

# THE THREAT BEHIND THE FLAVOR: TRANS FATS AND THEIR HEALTH IMPACTS IN INDONESIA



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**ALLIANCE OF INDEPENDENT JOURNALISTS (AJI) INDONESIA  
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# Preface

## Alliance of Independent Journalists (AJI)

### Rethinking the “Just Being Full” Principle

Unhealthy foods are all around us, present at our fingertips through cheap street food, fried foods with bulk margarine, and products without nutritional labels widely available in small shops. Recent media reports have revealed a sad fact: high consumption of trans fat in society is directly linked to rising cases of heart disease, obesity, and diabetes in children.

Ministry of Health data indicates that cases of type 2 diabetes in children surged by 80 percent between 2010 and 2023, largely driven by obesity and unhealthy lifestyles. In a national survey between 2009 and 2012, 38 children were registered with type 2 diabetes, the majority of whom were diagnosed after the age of 10. This trend serves as a stark warning that unhealthy lifestyles—from consuming foods high in fat and sugar, to lack of physical activity, to inadequate nutrition education—have put our children at serious risk. The impact is not only on individual health but also on the economic burden on families and the nation due to high medical costs. Under these conditions, the adage “the most important thing is to be full” is no longer a relevant principle. In fact, everyone needs to be more critical of the food they consume.

Amid these challenges, journalists play a crucial role. Through data-based reporting and scientific research, they can voice real-life experiences, critique weak oversight, and convey expert recommendations to increase public awareness and encourage the government to strengthen healthy food policies. This book contains 10 journalistic articles focusing on trans fat. They are based on field findings, and of course, are imbued with a rigorous journalistic process, supported by four experienced mentors.

What makes this book special is that the coverage within it enriches our understanding that the issue of trans fatty acid consumption is not just a medical issue, but is also closely related to macroeconomics, fiscal policy, and the future of national development. These articles highlight numerous societal phenomena, ranging from lifestyles dependent on

convenient and inexpensive foods. For example, stories of fried food vendors claiming to use bulk margarine because it is much cheaper, to the widespread circulation of grocery stores and roadside stalls selling products without nutritional labels.

This lack of information makes it difficult for consumers to make healthy decisions, and the impact is most experienced by lower-middle-class children who rely on cheap, high-fat snacks for their daily diet. There are also reports highlighting the high incidence of diabetes in children. This article examines healthy canteens as an effort to reduce the rate of diabetes in children. It also examines how implementing healthy canteens in schools can educate children to adopt a healthy lifestyle. All these coverages are based on scientific research and interviews with several experts and stakeholders on the issue of trans fatty acids.

AJI would like to thank the head of Global Health Strategies (GHS) for supporting training and fellowships for journalists on this important issue. AJI also thanks the mentors, participants, and editors who made this book possible. May journalism become a bridge of knowledge, and the motto “the most important thing is to be full” or “as long as you’re full” is no longer justified.

Thank you.

***Nany Afrida***

President of The Alliance of Independent Journalists

# Preface

## Global Health Strategies (GHS)

Imagine: after dinner with the family, a father suddenly feels a tightness in his chest. As usual, that evening they had just enjoyed warm rice with crispy fried chicken, sweet martabak bought from just across their home, and some biscuits served as a snack. These simple dishes are familiar to many families in Indonesia—but without realizing it, some of them can contain trans fat, a dangerous substance that slowly damages heart health and increases the risk of cardiovascular disease.

Cardiovascular disease is now the largest disease burden and the leading cause of death in Indonesia. Each year, cardiovascular disease causes more than 19 million deaths worldwide, including 765,000 deaths in Indonesia. Yet, many of these cases can be prevented by controlling the risk of cardiovascular disease. One way of doing so is by creating a healthier food environment free from trans fat.

According to a 2024 study by the World Health Organization (WHO) in Indonesia, trans fat is still found in everyday foods such as shortening and margarine, processed foods like biscuits and wafers, and fast food snacks like martabak and roti maryam. Today, many countries, such as Singapore, Thailand, and India, have taken bold steps to eliminate industrial trans fat from their food systems. However, Indonesia still faces regulatory challenges and low public awareness, leaving millions of people vulnerable to the risks posed by trans fatty acids.

Global Health Strategies is committed to supporting the Indonesian government in strengthening public health protections, one of which is through its trans fatty acid elimination efforts. We work with policymakers, researchers, and civil society to build evidence, support regulatory strengthening, and raise awareness of the dangers of trans fat. This effort aims to reduce preventable deaths and create a healthier food environment for the community.

Journalists play a crucial role in this mission. Through their investigative work and narratives, journalists give voice to those most impacted by unhealthy food environments and promote accountability from various institutions. Collaborating with journalists ensures that complex public health issues—such as trans fat elimination—are not only discussed in policy circles but also understood by the wider community across the country.

We hope this book will serve as both a wake-up call and a source of inspiration. By presenting the stories behind the data and emphasizing the urgency of action, we believe this book can drive momentum for stronger policies and collective action. Together—with the government, media, civil society, and international partners—we can create a future where Indonesians are protected from the hidden dangers of trans fat and can enjoy healthier lives.

**Ganendra Awang Kristandya**

Director of Global Health Strategies

# INTRODUCTION

Excessive consumption of trans fatty acids (TFAs) is closely linked to an increased risk of heart attack and death from coronary heart disease. The WHO recommends that adults limit their consumption of trans fat to less than 1% of their total energy intake, or less than 2.2 g per day for a 2,000-calorie diet. The WHO calls for the elimination of industrial TFAs and has published the REPLACE framework for action to support countries in eliminating TFAs from their food supply.

In 2023, WHO Indonesia supported a study on sources of trans fatty acids in food, which measured the trans fat content in foods (fat/oil-based) widely consumed in Indonesia. This study supports the Indonesian government's efforts to eliminate industrial trans fat. A total of 130 food products from four categories were tested: foods containing fat and oils, margarine and spreads, packaged foods, and ready-to-eat foods.

The WHO study found: (1) 8.46% samples had high trans fat content (above the WHO recommended threshold of 2 g/100 g total fat). (2) High trans fat content is found in widely consumed products such as biscuits, wafers, cakes, pastries, and street snacks like martabak and roti maryam. (3) High trans fat content is also found in ingredients widely used to make cakes and bread, such as shortening and margarine and butter mixtures (both imported and domestic products). (4) 25% baked goods samples had high trans fat content. (5) The highest trans fat content was found in margarine and butter mixtures (imported products), namely 22.68 g ALT, or 10 times higher than the WHO threshold recommendation.

Based on this description, the follow-up that must be taken by Indonesia is to establish regulations to eliminate industrial trans fat by limiting trans fat content to 2% of the total fat content in all food products or prohibiting the production, use, sale, and import of partially hydrogenated oils (PHO). Without regulations to eliminate trans fat, Indonesia faces the risk of the influx of products high in trans fat, as manufacturers target markets where these products are still permitted.

In this context, journalists play a key role. They are not simply news providers, but public opinion shapers capable of influencing public attitudes and behavior. Journalists have been equipped with accurate data, strong narratives, and a deep understanding of the trans fatty acid issue to prepare them for field reporting.

The Alliance of Independent Journalists (AJI) Indonesia, along with Global Health Strategies, sees a strategic opportunity in building public opinion. Journalists participate in a series of training and mentoring sessions by experts such as WHO, the Ministry of Health, and academics to produce high-quality, in-depth coverage. Through training and scholarships, this initiative targets capacity building for journalists in Greater Jakarta (Jakarta, Bogor, Depok, Tangerang, and Bekasi). Furthermore, this reporting is expected to serve as recommendations for the government in formulating public policy.

This compilation of reporting provides extensive data and facts about lifestyles dependent on convenient and affordable foods. Stories of fried food vendors claiming to use bulk margarine because it's much cheaper, and grocery stores and roadside stalls selling products without nutritional labels, are widespread, due to a lack of exposure to the importance of food products with nutritional labels. This lack of information makes it difficult for consumers to make healthy decisions, and the impact is felt most acutely by lower-middle-class children who rely on cheap, high-fat snacks for their daily diet.

Other coverage highlights the dangers of excessive consumption of unhealthy fats, which not only cause heart disease but also have economic impacts, undermining the household finances of patients at both the microeconomic and macroeconomic levels. Another coverage highlights the high incidence of diabetes in children. This article examines healthy canteens as an effort to reduce the rate of diabetes in children. It also examines how implementing healthy canteens in schools can educate children about healthy lifestyles. All of this coverage is based on scientific research and interviews with several experts and stakeholders involved in the issue of trans fatty acids.

The issue of trans fatty acid consumption is often discussed from a medical or lifestyle perspective, but is still rarely addressed from a macroeconomic and fiscal policy perspective. With this approach, it is hoped that this book will provide a new perspective and contribute to increased public awareness and national food policy reform.

# Trans Fats Continue to Pose Risks in School Canteens

Author: Resty Magdalena Tuter



The atmosphere of elementary school children eating in the school canteen (Photo: Google Gemini/Processed by AI)

**KBRN, Jakarta:** At precisely 9:15 a.m. (Western Indonesian Time), the school bell rang, signaling recess for students. The previously quiet atmosphere at school slowly transformed into a bustling one.

Shortly afterward, the teachers exited the classrooms, followed by the students with cheerful faces. They walked quickly, some even jogging, toward one of their favorite spots: the school cafeteria.

Upon arriving at the cafeteria on Monday of the second week of the new school year, the atmosphere was immediately bustling. Children lined up or gathered in front of the food stalls. A variety of menu options were tempting, including a variety of cold drinks,

steaming hot chicken noodles with meatballs, various fried foods, and light snacks that were always in high demand.

The students eagerly chose their favorite foods. Some were still unsure and kept looking back and forth at the options on the table, while others had already memorized their favorites.

While waiting in line, small talk flowed. Some discussed the lesson, some talked about games, and some even just laughed for no apparent reason.

After receiving their choice of food and drinks, some students sat on the provided benches, enjoying their chicken noodles and chatting. Others chose to stand and sip cold drinks or stroll leisurely around the cafeteria, eating donuts and other snacks.

The “race” to the school cafeteria seems to align with a 2023 study by Wahana Visi Indonesia (WVI). In the study, 32 percent of children skipped breakfast before going to school.

As a result, children simply buy snacks, even though these school snacks contain high levels of sugar, salt, and fat, which can increase the risk of chronic disease if consumed frequently. The survey showed that school snacks negatively impact children’s health.

To this day, many snacks containing trans fat exceeding the WHO’s recommended levels are still sold in schools. Examples include donuts, wafers, biscuits, sausages, and various fried foods.

Putri, a canteen worker at a junior high school, has been selling these foods for 18 years. During her time as a food handler, she sold various fried foods such as risol (risoles), cireng (circued meatballs), and other heavy meals.

When interviewed, she claimed to be unaware of trans fat. She revealed that the education provided by the community health center (Puskesmas) she and other vendors attended only covered food coloring, sweeteners, borax, and the use of plastic and styrofoam packaging.

“There hasn’t been any (education about trans fat), that we shouldn’t use coloring, sweeteners, or borax. “(We have) not yet about trans fat,” said Putri, echoed by other vendors at the end of last month.

Lisa, a vendor in the school cafeteria who has been selling for six years, echoed this sentiment. She admitted that she had never received any education from the community health center or the health department.

Although she hadn't received any education, Lisa knew a little about trans fat. "But I've only heard about it, I just know that it's a saturated fat usually found in fried foods," Lisa said.

Rumi, a food vendor in an elementary school cafeteria, had a different opinion. She said she had received education about trans fat.

However, the education she received from the class was limited to prohibiting the use of used cooking oil. "Oil must be single-use, not used and reused," Rumi said, adding that health center staff inspect the food sold in the cafeteria every six months.

When contacted by the local health center, Devi Wirasanti, the person in charge of health promotion, stated that the health center is currently actively conducting education in schools. This education is part of the Clean and Healthy Living Behavior (PHBS) program.

"We come to some schools to offer it, and some schools request it," she said. Devi explained that the health center is currently only limited in not recommending certain foods or snacks.

Meanwhile, Lies Sugianti and Isti Wulandari, nutritionists working at a health center, also commented on the issue of education about trans fat in schools. They explained that all of this is included in the sugar, salt, and fat (GGL) restrictions.

"Regarding trans fat, we've included it in the GGL restrictions. We hope that students will be aware that at that age, they should limit their fat consumption," said Isti when met earlier this week.

"For fat, it's five tablespoons a day. Also, consider the food processing process; oily foods, coconut milk-based foods, and fried foods and snacks must be limited. We also provide pictures of foods containing high fat," said Isti.

Meanwhile, for food handlers in school canteens, Lies said the community health center advises against repeated frying. They can also minimize the use of cooking oil.

Lies, a health worker, hopes the government will issue a label for fat consumption, similar to sugar consumption. This way, it will be easier for the public to determine when levels exceed safe limits.

“With the label, when hydrogenated fats are present, we need to ensure they are small and still safe. Hopefully, for example, if they’re above five grams, they’ll be red, some yellow, and some green, like sugar,” she said.

Lies also hopes for a massive campaign to raise public awareness of trans fat consumption. Not everyone is familiar with trans fat.

“Educating the public about buying snacks indiscriminately is crucial. This is because there’s a risk of degenerative diseases, the dangers of which extend beyond bacteria,” Lies said.

Furthermore, to support children’s health, Jakarta Governor Pramono Anung launched the Healthy Canteen program in May 2025. The program was launched in three schools: SMKN 57, SMKN 63, and SMA Unggulan MH. Thamrin.

Sarah Syarifah, the person in charge of the SMKN 63 canteen, said that the implementation of the healthy canteen is not yet 100 percent complete. However, since it was declared a healthy canteen, the school has been coordinating more intensively with the community health center.

“Because a healthy canteen isn’t just about the food, but also the sanitation. We’re improving it slowly,” said Sarah.

There’s also training for food handlers, involving children as healthy canteen ambassadors. Recalling the material provided, Sarah said the training covered the use of harmful food additives, packaging, nutrition, presentation methods, and so on.

Sarah said the explanation regarding trans fat wasn’t provided in detail. The material covered healthy snacks, such as avoiding foods high in sugar and saturated fat, and the consequences of consuming too much sugar and saturated fat.

A survey of several schools found no detailed education about trans fat, despite the fact that trans fat are one of the leading causes of death in Indonesia.

Regarding disease, according to Ministry of Health data, stroke, ischemic heart disease, and diabetes remain the three leading causes of death. These are all non-communicable diseases.

## **Foods containing trans fat**

In May 2024, the World Health Organization (WHO) released the results of a study on food sources of trans fatty acids in Indonesia. The results showed that nearly 10 percent of products, or approximately 11 foods tested, contained trans fat levels exceeding WHO recommendations.

The WHO recommends a trans fat content in food of less than 2 grams per 100 grams of total fat. This figure serves as a reference to prevent adverse impacts on public health.

Dina Kania, NPO Policy Legislation for WHO Indonesia, presented the research results at a Journalism Workshop in Jakarta on Friday, July 4, 2025. Eleven of the 130 food samples, or approximately 8.46 percent, contained trans fat levels above the WHO recommended threshold.

High levels of trans fat were found in commonly consumed products such as biscuits, wafers, cakes, pastries, and street food like martabak and roti maryam. These findings highlight the hidden risks in commonly sold foods.

Dina explained that high levels of trans fat are also found in baking and bread ingredients, such as shortening and margarine and butter mixtures. One in four baked goods samples contained high levels of trans fat.

The highest levels were found in imported margarine and butter mixtures, reaching 22.68 gALT. This figure is ten times higher than the WHO recommendation.

## **What are trans fat and their effects?**

Nuri Andarwulan from the Department of Food Science and Technology at IPB University explained that according to the WHO/FAO Codex Alimentarius, trans fatty acids are unsaturated fatty acids with at least one double bond in the trans configuration. These compounds can come from natural sources or be produced industrially through the partial hydrogenation of vegetable oils.

Furthermore, Nuri explained that the partial hydrogenation process occurs when hydrogen (gas phase) reacts with unsaturated fatty acids (liquid phase). This process converts some or all of the unsaturated fatty acids into saturated fatty acids.

The Chairperson of the Indonesian Pediatrician Association, Piprim Basarah Yanuarso, stated that excessive consumption of trans fat in children can trigger chronic inflammation. This condition can increase the risk of diseases such as obesity, diabetes, and insulin resistance.

“One of them is chronic inflammation that persists for a long time, which significantly triggers various degenerative diseases such as obesity and diabetes, and can cause insulin resistance. This is not an immediate acute process but a chronic one, slowly but surely,” Piprim explained.

Ministry of Health data shows that 50–80 percent of type 2 diabetes cases in children in Indonesia are caused by obesity. Trans fat contributes around 10 percent to the increase in childhood diabetes cases.

“Previously, type 2 diabetes usually affected adults aged 40 and over, but now, many adolescents, especially obese adolescents, are experiencing insulin resistance,” he said. This occurs due to poor diets coupled with lifestyle choices such as inactivity, staying up late, and chronic stress.

He advised against consuming foods containing trans fat. He emphasized the importance of parents preparing food at home with healthy oils.

“Food should be free of trans fat, so parents should fry with healthy oils such as olive oil, coconut oil, or butter, which are healthier than industrial trans fat, which are usually imported,” he said.

### **Policy to eliminate trans fat**

Echoing Piprim’s sentiment, Dina Kania emphasized that trans fat should not be consumed because they are not beneficial to the body. Trans fat cannot be processed by the body and only increase the risk of disease.

In 2018, the WHO issued guidelines for the elimination of trans fat called REPLACE. This acronym stands for Review, Promote, Legislate, Assess, Create, and Enforce.

The WHO recommends limiting trans fat content to a maximum of 2 grams per 100 grams of total fat in all foods. Furthermore, the WHO encourages a ban on the production, import, sale, and use of partially hydrogenated oils (PHOs).

Many countries have implemented this policy, including Singapore, Thailand, and India. In Indonesia, Government Regulation 28 of 2025 has become the legal basis for trans fat restrictions and the PHO ban.

However, existing regulations do not yet align with best practice recommendations. The 0 percent trans fat requirement only applies to cooking oil, solid cooking oil, and special nutrition foods.

The WHO Indonesia believes the government needs to create trans fat elimination regulations that apply to all food products. Without this regulation, Indonesia risks becoming a market for imported products with high trans fat content.

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***This article was published on RRI.co.id on August 15, 2025, and can be accessed through the following link:***



<https://rri.co.id/kesehatan/1768326/risiko-lemak-trans-terus-mengintai-kantin-sekolah>

# TRANS FAT: BPJS Kesehatan Struck by Half-Hearted Regulations

*The National Health Insurance (BPJS Kesehatan) faces high costs due to heart disease caused by trans fat. Weak regulations allow trans fat to remain widespread in Indonesia.*

Author: Emanuel B. Caesario



Participant services at a branch office of the Social Security Administration for Health (BPJS Kesehatan) in Jakarta, Monday (February 6, 2023). - Bisnis/Suselo Jati.

**Bisnis.com, JAKARTA** — Heart disease consistently ranks first in the annual budget drain for the National Health Insurance (BPJS Kesehatan). However, one of the main risk factors for this disease is still freely available on minimarket shelves and in kitchens: trans fat.

This substance hides quietly in processed foods often taken for granted, such as biscuits, wafers, bread, and shortening. Although the world has declared war on trans fat, Indonesia hasn't really taken action.

I tried to find out for myself. At a minimarket, I examined each packaging label. Of the dozens of products I saw, only a few listed trans fat information.

Some butter and snack products list 0 grams of trans fat. However, other than those products, not many others list trans fat information. Is this a reason to be complacent? Apparently not.

The Food and Drug Authority (BPOM) Regulation No. 26 of 2021 concerning Nutritional Information on Processed Food Labels actually requires the inclusion of trans fat information if it exceeds 0.5 grams per serving or if it includes claims about saturated fat and/or cholesterol.

In fact, a 2023 WHO study on sources of trans fat in processed and ready-to-eat foods found that 11 out of 130, or 8.46% food products in Indonesia contained more than 2% trans fat per 100 grams of total fat.

However, this trans fat information was obscured on other labels, such as those containing vegetable oil, butter, baking fat, hydrogenated palm kernel fat, or chocolate paste. The trans fat content ranged from 2.09 grams to 22.68 grams per 100 grams of total fat.

How is this possible? BPOM only requires manufacturers to list trans fat if the content is more than 0.5 grams per serving. The problem is, manufacturers can set the serving size to be quite small, making the trans fat content appear zero.

However, when viewed from the total fat content, the percentage can be very high. And, if the content is below 0.5 grams, it can be rounded down to 0 grams.

An interesting example is one imported whipping cream product with two different labels on its packaging. The country-of-origin label lists the trans fat content as 0.3 grams, while the Indonesian version lists 0 grams.

One package of this product contains 16 servings. This means it actually contains approximately 4.8 grams of trans fat.

Trans fat is formed when vegetable oil undergoes a partial hydrogenation (PHO) process to make it denser and more durable. This product is cheaper than butter, making it more profitable for food manufacturers.

Unfortunately, numerous studies have confirmed that trans fat, or trans fatty acids (TFAs), are the most harmful type of fat for the heart. This is because these fats increase LDL (bad cholesterol) while lowering HDL (good cholesterol).

TFAs also trigger inflammation and insulin resistance, increasing the risk of coronary heart disease, stroke, and diabetes.

## **National Health Insurance (BPJS Kesehatan) burden**

The National Health Insurance (BPJS Kesehatan) also reported that the cost of treating heart disease in 2024 reached IDR 19.25 trillion, representing 22.55 million cases. This cost increased compared to IDR 17.62 trillion in 2023, and even more so compared to IDR 12.1 trillion in 2022.

