

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

Thirteenth Congress
Third Regular Session

HOUSE BILL NO. 5974



Introduced by HONORABLE LUIS R. VILLAFUERTE

EXPLANATORY NOTE

Trans fatty acids are *artificial* fatty acids, very unlike those normally found in nature that is produced by the process of *hydrogenation*. **Trans fats** are fats whose molecular structure has been *damaged*.

Hydrogenation is a process where *unsaturated* vegetable oils, examples of which are **polyunsaturated** *canola oil, soybean oil, corn oil, sunflower oil*, etc. are *chemically altered* to form a more "saturated" fat. The process of hydrogenation will *artificially* increase the "saturation" of the vegetable oil so it will be less susceptible to rancidity and will increase the shelf life of foods. Hydrogenation involves heating the vegetable oil to very high temperatures while bombarding the oil with hydrogen atoms and mixing it with metal particles such as nickel oxide (nickel is a metal known to cause cancer). Then the oil is bleached.

In the process of hydrogenation, a new fatty acid, an *artificial* one is created and it is called the **trans fatty acid**. The process of partial hydrogenation changes as much as fifty percent (50%) or more of the oil's *natural* fatty acids into the **toxic trans fatty acids**.

Health experts and numerous studies have shown evidence that **trans fats**, which are *artificial fats* that are chemically engineered actually decrease levels of *good* cholesterol while increasing *harmful* cholesterol; they increase dangerous inflammation that can contribute to the onset of diabetes; they harden artery walls, which increases blood pressure as well as other health hazards. It has been concluded that *trans fats* from partially hydrogenated vegetable oils is a *toxic* substance that does not belong in food.

A comprehensive review of studies of *trans fats* was published in 2006 in the *New England Journal of Medicine* that concludes a strong and reliable connection between *trans fats* and *coronary heart disease*. Another major evidence

for the effect of *trans fat* on coronary heart disease comes from the *Nurses Health Study* in 1976 that involved 120,000 female nurses.

Dariusz Mozaffarian, a Harvard cardiologist and epidemiologist calculated that up to 22 percent (22%) of heart attacks in the United States are the result of *trans fat* consumption.

Several research studies have shown how *toxic trans fats* are to one's health. *Trans fats* are associated with accelerated aging and other degenerative diseases. It affects general metabolism making people more prone to *obesity, diabetes, cancer, arthritis, eczema, psoriasis, parkinson's disease* and other immunologic problems.

Trans fats causes human cells to freeze up, leaving them dysfunctional.

The human body does not have the protein enzymes needed to breakdown the *artificial fats* because **trans fats** are *synthetic fats* that are structurally different from our *natural fats*.

Some trans fatty acids *occur naturally* in the digestive system of ruminant animals such as cows, sheeps and goats. It has been shown that the *naturally occurring* trans fats from animal fats do *not* share the harmful properties of the *synthetic* trans fats resulting from the process of hydrogenation of vegetable oils.

The *natural* and *synthetic* trans fatty acids are *not* alike. Available data also shows that the content of trans fatty acids in industrially *hydrogenated fats* may reach 60 percent (60%) of the fatty acids while the equivalent number for *ruminant fat* is 2 to 5 percent (2% to 5 %)

In the year 2003, the *Institute of Medicine* of the United States of America reported the results of their three (3) year investigation of all published studies on **trans fat** in **hydrogenated vegetable oils**. Their conclusion was that **no levels** or **no amount** of **trans fats** are safe in the diet.

The evidence is so strong againsts **trans fat** that in July 2003, the US Food and Drug Administration (US FDA) issued what was considered as the biggest regulatory change for the US Food industry in a decade, which mandated food manufacturers to disclose and list the amount of *trans fat* on the nutrition labels of all processed foods. Mandatory compliance took effect on Jan. 1, 2006.

Denmark was the first country to introduce laws strictly regulating the sale of foods containing **trans fats** in March 2003 followed by *Canada* in November 2004 which was passed by an overwhelming vote of 193-73 in the Canadian House of Commons. The World Health Organization (WHO) recommends countries to eliminate processed trans fats.

This bill proposes to establish *trans fat* labeling requirement on food product labels and to **ban** harmful *trans fats* in foods in the Philippines.

