# **NATIONAL STRATEGY FOR THE**

# **ELIMINATION**



OF TRANS-FATTY ACIDS FROM

**GHANA'S FOOD SUPPLY (2025-2030)** 





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Ghana's first National Strategy on the elimination of Trans Fatty Acids (TFAs) was developed based on several stakeholder engagements, desk reviews, analysis of primary data from relevant state institutions, and validation workshops. Multiple individuals from academia, government and non-government agencies have committed invaluable time and effort in producing this document.

This document would not have materialized without the leadership of the Minister for Health, Hon. Dr. Bernard Okoe Boye, and his two Deputies Hon. Alexander Akwasi Acquah and Hon. Adelaide Ntim, and the Chief Director, Alhaji Hafiz Adam. We further wish to thank Mrs Emma Ofori Agyemang, Director, Policy, Planning, Monitoring, and Evaluation Directorate (PPMED). We appreciate the immediate past leadership of the Ministry of Health, Hon. Kwaku Agyeman-Manu and his two (2) deputies: Hon. Tina Mensa (MP), and Hon. Alhaji Mahama Asei Seini (MP) under whose regime the policy review process started.

Immense appreciation to the Institute of Leadership and Development (INSLA) for the excellent coordinating and actively contributing to the TFA elimination strategic process. Special recognition to Resolve to Save Lives (RSTL) for supporting this effort. Finally, we are grateful to the Multi Sectoral Technical Working Group (MSTWG) for their contributions and commitment. Profound appreciation goes to the subcommittee of the MSTWG which steered the affairs of the Ghana TFA elimination document.

(Kindly refer to the list of contributors under appendix 2. Pg. 38).

# **FOREWORD**

Over 60 countries worldwide have mandatory TFA policies of which 55 countries have adopted best-practice policies (i.e. ban of partially hydrogenated vegetable oils (PHOs) and/or 2% limit for TFA). There are only three countries in Africa (Nigeria, South Africa and Egypt) that have best-practice TFA policies in place.

Although Ghana is not a pacesetter on TFA elimination, it is emerging at this time to eliminate TFA as championed by the World Health Organization. The Ghana Trans-Fatty Acid (TFA) elimination strategy is an important national framework that seeks to protect heart health by reducing or eliminating trans fatty acids from our food supply system.

The TFA strategy was developed by a Multi Sectoral Technical Working Group (MSTWG) drawn from key partner institutions and stakeholders with support from the Institute for Leadership and Development (INSLA), Resolve to Save Lives (RTSL) and the World Health Organization (WHO). This strategy has three overarching objectives: to reduce the impact of trans fatty acids on public health, to ensure sustainable financing for TFA activities and to strengthen monitoring and enforcement mechanisms.

The Ghana TFA elimination strategy has taken into consideration the needs of all stakeholders along the food supply chain. The strategy is expected to be implemented by all stakeholders as enshrined under the implementation arrangement in a coordinated manner.

Finally, as the Minister responsible for Health, I call on all stakeholders to effectively collaborate and support the implementation of this all-important national document that seeks to guarantee TFA elimination in Ghana. This is a critical step towards achieving the Nutrition for Growth Commitment of enacting policies to eliminate industrially produced TFA and reduce the impact of marketing foods and beverages high in saturated fats and trans-fatty acids.

This strategy has three overarching objectives: to reduce the impact of trans fatty acids on public health, to ensure sustainable financing for TFA activities and to strengthen monitoring and enforcement mechanisms

Hon Dr. Bernard Okoe Boye

Minister for Health

# **ABBREVIATIONS**

CHD	Coronary Heart Disease
CSO	Civil Society Organization
DR-NCD	Diet-Related Non-Communicable Disease
FAO	Food and Agriculture Organization
FDA	Food and Drugs Authority
FNS	Food and Nutrition Security
FOPL	Front-of-pack labelling
GHS	Ghana Health Service
GINA	Global database on the Implementation of Nutrition Action
GOG	Government of Ghana
GSA	Ghana Standards Authority
IHD	Ischemic Heart Disease
INSLA	Institute of Leadership and Development
iTFA	Industrially processed Trans-Fatty Acids
LMIC	Low to Middle Income Countries
МОН	Ministry of Health
NCD	Non-communicable diseases
NGO	Non-governmental Organization
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NWG	Nutrition Working Group
РАНО	Pan American Health Organization
PHO	Partially Hydrogenated Oils
RTSL	Resolve To Save Lives
SSA	Sub-Saharan Africa
TFA	Trans-Fatty Acids
UHAS	University of Health and Allied Sciences
WHO	World Health Organization

# **GLOSSARY**

**Bad cholesterol:** known as Low-Density Lipoprotein (LDL) can build up in the walls of arteries, making them hard and narrow.

**Cholesterol:** is a soft, waxy substance that can cause clogged or blocked arteries (blood vessels).

**Dietary fat intake:** keep total fat consumption to less than 25% to 30% of your daily calories; more than two-thirds should come from monounsaturated and polyunsaturated fats.

**Essential fatty acids:** are fatty acids that the body cannot make, so they must come from food. Examples are Omega-3 fatty acid and omega-6 fatty acid.

**Fat choices:** make sure most of your daily fats are from monounsaturated and polyunsaturated sources.

**Fats health benefits**: act as a source of energy, provide insulation for the body, required for transport of fat-soluble vitamins, required for production of hormones.

Fats Panel/Label: check the total fat on the food label. Subtract the amount of saturated fat and trans-fat from the total fat to obtain the healthy, unsaturated fat. Consume if the unsaturated fat content is highest.

**Good cholesterol:** known as High-Density Lipoprotein (HDL) picks up excess cholesterol and takes it back to the liver. Healthy fats: are unsaturated fats or oils (i.e. monounsaturated and polyunsaturated fatty acids or oils) that are protective against heart diseases, high blood pressure and stroke. Good dietary sources are olive, canola, corn, soybean and safflower oils, avocados, nuts (ie. Walnuts, hazelnuts, almonds, tigernuts), seeds (i.e. Flaxseed, agushie), fatty fish such as salmon, herrings, sardines, mackerel, tuna.

**Healthy trans-fat intake:** aim for <1% of calories from trans-fat, which translates to < 2.2 g or < 1 tablespoon per day for a 2,000-calorie diet.

**High fatty foods:** contains >15 grams of trans-fat in one serving. By eating several servings of that food, the saturated/ trans-fats add up.

**Hydrogenation:** the chemical reaction of hydrogen with another substance, usually under the influence of temperature, pressure, and catalysts.

Industrially- produced Trans-Fatty Acids (iTFA): are formed in an industrial process that adds hydrogen to vegetable oil converting the liquid into a solid, resulting in "partially hydrogenated" oil. They can also be formed in lower quantities during the refinement of vegetable oils at the deodorization stage.

**Maximizing fats health benefits:** means replacing unhealthy fats with healthy fats

Monounsaturated fats or oils: are healthy fats that are liquid at room temperature but start to harden when chilled. Are found in plant foods such as olive oil, avocados and certain nuts.

Omega-3 fatty acids: are fish fats from fish with a lower fat content (ie. Herring, shrimp, sardines, and mackerel) or fatty fish such as salmon.

**Omega-6 fatty acids:** are plant-based oils, which are liquid at room temperature. Examples are Safflower, flaxseed, sunflower, and soybean oils.

Partially Hydrogenated Oil (PHO): is vegetable oil in a solid form at room temperatures. To make PHO, vegetable oil is placed in the presence of hydrogen and a catalyst to convert it to solid fat, a process known as hydrogenation.

**Polyunsaturated fats:** are a type of healthy fat that includes omega-3 and omega-6 fatty acids, which are essential for blood clotting, nerve and brain function. They must be obtained from food, as the body cannot make them. Polyunsaturated fats are found in plant and animal foods, such as salmon, vegetable oils, and some nuts and seeds.

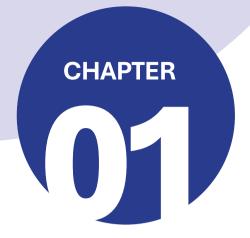
**Saturated Fats or oils:** are a type of dietary fat that is usually solid at room temperature and are mostly animal fats. Foods like butter, palm and coconut oils, cheese, red meat and dairy products have high amounts of saturated fat.

**Trans-fat free foods:** Foods free of trans fats are not automatically healthy. Food makers might substitute other unhealthy ingredients (ie. Coconut, palm kernel and palm oils- contain a lot of saturated fat) for trans fats.

Trans-fat or trans-fatty acids (TFA): are unsaturated fatty acids that come from either natural or industrial sources. Naturally occurring trans-fat come from ruminants (cows, goats, pork and sheep)

**Unhealthy fats:** are saturated, trans-fat and partially hydrogenated oils that can raise total blood cholesterol and can put one at risk for heart disease and stroke.

