### SPOTLIGHT ON INDUSTRY

# INDIA'S IMPLEMENTATION OF WHO BEST-PRACTICE TFA POLICY

# ADOPTION OF WHO BEST-PRACTICE TFA POLICY

Fats and oils have for long been integral in Indian diets; however, over the years, the consumption of fats and oils has changed in terms of both quantity and quality. Earlier research in 2016 has shown that, over the last several decades, the intake of trans-fatty acids (TFA) and saturated fatty acids (SFA) in India has increased, while the intake of healthier fats such as polyunsaturated fatty acids (PUFA) has been low.<sup>1</sup> According to the World Health Organization (WHO), ischaemic heart disease is the leading cause of death in India, and 4.6% of annual deaths from coronary heart disease are due to high TFA intake.<sup>2,3</sup>

Several regulations have been introduced in India over the last decade to gradually restrict TFA levels in vegetable fats and oils (see Figure 1). In 2021, the Food Safety and Standards Authority of India (FSSAI) published the 'Food Safety and Standards (Prohibition and Restrictions on Sales) Second Amendment Regulations, 2021' which stipulates that, as of January 2022, food products with edible oils and fats as an ingredient should not contain levels of industrial TFA (iTFA) that are more than 2% by mass of the total oils/ fats present in the product.4 According to WHO criteria, this regulation is classified as a best-practice TFA policy. Prior to this policy, iTFA levels were limited to 3% in all fats and oils as of 2021, and before that the TFA limit was 5% of total fat in certain categories of foods-mainly interesterified vegetable fat, industrial margarine, vanaspati, and bakery shortening-reduced from an initial TFA limit of 10%.5

#### FIGURE 1

# INDIA'S FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA REGULATIONS ON TRANS-FATTY ACIDS



Source: Food Safety and Standards (Prohibition and Restrictions on Sales) Second Amendment Regulations, 2021.



As part of the "Eat Right India" movement' initiated by the FSSAI, a range of industry actors, including edible oil associations, bakery associations, individual bakeries, and chefs, have voluntarily committed to reduce levels of iTFA from their products in a phased approach by signing pledges for a trans-fat free India by 2022.6

#### BOX 1: BASELINE SURVEY FOR iTFA LEVELS IN SELECTED FOODS ACROSS INDIA

FSSAI, in collaboration with the Quality Council of India, conducted a baseline survey in 2021 to assess iTFA content in selected food categories—by testing only two trans fats—in chosen cities and districts across India.

The results, tested only 2 trans fats and revealed that only 3.14% of the food samples (196 out of 6245) contained iTFA exceeding the 2% limit.

About 90% (176 samples) of the 196 samples that exceeded 2% iTFA belonged to the category of oils, vanaspati, shortenings, and margarine. A more comprehensive survey with approved methodology as per the regulation may be able to provide better insights and streamline the efforts towards Trans-fat free India.

# FROM POLICY TO PRACTICE: INDUSTRY SUCCESSES AND CHALLENGES

# Global edible oil suppliers contributing to a trans-fat free India

For some edible oil producers, the transition to TFA-free products began before FSSAI introduced mandatory TFA regulations. For example, Dalda Vanaspati–now a Bunge India brand–was reformulated to reduce TFA levels between 1987 and 2002 when it was still owned by Hindustan Unilever Limited. The current Dalda brand website explicitly labels its Vanaspati product as "trans-fat free" and provides information on what iTFA is, why it should not be consumed and includes related recommendations from WHO and local experts (see Figure 2.1/2.2).