Cancer came in second, but its value was much smaller, at only IDR 6.45 trillion in 2024.

Furthermore, BPJS Kesehatan recently reported a deficit of IDR 7.14 trillion throughout 2024. This was the first time this had occurred since 2019, as premiums increased in 2020, resulting in a surplus for the public health agency.

The deficit threatens to grow even larger if there are no concrete steps taken to improve the quality of public health. And, given the high burden of heart disease, addressing it is truly key to the BPJS Kesehatan budget.

BPJS Kesehatan President Director Ali Ghufron Mukti stated that BPJS Kesehatan is deeply concerned about the circulation of trans fat, which he believes are a silent killer. BPJS Kesehatan is taking steps within its capacity.

“BPJS Kesehatan is developing promotion, prevention, and education through Mobile JKN. People can conduct a health history screening. If a risk is proven, the Mobile JKN application system will recommend a checkup,” he told Bisnis last week.

He also hopes that regulations related to trans fat will be fully implemented, especially regarding information on nutritional labels.

“Of course, we hope the content and the amount are clearly stated so the public knows,” he said.

# TRANS FAT ERODES BPJS KESEHATAN



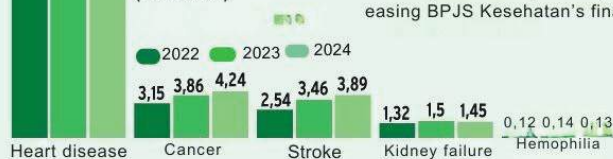
Heart disease consistently ranks as the leading illness draining the most funds from BPJS Kesehatan (Indonesia's national health insurance). Meanwhile, trans fat, one of the major risk factors for heart disease, continues to circulate freely in many processed food products across Indonesia.

## WHO Policy Recommendations on Trans Fat Elimination

- Limit trans fat content to a maximum of 2 grams per 100 grams of total fat in all types of food products.
- Ban the production, import, sale, and use of partially hydrogenated oils (PHOs).

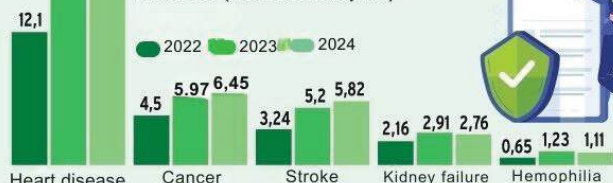


Number of Cases of the Five Most Prevalent Chronic Diseases (in Millions)



- Heart disease remains the leading cause of BPJS Kesehatan's highest healthcare spending, far exceeding other illnesses.
- The Health Social Security Fund (DJS Kesehatan) returned to a deficit in 2024, after maintaining a surplus since 2020. Addressing trans fat consumption could positively contribute to reducing the risk of heart disease and easing BPJS Kesehatan's financial burden.

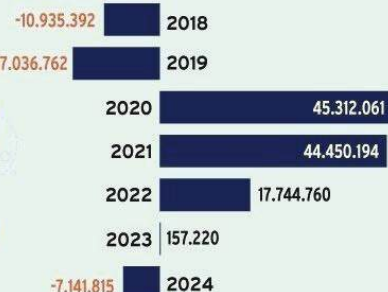
BPJS Kesehatan Claim Burden for the Five Major Chronic Diseases (in Trillion Rupiah)



Source: BPJS Kesehatan & WHO

## Surplus/ Defisit

of the Health Social Security Fund (in Million Rupiah)



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The government is not remaining silent on the trans fat issue. Several regulatory instruments are already in place, but they are not yet firm enough to regulate the distribution of these substances.

For example, BPOM Regulation No. 24 of 2020 concerning the Supervision of Processed Foods for Special Nutritional Needs (PKGK) limits trans fat levels, but only in certain types of processed foods for special nutritional needs.

The food groups in question include products for babies and children, foods for weight control, or foods specifically for people with diabetes.

In addition, Government Regulation (PP) No. 28 of 2024 concerning the Implementing Regulations of Law No. 17 of 2023 concerning Health has been issued.

Article 194 stipulates that the central government has the authority to set maximum limits for sugar, salt, and fat (GGL) content in processed foods. However, the technical details and the amount still need to be coordinated with the relevant ministries.

Interestingly, paragraph (4) of the same article also stipulates that the central government can impose excise taxes on certain processed foods. Some consider this article to be key to resolving the trans fat problem in Indonesia.

INDEF (Institute For Development of Economics and Finance) Director Esther Sri Astuti stated that addressing the trans fat and GGL issues depends solely on the government's willingness and firmness to enforce existing regulations.

"Products with high trans fat or GGL content should be subject to excise taxes, thus making healthy products more affordable. Oddly enough, in Indonesia, we want to consume healthy foods, but they are expensive," she said.

Esther understands that this measure will likely spark resistance from the food and beverage industry, as it has the potential to disrupt economic performance.

However, she believes the government should also consider the significant healthcare costs and opportunity costs lost due to disease.

Similarly, Timbul Siregar, Advocacy Coordinator for BPJS Watch, stated that the main

challenge to regulating the GGL excise tax is capitalism. After all, food and beverage businesses contribute taxes and create jobs.

“Ultimately, this depends on the political will and courage of the government. From a normative regulatory perspective, with philosophical, legal, and sociological foundations, everyone already knows the causes of this disease,” he said.

Furthermore, Timbul hopes that if the GGL excise tax is actually implemented, the majority of the funds should flow to BPJS Kesehatan. The ultimate goal is to support victims of excised products.

“Because if BPJS Kesehatan relies solely on participant contributions, it will be difficult. BPJS Kesehatan’s financing model should be consumption-based. The higher the GGL consumption, the greater its contribution to BPJS Kesehatan’s revenue,” he said.

Meanwhile, Adhi S. Lukman, Chairman of the Indonesian Food and Beverage Producers Association (Gapmmi), chose not to comment further on the issue, whether related to trans fat raw material controls, regulatory strengthening, or input from industry players.

“This is a technical matter, and we will try to discuss it first,” he said.

## **Long Process**

Fatchanuraliyah, Head of the Brain and Cardiovascular Disorders Working Team at the Directorate of Non-Communicable Diseases at the Ministry of Health, stated that cross-sector coordination is ongoing to finalize health regulations.

However, the process is not simple and involves many sectors. Drafts of several derivative regulations from Government Regulation No. 28/2024 are already finalized, but still require further harmonization to avoid sparking new controversy upon issuance.

On the other hand, Indonesia also faces complex challenges, particularly regarding supporting data. For example, to determine the GGL content limit, there is a lack of complete data to provide a factual basis for determining specific policies for each type of food.

Furthermore, the government is also considering public preferences regarding restrictions on certain ingredients and the sustainability of the industry.

“It’s not easy [to draft regulations]. Even if it’s just one sentence, coming up with that sentence requires a wealth of data. Then, it’s analyzed to produce the most representative analysis,” she said.

Meanwhile, Dina Kania, National Professional Officer for Policy and Legislation at WHO Indonesia, hopes that Indonesian health regulations, particularly those related to trans fat, will fully align with international best practice recommendations.

He believes that current regulations in Indonesia are not sufficient to protect the entire population from trans fat consumption. This is because restrictions and bans on trans fat only apply to certain food categories.

He believes that without regulations to eliminate trans fat, Indonesia faces the risk of imported products high in trans fat.

This is because many global producers are now targeting markets in countries that still allow these products, as more and more countries are tightening their trans fat restrictions.

“The highest trans fat content [in processed foods in Indonesia] is found in a mixture of margarine and butter, an imported product, containing 22.68 grams of trans fat, or 10 times higher than the WHO’s recommended threshold,” he said.

Ultimately, if not immediately and firmly regulated, trans fat will continue to burden the national health system. Not only will they contribute to disease, but they will also increase public costs that are largely preventable.

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<https://premium.bisnis.com/read/20250812/657/1901483/lemak-trans-bpjs-kesehatan-terimpit-regulasi-setengah-hati>



[https://drive.google.com/file/d/1n\\_vja0FcKUIFSdi8AcrOs0vv02v-S3Wz/view?usp=drive\\_link](https://drive.google.com/file/d/1n_vja0FcKUIFSdi8AcrOs0vv02v-S3Wz/view?usp=drive_link)

# Coronary Heart Disease Lurks in Young People, Is Trans Fat the Culprit?

Author: Yulia Adiningsih

**INDEPENDENT** -- In mid-2018, Yenni Nuvrita felt excruciating chest pain. However, she was at a loss. She wanted to go to the hospital, but her wallet was thin. Understandably, at the time, Yenni was still a student at a state university in Bandung.

Finally, armed with her BPJS card, Yenni went to the emergency room at a private hospital near her campus. As a migrant, she didn't have many people to ask for help. She went alone.

Upon arrival, a nurse helped her with the paperwork and received immediate treatment. The doctor immediately performed an Endomyocardial Biopsy (EMB), which involved inserting a small tube into Yenni's body to take a sample of heart muscle tissue (myocardium).

It didn't take long for Yenni to undergo various procedures. That same day, Yenni discovered the cause of her excruciating chest pain.

"Finally, the doctor told me my diagnosis was 80 percent arrhythmia," said Yenni.

Yenni was shocked by the doctor's diagnosis, especially since she was only 18 years old at the time.

Arrhythmia is a heart disorder. Typically, people with arrhythmia experience problems such as a heartbeat that's too fast, too slow, or irregular.

In the midst of this situation, Yenni was suddenly visited by a nurse. She was informed that her BPJS Kesehatan was no longer active. She had to pay tens of millions of rupiah for the consultation and treatment.

Yenni was distraught. She was already shocked by the doctor's diagnosis, and the BPJS Kesehatan was also inactive.

“It was a complete shock. It should have been tens of millions of rupiah, because there were tests, and I was admitted to the emergency room really quickly,” she said.

Fortunately, the private hospital decided to help Yenni. As a result, Yenni only had to pay Rp 300,000. However, she didn’t have any documentation for her diagnosis.

Because of this, Yenni couldn’t get medication for her arrhythmia. Every time she was sick and checked into another clinic, she was always given stomach acid medication.

Besides chest pain, she also experienced other symptoms similar to stomach ailments, such as a burning sensation in her stomach.

Yenni had no other choice. She was still considering returning for further examinations and medication at the previous private hospital. Although the service was good, Yenni had to pay a fee.

Yenni was also advised to change her eating habits and consume healthier foods, such as steamed and boiled foods, instead of ultra-processed foods.

In 2022, Yenni graduated from college. She opened her own business. At that time, she finally registered for insurance.

Yenni immediately returned for a checkup at a private hospital at the end of that year, this time in her hometown of Bogor.

However, it turned out her insurance coverage wasn’t working. It wasn’t until three months later that Yenni was able to use it.

Meanwhile, her symptoms worsened day by day. Even when she wasn’t doing anything, Yenni would often experience heart palpitations.

Within a week, the intensity of the attacks increased. She could feel them four to six times a week.

The problem wasn’t just the pounding heart; Yenni also experienced shortness of breath, dizziness, and sudden nausea.



“So I was with them. I cried a lot. It was mentally stressful,” she said.

Yenni was told about the factors that contributed to her sports training and coronary heart disease. The test results showed that Yenni’s LDL (bad cholesterol) level was well above 100 mg/dL.

If the level is too high, cholesterol can build up on the walls of blood vessels, forming plaque. This plaque can then lead to narrowing and blockage of the arteries (atherosclerosis).

The doctor explained that the main factor was likely consuming foods containing trans fat. Yenni admitted that since she was little, she’s loved eating fried foods cooked in oil repeatedly.

“I love that kind of food. I even reuse the oil over and over again. This was from childhood all the way up until high school,” she said.

She was also advised to stop consuming many convenience store snacks, as many contain trans fat.

Because the ring couldn’t be inserted, Yenni continued taking medication while making healthy lifestyle changes.

Yenni completely stopped consuming unhealthy foods. Within a year, she noticed changes in her body.

The bad fat in her body decreased. Simultaneously, her dizziness, shortness of breath, and nausea no longer frequently occurred.

Yenni isn’t the only young person to have heart problems. Jonathan (not his real name) was diagnosed with heart disease at the age of 19.

Jonathan forgot the date, but he remembers it happened in 2019. Jonathan had a high fever, chest tightness, sweating, and anxiety. Early that morning, he was rushed to the emergency room.

After being examined and undergoing treatment, Jonathan was diagnosed with heart failure. The doctor said that his poor lifestyle and diet were the cause.

Jonathan immediately realized that he had been developing unhealthy habits. Although he didn't smoke, he drank excessive amounts of coffee and often stayed up late. His diet was also problematic.

"Before my diagnosis, I had a habit of eating oily foods like fried foods, flour-based foods like donuts, martabak, and other processed foods," Jonathan said.

To this day, his symptoms often recur if he eats too much oily food, cakes, and donuts.



A good diet is essential in everyday life. (Photo: Pixabay)

## **Trans fat and coronary heart disease trends in young people**

Several doctors and studies have revealed a trend of increasing prevalence of heart disease in young people, including coronary heart disease. Cardiologist and vascular specialist Vito Anggarino Damay has observed a steady increase in the number of young people suffering from coronary heart disease in recent years.

"Surveys show that coronary heart disease patients tend to be younger, as do observations from daily practice. It's not surprising to see heart attack patients in their 30s and 40s," he said.

The member of the Indonesian Cardiovascular Specialists Association (PERKI) said that trans fat are a contributing factor to heart problems, including coronary heart disease. He explained that trans fat can increase bad cholesterol (LDL) levels and lower good cholesterol (HDL). This results in plaque buildup on blood vessel walls, a condition known as atherosclerosis.

“If left untreated, this plaque can block blood flow to the heart or brain, which can lead to a heart attack or blood vessel blockage,” Vito told Independen.id on Saturday (July 19, 2025).

In cases of heart enlargement or heart failure, he said, trans fat don't directly cause it. However, if the heart's blood vessels are blocked, the heart muscle can be damaged and weakened over time. The weakened heart will enlarge to compensate, resulting in heart enlargement.



Illustration of fried chicken (Pixabay Photo)

Furthermore, trans fat can also increase inflammation in the body. This inflammation causes blood vessels to become stiffer or more damaged. Examples of foods often containing trans fat include fried foods with re-used oil, fast foods like fried chicken and french fries, solid margarine, cookies, biscuits, donuts, factory-made pastries, and even instant popcorn.

He also warned against avoiding these unhealthy foods to avoid the risk of heart problems.

Vireza Pratama, a cardiologist and vascular specialist at Mayapada Hospital, South Jakarta (MHJS), also observed a similar trend. He suspects this is due to a shift in lifestyle. “Even at Mayapada Hospital, the population is getting younger every year,” he said.

He said that everything is now readily available, including food. However, these readily available foods can actually be dangerous.

“There’s been a shift in lifestyle. And don’t forget our current diet tends to be sweeter. What the younger generation prefers now is instant food, which is easier to obtain, and which may contain higher levels of carbohydrates and trans fat. This is also quite high in fat, which is a problem, and it’s a shared problem,” he said.

Radityo Prakoso, President of the Indonesian Heart Association, revealed that the prevalence of heart attacks in people under 40 is increasing by 2 percent annually. One heart disease that is increasing in young people is coronary heart disease. This survey was conducted on samples aged 16-50.

He explained that the heart needs food and oxygen. Both are supplied by blood flow from the small coronary arteries, with the largest diameter being 4 mm.

Therefore, he said, even the slightest blockage can disrupt these coronary arteries. Blockages in the coronary arteries, either due to cholesterol deposits or inflammation, can cause coronary heart disease.

“If the narrowing is almost complete, it will disrupt blood flow, which can lead to death of the heart muscle it supplies,” he said.

Risk factors for coronary heart disease in young people are divided into two categories: modifiable and non-modifiable. One of the non-modifiable risk factors is genetics.

Genetics is a family history of heart disease. So, if a parent has a history of heart disease, it will be passed on to their children. However, sometimes it doesn’t appear.

Modifiable risk factors include smoking, high blood pressure, a lifestyle that leads to high cholesterol, diabetes, fatty eating habits, and excessive alcohol consumption.

He stated that 1 in 6 young people prefers to eat fast food twice a day. Some of the reasons for the high rate of fast food consumption in young people include academic stress, poor time management, a lack of healthy food options in the school environment, and practicality.

“Consuming fast food induces inflammation, which plays a role in plaque formation in blood vessels and increases the risk of heart disease,” he said.

This trend of increasing prevalence of heart disease in young people is not unique to Indonesia. According to the Heart Disease and Stroke Statistics 2023 report released by the American Heart Association (AHA), there has been an increase in cases of coronary heart disease (CHD) in those under 40 years old. The report states that approximately 1 in 5 heart attacks now occurs in young people (<40 years of age). The main factors are a sedentary lifestyle, obesity, smoking, consumption of ultra-processed foods, stress, and the use of addictive substances.

## **Trans fat in our body**

The results of a study on sources of trans fat in processed and ready-to-eat foods conducted by the Ministry of Health (Kemenkes) indicate that food products in Indonesia contain more than 2 percent trans fat. The 2015 Individual Food Consumption Survey also found that 27 percent of Indonesians consume more than the recommended daily fat intake (>67 grams/day).



Illustration (Photo: Pixabay)

Meanwhile, a study by the WHO and the Seafast Center of Bogor Agricultural University (IPB) showed that eleven out of 130 samples (8.46 percent) had high trans fat content, exceeding 2 grams per 100 grams of total fat, exceeding the WHO's recommended threshold.

Dina Kania, NPO Policy and Legislation at WHO Indonesia, stated that high trans fat content was found in widely consumed products such as biscuits, wafers, cakes, pastries, and street snacks like martabak and roti maryam.

High trans fat content was also found in ingredients commonly used in cakes and bread, such as shortening and margarine and butter blends (both imported and domestic).

"One in four (25 percent) baked goods samples had high trans fat content. The highest trans fat content was found in the margarine and butter blend (an imported product), at 22.68 grams ALT, or 10 times higher than the WHO's recommended threshold," she explained.

## **Trans fat need to be eliminated**

Dina believes that trans fat need to be eliminated because they increase the risk of heart attacks and death from coronary heart disease. This disease causes at least 500,000 deaths annually worldwide.

She stated that Indonesia already has a legal basis for limiting trans fat and banning PHOs, as stipulated in PP 28 of 2025. Article 194 (1) of the PP states:

"In order to control the consumption of sugar, salt, and fat, the Central Government determines the maximum limits for sugar, salt, and fat content in processed foods, including ready-to-eat processed foods."

However, without any implementing regulations regarding the elimination of trans fat, she believes, Indonesia faces the risk of imported products containing high levels of trans fat, as producers target markets that still permit such products.

BPOM Decree No. 70/2025 concerning Changes to Food Categories and Changes to Raw Materials Derived from Plants and Animals in conjunction with BPOM Regulation No. 34 of 2019 concerning Food Categories also regulates trans fat. The Food and Drug Authority

(BPOM) has established a basic characteristic of 0 percent trans fatty acid levels in the food categories of cooking oil and solid cooking oil.

Furthermore, BPOM Regulation No. 24 of 2020 concerning the PKGK also prohibits the use of PHOs and limits trans fat levels in certain types of processed foods for special nutritional needs.

For example, processed foods for special nutritional needs, such as infant formula, must contain no more than 3 percent trans fat of the total fat content.

However, Dina believes that existing regulations do not align with best practice recommendations. The 0% trans fat requirement is currently limited to cooking oil, solid cooking oil, and foods for special nutritional needs. She believes it needs to be expanded to all types of food.

“Existing regulations are not yet able to protect the entire population from trans fat consumption,” she said.

She believes that Indonesia needs to create regulations to eliminate trans fat by limiting trans fat content to 2 percent of the total fat content in all food products or banning the production, use, sale, and import of partially PHOs.

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<https://independen.id/jantung-koroner-mengintai-anak-muda-lemak-trans-biang-keladi>

# Trans Fat: A Time Bomb for Young People's Health Amid Loose Regulation

*Diseases once associated with the elderly, such as stroke and hypertension, are now affecting many young people due to fast-paced lifestyles and the consumption of convenience foods high in trans fat. Unfortunately, trans fat regulations in Indonesia remain limited to recommendations without explicit prohibitions.*

Author: **Anggita Raissa**



Illustration of a practical meal. Photo: Anggita Raissa

**Koreksi, Jakarta** - In late December 2017, Karyadi's body suddenly weakened and he eventually fainted. This condition was triggered by hypertension. Unexpectedly, this was the beginning of his stroke.

At that time, Karyadi's blood pressure exceeded 140/90 mmHg. His family immediately rushed him to the hospital.

"I was quite shocked when the doctor told me I'd had a stroke. How could someone as young as myself has this kind of illness," Karyadi told Koreksi on Friday (July 25, 2025).

At the time, Karyadi was 28 years old. He worked for a private company in Jakarta. His busy work schedule had made him accustomed to eating convenience foods, especially ultra-processed foods.

Ultra-processed foods, or UPF, are foods that have gone through many industrial processes. These foods often have low nutritional value but are high in sugar, salt, and fat, including artificial trans fat.

Instant noodles were Karyadi's go-to almost every day. Their savory taste, easy preparation, and low cost made them his go-to menu amidst his busy work schedule.

"When I'm in a hurry or working overtime, the easiest thing is to cook instant noodles. I don't have time to find anything else," he said.

However, this habit slowly backfired. Unbeknownst to him, excessive consumption of ultra-processed foods like instant noodles exposed his body to high levels of artificial trans fat. As a result, Karyadi suffered a stroke. The hemorrhagic stroke left him unable to walk. He also had to take the generic Bisoprolol medication to lower his high blood pressure.