**Unsaturated fats or oils:** are dietary fats that are usually liquid at room temperature and are found mostly in fish and foods from plants such as nuts and seeds.



# INTRODUCTION

# 1.1 Background

Trans fat, or Trans-Fatty Acids (TFA), are unsaturated fatty acids that come from either natural (i.e. ruminants) or industrial process of hydrogenation. Naturally occurring *trans*-fatty acids are present in meat and dairy products while industrially produced *Trans*-Fatty Acids (iTFAs) are from Partially Hydrogenated Oils (PHO) (Heidenreich et al., 2022). Similarly, iTFAs can be formed in smaller quantities during the refinement of vegetable oils at the deodorization stage. Trans Fatty Acids (TFAs) have long been used in food manufacturing due in part to their melting point at room temperature. PHO were originally not a natural part of the human diet but found its way into the food industry as a replacement for butter and lard as early as in the 20th century because of its ability to prolong the shelf life of food products. Food products such as margarine, vegetable shortening, fried foods and doughnuts; baked goods such as crackers, biscuits, pancakes, and pies may contain PHO as a key ingredient. On the ingredient list of processed foods, partially hydrogenated fats or vegetable oils may be possible sources of iTFAs. Industrially produced trans-fat is a man-made harmful compound found in foods, fats and oils. They are contained in hardened vegetable fats, such as margarine and cheese, and are often present in snack food, baked foods and fried foods (WHO, 2018).

There is currently no documented evidence of a nationwide assessment of the sources of iTFA in the Ghanaian food supply. One of the few studies conducted by Addo and her colleagues in the Accra Metropolitan Area assessed the level of TFAs in plantain chips hawked on the streets of Accra. While their findings showed a level of TFA  $(0.6 \pm 0.1g/100g)$  (Addo et al., 2023) within the permissible range according to WHO standards (i.e., less than 1% of food energy) [WHO, 2018], it's important to remember that plantain chips are typically consumed as snacks. Frequent consumption of large quantities can still increase overall TFA exposure.

In the past, Ghana's food environment was dominated by open-air markets and informal stalls. However, the past decade has seen a dramatic shift, particularly in urban areas. This shift is marked by a surge of fast-food outlets, an influx of unhealthy, ultra-processed foods, and aggressive marketing pushing these unhealthy options (Kroll et al., 2019). This trend raises concerns about the increasing availability of trans

fats in the Ghanaian diet. Fast food chains pose a significant public health challenge due to their reliance on frying techniques and cost-effective oils for popular menu items such as fried chicken and pastries. While offering convenience and affordability, these practices can introduce detrimental trans fats into the food supply. The repeated heating of oils, a common practice in fast food preparation, can lead to the formation of trans fats. Furthermore, certain pre-packaged ingredients utilized by fast food establishments may contain partially hydrogenated vegetable oils, serving as an additional source of trans fats. Consequently, fast food emerges as a key conduit for the infiltration of these harmful fats into Ghana's dietary landscape.

iTFA are the main dietary sources of TFA and the latter increases Low-Density Lipoprotein (LDL) cholesterol, an important risk factor for coronary heart disease and other Diet-Related Non-Communicable Diseases (DR-NCDs) such as cardiovascular diseases, cancer, diabetes, and stroke. Among the NCDs, cardiovascular disease is the leading cause of mortality and morbidity while ischemic heart disease (IHD) alone accounted for about 2 out of 10 deaths in the world in 2019 (Roth et al., 2020). There is a strong positive correlation between a high trans-fatty acid intake of greater than 1 percent of total energy intake and the risk for ischemic heart disease (WHO, 2021) as evident by the annual global estimated 500,000 deaths from IHD attributable to TFA intake (Hajar, 2017; WHO, 2023). High consumption of trans fat increases the risk of death from IHD to 21%. Thus, DR-NCDs continue to be a global public health challenge particularly in low- and middle- income countries (LMIC) where 3 out of 4 deaths are attributable to NCD (WHO, 2022).

In sub-Saharan Africa (SSA), the burden of IHD has been on the rise over the past two decades as evident by reports from Nigeria and Kenya where IHD is the first and second cause of mortality in these two countries respectively (Huang et al., 2023)

Table 1: Potential Sources of TFA in Ghana's food system

IM	PORTED PRODUCTS	OCAL PRODUCTS	
1.	Fats and Oils (All types of vegetable fats).	Margarine and short	ening
2.	Margarine & Margarine type products	All edible oils	
3.	Vegetable shortening	Mayonnaise	
4.	Frozen pizzas	Biscuits, cakes, muf	fins, plantain chips,
5.	Mayonnaise	doughnut, pastries	
6.	Biscuits and all bakery wares including bread (Frozen and unfrozen), cakes, muffins, pies)	Fast Foods, deep frie	ed foods

Source: (Fernández-San Juan, 2009).

# 1.2 Situational Analysis

# 1.2.1 TFA Consumption Data

Data on the consumption of PHO and iTFA in Ghana is not readily available. However, in the absence of consumption data, PHO and iTFA can be determined based on the consumption pattern of foods containing iTFA among a defined population group and the importation pattern of products containing TFA. Ghanaians of all age categories consume fried local foods at an increased rate with the advent of food vendors who fry foods and sell in the markets, on streets and malls. Similarly, bread is widely consumed nationwide amongst the population aged one (1) year and above though there may be regional variations. Coupled with this, there is also the high consumption of both local and imported biscuits and oils that may contain trans

fatty acids. The lunch pack of an average child is mostly likely to contain biscuits as snacks, which they consume daily.

There is strong evidence from the Ghana Revenue Authority showing that importation of oils and other products which may contain TFA increased over the years. The net weight of imports of oils increased from 57128000kg in 2010 to 395825291kg in 2019 representing a 7-fold increase in importation of mayonnaise, margarine, fats, and vegetable oils in Ghana over a period of 10 years (Ghana Health Service- Nutrition Department, 2021/VizHub - GBD Results (healthdata.org)).

There are no studies to show the consumption rate of these products by Ghanaians especially children, but studies done in other countries like US showed that the presence of small amounts of trans fat in hydrogenated or partially hydrogenated oils/food products will likely cause many Americans to exceed their recommended maximum (Gatimu et al., 2016). This means there is the likelihood for our children and for that matter the populace to exceed their recommended maximum because more of such products can be consumed over the course of the day. This likelihood is exacerbated by the Food and Drug Administration labelling rules, which allow products containing <0.5 g trans-fat per serving to claim 0 g trans-fat (Gatimu et al., 2016). Many products with almost 0.5 g trans-fat, if consumed over the course of a day, may approximate, or exceed the 2g maximum as recommended by WHO, all while claiming to be trans-fat free (Remig et al., 2010). There is the need for TFA food consumption data to monitor trends in intake of TFA to inform progress on TFA elimination in Ghana.

#### 1.2.1.1 Domestic manufacturers of fats and oils

Data on PHO could not be obtained from the Association of Ghana Industries (AGI), Ministry of Trade and Industry (MOTI) and Ministry of Food and Agriculture (MOFA) databases. Nonetheless, the number of domestic producers of PHOs which in this case is margarine may not be a good measure of the burden of TFA and their contribution to the CVDs in Ghana. A good measure of the burden of TFA is a form of approximation of what is consumed locally (e.g. (QTY Produced Locally + QTY Imported) – QTY Exported) (Addo et al., 2021). From Table 2, it was evident that the most common type of oil used by domestic manufacturers of fats and oils in Ghana is Palm Olein (refined deodorized palm oil). The exposure of palm oil to high temperatures during refining/processing can also contribute to the generation of trans fats. The heat causes the unsaturated fats in the oil to undergo isomerization, converting some of them from the naturally occurring cis configuration to the trans configuration (Szabo et al., 2022; Bhat et al., 2022).

#### 1.2.2. Burden of Non-Communicable Diseases in Ghana

In Ghana, very limited population-based data on NCDs exist. Despite this, available data from research and surveys suggest that NCDs and their associated risk factors are on the ascendancy. Atibila and colleagues in 2021 reported prevalence of hypertension to be 30.1% (95% CI 25.6-36.0%) among females and 34.0% (95% CI 28.5-40.0%) among males. However, the prevalence of hypertension in older age groups is estimated to be higher. A prevalence of more than 50% among some sections of the Ghanaian population has been reported (Addo Yobo et al., 1997). Similar high prevalence of other NCDs have been reported in Ghana (Amoah et al., 2002; Gatimu et al., 2016). Evidence on cancers remain scanty but are assuming public health significance (Amoako et al., 2019; Calys-Tagoe et al., 2014; Laryea et al., 2014) as are complications of NCDs such as hypertension and diabetes (Amoako et al., 2014; Eastwood et al., 2010; Plange-Rhule et al., 1999). For Type II Diabetes Mellitus, the association with other comorbidities such as hypertension and hyperlipidaemia has been found among Ghanaian residents (Agyemang et al., 2016). For cancers, evidence of a higher burden among women compared to men has also been found with females accounting for more than two-thirds of cases reported (Amoako et al., 2019; Calys-Tagoe et al., 2014; Laryea et al., 2014). Although these indicate significant burden of NCDs, there is further evidence of poor awareness on NCDs. For example, a low level of awareness on hypertension and blood pressure control even among patients (Lamptey et al., 2017).

