

Tackling trans fat, the hidden killer

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The WHO recommends that trans fat intake be limited to less than 1% of total energy intake | Photo Credit: H. Vibhu

The Health Department and the Food Safety wing take a look at the dietary habits of the people and zoom in on checking the trans fat content in food.

Unhealthy eating, with excessive intake of processed and fried foods, very less of fresh fruits and vegetables and unhealthy cooking habits at home have been pushing up Kerala's epidemic of lifestyle diseases and obesity. An estimated 28.5% of men and 32.4% of women are said to be either overweight or obese (NFHS-4, 2015-16). Over 20% of the population has diabetes, while hypertension prevalence has crossed 30%.

Till now, all initiatives launched by the State for the primary prevention and control of non-communicable diseases (NCDs) have focused on screening, early detection and lifestyle changes. For the first time now, the Health Department is looking at the role of dietary interventions in the community as one of the NCD preventive strategies.

Two weeks ago, the Health Department and the Food Safety wing announced that they would launch a joint initiative to rein in the high amount of trans fatty acids (TFA), salt and sugar in foods commercially available in the market.

What consumers need to know about safe food

The State's initiative has now got a fillip with the Food Safety and Standards Authority of India (FSSAI) announcing on November 30 a new mass media campaign — Heart Attack Rewind — calling for the elimination of industrially produced TFA in food supply. Heart Attack Rewind warns citizens about the health hazards of consuming trans fat.

The campaign is to support the FSSAI's global target of eliminating trans fat in India by the year 2022, a year ahead of the global target by the World Health Organization (WHO) for complete elimination of trans fat.

“The mushrooming of eateries, from pricey restaurants to ‘thattukadas’ and the crowds milling around these indicate that eating out as a culture has been growing in the State.

Food industry responds positively

Till now, we have been focussing on preventing food adulteration and in enforcing hygienic norms and standards. But the FSSAI has been increasingly focussing on food quality, nutrition, safe eating and inducing behavioural changes in eating and has launched several nationwide initiatives in this regard. It is time the State stepped in to enforce regulations regarding what constitutes healthy food when it comes to food available in the market,” says K. Anilkumar, Joint Commissioner of Food Safety

With various studies indicating that hypertriglyceridemia (elevated triglycerides in blood) is way too high among Keralites at 45% ,dietary interventions in the community that focus on reducing the consumption of fried and high fat, salt, sugar (HFSS) foods could not have come at a better time..

What are TFAs?

TFAs are naturally found in small amounts in beef, lamb, and full-fat dairy products but it is the artificial TFAs contained in food made using partially hydrogenated vegetable oils (PHVOs) that are the culprit here.

Hydrogenation is a process typically used by the industry to improve the flavour stability and keeping qualities of oil. Partial hydrogenation reduces the amount of saturated fats in oil, which are deemed unhealthy.

Used cooking oil for making biofuel

By 1990s, various studies said artificial TFAs were worse than saturated fats because while both elevated the bad cholesterol (LDL), TFA also reduced the good cholesterol (HDL).

But the food industry prefers PHVOs as these are inexpensive and renders the desirable taste, texture and long shelf life to food. The typical foods which have a high TFA content are commercially fried foods like chips and baked goods like cakes, biscuits, cookies, puffs and the like.

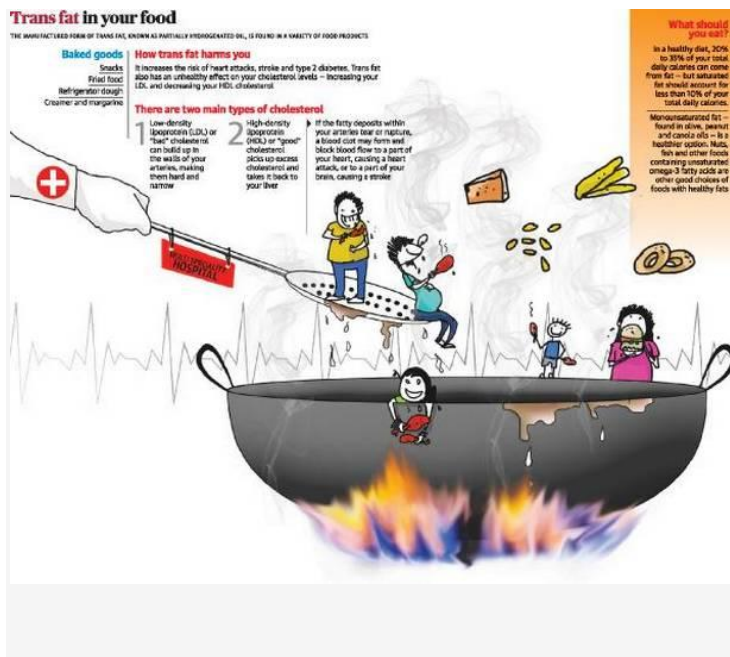
Reheating of oil above 180 degrees also produces TFAs. Today, the major sources of industrial TFAs in people's diets come from products which are made using PHVOs and fried food which are prepared in commercial fryers on the street where oil is repeatedly reheated.

Metabolic Syndrome

Reining in in commercially available food — both in organised as well as the unorganised sector — assumes more importance in the Kerala context because TFA has a direct connection to Metabolic Syndrome (MS).

The latest estimates (Harikrishnan. S et al., PLOS One, March 2018) put the prevalence of MS in Kerala between 24% and 33% by various international definitions. The study indicated that one in three or four persons in the State — predominantly women — have this condition. Metabolic Syndrome is a cluster of metabolic abnormalities — increased blood pressure, high blood sugar, abdominal obesity, abnormal cholesterol or triglyceride levels — that occur together, increasing one's risk of heart disease, stroke and diabetes.

Literature says that TFA consumption causes metabolic dysfunction. "It adversely affects circulating lipid levels, triggers systemic inflammation, induces endothelial dysfunction... increases visceral adiposity, body weight, and insulin resistance. In fact, TFAs seem to have a unique cardiometabolic imprint that is linked to insulin-resistance and Setabolic Syndrome pathways".



What regulations say

The WHO recommends that trans fat intake be limited to less than 1% of total energy intake and has called for the total elimination of TFAs in global food supply by 2023.

In 2015, the FSSAI set the maximum TFA limit in foods in the country at 5%. It has now proposed to further limit it to 2% and totally eliminate TFAs from foods by 2022. The FSSAI says that its plan is backed by vanaspathi makers, food companies and bakery associations, who have all supported the move and have pledged to make the necessary changes. However, in the market, even the current upper limit of 5% TFA is not met by many industry players, especially those in the huge network of unorganised food manufacturers, and the enforcement has been pretty lax.

Measuring TFA content

The State Food Safety authorities too admit that measuring the TFA content in food has never been a priority and that the food analysis labs have only recently acquired Gas Chromatography machines that can measure the TFA content in foods.

At a recent consultative workshop on TFA reduction called by the Health Department, it was pointed out that major players in the food industry had already reduced TFA content in their products because they were compelled to follow the labelling declarations. It was the unorganised sector that needed to be educated about the harmful health effects of TFA and the effective alternatives to TFA that they could use.