

Case study: Brief

IMPLEMENTING AND ENFORCING TRANS FAT (TFA) ELIMINATION POLICY IN SINGAPORE

TYPE OF POLICY: iTFA limit later replaced by PHO ban

DATE PASSED: iTFA limit 2012

IN EFFECT: iTFA limit 2013, PHO ban 2021

TOTAL COVERAGE: 5.5 million

ENFORCEMENT APPROACH:

Pre-marketing checks (iTFA limit) and most-marketing surveillance (PHO Ban).

LIVES SAVED PER YEAR:39¹

✓ Key takeaways

- A best-practice policy must cover all food products, not just oils and fats, to ensure that iTFA is removed from the entire food supply – especially imported packaged foods.
- Implementation of a mandatory policy can be supported by voluntary industry pledges to phase out ahead of the implementation date.
- Ideally, replacement fats and oils are monitored to determine whether reformulation leads to an increase of saturated fat content.

Context and background

In May 2012, Singapore introduced a 2% limit on industrial trans fat (iTFA) for pre-packaged edible fats and oils for sale or for use as an ingredient in the preparation of foods; the limit took effect after a one-year transition period. Singapore initially focused on oils and fats because shortening used for the commercial manufacture of baked goods (such as cakes, pastries, donuts, biscuits and snacks) was the main source of iTFA in the population's diet, accounting for around 60% of iTFA intake. On June 1, 2021, new regulations were introduced to address the increasing intake of iTFA from packaged foods, prohibiting the importation of edible fats or oils that contain any partially hydrogenated oils (PHO), as well as their use as an ingredient of any other edible fat or oil or packaged food. The PHO ban replaced the iTFA limit after a one-year transition period. Under Singapore's Healthier Choice Symbol program, voluntary "Free

from TFA" and "Low in TFA" claims on packaged food are permitted only if additional nutritional criteria (including sodium, sugar and cholesterol limits) are met.

Implementation

To facilitate compliance with the iTFA limit, domestic companies could apply for a grant from Enterprise Singapore, a government agency championing business development, to help cover reformulation costs. In addition, food manufacturers could access technical support for reformulation, provided by the Healthier Choice Symbol (HCS) program of the Health Promotion Board (HPB). The HPB also set up a dedicated mailbox to address queries or issues about the PHO ban from the food industry and the public. Extensive guidance was not required for the 2021 PHO ban, which mostly affected imported products, as domestic products were already in compliance

¹ Wang, Q., Afshin, A., Yakoob, M. Y., Singh, G. M., Rehm, C. D., Khatibzadeh, S., ... & Mozaffarian, D. (2016). Impact of nonoptimal intakes of saturated, polyunsaturated, and trans fat on global burdens of coronary heart disease. *Journal of the American Heart Association*, 5(1), e002891



due to the earlier iTFA limit. To expedite the removal of PHO from the market, six major retailers and manufacturers accounting for around half of available packaged foods in four high-risk categories (snacks, baked goods, prepared meals and fat spreads) pledged to phase out PHO by June 2020, one year ahead of the ban's effective date.

Enforcement

The Ministry of Health has set up a dedicated unit to oversee enforcement of the PHO ban. Testing methods for the PHO ban are the same as they were for the iTFA limit. While the older iTFA limit used pre-marketing checks (sampling products at the factory), only post-marketing surveillance (sampling products purchased in supermarkets and shops) is conducted for the PHO ban. Only high-risk products are sampled, namely those whose country of origin does not have an iTFA limit or PHO ban in place and whose food category is known to contain PHO (e.g., instant foods, snacks, frozen food and creamers). Sampling is done twice a year, with additional testing for seasonal products if they are suspected of containing PHO. In case of non-compliance, the company is required to remove the noncompliant product from the market and faces a series of escalating fines for subsequent violations.

Outcomes

National average trans fatty acid (TFA) intake halved from 2.1 grams per day in 2010 to 1 gram per day in 2018; however, the average daily intake among some demographics, such as young adults, was at least twice the national average, mostly due to their frequent consumption of packaged foods. The iTFA limit also significantly reduced TFA in the food service sector: before implementation, 60% of TFA intake derived from food services and 40% from packaged foods. By 2018, this had shifted to 10% from food services and 90% from packaged food. Singapore is planning further evaluation (including impact of the PHO ban) once the results of its 2021 National Nutrition Survey are published.

✓ Why eliminate trans fat?

- ✓ Industrially produced *trans*-fatty acids (iTFA) man-made compounds still used in some countries as a substitute for butter or lard in fried food, deep-fried food, baked goods and spreads estimated to cause 500,000 deaths per year.²
- ✓ iTFA can be eliminated and replaced with healthier alternatives, and many governments have already successfully protected their people.
- ✓ Countries that do not ban iTFA are at risk of having products containing iTFA dumped on their market.
- ✓ Since all people in all countries must be protected from the risks of iTFA consumption, the World Health Organization has called for the global elimination of iTFA with the REPLACE initiative.



Read the full report: [Implementing and Enforcing Trans Fat Elimination Policies](#), with case studies including Thailand, Chile, Singapore, Denmark, Saudi Arabia and the European Union

² Wang, Q., Afshin, A., Yakoob, M. Y., Singh, G. M., Rehm, C. D., Khatibzadeh, S., ... & Mozaffarian, D. (2016). Impact of nonoptimal intakes of saturated, polyunsaturated, and trans fat on global burdens of coronary heart disease. *Journal of the American Heart Association*, 5(1), e002891.