



## TRANS FAT

### The Issue

Scientific evidence has shown that dietary trans fats can increase your risk of developing heart disease. You can reduce this risk by choosing healthier foods that contain little or no trans fat.

### Background

Fat is an important part of a healthy diet because it provides essential fatty acids and energy (calories). It also helps your body absorb Vitamins A, D and E.

Fats and oils are made mostly of fatty acids. There are four main types of fatty acids. Most fats and oils contain a mixture of all four types, but such mixtures usually have a higher proportion of one particular type of fatty acid.

### The four main types of fatty acids are:

**Polyunsaturated fatty acids** - Many common vegetable oils (e.g., soybean, corn and sunflower oil), fatty fish (e.g., salmon, mackerel, smelt, herring and trout), fish oils, flaxseed, sunflower seeds, soybeans and some nuts (e.g., walnuts) contain a high proportion of polyunsaturated fatty acids.

**Monounsaturated fatty acids** - Olive oil, canola oil, high oleic sunflower oil, avocados and certain nuts (e.g., cashews, pecans, almonds and peanuts) contain a high proportion of monounsaturated fatty acids.

**Saturated fatty acids** - Coconut, palm and palm kernel oils, animal fats (e.g., pork and beef), butter, cheese and other dairy products contain a high proportion of saturated fatty acids.

**Trans fatty acids** - These are found naturally in small amounts in certain foods (e.g., dairy products, beef and lamb). Also, small amounts of trans fats are formed during the refining of liquid vegetable oils (e.g., canola and soybean oil). Trans fats are also created when manufacturers use a process called "partial hydrogenation." This process turns liquid oil into a semi-solid form, such as shortening or margarine.

Food products made with fats or oils with a high proportion of saturated or trans fatty acids have a longer shelf life than products made with oils that contain a higher proportion of other fatty acids. Saturated and trans fatty acids also play a role in producing the textures and flavours that make many bakery products and snacks so tempting. For example, it is the saturated and trans fatty acids that give pastries that "melt in your mouth" feeling.

### The Health Effects of Dietary Fats

In general terms, polyunsaturated and mono-unsaturated fatty acids tend to lower your risk of heart disease. They are the healthier fats, and they should be included in your diet.

Saturated and trans fatty acids are unhealthy fats because they tend to raise your risk of heart disease. Trans fats do two things that raise the risk of developing heart disease:

- Trans fats raise blood levels of so-called bad cholesterol (LDL-cholesterol). LDL-cholesterol is a risk factor for heart disease.
- Trans fats lower blood levels of so-called good cholesterol (HDL-cholesterol). HDL-cholesterol protects against heart disease.

Saturated fats also raise blood levels of "bad" cholesterol. However, at the same time, they also raise blood levels of "good" cholesterol.

### Main Dietary Sources of Trans Fatty Acids

Most of the trans fat in a typical Canadian diet comes from margarines (especially hard margarines), commercially fried foods and bakery products that are made with shortening, margarine or oils containing partially hydrogenated oils and fats. These products include crackers, cookies, donuts, cakes, pastries, muffins, croissants, snack foods and fried foods, such as french fries and breaded foods. In these products,



up to 45% of the fat content may be trans fatty acids.

Trans fatty acids are also present at low levels (2 to 6% of the fat) in such foods as dairy products, beef and lamb. Some refined liquid oils may contain small amounts of trans fatty acids (0.5 to 2.5% of the oil).

