

# TRANS-FAT

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The World Health Organization (WHO) recently published its fifth milestone report on global progress towards eliminating trans fats. This report covers the period from 2018 to 2023.

# Some key points about this issue:

- 1. Trans fats are a type of unsaturated fat that has been associated with increased risk of heart disease, stroke and type 2 diabetes. They are often found in processed foods, baked goods, and fried foods.
- 2. In 2018, WHO launched an initiative called REPLACE, which aims to eliminate industrially-produced trans fats from the global food supply by 2023.
- 3. This latest report is significant because it shows the progress made towards that 2023 goal, highlighting both achievements and remaining challenges in eliminating trans fats worldwide.
- 4. The report likely provides data on how many countries have implemented trans fat bans or restrictions, what percentage of the global population is now protected by such policies, and which regions or countries are lagging behind in implementation.
- 5. Given that 2023 was the target year for elimination, this report is particularly noteworthy as it indicates whether the global community has met or fallen short of WHO's ambitious goal.
- 6. The findings of this report can inform future policy decisions, both at national and international levels, regarding trans fat regulation and public health initiatives.

# Finding of the reporting

As of 2023, 53 countries had implemented best practices and policies to address industrial trans-fat in food.

These policies have significantly improved the food environment for 3.7 billion people, which represents 46% of the global population. This is a substantial increase from just 6% in 2018.

Despite progress, the World Health Organization's (WHO) ambitious goal of completely eliminating trans-fat from the global food supply by the end of 2023 was not fully achieved.



This suggests that while significant progress has been made in reducing trans-fat in food supplies globally, there's still work to be done to reach the WHO's target. The increase from 6% to 46% of the world's population benefiting from these policies in just five years is noteworthy, but it also indicates that over half of the global population still lacks these protections.

## About Trans Fat



Trans fats are unsaturated fatty acids that have been partially saturated with hydrogen.

- They are generally considered the worst type of fat for health.
- There are two main types: natural (found in small amounts in meat and dairy) and artificial (industrially produced).
- Artificial trans fats are created through hydrogenation of vegetable oils.
- Partially hydrogenated oils (PHOs) can contain 25-45% trans fats.
- Artificial trans fats are commonly used in processed foods and offer no nutritional benefits.

### Health Concern

#### Cardiovascular Disease:

- Trans fats raise LDL (bad) cholesterol levels while lowering HDL (good) cholesterol.
- This imbalance increases the risk of heart disease and stroke.
- Even small amounts of trans fats can significantly increase cardiovascular risk.

## Inflammation:

- Trans fats promote systemic inflammation in the body.
- Chronic inflammation is linked to various diseases, including heart disease, diabetes, and certain cancers.

## Insulin Sensitivity:

- Regular consumption of trans fats may reduce insulin sensitivity.
- This can increase the risk of developing type 2 diabetes.

# Weight Gain and Obesity:

- Trans fats may contribute to weight gain and obesity, particularly abdominal obesity.
- This effect is partly due to their impact on metabolism and fat storage.

#### Liver Function:

- High intake of trans fats has been associated with non-alcoholic fatty liver disease.
- This can lead to liver inflammation and damage over time.

### Cognitive Function:

• Some studies suggest that trans fat consumption may be linked to cognitive decline and an increased risk of Alzheimer's disease.



• However, more research is needed in this area.

## Pregnancy and Fetal Development:

- High trans fat intake during pregnancy has been associated with negative effects on fetal development.
- It may increase the risk of excessive fetal growth or low birth weight.

#### Cancer Risk:

• While the evidence is not as strong as for cardiovascular disease, some studies suggest a potential link between trans fat consumption and certain types of cancer.

## Step taken to replace trans fat

#### Global

### World Health Organization (WHO) Initiative:

- In 2018, WHO launched a global initiative called REPLACE to eliminate industrially-produced trans fats from the global food supply by 2023.
- This program provides strategies for countries to implement bans or strict limits on trans fats.

### **United States:**

- In 2015, the FDA determined that partially hydrogenated oils (PHOs) were no longer "Generally Recognized as Safe" (GRAS).
- By June 2018, manufacturers were required to remove PHOs from products.
- A complete ban on artificial trans fats in processed foods went into effect in January 2021.

# European Union:

- In 2019, the EU adopted a regulation limiting the amount of industrially-produced trans fats in all foods to a maximum of 2 grams per 100 grams of fat.
- This regulation became fully applicable on April 1, 2021.

## Canada:

- Banned the use of PHOs in foods in September 2018.
- This made Canada the first country to completely ban PHOs.

#### Denmark:

• Was the first country to restrict industrial trans fats in 2003, limiting them to 2% of fats and oils in all food products.



#### Other Countries:

• Many other countries have implemented similar bans or restrictions, including Switzerland, Austria, Iceland, Norway, and Hungary.

### Labeling Requirements:

- Many countries require trans fat content to be listed on nutrition labels.
- In the US, if a product contains less than 0.5 grams of trans fat per serving, it can be labeled as "0 grams trans fat."

#### Local Initiatives:

• Some cities and states implemented their own restrictions before national regulations. For example, New York City banned trans fats in restaurant food in 2006.

