Heart Healthy Diet

Low Saturated Fat, Sodium, and Added Sugar Diet

A heart healthy diet that is low in saturated fat, sodium, and added sugar helps to:
- Control or decrease cholesterol and triglycerides in your blood.
- Control or decrease blood pressure and fluid retention.

Heart healthy lab goals

<table>
<thead>
<tr>
<th>Lab</th>
<th>Healthy Level</th>
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</thead>
<tbody>
<tr>
<td>Total cholesterol</td>
<td>less than 200 mg/dL</td>
</tr>
<tr>
<td>HDL (good) cholesterol</td>
<td>men: greater than 40 mg/dL</td>
</tr>
<tr>
<td></td>
<td>women: greater than 50 mg/dL</td>
</tr>
<tr>
<td></td>
<td>optimal heart health: greater than 60 mg/dL</td>
</tr>
<tr>
<td>LDL (bad) cholesterol</td>
<td>less than 70 mg/dL</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>less than 150 mg/dL</td>
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</tbody>
</table>

Saturated fats

This type of fat increases total cholesterol and LDL (bad) cholesterol. Saturated fats are found mainly in animal foods, such as meat and dairy products, and are most often solid at room temperature. The main sources of saturated fat in the American diet are:

- Cheese
- Meat
- Pizza
- Whole and reduced fat milk and butter
- Snacks and sweets

Trans fats

This type of fat increases LDL (bad) cholesterol and decreases HDL (good) cholesterol. Trans fats come mostly from partially hydrogenated plant oils. Foods that may include trans fats are:

- Store bought baked goods
- Non-dairy whipped toppings
- Cream substitutes
- Crackers and cookies
- Deep fried foods
Polyunsaturated and monounsaturated fats

These types of unsaturated fats protect HDL (good) cholesterol. They often come from plants, with the exception of fish, and are often liquid at room temperature.

Examples of polyunsaturated fats:
- Sunflower, corn, soy, and flax oil
- Walnuts
- Flax Seeds
- Fish

Examples of monounsaturated fats:
- Olive, peanut, and canola oil
- Avocados
- Almonds, hazelnuts, and pecans
- Pumpkin and sesame seeds

Cholesterol

This fat-like substance is necessary for good health. However, high levels in the blood can cause heart and blood vessel diseases. Your body makes cholesterol. You also get it from eating foods from animals, such as meat, milk, eggs, cheese, and butter. Foods from plants, such as fruit, vegetables, and grains, do not contain cholesterol.

How can I lower my cholesterol?

- Decrease saturated fat and trans fat in your diet.
  - Limit saturated fat to no more than 10% of your daily calories. Less than 7% is recommended by the American Heart Association.

<table>
<thead>
<tr>
<th>Daily calories</th>
<th>Each day limit saturated fat to</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>15-22 grams</td>
</tr>
<tr>
<td>1800</td>
<td>14-20 grams</td>
</tr>
<tr>
<td>1500</td>
<td>12-16 grams</td>
</tr>
<tr>
<td>1200</td>
<td>9-13 grams</td>
</tr>
</tbody>
</table>

Note: There are 4.5 grams of saturated fat in ½ cup of ice cream.

Replace saturated fats in your diet with heart healthy polyunsaturated or monounsaturated fats to lower your cholesterol. Limit to 5-6 teaspoons per day, so you don’t overdo it on calories.

- Since trans fats both lower HDL (good) cholesterol and increase LDL (bad) cholesterol, aim for 0 grams of trans fat per day.

Note: If a food has less than half (0.5) a gram of trans fat per serving, the manufacturer can list “0 grams of trans fat” on the food label. The best way to know if a food has trans fat is to read the ingredient list. If the product has partially hydrogenated oils, it has trans fat.
A special note on fish: Many fish are low fat. Some fish, which are higher in fat, are high in a kind of fat called **omega 3 fatty acids**. This type of fat is heart healthy. Examples include salmon, mackerel, and tuna. For this reason, it is recommended that you **eat fish three times a week**. Bake, broil, grill, or poach your fish, so you don’t add a large amount of undesired fats.

