



General Studies-3; Topic: Food processing and related industries in India

Concerns over mandatory food fortification

Introduction

- In a pushback against the Centre's plan to mandatorily fortify rice and edible oils with vitamins and minerals, **a group of scientists and activists have written to the Food Safety and Standards Authority of India (FSSAI), warning of the adverse impacts on health and livelihoods.**
- They cited multiple studies to show that **dietary diversity and higher protein consumption are key to solving undernutrition in India**, rather than adding a few synthetic micronutrients which could harm the health of consumers.

Reasons Cited

- Recent studies published in the medical journal Lancet show that **both anaemia and Vitamin A deficiencies are over-diagnosed**, meaning that mandatory fortification could lead to **hypervitaminosis.**
- Many of the studies which FSSAI relies on to promote fortification are sponsored by food companies who would benefit from it, leading to conflicts of interest.
- One major problem with chemical fortification of foods is that nutrients don't work in isolation but need each other for optimal absorption.
- Undernourishment in India is caused by monotonous cereal-based diets with low consumption of vegetables and animal protein.**
- Adding one or two synthetic chemical vitamins and minerals will not solve the larger problem.
- A 2010 study showed iron fortification causing gut inflammation and pathogenic gut microbiota profile in undernourished children.

- **Mandatory fortification would harm the vast informal economy of Indian farmers and food processors** including local oil and rice mills, and instead benefit a small group of multinational corporations.
- Once iron-fortified rice is sold as the remedy to anaemia, the value and the choice of naturally iron-rich foods like millets, varieties of green leafy vegetables, flesh foods, liver will be suppressed.

Concerns / Challenges

- Consumption of excess iron by pregnant women can adversely affect foetal development and birth outcomes. These children have increased risk of contracting chronic diseases.
- Anaemia is high among poor children in the rural areas but iron deficiency is more among the urban and rich across the country.
- The prevalence of anaemia is magnified because of the use of inappropriate haemoglobin cut-offs to diagnose the malady in children and pregnant women.
- The method of measurement of haemoglobin also inflates anaemia prevalence.
- The fortification expenditure of only the rice delivered through the social safety networks will cost the public exchequer about Rs 2,600 crores annually.

Way Forward

- **Dietary diversity is a healthier and more cost-effective way to fight malnutrition.**
- The quality of diet should be improved. Increasing the intake of foods from animal sources and fruits would help more.
- National Institute of Nutrition, too, recommended that a diverse natural diet is required to meet the normal population need of micronutrients in its Nutrient Requirements of Indians released 2020.
- The government must spend on **alternative diet based sustainable solutions** and improve the access to quality healthcare in the public sector.