Penn State **Extension**

# *Creating Health & Nutrition Fact Sheets*

## What Are Trans Fatty Acids?

***Tip***
Choose foods with 0 grams trans fat and less than 5 percent of the Daily Value of saturated fat more often.

Concern about trans fats brought about a change to the Nutrition Facts panel in 2006. Now the amount of trans fat in a serving of food is listed right under saturated fat on that panel. Should you be paying attention to the amount of trans fat you eat? Health experts think so, especially if you are at risk for coronary heart disease—one of the leading causes of death in the United States.

### Why Does Trans Fat Affect Coronary Heart Disease Risk?

The average daily intake of trans fat is about 5.8 grams. This has been shown to raise LDL (the bad cholesterol) by 6 percent. If you are eating above-average amounts, trans fat also lowers HDL (the good cholesterol) while raising LDL still higher. When you add this to the LDL-raising effect of saturated fat, trans fat can substantially increase your risk of heart disease.

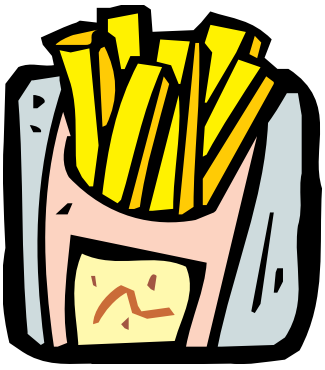
### What Is Trans Fat?

Trans fats are produced during hydrogenation of vegetable oils. This process is used in the food industry to produce partially or fully hydrogenated vegetable oils. Basically hydrogenation converts one form (cis) of a monounsaturated fat into another (trans) by moving a hydrogen atom from one side of a double bond to the other.

Although most trans fat in the food system comes from hydrogenation, ruminants (cattle, sheep, goats) have bacteria in their stomachs that produce natural trans fats. These are found in beef and lamb fat.

### Why Are Trans Fats Used as an Ingredient?

Hydrogenated fats have advantages for production of many manufactured foods. These oils are less likely to be oxidized or broken down in deep fat frying. Hydrogenation increases the shelf life of the vegetable oil. It gives many foods made with hydrogenated oils a much longer shelf life. Hydrogenation increases the length of time oil can be used for deep fat frying since it does not break down in heat as readily. It also provides desired characteristics to dough for baking and taste to French fries.



### Where Are Trans Fats Found?

In the supermarket, the major sources are crackers, cookies, snacks, frostings, cake mixes, some margarines, and ready-prepared breaded foods like meatballs. In restaurants, hydrogenated oils may still be used to fry foods, make biscuits and other baked goods, or to deep fry foods.

### How Do I Identify Products That Contain Trans Fat?

Trans fat is now listed on the Nutrition Facts panel. The trans fat per serving is listed in grams. There is no Daily Value since the Institute of Medicine recommends we keep our

PENNSTATE
1855
Cooperative Extension
*College of Agricultural Sciences*

intake of trans fat as near 0 as possible. However, a serving of a food can still contain somewhat less than ½ gram per serving and declare 0 trans fat per serving. Then the amount of trans fat you eat depends on the number of servings you consume. To avoid trans fat entirely, you need to scan the ingredient list. If partially hydrogenated vegetable oil were listed, you would want to select another product.

### Should I Continue to Monitor Saturated Fat and Cholesterol in My Diet?

Americans consume on average four to five times as much saturated fat as trans fat in their diets. Saturated fat raises LDL, so reducing saturated fat is still a major concern. Use the Nutrition Facts panel to compare similar foods. Choose foods lower in saturated and trans fats.

### *Shopping Tips*

- Soft margarines usually contain less trans fat than solid or hard margarines. Margarine manufacturers have altered their recipes so trans fat levels are lower than in the past. Read labels and select soft margarines more often.
- Solid cooking shortenings like Crisco have been reformulated. There are trans fat–free versions available.
- Vegetable oils have no trans fat and little saturated fat compared to margarines or butter. Use these in food preparation instead of margarine or butter. Health experts suggest using olive and canola oil more often than soybean, corn, or sunflower oil.
- Choose crackers, cookies, and snacks that are low in both saturated and trans fat.
- When eating out, look for nutrient content declarations. More restaurants are voluntarily telling you the amount of fat, saturated, and trans fat in a serving of foods.
- Ask how a food is prepared when ordering foods in a restaurant. You can ask about the type of cooking oil used if the food is fried or baked.
- Although animal fat can include trans fats, the saturated fat content is higher. So removing all visible fat from beef and lamb is important for control of both saturated and trans fat intake.

## Examine Your Choices

| Food | Source | What I buy | What I plan to buy/change |
|---|---|---|---|
| *Example:* Reformulated Crisco | Low saturated and no trans fat | Regular Crisco | Change to reformulated Crisco |
| | | | |
| | | | |

| My Goal: |
|---|
| |
| |

Prepared by J. Lynne Brown, professor of food science, and Robin Rex, Penn State extension educator, Columbia County

Sources: *Functional Ingredients: Trans Fats;* www.cfsan.fda.gov/~dms/transfat.html; J. Judd et al. Dietary trans fatty acids: effects on plasma lipids and lipoproteins of healthy men and women. *Am J Clin Nutr* 59:861–68.

An OUTREACH program of the College of Agricultural Sciences

Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

Visit Penn State Extension on the Web: **extension.psu.edu**

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone 814-865-6713.

This publication is available in alternative media on request.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

Produced by Ag Communications and Marketing

© The Pennsylvania State University 2011

**CODE # UK184** Rev2M10/11graphtech4863