



Overview of global initiative, success and challenge

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Global elimination of industrially produced trans fat

- Artificial compound produced through “partial hydrogenation”
- Can be contained in:



- **HOWEVER**, trans fat is associated with increased risk of heart disease. Estimated to be responsible for 278,000 deaths a year globally.



In 2018, WHO called for the global elimination of this harmful and unnecessary compound by 2023, and launched



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LEGISLATE or enact regulatory actions to eliminate industrially produced TFA

Best-practice policies recommended by WHO

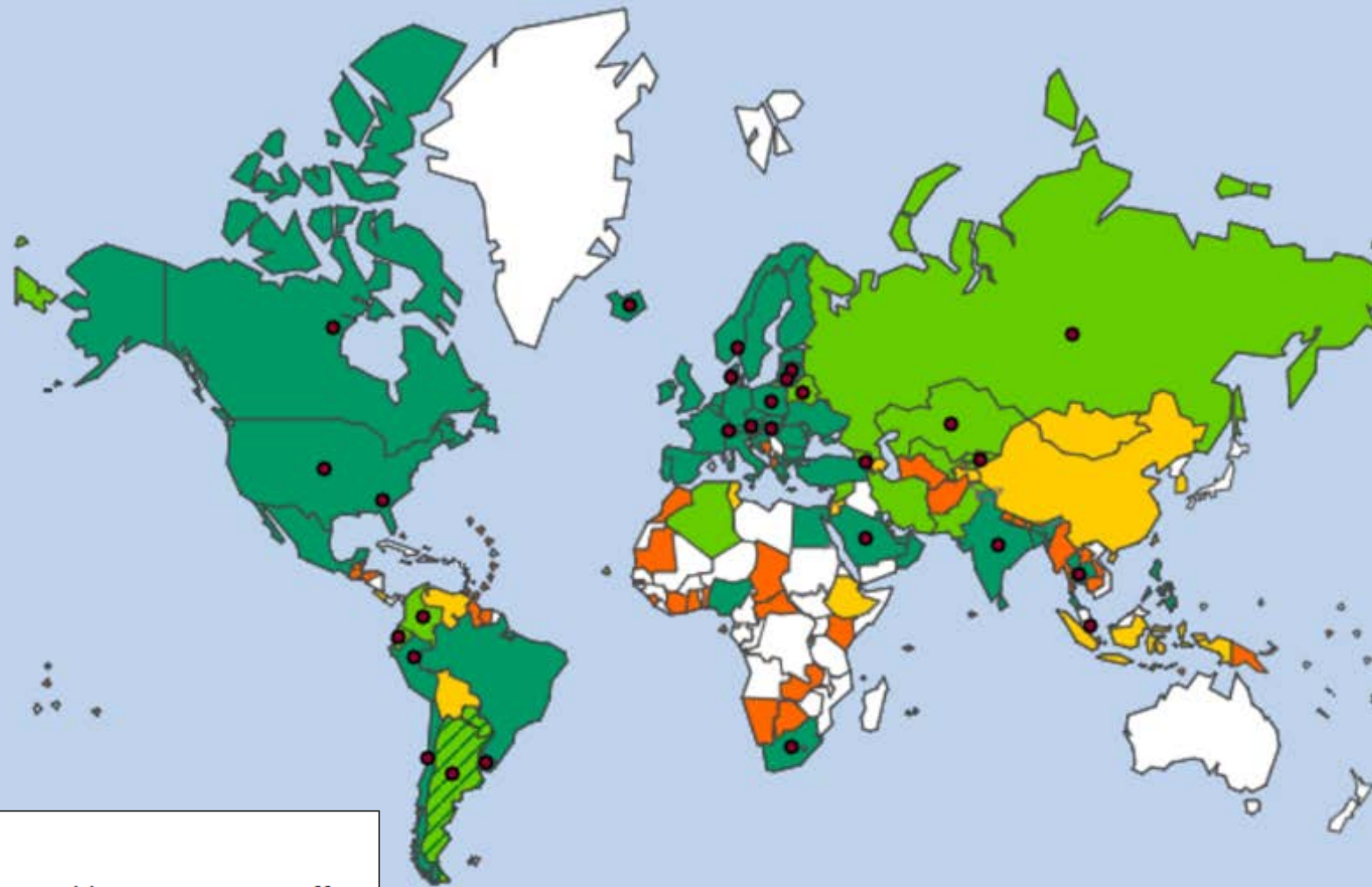
2% iTFA limit








- Mandatory national limit of 2 g of industrially produced trans fat per 100 g of total fat **in all foods**

