The Fats of Life

Heart attacks and strokes are leading causes of death in the United States. They are frequently the result of atherosclerosis— the hardening and narrowing of arteries due to the accumulation of cholesterol in the blood.

What Is Cholesterol?
Cholesterol is a fat-like substance that is part of all cell membranes. It also serves as a pre-cursor to vitamin D and sex hormones. Most of the cholesterol in your blood is manufactured by the liver, but it also comes from animal foods in our diet. High levels of blood cholesterol are a risk factor for heart disease.

Contrary to what most people think, the most important dietary strategy for reducing blood cholesterol levels is reducing saturated fat, not dietary cholesterol.

Types of Fat in Our Diet
Fats can be classified as either saturated or unsaturated.

Saturated fats are generally solid at room temperature, and they are mainly found in animal products, like butter, meat, whole milk, and cheese. However, some vegetable oils (coconut, palm, and palm kernel oil) are also high in saturated fat. These fats should be limited because they raise blood cholesterol levels.

Unsaturated fats are generally liquid at room temperature, and are mainly found in plant foods. These fats are more heart healthy because they help lower blood cholesterol levels when eaten in place of saturated fats in the diet. Unsaturated fats can be further classified as mono- or poly-unsaturated fats.

Monounsaturated fats are found in high amounts in olive oil, canola oil, avocados, and nuts. These are considered the healthiest of all the fats.

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Polyunsaturated fats include the omega 6 and omega 3 essential fatty acids. Try to cut back on the omega 6s found in safflower, sunflower, corn, and soybean oils and foods made with these oils (like margarine, mayonnaise, and salad dressings). Instead, try to eat more omega 3s found in fatty fish (like salmon, mackerel, and tuna), walnuts, and flaxseeds.

Trans fats are made during hydrogenation, a process that makes unsaturated liquid vegetable oils more solid, saturated, and shelf-stable. Trans fats are found in margarine, vegetable shortening, and many processed foods which list "partially hydrogenated vegetable oil" as an ingredient. Trans fats raise cholesterol levels just like saturated fats do, so read your food labels and avoid products that contain these.

Tips for a Healthy Heart

- Choose skinless chicken or turkey breast, fish, beans, or tofu for protein. Limit high-fat red meats (beef, pork, veal, and lamb).

- Bake, broil, microwave, and steam foods. Avoid frying and sautéing. If you add fat during cooking, choose healthy monounsaturated fats like olive or canola oils.

- Flavor foods with herbs, garlic, mustard, lemon juice, salsa, seasoned vinegars, or small amounts of olive oil. Limit high-fat additions like margarine, butter, creamy salad dressing, mayonnaise, and sour cream.

- Read food labels. Avoid products containing partially hydrogenated vegetable oils.

- Limit your intake of foods high in cholesterol, such as whole dairy products, liver, egg yolks, and shellfish.

- Enjoy a variety of vegetables, fruits, whole grains, beans, and small amounts of nuts, every day. These foods are packed with fiber, antioxidants, and phytochemicals which may benefit the heart.

- Don’t smoke, and do be physically active every day.

For more information on controlling fats in your diet, please visit www.snac.ucla.edu.
The Fats of Life

NOT ALL FATS ARE CREATED EQUAL
Fat is an important component of a healthy diet. It contains essential fatty acids which are vital for nerve function, and is necessary for the absorption of fat-soluble vitamins (like vitamins A, D, E, and K). Fat also gives flavor, tenderness, and satiety to food. Certain types of unsaturated fats, like monounsaturated fats (found in olive oil, most nuts, and avocados), and omega 3 fats (found in fatty fish, walnuts, and flaxseeds), may even help prevent heart disease.

Too much fat in the diet, however, can contribute to many health problems. Fat is a concentrated source of calories and, therefore, may lead to obesity, diabetes, and high blood pressure. Of even greater concern than the amount of fat you consume is the type of fat you consume. Saturated fat in animal foods (like butter, whole fat dairy products, and red meat) and trans fat (found in margarine, vegetable shortening, and partially-hydrogenated vegetable oils) are major contributors to heart disease.