The burden of NCDs in Ghana is projected to increase due to aging, rapid urbanization, and unhealthy lifestyles. The proportion of children under five years of age who are overweight was less than 1% in 1988 but 3% in 2014. Less than 5% of adults consume adequate amounts of fruits and vegetables (GSS, 2014) and about 41% of adults do not engage in any vigorous physical activity (Ghana Statistical Service [GSS], 2009). The increasing burden of NCDs and associated risk factors have implications for healthcare delivery in Ghana. In terms of modifiable risk factors, 16% of Ghanaian males and 40% women are overweight, 13% have high blood pressure whiles 9% have diabetes. The cost involved in treating or managing these conditions keeps increasing and this lays burdens on the individual and the government. In the last few decades, NCDs have gained recognition as a significant cause of morbidity and mortality in Ghana. Further research is needed on the NCD burden attributable to TFA in Ghana.

#### 1.2.2.1 Burden of Coronary heart disease in Ghana

According to the global ranking of cardiovascular diseases (CVD) deaths, coronary heart disease (CHD)/ ischemic heart disease (IHD), ischemic stroke, and hypertensive heart disease are the first, second, and fourth of overall causes of CVD mortality. In Ghana, the total number of CHD deaths was 15,888 (2019) and this accounted for about 40% of total cardiovascular deaths (39,650). For ischemic stroke, the total number of deaths was 17,201 (Roth et al., 2020). From the global ranking of attributable burden of cardiovascular disease due to selected modifiable risk factors, high blood pressure, dietary risk, high low density lipoprotein cholesterol, diabetes and overweight/obesity were the first, second, third, sixth and seventh risk factors contributing to the CVD burden (Roth et al., 2020). New evidence from the 2023 Ghana cardiovascular disease scorecard reveals that 13% of premature deaths are due to CVDs and the burden is skewed towards females (World Heart Federation; 2022).

#### 1.2.3 Labelling of foods

In Ghana, information on TFA in the food supply chain is not available because currently, nutrient declaration is not mandatory since the country's laboratories are not adequately resourced to carry out nutrient analysis. A simple survey in collaboration with the consumer protection agency showed that manufacturers were only reporting total fat content of food products. The majority of manufacturers do not declare the breakdown of total fats (saturated fats, TFA, monounsaturated fats and polyunsaturated fats) on their labels. There were also discrepancies in reporting of the nutritional facts panel, whereas some manufacturers indicate the nutritional value per 100 grams, others indicate the nutritional content of the food per serving or both. The food categories sampled were oils, margarines, butter, dairy products and biscuits/baked products which are known to contain specific ingredients indicative of the presence of iTFA. Generally, the ingredient list of the various food products sampled contained specific and non-specific ingredients indicative of the presence of iTFA but TFA contents were not displayed in the nutritional facts panel.

Authorities and consumers will have to rely on food labels to ascertain the levels of TFA. Such labelling may also be misleading.

#### 1.2.4 Laboratory capacity

The ability to assess the levels of Trans fats in the food supply system is an integral part of efforts towards the elimination of trans fats. Furthermore, in Ghana data/information on TFA in the food supply chain is not easily available since the country's laboratories are not adequately resourced to carry out nutrient analysis.

There are potential institutions that have been identified and can be developed to have the testing capacity for TFA. The country's laboratories do not have the full capacity to test TFA. Institutions such as Food Research Institution, Ghana Standards Authority, Food and Drugs Authority, Customs amongst others

should be strengthened to play their roles. Ghana needs laboratories to test trans fats in food products. The World Health Organization (WHO) recommends identifying laboratories in each region that have demonstrated capacities for analysing fatty acids in foods.

Therefore, it is essential to establish laboratories with the capacity to test trans fatty acids in Ghana to ensure food safety and protect public health. The lack of facilities for laboratory analysis makes it very difficult to assess the levels of TFA in locally available oils and packaged foods.

#### 1.2.5 Research for TFA elimination

The effects of TFA on health have become a subject of public health concern. Scientific evidence of TFA as potentially hazardous to health is pertinent as it provides information that could be used to protect public health. Unfortunately, there is limited coordinated effort for integrated research, data capturing and reporting and information management on TFA in Ghana.

The health sector has five research units all within the Ghana Health Service with specialty in healthcare system strengthening. As a food and drug regulator, the Ghana Food and Drugs Authority undertakes some research works around the food industry however, much is desired of them when it comes to human capacity and logistics. In addition, there is a strong collaboration between academia and selected key stakeholders like the consumer protection agency for research in TFA.

The availability of real-time data and the use of modern technology to address the information needs of TFA is a challenge. TFA data from other sectors for an informed decision in the health sector is not included in the current data sets if even available. In addition, there is no countrywide survey data available from the Ghana Statistical Service on TFA. Currently, TFA data is fragmented, unreliable and difficult to access in real time. Research and Information management into TFA to foster continuous learning and development in the food industry should be a priority.

# 1.2.6 Monitoring and Enforcement

Monitoring and enforcing regulations on Trans Fat Acids is critical. There is a growing recognition of the need to regulate and enforce TFA restrictions in Ghana, aligning with global initiatives to reduce the health risks associated with trans fats. Ghana's ability to monitor and enforce TFA restrictions is closely linked to its laboratory capacity amongst others.

There is the need to strengthen monitoring and enforcement mechanisms by resourcing regulatory bodies, ensuring effective coordination and collaboration amongst law enforcement agencies and enacting TFA regulations.

# 1.2.7 Funding for TFA elimination

In Ghana, the main sources of revenue for the health sector are general government allocation, social health insurance, Internally Generated Fund (IGF), through out-of-pocket and donor support (bilateral and multilateral). The very key source of health financing is the National Health Insurance Levy of 2.5% of VAT, 70-80% of which is usually allocated to the NHIS.

Globally, investment by national governments against NCDs has become very scarce due to inaccurate and unavailable NCD data to support the development of an NCD investment case or strategy in many countries. It is estimated that financing for NCDs has stagnated at 1-2% of development assistance for health for two decades (NCD Alliance). The situation is indifferent in Ghana. For instance, an explanatory, cross-sectional, and grounded theory study among 39 purposively sampled health policymakers and implementing officials at the national and sub-national levels in Ghana was conducted by (Nyaaba et al, 2020). The study revealed that the funding for NCD policy implementation in Ghana is insufficient as

there is no dedicated funding source for it. It was also indicated that this is due to the lack of a dedicated government budget line for NDC policy implementation coupled with the lack of donor funding to support NCD interventions. At the sub-national levels, the main identified challenges affecting NCD policy implementation were the late release of government health funds to the regional-levels and inadequate resources for regional-level NCD focal persons to perform their functions.

#### 1.3 Rationale for strategy

The health and wellbeing of the citizens of Ghana is a constitutional requirement as enshrined in the Directive Principles of State Policy of the 1992 Constitution of Ghana. The Government owes it a sovereign duty to keep all people living in Ghana safe and healthy including protection from the harmful effects of Trans Fatty Acids. Ghana has developed bundle of health policies in response partly to the SDGs including the NCD policy. Although Ghana's NCD policy aims at strengthening the legal regime of nutrition including regulation of the labelling, promotion, sales and advertisement of Trans fats, this has so far not been implemented, hence the need for this strategy.

# 1.4 Scope of the Ghana TFA Elimination Strategy

The strategy will reduce or eliminate trans fatty acids in the foods we produce/consume in Ghana and put in regulations to check the level of TFA of foods imported. The strategy will focus amongst other things on the methods of cooking and preparing of foods as one of the complimentary efforts to reducing or eliminating TFA thereby reducing the incidence of cardiovascular diseases and other NCDs in the country.

Another important complimentary measure that this strategy will consider is a mandatory approach towards TFA elimination in Ghana. The strategy shall enforce mandatory nutrition labelling while enhancing the capacity of laboratories to carry out the necessary nutrient analysis particularly for TFA.

# 1.5 Strategy development process

This National Strategy for the Elimination of Trans Fatty Acids in Ghana's food was developed under the stewardship of the Minister for Health. The process leveraged the Health Sector Working Group Platform under the chairmanship of the Chief Director of the Ministry of Health. The day-to-day work was done by a Task Team led by the Director of Policy, Planning, Monitoring and Evaluation (PPME) under the leadership of the Multi-Sectoral Technical Working Group (MSTWG). This document was developed around activities of the MSTWG that led to the production of new evidence retrieved from the analysis of available publications and secondary data on this topic.