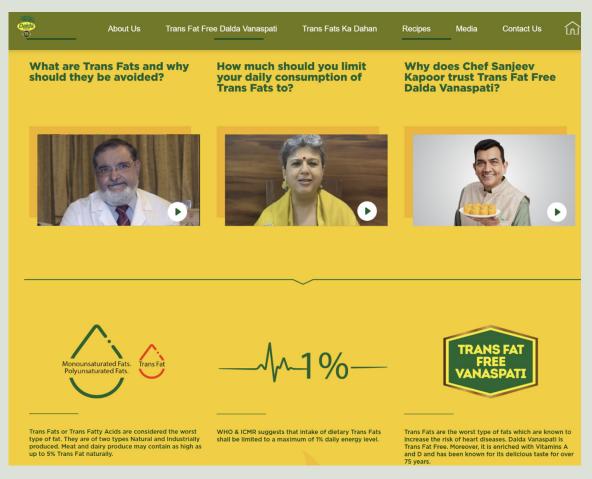
#### FIGURE 2.1

#### **DALDA TRANS-FAT FREE VANASPATI**



#### FIGURE 2.2

#### **DALDA TRANS-FAT FREE VANASPATI**



Source: Dalda brand website

# BOX 2: VANASPATI IN INDIA AND TRANS-FATTY ACIDS

Before the widespread use of refined vegetable oils, Vanaspati–a partially hydrogenated vegetable oil–was commonly used in India as an all-purpose fat and traditionally served as a substitute for butter. It played a key role in cooking, frying, baking, and processed foods like snacks and bakery items. However, Vanaspati has historically been a major source of TFA, with levels once reaching up to 45-50% of total fat content before regulatory limits were introduced. These trans fats are produced during the hydrogenation of unsaturated vegetable oils. <sup>10</sup>

Bunge India's parent company, Bunge Loders Croklaan, was one of the eight companies assessed in the global Edible Oil Supplier Index 2025, being one of the world's largest suppliers of edible oils for use as ingredients by the food and beverage (F&B) industry (i.e. the business-to-business (B2B) sector). 11 Among the other seven global companies assessed, five also sell edible fats and oils in bulk for B2B and as packaged products for direct sale to the consumer (B2C) in India. Of those companies, only Patanjali originates from India. See Table 1 for more details about the companies active in India, their parent company and headquarters (HQ), and the estimated shares in India's B2B edible oil market. Together, the six companies represent over 20% of India's market for B2B edible oils and fats. 12,a

#### TABLE 1

#### **EDIBLE OIL PRODUCERS IN INDIA**

Company	Global Parent Company	Head- quarters	Global company assessed in Edible Oil Supplier Index 2025?	Estimated share in India's B2B edible oil market (FY 2023)a	Estimated share in India's B2C edible oil market (FY 2023)b
AWL Agri Business (formerly Adani Wilmar)	Wilmar International	Singapore	Yes	~11%	~22%
Patanjali Foods Limited	Patanjali Foods Limited	India	Yes	~7%	~11%
Cargill India Private Limited	Cargill Inc.	USA	Yes	~3%	~3%
Emami Agrotech Limited	Emami Agrotech Limited	India	No	~3%	~5%
Marico Limited	Marico Limited	India	No	~1%	~1%
Bunge India	Bunge Loders Croklaan	USA	Yes	<5%	<1%
ADM Agro Industries India Private Limited	Archer Daniels Midland	USA	Yes	<5%	Not applicable
Gemini Edibles & Fats (GEF) India Limited	Golden-Agri Resources	Singapore	Yes	<5%	No information
Other companies	Other companies	-	No	~75% collectively (<5% each company)	>50% collectively (<5% each company)

<sup>&</sup>lt;sup>a</sup> Based on estimates of Manufacturer Selling Price data for edible oils and fats from Euromonitor International for the financial year (FY) 2023

The top five companies listed in Table 1 are also among the ten largest companies in India's B2C edible oil market, collectively holding over 40% of the market share. <sup>12,b</sup>

The estimated market shares in Table 1 further highlight the fragmented nature of India's B2B edible oil market, consisting mostly of smaller producers with relatively minor shares of the market.

Similar to the findings of the global Edible Oil Supplier Index 2025, there is limited information in the public domain on the commitments and processes the companies have in place to eliminate iTFA in India.

In addition, as noted in the global Edible Oil Supplier Index 2025, the level of disclosure of TFA content varied between the companies, and even among their products in the same market, including India. It is worth noting that the research conducted for the Index did not include assessments of product labels from physical points of sale and was based solely on information available on the companies' India-specific websites.