- **Limit foods high in cholesterol.**
  While the cholesterol you get from food does not have a significant influence on cholesterol levels in your body, high cholesterol foods also tend to be high in saturated fat. Because of this, limit foods high in cholesterol in your diet, such as egg yolks, meat, and cheese.

- **Increase fiber in your diet.**
  Eat more fiber to help lower your cholesterol. Aim for 25-35 grams of fiber per day, including 10 grams of soluble fiber a day. Tips:
  - Eat 5 servings of fruits and vegetables each day.
  - Make at least half of the grains that you eat unrefined carbohydrates or whole grains, such as whole wheat bread and pasta, and brown rice.
  - Focus on sources of soluble fiber. Good sources include oats, beans, barley, pears, mangos, and Brussel sprouts.

**How can I lower my triglyceride level?**

- **Limit the amount of saturated fat that you eat.** Follow the recommendations above.

- **Limit the amount of refined carbohydrates and added sugars in your diet.**
  To lower triglycerides and cholesterol in your diet, make at least half of the grains that you eat unrefined carbohydrates or whole grains.
  Refined carbohydrates are those that have had the fiber, vitamins, and minerals removed. Examples include:
  - White bread, rice, and pasta
  - Sweets made from white flour
  Unrefined carbohydrates or whole grains are those that have fiber, vitamins, and minerals included. Examples include:
  - Whole wheat bread and pasta
  - Brown rice
  - Quinoa, barley, and millet
  - Fruit and vegetables
  Limit added sugars in your diet. Too much sugar in the body gets converted into triglycerides. Those who eat 17-21% of their daily calories as added sugar increase their risk of dying from heart disease by 38%. These foods often have added sugar:
  - Sugar-sweetened beverages, such as soda, fruit drinks, sports drinks, lemonade, iced tea, and flavored coffee
  - Cakes, cookies, candy, and pie
Dairy products, such as ice cream, sweetened yogurt, and chocolate milk
Sweetened breakfast cereals, such as children’s cereals and granola

Have no more than 10% of your daily calories come from added sugars. The American Heart Association recommends a stricter limit of 9 teaspoons a day for men and 6 teaspoons a day for women.

<table>
<thead>
<tr>
<th>Daily calories</th>
<th>Each day limit added sugars to</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>50 grams or 12 1/2 teaspoons</td>
</tr>
<tr>
<td>1800</td>
<td>45 grams or 11 teaspoons</td>
</tr>
<tr>
<td>1500</td>
<td>38 grams or 9 1/2 teaspoons</td>
</tr>
<tr>
<td>1200</td>
<td>30 grams or 7 1/2 teaspoons</td>
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</tbody>
</table>

Note: A 12-ounce can of regular soda contains 40 grams or 10 teaspoons of sugar!

Tip: On a food label, divide the grams of sugar by 4 to know how many teaspoons of sugar have been added per serving.

**Sodium**

**What is sodium?**

Sodium is a mineral that is needed for good health and is present in all foods. Most people eat more sodium than they need. If the body cannot get rid of the extra sodium, fluid builds up. Extra fluid increases the work of the heart and kidneys, and may increase blood pressure. Eating less sodium may help control these problems. You will sometimes see the term sodium abbreviated “Na”, as in NaCl (Sodium Chloride), which is table salt.

The current guideline for how much sodium a person should eat is 2,300 milligrams (mg). The guideline is even lower at 1,500 mg for those over 50, with high blood pressure, and for African Americans.

**Read food labels**

- Nutrition facts food labels list the amount of sodium in milligrams (mg) per serving. Be aware of serving size.
- These food labels can help you choose foods that are healthier for you:
  - Sodium-free – less than 5 mg of sodium per serving
  - Very low-sodium – 35 mg or less per serving
  - Low-sodium – 140 mg or less per serving
  - Reduced sodium – usual sodium level is reduced by 25 percent
  - Unsalted, no salt added, or without added salt – made without salt, but still has the sodium, which is a natural part of the food
Know your salt

Even a small amount of salt has a lot of sodium in it.

- ¼ teaspoon salt = 600 milligrams of sodium
- ½ teaspoon salt = 1,200 milligrams of sodium
- ¾ teaspoon salt = 1,800 milligrams of sodium
- 1 teaspoon salt = 2,300 milligrams of sodium
- 1 teaspoon baking soda = 1,000 milligrams of sodium

How can I limit sodium?