This bill will make the Philippines the *first* country in Asia to limit *trans fats* in processed foods and to encourage hotels and restaurants, bakeries, catering businesses, fast food chains, and other food manufacturers to voluntarily cook using **trans fat-free** oils such as our very own **coconut oil** which is abundant in the Philippines.

Coconut oil is rich in **plant-based** healthy type of *saturated fats* that is predominantly composed of the immune boosting and heart-healthy **medium chain fatty acids (MCFA)** which is very different from the *saturated fats* from *animals* that is composed of the **long chain fatty acids (LCFA)**. Coconut oil has **no** cholesterol. Coconut oil is 92 percent (92%) *highly saturated fat* which means it is more tolerant of the temperatures used in cooking, it does *not* need to undergo the process of hydrogenation (unlike *polyunsaturated oils* such as *soy, corn, canola, sunflower, etc.*). **Coconut oil is trans fat-free.**

Moreover, the **positive effects** of the **medium chain fatty acids (MCFA)** found in **coconut oil** includes the following: it protects against infections of all kinds; it boosts metabolism; it improves the absorption of nutrients, it does not clog artery walls; it produces energy and not body fat; it inactivates many *viruses* such as measles, influenza, herpes, HIV, hepatitis C, SARS and cytomegalovirus, etc.; coconut oil tempers or blocks the harmful effects of many *toxins* such as ethanol, glutamic acid (MSG), aflatoxin, E.coli endotoxin, etc. Published medical studies show that MCFA's in coconut oil also kill *bacterial infections* such as throat and sinus infections, urinary tract infections, ear infections, food poisoning, gastric ulcer, pneumonia, dental cavities and gum disease, meningitis, conjunctivitis, etc. MCFA's also kill the following *fungal infections*: ringworm, athletes foot, jock itch, diaper rash, toenail fungus, candidiasis, etc.

Coconut oil's saturated fatty acids is *predominantly composed* of sixty-four percent (64%) **medium chain fatty acids (MCFA's)**. It has the **most** or **largest** concentration of *medium chain fatty acids (MCFAs)* compared with other vegetable oils and fats traded in the world today. It is the *medium chain fatty acids* that give **coconut oil** its remarkable **nutritional** and **medicinal properties** which earned it the reputation of being the **"healthiest oil on earth"**. *Lauric acid* makes up about 50 percent (50%) of coconut oil's healthy *medium chain fatty acids*. *Lauric acid* in coconut oil is the same *lauric acid* found in human breast milk. *Lauric acid* is the most important essential fatty acid in building and maintaining the body's immune system.

This bill will promote the following:

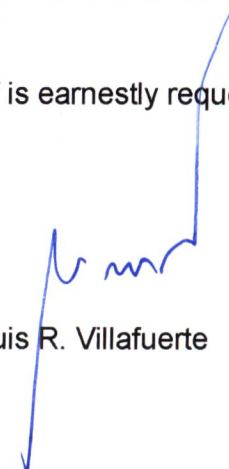
- Give consumers alternative foods that are lower in *trans fats* and will require manufacturers to *reduce* or *eliminate* the amount of *trans fats* in their products.
- Will make Philippine food manufacturers less dependent on imported *hydrogenated* vegetable cooking oils such as *soy, corn, canola, sunflower*

oils which contain the **toxic trans fats**. This will save the country foreign exchange by reducing importation of *hydrogenated* vegetable oils.

- Food manufacturers, hotels and restaurants, catering businesses, etc should be encouraged to patronize our *trans fat* - free **coconut oil** which is heart- healthy and abundantly available locally .
- The use of **coconut oil** (instead of the imported *hydrogenated* vegetable oils) in the manufacture of *processed foods* and as *cooking oil* will help prevent numerous diseases and will help lessen health care costs in the Philippines . The US FDA estimates that by 2009, their trans fat labeling requirement will have prevented from 600 to 1,200 cases of coronary heart diseases and 250 to 500 deaths each year. A similar study should be made in the Philippines.

The recent laws and regulation on *trans fat* now implemented in the **USA, Denmark, Canada**, and this *bill* in the **Philippines** will help place *coconut oil* in a more competitive and advantageous position than it has been in the past decades. The Philippines being one of the largest coconut-producing countries in the world should take a lead and be an example to other Asian countries as this will be beneficial to the Philippines and the rest of the world.

