



Eliminating Trans Fats in Saudi Arabia: A Case Study in Implementing Successful Nutritional Regulations

One of the main goals of Vision 2030 is to improve public health, and promote healthy food consumption among citizens and residents. The Saudi Food and Drug Authority (SFDA) is responsible for regulating food products in the Kingdom, and for introducing regulations and standards that manufacturers are mandated to follow. One major public health issue that the SFDA has sought to tackle in recent years is the consumption of trans-fatty acids, also known as trans fats. More than 500,000 deaths occur each year globally due to the intake of artificial trans fats, according to a 2018 report from the World Health Organisation (WHO). As such, that year the global organisation set a target to eliminate these fats from the global food supply by 2023.

The SFDA has led initiatives and partnered with global organisations such as the WHO to gradually eliminate trans fats in Saudi Arabia. After years of concerted efforts and the gradual introduction of legislation, the SFDA successfully banned artificial trans fats from the country's food supply in January 2020. In the years since, the authority has prioritised the implementation of and compliance with these regulations.

Public Heath Indicators

Saudi Arabia faces a number of public health challenges that the SFDA and the country's other health authorities are working to overcome. A 2019 survey released by the Ministry of Health (MoH) found that 38% of residents were overweight and 20% were obese. The survey also found that 14% of respondents had high blood pressure and 43% had raised cholesterol levels. According to the WHO, non-communicable diseases were estimated to account for 73% of all deaths in Saudi Arabia in 2016. These include cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. A number of these health issues are linked to unhealthy lifestyles in areas such as nutrition and physical activity. Trans fat intake, for example, was estimated to cause 10% of all deaths from heart disease in Saudi Arabia in 2016. This signalled to the country's health authorities that wide-ranging action must be taken to tackle these public health challenges. Indeed, supporting healthy nutrition is one of the SFDA's top priorities in this regard.

Trans Fats Explained

Trans fats are a type of fat that pose a risk to human health. It is important to note that not all fats are unhealthy. Certain types of fats, such as monounsaturated and polyunsaturated fats found in plants and healthy oils, provide essential nutrients for the human body and protect health when consumed in moderation.

There are two main sources for trans fats: natural and industrially produced sources. The latter poses a health risk. Naturally occurring trans fats are present in meat and dairy products in small quantities – around 2-8% – and do not pose a risk to the human body. However, this is not the case for artificial or industrially produced trans fats in hardened vegetable fats such as margarine. These are often present in snack foods, baked goods and fried foods. Artificial trans fats have a longer shelf life than other fats, which is one of the main reasons why manufacturers use them. They are formed in an industrial process that adds hydrogen to vegetable oil, converting the liquid oil into a solid. The result is partially hydrogenated oil (PHO), which is another term for industrially produced trans fats. They were first introduced into the food supply in the early 20th century as a replacement for butter and became popular from the 1950s onwards.



Foods containing industrially produced trans fats can have a trans-fat content of between 25% and 45%. High levels of consumption of trans fats can lead to cardiovascular diseases, obesity, high blood pressure and Type 2 diabetes. High trans-fat intake increases the risk of death from any cause by 34% and risk of coronary heart diseases deaths by 28%, according to the WHO. It is important to note that healthier alternatives exist that do not impact the taste or the cost of food.

The WHO recommended a series of steps for eliminating industrially produced trans fats. These include mandatory labelling of the trans-fat content, reducing trans-fats content and ultimately replacing trans fats with healthier alternatives. These steps should then be followed by monitoring and evaluation campaigns.

The SFDA's Regulatory Phases

In line with Vision 2030 and WHO recommendations, the SFDA has developed legislation in recent years to eliminate trans fats. This followed a gradual approach and targeted both local food manufacturers and imported food products. The latter is particularly important given that Saudi Arabia imports over 80% of its food. The SFDA led four main phases of regulations:

- **1. Labelling**: In 2016 regulations were implemented that required food manufacturers to label trans-fat content on food products, even if the amount was zero. Notice was issued one year in advance to make manufacturers aware of the new regulation.
- **2. Introduction of Content Limits**: In 2017 food manufacturers were required to limit trans-fats content to 2% for fats and oils such as butter and cooking oils, and 5% for all other food products. One year's notice was also given.
- **3. Voluntary Agreement for Further Content Limits**: In 2018 the SFDA signed a voluntary agreement with the International Food and Beverage Alliance a body that includes nine of the biggest multinational food companies in which they agreed to reduce salt, fat and sugar in products. This included an agreement to reduce trans-fat content in food products to less than 1%.
- **4. Ban**: In 2020 the SFDA banned PHOs in all food products. This meant manufacturers were required to ensure that their products were completely free from artificial trans fats.

Supportive Measures

A number of supplementary measures were taken to ensure successful implementation and compliance with the new regulations. The SFDA produced guidelines and conducted workshops for food manufactures to facilitate the adoption of the new regulations. On the consumer front, the SFDA issued educational awareness materials designed to help residents understand the risks posed by trans fats.

Monitoring and Evaluation

An effective monitoring and evaluation campaign was conducted after each phase of implementation. In February 2018, three months after the introduction of content limits, an inspection campaign was conducted, and the SFDA found that 94.7% of food products met the newly imposed 2% and 5% trans-fat limits. This indicated that the SFDA could continue its campaign, and move to further reduce and eventually ban trans fats. Following the 2020 ban, an inspection campaign was conducted in July 2020 that analysed approximately 2700 products in SFDA laboratories. Around 80% of products were found to be compliant and 20% were non-compliant. Of those that were non-compliant, 200 were locally produced and 332 were imported. The SFDA has a number of measures to address non-com-



pliance, including warnings and imposing fines. The SFDA also has the authority to close local production lines or cease imports from manufacturers until compliance can be certified.

Leading the Region

Saudi Arabia was one of the first countries in the world to phase out trans fats, and the first country in the Eastern Mediterranean to do so. As of December 2021 there were 40 countries that banned the fat. This represents a milestone in nutritional regulation in Saudi Arabia and achieves one of the core objectives of the SFDA's Healthy Food Strategy, launched in 2018.

The SFDA is one of the regional leaders in food standards. In July 2020 the SFDA's trans-fat standards were adopted by the Gulf Standards Organisation. This required the same regulations to be adopted in other GCC states, with each country following its own implementation timeline under the guidance of national regulators.

In cooperation with the WHO's regional office, the SFDA provides training for authorities in other countries in the Middle East on how to gradually eliminate trans fats. The workshops cover guidelines and phases, and the forums allow Saudi Arabia to share its experience and become an effective partner in bolstering worldwide health.