- **Prepare your meals at home.** 77% of the salt we consume comes from packaged foods and restaurant meals. At home, avoid salting food before or during cooking, and limit salt use at the table.

- **Limit processed foods that are high in salt.** This includes breads/rolls, cheese, processed meats (deli meat, hotdogs), frozen dinners, pickles, salted snacks (chips, pretzels, nuts), canned soups, and pasta sauce. If you need to use packaged foods, look for brands that are lower in sodium.

- **Speak up at restaurants.** Ask if your meal can be prepared without salt, or ask your server to point you to low sodium options on the menu. Ask for sauces and dressings on the side, and use less. Only eat half of your meal and save the rest for later to save on sodium and calories.

- **Use herbs and spices to help flavor foods.**

- **Eat more fruits and vegetables.** They are naturally low in sodium! Aim to fill half of your plate at meals with fruits and vegetables.

Maintain a healthy weight

If you are at your ideal body weight, it is important that you avoid any weight gain.

If you are overweight, weight loss can be helpful in lowering your cholesterol and blood pressure. To lose weight, you will need to decrease the number of calories that you eat.

To control your weight:

- **Keep snacking in check.** Calories from snacks, especially from packaged foods, can add up quickly and lead to weight gain over time. If you need a snack between meals to stave off hunger, choose an option between 200-300 calories. Choosing a serving of fruit or vegetables plus a protein, like peanut butter or hummus, is a great way to keep snacks low calorie and still satisfy your hunger. For more healthy snack ideas, ask for the handout, Healthy Snacks.

- **Keep serving sizes moderate.** Keep in mind that all foods have calories, so avoid large amounts and second helpings. Portion control is very important in maintaining or losing weight.
• **Satisfy your appetite.** Raw vegetables, raw fruits, water, and other calorie-free beverages can help satisfy your appetite. Pick caffeine-free beverages as your doctor or dietitian directs.

• **Do not skip meals.** This often leads to overeating at the next meal.

• **Eat mindfully.** Keep distractions to a minimum while eating and focus on your food. Tune into your body and stop eating when you are full. Pay attention to whether you are eating out of hunger or to satisfy an emotion. This awareness will improve meal satisfaction, help to prevent overeating, and help to prevent eating for the wrong reasons. For more information, ask for the handout, *Mindful Eating.*

• **If you have diabetes, eat to control your blood sugar levels.** Limit total calories and high amounts of carbohydrates to keep your blood sugar levels in control.

• **Be active every day.** Being active will help you to lose weight because your body burns stored calories. If your activity is restricted, non-strenuous activities may be used. Check with your doctor before starting any exercise program.

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**Summary of diet changes**

• Decrease saturated fats and trans fats in your diet and replace them with heart healthy unsaturated fats.

• Limit refined carbohydrates and added sugars in your diet.

• Increase fiber in your diet.

• Avoid high sodium packaged foods and restaurant meals, and use less salt at the table.

• Maintain a healthy weight.

• Eat a balanced diet.
Guidelines for meal planning

Fruits and vegetables

Use:
- Raw, cooked, plain frozen, dried, or salt-free canned fruits and vegetables - pick canned foods that have been packed in natural juice or water
- Canned tomato puree and tomato paste in recipes - do not add salt
- Homemade tomato sauce without added salt, or store bought low sodium sauce
- Pan fried or roasted vegetables cooked with a small amount of polyunsaturated or monounsaturated oil, such as vegetable, canola, or olive oil

Avoid using:
- Sauerkraut
- Vegetables cooked with meat fat, such as greens
- Frozen vegetables in cream, cheese, or butter sauce
- Pickled vegetables
- Packaged potato mixes, such as scalloped or gratin potatoes
- Regular canned vegetables - if used on occasion, drain and rinse vegetables, and cook in salt-free water
- Regular V-8 or tomato juice
- Canned fruit packed in syrup
- Deep fried vegetables, such as French fries

Limit:
- Regular tomato sauce - limit to 2 cups per day
- Reduced sodium tomato juice, like V-8
- Frozen French fries. Do not add salt. Bake, rather than fry them

