

**GOVERNMENT OF INDIA  
MINISTRY OF CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION  
DEPARTMENT OF FOOD AND PUBLIC DISTRIBUTION**

**LOK SABHA  
UNSTARRED QUESTION NO.1655  
TO BE ANSWERED ON 27<sup>TH</sup> JULY, 2022**

**IMPLEMENTATION OF FORTIFICATION PROGRAMME**

**1655. DR. SHASHI THAROOR:**

**Will the Minister of CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण मंत्री be pleased to state:**

- (a) whether the Ministry has implemented rice, milk and edible oil fortification programme in India;**
- (b) if so, the details of nutritional supplements added in quantity as part of the fortification programme;**
- (c) whether there has been an increase in price in Rs./kg or Rs./litre due to the nutritional fortification of the rice, milk and edible oil and if so, the details of the cost borne on the exchequer and citizens, if any;**
- (d) whether the Ministry has recorded data on the number of mills, oil processing units and dairy processing units that are currently providing fortified rice, milk and edible oil respectively and if so, the details thereof; and**
- (e) whether supplying fortified consumables shall be made mandatory for all mills, milk processing units and oil processing units and if so, whether the non-complying units shall be deemed illegal and the punishment prescribed thereof?**

**A N S W E R  
MINISTER OF STATE FOR MINISTRY OF RURAL DEVELOPMENT AND  
CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION  
(SADHVI NIRANJAN JYOTI)**

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**(a): Government has approved supply of fortified rice across Government Schemes like Targeted Public Distribution System (TPDS) and Other Welfare Schemes (OWS) throughout the country by 2024.**

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**(b): The Food Safety Standards (Fortification of Foods) Regulations, 2018 specifies standards of fortification of milk, edible oil, wheat flour, rice and double fortified salt. The details of micronutrients added in fortified rice, fortified milk and fortified edible oil is at Annexure.**

**(c): Fortified rice distributed under Government Schemes is available for beneficiaries at the same rate as that of non-fortified rice.**

**(d): As reported by FSSAI, a Food Business Operator producing fortified staples has to apply for +F endorsement on FoSCoS portal of FSSAI and get approval. The number of active manufacturers, producing fortified rice, milk and edible oil are:**

**Dairy Processing Units:-**

**Milk- 117**

**Milk Powder- 35**

**Edible Oil Unit:- 189**

**Rice Units:- 4530**

**(e): At present, the fortification of Milk and Oil is voluntary in the country. Every package of fortified food shall carry the words “fortified with ----- (name of the fortificant)” and the logo, specified in Schedule- II of The Food Safety Standards (Fortification of Foods) Regulations, 2018, on its label. It may also carry a tag line “Sampoorna Poshan Swasth Jeevan” under the logo.**

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**ANNEXURE**

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF LOK SABHA UNSTARRED QUESTION NO. 1655 FOR ANSWER ON 27.07.2022

**Standards for fortified staples**

**A. Fortified Rice:** when fortified, must contain added Iron, Folic Acid and Vitamin B12 at the levels given in the table below:

S. No.	Nutrient	Level of Fortification per Kg
1.	Iron - (a) Ferric pyrophosphate	28 mg - 42.5 mg*
	(b) Sodium Iron (III) Ethylene diamine tetra Acetate, Trihydrate (Sodium Ferredetate-Na Fe EDTA)	14 mg - 21.25 mg
2.	Folic acid - Folic acid;	75 µg - 125 µg
3.	Vitamin B12- cyanocobalamin or hydroxocobalamin;	0.75 µg - 1.25 µg

\*Note: added at a higher level to account for less bioavailability

In addition, rice may also be fortified with following micronutrients, singly or in combination, at the level given in the table below:

S. No.	Nutrient	Level of Fortification per kg
1.	Zinc - Zinc Oxide	10 mg - 15 mg
2.	Vitamin A- RetinylPalmitate;	500 µg RE - 750 µg RE
3.	Thiamine (Vitamin B1)- Thiamine hydrochloride, Thiamine mononitrate;	1 mg - 1.5 mg
4.	Riboflavin (Vitamin B2)- Riboflavin or Riboflavin 5'-phosphate sodium	1.25 mg - 1.75 mg
5.	Niacin (Vitamin B3) - Nicotinamide or Nicotinic acid	12.5 mg - 20 mg
6.	Pyridoxine (Vitamin B6)-Pyridoxine hydrochloride;	1.5 mg - 2.5 mg

**B. Fortified Milk**

S. No.	Nutrients	Level of nutrient per litre of Species identified milk (namely buffalo milk, cow milk, goat milk, sheep milk and camel milk)/ full cream milk/toned milk/double toned milk/skimmed milk/standardized milk)	Nutrient Source
1.	Vitamin A (µg RE)	270 – 450	Retinyl acetate or Retinylpalmitate
2.	Vitamin D (µg)	5-7.5	*Cholecalciferol or*Ergocalciferol (*Only from Plant source)

Note: Vitamin A (retinol): 1 IU= 0.3 µg RE (Retinol Equivalent); Vitamin D (Cholecalciferol or Ergocalciferol): 1 IU= 0.025 µg

**C. Fortified Edible Oil**

<b>S. No.</b>	<b>Nutrients</b>	<b>Level of nutrient per gram of oil</b>	<b>Nutrient Source</b>
<b>1.</b>	Vitamin A ( $\mu\text{g RE}$ )	6-9.9	Retinyl acetate or Retinylpalmitate
<b>2.</b>	Vitamin D ( $\mu\text{g}$ )	0.11-0.16	*Cholecalciferol or*Ergocalciferol (*Only from Plant source)

Note: Vitamin A (retinol): 1 IU= 0.3  $\mu\text{g RE}$  (Retinol Equivalent); Vitamin D (Cholecalciferol or Ergocalciferol): 1 IU= 0.025  $\mu\text{g}$

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