This strategy was developed through evidence-based and extensive participatory processes involving reviews of relevant documents, consultations, and dialogue with stakeholders in the trans fatty acid space. Other stakeholders in other sectors included development partners, private sector, academia and research community and civil society organizations.



# STRATEGY POLICY AND LEGAL CONTEXTS

This National Trans Fatty Acids (TFAs) Elimination Strategy acknowledges several global, regional, and national compacts and policy frameworks, and supports the broader health sector vision of ensuring a healthy population for national development.

#### 2.1 Global Context

S/N	POLICY/LEGAL FRAMEWORKS	ALIGNMENT
1	Sustainable Development Goals (SDGs)	Goal 3: Ensuring healthy lives and promoting well-being for all at all ages.  Target 3.4: Reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
		<b>Target 3.8:</b> Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all
2	World Health Assembly- Global Strategy for Health for All by 2000 (Resolution 32.30)	Elaborates the WHO global strategy for extending health care coverage in keeping with the basic right of all humans to enjoy the many benefits of health, economic productivity, and social activity made possible by advances in medical knowledge.
3	2018 Astana Kazakhstan Declarations on Primary Health Care	The declaration aims to refocus efforts on primary health care to ensure that everyone everywhere can enjoy the highest possible attainable standard of health

S/N	POLICY/LEGAL FRAMEWORKS	ALIGNMENT
4	WHO REPLACE Action Package (2018)	<ul> <li>WHO recommends limiting industrially produced trans-fat content in all foods to 2% of fats and a mandatory national ban on the production or use PHOs as an ingredient in all foods.</li> <li>Aimed at eliminating iTFA from the global food supply by 2023:</li> <li>Review dietary sources of industrially produced transfat and the landscape for required policy change.</li> <li>Promote the replacement of industrially produced transfat with healthier fats and oils,</li> <li>Legislate or enact regulatory actions to eliminate industrially produced transfat,</li> <li>Assess and monitor transfat content in the food supply and changes in transfat consumption in the population,</li> <li>Create awareness of the negative health impact of transfat among policymakers, producers, suppliers, and the public</li> <li>Enforce compliance with policies and regulations.</li> </ul>
5	Global NCD Compact (2020 – 2030)	The Compact aims to align countries around scaled-up commitments and action on the prevention and control of NCDs essential to achieving both UHC and other health-related Sustainable Development Goals
6	Global Convention on Healthy Diets (2014)	The objective of this Convention and its protocols is to protect current and future generations from avoidable, diet-related ill health by providing a health promoting food environment through a framework of dietary protection and promotion measures, to be implemented by the Parties at the national, regional and international levels in order to reduce continually and substantially the prevalence of diet-related disease
7	WHO Global Strategy on Diet, Physical Activity and Health", adopted in 2004 by the World Health Assembly.	Call on governments, WHO, international partners, the private sector, and civil society to act at global, regional, and local levels to support healthy diets and physical activity.
8	WHA, 2010: Set of Recommendations on the Marketing of Foods and Non- alcoholic Beverages to Children	A guide to countries in designing new policies and improving existing ones to reduce the impact of the marketing of foods and non-alcoholic beverages to children.
9	WHO certification Programme for TFA elimination (2020)	Aims to accelerate progress towards the 2023 goal for global elimination of TFA by recognizing countries that have eliminated iTFA from their national food supplies.

S/N	POLICY/LEGAL FRAMEWORKS	ALIGNMENT
	African Region	
10	Africa Agenda 2063: "The Africa We Want"	Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future. It is the continent's strategic framework that aims to deliver on its goal for inclusive and sustainable development.
		Specifically on health, it seeks to ensure healthy and well-nourished citizens: "By 2063, every citizen will have full access to affordable and quality health care services".
11	The African Health Strategy (2016-2030)	Advocates and promotes Member States action to prioritize and invest in specific social determinants of health through better inter-sectorial collaboration highlights the central importance of health systems strengthening priorities, calls for better leveraging of community strengths, public-private, and other partnerships.
12	The Africa Health Transformation Agenda (2015-2020)	It provides a vision for universal health coverage and is the strategic framework that will guide WHO's contribution to the emerging sustainable development platform in Africa.
13	The Ouagadougou Declaration on PHC and Health System 2008.	Lays emphasis on Community Ownership and Participation; And Partnerships for Health Development; and Research for Health in the context of Africa.
14	The Accra Declaration on Universal Health Coverage, 2022	Ensure that health services cover the whole spectrum of promotive, preventive, curative, rehabilitative, and palliative care.

#### 2.2 National Context

This Strategy also derives inspiration from *Article 34 (2)* of the 1992 Constitution of the Republic of Ghana-*Directive Principles of State Policy* amongst others requires the state to ensure, the realization of the right to good health care which includes the right to healthy living. It further recognizes some other key national policy, legal and strategic frameworks including:

S/N	FRAMEWORK	ALIGNMENT
1	Coordinated Program of Economic and Social Development Policies (2021-2025)	Current efforts by the Regenerative Health and Nutrition programme of the Ministry of Health and the Health Promotion Units to increase public education on nutrition will be intensified and the messages appropriately targeted to specific population groups. In particular, the Ministry will undertake food literacy campaigns to promote the consumption of locally produced nutritious foods.
2	National Health Policy (2020)	Promote Healthy Eating: A healthy food environment and improved nutritional knowledge that enables people to adopt and maintain healthy dietary practices throughout their lifespan will be promoted.
3	Universal Health Coverage Roadmap for Ghana (2020 – 2030)	UHC for Ghana: "All people in Ghana have timely access to high-quality health services irrespective of ability to pay the point of use".  Promotive Services: Will among others, create awareness on regular medical check-ups, healthy eating, physical activity, and wellbeing.
4	Health Sector Medium-Term Development Plan (2022 – 2025)	Institutionalize reforms for sector effectiveness Establish sustainable programmes for the prevention, screening, and early detection of NCDs, including cancers
5	National Policy on Non- communicable Diseases (2022) and Costed Strategic Action Plan (2022-2026)	Diet and Nutrition: The policy seeks to ensure optimal nutrition and health of all persons living in Ghana to reduce the burden of NCDs in Ghana. This will focus on healthy dietary choices to prevent NCDs and improve nutrition among persons living with NCDs. The legal regime for nutrition in Ghana to prevent NCDs will be strengthened and will include regulation of the labelling, promotion, sale, and advertisement of food and drinks including sugar-sweetened beverages, saturated fatty acids/trans fats and salt.
6.	National Nutrition Policy, 2016	The National Nutrition Policy (NNP) of Ghana aims to ensure optimal nutrition and health for all people living in Ghana to enhance capacity for sustainable economic growth and development.

S/N	FRAMEWORK	ALIGNMENT
7	National Food Safety Policy (2022) and Costed Strategic Action Plan (2022-2026)	<ul> <li>Objective 3: To promote and ensure harmonization, synergy, and enforcement of laws and regulations on food safety in Ghana.</li> <li>Establish measures to improve enforcement of legislation and regulations on food safety.</li> <li>Recommend amendments when necessary to existing laws to be consistent with national and international best practices.</li> <li>Identify other priority areas for action and the drafting of the necessary legislation.</li> </ul>
8	National Food Safety Emergency Response Plan (2022)	The purpose of this FoSERP is to provide for a coordinated and consistent inter-agency approach to prepare for, prevent, protect against, mitigate, respond to, and recover from (food) emergencies.
9	Essential Health Service Package (2022)	Prevention and Management of NCDs: The prevention and control of some of the major non-communicable diseases in Ghana are considered with listed services and interventions aimed at reducing the occurrence and adverse effects of obesity, hypercholesterolemia, hypertension, diabetes, cardiovascular diseases, chronic respiratory diseases, and cancers, among others. Modifiable risk factors such as tobacco use, physical inactivity, unhealthy diet, and the harmful use of alcohol are also addressed.
10	Civil Service Act, 1993, PNDCL 327	Mandates all Ministries (and for this matter the Ministry of Health) to initiate and formulate policy options for the consideration of Government.
11	Public Health Act, 2012, Act 851	Non-communicable disease: Part One (18): The Ministry of Health, the Veterinary Services Department, and other relevant organizations shall educate the public on non-communicable diseases and provide facilities for screening, early detection, and management of non-communicable diseases and for the promotion of public health.  Article 107 - 2 and 3 of the Public Health Act empowers the FDA to determine what constituents can be used to fortify foods.
12	Ghana Health Service and Teaching Hospitals Act, 1996, Act 585	Established the Public Health Division of the Ghana Health Service to lead the implementation of public health interventions (including NCDs).