Lowering Fat Intake and Choosing Healthier Fat Choices
For optimal health, aim to keep your daily fat intake between 20-35% of your total calories. The following is a guide to assist you in selecting foods that are lower in fat. If you choose a higher fat item, try to balance it with lower fat choices. Remember to choose healthy monounsaturated and omega 3 fats whenever possible.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Low in Fat (Less than 15% of calories from fat)</th>
<th>Medium in Fat (15%-30% of calories from fat)</th>
<th>High in Fat (30%-50% of calories from fat)</th>
<th>Very High in Fat (Over 50% of calories from fat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breads and Cereals</td>
<td>Grains and Flours: Barley, Rice, Pasta, Corn, Wheat, Rye, Most Breads, Air-popped Popcorn, Matzo, Most Breakfast Cereals, Pretzels</td>
<td>Corn Bread, Flour Tortillas, Oatmeal, Plain Crackers, Wheat Germ, Soft Rolls &amp; Buns</td>
<td>Biscuits/Muffins, Granola Cereals, Pancakes, Snack Crackers, Taco Shells, Popcorn (popped in oil)</td>
<td>Snack Chips, Croissants, Danish Pastries, Donuts, Butter Crackers</td>
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<tr>
<td>Vegetables and Fruits</td>
<td>Fruit, Plain Vegetables, Pure Juices</td>
<td></td>
<td>French Fries, Hash Browns</td>
<td>Avocados*, Olives*, Potato Chips, Onion Rings</td>
</tr>
</tbody>
</table>

*Good sources of heart-healthy monounsaturated and omega 3 fatty acids.
### CHOOSE MORE OFTEN

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<tr>
<td>Dairy Products</td>
<td>Nonfat Milk, Nonfat Dry Milk, Nonfat Yogurt</td>
<td>1% Milk, Ice Milk, 2% Cottage Cheese, Plain Lowfat Yogurt</td>
<td>2% or Whole Milk, 4% Cottage Cheese</td>
<td>Butter, Sour Cream, Ice Cream, Non-dairy Creamer Cheeses: Cheddar, Swiss, Cream, Mozzarella</td>
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<tr>
<td>Protein-rich Foods</td>
<td>Dried Beans, Peas, and Lentils, Cod, Sole, Tuna (in water), Egg Whites</td>
<td>Clams, Lobster, Crab, Bass, Fresh Tuna, Chicken &amp; Turkey (light meat w/o skin), Top Round Steak (lean, completely trimmed)</td>
<td>Soybeans, Tofu, and Tempeh*, Chicken &amp; Turkey (light meat w/skin), Duck (w/o skin), Ham (completely trimmed &amp; cured), Beef Sirloin Steak (trimmed), Salmon*</td>
<td>Nuts and Seeds*, Nut Butters*, Chicken &amp; Turkey (dark meat w/skin), Egg Yolks, Corned Beef, Duck (w/skin), Pastrami, Spare Ribs, Bacon, Beef, Pork, Lamb (partially trimmed), Cold Cuts, Hot Dogs, Sausage</td>
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<tr>
<td>Sweets</td>
<td>Frozen Nonfat Yogurt, Sherbet, Angel Food Cake, Most Hard Candy, Jelly Beans, Gelatin</td>
<td>Ginger Snaps, Graham Crackers, Frozen Lowfat Yogurt, Pudding Pop, Lowfat Granola Bars</td>
<td>Cakes, Pies, Cookies, Candy Bars</td>
<td>Ice Cream, Cheese Cake, Milk Chocolate, Peanut Butter Cups</td>
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<tr>
<td>Prepared Foods</td>
<td>Spaghetti with Tomato Sauce, Grilled Chicken Breast Sandwich, Turkey Breast Sub, Most Broth Soups, Bean or Chicken Burritos and Soft Tacos, Lean Roast Beef Sub</td>
<td>Pizza, Lasagna, Tostadas, Burritos, Tacos, Tamales, Pot Pies, Hamburgers, Macaroni &amp; Cheese, Spaghetti w/Meat, Fish Sandwich, Fish Sticks, Beef Stew</td>
<td>Pizza, Lasagna, Tostadas, Burritos, Tacos, Tamales, Pot Pies, Hamburgers, Macaroni &amp; Cheese, Spaghetti w/Meat, Fish Sandwich, Fish Sticks, Beef Stew</td>
<td>Chili con Carne, Fried Chicken, Most Cream Soups, Caesar Salad</td>
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<tr>
<td>Condiments</td>
<td>Seasoned Vinegar, Mustard, Ketchup, Soy Sauce, Salsa, Barbecue Sauce, Jam/Jelly, Honey, Sugar, Herbs, Spices</td>
<td>Tomato/Marinara Sauces</td>
<td>Vegetable Oils (Canola*, Olive*, Corn, Sunflower, Palm)</td>
<td>Margarine, Pesto and Cream Sauces, Gravy, Mayonnaise, Regular Salad Dressing</td>
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