PHO ban

- Mandatory national ban on the production and use of PHO as an ingredient **in all foods**

❖ PHO = partially hydrogenated oils (a major source of industrially produced trans fat)



	Best-practice TFA policy
	Best-practice TFA policy passed but not yet in effect
	Policies with less restrictive TFA limits
	Other complementary measures
	National policy commitment to eliminate TFA
	Monitoring mechanism for mandatory TFA limits
	Missing data (no policy or unknown)

TFA policy country score map

Source: <https://extranet.who.int/nutrition/gina/en/scorecard/TFA>

Policy		Countries
<p>Best-practice policy</p> <p>Two-best-practice alternatives:</p> <ol style="list-style-type: none"> 1) 2% iTFA limit 2) PHO ban 	<p>Implemented in 54 countries</p>	<p>Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, Chile, Croatia, Cyprus, Czechia, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, India, Ireland, Italy, Kuwait, Latvia, Lithuania, Luxembourg, Malta, Mexico, Netherlands, Nigeria, North Macedonia, Norway, Oman, Peru, Philippines, Poland, Portugal, Republic of Moldova, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Thailand, Türkiye, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay</p>
	<p>Passed in 4 countries</p>	<p>Argentina, Bahrain, Nepal, Paraguay</p>
<p>Less restrictive iTFA limits</p> <p>(e.g. 2% limit for iTFA in oils and fats, and 5% limit in other foods)</p>	<p>Implemented in 17 countries</p>	<p>Algeria, Argentina, Armenia, Bahrain, Belarus, Colombia, Ecuador, Georgia, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Paraguay, Russian Federation, Switzerland, Syrian Arab Republic, Uzbekistan</p>

WHO's priority actions to reach the 2025 target of global iTFA elimination

1. Provide regulatory and laboratory capacity-building support to countries
 - Passage of a best-practice policy
 - Implementation and enforcement
2. Support replacement with healthy oils
3. Development of guidelines
4. Engage with food manufacturers
5. Disseminate country good practices and recognize country achievements

Provide capacity-building support to countries



Action package Modules

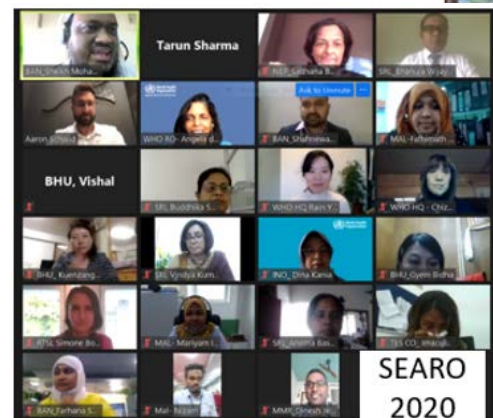


Progress report



Supporting countries – regulatory capacity building workshops

Building country's regulatory capacity to develop, implement and enforce a policy to eliminate iTFA



TFA laboratory analysis

- Lab capacity building workshops (EMRO, EURO, SEARO, China, Ukraine, etc.)
- Working with individual laboratories (Brazil, China, Fiji, Ghana, India, Kenya, Nigeria, Pakistan, Philippines, etc.)



Supporting countries – development of lab protocols

WHO Laboratory Protocol



Global protocol

for measuring fatty acid profiles of foods, with emphasis on monitoring *trans*-fatty acids originating from partially hydrogenated oils

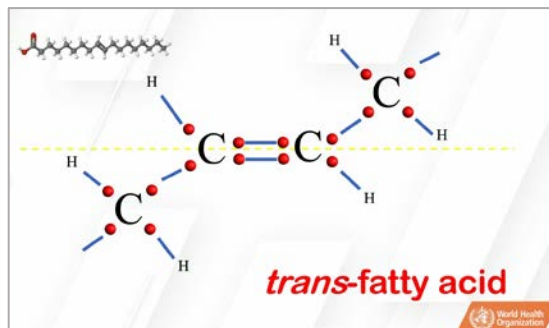


(Published in Dec 2020)

Video module 1: Procedures of the protocol



Video module 2: Basics of TFA and analysis



Simplified protocol

for measuring *trans*-fatty acids content as a percentage of total fatty acids in food products