"I used to take 30 milligrams, now I only take 2 milligrams of the generic Bisoprolol," he said.

During his recovery, using prescription medications, Karyadi also underwent therapies such as physiotherapy and acupuncture. He is grateful that these treatments and therapies were largely affordable thanks to his participation in the BPJS Kesehatan program.

Adrian Pratama, then 23, also suffered from hypertension. Adrian had a stroke in mid-2017. At the onset of the stroke, he had difficulty speaking. Shortly after, he began to lose consciousness. Adrian's parents thought he was asleep.

However, his mother sensed something was unusual. Adrian's face was tilted to one side, and his breathing sounded labored. When he was woken up, his body was limp and he was unable to respond clearly.

Unconscious, Adrian was taken to the hospital and immediately underwent a CT scan. The test revealed a ruptured blood vessel in his brain, and he was diagnosed with a stroke.

"The doctor said Adrian's lifestyle was a major factor, including a diet high in fat, fried

foods, and instant foods,” said Adrian, who has been suffering from a stroke for almost eight years, on Friday (August 1, 2025).

Karyadi and Adrian’s experiences are a clear example that strokes caused by hypertension are no longer associated with age. The disease, often dubbed “an old person’s disease,” is increasingly affecting young people.

Data from the Basic Health Research (Riskesdas) shows that the prevalence of hypertension among young people continues to increase. In the 2013 Riskesdas, the prevalence of hypertension in the 18-24 age group was recorded at 6.2%. However, five years later, the figure jumped to 12.8% in 2018. This means that in five years, cases of hypertension among young people have more than doubled.

Fatchanuraliyah, Head of the Brain and Cardiovascular Disorders Task Force at the Directorate of Non-Communicable Disease Prevention and Control at the Indonesian Ministry of Health, stated that the increase in stroke and hypertension cases in young people is a serious alarm for the national health system.

“Currently, there is a growing trend of young people experiencing strokes, even in their 20s. Modern lifestyles, including high consumption of ultra-processed foods and low physical activity, are among the triggers,” Fatchanuraliyah said in Jakarta on Friday (July 4, 2025).

She added that a diet high in trans fat significantly worsens the risk of heart and blood vessel diseases by triggering inflammation and damaging blood vessels in the long term.

## **The hidden dangers in food**

The World Health Organization (WHO) defines trans fat, or trans fatty acids, as a type of unsaturated fatty acid derived from industrial or natural sources.

Artificial or industrial trans fat are produced from the hydrogenation process of vegetable oil, which converts the oil from a liquid to a solid, resulting in PHOs.

trans fat are often found hidden in snack foods such as biscuits, bread, wafers, shortening, and ultra-processed foods. In instant noodles, the saturated and trans fat come from the oil used in the frying process.



Illustration of a practical meal. Photo: Anggita Raissa

According to the WHO, consumption of industrial trans fat contributes to more than 500,000 deaths annually from coronary heart disease worldwide.

Due to the dangers of trans fat, the WHO recommended the elimination of trans fat by 2023 to its member countries through the REPLACE (Promote, Legislative, Assess, Create, Enforce) framework, limiting trans fat levels to 2% of the total fat content in all foods. Then, the ban on PHOs, including the ban on the production, import, sale, and use of PHOs in all foods.

A 2023 WHO Indonesia trans fat content assessment of 130 food samples showed that approximately 8-9% of products contained trans fat levels exceeding 2 grams per 100 grams of total fat, exceeding the WHO's safe limit.

These products with high trans fat content were found primarily in biscuits, wafers, cakes, pastries, martabak (a type of fried food), and roti maryam (a type of bread). Some imported margarine or butter blends even contained up to 22.68 grams of trans fat per 100 grams of fat, more than 10 times the WHO's safe limit.

Trans fat is known to be a major trigger for heart disease, stroke, and hypertension, especially when consumed regularly and over the long term. More than 278,000 deaths worldwide each year are caused by the consumption of industrial trans fat. In Indonesia, stroke, ischemic heart disease, and diabetes are three of the five leading causes of death.

Unfortunately, in Indonesia, foods with high trans fat content are still widely distributed without strict government oversight.

In Indonesia, there is no total ban on trans fat in the food industry. Current regulations, namely BPOM Regulation No. 26 of 2021 concerning Nutritional Information on Processed Food Labels, only require the inclusion of trans fat information if it exceeds 0.5 grams per serving. However, research from the WHO in 2023 found that 11 out of 130 food products, or approximately 8.46% of the food available in Indonesia, contained high levels of trans fat.

The Center for Indonesia's Strategic Development Initiatives (CISDI), a nonprofit organization dedicated to advancing the health sector, stated that current regulations are still too lax. In addition to the lack of a total ban, the inclusion of trans fat content on nutrition labels is still voluntary, without a strict maximum threshold as set by the WHO.



Illustration of a stroke. (VSRao from Pixabay)

“The consequences will be significant, especially for vulnerable groups such as children and adolescents who consume foods containing trans fat excessively,” explained Nida Adzilah Auliani, Project Lead for Food Policy at CISDI, to Koreksi on Wednesday (July 9, 2025).

The CISDI study revealed that approximately 9% of food products in Indonesia contain trans fat ranging from 2-23%, far exceeding the WHO’s safe limit of 2%.

“This demonstrates weak oversight and sub-optimal policies governing the composition of processed foods, particularly ultra-processed foods. Furthermore, there is no requirement for industry to include fat content in nutritional information,” she said.

trans fat are known to increase LDL, also known as “bad cholesterol,” and lower HDL, also known as “good cholesterol,” and contribute to cardiovascular disease, which causes up to 500,000 deaths annually globally. In the long term, this risks increasing metabolic disease in young people and burdening national health systems.

It’s been recorded that BPJS Kesehatan funding for catastrophic illnesses related to obesity and hypertension has surged by 43%, reaching Rp 6-19 trillion in just the past five years.

Nida believes the urgency of controlling trans fat consumption must be seen as part of the national strategy for controlling cardiovascular disease.

“If left unchecked, we will not only face the ever-increasing burden of BPJS funding, but also the loss of productivity of our young generation,” she added

## **The rules are still lax**

Sudaryatmo, Program Manager for the Trans Fat Elimination Program at the Indonesian Consumers Foundation (YLKI), stated that consumer protection related to the issue of eliminating trans fat in food products encompasses two fundamental rights: the right to information and the right to food safety. These two rights are considered crucial, given the serious impact trans fat have on health.

He stated that consumers have the right to know if the food they consume contains trans fat, and this information should be clearly stated on product labels. However, in reality,

Indonesia does not yet require the inclusion of trans fat content on food labels, resulting in many products circulating without such information.

“If food contains trans fat, consumers have the right to know, and this information must be on the label. In fact, labeling in Indonesia does not yet require trans fat content to be listed, so many products do not,” Sudaryatmo told Koreksi on Wednesday (August 6, 2025).

The main source of industrial trans fat is PHO. This process solidifies the oil and is often used in processed foods.

The WHO has banned the distribution of trans fat globally, and various countries have implemented strict regulations to limit the distribution of trans fat. However, the situation in Indonesia is different. Trans fat are still freely available and circulating in the market.

“Without regulation, Indonesia will become a market for trans fat, which ultimately poses risks to consumer health,” he stressed.

The YLKI highlighted the weakness of food labeling regulations in Indonesia. Currently, labels only list the term “vegetable oil” without further explanation of its source, whether it is soybean, palm, or sunflower, and without information about the hydrogenation process. However, if the oil undergoes partial hydrogenation, it almost certainly contains trans fat.

BPOM Regulation No. 26 of 2021 mandates compulsory trans fat information on labels, but it only applies if the trans fat content exceeds 0.5 grams per serving. YLKI believes this provision is too general and not transparent enough to protect consumers.

Furthermore, BPOM Regulation No. 24 of 2020 concerning PKGK also limits PHO and trans fat levels, but only applies to certain food groups, such as products for babies and children, foods for weight management, and special foods for people with diabetes. This means that most other processed food products remain exempt from these restrictions.

The government has also issued PP No. 28 of 2024 as the implementing agency for Law No. 17 of 2023 concerning Health. In Article 194, the central government has the authority to set maximum limits for GGL content in processed foods. It is worth noting that in paragraph (4) of the same article, the government also has the authority to impose excise taxes on certain processed foods containing GGL.

However, YLKI believes that, unlike sugar, which can be subject to excise, trans fat should not use fiscal instruments.

“In other countries, there is no excise tax on trans fat, due to their harmful nature. The approach should be elimination, not reduction,” explained Sudaryatmo.

Countries like the United States and Canada have implemented “trans fat-free” standards across the board. Conversely, the lack of strict regulations in Indonesia actually opens up opportunities for the entry of products high in trans fat from multinational companies.

“They (companies) use double standards. In countries where the ban is prohibited, they supply trans-fat-free products. But in countries where the regulations are relaxed, products high in trans fat are still marketed,” he concluded.

On the other hand, food and beverage industry players, through the Indonesian Food and Beverage Association (GAPMMI), expressed their support for the public health initiative to eliminate trans fat from their products.

“Essentially, we support the development of public health. Currently, there are no regulations, and they are still under discussion,” GAPMMI Chairman Adhi Lukman told Koreksi on Thursday (August 5, 2025).

#### The urgency of national regulation

Denmark was the first country to set a maximum limit for Industrially Produced Trans Fatty Acids (ITFA) at 2% of total fats and oils in 2003.

By the end of 2018, 23 countries had implemented mandatory limits or bans on PHOs as the primary source of trans fat in industry. Among those countries are Brazil, Canada, the United States, Austria, Hungary, Iceland, Singapore, Latvia, Slovenia, and Sweden.

“The majority of countries that have implemented bans or restrictions on industrial trans fat are high-income countries,” said Dina Kania, NPO Policy and Legislation for WHO Indonesia, in Jakarta on Friday (July 4, 2025).

In fact, cases of heart disease are increasing in middle- and low-income countries. In Indonesia, various studies show that the trans fat content in processed and ready-to-eat foods, including street fried foods, remains above WHO safe limits. The lack of regulations

explicitly prohibiting or limiting iTFA in the food industry exposes the public, especially the younger generation, to higher risks. This situation threatens the national health burden, considering that cardiovascular disease is the leading cause of death in Indonesia and its costs continue to rise annually.

If strict regulations on trans fat continue to be delayed, by 2045, Indonesia will be facing a “golden Indonesia” as its productive young generation is already suffering from preventable chronic diseases.

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<https://koreksi.org/2025/08/13/lemak-trans-bom-waktu-kesehatan-anak-muda-di-tengah-regulasi-longgar/>

# The Threat of Trans Fat Behind Street Food

*Many people don't fully understand the negative impacts of consuming trans fat. However, their health impacts can be even worse than those of saturated fat.*

Author: **Deonisia Arlinta**

## Key Findings on Trans Fat

- Eleven out of 130 samples (8.48%) contained high levels of trans fat (exceeding the WHO-recommended limit of 2 grams per 100 grams of total fat).
- High trans fat content was found in widely consumed products such as biscuits, wafers, sponge cakes, pastries, and street foods like *martabak* and *roti meryam*.
- Elevated trans fat levels were also detected in common baking ingredients, including white butter and margarine and butter blends (both imported and locally produced).
- One in four (25%) baked food samples contained excessive trans fat.
- The highest trans fat content was found in imported margarine and butter blends, reaching 22.68 gALT, ten times higher than the WHO-recommended limit.



## Foods Containing High Levels of Trans Fat (>2g per 100g of Total Fat)

| Product Categories             | % of Tested Products with High Trans Fat Content (n) | Product Types                           | ALT Content (g/100 g fat) |
|--------------------------------|------------------------------------------------------|-----------------------------------------|---------------------------|
| 1. Fats and oils               | 10% (3/29)                                           | White butter/shortening*                | 4.21                      |
|                                |                                                      | Bulk white butter/shortening (urban)    | 2.40                      |
|                                |                                                      | Margarine-butter blends**               | 22.68                     |
| 2. Margarine and spreads       | 0% (0/18)                                            | -                                       | -                         |
| 3. Packaged foods              | 7% (3/44)                                            | Plain pie biscuits*                     | 9.34                      |
|                                |                                                      | chocolate wafers with chocolate cream** | 2.38                      |
|                                |                                                      | Bred velvet sponge cake*                | 2.33                      |
| 4a. Ready-to-eat (fried) foods | 0%                                                   | -                                       | -                         |
| 4b. Ready-to-eat (baked) foods | 25% (5/20)                                           | Roti meryam (urban)                     | 4.50                      |
|                                |                                                      | Roti meryam (rural)                     | 6.48                      |
|                                |                                                      | Chocolate martabak (urban)              | 4.19                      |
|                                |                                                      | Croissant                               | 2.09                      |
|                                |                                                      | Chocolate-filled croissant              | 5.34                      |
| Total product                  | 8.46% (11/130)                                       |                                         | 2.09-22.68                |

\*Local products      \*\*Imported products

Source: Study by the World Health Organization (WHO) and the South-East Asia Food and Agricultural Sciences and Technology (SEAFST) Center, IPB University

IN FOGRAFIK-GUNAWA

Trans fat are often confused with saturated fats, commonly found in oils in everyday foods. However, they are different, although both can increase LDL levels in the body.

Trans fat are a type of fat that can be obtained naturally or artificially. Natural trans fat are found in small amounts in meat and milk from ruminant animals, such as cows and goats. However, the artificial trans fat produced by industry are of concern.

Yohannessa Wulandari, a clinical nutrition specialist from the Department of Nutritional Sciences, Faculty of Medicine, University of Indonesia/University of Indonesia Hospital (RSUI), contacted in Jakarta on Tuesday (August 5, 2025), said that industrially produced trans fat are derived from unsaturated fat that undergoes a hydrogenation process, which involves the addition of hydrogen to the chemical structure.

This process converts liquid vegetable oils into semi-solid or solid fat, which then turn into saturated fat. This makes what was once healthy fat harmful to the body.

“Trans fat are not saturated fat, but they’re not unsaturated fat either. Because their chemical structure has changed, they become a new type called trans fat, which unfortunately have the same negative effects as saturated fat,” she said.

These (trans) fat instead remain in the body, eventually clogging blood vessels and increasing the risk of heart disease.

Trans fat can be found in margarine, ghee, and various processed products, including biscuits, cakes, and pastries. “These include foods we frequently consume every day,” said Yohannessa.

## Health impacts

Yohannessa stated that excessive consumption of trans fat carries the risk of various serious diseases, such as obesity, high blood pressure, diabetes, and heart disease. trans fat can not only increase bad cholesterol levels but also lower good cholesterol levels.

Food hunters enjoyed culinary delights from 13 countries at the recent World Street Food Congress in Manila, Philippines. Indonesian martabak was one of the best-selling dishes at the event.



KOMPAS/SIWI YUNITA CAHYANINGRUM

According to the World Health Organization (WHO) recommendations, trans fat consumption should be limited to around 2 grams. “That’s very small, so it’s best to avoid it. Moreover, trans fat is also found in meat and dairy, so it’s best not to add more from processed foods,” he said.

Nuri Andarwulan, a senior researcher from the Southeast Asia Food and Agricultural Science and Technology (Seafast) Center at IPB, stated in mid-July 2025 that trans fat can have a more detrimental effect on coronary heart disease than saturated fat from oils. Unfortunately, public awareness, including among stakeholders, of the dangers of trans fat remains low.

## **Street food**

Based on a study by the WHO and the Seafast Center at IPB, many foods consumed by the public contain high levels of trans fat.

At least 11 of the 130 samples studied were found to contain high levels of trans fat, or more than 2 grams per 100 grams of total fat, as recommended by the WHO. This included street foods such as roti maryam (4.5-6.48 grams), sweet chocolate martabak (4.19 grams), and croissants (2.09-5.34 grams).

The public’s lack of awareness about the dangers of trans fat is at least partly reflected in the experience shared by Mikael Bima (31), a resident of South Tangerang. He consumes roti maryam almost every month. Sweet martabak is also one of his favorite snacks.

However, he knew nothing about trans fat. The only dangers he knew were those produced from meat or foods fried in a lot of oil. He believes that snacks like roti maryam are actually healthier than other street food snacks, such as fried foods or other breads. “Moreover, roti maryam is baked, not fried,” he said.

Beside Bima, there’s also Asep Mulya Permana (32), a resident of Bekasi. He also frequently buys roti maryam and martabak. When asked about trans fat, he replied, “Fat are probably found in fried foods.”

Yohannesa explained that people are often unaware of the presence of trans fat in their daily foods. Sometimes, when consuming biscuits or pastries, people only focus on the sugar content. However, high trans fat content is also something to be wary of.

## Foods Containing High Levels of Trans Fat (>2g per 100g of Total Fat)



| Product categories             | % of tested products with high Trans Fat Content (n) | Product types                                                                                                      | ALT content (g/100 g fat)            |
|--------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1. Fats and oils               | 10%<br>(3/29)                                        | White butter/shortening*<br>bulk white butter/shortening (urban)<br>Margarine–butter blends**                      | 4,21<br>2,40<br>22,68                |
| 2. Margarine and spreads       | 0%<br>(0/18)                                         | -                                                                                                                  | -                                    |
| 3. Packaged Foods              | 7%<br>(3/44)                                         | Plain pie biscuits*<br>Chocolate wafers with chocolate cream**<br>Red velvet sponge cake*                          | 9,34<br>2,38<br>2,33                 |
| 4a. Ready-to-eat (fried) foods | 0%                                                   | -                                                                                                                  | -                                    |
| 4b. Ready-to-eat (baked) foods | 25%<br>(5/20)                                        | Roti maryam (urban)<br>Roti maryam (desa)<br>Chocolate martabak (urban)<br>Croissant<br>Chocolate-filled croissant | 4,50<br>6,48<br>4,19<br>2,09<br>5,34 |
| Total product                  | 8,46%<br>(11/130)                                    |                                                                                                                    | 2,09-22,68                           |

\*Local products

\*\*Imported products

Source: Study by the World Health Organization (WHO) and the South-East Asia Food and Agricultural Science and Technology (SEAFST) Center, IPB University



INFOGRAFIK: GUNAWAN

Infographic by: Humaniora — Foods Containing High Trans Fat (>2g per 100g Total Fat)

## Key Findings

- Eleven out of 130 samples (8.48%) contained high levels of trans fat, exceeding the WHO-recommended limit of 2 grams per 100 grams of total fat.
- High trans fat content was found in widely consumed products such as biscuits, wafers, sponge cakes, pastries, and street foods like *martabak* and *roti maryam*.
- Elevated trans fat levels were also detected in common baking ingredients, including white butter and margarine and butter blends (both imported and locally produced).
- One in four (25%) baked food samples contained excessive trans fat.
- Elevated trans fat levels were also detected in common baking ingredients, including white butter and margarine and butter blends (both imported and locally produced).

WHO-SEAFast CENTER IPB

Findings from a study by the World Health Organization (WHO) and the South-East Asia Food and Agriculture Science and Technology (SEAFast) Center, IPB University.

## Regulation

It is crucial to raise public awareness of the dangers of trans fat. In some countries, trans fat have even been banned. Therefore, governments must be more assertive in protecting the public from the dangers of trans fat.

Currently, 53 countries have regulations regarding restrictions or bans on trans fat consumption. However, Indonesia is not one of these countries.

One country with fairly good trans fat regulations is Singapore. There, the trans fat content limit in any food product must not exceed 2 percent, in accordance with WHO recommendations.

Furthermore, Singapore has banned the use of PHOs as an ingredient in all types of food sold on the market. Imports of PHOs have also been banned. Following the ban, the average trans fat intake in Singapore decreased from 2.1 grams per day in 2010 to 0.2 grams per day in 2022.

Dina Kania, WHO Indonesia's National Professional Officer for Policy and Legislation, stated that WHO has issued recommendations regarding trans fat limits and is encouraging the elimination of trans fat worldwide. According to WHO recommendations, eliminating trans fat can be achieved in two ways.

First, limiting trans fat content to a maximum of 2 grams per 100 grams of total fat in all foods. Second, banning the production, import, sale, and use of PHOs.



GOOGLE AI STUDIO  
Original photo of a croissant taken from the Google AI Studio website for experimentation purposes.

“Trans fat must be eliminated. Besides having no nutritional value and being unnecessary for the body, trans fat is actually dangerous because they cannot be broken down by the body. These fats instead remain in the body, ultimately clogging blood vessels and increasing the risk of heart disease,” she said.

Dina said that Indonesia already has a legal framework to limit trans fat through PP 28 of 2024. However, more detailed implementing regulations are needed because the regulation does not clearly address trans fat. Without clear regulations, the use of trans fat, especially those processed by industry, is difficult to limit and monitor.

Sudaryatmo, Executive Director of the Indonesian Consumers Foundation (YLKI), added that many countries are increasingly restricting or banning the consumption of trans fat. If Indonesia does not firmly limit trans fat, foreign producers of food or other ingredients containing trans fat will target Indonesia for their marketing.

Trans fat are found not only in fast food but also in many street foods. A study by the WHO and the IPB Seafast Center found that high levels of trans fat were also found in packaged foods, such as biscuits, cakes, wafers, and bread. However, a survey conducted by the YLKI found that not all packaged products listed trans fat information. Of the 119 packaged products examined, 60 percent did not include information regarding trans fat.

He also urged the government to immediately issue strict regulations banning the use of trans fat. “We can’t just expect people to be more careful in choosing the products they consume. The government has an obligation to protect the public from substances that can be dangerous and have negative health impacts,” said Sudaryatmo.