S/N	FRAMEWORK	ALIGNMENT
13	Excise Duty Amendment Act, 2023 (Act 1093)	The first schedule of the Excise Duty Act, 2014 has been amended to increase the excise duty charged on specific goods such as cigarettes and tobacco products, wine, malt drinks, etc. produced locally or imported into the country
14	National Guidelines for the Management of Cardiovascular Diseases (2019)	This document has been developed to capture all recommended approaches and necessary information for clinicians and other healthcare workers on CVDs. It also serves as a practical guide for assessing and managing the most important CVDs prevalent in Ghana and can be used at all levels of care namely health facilities without a doctor; with a general practitioner and with a physician specialist.
15	Ghana Codex Alimentarius	Ghana aligns with the collection of internationally recognized standards, codes of practice, guidelines, and other recommendations relating to food, food production, and food safety.
16	National Food Based Dietary Guidelines	These guidelines aim to promote healthy eating habits and lifestyles among Ghanaians by recommending amongst others eating a variety of foods including healthy fats
17	Local Government Food Safety Guidelines	The local government food safety guidelines incudes by-laws to protect consumer health.

# 2.3 Vision, Mission, and Goal

#### 2.3.1 Vision of MoH

A healthy population for national development.

#### 2.3.2 Mission

To contribute to a healthy population for national development by eliminating TFA from the food supply system through policy development and a strong regulatory environment.

#### 2.3.2 Goal

To protect heart-health of all people living in Ghana by eliminating TFA in the food supply.

# 2.3.4 Guiding Principles

The following are the guiding principles of this strategy:

- 1. Equity
- 2. Primary Prevention
- 3. Rule of Law

- 4. Person-centeredness
- 5. Partnerships and collaborations
- 6. Transparency, Accountability and Trust
- 7. Confidentiality

# **Equity**

This strategy recognizes that all people in Ghana must have a fair and just opportunity to attain the highest level of health.

# **Primary Prevention**

This strategy recognizes the need to take actions aimed at avoiding the manifestation of a disease and thus ascribes to performing actions to improve health through the provision of information and education on behavioural and medical health risks associated with diet and nutrition.

#### Rule of Law

This strategy recognizes that the rule of law is a key mechanism through which behaviours and prejudices can be transformed into well-being among populations.

#### **Person-centeredness**

The strategy will respond to the unique requirements of identified (targeted) groups such as persons living with NCDs.

# **Partnerships and Collaboration**

The strategy recognizes partnerships and collaboration with all institutions in all its forms towards the elimination of TFAs for better quality of life.

# Transparency, Accountability and Trust

There should be transparency in information sharing among key implementing institutions.

Open discussions among stakeholders and the monitoring and evaluation process put in place during the implementation process.

# Confidentiality

Confidentiality will play a critical role in the implementation of this strategy to maintain trust amongst all stakeholders. Upholding confidentiality will ensure that industry and individual privacy are respected. It will also prevent information misuse and will support autonomous decision-making.



# STRATEGIC OBJECTIVES AND INTERVENTIONS

The objectives of the national strategy for the elimination of TFAs from Ghana's food supply system are as follows:

- 1. To reduce the impact of trans fatty acids on public health.
- 2. To ensure sustainable financing for TFA activities.
- 3. To strengthen monitoring and enforcement mechanisms.

# 3.1 Strategic Objective 1: To reduce the impact of TFAs on Public Health

# 3.1.1 Strategic Intervention

- a. Enhance public awareness, advocacy and education on the negative impact of TFAs.
- b. Develop and implement legislation for TFA restriction.
- c. Collaborate and partner with key industry players to encourage reformulation, reduction and replacement of TFAs.
- d. Establish incentives and recognition programs for food manufacturers that successfully reduce trans fats from their products.

# 3.2 Strategic Objective 2: Ensure Sustainable Financing for TFA Activities

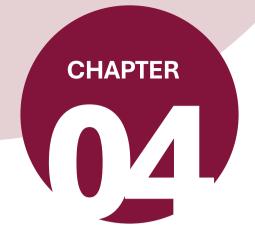
#### 3.2.1 Strategic Interventions

- a. Conduct resource mapping and costing for the implementation of TFA activities.
- b. Establish PPP arrangements to mobilize resources.
- c. Advocate for government budget allocation for TFA activities.

# 3.3 Strategic Objective 3: Strengthen Monitoring and Enforcement Mechanisms

#### 3.3.1 Strategic Interventions

- a. Establish collaboration for research and development of trans fat-free alternatives.
- b. Establish a robust monitoring system to track trans-fat levels in food products.
- c. Strengthen regulatory capacity of relevant institutions and enforcement mechanisms on trans-fat regulations.
- d. Create an enabling environment for data/information sharing on TFAs.
- e. Enhance food labelling in line with established standards.



# STRATEGY IMPLEMENTATION FRAMEWORK

Ghana has a single food regulator Food and Drug Authority (FDA) with authority to limit unhealthy compounds, such as trans-fat. However, multiple government bodies might also share regulatory responsibility for different phases of the food supply chain.

# 4.1 Implementation Arrangement

The implementation arrangement for this strategy is designed to ensure that there is effective coordination, collaboration, and harmonization of efforts of all stakeholders involved in food safety space. Below are the detailed roles of relevant institutions.

# 4.1.1 Ministry of Health

The Ministry of Health shall have oversight responsibility over the full implementation of this strategy. The Ministry will enact and implement regulation (ie iTFA limit of 2g per 100g fat in all foods or a ban of partially hydrogenated oils (PHO) for TFA elimination and mobilize resources for effective Strategic implementation as well as conduct monitoring & evaluation of this strategy. The Ministry shall work with food manufacturers to ensure iTFA is replaced with healthier fats – ideally polyunsaturated (healthiest) or monounsaturated fats and oils.

The Ministry shall embed iTFA elimination into a broader policy approach addressing CVD and other NCDs by adopting complementary nutrition and health policy measures.

#### 4.1.2 Ministry of Finance

The Ministry of Finance in Ghana plays a crucial role in the elimination of trans fats through the enactment of policies aimed at reducing the impact of marketing foods high in trans-fatty acids. The WHO's REPLACE initiative aims to eliminate industrial trans fats by 2023, emphasizing the importance of healthier fat options like olive, soybean, or canola oil. The Ministry of Finance's involvement in funding and supporting these initiatives is essential for the successful implementation of policies aimed at reducing trans-fat intake and improving public health outcomes.

#### 4.1.3 Ministry of Food and Agriculture

The Ministry of Food and Agriculture (MoFA) is the lead agency and focal point of the Government of Ghana, responsible for developing and executing policies and strategies for the agriculture sector within the context of a coordinated national socio-economic growth and development agenda. MoFA has oversight responsibility of the Livestock sub-sector of Ghana, thus playing a key role in the One Health agenda. It seeks to undertake the following:

- Solicit for funding and collaboration with research institutions and scientists to advance one health agenda.
- Collaborates with various research institutions and universities internally and externally to harness scientific knowledge and expertise in animal health and livestock management.
- Contribute to capacity-building efforts, including training in animal science in modern techniques, pest control, and animal husbandry practices based on scientific principles.

#### 4.1.4 Ministry of Trade and Industry

The Ministry is the lead policy advisor to government on trade, industrial and private sector development. The Ministry is responsible for the formulation and implementation of policies for the promotion, growth and development of domestic and international trade and industry. The Ministry ensures that Ghana derives maximum benefit from international trade relations and that domestic trade is conducted in a smooth and orderly manner. In line with its mandate, the Ministry of Trade and Industry shall notify the World Trade Organization and trading partners about the intention to ban or eliminate TFA from Ghana's food supply system.

# 4.1.5 Ministry of Fisheries and Aquaculture

The Ministry of Fisheries plays a crucial role in preventing Non-Communicable Diseases (NCDs) by contributing to improved nutrition and health outcomes through fisheries management. The Ministry shall address the dietary contributors to NCDs and support the sustainable management of aquatic resources. The Ministry of Fisheries shall play a critical role in the elimination of Trans Fatty Acids (TFAs) by enforcing policies that limit or ban the use of PHOs and promoting the adoption of healthier fats and oils.

# 4.1.6 Ministry of Environment, Science, Technology, and Innovation

The Ministry of Environment, Science, Technology, and Innovation shall leverage its expertise in science, technology, and innovation to develop and implement effective prevention and control strategies to support the elimination of TFA from Ghana's food supply system.

# 4.1.7 Ministry of Information

The Ministry of Information, in collaboration with other ministries shall sensitize key stakeholder ministries and the public on the harmful effects of consuming foods containing trans-fatty acids.

#### 4.1.8 Other Relevant Ministries, Departments and Agencies

The MoH will collaborate with other Ministries, Departments, and Agencies whose mandates are directly or indirectly related to genomic surveillance aside the Ministries mentioned above. The matrix below gives a detailed description of the roles and responsibilities some of the implementing institutions.

#### 4.2 Roadmap to implementation

A stepwise approach will be applied towards TFA elimination in Ghana beginning with stakeholder engagements, advocacy and gradually achieving PHO ban in Ghana.