Tip:
If you are trying to lose weight, raw fruit and vegetables are low in calories and make good snacks
Breads and Starches

Use:
- Whole grain breads, cereals, bagels, and English muffins
- Whole wheat pasta
- Whole wheat tortillas
- Brown rice
- Melba toast, matzo, unsalted tops saltines, graham crackers, rye wafers, and low salt crackers
- Salt-free pretzels
- Salt-free and air-popped popcorn

Avoid using:
- Commercially prepared biscuits, muffins, pancakes, waffles, cornbread, donuts, sweet rolls, coffee cakes, packaged nut breads, cakes, pies, and cookies
- Egg noodles, packaged breading and stuffing mixes, seasoned rice mixes, soy meat extenders, and any mix that comes out of a box as they can be high in sodium
- Salted crackers, corn chips, potato chips, and pretzels

Limit:
- Homemade biscuits, muffins, pancakes, waffles, cornbread made with allowed ingredients - egg substitutes can be used instead of whole eggs in these products
- Homemade baked goods, such as cookies and cakes, made with allowed ingredients

Milk and dairy

Use:
- Fat free or 1% milk
- Fat free or low-fat yogurt
- Low-fat or fat-free sour cream
- Low-fat buttermilk
- Low-fat or fat-free cottage cheese or ricotta cheese
- Low-fat or low-cholesterol cheeses
- Reduced-fat or fat-free cream cheese
- Unsweetened non-dairy milk, such as soy, almond, and rice

Avoid using:
- 2% and whole milk
- Buttermilk, chocolate milk, or cocoa made from whole milk
• Instant cocoa mixes with palm or coconut oil or butterfat added
• Yogurt made with whole milk
• Cream, half and half, sour cream, whipped cream, and non-dairy or frozen whipped toppings
• Processed cheeses and cheese foods that have more than 5 grams fat per serving
• Natural cheese made with whole milk or cream

Limit:
• Homemade cocoa or chocolate milk made from fat free milk
• Instant cocoa made with fat free milk powder
• Sweetened non-dairy milk, such as soy, almond, and rice

Meat and meat substitutes

Use:
• Chicken and turkey - remove skin
• Fish, such as salmon, canned tuna (packed in water), and shellfish - shrimp and crayfish are higher in cholesterol than other fish, but lower in fat and cholesterol than most meats and poultry
• Red meats, such as lean beef, raw pork, veal, or lamb. Trim all fat. Limit to three, 3-ounce servings a week. Leanest cuts include beef round, sirloin, loin, rump or pork tenderloin, sirloin, and loin roast.
• Dried or low-sodium canned beans, peas, lentils, and legumes - rinse canned foods and cook without adding meat fat
• Tofu, tempeh, and soybeans
• Low-cholesterol eggs or egg whites
• Vegetable patties - avoid high sodium
• Casseroles and mixed dishes made with allowed ingredients

Avoid using:
• Fatty, well marbled meats and poultry skin
• Sausage, wieners, and lunch meats
• Cured meats, such as ham, corned beef, pastrami, salami, and pepperoni
• Regular frozen TV dinners and entrees, pot pies, canned or packaged entrees (such as Hamburger Helper), and frozen or store made pizza
• Restaurant prepared Chinese, Italian, or Mexican foods

Limit:
• Egg yolks - The American Heart Association no longer makes recommendations on how many egg yolks to eat or not to eat. A good, general guideline is to eat no more than 1 egg yolk a day, up to 5 total a week.
• Egg whites - there is no restriction on egg whites, including those used in baking and cooking
• Peanut butter - 1 tablespoon once or twice a week if you are trying to lose weight
• Liver - One, 3-ounce serving per week as a substitute for 1 egg yolk

Tips:
• Since poultry and fish are generally lower in fat than red meats (beef, pork, lamb), include these more often at meals
• Bake, broil, boil, grill, roast, or pan broil meat without adding fat. Use a non-stick skillet or vegetable spray, such as Pam.
• If a frozen TV dinner is eaten on occasion, choose one that has no more than 600 mg of sodium and 10 grams of fat.
• Consider having fish and meatless meals more often.