Separately, Deputy Minister of Health Dante Saksono Harbuwono stated that trans fat are not yet a government priority. Currently, the Ministry of Health is still preparing regulations to limit sugar, salt, and fat. “Trans fat are not our priority yet. We are still studying that,” he said.

Commitment and political will from stakeholders to regulate trans fat are crucial to protect public health. Trans fat are not ordinary fats.

The impacts can be long-term, from increasing the risk of disease to increasing national healthcare costs. If other countries can strictly regulate and limit trans fat, there should be no reason for Indonesia to delay.

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*This coverage was supported by a fellowship from the Alliance of Independent Journalists (AJI) Indonesia in collaboration with Global Health Strategies (GHS).*

***This article was published in Kompas.id on August 8, 2025, and can be accessed through the following link:***



<https://www.kompas.id/artikel/ancaman-lemak-trans-bersembunyi-di-balik-kuliner-jalanan>

# The Dangerous Threat of Trans Fat in Free Nutritious Meals Program

*“This is a hidden danger or a hidden threat that children usually consume more of.”*

Author: **Hoirunnisa**



Head of the National Education Agency (BGN) Dadan Hindayana (right). Photo: ANTARA. Graphic: Raihan/KBR

**KBR, Jakarta** – Fitri – not her real name – smiled as we brought out a number of snacks and placed them on the table. The second-grade junior high school student remembered having them on the Free Nutritional Meal (MBG) menu.

“I got them, I like them, I like these the most,” she said, pointing to the biscuits on the table.

“My favorite is the milk and biscuits. Because the milk and biscuits are dipped in milk, it’s delicious,” she added.

Fitri was happy because she could save money on snacks. “You can take these home, so you can eat them with your family.”

“There are Marie biscuits, peanuts, milk, raisins, and jam biscuits. But I like all the menu items,” she said.

This student at a public school in West Java only chuckled occasionally when we asked questions.

She innocently replied that all the food on the MBG menu was definitely healthy. “I think it’s included (in nutritious foods). Because it contains milk,” he said briefly.



Packaged food as part of the MBG program distributed to a school in West Java. (KBR/Hoirunisa)

However, for parents like Yuli—not her real name—those foods shouldn’t be on the MBG menu.

Yuli was upset because her child had received packaged snacks from the MBG menu. She witnessed it firsthand when she was asked to help distribute MBG at school during the holidays.

“They said all the class coordinators were asked to help (with the distribution). So we went there. It was like, ‘This is called a snack, a birthday snack, and I did that.’”

“What’s the acronym for it? ‘Free nutritious food,’ is it really nutritious? No, right? Milk, biscuits, cereal drinks, peanuts, those aren’t nutritious,” the mother of two told KBR.

Yuli protested to her child’s homeroom teacher.

“I complained, ‘Ma’am, this is called a snack, but if that’s the case,’ what’s the point? Gibran,

Mr. Prabowo, eating for free like this,” she said angrily.

Yuli was even more disappointed and surprised by the teacher’s response, who claimed she had no idea the students would be getting snacks on the MBG menu that day.

“That complaint went viral, didn’t it? It was because of why the MBG was like that,”Yuli said.



Source: WHO | Graphic: KBR/Raihan

## Layers of dangers lurk

Yuli’s concern is justified. Packaged biscuits and peanuts are considered ultra-processed foods (UPF). These products undergo a lengthy processing process before they are ready for consumption.

Salt, sugar, flavorings, colorings, and preservatives are added to enhance their flavor.

This series of steps makes ultra-processed foods potentially harmful to health when consumed excessively. For example, they can lead to obesity, heart disease, type 2 diabetes, and even cancer.

However, the dangers lurking go beyond that. The threat can be compounded if ultra-processed foods contain high levels of trans fat.

Trans fat are unsaturated fatty acids that can increase the risk of coronary heart disease and stroke.

According to the World Health Organization (WHO), coronary heart disease causes approximately 500,000 deaths globally each year.

This situation has drawn serious attention from the Center for Indonesia's Strategic Development Initiatives (CISDI), which monitors the implementation of the MBG. CISDI has also found that many schools receive MBG packages containing ultra-processed foods such as instant cereals, dry biscuits, and flavored packaged milk.

"There are foods packaged in ultra-processed packaging, meaning they're high in trans fat. And we can see, yes, what's on the ground is enough for us to know that this is indeed the state of the program and the quality of the food provided in the MBG program," said Diah Saminarsih, founder and CEO of CISDI.

Reflecting on these findings, Diah believes that President Prabowo Subianto's flagship program still has serious problems.

"Children who are obese have a very large accumulation of trans fat, which comes mainly from ultra-processed foods or foods that are fried in oils that are difficult for the body to digest," said Diah.



Pendiri CISDI Diah Saminarsih. (KBR)

## Excuse

The Head of the National Nutrition Agency (BGN), Dadan Hindayana, argued that packaged food is only provided during school holidays because it lasts longer. Dadan claimed that there are guidelines for public kitchens regarding the contents of the MBG packages during school holidays.

“The directive is milk, boiled eggs, fruit, nuts, and then fortified bread or cookies. So if SPPGs (public kitchens) participate, that’s exactly what they’ll include,” Dadan said after a Public Hearing (RDPU) with Commission X of the Indonesian House of Representatives (DPR RI) last July.

On the other hand, Dadan acknowledged that not all public kitchens or Nutrition Fulfillment Service Units (SPPG) adhere to these guidelines.

“Some SPPGs want to be practical, giving them five days, and in the end, they choose foods with a long shelf life. In the long term, we’re actually encouraging SPPGs to innovate with quality products that offer good nutrition but can last for two days. But that takes time,” he said.

One SPPG interviewed by KBR said they rely solely on their own knowledge to create the MBG menu. They showed a stack of documents claiming to be standard operating procedures (SOPs) and regulations for providing nutritious food. However, they contained no specific guidelines governing ultra-processed foods or trans fat.



The Head of the National Nutrition Agency (BGN), Dadan Hindayana, delivered remarks during the inauguration and groundbreaking ceremony for the Indonesian Air Force's Nutrition Fulfillment Service Unit (SPPG) at Halim Perdanakusuma Air Force Base, Jakarta, Wednesday (August 6, 2025). ANTARA FOTO/Fauz

## Ignore

The inclusion of various ultra-processed food products with high trans fat content in the MBG menu indicates the government's disregard for the dangerous threat to children's health.

The government has also failed to create technical regulations specifically governing trans fat levels in food products.

This is despite the existence of Government Regulation (PP) Number 28 of 2024 concerning the Implementing Regulations of Law Number 17 of 2023 concerning Health.

"Regulations regarding high levels of sugar, salt, and fat don't yet exist. So, the BPOM (Food and Drug Monitoring Agency) has given its approval or issued a 'yes' decision, not based on a clearly written regulation that in Indonesia, sugar consumption should not exceed a certain percentage, salt a certain percentage, or fat a certain percentage," Diah explained.

The WHO actually has a recommendation regarding the permissible level of trans fat in food, which is less than 2 grams per 100 grams of total fat.

In 2024, the WHO found that 10 percent of food products in Indonesia contained trans fat levels exceeding the safe limit.

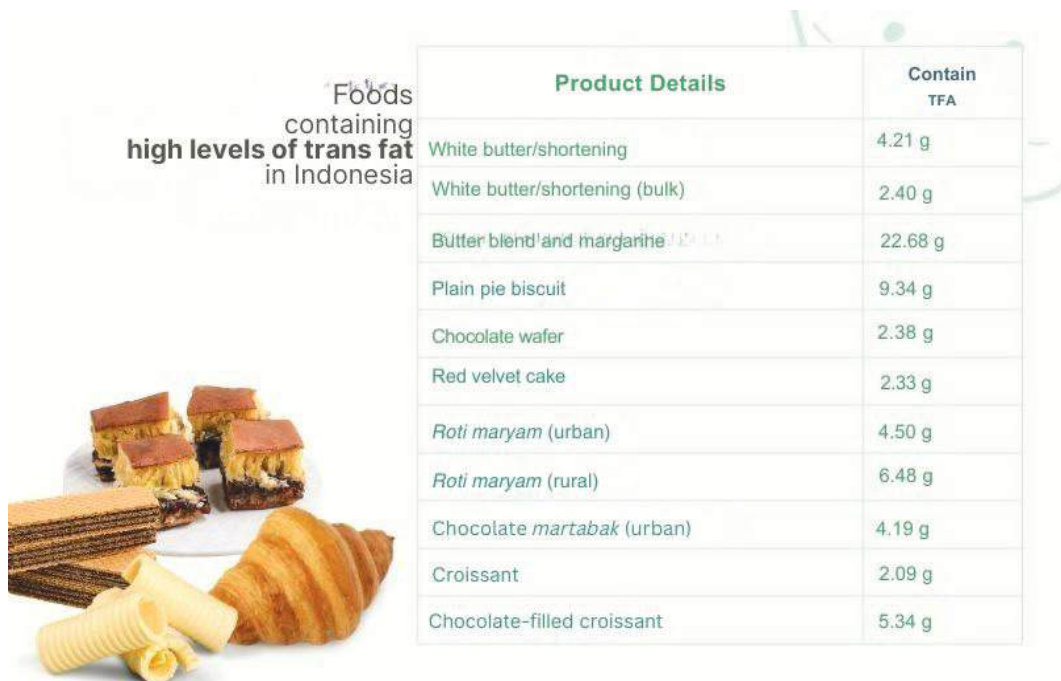
"When we talk about high cholesterol, it's a manifestation of consuming too much saturated fat, which raises bad cholesterol," said Diah.

Unfortunately, not all packaged food companies display the trans fat content in their products.

Another sad reality is that no laboratory in Indonesia is capable of accurately detecting trans fat content in food.

Professor of Food Science and Technology from Bogor Agricultural University (IPB), Nuri Andarwulan, hopes the government will provide incentives to laboratories to develop trans fat analysis methods.

"So, if the government sets regulations, the analysis must be established. So, all laboratories must be prepared," said Nuri.



Graphic: KBR/Raihan

Fatcha Nuraliyah, Head of the Ministry of Health's Cardiovascular Disease Working Team, claimed the regulation is currently being drafted.

"Because the PP is extensive, there are hundreds of articles. There are also many Presidential Regulations, potentially hundreds of articles. So, just developing the PP alone will take several years, maybe around 3-4 years. All regulations must be carefully regulated because they affect people's livelihoods. So, there can be no rush," Fatcha said when met in Jakarta on Friday (July 4, 2025).

A series of upstream problems, ranging from low government commitment, a lack of regulations, and a lack of infrastructure, inevitably have downstream impacts. Consumers are victims, inundated with ultra-processed food products that potentially contain high levels of trans fat.

Ironically, the same foods are served to children as part of the Free Nutritious Meal Program.

CISDI founder Diah Saminarsih is concerned that this situation increases the risk of children being exposed to disease at an early age.

"This is a hidden danger, or a hidden threat, that children typically consume more of. If these unhealthy eating habits accumulate from a young age, they will develop cardiovascular disease or chronic illnesses in their teens or even young adults," said Diah.



Source: WHO | Graphic: KBR/Raihan

The MBG program should be able to build children's habits of consuming nutritious foods, but...

"This is a very serious matter, because at a crucial age, when we are shaping children's eating and consumption patterns, we are instead setting the example that nutritious foods are like this: packaged foods, high in trans fat," Diah criticized.

*This coverage was supported by a fellowship from the Alliance of Independent Journalists (AJI) Indonesia in collaboration with Global Health Strategies (GHS).*

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<https://kbr.id/articles/indeks/ancaman-bahaya-lemak-trans-di-makan-bergizi-gratis>

# Fat! What You Did To Me Was Cruel!

*Have you heard about trans fat? Believe it or not, they have incredibly destructive powers! Although they're so small they can only be seen with a microscope, they can cause human suffering and even destabilize a country's economy.*

Author: **Krisnatama**



Ilustrasi sakit jantung. (Sumber: Canva/2025)

Sari Dewi Putri's breath was ragged. After walking approximately 700 meters from Fatmawati MRT Station, the 28-year-old woman finally arrived at the Griya Husada Building of Fatmawati General Hospital (RSUP) on Tuesday (July 8, 2025). Sitting in the waiting room, Sari caught her breath and wiped away the sweat that was pouring down her forehead and cheeks.

"It doesn't seem like it's far, but when I walk it's really tiring," he said.

The woman, who weighs 110 kilograms and stands 155 cm tall, said she has had a heart

attack for the past three years. Given her build, Sari's Body Mass Index (BMI) is 45.79, which indicates class III obesity, or morbid obesity. This indicates a very high level of obesity and carries a high risk of various health problems.

That afternoon, Sari was going to have her heart checked. She explained that the previous Saturday night, while attending an acquaintance's wedding, she had eaten a lot of food, from roasted lamb to es doger. "The next day, my chest was sore," Sari said.

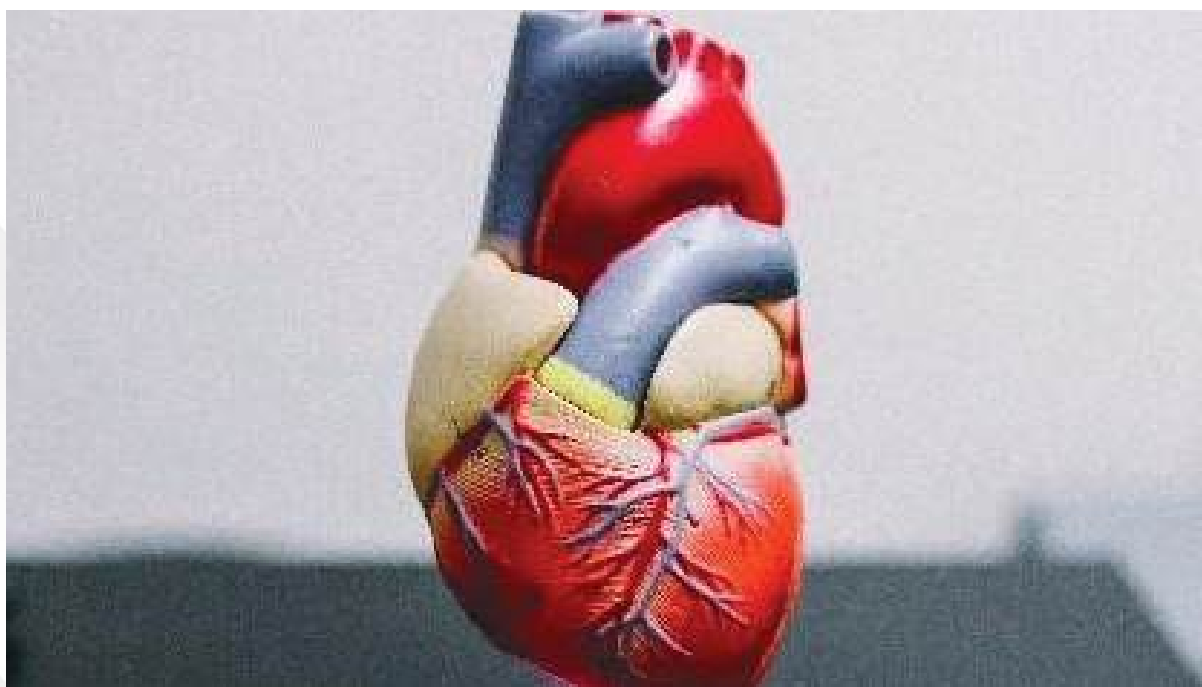


Illustration of a heart. (Photo Source: Kenny Eliason/Unsplash.com)

Sari recalls that the first attack occurred one morning in 2022. She was on her way to work from her boarding house in Cipete, South Jakarta. Suddenly, she felt dizzy and her left chest ached. She immediately lost consciousness. Fortunately, a boarding house guard saw her and immediately took her to Fatmawati General Hospital.

The doctor said, Sari continued, she had a heart attack. The cause was a blockage in blood flow to the heart due to a buildup of fatty plaque. The trigger was a diet high in GGL coupled with an unhealthy lifestyle.

Since childhood, while still living with her parents in Yogyakarta, Sari has enjoyed snacking. Both her father and mother often treated her sweet martabak (terang bulan) on birthdays or when she got good grades at school. Furthermore, when accompanying her mother to the market, she often bought snacks like fried foods and bread.

Snacking habit carried over into adulthood. After graduating from college and moving to Jakarta, Sari became even more addicted to snacking. On the other hand, Sari's physical activity was also very limited. As an accountant at a public accounting firm, she spent most of her time behind a desk. Furthermore, she was also a smoker, often consuming a pack of cigarettes every one to three days.

A few months after the heart attack, Sari, then 25, decided to have a stents implanted in her heart. The procedure cost Sari approximately Rp 50 million (approximately \$3,000).

She was willing to pay out of pocket because she didn't want the hassle of managing and facing the long queues for BPJS, which she found excessively long. Sari admitted she even borrowed money from online lending platform several times to cover post-surgery medical expenses.

"At that time, I didn't use BPJS because I was already scared because my chest pain was frequent. I wanted to be treated quickly," he said.

After the ring was inserted, Sari became disciplined in her diet, and her fitness improved. Furthermore, she had to cut back on snacks and save money to pay off her online loans.

However, over time she still fell back into her bad habits of snacking and smoking.



Illustration of a heart rate monitor. (Photo source: Jair Lazaro/Unsplash.com)

Now that her chest pain has returned for the second time, Sari is determined to change her lifestyle. She's also determined to get treatment through BPJS Kesehatan to avoid financial hardship. "I was so scared. I thought my time was up. But it turns out God is giving me another chance. I want to change."

Like Sari, Dwi Putra Rahmat also developed heart disease at a relatively young age. This 38-year-old man also suffered from arrhythmia, an irregular heartbeat.

"My chest often hurts, especially when I walk a long distance or half-run, or when I climb a lot of stairs," said Putra when contacted on Thursday (31/7/2025).

The first time he felt a pounding in his chest was four years ago. Putra was chasing the elevator as it was about to close when he was already late for work. Since then, he's experienced frequent palpitations and pain.

A few days later, Putra went to the doctor. There, the doctor diagnosed him with arrhythmia. One of the causes was high blood pressure, triggered by a combination of chronic consumption of excessive sugar, salt, and fat, coupled with an unhealthy lifestyle. However, it was primarily the high-fat diet that caused the high blood pressure.

As an event organizer, Putra admitted to often buying snacks like martabak and bread to fill his stomach when he has to work overtime. Furthermore, Putra and his friends often watch football matches, and they often buy martabak as a snack.

"Staying up late, smoking, and snacking uncontrollably. My heart faces the consequences," he said.

## **All ages**

The evils of fat also attacked Antonius Yulianto's body. The man, who turned 70 this August, suffered a stroke in 2022. Similar to Sari's experience, Yulianto was attending an event and enjoying roasted lamb.

The next day, while driving his wife to work on his motorcycle, Yulianto suddenly lost his balance and fell. He was able to continue his journey to his wife's office, but upon arriving home, he found his tongue was stiff and his lips were chapped.

When he was taken to the hospital, the doctor said he had a blockage in his head. The doctor explained that the blockage was caused by high blood sugar and cholesterol levels. “I was shocked. I thought it was just exhaustion, but it turned out to be a stroke,” Yulianto said in a video call on Monday (July 7, 2025).

After suffering a stroke, Yulianto, who was usually energetic and talkative, has become withdrawn. There’s concern that his excessive quietness and apathy could make him unaware of dangerous situations.

When spoken to, Yulianto takes 2-5 seconds to respond to what the other person is saying. His voice sometimes chokes up during conversations. His facial expression also suddenly changes, as if he’s about to cry, even though he’s in a normal emotional state.

After nearly a year of outpatient treatment at the National Brain Center (PON) Hospital in Cawang, East Jakarta, Yulianto was declared cured. Yulianto and his family were very grateful that almost all of his medical expenses, from doctor’s fees and laboratory tests to medication, were covered by BPJS Kesehatan.

“Thank God. If it weren’t (covered by BPJS Kesehatan), it would cost me much more,” said Yulianto.

However, it seems the disease hadn’t completely disappeared from his body. On May 28, 2025, he suffered a second stroke. Yulianto, who now lives in Klaten, Central Java, underwent treatment there.

Thomas Dwi Joko also experienced fatty plaque buildup, which can trigger heart disease. The 72-year-old from Yogyakarta said his doctor explained that plaque had accumulated in the blood vessels leading to his heart by approximately 50 percent.

After two days of intensive care, Joko’s health improved. He now has regular monthly check-ups with his doctor and takes cholesterol and blood-thinning medication daily.

“Since then, my lifestyle has changed. I quit smoking and cut back on fatty and fried foods. I now live a more regular lifestyle, don’t smoke, and only cycle short distances,” he said.

His determination to live a healthy lifestyle paid off. Joko said that after undergoing a series of physical tests, he received praise from doctors, noting that his physical condition was above average for a 72-year-old.

## The dangers of trans fat for the body

Sari, Putra, Yulianto, and Joko are vivid examples of the evils of trans fat. While heart disease and stroke are caused by various factors, it's undeniable that trans fat are a risk factor for various catastrophic non-communicable diseases (NCDs), such as heart disease and stroke.

Senior Researcher at the Seafast Center of IPB University, Nuri Andarwulan, explained that many foods around us contain the threat of trans fat without us realizing it.

Trans fat are unsaturated fatty acids with at least one double bond in the trans configuration. These compounds can come from natural sources or be produced industrially through the partial hydrogenation of vegetable oils.

Nuri explained that consuming trans fat is dangerous for the body because it can increase the levels of LDL or commonly called bad cholesterol and reduce the levels of HDL or good cholesterol.

Increased LDL and decreased HDL can lead to plaque buildup in the arteries, increasing the risk of heart disease and stroke.