Considering the merits of this bill, approval hereof is earnestly requested.



Luis R. Villafuerte

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

THIRTEENTH CONGRESS
Third Regular Session

HOUSE BILL NO. 5974

Introduced by: Honorable LUIS R. VILLAFUERTE

AN ACT
ESTABLISHING *TRANS FAT* LABELING
REQUIREMENTS ON FOOD PRODUCT LABELS AND
BANNING HARMFUL *TRANS FATS* IN FOOD

Be it enacted by the Senate and House of Representatives in Congress assembled:

Section 1 *Title* – This ACT shall be known as “**The Trans fat Labeling Act**”

Section 2 *Declaration of Policy* – The State recognizes the need to establish labeling requirement for food products on the amount of *trans fat* contained therein. This requirement will motivate food manufacturers, catering businesses, hotels and restaurants, fast food chains, bakeries and others in the food industry to modify their formulas to *reduce* or even *eliminate trans fats* and direct them to the growing trend of healthy food choices being offered to consumers.

The State shall endeavor to protect public health versus private profit from the public sale of processed foods containing *trans fats* from artificially *hydrogenated* oils and fats . Accurate food labels are critical especially for the millions of consumers who have diabetes, are overweight, have heart problems, or those on a restricted diet that require monitoring of the total amount of fats, carbohydrates and calories they consume.

Section 3 *Definition of Terms* – For purposes of this Act:

Trans Fatty Acid shall be defined as:

An *artificial* fatty acid, very unlike those normally found in nature that is produced by the *process of hydrogenation*. Trans fats are fats whose molecular structure has been damaged.

Trans fatty acid is the sum of all isomeric fatty acids with 14, 16, 18, 20 and 22 carbon atoms and one or more trans double bonds, i. e. C_{14:1}, C_{16:1}, C_{18:1}, C_{18:2}, C_{18:3}, C_{20:1}, C_{20:2}, C_{22:2}, C_{22:2} trans isomeric fatty acids, but only polyunsaturated fatty acids with methylene – interrupted double bonds.

Hydrogenation shall be defined as:

A process where *unsaturated* vegetable oils (examples of which are **polyunsaturated** *canola oil, soybean oil, corn oil, sunflower oil*) are chemically altered to form a more “saturated “ fat. The process of hydrogenation will artificially increase the “saturation “ of the unsaturated vegetable oils so it will be less susceptible to spoilage and will increase the shelf life of foods. Hydrogenation involves heating the oil to very high temperatures. Oil is mixed with metal particles such as nickel oxide and then bleached to achieve a white color.

In the process of hydrogenation, a new fatty acid, an *artificial* one is created and it is called the **trans fatty acid**. Partial hydrogenation changes as much as 50 percent (50%) or more of the oil's natural fatty acids into the *toxic* trans fatty acids.

Section 4 Scope

1. This Act shall apply to oils and fats, including emulsions with fat , as the continuous phase, which ,either alone or as part of processed foods, are intended for human consumption or must be assumed to be intended for human consumption.

2. This Act shall **not** cover or apply to *naturally occurring* content of trans fatty acids present in meat, milk and other dairy produce.

3. It shall be prohibited to sell oils and fats covered by this Act if such oils and fats exceed 2 grams of *trans fatty acids* per 100 grams of oil or fat.

4. In products claimed to be “*free of trans fatty acids*” the content of trans fatty acids shall be less than 1 gram per 100 grams of the individual oil or the individual fat in the finished product.

Section 5 Implementing Rules and Regulations

The Secretary of Health in collaboration with the Bureau of Food and Drug Administration (BFAD) shall issue the rules and regulations necessary to carry out the purpose of this Act.

Section 6 Penalty Provisions

1. Any person or entity violating the provisions of this Act shall be liable to a fine of *one hundred thousand pesos* (P100,000.00).

2. The penalty may include imprisonment for up to two years if the violation was intentional or grossly negligent or if by the violation:

a. damage to health has been caused, or damage of such damage has been caused; or

b. a financial gain, including by means of savings, has been achieved or has been intended to be achieved for the violator.

Section 7 Effectivity Clause

This Act shall take effect fifteen (15) days following its publication in the Official Gazette or in two (2) national newspapers general circulation.

APPROVED.