## Minimizing Your Risk

The best way to minimize the risk of adverse health effects related to trans fat is to reduce your intake of foods that contain trans fatty acid

- Avoid commercially fried foods and high-fat bakery products unless they are identified as being reduced in or free of trans fat.
- Follow the suggestions in Canada's Food Guide to Healthy Eating. The Guide advises you to choose lower fat dairy products, leaner meats and foods prepared with little or no fat.
- Read the labels on pre-packaged food products. Since December 2005, it has been mandatory for most foods to list on the "Nutrition Facts" table the amount of trans fat in the product. Also, look for the phrase "partially hydrogenated oil." If you see this phrase in the list of ingredients on the label, it means the product contains trans fat.
- Choose soft margarines that are labelled as being free of trans fat or made with non- hydrogenated fat.
- Fry foods less often. When you do fry foods, use healthier oils that contain a higher proportion of mono-unsaturated fats. Do not re-use the oils more than two or three times.
- When you eat out, ask about the trans fat content of foods on the menu.

Remember, saturated fat also increases your risk of developing heart disease. You can lower your intake of both saturated and trans fats by eating more vegetables and fruit, fish, shell-fish and other seafood, whole grain breads and cereals, peas, beans, lentils and nuts. It also helps to choose oils and fats that contain a high proportion of poly-unsaturated and monounsaturated fatty acids.

Finally, help your children develop healthy eating habits. Encourage them to eat healthy snacks that are lower in trans fats and saturated fats, and lead by example. Good snack choices for children include fruits and vegetables, milk, yogurt, and whole grain cereal and bakery products that are lower in trans fats and saturated fats.

## The Government of Canada's Role

As part of its ongoing commitment to provide Canadians with the information they need to make healthy lifestyle choices, the Government of Canada introduced mandatory nutrition labelling for pre-packaged foods. Canada was the first country in the world to introduce mandatory labelling of trans fat. As of December 12, 2005, these new labelling regulations require that calories and the content of 13 core nutrients, including trans fat, be listed on the labels of most pre-packaged foods.

The mandatory labelling of trans fat is intended to help consumers make healthy food choices. It has already prompted a number of food companies to reduce or even eliminate trans fat in their products.

In addition, Health Canada, along with the Heart and Stroke Foundation of Canada, has been working with a task force made up of various stakeholders to develop recommendations and strategies for reducing trans fats in Canadian foods to the lowest level possible. The report of the Task Force was released in June 2006.

## Need More Info?

For more information on trans fats and healthier food choices, contact:

Office of Nutrition Policy and Promotion,  
Health Canada  
Tower A, Qualicum Towers  
AL: 3303D,  
2936 Baseline Rd,  
3rd floor  
Ottawa, ON, K1A 0K9  
[healthy\\_eating@hc-sc.gc.ca](mailto:healthy_eating@hc-sc.gc.ca)

Also, see the following publications:

Canada's Food Guide to Healthy Eating at:  
[http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html).  
You may also order this publication by calling 1-800-O-Canada (1-800-622-6232).  
The call is toll-free in Canada.

Health Canada's Fact Sheet on Trans Fats at:  
[http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/2004/2004\\_56bk1\\_e.html](http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/2004/2004_56bk1_e.html)

The Trans Fat Task Force report at:  
[http://www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/index_e.html)

Canada's Food Guide to Healthy Eating Focus on Preschoolers at:  
[http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/res/fg\\_preschoolers-prescolaire\\_ga\\_e.html](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/res/fg_preschoolers-prescolaire_ga_e.html)

The Healthy Heart Kit (Public Health Agency of Canada) at:  
<http://www.phac-aspc.gc.ca/ccdpc-cpcmc/hhk-tcs/>

For general information about heart disease, visit the Heart and Stroke Foundation of Canada at:  
<http://ww2.heartandstroke.ca/Page.asp?PageID=24>

For more on nutrition labelling, including information about the Nutrition Facts table, see It's Your Health – Nutrition Labelling at:  
[http://www.hc-sc.gc.ca/iyh-vsv/life-vie/labelling-etiquetage\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/life-vie/labelling-etiquetage_e.html)

For additional articles on health and safety issues go to the It's Your Health Web site at:  
[www.healthcanada.gc.ca/iyh](http://www.healthcanada.gc.ca/iyh)  
You can also call toll free at 1-866-225-0709  
or TTY at 1-800-267-1245\*