"Imagine blood vessels like hoses. HDL is small but moves fast. Meanwhile, LDL is large and slow. Because it's slow, it easily oxidizes and can stick together to form plaque, blocking blood flow. This can trigger various serious diseases like heart disease and stroke," said Nuri.

A study by the World Health Organization (WHO) and the Seafast Center of IPB, published in May 2024, found that 11 of the 130 food samples studied contained high levels of trans fat, or more than 2 grams per 100 grams of total fat, in line with WHO recommendations.

Foods high in trans fat include white butter (4.21 grams per 100 grams), a mixture of butter and margarine (22.68 grams per 100 grams), original pie biscuits (9.34 grams), chocolate wafers (2.38 grams), maryam bread (4.5-6.48 grams), sweet chocolate martabak (4.19 grams), and croissants (2.09-5.34 grams). Likewise, fried foods also contain trans fat when cooked with the same cooking oil repeatedly.

## Foods Containing High Levels of Trans Fat in Indonesia

| Categories                 | Percentage of products containing TFA (Trans Fatty Acids) > 2g per 100g of Total Fat | Product Details                                                                                                           | On-Pack Ingredient Labels                                                                      | TFA Content                                    |
|----------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------|
| Fats and Oils              | 10% (3 of 29)                                                                        | White butter /shortening<br>White butter /shortening<br>A mixture of butter and margarine                                 | Vegetable oil<br>-<br>Vegetable oil                                                            | 4.21 g<br>2.40 g<br>22.68 g                    |
| Margarine and spreads      | 0% (0 of 18)                                                                         |                                                                                                                           |                                                                                                |                                                |
| Packaged foods             | 7% (3 of 44)                                                                         | Original Pie Biscuit pie biscuits<br>Chocolate wafer<br>Cake red velvet                                                   | Margarine, baking fat<br>Hydrogenated palm kernel fat<br>Hydrogenated vegetable fat, margarine | 9.34 g<br>2.38 g<br>2.33 g                     |
| Ready-to-eat (fried) foods | 0% (0 of 19)                                                                         |                                                                                                                           |                                                                                                |                                                |
| Ready-to-eat (baked) Foods | 25% (5 of 20)                                                                        | Roti maryam (urban)<br>Roti maryam (rural)<br>Martabak sweet chocolate (urban)<br>Croissant<br>Chocolate-filled croissant | Margarine<br>Margarine<br>Margarine, baking fat<br>Margarine, chocolate paste                  | 4.50 g<br>6.48 g<br>4.19 g<br>2.09 g<br>5.34 g |
| Total                      | 8.46% (11 of 190)                                                                    |                                                                                                                           |                                                                                                |                                                |

Organization  
Indonesia

<https://www.who.int/indonesia/news/publications/other-documents/trans-fatty-acid-fact-sheet>

In fact, some of these foods are frequently consumed by the public. Citing a publication titled “Calorie and Protein Consumption of the Indonesian Population and Provinces in September 2024” released by the Central Statistics Agency (BPS) in May 2025, it states that the consumption of cookies, biscuits, and wafers reached 25.22 calories per capita per day. Meanwhile, the consumption of fried tofu, tempeh, bakwan, and fried bananas reached 38.33 calories per capita per day. When these two types of food are combined, they produce 63.55 calories, equivalent to 3 percent of the 2,120 calories that constitute the average daily calorie intake of Indonesians.

Furthermore, sweet martabak is also a popular snack. This is reflected in the “GoFood Food Heaven Trends 2024” research, which ranked sweet martabak as the best-selling sweet snack in 2024.

Pro Health’s investigation of sweet martabak vendors in the Pamulang and Ciputat areas found that vendors use butter and margarine when preparing the dish. While further laboratory research is needed to confirm the trans fat levels in the sweet martabak, research by the WHO and the IPB Seafast Center suggests that these foods and types of food contain trans fat.

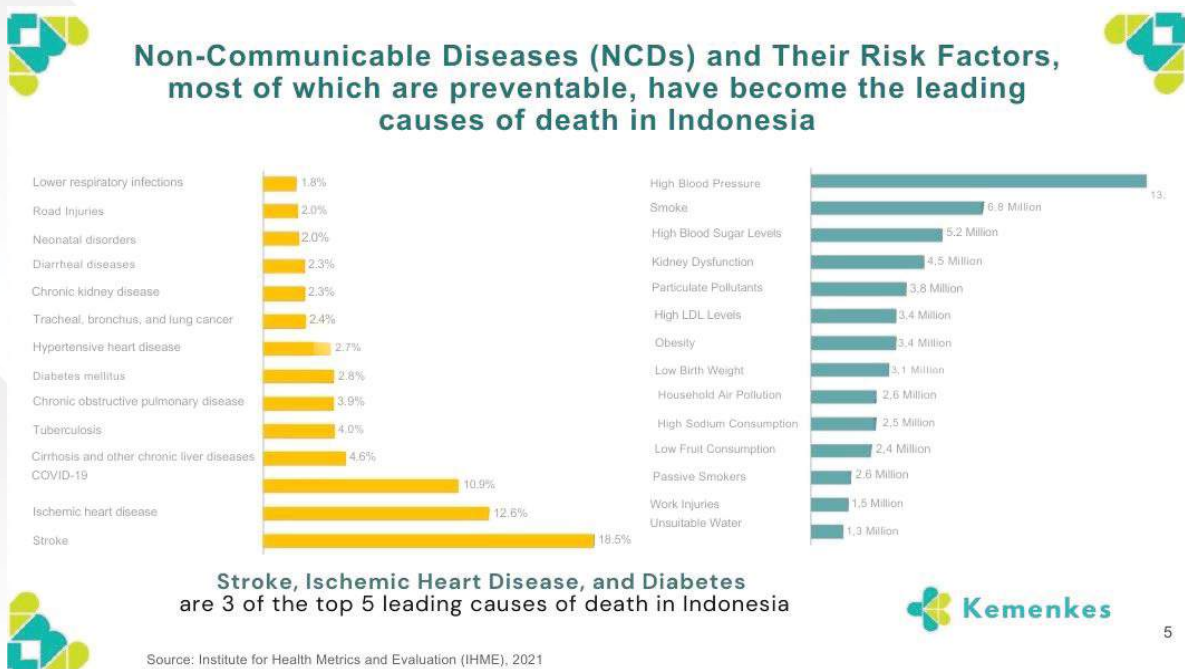
Dina Kania, WHO Indonesia’s National Professional Officer for Policy and Legislation, said the public needs to become aware of the hidden threat of trans fat. High levels of trans fat are found in widely consumed products such as biscuits, wafers, cakes, pastries, and street foods like martabak and roti maryam.

## Shaking the country

Not only is trans fat damaging to human health, it can also devastate countries and even the world. According to WHO data, trans fat causes 500,000 deaths annually worldwide.

Heart attacks and strokes, one of the risk factors of which is triggered by trans fat, also record a horrific death rate in Indonesia.

Citing 2021 data from the Institute for Health Metrics and Evaluation (IHME), as compiled by the Ministry of Health, stroke and heart attacks are the leading causes of death from NCDs (non-communicable diseases). Strokes accounted for 18.5 percent of NCDs deaths. Heart disease was the second-highest cause of death among NCDs, accounting for 12.6 percent.



From an economic perspective, the high rate of chronic NCDs also strains state coffers. According to an analysis by Kompas Research and Development, heart disease could result in an economic burden of Rp 67.34 trillion (approximately US\$4.7 billion) in 2024. This figure is equivalent to one-third of the Rp 187.5 trillion allocated for health care in the 2024 State Budget (APBN).

The high number of NCDs is also burdening state finances. NCDs accounted for 61.9 percent of JKN spending in 2021.

Heart disease, cancer, and stroke were the three highest contributors to the number of cases and medical costs under the National Health Insurance (JKN) in 2022. Total heart treatment costs under the JKN in 2022 reached Rp12.14 trillion, with 15.49 million cases. Cancer was second with Rp4.50 trillion and 3.14 million cases. Stroke was third with Rp3.23 trillion and 2.53 million cases.

The high cost burden of the JKN has left the BPJS Kesehatan in a deficit. A working meeting with Commission IX of the House of Representatives (DPR) on February 12, 2025, revealed that BPJS Kesehatan's finances were in deficit of Rp 9.56 trillion. The problem was that BPJS Kesehatan's revenue reached Rp 165.73 trillion, while JKN expenses reached Rp 174.90 trillion.

Executive Director of the Center of Economics and Law Studies (CELIOS), Bhima Yudhistira, said that the increasing number of NCDs is not only an economic burden on patients and the community, but also on the BPJS Kesehatan and the state.

"The state budget, which should be directed to productive aspects such as job creation, is now being increasingly used for public health costs," Bhima said when contacted on Wednesday (July 9, 2025).

Furthermore, the high incidence of chronic NCDs such as heart disease and stroke can lead to increased poverty. The high cost of medical care can push the middle class into poverty, pushing them into the vulnerable and even the poor, and even pushing the vulnerable into poverty.

Moreover, the current rate of medical inflation in Indonesia is very high. According to a report by the research institute Mercer Marsh Benefits (MMB), "Indonesia Health and Benefits Study: 2024 edition," medical inflation in Indonesia has increased annually for the past five years.

In 2021, medical inflation reached 12.1 percent. Last year, the figure increased to 17.9 percent. In 2021, the national inflation rate was 1.87 percent. In 2024, inflation is projected to reach 1.57 percent. This year, the MMB projects the inflation rate to remain high at 19.0 percent.

"People's income growth is weakening amidst this sluggish economic climate, making them unable to keep pace with the growth in medical inflation," said Bhima.

This high medical inflation, Bhima continued, could push those in need to take out loans. If people aren't careful, they could end up trapped by extortionate interest rates, which will only exacerbate their problems.

Furthermore, another impact is decreased productivity. When someone is sick, they must take time off work. This means potential lost productivity. Furthermore, if someone suffers from chronic NCDs, such as heart disease and stroke, their work life expectancy is significantly reduced compared to healthy and fit workers. This is especially true now with the increasing number of young patients suffering from chronic NCDs.

All of these economic impacts will clearly hamper Indonesia's economic growth. President Prabowo Subianto aspires to achieve 7-8 percent economic growth. Currently, in the first quarter of 2025, economic growth has only reached 4.87 percent, far below the target.

"A healthy society can certainly drive economic growth," said Bhima.

## **Regulatory changes**

Dina from the WHO stated that to improve this situation, her agency recommends a policy of eliminating trans fat. First, limit trans fat content to a maximum of 2 grams per 100 grams of total fat in all foods. Second, prohibit the production, import, sale, and use of PHOs or trans fat.

"Trans fat must be eliminated. The body doesn't need them. Trans fat are actually dangerous because they can't be broken down by the body and instead remain in the body, clogging blood vessels, which can lead to heart disease," said Dina.

He stated that currently, 53 countries worldwide, with a total population of 3.7 billion, have implemented trans fat elimination policies. In Southeast Asia, Indonesia still lags behind Singapore and Thailand in this trans fat elimination policy.

In Singapore, for example, in 2021, they banned the use and import of PHOs as ingredients in all foods sold in Singapore. As a result, the average daily trans fat intake decreased from 2.1 grams in 2010 to 0.2 grams in 2022.

Bhima added that the government needs to implement preemptive policies, such as encouraging people to be physically active by eliminating taxes on sports services.

Conversely, the government can also use state financial instruments to control low-nutritious food by imposing excise taxes on processed and fast food.

Fatchanuraliyah, Head of the Brain and Cardiovascular Disorders Working Team of the Directorate of NCDs at the Ministry of Health, stated that efforts to limit trans fat consumption are part of the strategy to control GGL consumption.

In accordance with PP No. 8 of 2024 concerning the implementing regulations of Law No. 17 of 2023 concerning Health, the food industry is encouraged to reformulate high-GGL products. The regulation states that the government will establish regulations or policies to establish maximum limits.

Taruna Ikrar, Head of the BPOM, stated that his agency is monitoring research and WHO recommendations regarding trans fat. He believes trans fat contain harmful compounds that can trigger various metabolic, cardiovascular, and degenerative diseases.

According to him, when WHO has set its standards, it is necessary to translate their implementation in Indonesia.

“The WHO certainly works based on science and data. The BPOM can use it as a standard reference,” he said, as quoted by CNN.

Various studies also indicate that many non-communicable diseases in Indonesia are triggered by foods containing GGL. The agency supports the implementation of PP 8/2024 to promote the nutritional safety of food consumed by the public.

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*This coverage was supported by a fellowship from the Alliance of Independent Journalists (AJI) Indonesia in collaboration with Global Health Strategies (GHS).*

***This article was published in Prohealth.id on August 12, 2025, and can be accessed through the following link:***



<https://prohealth.id/lemak-apa-yang-kau-lakukan-padaku-itu-jahat/>

# Dying a Little Every Day from Snacks

*The government has failed to create a safe food system, leaving children in urban areas flooded with snacks high in trans fat.*

Author: **Ahmad Thovan Sugandi**



For children in Jakarta's relatively densely populated urban villages, the most readily accessible snacks are packaged processed foods. However, those who indulge in these flavorful snacks are not to blame. What appears to be an individual choice is actually shaped by the absence of regulation and poor oversight of high-risk foods, particularly those containing trans fat.

Trans fat, or trans fatty acids, are a type of unsaturated fatty acid that can come from both natural and industrial sources. In industrial production, trans fat are created through the partial hydrogenation of vegetable oils, converting liquid vegetable oils into a more stable solid form. This ingredient is widely used in various processed food products and is often a favorite among consumers.

The risks are serious. The WHO confirms that consuming large amounts of trans fatty acids (TFAs) can increase the risk of heart attacks and death from coronary heart disease. The agency recommends a ban on PHOs, including the production, import, sale, and use of PHOs in all foods. If this measure is deemed impractical, the WHO recommends limiting trans fat consumption to less than 1 percent of total daily energy intake. This equates to less than 2.2 grams per day for a 2,000-calorie diet.

### **The Codex international standard does not require the inclusion of trans fat in processed foods.**

However, the reality on the ground is far from ideal. A 2023 WHO Indonesia study found that a number of processed foods in Indonesia still contain ALT above the recommended threshold. Of the 130 food product samples tested, including margarine and spreads, oils and fats, fat-based packaged foods (biscuits, cookies, wafers, cakes, bread), and ready-to-eat foods such as donuts and martabak, eleven of them (8.46%) contained high levels of trans fat, exceeding the WHO threshold of 2 grams per 100 grams of total fat.

Products with high ALT content are commonly found around us, including biscuits, wafers, cakes, pastries, and street foods like martabak and roti maryam. Even ingredients often used to make cakes and bread, such as shortening or margarine-butter mixtures, have also been found to have high levels. The highest record was found in an imported margarine-butter mixture, at 22.68 grams of ALT, ten times the WHO recommendation. In the baked goods category, one in four samples (25 percent) had high trans fat content.

The lack of adequate regulation, coupled with social vulnerability, creates a fertile ground for unhealthy consumption patterns, especially among children. Processed food vendors are readily found in nearly every alley in densely populated areas. From school hours until the afternoon, these stalls are swarmed by children seeking cheap and appealing snacks, despite their health risks.

This scene is clearly visible in the Johar Baru sub-district of Central Jakarta, and in several densely populated areas of the Setiabudi sub-district of South Jakarta. According to data from the BPS, Johar Baru has 25 kindergartens, 27 elementary schools, and 11 junior high schools, with a total of 30,536 children of elementary to junior high school age. They live in narrow alleys with a population density of approximately 57,771 people per square kilometer, the highest in Central Jakarta. Ironically, this area also houses the headquarters of the BPOM.

Amidst these limitations, small food stalls have become the primary source of food for children, providing packaged snacks that are cheap and attractive, but high in risk, especially due to their trans fat content.

Setiabudi presents a different landscape. This area, home to 107,400 residents and covering an area of 8.85 square kilometers, has a population density of only 12,136 people per square kilometer, significantly lower than Johar Baru. With 22 elementary schools and 10 junior high schools accommodating approximately 11,889 school-age children, the environment here is more spacious. However, pockets of vulnerable residents remain, as do food stalls near schools that influence children's daily consumption patterns.

To take a closer look, detikX visited food stalls in residential areas, around schools, and at children's gathering points in both districts. From conversations with vendors, parents, children, and residents, 38 types of processed snacks were identified as the most frequently sold and purchased.

Of the 38 types, 23 were produced by three well-known manufacturers. These included 19 assorted-flavored biscuits, 8 non-biscuit snacks (chips, crackers, and others), 6 wafers, and 1 chocolate paste. Based on the nutritional information labels, only 8 products claimed to be trans fat or ALT-free, while the remaining 26 did not include any relevant information at all.

Given these conditions, Indonesia is seen as not having implemented an adequate trans fat elimination policy. Without strengthened regulations, this gap leaves the Indonesian market open to products high in trans fat, both local and imported.

BPOM Head Taruna Ikrar acknowledged that current regulations have not yet reached the stage of complete elimination. The ban or restriction on trans fat in Indonesia only covers cooking oil and special nutritional products. There are no regulations that target all processed food products.

Taruna explained that BPOM Regulation Number 26 of 2021 regarding processed food labels is currently under revision, but the inclusion of trans fat on labels remains non-mandatory. BPOM's oversight of food products that include information about trans fat on the label is also risk-based. This means that BPOM does not routinely test the actual levels of trans fat in all products, but only verifies that the labels match the registration data.

# Regulations Trans Fat IN INDONESIA



0% trans fat requirement applies only to cooking oil and solid frying oil.  
(BPOM Decree No. 70/2025)



Prohibition of partially hydrogenated oils (PHO) in infant formula, complementary feeding products, and diabetic foods, with trans fat limits ranging from 1–3% of total fat, depending on product category.  
(BPOM Regulation No. 24/2020)



Mandatory labeling of trans fat content if it exceeds 0.5g per serving or if the product makes a saturated fat or cholesterol claim.  
(BPOM Regulation No. 26/2021)



The government may restrict or ban risky ingredients, including PHO, in processed and ready-to-eat foods.  
(Government Regulation No. 28/2024)

## Examples of Trans Fat Regulations in Other Countries



**Singapore**  
Introduced a 2% trans fat limit in 2012, then completely banned the use of PHOs in all foods, including imports, in 2021.



**India**  
Imposed a 2% trans fat cap on all food products, requiring trans fat labeling and clear indication of “partially hydrogenated” or “fully hydrogenated” oils on packaging.



**Thailand**  
Has banned the production, import, and sale of PHOs since 2018.

SOURCE: COMPILED FROM VARIOUS REFERENCES | BASED ON A PAPER BY AHMAD THOVAN SUGANDI

“The Codex international standard does not require the inclusion of trans fat in processed foods,” Taruna told detikX last week in writing.

According to the BPOM, this requirement could be a burden for industry, especially MSMEs, given the high cost of testing and the limited number of testing laboratories that comply with WHO methods. This is despite the BPOM claiming to have laboratories capable of testing trans fat according to international standards.

Meanwhile, Siti Nadia Tarmizi, Director of Non-Communicable Disease Prevention and Control at the Indonesian Ministry of Health, acknowledged that there is currently no technical policy specifically targeting trans fat control in the community. The government does have regulations, through PP 28/2024, that address sugar, salt, and fat control, but implementation remains limited to education and outreach.

“There really isn’t a technical policy that has reached the grassroots level,” Nadia told detikX.

Nutrition labels on food packaging are expected to provide detailed information on sugar, salt, fat, and calorie content. However, without strict technical regulations, listing trans fat content is still rare. Public awareness is considered the initial step, with distribution or promotion restrictions implemented later.

“We won’t immediately implement sanctions; we’ll start with outreach and education,” he explained.

He stated that the main sources of trans fat in Indonesia are baking fat, biscuits, wafers, and packaged cakes. However, upstream prevention efforts, such as banning the import or production of raw materials containing trans fat, are still difficult to implement.

“It’s impossible to ban imports, because trans fat are also used in other products,” he said.

## **The trap of trans fat free claims**

Nuri Andarwulan, a senior researcher at the SEAFast Center in Bogor Agricultural University (IPB), stated that labels labeled “zero trans fat” or “trans-fat-free” on the market don’t necessarily mean they’re completely free from trans fat. He explained that a “zero trans fat” number doesn’t mean there’s no trans fat detected in the food.

However, according to BPOM Regulation No. 26 of 2021, if the trans fat content is below 0.5 percent, companies can claim zero. In a study by IPB and the WHO, levels of 0.2 or 0.3 percent were frequently found in almost all product samples, yet they were still allowed to be labeled zero because they met these requirements.

The problem, according to Nuri, is that this testing method isn't necessarily accurate. The official WHO standard method for detecting trans fat generally uses a gas chromatograph (GC) equipped with a 100-meter-long polar capillary column specifically designed for the high-precision separation of cis/trans fatty acid isomers. Unfortunately, according to Nuri, most laboratories in Indonesia use columns only 60 meters long. Columns of this length are only capable of detecting 60 percent of the total trans fat content.

IPB previously used a 60-meter column that could only detect 60 percent trans fat content. Under the guidance of WHO experts, they then used a 100-meter column, which showed higher levels.

"For example, if there's a figure of 1 percent, it actually only represents 60 percent of the total trans fat present if the analysis uses 60 meters," Nuri explained.

This situation raises questions about how accurate the zero-trans fat claims claimed by manufacturers and the BPOM are if testing doesn't use the most sensitive methods. Meanwhile, according to Nuri, Indonesia only has one laboratory capable of optimal trans fat analysis, namely at IPB University.

"BPOM also doesn't have a comparative laboratory," he said.