Regulatory measures to eliminate TFA will go into effect as early as possible, while also giving food producers time to test and reformulate products, acquire new supply lines and renegotiate contracts, redesign, and produce new labels, and exhaust existing stock.

An effective date following the enactment of the necessary regulations will be provided as a transition period. The Ministry of Health in promoting compliance shall inform stakeholders about the strategy. Industry stakeholders shall be required to share technical knowledge and reformulation challenges during this process.

#### 4.3 Resource Mobilization

The mobilization of the requisite resources is key for the effective implementation of this strategy. These resources include financial, logistics and human resources. It will be the responsibility of the MoH to work closely with stakeholders to mobilize resources from both local and international organizations to implement this Strategy.

Financing options will include:

- GoG Budgetary Support;
- 2. Internally Generated Funds (IGF);
- 3. Development Partner(s) Support;
- 4. Corporate Bodies;
- 5. Civil Society Organizations (CSOs);
- 6. Non-Governmental Organizations (NGOs);
- 7. Public Private Partnerships (PPP) Arrangements and
- 8. Others

# 4.4 Roles of key stakeholders

The MSTWG consisting of all relevant implementation and enforcement agencies will continue to coordinate the implementation and enforcement of this strategy. Ideally, the MSTWG through the Policy Planning Monitoring and Evaluation Directorate of the Ministry of Health will:

- a. serve as focal point on TFA nationally.
- b. coordinate implementation actions, advise on strengthening enforcement, provide guidance on appeals against enforcement actions)
- c. establish effective coordination mechanisms for the implementation and enforcement of trans fats policies. This collaboration can facilitate information sharing, capacity building, and joint enforcement efforts.

#### 4.4.1 Academia and Research Institutions

Academia and research institutions will support the implementation of the strategy by:

- a. providing technical guidance and input to the drafting and revision of this strategy to ensure alignment with global best practices outlined in the WHO REPLACE action package.
- b. conducting research on NCD burden and TFA consumption in Ghana.
- c. developing nutrition education messages on TFA elimination.
- d. supporting the testing capacities of regulatory agencies and industries.
- e. supporting the CSO in advocacy on TFA elimination.
- f. monitoring and evaluating the implementation of all activities and recommendations of this strategy.

#### 4.4.2 Foods and Drugs Authority (FDA)

The **FDA** will support the implementation of the strategy by:

- a. monitoring the compliance of food businesses with trans fats policies. This can involve conducting inspections, audits, and sample testing to ensure that products meet the required standards.
- b. initiating lawsuits and seeking appropriate penalties/ fines for violations of any regulation by importers and producers/ manufacturers as mandated by the Public Health Act.
- c. Employ regulatory measures to punish industries and companies who repeatedly violate the rules.
- d. Ensuring supervision of reformulation of food products and processes align with this strategy.
- e. initiating an amendment of TFA related regulation if new scientific and independent evidence and international nutrition guidance changes on recommended limits of industrially produced trans-fatty acids in food products.
- f. meeting with industry (i.e. small- and medium-scale industries) to discuss the need for reformulation of food products and processes to align with the strategy.
- g. establishing, convening, and chairing a multi-agency coordination group for the implementation and enforcement of this strategy.
- h. providing data on industrially processed TFAs in foods in all settings in Ghana
- i. providing data on the use of PHO as an ingredient in all foods from small and medium scale industries in all settings in Ghana.

# 4.4.3 Ghana Standards Authority (GSA)

The **GSA** will support the implementation of the strategy by:

- a. developing and reviewing food standards to include TFA specifications.
- b. testing TFA levels in foods, fats, and oils at regular intervals to assess compliance with the regulation by food manufacturers.
- c. adapting and implementing additional policies, standards, decrees, orders, and guidelines to implement and enforce this strategy.
- d. inspecting and investigating facilities and products for compliance with the strategy.

# 4.4.4 Ghana Revenue Authority (GRA)

The **GRA** will support the implementation of the strategy by:

- a. providing data on imports of fats and oils and PHO
- b. support implementing tax measures that encourage the reduction or elimination of TFAs in food products. For instance, they can levy higher taxes on products containing TFAs or provide tax

- incentives for companies that produce healthier alternatives.
- c. can enforce strict regulations and customs procedures to monitor and control the importation of food products containing TFAs. This includes ensuring compliance with trans fats limits and restrictions set by the government.

#### 4.4.5 Ghana Health Service (GHS)

The **GHS** will support the implementation of the strategy by:

- a. training healthcare workers to educate the public on health food choices and NCDs
- b. developing public education materials on TFA elimination and NCDs risk
- c. lobbying for an allocation of the targeted taxes for the management of CVDs/NCDs

#### 4.4.6 Civil Society Organizations (CSOs)

The **CSOs** (ie. INSLA, Consumer Protection Agency, etc) will support the implementation of the Strategy by:

- a. engaging with key stakeholders in government (ie. office of the president, parliament, Ministry of Health, and Consumer Protection Commission) to ensure that TFA is a priority for all stakeholders.
- b. building a community of journalists dedicated to in-depth reporting of TFA and other NCD- related issues, and deploying proven media advocacy tools and approaches to create awareness among the public, as well as policy- makers and decision-makers
- c. establishing a community of practice in Ghana on TFA and PHO, including academia, technical and public health experts, CSOs and government
- d. proactively monitoring the industry and developing effective messaging to counter opposition to the TFA regulation
- e. Call out, challenge and counter food industry opposition to iTFA regulation and other cost-effective nutrition policy measures.
- f. Support governments in the development and adoption of iTFA regulation, and once enacted, hold governments to account for effective implementation, monitoring and enforcement.
- g. contribute to public awareness campaigns by disseminating information about the health risks associated with trans fats and the importance of complying with policies aimed at their reduction. This can help educate both businesses and consumers on the need to choose healthier alternatives.

#### 4.4.7 Donor/ International Partners

The donor/international partners will support the implementation of the strategy by:

- a. equipping the capacity of regulatory agencies to monitor the implementation of this strategy.
- b. strengthening the testing capacity of laboratories to test TFA levels in foods, fats and oils.
- c. providing financial support for the monitoring & evaluation of this strategy.

# 4.4.8 Food & Hospitality Industries/ Importers / And Other Service Providers in the TFA Value Chain

The food and hospitality industries/importers and other service providers in the TFA value chain will support the implementation of the strategy by:

- a. reformulation of food products and processes to align with this strategy.
- b. avoiding the imports and exports of foods, fats and oils and PHO exceeding the TFA limit.
- c. constantly engaging with FDA, GSA and GRA to ensure compliance to this strategy.

# 4.5 Roles and Responsibility Matrix

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
Objective 1: Reduce the impact of trans fatty acids on public health.	Enhance public awareness, advocacy and education on the negative impact of TFAs.	Develop materials and resources to promote informed food choices and alternatives to trans fats.  Collaborate with health professionals to raise awareness of the health risks associated with trans fats.  Incorporate nutrition education programs into school curricula to teach children about healthy eating and the dangers of trans fats.  Collaborate with media outlets to disseminate information about trans fats and healthy cooking oil use practices.  Engage with community organizations,  Community/traditional leaders, NGOs and health professionals to conduct workshops and seminars on trans fats and healthier food options.	МоН	Mol, NCCE, Media, GHS (NCDCP, HPD), MoE, CSOs. NGOs in Health, MoFA, Food Industry Players, FDA, GSA, GMA, GAND, GES (Ex. SHEP), MoGCSP, GSFSGIBA (Ghana Independent Broadcasters Association), Parliament, Academia and Research Institutions, Attorney General's Department, Ministry of Environment Science, Technology and Innovation, Centre for Scientific and Industrial Research, Association of Ghana Industries, Food and Hospitality Industries, Food Vendors, Ghana Hoteliers Association and others

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
	Develop and implement legislation for TFA restriction.	Conduct of legal landscape assessment Set up a core (legal) team for the initial drafting of legislation Draft initial TFA legislation Organize stakeholder meetings Transmit TFA Bill to the Office of the Attorney-General (A-G) For legislative drafting. Transmit Bill to Cabinet and Parliament for approval. Meet the Parliamentary Select Committee on Health and Subsidiary Legislation Committee of Parliament Gazette and disseminate TFA legislation		

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
	Collaborate and partner with key industry players to encourage reformulation, reduction and replacement of	Provide guidance and resources to key industry players on how to reformulate, reduce, and replace trans-fat content  Develop guidelines		
TFAs.	TFAs.	on the levels of TFAs in foods and how to accurately measure and label trans-fat content		
		Encourage industry associations to develop voluntary commitments or codes of practice for trans-fat reduction		
		Develop educational materials and resources on TFA elimination		
		Organize capacity building workshops for food manufacturers		
	Establish incentives and recognition programs for food manufacturers that successfully reduce trans fats from their products.	Identify incentive and recognition program for food manufacturers  Organize an annual TFA elimination conference		