Fats and oils

Use:
• Liquid vegetable oils, such as canola, olive, safflower, corn, sunflower, soy, cottonseed, and peanut
• Soft tub margarines that list “liquid vegetable oil” or water as the first ingredient - use “squeeze” or spray margarines for the least amount of saturated fats.
• Low-fat or fat-free mayonnaise or salad dressing
• Homemade sauces made with allowed ingredients

Avoid using:
• Coconut oil, palm oil, partially hydrogenated oils, and products using these oils
• Butter, lard, salt pork, bacon, meat fat, sour cream, gravy (mixes, canned, or made from meat drippings), and cream and cheese sauces
• Margarine which lists “partially hydrogenated vegetable oil” as the first ingredient
• Salad dressings, such as Roquefort or bleu cheese, any containing cheese or sour cream, creamy varieties, store bought slaw dressing, and real mayonnaise
• Tartar sauce

A special note about coconut oil: Although coconut oil is a plant-based oil, it contains the highest percentage of saturated fat (91%) out of all oils. It is better for your heart health to use liquid plant oils, such as olive or canola oil.
Limit:
- All nuts if you are trying to lose or maintain your weight. Limit nuts to a small handful (about 15 nuts) a day. Salt free nuts are best.

**Snacks**

**Use:**
- Raw fruit (can pair with a small handful of nuts or 2 tablespoons of nut butter)
- Raw vegetables (can pair with low sodium hummus or dressing)
- Unsalted popcorn or pretzels
- Pudding made from fat free or 1% milk
- Unsweetened or lightly sweetened yogurt

**Avoid using:**
- Salted popcorn, potato chips, corn chips, pretzels, and other salted or deep fried snack foods
- Candy and chocolate bars
- Store bought pies, cakes, cookies, cake mixes, pie crusts, canned puddings, and pie fillings

Limit:
- Regular or sugar-free gum and mints, sugar, brown sugar, molasses, honey, syrups, fructose, gum drops, and hard candy
- Homemade cakes, cookies, and pies made with recommended oils and margarine
- Ice milk, low-fat frozen yogurt, sherbet, sorbet, and popsicles
- Regular or sugar-free soda pop, Gatorade, canned sweetened fruit drinks, Kool-Aid, decaffeinated coffee, tea, and iced tea

**Soups**

**Use:**
- Homemade soups made with recommended ingredients
- Salt-free canned, broth based soups
- Salt-free bouillon. When making soups from meat broth, cool broth in refrigerator until fat rises to the top and hardens. Remove fat, and then add vegetables.

**Avoid using:**
- Regular canned, frozen, or instant soups
- Bouillon cubes or granules
- Soups made with ham or ham bones
- Soups served in restaurants unless low fat or low salt
Condiments

Use:
- Mrs. Dash
- Vinegar, lemon juice, garlic, garlic powder, onion powder, herbs and spices, and salt substitute
- Horseradish
- Ketchup and mustard - eat no more than 2 tablespoons per day because of sodium content

Avoid using:
- Meat tenderizer, monosodium glutamate (MSG), seasoned salt, onion salt, celery salt, Morton Lite Salt, sea salt, spice blends which contain salt, and seasoning mixes
- Baking powder and baking soda - use as an ingredient for baking only
- Chili sauce, soy sauce, steak sauces, BBQ sauce, Worcestershire sauce, cooking wine, and cooking sherry
- Dill pickles, sweet pickles, pickle relish, olives, and imitation bacon bits

Other tips
- If you have diabetes, limit foods with large amounts of sugar.
- If you have diabetes and your doctor tells you to limit your fluids, check with him or her on what your limit is. 1 cup of fluid = 8 ounces. Anything liquid at room temperature is a fluid, including ice cream, gelatin, soup, and popsicles.
- Read food labels. Avoid products which contain shortening, vegetable shortening, partially hydrogenated vegetable oils, lard, butter, beef suet, animal or chicken fat, bacon, cream, salt, and monosodium glutamate (MSG).
- Check all medicines with your doctor. Commonly used medicines for indigestion which are high in sodium include Alka Seltzer, Bromo Seltzer, Rolaids, some laxatives, pain relievers, antibiotics, and cough medicines.
- The fresher the better. You will cut down on your sodium, fat, and cholesterol if you make your own food with allowed food items.