



NUTRITION SERIES

- People with diabetes are much more likely to suffer from heart disease than those without diabetes.
- Heart healthy eating refers to choosing foods that are low in saturated fat and sodium and high in fiber. In terms of fat, it is important to focus on limiting cholesterol and solid fats.
- Saturated fats are solid fats found in fatty animal products and in some vegetable oils, such as coconut and palm oils.
- Liquid vegetable oils can also be converted into solid fats by hydrogenation, which produces trans-fatty acids (trans fats). Trans fats are similar to saturated fats and should be eaten only in small amounts.
- Good sources of heart healthy monounsaturated fats include olive oil, canola oil, and peanut oil. In most recipes, these oils can replace solid fats such as lard or butter.
- Many people with diabetes also have high blood pressure. If you have high blood pressure, you should be careful about the amount of sodium in your diet.



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People with diabetes are at increased risk for heart disease. Eating a diet high in saturated fat—and having high blood glucose and high blood pressure—may contribute to this. A diet high in saturated fat can also contribute to other vascular problems associated with diabetes, such as stroke, bad circulation to the legs and feet, and male impotence.

People with diabetes should keep their blood glucose and blood pressure under control and choose heart healthy foods every day. Heart healthy eating means choosing foods that are low in fat and sodium and high in fiber. In terms of fat, it is important to focus on limiting cholesterol and solid fats.

Cholesterol

All animals, including humans, make cholesterol. Some people's bodies make too much of it. Cholesterol is also found in fatty animal products such as eggs, some meats, and high-fat dairy products (like many cheeses).

Solid fats

Solid fats refers to fats that are solid at room temperature. One type of solid fat, saturated fat, is found in fatty animal products and in some vegetable oils, such as coconut and palm oils—these are often used in processed foods.

Liquid vegetable oils can also be converted into solid fats by hydrogenation, which produces trans-fatty acids (or *trans fat*). These substances can be as harmful to the body as saturated fat. For this reason, trans fat now appears on Nutrition Facts labels.

Products with high amounts of trans fat include solid vegetable shortening and regular margarines. Trans fat is commonly used in crackers, cookies, snack foods and baked goods. Look for ways to substitute healthier oils for fats and oils that contain high amounts of cholesterol, saturated fatty acids or trans fat. Lard, bacon fat and butter add flavor to foods, but are high in cholesterol and saturated fat. These fats should be used only occasionally and in small amounts. All fats and oils are high in fat and calories, so it is important to eat them only in moderation.

It is also important to choose solid vegetable fats carefully. Even though vegetable shortening and margarine do not contain cholesterol, they do have high amounts of saturated and trans fats and therefore should be used only once in a while.

Healthy oils

In contrast, there are liquid oils that should be your "fats of choice" because they are good sources of heart healthy monounsaturated fats. These include olive oil, canola oil, and peanut oil. In most recipes, these oils can replace solid fats like lard or butter. Oils with strong flavors (olive, sesame or walnut) add flavor to foods even when used in small

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amounts. Most nuts contain high amounts of monounsaturated fats; try almonds, walnuts or pecans.

Food preparation

Prepare food with less fat. Vegetables can be steamed, stir-fried, cooked in a microwave oven, roasted or grilled. Potatoes, sweet potatoes and winter squash can be baked. Oven bake french fries instead of frying them. Use lower fat salad dressings or less regular salad dressing. Use vinaigrette or lowfat yogurt with seasonings to dress coleslaw. Season foods with Canadian bacon or lean ham instead of fattier meats.

Meats

Choose lean cuts of meat. Marbled fat is the main source of saturated fat for many people. Trim visible fat before cooking. Remove the skin of poultry. Broil, grill, roast, braise or stew meats instead of frying them. Remove the fat from soups and stews. If you refrigerate the liquid, the fat will harden and be easier to remove. After ground beef has been thoroughly cooked, it can be placed in a colander and rinsed with hot (but not boiling) water.

Dairy fats

The fat in dairy products is quite saturated and contains cholesterol. Choose skim milk or 1% milk instead of 2% or whole milk. Evaporated skim milk can be used in place of high-fat cream in sauces and desserts. Use a small amount of a strongly flavored high-fat cheese such as Parmesan or sharp cheddar to add flavor without adding a lot of fat. Also, try lowfat cheeses. These are better quality today than when lowfat cheeses were first marketed. Buy lowfat or nonfat yogurt that has been sweetened with a sugar substitute, or choose plain nonfat vogurt and add fruit or a sugar substitute to taste. Plain yogurt can be substituted for sour cream or mayonnaise in many recipes.

Sodium and salt substitutes

Many people with diabetes also have high blood pressure. If you have high blood pressure you should be careful about the amount of sodium in your diet. Your doctor can tell you how much sodium is healthy for you.

Sodium is measured in milligrams (mg). Dietary Guidelines for Americans, 2005, recommends consuming less than 2,300 mg of sodium a day, less than 1 teaspoon. Certain population groups—those with high blood pressure, African Americans, and those middle aged and above are recommended to consume no more than 1,500 mg of sodium a day. To reduce sodium, use less salt in cooking and at the table.

According to the American Diabetes Association, "hidden salt" may be the biggest source of sodium in our diets. Hidden salt is found in processed foods, including fast food, restaurant food, canned food and frozen and boxed dinners. Read Nutrition Facts labels to find how much hidden salt foods contain.

When using canned vegetables in a recipe, don't add extra salt, since salt is contained in the canning liquid. You can also rinse canned vegetables before adding them to recipes. Or, select canned vegetables that are lower in sodium.

Read labels carefully when you buy seasoning blends. Garlic salt is made of salt and just a little garlic powder. Using garlic powder is better. Mixes like Mrs. Dash™ are very tasty and do not contain salt. Start by using a small amount and increase it gradually until you obtain the flavor you like. Salt substitutes can also be prepared at home. Recipes for three salt substitutes are given in Table 1. Be careful when choosing salt substitutes, because some of them are made with potassium chloride. This compound is not healthy for all people to consume. Ask your doctor before using a substitute that contains potassium chloride.

Table 1. Salt Substitutes

Recipe #1

1 tablespoon garlic powder 11/2 teaspoons oregano

11/2 teaspoons basil leaves 11/2 teaspoons powdered lemon rind

(or dehydrated lemon juice)

Recipe #2

11/2 teaspoons basil leaves 1 teaspoon rubbed sage 1 teaspoon savory 1 teaspoon marjoram 1 teaspoon celery seed 1/2 teaspoon lemon thyme 1 teaspoon cumin seed

Recipe #3

1 tablespoon rosemary 1 teaspoon black pepper 2 teaspoons paprika 1 teaspoon coriander seed 1 teaspoon cloves

- To make an herb blend, combine all the herbs and spices and crush them with a spoon against the bottom of a bowl, or grind with a mortar and pestle until a coarse powder is formed.
- Keep the mixture in a salt shaker and use it at the table instead of salt. (Each recipe yields approximately enough to fill a salt shaker.)
- If necessary, add a few grains of uncooked rice to the container to prevent the blend from clumping.

Where to go for more information

- Your health care provider
- American Diabetes Association: 1-800-DIABETES www.diabetes.org
- National Diabetes Education Program: 1-800-438-5383 or visit the World Wide Web at ndep.nih.gov or www.cdc.gov
- New Mexico Diabetes Prevention and Control Program www.diabetesnm.org
- Your county Extension office