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
2: Ensure Sustainable Financing for Trans Fatty Acids Activities	Conduct resource Mapping and Costing for Implementation of TFA Activities	Undertake costing of the TFA strategy Identify potential development partners/ funders to support TFA elimination activities.	МоН	MoF, FDA, Private Sector, Academia, Development Partners, CSOs, NGOs in Health, Food Industry Players, Media, NaNuPACC (National Nutrition Partners Coordinating Committee) and others
	Establish PPP arrangements to mobilize resources.	Develop a resource mobilization strategy for TFA elimination  Create a profile of key private sector players with interest in TFA elimination and the sectors' common shared values  Advocate for private sector support towards TFA elimination		
	Advocate for government budget allocation for TFA activities.	Organize media engagements Organize meetings with key government agencies Develop an investment case for TFA elimination in Ghana Participate in strategic government budget discussions		

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
Objective 3: Strengthen Monitoring and Enforcement Mechanisms	Establish collaboration for research and development of trans-fat-free alternatives.	Conduct national representative baseline survey to determine TFA levels in commonly consumed foods in Ghana that are potential sources of TFA.  Conduct comprehensive research and analysis on the health impacts of trans fats.  Engage with food manufacturers, industry associations, and consumer groups to establish partnerships for transfat reduction.  Create platforms for knowledge sharing and collaboration among stakeholders.  Provide financial incentives or grants to support research and development of transfat-free alternatives.	FDA and GSA	MoH, Academia/ Research Institutions, CUSTOMS, FDA, Ghana Standard Ministry of Justice and Attorney General, CSOs/ CSO, Authority, GHS, MoFA, GRA, MOTI, GIPC, Ghana Free Zones Board, EXIM Bank, Agric Development Bank, Academia, Ministry of Foreign Affairs, Ministry of Interior (GPS), Ghana Export Promotion Authority, Consumer Protection Agency, and others

Strategic Objectives	Strategic Interventions	Activities	Responsibility	
			Lead MDA	Collaborators
	Establish a robust monitoring system to track transfat levels in food products.	Set science-based targets for reducing trans-fat consumption Establish a surveillance system to track TFA levels in food products, including imported items.  Conduct regular inspections and testing to ensure compliance with trans-fat regulations.		
	Strengthen regulatory capacity of relevant institutions and enforcement mechanisms on trans-fat regulations.	Organize capacity building workshops for relevant institutions Impose penalties or sanctions for non- compliance. Assess existing TFA enforcement mechanisms Enhance national laboratory testing capacity for TFA (equipment, reagents etc)		
	Create an enabling environment for data/information sharing on TFAs.	Create platforms for knowledge and data sharing among stakeholders.  Provide incentives for data/information sharing on TFAs.		

Strategic Objectives	Strategic Interventions	Activities	Responsi	bility
			Lead MDA	Collaborators
	Enhance food labelling in line with established standards.	Mandate clear and accurate labelling of trans fat content on food packaging.  Provide guidance and resources to food manufacturers on how to accurately measure and label trans-fat content.  Conduct regular inspections and testing to ensure compliance with labelling regulations.  Educate consumers about how to interpret food labels and make	MDA	
		healthier choices		



## MONITORING AND EVALUATION

The MoH in collaboration with its stakeholders shall undertake periodic Monitoring and Evaluation of the implementation of the objectives and interventions contained in this document. This is to ensure adherence to the demands of the strategy and facilitate review when necessary. This is also to determine how much progress is being made toward the attainment of the goal of this strategy.

Monitoring and Evaluation will be done using appropriate frameworks (**Appendix 1**) and structures of the Ministry of Health. There will be regular information sharing and feedback among all stakeholders regarding the progress of the implementation of the strategy.

#### 5.1 Review of the Strategy

This may be done periodically or within a certain reasonable time-period that takes into consideration, the nature, scope and time frame of the strategy.

# 5.2 Monitoring and Evaluation Framework

Strategic Objective	Strategies	Indicator	Baseline	Target	Timeline	Responsibility Lead MDA/ Organization	Collabora- tors	Means of Verification
1: Reduce the impact of TFA on public health	Enhance public awareness, advocacy and education on the negative impact of TFAs.	Number of awareness, advocacy and education programmes undertaken	Not known	12 (2 per year)	2030	H O V	Relevant Agencies/ Institutions	Awareness, advocacy and education programmes report
	Develop and implement legistation for TFA restriction.	Legislation for TFA restriction developed and implemented	No existing legislation for TFA restriction	Legislation for TFA restriction developed by 2025	2025	МоМ	Relevant Agencies/ Institutions	TFA Legislation
	Collaborate and partner with key industry players to encourage reformulation, reduction, and replacement of TFAs.	Percentage of identified stakeholders collaborated and partnered with Number of collaborations undertaken	Not known	100% At least 2 per year	2030	ΗοΣ	Relevant Agencies/ Institutions	Stakeholder engagement reports
		Percentage of targeted food manufacturers trained and supported to eliminate trans-fat acids.	Not readily available	%08	2030	ΗοΣ	Relevant Agencies/ Institutions	Training/ capacity building reports

	Establish incentives and recognition programs for food manufacturers that successfully reduce trans fats from their products.	Incentives and recognition programs for food manufacturers established Percentage of food manufacturers that have trans fats from reduced from their products	Not known Not readily available	Incentives and recognition programs for food manufacturers established by 2026	2026	Нο	Relevant Agencies/ Institutions	Monitoring reports
2: Ensure Sustainable Financing for TFA Activities	Conduct resource mapping and costing for the implementation of TFA activities.	Resource mapping and costing for implementation of TFA activities conducted.		Resource mapping and costing for implementation of TFA activities conducted by 2025	2025	Ном	Relevant Agencies/ Institutions	Resource mapping and costing report
	Establish PPP arrangement to mobilize resources.	PPP arrangement to mobilize resources established		PPP arrangement to mobilize resources established by 2026	2026	Ном	Relevant Agencies/ Institutions	Monitoring reports
	Advocate for government budget allocation for TFA activities.	GoG allocation for TFA activities included in the health budget Percentage of TFA activity budget released to implementing	None	GoG allocation for TFA activities included in the health budget by 2025	2025	Ном	Relevant Agencies/ Institutions	Health Budget Monitoring reports

3. Strengthen Monitoring and Enforcement Mechanisms	Establish collaboration for research and development of trans fat-free alternatives.	Percentage of identified stakeholders collaborated/ partnered with for research and development of TFA free alternatives	Not known	70%	2030	НοΣ	Relevant Agencies/ Institutions	Monitoring reports
,	Establish a robust monitoring system to track trans-fat levels in food products.	M&E system for monitoring implementation of the TFA activities established	None	M&E system for monitoring implementation of the TFA activities established by 2025	2025	Ном	Relevant Agencies/ Institutions	Monitoring reports
	Strengthen regulatory capacity of relevant institutions and enforcement mechanisms on trans-fat regulations.	Number of capacity building activities for relevant regulatory agencies undertaken Percentage of targeted regulatory agencies that received training and other resources.	Not known	6 (2 per year) 100%	2027	МоН	Relevant Agencies/ Institutions	Monitoring reports
,	Create an enabling environment for data/information sharing on TFAs.	Number of stakeholder forum/ conference on TFAs organized to share information	None	6 (1 per year)	2030	МоН	Relevant Agencies/ Institutions	Monitoring and annual reports
	Enhance food labelling in line with established standards.	Percentage of identified food products labelled in line with established standards	Not known	70%	2030	МоМ	Relevant Agencies/ Institutions	Monitoring reports



## COMMUNICATION AND STRATEGY DISSEMINATION

Health communication will form a major component of the implementation of this strategy, and it will serve as a major driver to motivate and inspire all implementing stakeholders to achieve the desired objectives. The dissemination process will ensure that the key stakeholders and partners understand the tenets of the document as well as have a buy-in. It will further create awareness, empower the population, and generate population interest in Trans Fatty Acids and its impact on health.

The communication plan will be activated within the existing structures of the health sector in close collaboration with relevant stakeholders (NGOs, CSOs, Medica, DPs, Academia, etc.). Communication planning and programming will be led and coordinated by the Public Health and Health Promotion Unit of the MoH with the Health Promotion Division of the GHS leading its implementation.

- The following existing systems and structures shall therefore be leveraged for the dissemination of the Strategy.
- The Inter-Agency Leadership Committee (IALC)
- The Health Sector Working Group (HSWG) meetings.
- Business Meetings
- Annual Health Summit
- Decentralized Level Dialogue

#### **Annual Policy Dialogue**

The Ministry of Information (MoI), the National Commission for Civic Education (NCCE) and the Information Services Department will also play a part in disseminating the Strategy.