Ironically, procuring equipment isn't actually a major obstacle. The price of WHO standard columns is considered relatively inexpensive. In fact, a single column can be used for hundreds of tests.

"The equipment is there, we only lack the columns. The price of the columns is around Rp 30-40 million. That's actually a small amount if the government procures it," said Nuri.

According to Nuri, the idea of mandating trans fat levels on food labels is already underway. Therefore, laboratory readiness is key. Every manufacturer registering their product with the BPOM will be required to submit trans fat analysis results. Therefore, the BPOM is required to have a qualified laboratory to conduct comparative tests.

"That's what we mean by having to prepare first if trans fat is regulated," said Nuri.



This regulatory delay leaves consumers vulnerable to consuming trans fat unknowingly. A zero-fat label on packaging can mask the fact that the product still contains levels that pose a health risk, while governments are unable or unwilling to ensure accurate and equitable testing.

Sudaryatmo, Executive Director of the YLKI, emphasized that information on trans fat content in food products, as well as research into it, remains very limited in Indonesia. Meanwhile, imports of PHOs continue from various countries. Many PHOs producers worldwide have made Indonesia one of their export destinations, given that many other countries have already banned PHOs.

Citing World Bank data, in 2023 alone, Indonesia imported approximately USD 33.87 million worth of vegetable fats and oils, as well as their fractions, both partially and fully hydrogenated. The total import volume reached approximately 13,486 tons.

“This is from the downstream side. From the upstream side, one source of trans fat is PHOs. Since several developed countries, particularly America and Europe, banned it, it has shifted to developing countries, particularly in the Asia Pacific,” Sudaryatmo told detikX.

Downstream, labeling trans fat content in processed products is also problematic. The YLKI once conducted a food label analysis in Jakarta on biscuits and similar products. The

results showed that some didn't list the product at all, while others did, but all claimed zero percent trans fat. However, testing conducted by IPB specifically for biscuits found a high trans fat content, well above the 2 percent recommended by the WHO. Furthermore, BPOM regulations on packaged food labeling are still voluntary.

Domestically, PHOs isn't solely imported. According to the YLKI, several large industries conduct partial hydrogenation of vegetable oil independently. Unfortunately, Indonesian labeling regulations only require the term "vegetable oil" to be listed, without specifying the type or hydrogenation process.

"Partial hydrogenation definitely contains trans fat, right? The regulation doesn't just specify vegetable oil; it must also specify the vegetable source and whether or not it was hydrogenated," he stressed.

## **Slowly damaged by snacks**

Dr. Piprim Basarah Yanuarso, Chairman of the Indonesian Pediatrician Association (IDAI), stated that trans fat regulations in Indonesia are far from firm. He believes that weak regulations allow the industry to freely market products that pose risks to children's health, often with misleading labels.

According to Piprim, the root of the problem can be traced back to a history of misguided campaigns dating back to the 1970s, when saturated fats like coconut milk, coconut oil, butter, cheese, and whole eggs were branded as harmful to health. The public was then trapped in the assumption that vegetable oils were healthy because they were cholesterol-free. However, decades after the shift in consumption from saturated fats to PHOs, cases of coronary heart disease and metabolic diseases actually increased rapidly. Products such as margarine, industrial cookies, fast food, and even packaged popcorn and potato chips, Piprim said, are the main sources of exposure to trans fat.

Public awareness of these dangers, he said, is still low. trans fat are chronic and their effects are not immediately visible, but they contribute to obesity, hypertension, and cardiometabolic syndrome in children and adolescents.

"Now many children have hypertension, teenagers already have hypertension," said Piprim to detikX.

IDAI, said Piprim, urged the government to protect the public, especially children, by requiring the food industry to write product contents honestly and in detail.

“Because sometimes there’s deception in this world. Sugar isn’t even considered sugar, even though it contains high fructose corn syrup,” he said.

He warned that the combination of high fructose corn syrup with trans fat or PHO vegetable oil is a quick way to damage the health of the Indonesian people.

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<https://news.detik.com/x/detail/spotlight/20250820/Mati-Perlahan-karena-Jajanan/>

# Trans Fats Put Our Blood Vessels at Risk

Author: **Anza Suseno**



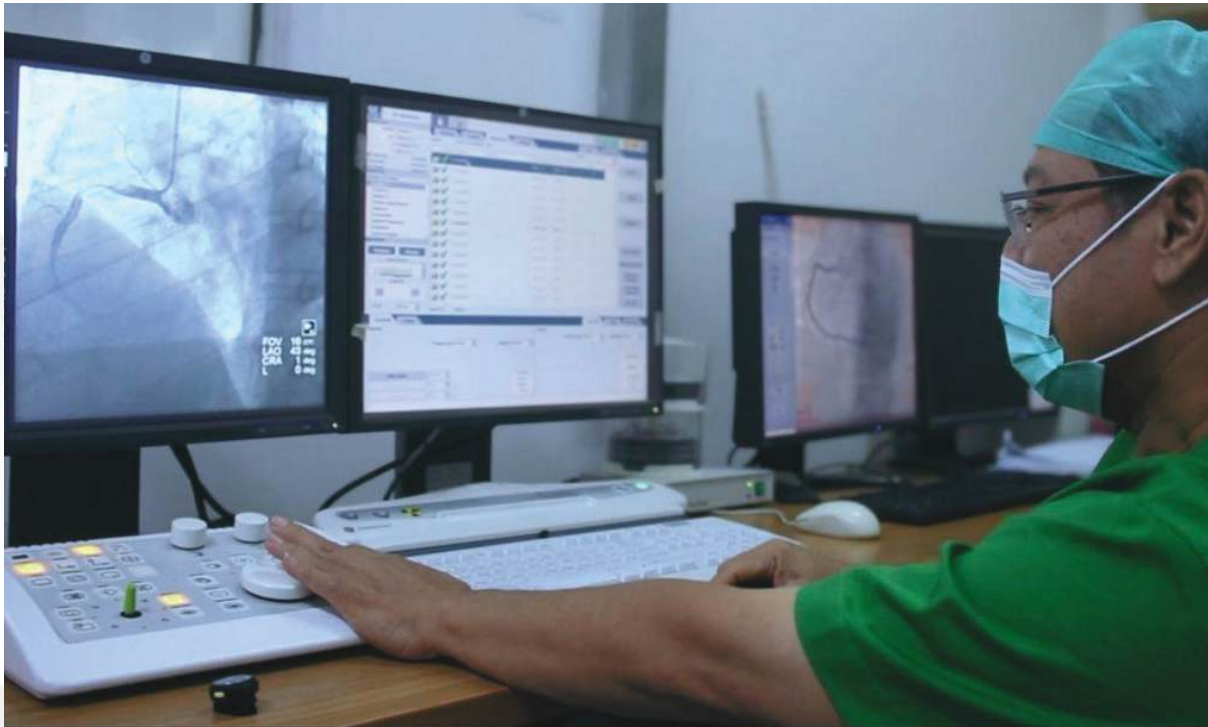
Critical moments in the cath lab during treatment of a heart patient (July 31). Photo: Anza Suseno

**INDEPENDEN** – The operating room lights shone on the patient lying on the operating table. The beeping of the heart monitor combined with the ceaseless clatter of medical equipment, creating a tense rhythm inside the catheterization laboratory at Syamsudin SH Regional Hospital in Sukabumi City, West Java. The air, laced with the scent of antiseptic, stung the nostrils, while high radiation exposure was a well-known risk for the medical staff.

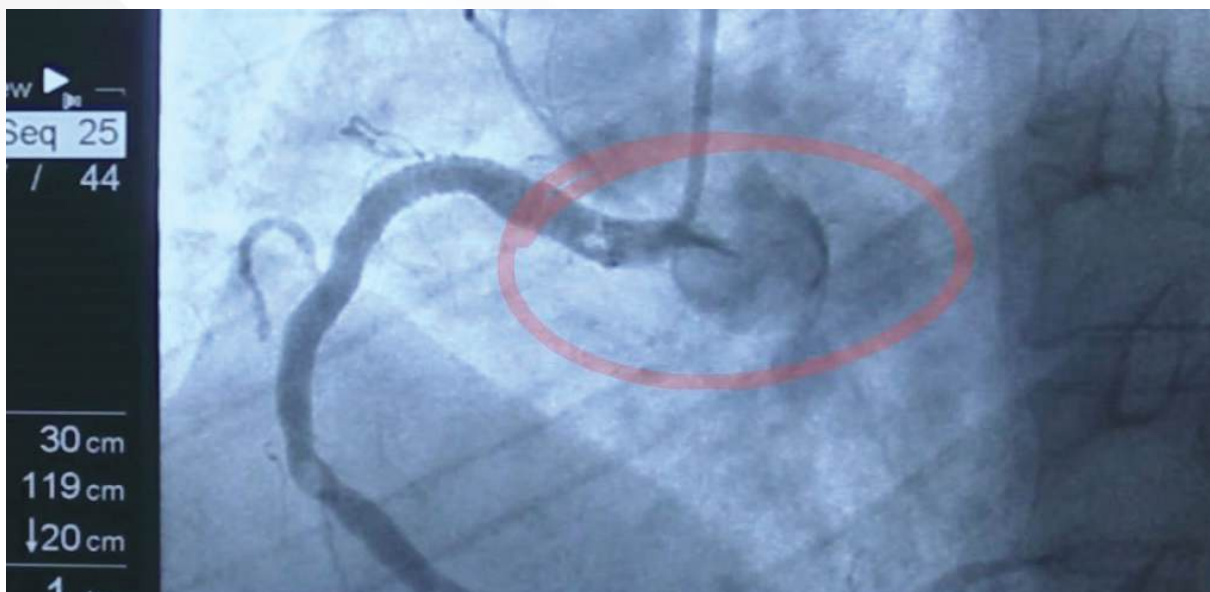
Behind sterile green masks, the eyes of doctors and nurses were glued to the monitor screen. They were racing against time, facing a life-saving crisis. That Thursday morning, July 31, 2025, the atmosphere in the operating room was tense yet filled with hope.

Among the medical team stood Dr. Fadjar Herianto, an interventional cardiologist. Calmly, he stared at the monitor, tracing the path of the patient's blocked blood vessels. Fine needles and guidewires were guided to locate the blockage. At the right moment, a stent was inserted, reopening the previously blocked blood flow.

For Dr. Fadjar, such moments were familiar. Almost daily, he faced one of Indonesia's biggest killers: heart disease.



An officer shows a blocked blood vessel on a monitor (July 31). Photo: Anza Suseno



Position of the ring on a blocked blood vessel (31/07). Photo: Anza Suseno

Heart surgeries at Dr. Fadjar's hospital can only be performed in a limited time, between 15 and 30 minutes, and a maximum of 1 to 2 hours. Limited equipment prevents the hospital from handling more critical surgeries, so patients must be referred to facilities with more advanced equipment.

"One patient takes approximately 15 to 30 minutes, to a maximum of 1 to 2 hours. I don't perform critical surgeries due to the limited equipment we have. So patients who require a higher standard of care must be referred (to other hospitals), and that's what we do," said Dr. Fadjar.

After returning from Australia and briefly working at a major hospital in Jakarta, Dr. Fadjar, a cardiologist, never imagined his workload would be this heavy in Sukabumi, a small city in West Java. He thought living in a small town with seemingly docile residents would make his job easier. But reality proved otherwise. "When I first started working here, I thought I wouldn't experience any burdens. Because it's a small town, the people are relatively compliant. In reality, it's the opposite," said Dr. Fadjar.

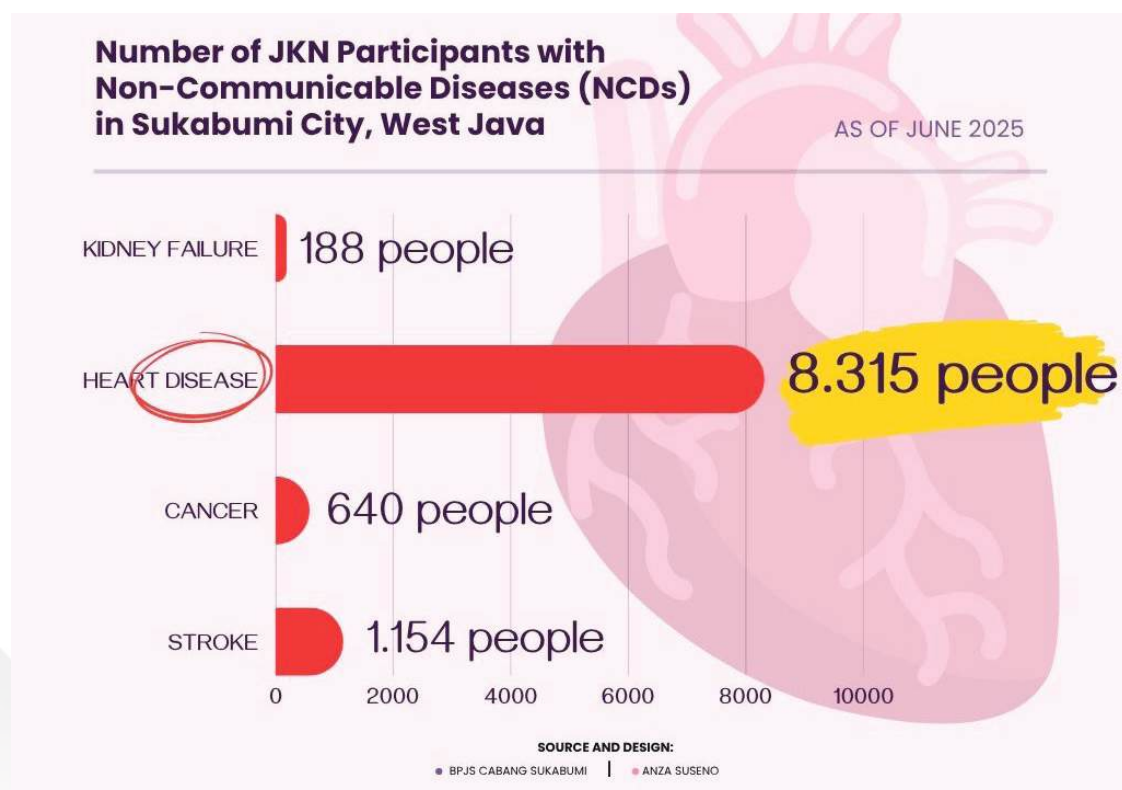
The incidence of heart disease in Sukabumi continues to rise. He performs lifesaving procedures almost every day. He admits that in a single night, he can see two to three emergency patients requiring primary PCI or rescue PCI. His schedule is packed with heart patients almost every week.

"I perform procedures almost every day. It's a small town with a population of only 300,000, but the number of cases is very high. Sometimes there are 10 to 15 patients in a single day. Until now, I haven't even had time for family or hobbies," he said.

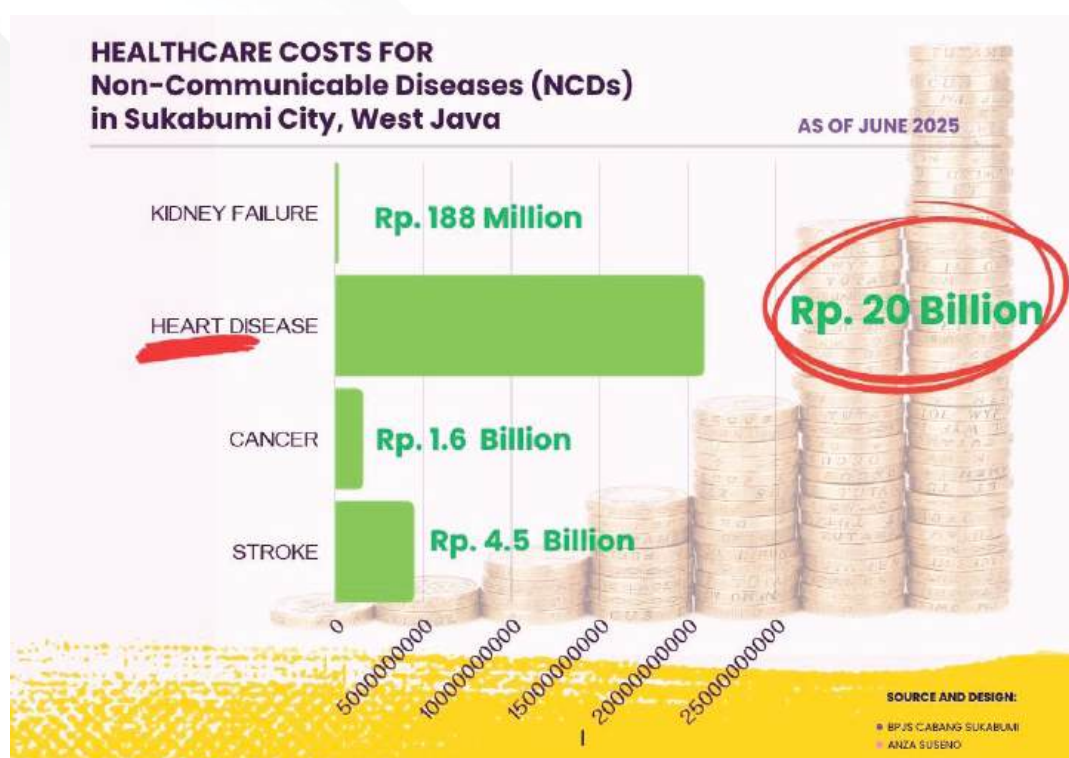
This data confirms that heart disease remains the most expensive non-communicable disease. Dr. Fadjar explained that heart disease doesn't appear suddenly; it can begin from one's childhood through adolescence. Lifestyle and dietary habits significantly influence the condition of blood vessels.

He previously suspected that smoking was the primary factor in Sukabumi. However, recently, he has become increasingly concerned about another threat: trans fats.

Trans fats significantly contribute to blood vessel damage. These substances increase LDL, or bad cholesterol, lower HDL, or good cholesterol, and accelerate the formation of plaque that blocks blood flow. If plaque ruptures, a heart attack or stroke can occur.



Indeed, according to data from the Sukabumi branch of the BPJS Kesehatan, the number of JKN participants with internal diseases such as heart disease has reached 8,000. This figure continues to dominate the healthcare cost burden in the Sukabumi region, with total costs reaching Rp 20 billion in just the first six months of 2025.



“I initially thought the problem was just smoking. But then I saw a greater threat coming from trans fats. Because trans fats increase LDL, lower HDL, and the body’s protection is lost. As a result, plaque builds up, causing rupture, blocking blood flow,” explained Dr. Fadjar.

Meanwhile, the number of heart attacks in Indonesia is increasingly alarming, now even targeting people of productive age.

Dr. Fadjar shared his experience treating the youngest patient, who is only 20 years old. The patient was a college student with no history of smoking, but suffered a heart attack due to plaque buildup in his blood vessels.

“My youngest patient was 20 years old. He had just started college, was a non-smoker, and clean. But then he had a heart attack. After examination, there was plaque buildup in one of his heart arteries. We finally implanted a stent there,” said Dr. Fadjar.

Behind the often-stuffy statistics, there are real faces battling a deadly disease. One of them is Herlansyah, a 56-year-old teacher from Sukabumi.



A heart disease survivor demonstrates the position of chest pain during a heart attack (August 11). Photo: Anza Suseno

It was a bright morning, Tuesday, May 13, 2025, with the clock pointing to 5:30 a.m. Herlansyah's modest home in Sukabumi was peaceful. As usual, he sat in the living room with a cup of hot coffee and the morning news on the television. Everything seemed normal, without any warning signs. But beneath that calm, a major turning point in his life awaited him. Suddenly, his body gave him unusual signals.

"After drinking coffee that morning, I thought everything was fine," Herlansyah recalled. "But my body got worse. I vomited, broke out in a cold sweat, and my chest felt tight. The pain wasn't on my left side, but right in the middle. The cold sweat wouldn't stop."

His wife, who was in the kitchen at the time, found her husband pale. Panic and anxiety mixed together.

"I saw his face was very pale, cold, and he was in pain. I was immediately afraid of losing him," said his wife, her voice trembling.



A heart patient talks with an interventional cardiologist after stenting surgery (July 31). Photo: Anza Suseno

In a state of panic, he immediately sought help from his family and took Herlansyah to the hospital. At the hospital, an electrocardiogram (EKG) revealed a serious condition. His heart arteries were nearly 100% blocked in three places.

“The EKG showed almost 100% blocked arteries. He said there were three blockages. The only problem with the attack was the right side of my heart, the right side. It was almost 100% blocked. I was admitted to the ICU, and the doctor said I needed a stent to open the blockage. “I was immediately okay, ready to be stented,” he said.

That afternoon, at 5:00 PM WIB, the doctor decided to quickly install the stent. Herlansyah was stunned, in disbelief, but he knew there was no other option.

“The doctor said if I didn’t have the stent installed, I would continue to be ill. At 5:00 PM, I went into the operating room, and thankfully, the operation went well.”

