemia Patients**

- Individuals with Sickle Cell Anaemia are unlikely to absorb excess iron from fortified rice due to naturally higher levels of hepcidin, a hormone that regulates iron absorption, reducing the risk of iron overload in these patients.

Q.1. Why is fortified rice considered safe for all individuals?

Fortified rice is considered safe for everyone, including those with conditions like Thalassemia and Sickle Cell Anaemia, as scientific evidence shows minimal iron intake from rice, following WHO guidelines.

Q.2. How does India ensure the safety of fortified rice for hemoglobinopathy patients?

India uses chelation treatment for fortified rice to manage iron overload and follows global standards, ensuring no safety concerns for people with Thalassemia or Sickle Cell Anaemia.

Source: [Amid concerns, Centre claims fortified rice is safe for consumption for everyone](#) | PIB | [News on Air](#) | [Indian Express](#)

Source: <https://vajiramandravi.com/current-affairs/centre-defends-fortified-rice-as-safe-for-everyone/>

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