#### 6.1 Audience

- Ministry of Health and its Agencies
- Ministries, Departments, and Agencies
- Civil Society and Non-State Actors
- Industry Players
- Development Partners
- Parliamentary Select Committees on Finance and Health
- The coalition of NGOs/CSOs in Health
- The Media
- Others

#### 6.2 Objective

- The objectives of the communication strategy are to:
- Seek ownership and buy-in from all stakeholders for the smooth implementation of the strategy.
- Inform and assure the public of the government's commitment to protecting the population from the harmful effects of trans fats.
- Sensitize stakeholders on their roles and responsibilities.

Sensitize stakeholders on the institutional and implementation arrangement of the strategy.

# Appendix 1: Costing of Strategy

Strategic Objectives, Strategy and Key Activities	TOTAL (GHC) Lead	Lead
Strategic Objective 1: Reduce the impact of TFA on public health	4,865,250.00	
Strategy 1.1: Enhance public awareness, advocacy and education on the negative impact of TFAs.	629,500.00	
Activity 1.1.1: Develop materials and resources to promote informed food choices and alternatives to trans fats.	155,000.00	МоН
Activity 1.1.2: Collaborate with health professionals to raise awareness of the health risks associated with trans fats	42,000.00	МоН
Activity 1.1.3: Incorporate nutrition education programs into school curricula to teach children about healthy eating and the dangers of trans fats.	225,500.00 MoH	МоН
Activity 1.1.4: Collaborate with media outlets to disseminate information about trans fats and healthy cooking oil use practices	42,000.00	МоН
Activity 1.1.5: Engage with community organizations, community/traditional leaders, NGOs, and health professionals to conduct workshops and seminars on trans fats and healthier food options	165,000.00	МоН
Strategy 1.2: Develop and implement legislation for TFA restriction.	1,745,000.00	
Activity 1.2.1: Conduct of legal landscape assessment	330,000.00	МоН
Activity 1.2.2: Set up a core (legal) team for the initial drafting of legislation	35,000.00	МоН
Activity 1.2.3: Draft initial TFA legislation	330,000.00	МоН
Activity 1.2.4: Organize stakeholder meetings	250,000.00	МоН
Activity 1.2.5: Transmit TFA Bill to the Office of the Attorney-General (A-G) for legislative drafting	20,000.00	МоН
Activity 1.2.6: Transmit Bill to Cabinet and Parliament for approval.	20,000.00	МоН
Activity 1.2.7: Meet the Parliamentary Select Committee on Health and Subsidiary Legislation Committee of Parliament	750,000.00	МоН
Activity 1.2.8: Gazette and disseminate TFA legislation	10,000.00	МоН

Strategy 1.3: Collaborate and partner with key industry players to encourage reformulation, reduction and replacement of TFAs.	1,585,750.00	
Activity 1.3.1: Provide guidance and resources on how to reformulate, reduce, and replace trans-fat content	473,000.00	МоН
Activity 1.3.2: Encourage industry associations to develop voluntary commitments or codes of practice for trans-fat reduction	387,750.00	МоН
Activity 1.3.3: Develop educational materials and resources on TFA elimination	600,000.00	
Activity 1.3.4: Organize capacity building workshops for food manufacturers	125,000.00	
Strategy 1.4.: Strengthen capacity of food manufacturers to eliminate trans-fat acids.	905,000.00	
Activity 1.4.1: Identify incentive and recognition program for food manufacturers	80,000.00	МоН
Activity 1.4.2: Organize an annual TFA elimination conference	825,000.00	МоН
Strategic Objective 2: Ensure Sustainable Financing for TFA Activities	1,286,500.00	
Strategy 2.1: Conduct resource Mapping and Costing for Implementation of TFA Activities	382,000.00	
Activity 2.1.1: Undertake costing of the TFA strategy	320,000.00	МоН
Activity 2.1.2: Identify potential development partners/funders to support TFA elimination activities.	62,000.00	МоН
Strategy 2.2: Establish PPP arrangement to mobilize resources.	557,500.00	
Activity 2.2.1: Develop a resource mobilization strategy for TFA elimination	340,000.00	МоН
Activity 2.2.2: Create a profile of key private sector players with interest in TFA elimination and the sector's common shared values	55,000.00	МоН
Activity 2.2.3: Advocate for private sector support towards TFA elimination	162,500.00	МоН
Strategy 2.3: Advocate for government budget allocation for TFA activities.	347,000.00	
Activity 2.3.1: Organize media engagements	2,000.00	МоН
Activity 2.3.2: Organize meetings with key government agencies	75,000.00	МоН
Activity 2.3.3: Develop an investment case for TFA elimination in Ghana	220,000.00	МоН
Activity 2.3.4: Participate in strategic government budget discussions	<b>50,000.00</b> MoH	МоН

Strategic Objective 3: Strengthen Monitoring and Enforcement Mechanisms	5,515,000.00	
Strategy 3.1: Establish collaboration for research and development of trans fat-free alternatives.	3,910,000.00	
Activity 3.1.1: Conduct comprehensive research and analysis on the health impacts of trans fats.	400,000.00	МоН
Activity 3.1.2: Engage with food manufacturers, industry associations, and consumer groups to establish partnerships for trans-fat reduction.	440,000.00 MoH	МоН
Activity 3.1.3: Create platforms for knowledge sharing and collaboration among stakeholders.	455,000.00	МоН
Activity 3.1.4: Provide financial incentives or grants to support research and development of trans fat-free alternatives	795,000.00 MoH	МоН
Activity 3.1.5: Conduct national representative baseline survey to determine TFA levels in commonly consumed foods in Ghana that are potential sources of TFA.	1,820,000.00	
Strategy 3.2: Establish a robust monitoring system to track trans-fat levels in food products.	610,000.00	
Activity 3.2.1: Set science-based targets for reducing trans-fat consumption	40,000.00	МоН
Activity 3.2.2: Establish a surveillance system to track TFA levels in food products, including imported items.	10,000.00	МоН
Activity 3.2.3: Conduct regular inspections and testing to ensure compliance with trans-fat regulations	560,000.00	
Strategy 3.3: Strengthen regulatory capacity of relevant institutions and enforcement mechanisms on trans-fat regulations	285,500.00	
Activity 3.3.1: Organize capacity building workshops for relevant institutions	135,000.00	МоН
Activity 3.3.2: Impose penalties or sanctions for non-compliance	<b>5,000.00</b> MoH	МоН
Activity 3.3.3: Assess existing TFA enforcement mechanisms	83,000.00 MoH	МоН
Activity 3.3.4: Enhance national laboratory testing capacity for TFA (equipment, reagents etc)	<b>62,500.00</b> MoH	МоН

Strategy 3.4: Create an enabling environment for data/information sharing on TFAs.	70,000.00	
Activity 3.4.1: Create platforms for knowledge and data sharing among stakeholders.	40,000.00 MoH	МоН
Activity 3.4.2: Provide incentives for data/information sharing on TFAs.	30,000.00 MoH	МоН
Strategy 3.5: Enhance food labelling in line with established standards.	640,000.00	
Activity 3.5.1: Mandate clear and accurate labelling of trans fat content on food packaging	135,000.00 MoH	МоН
Activity 3.5.2: Develop guidelines on how to accurately measure and label trans-fat content.	265,000.00 MoH	МоН
Activity 3.5.3: Conduct regular inspections and testing to ensure compliance with labelling regulations	120,000.00 MoH	МоН
Activity 3.5.4: Educate consumers about how to interpret food labels and make healthier choices	120,000.00 MoH	МоН
GRAND TOTAL	11,666,750.00	

#### **Appendix 2:** List of Contributors

NO.	NAMES	ORGANIZATION
MoH Lead		
1	Hon. Dr. Bernard Okoe Boye	Minister for Health
2	Hon. Alexander Akwesi Acquah	Dep. Minister for Health
3	Hon. Adelaide Ntim	Dep. Minister for Health
4	Alhaji Hafiz Adam	Chief Director, Ministry of Health
5	Mrs Emma Ofori Agyemang	Director, PPME, Ministry of Health
Technical '	Working Group	
6	Dr. Mimi Darko	Food and Drugs Authority
7	Roderick Daddey Adjei	Food and Drugs Authority
8	Prof. Richmond Aryeetey	University of Ghana, School of Public Health
9	Gifty Aidoo	Food and Drugs Authority
10	Maureen Lartey	Food and Drugs Authority
11	Mr. Benjamin Nyakutsey	Ministry of Health
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21	Benjamin Anabila	INSLA
22	Benjamin Akoto	Consumer Protection Agency
23	Dr Yaw Opoku Boateng	National Health Insurance Authority
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25	Killicks A. Yeboah	Shoprite Ghana
26	Dr. Benjamin K. Mintah	Council for Scientific and Industrial Research, Food Research Institute
27	Kwame Larbi Siaw	Shoprite Ghana
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32	Dorcas Hushie	Ghana Education Service
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38	Alhaji Inua Yusif (Esq)	Ministry of Health

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