While Bunge India highlights on the Dalda brand website that its Vanaspati (sold to consumers) is TFA-free, the company is less explicit about the TFA content in its other products, for example, from the Masterline range of specialized bakery fats, shortenings, and margarines (for businesses).<sup>13</sup>

Similarly, TFA content was not reported for the edible fat and oil products on Cargill India's website, except for one consumer product, which was described as TFA-free. <sup>14</sup> However, the company confidentially shared with ATNi examples of the labels used in the packaging of edible fats sold in bulk to businesses in India. The labels include TFA content in grams per 100 grams of the product, and a TFA-free claim.

Also, among GEF's edible fat and oil products, only one consumer product was described as TFA-free on its website, and from AWL's range of specialty fats for businesses, only one was noted as TFA-free. 15,16

On the other hand, nutritional information was reported for every edible oil product–B2B and B2C products–in Patanjali's official online store for the Indian market, including grams of TFA, SFA, MUFA, and PUFA, as well as micrograms of micronutrients per 100 grams of oil.<sup>17</sup>

While it is acknowledged that B2B products are often customized to meet the specific nutritional and functional requirements of customers in the F&B sector, companies are encouraged to report estimated ranges of nutritional information at a minimum to support informed decision-making. Examples of companies' disclosure of nutritional information for their B2B products can be found in Table 3.2 of ATNi's Edible Oil Supplier Index 2025.<sup>11</sup>

# BOX 3: EXPORTING TFA-FREE FATS AND OILS FROM INDIA TO UNREGULATED NEIGHBOURING MARKETS

During the assessment for the Edible Oil Supplier Index 2025, Cargill informed ATNi that it exported edible fats and oils containing less than 2 grams of iTFA per 100 grams of fats and oils from India—where WHO best-practice TFA policy became effective as of January 2022—to neighbouring countries where WHO best-practice TFA policies had not yet been implemented (Bangladesh) or adopted (Nepal). Bangladesh and Nepal implemented WHO best-practice TFA policies starting from December 2022 and August 2024, respectively.

- b Based on Retail Sales estimates for edible oils from Euromonitor International for the financial year (FY) 2023
- <sup>c</sup> The information was shared by Cargill during the Edible Oil Supplier Index 2025 assessment.

# Supporting India's industry in policy implementation

While companies with a global market presence are more likely to have the technical expertise and resources needed to reduce TFA levels in their products in line with WHO recommendations, national-level companies, and particularly smaller companies, often lack this advantage.

In light of India's regulation to limit iTFA to no more than 2% by mass of the total fats and oils in all foods, FSSAI developed a guidance note on elimination of TFA. The guidance note summarizes India's regulations and notifications related to TFA and provides tailored guidelines for fat and oil manufacturers, as well as the F&B industry, on eliminating TFA from the food supply.<sup>18</sup>

The guidelines for producers of edible fats and oils suggest switching to newer technologies, such as interesterification, as well as monitoring and modifying hydrogenation and deodorization processes to reduce the formation of iTFA.

In the course of the research for the Edible Oil Supplier Index 2025, ATNi interviewed the Solvent Extractors' Association (SEA) of India and Kanpur Edible Oils to understand the challenges and opportunities faced by the Indian industry in implementing the latest WHO recommended TFA policy.

# BOX 4: INSIGHTS FROM AN INDUSTRY ASSOCIATION

The Solvent Extractors' Association of India is the largest association in the vegetable oil sector in India, with over 700 members across the country representing all types of vegetable oils.d Members include edible oil suppliers whose parent companies were assessed on the Index-such as Adani Wilmar, ADM Agro Industries India, Bunge India, GEF India, and Patanjali-as well as smaller local suppliers. SEA informed ATNi that while significant strides had been made by the edible oil industry to eliminate iTFA in India, smallerand medium-scaled producers in particular faced challenges in adopting the suggested new technologies due to cost and technical constraints. SEA noted that collaboration was key to overcome these challenges. FSSAI and local research institutes provided training and technical support, while peer learning within the industry further facilitated the adoption of healthier processing methods. Technical support particularly focused on defining the technical parameters to ensure reduced TFA formation in edible oil processing.

