



Trans Fatty Acids

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Why in News

The **Food Safety and Standards Authority of India (FSSAI)** has capped the amount of **trans fatty acids (TFA)** in oils and fats to **3%** for 2021 and **2%** by **2022** from the current permissible limit of **5%** through an **amendment to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations 2011**.

The **Regulations deal with the prohibitions and restriction on sales of various food products**, ingredients and their admixtures.

Key Points

- The revised regulation **applies to** edible refined oils, vanaspati (partially hydrogenated oils), margarine, bakery shortenings, and other mediums of cooking such as vegetable fat spreads and mixed fat spreads.
- As per the **World Health Organisation (WHO)**, approximately **5.4 lakh deaths** take place each year globally because of intake of **industrially produced trans fatty acids**.
- The FSSAI rule comes at the time of a **pandemic** where the burden of **non-communicable diseases (NCD)** has risen.
 - Trans-fat consumption is a significant risk factor for cardiovascular diseases.
 - Cardiovascular diseases account for most NCD deaths.
- Previously it was in 2011 that India first passed a regulation that set a TFA limit of **10%** in oils and fats, which was further reduced to **5%** in **2015**.

Trans Fat

- Trans fatty acids (TFAs) or Trans fats are the **most harmful type of fats** which can have much more adverse effects on a human body than any **other dietary constituent**.

- These fats are **largely produced artificially** but a **small amount also occurs naturally**. Thus in our diet, these may be present as Artificial TFAs and/ or Natural TFAs.

Artificial TFAs are formed when **hydrogen is made to react with the oil to produce fats resembling pure ghee/butter**.

- In our diet the major sources of artificial TFAs are the **partially hydrogenated vegetable oils (PHVO)/vanaspati/ margarine while the natural TFAs are present in meats and dairy products**, though in small amounts.
- **Usage:**
 - TFA containing oils can be preserved longer, they give the food the **desired shape and texture** and can easily substitute **‘Pure ghee’**. These are comparatively far lower in cost and thus add to profit/saving.
- **Harmful effects:**
 - TFAs pose a higher **risk of heart disease** than saturated fats. While saturated fats raise total cholesterol levels, TFAs not only **raise total cholesterol levels** but also **reduce the good cholesterol (HDL)**, which helps to protect us against heart disease.
 - It is also associated with a higher risk of developing **obesity, type 2 diabetes, metabolic syndrome, insulin resistance, infertility, certain types of cancers** and can also lead to **compromised fetal development** causing harm to the yet to be born baby.
 - Metabolic syndrome includes **high blood pressure, high blood sugar, excess body fat around the waist and abnormal cholesterol levels**. The syndrome increases a **person's risk of heart attack and stroke**.
- **Efforts to reduce their intake:**
 - National:**
 - FSSAI launched a **“Trans Fat Free”** logo for voluntary labelling to promote **TFA-free products**. The label can be used by bakeries, local food outlets and shops for preparations containing TFA not exceeding **0.2 per 100 g/ml**.
 - FSSAI launched a new mass media campaign **“Heart Attack Rewind”** to **eliminate industrially produced trans fat** in the food supply by the year 2022.
 - “Heart Attack Rewind” is a follow-up to an earlier campaign called **“Eat Right”**, which was launched in **July, 2018**.
 - Edible oil industries took a pledge to reduce the levels of salt, sugar, saturated fat and trans fat content by 2% by 2022.
 - **Swasth Bharat Yatra**, an initiative started under the **“Eat Right”** campaign is a **Pan-India cyclothon** to engage citizens on issues of food safety, combating food adulteration and healthy diets.

- **Global:**

WHO launched a **REPLACE campaign in 2018** for global-level elimination of trans-fats in **industrially produced edible oils by 2023**.

Source:TH