



Chapter 5

**Trans Fats are not
Just Bad but
Downright Ugly**

Fats get the bad rap all the time, but not all fats are bad. Some like ghee and coconut oil are actually good for us when consumed in right amount. But that said it's important to keep an eye out for the meanest of all the fats - trans fats.

That is because according to WHO estimates, every year, trans fat leads to more than 500,000 deaths worldwide from cardiovascular diseases. So, eliminating trans fats is key to protecting health and saving lives.

But why are they so dangerous?

Trans fats have a specific chemical structure, that our body finds hard to metabolize and also trans fats have no physiological role to play in our body. So certainly don't consume it !

In addition they clog arteries, increases 'bad' LDL cholesterol and triglycerides, and reduces 'good' HDL cholesterol, a multifold whammy that increases the risk of coronary heart diseases. They can also trigger diabetes. Immune dysfunction, obesity, reproductive problems and cancer.

Plus those who eat more trans fats have higher levels of C-reactive protein (a biomarker for inflammation in the body). Trans fat consumption is linked with poor memory and higher risk for dementia too.

All this is definitely scary!

Where are they lurking?

Even scarier news is that these artery clogging fats are there almost everywhere. Some trace amounts are found in dairy and red meats which according to some reports may not be that harmful for health as other forms i.e. artificial trans fats.

It is the artificial trans fats that is formed when hydrogen is added to vegetable oil to make it solid at room temperature called industrially produced trans fatty acids (IP-TFA), which is the dangerous kind.

TFA were first introduced into the food supply in the late 19th and early 20th centuries when partially hydrogenated oils became popular and replaced butter and ghee in industrial food products to cut cost and to increase the shelf life.

Look out

Trans fats are also found liberally in:



Fats/oils: Vanaspati, margarine, bakery shortenings.



Bakery Products: Cookies, biscuits, doughnuts, fan, rusk, cake, crackers.



Packaged foods: Bhujia, namkeen mixtures, cake icing, hot chocolate mixes, potato chips, corn and tortilla chips, microwave popcorn.



Fried foods: Most street / restaurant foods - batura, aloo chaat, patties, samosa, kachori, pakora's, french fries, fried chicken, even sweets like imarati, jalebi... as these are mostly made with or fried in partially hydrogenated oils.



Reheated oil: Some trans fats are formed when the same oil is reheated and used for cooking again and again.

Be careful

WHO recommends that total TFA intake to be limited to less than 1% of total energy intake, which translates to less than 2.2 g/day in a 2,000-calorie diet. No need to get into calculations, just follow these thumb rules:

- ★ Go easy on fried foods and bakery items
- ★ Carefully choose the cooking oil at home (avoid vanaspati)
- ★ Don't reheat oil too much
- ★ Cut down consumption of processed and packaged foods
- ★ Avoid fried street food.
- ★ Read the labels carefully as other names for trans fats are partially hydrogenated oils, hydrogenated vegetable fats and shortening.

The News is Good

Elimination of industrially-produced TFA is feasible and achievable, and it is being done successfully worldwide. Several countries have in fact eliminated industrially-produced TFA from the food supply through implementation of systematic policy actions and monitoring programs.

Taking guidance from the REPLACE action package recommended by WHO that provides six strategic actions to eliminate trans fats from the food supply: Review, Promote, Legislate, Assess, Create and Enforce - India too is committed to elimination of industrial trans fats in fats and oils in a phased manner from the food supply and make India Trans Fat free by 2022.

The trans-fat content in fats and oils has already been limited to 5% and the process to further reduce it to 3% by 2021 and to 2% by 2022 is already on target. The regulation is being extended to food products having fats and oils too.

In addition, Food Safety and Standards (advertising and claims) regulation 2018 allow the trans-fat free claim on foods that contain 0.2 gram trans fats per 100 gm / 100 ml. Similarly, food establishments (bakeries, sweet shops and other food outlets) can now display the trans-fat free logo in their outlets and on their food products if they use trans-fat free oils/fats.

FSSAI is also educating chefs and working with them to encourage use of healthier fats/oils, use fats/oils with less than 2% trans fats in all their recipes, promote trans fats free food, reformulate and create a pool of healthy region specific trans-fat free recipes, work with food technologists to promote substitutes for trans fats and create awareness among consumers on ways to avoid trans-fat in their diet.

TRANS-FAT: A SILENT KILLER

Eliminate Trans-fat



AVOID
VANASPATI OR
MARGARINE



LIMIT FRIED
FOODS



AVOID REPEATED
USE OF COOKING
OIL



100 Calories from Fat	
	% Daily Val.
Total Fat 11g	17%
Saturated Fat 2.5g	12%
Trans Fat 2.5g	
Cholesterol 0mg	0%
Sodium 105mg	4%
Total Carbohydrate 0g	0%
Dietary Fiber 0g	

CHECK
NUTRITION LABEL
FOR "TRANS-FAT"



Trans Fats are the worst type of fat, they increase the bad cholesterol (**LDL**) and decrease the good cholesterol (**HDL**) in our body

Bottom line

The fact is that while we love foods which contains trans fats, our heart and blood vessels don't. Remember they increase the shelf life of foods, but might end up reducing ours. Besides why should our children have such an unsafe ingredient in their food. We owe it to them to eliminate it completely, and replace with healthier oils that preferentially contain monounsaturated and polyunsaturated fats.

The REPLACE Road-Map

Review dietary sources of industrially produced trans-fat and the landscape for required policy change.

Promote the replacement of industrially produced trans fat with healthier fats and oils.

Legislate or enact regulatory actions to eliminate industrially produced trans fat

Assess and monitor trans fat content in the food supply and changes in trans fat consumption

Create awareness of the negative health impact of trans fat among policy makers, producers, suppliers, and the public. Enforce compliance with policies and regulations

TRANS FAT
FREE