In addition, SEA believes that the phased TFA restrictions introduced by FSSAI were also important to enable WHO best-practice policy implementation, as this allowed the industry to gradually adjust their practices.

d The Solvent Extractors' Association (SEA) of India is an NGO and Trade Promotion Organisation, recognised by the Government of India. SEA of India members include oilseed crushers, importers of edible oils, refiners and service providers. SEA of India works with industry players, government agencies, decision makers and multiple global organisations and governments to promote the growth and development of the vegetable oil trade and industry, within borders as well as across borders.



#### **BOX 5: INSIGHTS FROM A LOCAL EDIBLE OIL PRODUCER**

Kanpur Edibles Private Limited is a key supplier of edible oils in India, serving both the F&B industry and consumers. The company supplies a range of edible vegetable oils such as refined soybean oil, refined sunflower oil, refined rice bran oil blend, and mustard oil. The company informed ATNi that it had to modify several technical parameters in its edible oil refining processes to comply with the iTFA limit of 2% of total fat, as mandated by FSSAI. However, at the request of a major F&B company—one of Kanpur's key customers—the edible oil producer strived to further reduce iTFA levels to no more than 0.6 grams per 100 grams of edible oil. To achieve this, the company adopted a new refining technology that is three times more expensive than conventional processes. The added cost was absorbed through reduced profit margins rather than by market price adjustments, as market pricing remains highly competitive and externally driven. However, their sales volume increased due to growing awareness and demand for healthier oils among buyers, compensating for the reduced profit margin. In addition, the company noted that its marketing team is highlighting the benefits of healthier oils to distributors and retailers to encourage the purchase of edible oils with no more than 1% iTFA.

#### KEY LEARNINGS FROM INDIA AND WAY FORWARD

Insights from India's implementation of FSSAI's mandate limiting iTFA to 2% of total fat in all foods highlights the successes of cross-sector collaboration and offers actionable recommendations—both for countries like India that have implemented a WHO best-practice TFA policy, and for those still working towards its adoption and implementation.

Successful implementation of WHO best-practice TFA policies is driven by the following:

#### Collaborative efforts

Government, industry associations, development partners, and researchers are encouraged to collaborate and align efforts in providing guidance and resources to enable industry implementation of WHO bestpractice TFA policy, and especially to support small- and medium-scale companies.

#### **EXAMPLE:**

In India, FSSAI laid the groundwork for iTFA elimination by introducing a policy aligned with WHO best practices. However, successful implementation has depended on coordinated action, through initiatives like the Eat Right India campaign and with the active engagement of civil society organizations, industry stakeholders (including edible oil associations), researchers, and consumer advocacy groups.

- Industry should engage in peer-to-peer and cross-sector learning to facilitate industry-wide implementation of WHO best-practice TFA policies.
- An appropriate transition period is recommended to allow industry to gradually adapt and adjust production practices.

#### 2 Industry leadership

- o In addition to government regulation, the consumer facing F&B industry can be an important lever of change by **demanding healthier edible fat and oil ingredients from suppliers**, aligning with or exceeding WHO iTFA standards.
- Extending best practices, particularly in unregulated markets—for example, by exporting and supplying TFA-free products to neighbouring countries that have not yet adopted or implemented WHO best-practice TFA policies—can help facilitate the transition.
- The F&B industry, including edible fat and oil producers, are encouraged to disclose iTFA elimination activities to promote transparency, accountability and recognition of these efforts, and demonstrate good practices.

#### 3 Robust monitoring systems and transparency

- The establishment of robust monitoring systems for total TFA levels in the food supply supports effective policy implementation by ensuring compliance and informing ongoing improvements.
- o The F&B industry, including edible fat and oil producers, are encouraged to disclose total TFA levels in their products (natural and industrial) to support national monitoring efforts, and to ensure transparency and accountability.
- Disclosure of nutritional information is critical for enabling informed purchasing decisions especially in B2B contexts—where it can guide responsible sourcing and support public health objectives.

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