WHO laboratory protocol



(Published in April 2023)

Saturated fatty acid and *trans*-fatty acid intake for adults and children

WHO guideline



WHO guideline on SFA and TFA

- Limit **total** TFA intake to less than 1% of total energy
 - Industrial TFA and ruminant TFA have similar adverse health effects
- Limit SFA intake to less than 10% of total energy
- Replace TFA with PUFA or MUFA
- Forthcoming guidelines
 - Polyunsaturated fatty acids (PUFA)
 - Tropical oils
 - Rapid reviews on palm oil and coconut oil

Saturated fatty acid and *trans*-fatty acid intake for adults and children

WHO guideline



Total fat intake for the prevention of unhealthy weight gain in adults and children

WHO guideline



Guideline:

Sodium intake for adults and children



Guideline:

Potassium intake for adults and children

Carbohydrate intake for adults and children

WHO guideline



Use of non-sugar sweeteners

WHO guideline



Guideline:

Sugars intake for adults and children

WHO healthy diet guidelines



Examples of existing technical solutions for PHO replacement

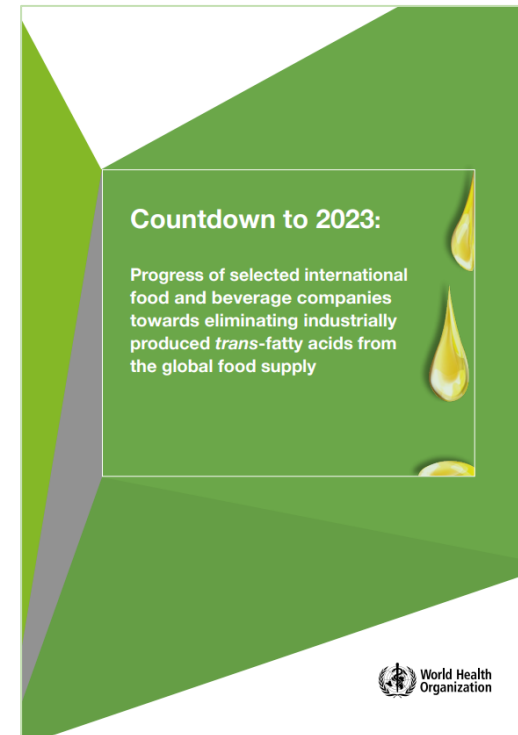


TECHNICAL SOLUTION	EXAMPLES
Stable plant oils: liquid at room temperature	Naturally stable oils; trait-enhanced oils (high oleic oils); oils with antioxidants and emulsifiers
Fractionated oils and fats: use slow cooling to separate more solid and more liquid fat fractions	Low melting (liquid) palm olein; high melting (solid) palm stearin
Rearranged fats: fatty acids are reshuffled (“interesterified”) within the triglycerides	Chemically or enzymatically rearranged hardstocks
Blending of oils and fats	Mix of soy oil and palm oil, which gives a viscous liquid
Natural hardstocks: fats that are naturally high in SFA and solid at room temperature	Animal fats; tropical oils and fats (palm, coconut, palm kernel)

Strengthen effective industry engagement

- IFBA member companies pledged in May 2019 to reformulate their products worldwide by 2023 to be aligned with WHO recommendation. And share knowledge on reformulation to support SMEs.
- Follow-up dialogues and progress reporting by independent evaluation.
- WHO expects major suppliers of fats and oils step up to remove PHO that are sold to food manufacturers globally
- Cargill made a commitment in December 2021 → “fully achieved as of 1 Jan 2024”

Interim evaluation report on companies' progress



Reformulation guide for manufacturers (by IFBA and AOCS)



Recognizing country achievements



- The programme will recognize Member States **for having a normative framework in place to eliminate iTFA from national food supplies**
 1. **Best-practice policy is in effect** in the country
 2. Country conducts adequate **monitoring activities** to ensure no domestically produced or imported industrially produced TFA
 3. Country has a robust **enforcement system** in place
- Application was open to countries in April 2023.
- TFATAG was established to evaluate the applications.





5 countries received the WHO validation certificate

Denmark, Lithuania, Poland, Saudi Arabia and Thailand became the first five countries to receive the WHO validation certificate on trans fat elimination.

(WHO trans fat validation ceremony (29 January 2024, Geneva))

Thank you!

**TRANS FAT
FREE**

BY 2025!

