How to avoid trans fat (bad fat) in our diet?

What are “good” and “bad” fats?
Hi, I am a biologist and a lecturer at Hong Kong Baptist University, teaching food and nutrition courses to undergraduate students. As a parent, I am concerned with the nutritional needs of children. Children are all happy with sweet and “yummy” snacks. However, do you know how to avoid harmful nutrients or foods among snacks in the supermarket?

In this article, I would like to let you know what “bad” fat is and how to avoid it from our dairy foods. There are four different kinds of fats that we can consume: 1) Saturated fat: mainly found in animal fat tissues, butter and some vegetable oil, such as coconut oil. The over-consumption of saturated fat is generally considered a risk factor for heart disease, stroke and cancers. 2) Monounsaturated fat: mainly found in olive oil, peanuts and almonds. 3) Polyunsaturated fat: mainly found in omega 3 or omega 6 containing fishes, soybean, flaxseed and rapeseed oil, etc. All unsaturated fats are considered as “good fats” to lower our risk of heart disease, cancer and obesity. Consumption of omega-3 fatty acids during pregnancy is critical to fetal development. 4) Trans fat: Unlike other members of the fat family, trans fats, or trans-fatty acids, are largely artificial fats. Like saturated fat, trans fats increase the risk of heart attack, stroke, cancer and disrupt hormonal and enzymatic activity in human body.

Why is trans fat found in foods?
Trans fats are made by a chemical process called partial hydrogenation. Liquid vegetable oil is packed and converted into a solid fat by partial hydrogenation process. This made an ideal fat for the food industry to work with because of its high melting point, its creamy, smooth texture and its reusability in deep-fat frying. Partially hydrogenated fats, or trans fats, extend the shelf life of food. They also add a certain pleasing mouth-feel to all manner of processed foods. Think of buttery crackers and popcorn, crispy French fries, crunchy fish sticks, creamy frosting and melt-in-your mouth pies and pastries. All these foods owe those qualities to trans fats. Trans fats seemed like such a good thing for enhancing the flavor, texture, and shelf life of many processed foods -- from cookies to frozen pizza. Unfortunately, they come with a health risk. They can only be made by cooking with a very high heat, at temperatures impossible in a household kitchen.

How “bad” is trans fat?
Saturated fats raise total and bad (LDL) cholesterol levels. Trans fats do the same, but they also reduce the levels of good (HDL) cholesterol. Bad (LDL) cholesterol can clog our arteries and increase the risk of heart disease whereas good (HDL) cholesterol can help to maintain a good heart. Trans fats also increase...
total cholesterol level in the blood, adding to our risk of heart disease. Basically, the more solid the fat, the more it clogs our arteries. There are suggestions that the negative consequences of trans fat consumption go beyond the cardiovascular risk, such as Alzheimer’s disease, cancers, diabetes, obesity, liver dysfunction, infertility in woman, etc.

How to avoid trans fat?
As far as your body is concerned, trans and saturated fats do the same amount of damage. You want to try to limit your intake of foods that have significant amounts of these fats, or maybe even avoid them altogether. You should keep in mind that a food touted as “low in saturated fats” might be high in trans fat and just as harmful to you, so check the ingredients. The higher on the list an ingredient is, the more there is of it. But remember, not all fats are bad. Monounsaturated and polyunsaturated fats found in olive, canola, soybean, corn, and sunflower oils are helping us to maintain a good heart.

Remember, trans fatty acids are not essential and provide no known benefit to human health. The Food and Drug Administration (FDA) established a rule in 2003 requiring food manufacturers and makers of some dietary supplements to include trans fat information on the nutrition label of their products. It limited the trans fat content of vegetable oils and soft, spreadable margarines to 2% of the total fat content; and limited the trans fat content for all other foods to 5% of the total fat content, including ingredients sold to restaurants.

However, the FDA also gave food producers considerable wiggle room in their labeling. Current law says that any food containing less than 0.5 grams of trans fat can “round down” and indicate trans fat content as 0 grams. In essence, zero doesn’t always mean zero, and an item that is advertised “trans-fat free” might just be almost trans-fat free. The easiest way to avoid the “zero trans fat” labeling scam is to read the ingredient list and avoid anything that contains partially hydrogenated oils. Of course, another easy rule is to stick with whole, fresh foods that have no label at all!

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