



# Questions & Answers About **FATS** in Our Diet



**Julie Garden-Robinson**, Ph.D., R.D., L.R.D., Food and Nutrition Specialist  
**Tanya Lillehoff**, Program Assistant (former)

**T**hrough the years, certain foods fall in and out of public awareness and favor. This certainly has been true of fats, such as those found in margarine and butter. For example, for a time, margarine was recommended instead of butter for health reasons; more recently, margarine has gotten bad press because it contains trans fat.

The sometimes-conflicting messages in the media can create confusion, so this publication discusses the different types of fat and current research-based recommendations for health, and it answers common questions about dietary fats.

## **Q: What are the current recommendations related to fats in the diet?**

Choosing liquid vegetable oils instead of solid fats is a great way to be kind to your body. The Dietary Guidelines for Americans recommends that we:

- Consume less than 10 percent of calories from saturated fatty acids by replacing them with monounsaturated and polyunsaturated fatty acids.
- Keep *trans* fatty acid consumption as low as possible by limiting foods that contain synthetic sources of *trans* fats, such as partially hydrogenated oils, and by limiting other solid fats.
- Replace protein foods that are higher in solid fats with choices that are lower in solid fats and calories and/or are sources of oils.

## **Q: What is trans fat?**

Trans fats are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid at room temperature. This is why they are dubbed “partially hydrogenated oils.” Food manufacturers like using trans fats because they are inexpensive to produce and lengthen shelf life.

## **Q: Why should I be concerned about my trans fat intake?**

Trans fats raise your bad (LDL) cholesterol levels and lower your good (HDL) cholesterol levels, which in turn increases how much cholesterol builds up on the walls of your body’s arteries. Increased cholesterol buildup, or plaque, increases your risk of developing cardiovascular disease.

## **Q: Why is “good cholesterol” (HDL) good and “bad cholesterol” (LDL) bad?**

Cholesterol has an overall bad reputation, but some cholesterol in the body is necessary to sustain life. To travel through the bloodstream, cholesterol must be transported by the carrier molecules LDL (low-density lipoprotein) and HDL (high-density lipoprotein), and each has a different function. HDL scavenges and removes cholesterol from arteries. It acts as a maintenance crew for the inner walls of blood vessels to keep plaque from building up. This is why HDL is considered good for health.

LDL, on the other hand, is a bit of a litterbug. LDL deposits cholesterol and collects in the walls of blood vessels, causing plaque to form. Higher LDL levels put you at greater risk for a heart attack from a sudden blood clot in an artery narrowed by atherosclerosis.

**NDSU** EXTENSION  
SERVICE

North Dakota State University, Fargo, North Dakota  
September 2013

**Q: Is eating butter or stick margarine better?**

Stick margarine, which can contain trans fat, hits you with a double whammy because it raises your bad LDL cholesterol and lowers your good HDL cholesterol. The saturated fat contained in butter may raise your bad LDL cholesterol, but it doesn't affect your good HDL cholesterol. Many tub (vs. stick) margarines are lower in saturated and trans fat, which make them a healthier option. Liquid vegetable oils, which are mostly poly and monounsaturated fats, are the healthiest option. Keep in mind, though, that any type of fat is a concentrated source of calories.

**Q: What are some common sources of trans fat and saturated fat?**

Trans fat often can be found in deep-fried foods and commercial baked goods. Sources of saturated fat include fat from meat and high-fat dairy products.

**Q: How do I increase good fat in my diet?**

Replace solid fats in your diet with liquid vegetable oil, which is a source of the healthier fats. Fish such as salmon, tuna, sardines, mackerel and trout contain omega-3 fatty acids, which lower your risk for cardiovascular disease.

**Q: How can I modify my favorite recipes to reduce trans and saturated fat?**

**When the recipe calls for: Substitute this:**

Margarine or Butter	Canola or Olive Oil
1 teaspoon.....	¾ tsp. + ¼ tsp. water*
1 tablespoon.....	2¼ tsp. + ¾ tsp. water*
1 cup.....	¾ cup + ¼ water*

\*Margarine and butter contain water

Shortening	Canola or Olive Oil
1 teaspoon.....	1 teaspoon



**For more information, visit these websites:**

**NDSU Extension Service**

[www.ndsu.edu/eatsmart](http://www.ndsu.edu/eatsmart)  
[www.ag.ndsu.edu/publications](http://www.ag.ndsu.edu/publications)  
(Enter "fat" into the search function)

**The Dietary Guidelines for Americans 2010**

[www.health.gov/dietaryguidelines/dga2010/dietaryguidelines2010.pdf](http://www.health.gov/dietaryguidelines/dga2010/dietaryguidelines2010.pdf)

**American Heart Association**

[www.heart.org/HEARTORG/](http://www.heart.org/HEARTORG/)  
[www.heart.org/facethefats](http://www.heart.org/facethefats)  
<http://mylifecheck.heart.org/>

To learn more about trans fat, saturated fat and how to reduce them in the kitchen, visit this online learning module: [www.ag.ndsu.edu/millionhearts](http://www.ag.ndsu.edu/millionhearts)

The NDSU Extension Service does not endorse commercial products or companies even though reference may be made to tradenames, trademarks or service names. NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit [www.ag.ndsu.edu/agcomm/creative-commons](http://www.ag.ndsu.edu/agcomm/creative-commons).

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.