



2 – December 2022

An Indian recipe to quell micronutrient malnutrition

Significance for Prelims: Not Much

Significance for Mains: Malnutrition and associated issues.

News: India is in urgent need to address the maladies of micronutrient malnutrition. Poor nutrition can inflict severe damage on diverse populations in India.

Serious challenge and concern due to malnutrition: Shows the magnitude of the public health crises

- **Data from National Family Health Survey-5:** In India every second woman is anaemic, every third child is stunted and malnourished, and every fifth child is wasted.
- **Food Security Report, 2021 from FAO:** Ranking of India in the Global Hunger Index 2021 is 101 out of 116 countries. The country has a 15.3% undernourished population, a proportion of stunted children and 30% wasted children (17.3%).
- **Global Nutrition Report 2021:** In India stunting among children is significantly higher than average in Asia.

Strategy to tackle issues of malnutrition, Food fortification: India along with low-and middle-income countries also pursued food fortification as one of the strategies to tackle micronutrient malnutrition.

Food Fortification: The process of adding nutrients to food is food fortification.
Example: Fortification of rice and wheat with iron, folic acid and vitamin B 12, and fortification of salt (iodised salt) with iron and iodine.

Various Case studies of Food fortification:

- **Targeted Public Distribution programme of fortified rice in Maharashtra (Gadchiroli district):** The programme successfully prevented anaemia. Within the span of two years cases of anaemia decreased from 58.9% to 29.5%. Various study shows a reduction in the prevalence of anaemia among women, adolescent girls, and children in the Gadchiroli district.
- Success of fortified rice prompted Central Government to scale up the distribution of fortified rice through social safety net platforms such as the PDS, ICDS and PM-POSHAN.
- **Noon meal scheme in Gujarat:** In 2018-19 Gujarat government introduced multiple micronutrient-fortified rice interventions for schoolchildren (six-12 years) as part of the Midday Meal Scheme. Due to this scheme haemoglobin concentration increased in school children as well as there is a 10% reduction in anaemia prevalence and improve in average cognitive scores by 11.3%.

Benefits associated with food fortification:

- **Cost-effective:** When the food fortification programme is compared with the results of other global programmes this seems to be a cost-effective strategy.
- Evidence of health benefits: Due to several health benefits accruing from food fortification 80 countries framed laws for cereal flour fortification, 130 countries for iodised salt, and 13 countries have mandated rice fortification.
- **Conclusion:** While pursuing food fortification is a cost-effective strategy to address multiple micronutrient deficiencies but there are some issues associated with food fortification there are cases that excessive iron overload from fortified rice may have caused sickle cell anaemia and thalassaemia to Jharkhand's tribal population.

Key facts:

- Impact of Iron deficiency anaemia: According to the World Health Organization (WHO), it is responsible for 3.6% of disability-adjusted life years or DALYs (years of life lost due to premature mortality and years lived with disability).
- According to NITI Aayog: A budget of around ₹2,800 crores per year on food fortification can save 35% of the total or 16.6 million DALYs per year.
- 1% expenditure of the food subsidy bill on food fortification has the potential to prevent 94.1 million anaemia cases, saving ₹8,098 crores over a five-year period.

Prelims:

Q. Global Nutrition Report is published by which of the following organisation

- (a) World Health Organisation(WHO)
- (b) Food and Agriculture Organisation(FAO)
- (c) International Monetary Fund (IMF)
- (d) UN Women

Mains(2021):

Q. Can the vicious cycle of gender inequality, poverty and malnutrition to be broken through microfinancing of women SHGs? Explain with examples.



Yojna IAS

योजना है तो सफलता है

Sharad