

Dietary Guideline #6: Fats



Goals:

1. Consume less than 10 percent of calories from saturated fatty acids and less than 300 mg/day of cholesterol, and keep *trans* fatty acid consumption as low as possible.
2. Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids such as fish, nuts, and vegetable oils.
3. When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
4. Limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.

Saturated Fat

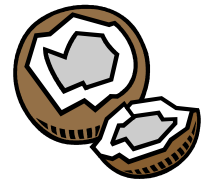


Animal sources

Meat
Dairy (unless fat-free)

Plant Sources

Coconut
Palm



Any fat that is solid at room temperature = **Saturated**

Why is saturated fat so bad?

Saturated fat stimulates the production of LDL cholesterol ("bad" cholesterol) and therefore increases blood cholesterol levels and the risk of heart disease. Saturated fats raise cholesterol levels and LDL cholesterol levels **more than dietary cholesterol** itself.

Choose lean meats and low-fat or fat-free dairy to decrease your saturated fat intake. Also avoid the "movie theater popcorn"; it is made with palm oil!

Cholesterol

Source: Animal products

- Meat
- Eggs
- Dairy



1 egg = 212 mg

There is NO cholesterol in plant products!

Food Sources of Dietary Cholesterol & Saturated Fat		
Food	Cholesterol (mg)	Saturated Fat (g)
Beef liver, 3 ounces cooked	331	1.6
Egg, whole, large	212	1.6
Shrimp, 3 ounces cooked*	166	0.3
Milk, whole, 1 cup	33.2	5.0
Cheese, regular cheddar, 1 ounce	30	6.0
Cheese, reduced fat, 1 ounce	6.0	1.0
Ice cream, gourmet, 1 cup	90.3	14.8
Ice cream, light, 1 cup	31.4	6.2
Beef, sirloin, 3 ounces cooked	71.4	1.4
Beef, rib eye, 3 ounces cooked	65	3.0
Pork chop, 3 ounces cooked	70.6	3.0
Ham, regular, 3 ounces cooked	50.2	2.7
Chicken breast, 3 ounces cooked	72.3	1.1
Chicken, dark, 3 ounces cooked	70	2.8

***Although shrimp is high in cholesterol, it is very low in saturated fat and contains omega-3 fatty acids, which may reduce the risk of heart disease.**

Since saturated fat has a more negative effect on cholesterol levels than actual cholesterol does, it is more beneficial to decrease saturated fat intake than to only limit cholesterol consumption.

Tips to Lower Dietary Cholesterol Intake:

- ✓ **Skip the yolk:** All of the cholesterol found in eggs is contained in the yolk.
 - ✓ **Try a substitute:** Egg Beaters or other eggs substitutes contain only the egg white. Because the yolk is removed, there is no fat or cholesterol, and vitamins are added to replace those removed with the yolk. You get the same nutrition without the fat, cholesterol, and calories!
 - ✓ **Replace butter with margarine or oil.** Since butter comes from an animal source, it contains cholesterol. Try replacing it with tub or spray margarine or canola oil.
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What is *Trans* Fat?

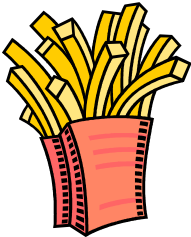
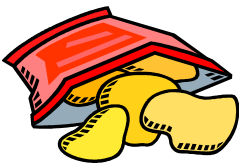


Trans fat is made when manufacturers add hydrogen to vegetable oil--a process called hydrogenation. Hydrogenation increases the shelf life and flavor stability of foods containing these fats.

"Good" Fat + Hydrogen = "Bad" Fat

The Trans Fat Effect

Like saturated fat, *trans* fat raises LDL “bad” cholesterol levels. However, *trans* fat also lowers HDL “good” cholesterol making it more harmful than saturated fat regarding heart health. The American Heart Association recommends minimizing *trans* fat intake. If you limit your daily intake of deep-fried foods, processed baked goods, and shortening and stick margarine, you are not likely to get an *excess of trans* fatty acids.

Total fat, Saturated Fat, and *Trans* Fat Content per Serving

Product	Common Serving Size	Total Fat g	Sat. Fat g	<i>Trans</i> Fat g	Combined Sat. & <i>Trans</i> Fat g
 French Fries	Medium	27	7	8	15
Butter	1 tbsp	11	7	0	7
Margarine, stick	1 tbsp	11	2	3	5
Margarine, tub	1 tbsp	7	1	0.5	1.5
Mayonnaise (Soybean Oil)	1 tbsp	11	1.5	0	1.5
 Shortening	1 tbsp	13	3.5	4	7.5
Potato Chips	Small bag	11	2	3	5
Milk, whole	1 cup	7	4.5	0	4.5
Milk, skim	1 cup	0	0	0	0
Doughnut	1	18	4.5	5	9.5
 Cookies (Cream Filled)	3	6	1	2	3
Candy Bar	1	10	4	3	7
 Cake, pound	1 slice	16	3.5	4.5	8

Starting **January 1, 2006**, the Food and Drug Administration required that *trans* fat be listed on food labels. With *trans* fat added to the Nutrition Facts panel, you will know for the first time how much of all three--saturated fat, *trans* fat, and cholesterol--are in the foods you choose. This revised label will be of particular interest to people concerned about high cholesterol and heart disease.

Polyunsaturated Fat

Sources: Vegetable Oils & Seafood



Safflower

Sunflower



Corn

Flaxseed



Soybean

Cottonseed



Canola

Linoleic (omega-6) acid and alpha-linolenic (omega-3) acid are essential fatty acids. They are necessary for cell structure and making hormones.

We cannot make essential fatty acids in our body; they must come from food!

Best sources of omega-6 FA: fish oils, and also in the flesh of oil-rich fish, such as mackerel, salmon, kippers, herrings, sprats, trout, sardines and pilchards.

Best sources of omega-3 FA: seed oils, such as linseed oil, rapeseed oil, soya oil, mustard oil and some nuts, particularly walnuts.

What effect do polyunsaturated fats have on our health?

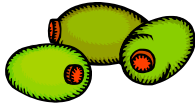
- Eating polyunsaturated fat lowers *total cholesterol*, by lowering both LDL (“bad”) and HDL (“good”) blood levels.

10%

...of daily calories should come from polyunsaturated fats.

Monounsaturated Fat

Olive oil



Canola oil



Peanut oil



What is so great about monounsaturated fat?

Monounsaturated fat lowers LDL, the “bad” cholesterol, but does not affect HDL, the “good” cholesterol.

Plus, high levels of HDL lower LDL levels!

MOST of your daily fat intake should come from monounsaturated fats.

The Mediterranean diet is known for being heart healthy because olive oil is the primary fat.

Compared to the USDA MyPyramid, it contains very small amounts of saturated fat and cholesterol. It limits red meat and puts more emphasis on lean meats like fish and poultry.

The Traditional Healthy Mediterranean Diet Pyramid



Click on this website for a dietary fat comparison chart. It shows the percentage of each type of fat contained in the different oils and solids.

<http://www.canolainfo.org/pdf/dietfat.pdf>