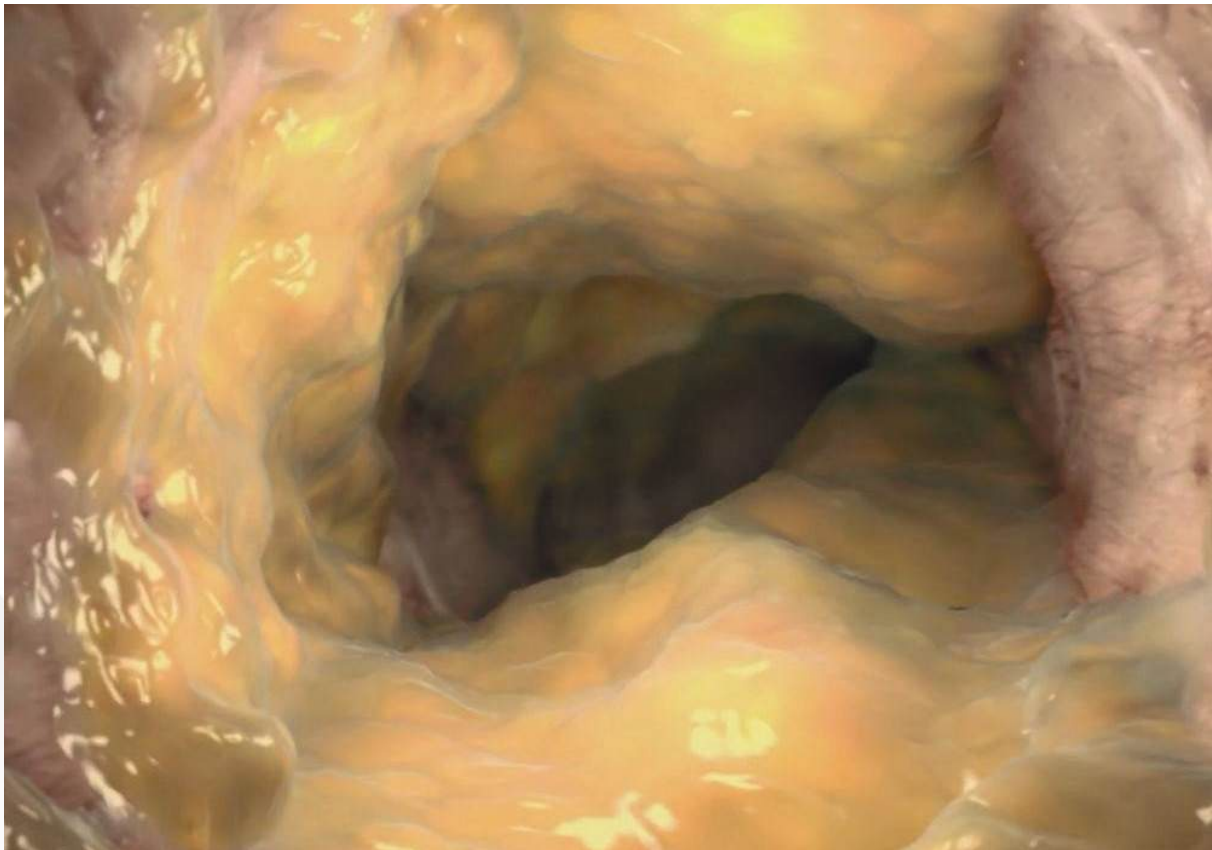
The heart attack was a turning point in Herlansyah’s life. He used to feel healthy, still able to teach, and actively support his family. But reality proved otherwise. “I often ate fried foods, fried rice, and instant noodles for dinner. Sometimes I’d go straight to bed after eating. I ignored my cholesterol. It turned out that habit ultimately backfired,” he said.

## **The hidden threat behind processed foods**

From heart attacks to life-and-death situations in the operating room, we often rethink a simple matter: what we eat every day. Even the slightest deviation from a healthy diet can significantly impact our body’s exposure to trans fats.

This dangerous substance is as deadly as it sounds. Industrially produced fats are not designed for human health, but rather to extend the shelf life of food.

In many countries, trans fats have been banned. However, in Indonesia, they are still readily available, from street-side fried foods to packaged biscuits to various processed foods that we often consume without realizing it. Yet, the risks are significant: they clog arteries and increase the risk of heart disease.



A condition where blood vessels become clogged due to trans fats. Source: WHO

## **So, what is trans fat?**

You may not be familiar with the term trans fatty acids. Simply put, they are unsaturated fatty acids derived from two sources: natural and industrial. The most dangerous are industrial trans fats, the result of the hydrogenation process of vegetable oils.

This process turns liquid oil into a solid, known as partially hydrogenated oil (PHO). Without realizing it, many of us probably consume them every day. Trans fats were discovered in the 20th century as a cheap substitute for butter and to extend shelf life. PHOs are used for frying and as an ingredient in cakes and breads.

Trans fats have been shown to alter cholesterol levels, increasing LDL (bad) cholesterol, which clogs arteries, while decreasing HDL (good) cholesterol, which protects the heart. This condition accelerates atherosclerosis, or plaque buildup in the arteries, which can lead to heart attacks and strokes.

## Trans fat are the “evil”

Internal medicine doctor, Muhammad Arzan Alfarish, Sp.PD., emphasized that the body does need fat, but not all fats are good.

“There are several types of fatty acids or cholesterol that can be detrimental to health, and these are the ones we should avoid. Trans fats are the worst of all,” he explained.

Arzan then divided fatty acids into three main groups. First, saturated fatty acids, which are generally found in red meat. This type of fat, if consumed in excess, can increase the risk of health problems.

Second, unsaturated fatty acids, which are more commonly derived from plants, such as olive oil or avocados. This type of fat is known to be healthier and more beneficial for the body.

Third, trans fatty acids. Initially, this group was also classified as unsaturated fatty acids. However, after industrialization processes such as hydrogenation of vegetable oils to increase their shelf life, these fats changed into a form that is harmful to the body. The impact is significant.

“Trans fats have been shown to increase LDL while lowering HDL. If HDL decreases and LDL increases, it’s very dangerous. This condition can accelerate atherosclerosis, the buildup of plaque in blood vessels,” added Arzan.

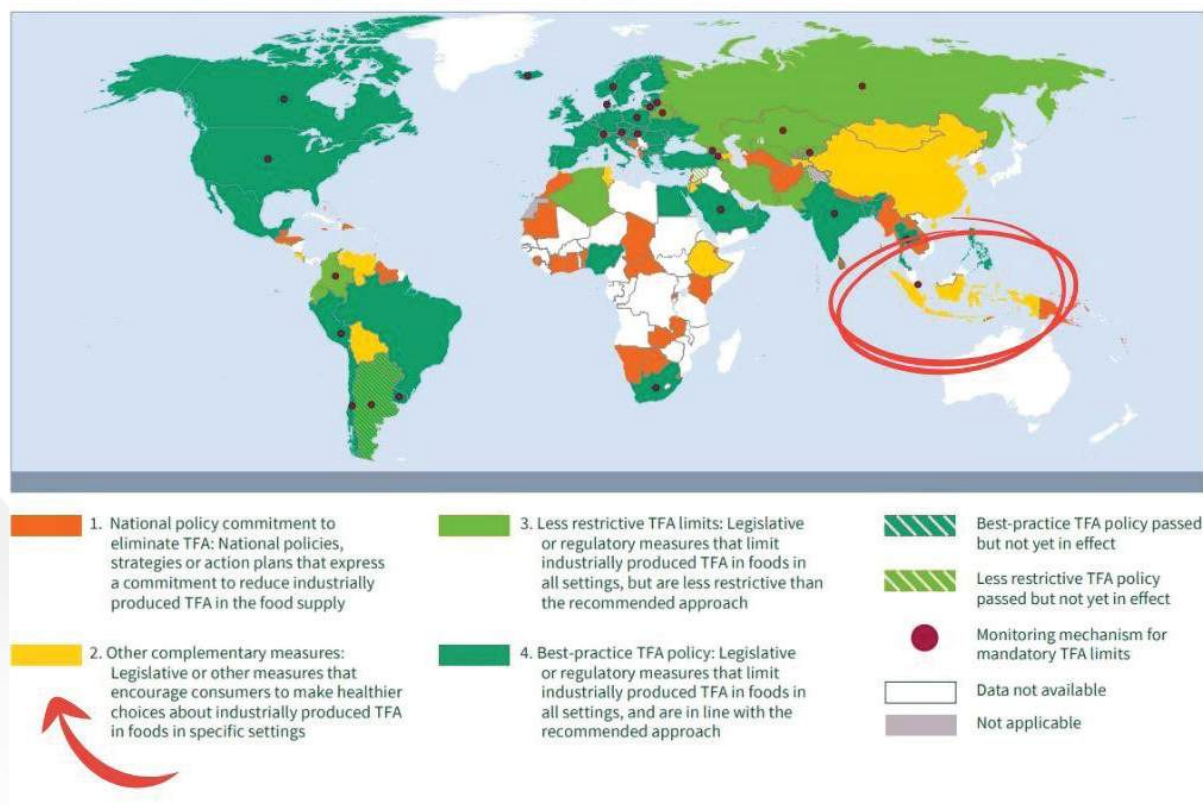
Furthermore, Arzan reminded the public to be wary of their daily diets.

“We should avoid trans fatty acids as much as possible. They are found in many processed foods like biscuits and cookies. But the most common type is fried foods.

Oil is initially good, with unsaturated fatty acids. But if it’s used repeatedly and heated continuously, trans fats are formed. These trans fats will stick to fried foods, and that’s very bad for your health,” he stressed.

Heart attacks continue to increase in Indonesia. Data from the WHO states that heart disease remains the number one cause of death worldwide, including in Indonesia. One of the main triggers is the consumption of trans fats, which remains difficult to control.

Global TFA elimination policies and measures as of December 2023



Indonesia's position: Indonesia only recently required manufacturers to list TFA content on nutrition labels. Source: WHO

Since 2018, the WHO has called for the total elimination of industrial trans fats by 2023 through the REPLACE strategy. To date, 53 countries have implemented this policy, either by banning the use of PHO or limiting their content to a maximum of 2 percent of the total fat in food products.

However, Indonesia still lags behind. To date, there are no specific regulations explicitly prohibiting or limiting industrial trans fat levels. Existing regulations only mandate the inclusion of nutritional information on food labels.

A 2023 study by the SEAFast Center of IPB University in collaboration with the WHO reinforced these concerns. Of 130 processed food samples in Jakarta and Bogor, 11 products, or 8.64 percent, contained trans fats exceeding the WHO's recommended level of 2 percent of total fat.

High levels of trans fat were found in a variety of foods, including margarine, shortening, biscuits, pies, chocolate-cream wafers, red velvet cake, roti maryam, chocolate martabak, chocolate-filled croissants, and Danish pastry.

Further analysis revealed that 8 percent, or 10 products, had TFA levels exceeding 2 grams per 100 grams of fat. In fact, around 3 percent of products, or 4 samples, contained more than 0.5 grams of TFA per serving, the amount that should be listed on the label according to BPOM Regulation Number 26 of 2021.

These findings raise serious concerns. Trans fats have been shown to increase the risk of heart disease and death. The WHO reports that each year, approximately 500,000 people worldwide die from cardiovascular disease caused by trans fat consumption.



The atmosphere of Indonesian society in Jakarta (20/08). Photo: Anza Suseno

## Health burden and state budget

Meskipun demikian, angka kematian akibat penyakit yang dipicu oleh konsumsi Despite this, the death rate from diseases triggered by trans fat consumption, such as coronary heart disease, remains the highest in Indonesia. This impacts not only public health but also places a burden on the state budget.

Ministry of Health data shows that in 2023, funding for catastrophic diseases through the JKN reached Rp 34.8 trillion. Of this amount, cardiovascular diseases, including heart disease and stroke, dominated, with total funding of Rp 22.8 trillion, making it the largest item in JKN spending for catastrophic diseases.

More specifically, the Ministry of Health revealed that in 2023, there were 20 million cases of heart disease in Indonesia, with the highest funding reaching IDR 17.6 trillion. This confirms that heart disease remains the largest burden on the national health system.

## Healthcare Financing in Indonesia

| Catastrophic Disease | 2022                 |                       | 2023                 |                      |
|----------------------|----------------------|-----------------------|----------------------|----------------------|
|                      | Number of Cases      | Cost                  | Number of Cases      | Cost                 |
| Heart Disease        | 15, 5 Million        | 12, 14 Trillion       | 20 Million           | 17,6 Trillion        |
| Cancer               | 3,15 Million         | 4,5 Trillion          | 3,8 Million          | 5,9 Trillion         |
| Stroke               | 2,54 Million         | 3,23 Trillion         | 3,4 Million          | 5,2 Trillion         |
| Kidney Failure       | 1,32 Million         | 2,16 Trillion         | 1,5 Million          | 2,92 Trillion        |
| Haemophilia          | 116 Thousand         | 650 Billion           | 140 Thousand         | 1.2 Trillion         |
| Thalassaemia         | 305 Thousand         | 614 Billion           | 346 Thousand         | 764 Billion          |
| Leukeamia            | 146 Thousand         | 428 Billion           | 161 Thousand         | 579 Billion          |
| Cirrhosis Hepatis    | 193 Thousand         | 330 Billion           | 237 Thousand         | 446 Billion          |
| <b>TOTAL</b>         | <b>23,27 Million</b> | <b>24,06 Trillion</b> | <b>23,27 Million</b> | <b>34,8 Trillion</b> |

In 2023, there was a notable increase in catastrophic disease spending, **reaching Rp 34.8 trillion**. The largest portion of this spending under the National Health Insurance (JKN) program was allocated to cardiovascular diseases (**heart disease and stroke**), totaling (**Rp 22.8 trillion**).



### Reformulation is the first step

The Ministry of Health acknowledges that eliminating trans fats is necessary to reduce heart disease, the disease with the highest cost under the JKN. However, so far, the policy has been limited to reformulating the levels of trans fats found in many fast foods and industrial products.

“Baking fat, biscuits, and martabak, there are many of those, croissants, and those foods contain a lot of trans fat, and the levels are usually quite high. So, if we look at what we’re doing in implementing the policy, we definitely hope for reformulation, to reduce the presence of trans fats. We also have to ensure labeling. For example, if the fat content is high, it must be reduced,” said Dr. Siti Nadia Tarmizi, M.Epid., Director of Prevention and Control of NCDs at the Indonesian Ministry of Health.

The Ministry of Health emphasized that reformulation and labeling are the initial steps before the full implementation of the trans fat elimination policy. It is hoped that if stricter regulations are implemented immediately, Indonesia will be able to reduce the death rate from NCDs while reducing the burden on state finances, which continues to increase every year.

## Trans fat regulation remains on hold

Although trans fat consumption has been shown to increase the risk of heart disease, stroke, and premature death from cardiovascular disease, the WHO has issued a global recommendation for every country to eliminate industrial trans fats from the food supply chain.

However, Indonesia remains lagging behind. Indonesia hasn't had specific regulations governing the elimination of industrial trans fats. This is despite the fact that 53 countries worldwide have implemented strict policies, including Singapore and Thailand, which have already protected their citizens from this threat.

The WHO offers two policy options that governments can implement. First, limit trans fat content to a maximum of 2 percent of the total fat content in all foods. Second, completely ban the production, import, sale, and use of PHOs in all food products.

Furthermore, the WHO is also encouraging food manufacturers to stop using PHOs in their production processes to ensure that food innovation continues in line with public health protection.



Special interview with the Head of the BPOM RI, Prof. Dr. Taruna Ikrar, regarding trans fat regulations (July 25). Photo: Anza Suseno

Based on BPOM Regulation Number 26 of 2021, every food product containing trans fats should be required to include nutritional information on the packaging label. However, findings in the field indicate that many products still lack transparency with consumers. This reinforces concerns that trans fats are still widely circulated in the market and have the potential to pose a serious threat to public health.

The regulatory back and forth is becoming increasingly apparent as the draft technical regulation regarding mandatory trans fat content disclosure remains stalled in the bureaucracy. Public review has been conducted, but ratification has not been completed due to differing views between ministries and objections from business actors.

The Head of BPOM RI, Taruna Ikrar, emphasized the importance of immediate regulation regarding trans fats.

“So, in conclusion, this does need to be regulated. That’s why this law addresses Government Regulation Number 28, which stipulates that this regulation must be regulated. And the authority to regulate it is the BPOM. And we are currently in the process of finalizing the draft. We have actually conducted public review, harmonized the draft, and it has already been processed,” he said.

However, Taruna acknowledged that there are still a number of obstacles in its implementation, particularly from the industry.

“There are still obstacles, especially for business actors. Because of course they have to rebrand, reformulate, and change the content of their products, and that requires costs. Meanwhile, the process of issuing regulations is not easy, and we cannot be authoritarian,” he stressed.

Taruna added that the harmonization process not only concerns health matters, but also the trade sector, which is closely related to the interests of business actors.

“For example, between institutions, the BPOM regulations that will be issued as technical implementation will impact the trade system. Therefore, we must harmonize with the Ministry of Trade. There are many business actors under its purview, so it’s certainly not easy. Regarding health aspects, it’s usually simpler, because we share a common vision with the Ministry of Health,” he explained.

He emphasized that the specific regulation regarding trans fats is still stuck in the

cross-sector harmonization process. In fact, the draft has long been prepared by BPOM. Regulations that should protect public health are instead being held up by competing interests, particularly from the trade and food industry. This situation leaves the public still exposed to the risk of heart disease caused by trans fats, while the government lacks a clear legal framework to limit them.

“After that, there must also be harmonization with the public directly. Currently, our regulations on sugar, salt, and fat have been drafted and finalized by our team. However, there are several points that the Ministry of Trade disagrees with, so they need to be reviewed, with committed involvement of business actors,” he continued.

### **Consumer protection is still on hold**

Regulatory-wise, the BPOM has a strong mandate. Health Law Number 17 of 2023, Food Law Number 18 of 2012, and Government Regulation Number 28 of 2024 have affirmed BPOM’s position as the sole authority in food safety supervision.

However, implementation of important regulations, such as the mandatory inclusion of trans fat levels on food labels, remains sluggish. The tug-of-war between industry interests and inter-ministerial harmonization have hampered consumer protection efforts.

As a result, the public still faces serious risks from consuming trans fats hidden in various everyday food products. Without concrete action, the threat of heart disease, stroke, and diabetes is predicted to continue to haunt millions of Indonesians.

Furthermore, regulations regarding trans fats in Indonesia are still considered lax. There is no strict obligation for producers to list trans fat levels on food packaging. As a result, consumers are not fully protected from the threat of heart disease, stroke, and diabetes, which are closely linked to the consumption of these dangerous fats.

However, food labels are more than just a formality. According to the BPOM, labels demonstrate a manufacturer’s objectivity in providing honest information to consumers.

“If a label changes, it’s because BPOM regulates all food labels. There are regulations and laws. We are given the authority to regulate. That’s why we check the label, packaging, distribution permit, and expiration date. We regulate it. It’s all listed on the label. And the label demonstrates objectivity,” Taruna Ikrar emphasized.

Taruna emphasized that any form of label manipulation is a serious violation. Manufacturers found to have changed or falsified labels without a re-permit not only risk having their products withdrawn from circulation but also face severe legal sanctions.

“If there’s a violation, for example, they don’t apply for a re-label, but then they change the label in the field. That’s fraud, counterfeiting. There can be multiple penalties: the product can be recalled, destroyed, and the individual can even face legal sanctions of up to 12 years in prison,” Taruna emphasized.



|                                      | %AKG/%DV* |
|--------------------------------------|-----------|
| Lemak Total/Total Fat                | 8g 12%    |
| Lemak Trans/Trans Fat                | 0g        |
| Kolesterol/Cholesterol               | 15mg 5%   |
| Lemak Jenuh/Saturated Fat            | 4g 20%    |
| Protein                              | 7g 11%    |
| Karbohidrat Total/Total Carbohydrate | 11g 3%    |
| Serat Pangan/Dietary Fiber           | 1g 4%     |
| Gula/Sugar                           | 10g       |
| Sukrosa/Sucrose                      | 0g        |
| Laktosa/Lactose                      | 10g       |
| Garam (Natrium)/Salt (Sodium)        | 60mg 4%   |
| Vitamin & Mineral                    |           |
| Vitamin A                            | 20%       |
| Vitamin B1                           | 75%       |
| Vitamin B2                           | 50%       |
| Vitamin B5                           | 10%       |
| Vitamin B6                           | 70%       |
| Vitamin B7                           | 15%       |

Nutritional Value Label Listing Trans Fats (July 24). Photo: Anza Suseno

Amid criticism that regulations are often considered burdensome, the BPOM emphasized that the regulations were created to protect consumers, not hinder the industry.

“Industry is a business, and businesses aim to make a profit. Profit is not prohibited. However, don’t break the law by deceiving consumers. Secondly, businesses have a responsibility to ensure the safety, health, and security of their consumers,” Taruna continued.

He emphasized that public education about the dangers of trans fats is a shared responsibility, not just the government’s. Industry also has a moral obligation not to turn a blind eye to the public health risks.

“If consumers always eat like that, they will eventually get sick. As a result, they will no longer be able to use their products. So, ultimately, they will lose out,” he added.

The laxity of trans fat regulations has left consumer protection in Indonesia less than fully established. Meanwhile, the tug-of-war between ministries and industry has slowed Indonesia's progress in ridding the public of the threat of trans fats.

While many countries have moved quickly to comply with the WHO's recommendations to eliminate trans fats from the food chain, Indonesia remains mired in regulatory debates.

Without strict regulations, consumers remain vulnerable, unaware of how much trans fat enters their bodies every time they buy processed products.



Heart disease survivor Herlansyah, 56, eating healthily with his wife (August 12). Photo: Anza Suseno

## Reversing the impact of trans fats

After a heart attack that nearly took his life, Herlansyah now lives life differently. Two major surgeries were the lowest point, forcing him to abandon his unhealthy diet of fried foods, instant noodles, and fatty foods. Vegetables, fruit, and healthy foods now make up most of his plate.

However, this painful experience left his wife, Ani Suryani, deeply traumatized. The moment she found her husband lying weak, his face pale and his body cold, remains vividly etched in her memory. Those tense moments are like a nightmare that is hard to erase. Ani admitted that since the incident, anxiety has haunted her every time she sees her husband feeling tired or unwell.