### Ongoing Challenges:

- While many developed countries have strict regulations, many developing countries still lack comprehensive policies on trans fats.
- The WHO continues to work with countries to implement effective policies worldwide.

### **Industry Response:**

• Many food companies have voluntarily reduced or eliminated trans fats in their products, often in response to consumer demand and upcoming regulations.

#### India

In India, the Food Safety and Standards Authority of India (FSSAI) has implemented several significant initiatives aimed at improving public health through better nutrition and food safety:

- 1. Trans Fat Free Logo: This voluntary labeling initiative encourages manufacturers to label their products as free from trans fats, helping consumers make informed choices about healthier food options.
- 2. Heart Attack Rewind: This is a mass media campaign designed to eliminate industrially produced trans fats from the food supply. The campaign aims to raise awareness about the risks associated with trans fats and promote healthier alternatives.
- 3. Eat Right India Movement: This broad initiative seeks to promote healthier eating habits among Indians. It encompasses various activities, including public awareness campaigns, educational programs, and partnerships with various stakeholders to encourage better dietary practices.
- 4. Trans Fat Regulations: In 2021, the FSSAI amended the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations 2011 to cap the amount of trans fats in oils and fats at 3% by 2021 and 2% by 2022. This regulatory measure aims to significantly reduce the levels of harmful trans fats in processed foods.

5. Revised Dietary Guidelines: The Indian Council of Medical Research (ICMR) and the National Institute of Nutrition have updated their dietary guidelines to reflect new research and recommendations on nutrition and health. These guidelines provide evidence-based advice to help individuals make better dietary choices and improve overall public health.

These initiatives collectively aim to reduce the prevalence of non-communicable diseases such as cardiovascular conditions and to promote a healthier diet among the Indian population.

# **Challanges**

Eliminating trans fats presents several challenges that need to be addressed to protect public health effectively

# 1. High Demand in the Food Industry

## Long Shelf Life and Texture:

- Shelf Life: Trans fats are favored for their ability to extend the shelf life of food products, which reduces waste and increases convenience for manufacturers and consumers.
- Texture: They contribute to the desirable texture and mouthfeel in many baked goods and fried foods.

#### **Cost Considerations:**

• Cheaper Alternatives: Trans fats are often less expensive than healthier alternatives like unsaturated fats. This cost advantage makes them attractive to food producers, especially those operating on tight margins.

### 2. Poor Enforcement of Policies

### Lack of Comprehensive Policies:

- Varied Adoption: Not all countries have implemented effective policies to eliminate trans fats. The inconsistency in regulations can hinder global efforts to reduce their prevalence.
- Policy Gaps: In many places, existing regulations may be outdated or inadequate, failing to address new ways trans fats are used.

### Regulation Challenges:

- Unregistered Firms: Many small or unregistered food producers may continue using trans fats due to insufficient oversight.
- Monitoring Infrastructure: Developing countries often struggle with limited infrastructure and resources to enforce policies effectively. This includes challenges in inspecting food products, monitoring compliance, and educating both businesses and consumers.

### 3. Consumer Preferences



# Processed Food Popularity:

- Preference for Convenience: The increasing demand for processed foods, which often contain trans fats, complicates efforts to promote healthier eating habits.
- Taste and Texture: Consumers may be accustomed to the taste and texture that trans fats provide, making it difficult to shift preferences towards healthier alternatives.

#### Market Demand:

• Resistance to Change: There may be resistance to reformulation of popular products, both from manufacturers who fear losing market share and from consumers who prefer the taste and texture of products containing trans fats.

# Addressing the Challenges

## Policy Improvement:

• Governments need to adopt comprehensive, science-based policies that ban or restrict trans fats effectively. This includes updating regulations as new scientific evidence emerges.

## Strengthening Enforcement:

• Enhancing monitoring and enforcement infrastructure, especially in developing countries, is crucial. This includes improving training for inspectors, increasing funding for food safety programs, and closing regulatory gaps.

#### Consumer Education and Alternatives:

• Educating consumers about the health risks associated with trans fats and promoting the benefits of healthier alternatives can help shift preferences. Supporting manufacturers in reformulating products to reduce or eliminate trans fats without sacrificing quality can also be beneficial.

# Way Ahead

# 1. Policies and Framework

- Global Standards: Countries, particularly those with a high burden of disease related to trans fat, should adopt best practice policies for trans fat elimination.
- Monitoring and Enforcement: Implement robust mechanisms to monitor and enforce these policies, aiming for eligibility for the WHO Validation Certificate.
- Regional Initiatives: Sub-regional bodies should introduce mandatory policies to eliminate trans fats.

### 2. Enforcing Regulations



- Food Manufacturers: Regulate food manufacturers to ensure they reduce or eliminate partially hydrogenated oils (PHOs) from their products.
- Healthier Alternatives: Encourage the use of healthier fats, such as those rich in polyunsaturated fatty acids (PUFAs) and monounsaturated fatty acids (MUFAs). Examples include oils like safflower, corn, sunflower, soybean, and peanut.

## 3. Awareness and Nudge

- Consumer Education: Raise awareness about the harmful effects of trans fats through educational campaigns.
- Policy Nudges: Implement policies that subtly guide consumers away from processed foods high in trans fats. This could include labeling with warnings or imagery similar to those used on cigarette packs