“I was traumatized when it happened. My husband suddenly became like that. He was pale, cold, as if he were dead. I was so panicked that I couldn’t even see him. Previously, he ate noodles almost every night; his diet was chaotic. After the surgery, his weight dropped, and I helped him change his diet to no fried foods and no oil. Now he’s slowly starting to get healthy again,” Ani said.

Herlansyah himself now relies on blood thinners and cholesterol-lowering medications for the rest of his life to keep his heart healthy. Despite this, he admits he’s grateful for a second chance.

“My advice is to not let what happened to me happen to you. Please live a healthy lifestyle, from diet to exercise. I’ve experienced the risks myself. Thank God, I’ve been given a long life, and I must use it to live more wisely,” he said hopefully.



An interventional cardiologist awaits his next patient in the cath lab operating room (July 31). Photo: Anza Suseno

On the other hand, Indonesia is still lagging behind in its efforts to eliminate trans fats. While neighboring countries like Singapore and Thailand have banned their use, Indonesia is still just talking about it.

Interventional cardiologist, Dr. Fadjar H. Sahal, SpJP(K), emphasized that the government must take immediate and decisive action.

“Indonesia doesn’t yet have clear regulations for elimination. I hope the Ministry of Health will do so immediately. They could limit trans fat levels to just 2%, or completely eliminate

them from production and distribution. Because if other countries can do it, why can't we?" Fadjar asserted.

To date, Indonesia does not have specific regulations governing the elimination of industrial trans fats. Yet, 53 countries worldwide have implemented such policies in accordance with WHO recommendations. Within the ASEAN region, Singapore and Thailand have already enacted strict regulations regarding the elimination of trans fats from the food chain.

For him, without an official statement and strong commitment from the government, medical therapy is only a small step. The real threat lies in weak regulations. Ultimately, trans fats are more than just a term on a food label. They are a real threat that is slowly eroding public health. Without clear regulations, millions of lives are at stake.

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*This coverage was supported by a fellowship from the Alliance of Independent Journalists (AJI) Indonesia in collaboration with Global Health Strategies (GHS).*

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<https://independen.id/lemak-trans-ancaman-pembuluh-darah-kita>



[https://youtu.be/3ains5uan9E?si=spsvNJUpMI8S\\_oQ](https://youtu.be/3ains5uan9E?si=spsvNJUpMI8S_oQ)

# Beware! Trans Fats Can Trigger Obesity

*Behind the variety of contemporary culinary delights that tempt the tongue, there is a health threat that needs to be watched out for, namely obesity.*

Author: Afrin Dwimeyriana



Every year, new types of food appear that go viral (Photo: Adam Farizky)

Food is not just a necessity, but also a cultural and entertainment factor. It's no surprise that snacks have become a daily delight, chosen, purchased, and consumed daily. Butter croissants and matcha cakes are two examples of snacks that have been trending in recent years. Packaged snacks with various seaweed and tteokbokki flavors are also popular flavors for seasonings. Many new culinary styles are emerging, but are we aware that the threat of disease is also present?

Data from the BPS states that the food and beverage (F&B) processing industry plays a vital role in the Indonesian economy. In 2024, it recorded significant growth, contributing 5.9 percent to Indonesia's gross domestic product (GDP). BPS also recorded that the industry's contribution to gross domestic product reached IDR 1.53 quadrillion last year.



Cut Thalya, a nutrition specialist at Husada Hospital Jakarta, explains the important role of fat (Photo: Adam Farizky)

“Fried foods, processed fast foods, and savory and crunchy foods contain the highest levels of saturated and trans fat. This can trigger obesity,” said Cut Thalya, a nutrition specialist at Husada Hospital in Jakarta. (July 18, 2025)

According to the Centers for Disease Control and Prevention, a BMI (body mass index) greater than 25 is considered overweight. A figure of 30 or higher is considered obese. The formula for calculating BMI is weight (kg) divided by height multiplied by height, or height squared.

According to data from the 2018 Basic Health Research (Riskesmas) and the 2023 Indonesian Health Survey (SKI) from the Ministry of Health, the prevalence of obesity has increased over the past five years. The prevalence of obesity was 21.8% in 2018 and has risen to 23.4%. Meanwhile, according to the NCD Risk Factor Collaboration (NCD-RisC), a global network of health scientists studying obesity trends for 2024, 6.53% of adult men and 16.58% of women in Indonesia are obese.

The problem? Not everyone sees this as a problem. In Indonesia, chubby cheeks are still considered cute, and a pot belly is considered normal in adulthood. Large bodies are sometimes praised for being “bulky,” as if weight were an indicator of success.

According to Cut Thalya, not all fat is bad. The body needs fat for cell wall components, hormones, and as a source of energy. However, it depends on the type and amount that needs to be considered.

“Excess fat will be stored in the body and surround our organs. Excess fat can cause inflammation, making us susceptible to disease,” she continued.

The WHO states that unhealthy trans fat comes from industrial processes. Oils undergo partial hydrogenation, or processing, frying, and heating. This process changes the chemical bonds and changes the form from a liquid to a solid oil.

Beside obesity, they also need to be eliminated because they increase the risk of heart disease and death from coronary heart disease. They increase LDL which clogs blood vessels in the heart, and lower HDL.

A 2023 study conducted by the WHO found that 8.46% of 130 snack samples tested in Indonesia contained trans fat exceeding the WHO recommendation of 2 grams per 100 grams of total fat.

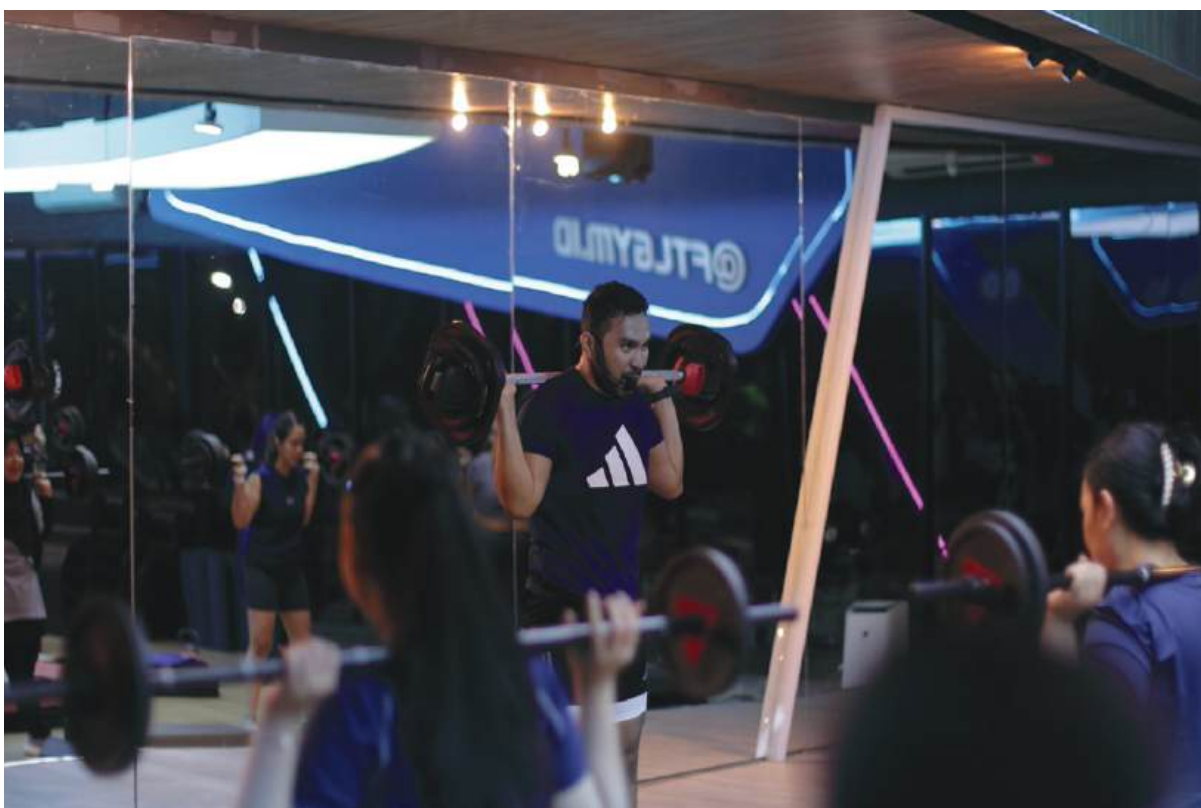
The samples came from four food categories: oils and fats, margarine and spreads, packaged foods containing fat, such as biscuits, cookies, wafers, cakes, and bread, and fast food such as fried noodles, fried rice, fried chicken, French fries, and bread. The source of trans fat comes from the ingredients used in these foods.

## **From feeling obese, to becoming a ‘Gym Enthusiast’ body pump instructor**

Eating something sweet or savory is often the go-to when stressed. Sweet and tasty foods trigger the brain’s reward system, providing a temporary sense of well-being, although the effects are often short-lived and not a long-term solution. Stress or anxiety may subside, but other health problems may arise.

Ilham Wijaya also chose to escape stress through eating. He adopted this habit in 2013, when he was 22 years old. Although he weighed over 100 kilograms, he wasn’t aware of the dangers of obesity yet.

“When I was in college, the slightest stress would lead to food, like fried chicken. I even consumed sweet drinks, just about anything. In 2013, I weighed 110 kilograms,” Ilham recounted. (July 19, 2025)



Ilham Wijaya, an obesity survivor who is now a Body Pump exercise instructor (Photo: Adam Farizky)

Not infrequently, at his relatively young age, Ilham often felt sick, experiencing shortness of breath, chest pain like being pinched, and neck pain, all due to the effects of high blood pressure. The pain that tormented his body at that time became a turning point for him to start a healthy lifestyle.

In 2017, Ilham Wijaya, then a student, began to regulate his diet and exercise. Now, in 2025, Ilham is employed by a private company. He is no longer obese. His scale has reached 73 kilograms.

“Now I’m more focused on increasing muscle mass and reducing fat through exercise. As for food, I’m currently increasing protein intake and reducing carbohydrates and fat. Fried foods, palm sugar coffee, and bread are no longer on the table,” Ilham said.

In fact, his journey to a healthier lifestyle has led him to become a body pump instructor. Body pump is a weight training exercise, with light to moderate weights, high repetitions, and energetic music.

“Body pump is simpler, with clearly defined muscles to be built and strength training, along with plenty of cardio,” he explained.

Every day after work, Ilham is greeted by dozens of participants at the gym. After an hour of instructing in a body pump class, Ilham chooses to focus on his own body with guidance from a personal trainer.

Nutritional labels for food sold are usually printed on the back of food packaging. These labels help consumers make healthy food choices by understanding the serving size per serving and the % RDA (Recommended Daily Intake), which indicates the nutrient's contribution to daily needs. This information includes serving sizes, total energy, macronutrients (carbohydrates, fats, proteins), dietary fiber, and micronutrients such as vitamins and minerals.

Sugar and fat types are explained in more detail. For example, for total sugars, the use of sucrose is explained. For total fat, the use of saturated fat, cholesterol, and trans fat is explained. However, because Indonesia does not yet have strict regulations mandating the inclusion of trans fat levels, not all packaged foods sold in Indonesia list trans fat on their nutritional labels.

To date, 53 countries have regulations restricting or prohibiting the consumption of trans fat. Therefore, public awareness of the dangers of trans fat needs to be increased. In some countries, trans fat has even been banned.

One country with relatively good trans fat regulations is Singapore. In that country, the trans fat content limit in any food product should not exceed 2 percent, in accordance with WHO recommendations.



| INFORMASI NILAI GIZI / NUTRITION FACTS        |         |     |
|-----------------------------------------------|---------|-----|
| Takaran Saji / Serving Size 12 g              |         |     |
| 8 Sajian Per Kemasan / Servings Per Container |         |     |
| Jumlah Per Sajian / Amount Per Serving        |         |     |
| Energi Total / Total Energy                   |         |     |
| Energi dari Lemak / Energy from Fat           |         |     |
| Lemak Total / Total Fat                       | 60 kkal |     |
| Lemak Trans / Trans Fat                       | 20 kkal |     |
| Kolesterol / Cholesterol                      | 2 g     | 3 % |
| Lemak Jenuh / Saturated Fat                   | 0 g     | 0 % |
| Protein                                       | 0 mg    | 0 % |
| Karbohidrat Total / Total Carbohydrate        | 1 g     | 5 % |
| Serat Pangan / Dietary Fiber                  | 1 g     | 1 % |
| Gula / Sugars                                 | 8 g     | 3 % |
| Garam (Natrium) / Sodium                      | 0 g     | 0 % |
|                                               | 4 g     | 2 % |
|                                               | 25 mg   | 2 % |

\* Persen AKG berdasarkan kebutuhan energi 2150 kkal.  
Kebutuhan energi anda mungkin lebih tinggi atau lebih rendah.  
\* Percent Daily Values are based on a 2,150 calorie diet.  
Your daily values may be higher or lower depending on your calorie needs.

Nutritional value labels show the nutritional content of food (Photo: Adam Farizky)

Law No. 18 of 2012 concerning Food regulates food management and establishes principles of food security. This falls under the role of the BPOM, which issues permits and regulations for food sold in Indonesia, whether produced domestically or internationally. Despite this, consumers often neglect to check the nutritional content on food labels. This can be due to a lack of understanding of the information and their own nutritional needs.



Taruna Ikrar, Head of BPOM, agrees to strengthen regulations on trans fat in Indonesia (Photo: Adam Farizky)

“We agree to clarify the regulation of trans fat. Trans fat is a trigger for the deaths of 500,000, or half a million people, every year,” explained Taruna Ikrar, Head of the BPOM, (July 24).

BPOM Regulation No. 16 of 2020 mandates the inclusion of nutritional information on processed food labels. The nutritional limit is also stipulated in the regulation. However, including information about trans fat on nutritional labels on packaging is not yet mandatory.

Taruna added that ratifying the regulation on trans fat inclusion on nutritional labels requires harmonization with several parties, such as the Ministry of Health and the Ministry of Trade, as well as businesses.

“The challenge lies with businesses: they must make adjustments and change the content of the nutrition labels, and that requires costs,” Taruna explained.

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*This coverage was supported by a fellowship from the Alliance of Independent Journalists (AJI) Indonesia in collaboration with Global Health Strategies (GHS).*

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<https://youtu.be/XNEVKJHfNqc?feature=shared>



<https://www.liputan6.com/amp/6152979/awas-lemak-trans-bisa-picu-obesitas>

## CLOSING

**T**he issue of trans fats is not something far removed from our daily lives. The in-depth coverage presented in this book shows how food ingredients that are often found on Indonesian dining tables can pose serious health risks. Ten journalists with different perspectives have succeeded in uncovering the complexity of this issue—from home kitchens, industrial practices, school environments, to policy-making rooms.

In-depth journalism plays an important role in uncovering issues that are often hidden behind technical data and economic interests. Through the stories, facts, and voices of the people documented here, the public is reminded that health issues are not only the responsibility of medical personnel or regulators, but a shared responsibility. This book also emphasizes how collaboration between independent journalists and various stakeholders is key to driving change.

This compilation of reports aims to emphasize the need for a more in-depth discussion on how trans fatty acids can be eliminated from the food system in Indonesia. The journalists' reports explore the perspectives of the community, policy makers, and academics to raise public awareness and reform national food policy. In addition, the journalists' findings in the field also show a common thread: Unlike many other countries that have already banned or strictly limited trans fat, Indonesia lacks strict regulations regarding the maximum trans fat content in packaged food products.

We would like to thank the journalists for their hard work in producing this very important coverage. We would also like to express our appreciation to all the sources who were willing to share their views and time, as well as all those involved in compiling this work.

It is hoped that this compilation of reports will encourage the government to immediately draft or strengthen regulations limiting trans fat content in processed foods.

Going forward, the sustainability of this advocacy needs to be realized by continuing to build a critical narrative about the dangers of trans fats, from news reports and research to public discourse. Because the issue of trans fats in Indonesia is not yet a popular topic, this narrative must be raised with special attention in order to attract interest and build public awareness of the dangers of trans fats.

*"A trans fat-free future is not just an ideal, but an urgent need that is already upon us."*

## Author Profile



**Afrin Meyriana**, Liputan6.com journalist. Afrin began her journalism career in 2012.

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The training on trans fat has had an impact on my personal awareness of healthy living. It's not just about the education presented in the videos and articles I publish. The discussion of trans fat has led to many important health topics. I also agree that the BPOM and the Ministry of Health should collaborate to provide transparent oversight of the nutritional value of distributed foods.



**Ahmad Thovan Sugandi**, detik.com journalist (detikX). Covering and writing on a variety of issues, including public health. On health issues, some of my in-depth coverage includes antimicrobial resistance and cases of acute kidney failure in children due to drug poisoning.

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This series of training sessions provided me with a new perspective on trans fat. I greatly appreciate the organizers' efforts in bringing in speakers who are experts in their fields. The detailed explanations from the expert speakers helped us understand the ins and outs of the vegetable oil industry. This is something I always look forward to in all training sessions.



**Anggita Raissa**, freelance journalist in Serang City, Banten. Gita enjoys nature adventures, is familiar with marginalized groups, and enjoys observing flora and fauna. She is interested in environmental issues, human rights, health, politics, social issues, and science. Her writings have been published in Mongabay Indonesia, Project Multatuli, Deduksi, Koreksi, Kumparan, RMOL, and Kompas Muda. She is currently active in the citizen journalism movement at Surosowan.id. Instagram:

“

gitaraissa

Through intensive discussions and training, I gained a deeper understanding of the health impacts of trans fat consumption and effective strategies for communicating this issue to the public. I also had the opportunity to share my experiences and learn from other journalists with similar interests. This fellowship has enhanced my capacity as a journalist to cover health issues more accurately and impactfully. I believe that with the knowledge and skills I have gained, I can make a more significant contribution to raising public awareness about the importance of eating a healthy diet and reducing trans fat consumption.



**Anza Suseno**, a journalist who has been pursuing a career since he was young with a passion for voicing various important issues for society. I have written and covered a variety of topics, ranging from education, tourism, culture, socioeconomics, law, politics, energy, and even health issues. This experience has made me a journalist capable of viewing issues from various perspectives and presenting them in accurate, in-depth, and accessible pieces. He currently works at CNN Indonesia TV.

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The training, initiated by GHS and AJI Indonesia, opened a new window in my journalistic journey. Through comprehensive material and competent sources from the WHO, IPB, Tempo, and the Ministry of Health, I discovered that trans fat is not just a scientific term, but a real threat lurking on our daily dinner tables. The insights I gained ignited the courage to write with accurate data while maintaining language that is accessible to the public. Thank you to the committee and mentors, who, with patience and dedication, guided us to craft coverage that is not just news, but a small beacon of light to educate the Indonesian public.



**Benediktus Krisna Yogatama**, Freelance Prohealth. A journalist since 2013, she has worked for Kontan, Kompas, and Tech In Asia, as well as freelanced for ProHealth. She is currently an associate editor at Suar.id. She has over 12 years of experience, specializing in economic coverage.

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Trans Fat Workshops are crucial for education and increasing public knowledge and awareness of the dangers of trans fat. People are often unaware, due to a lack of understanding, that the food they consume contains unhealthy chemicals.



**Deonisia Arlinta**, started his journalism career in 2017. She has covered various issues. However, in the past five years, she has focused more on health and science. Currently, Deonisia works as a journalist for Kompas Daily/Kompas.id.

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Participating in the “Strengthening Public Awareness about Trans Fat Consumption” training was very beneficial for me. I gained a lot of in-depth information from this training. Sharing with other friends also broadened my perspective on the multifaceted impact of trans fat, not just on health but also on the economy, policy, and the quality of life for the younger generation. The scholarship provided also helped me to review and present more in-depth news stories about the impact of trans fat.



**Emanuel Berkah Caesario**, Capital markets and banking editor for Bisnis Indonesia, joined in 2014. Graduate of the Driyarkara School of Philosophy.

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The issues raised by AJI in this training were completely new and broadened my horizons, not only as an economic journalist, but also for a healthier personal lifestyle going forward. Training with reporting assignments like this made the material more ingrained than other AJI training I've attended without reporting assignments.



**Hoirunnisa**, A KBR Media journalist focusing on health, environmental issues, and public policy. I actively cover various topics that directly impact people's lives, including nutritious food, food security, and the impact of policies on public health. Through my journalistic work, I am committed to presenting accurate, critical, and easily understood information to the public.

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Participating in the fellowship has been a valuable experience for me as a journalist. The issue of trans fat previously felt abstract, but through this fellowship, I realized how imminent the threat is to people's daily lives, especially children. In addition to enriching my knowledge, this program also equipped me with new perspectives to present more incisive and impactful coverage. I feel better prepared to address public health issues in depth and drive positive change.



**Resty Magdalena Tuter**, Journalist at Radio Republik Indonesia since 2019.

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This fellowship is a great and beneficial activity for journalists. The speakers are highly competent and experienced in their fields. I personally learned a lot about trans fat through this program. This fellowship not only provides knowledge but also provides an opportunity to learn and share experiences with fellow journalists.



**Yulia Adiningsih**, Freelance journalist for various national media outlets. Her writing often addresses health, human rights, and environmental issues. Previously, she worked as a video journalist for Watchdoc Documentary Maker and an online journalist for CNN Indonesia.

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This program provides a wealth of new information about trans fat, which has previously been under-recognized. It raises awareness of the food around us. Unsuspecting foods, even those close to us, are actually high in trans fat and increase the risk of many diseases.

# THE THREAT BEHIND THE FLAVOR: TRANS FATS AND THEIR HEALTH IMPACTS IN INDONESIA

