

*If you have any questions, ask your physician or registered dietitian.*

## Heart-Healthy Nutrition

A healthy diet and lifestyle can help lower your risk of heart disease. This brochure will help you learn the connection between diet and heart health and the basics of heart-healthy eating.

### Lipids and heart disease

Coronary artery disease (CAD) is the most common type of heart disease. It is a leading cause of death in the United States in men and women. In CAD, fat and cholesterol (plaque) build up inside the arteries. This causes the blood flow to slow down or become blocked. These changes may cause chest pain, heart attacks or stroke. They may also damage blood vessels.

There are 3 types of lipids (fats) found in your blood that are related to heart health:

- **Low-density lipoprotein (LDL)** is known as “bad” cholesterol. A diet high in saturated fats and trans fats raises LDL levels. This increases your risk of heart disease. **A low LDL cholesterol level is considered good** for your heart health.
- **High-density lipoprotein (HDL)** is known as “good” cholesterol. HDL cholesterol helps remove cholesterol from your arteries. This lowers your risk of heart disease. **A higher HDL cholesterol level is considered good** for your heart health.

A lower HDL cholesterol level increases your risk of heart disease. Factors that lead to a lower HDL cholesterol level include smoking, being obese, not exercising, having a large waist circumference, and eating foods full of trans fats and sugar.

- **Triglycerides** are a type of fat in your blood. Eating a diet high in sugar and saturated fats, drinking alcohol in excess and being overweight may increase your triglyceride levels. High triglyceride levels increase your risk of heart attack.

Your risk for CAD also increases if you have diabetes. Please talk with your physician about your individual risk factors and cholesterol levels.

### Dietary fat, cholesterol, fiber and heart disease

Learning more about what is in the foods you eat will help you make good food choices.

- **Monounsaturated and polyunsaturated fats** are **good** types of fats to include in your diet. They may help to lower LDL levels. Examples include walnuts, almonds, peanuts, avocados; and vegetable oils such as peanut, safflower, sunflower, corn, olive, soybean, sesame and cottonseed.

- **Saturated fat** is a “**bad**” fat that raises LDL cholesterol. It is common in animal fats. A few vegetable oils are high in saturated fat, including coconut oil, palm oil, palm kernel oil and cocoa butter. This type of fat is generally solid at room temperature. **It is best to eat foods with low or no saturated fat.**
- **Trans fat** is a “**bad**” fat that raises LDL cholesterol. It is found in some fried foods and packaged foods made with hydrogenated oils. It is also found in shortening, butter and stick margarine. Avoid foods with trans fats. Choose reduced-fat, whipped or liquid spreads instead.

**Cholesterol** is only found in foods from animals, such as meat, eggs and dairy products. Some of these foods may also be high in saturated fat. If you have heart disease, ask your physician or dietitian to see if you should limit the amount of cholesterol-rich foods you eat.

**Plant sterols and plant stanols** are naturally found in many grains, vegetables, fruits, legumes, nuts and seeds. They may decrease your LDL cholesterol. Good sources include some butter substitutes, vegetable oils, nuts and soybeans.

**Fiber** has many health benefits. Sources include fruits, vegetables, whole grains, nuts, seeds, beans and legumes (see page 5 for specific fiber-rich foods). There are 2 main types of fiber:

- **Soluble fiber** helps lower LDL cholesterol. Foods rich in soluble fiber include oats, barley, and some types of beans, vegetables and fruits.
- **Insoluble fiber** helps prevent constipation and may help prevent some types of bowel disease. This type of fiber is found in whole grains, brown rice and some types of fruits and vegetables. Insoluble fiber may also help to keep blood glucose levels stable if you have diabetes.

## Keys to heart health

Lifestyle and diet changes can help reduce your risk of CAD. They include:

- Maintain a healthy body weight. Talk with your physician or dietitian about a healthy weight that is right for you. Set goals to reach and maintain that weight.
  - Ask how many calories you should be eating and drinking to achieve and maintain your desired weight. Refer to the Northwestern Memorial Hospital *Managing Your Weight: Portion Control* brochure.
  - Do not eat more calories than you know you can use up every day.
  - Set a plan to increase your activity. Aim for at least 45 minutes of exercise 5 times a week. Start with walking or other aerobic activities like running, bicycling or swimming. These increase the flow of blood to your heart. Then, add weights as recommended by your physician. For more information, ask your healthcare provider for the Northwestern Memorial Hospital *Exercise and Your Heart* and *Managing Your Weight – Tracking Your Activity* brochures.
- Eat whole grains, lean protein, fruits and vegetables every day. Aim for 1 1/2 to 2 cups of fruits and 2 to 3 cups of vegetables per day.

- Try to eat fish 2 times a week.
- Eat more omega-3 fats (heart-healthy fats). Sources include salmon, tuna, mackerel, walnuts, flaxseeds and canola oil.
- Eat more meat-free meals with dried beans, lentils, legumes and soy (tofu, tempeh) foods for protein.
- When eating out, choose foods that are steamed, baked or broiled and prepared without added butter, salt, sauce, cream or gravy.
- Eat foods high in fiber. Women should aim for at least 25 grams of fiber a day. Men should aim for 35 grams of fiber a day. Look for foods with more than 3 grams of fiber per serving on the Nutrition Facts label. Aim for 10 to 25 grams of soluble fiber each day.
- Limit salt (sodium) to 1,500 to 2,300 milligrams (mg) per day. Choose and prepare foods with little or no salt.
- Limit the amount of fat you eat, especially saturated fat and trans fat. Of your total daily calories, no more than 25% to 35% should come from fat. No more than 5% to 6% of your total calories should come from saturated fat. If you eat 2,000 calories a day, the total amount of fat you eat should be no more than 50 to 75 grams a day. The amount of saturated fat you eat should be no more than 11 to 13 grams a day.
- Avoid processed or fried foods. They often contain high amounts of salt and fat.
- Limit the amount of sugar you eat. Sugar adds calories that can lead to weight gain, which affects the health of your heart. Read food labels to see how much sugar a food has in it. **For women:** Try not to eat and drink more than 6 teaspoons of sugar (25 grams, 100 calories) each day. **For men:** Try not to eat and drink more than 9 teaspoons of sugar each day (36 grams, 150 calories.)

### Tips for cooking and dining out

- Roast, bake or broil meats, and trim excess fat and remove skin from poultry before eating
- Choose fish, poultry and legumes more often, and eat smaller portions of meat
- Avoid fried foods and drain any fat when cooking ground meat
- Avoid adding excess margarine, butter, salad dressing and oils to foods
- Use healthier oils (like canola, olive, soybean) when cooking with fat
- Use lemon juice or herbs instead of salt to add flavor when cooking or at the table
- Choose skim or 1% milk, and low-fat or reduced-fat milk products and cheeses
- Choose high-fiber foods, such as fruits, vegetables and whole grains

### Read Nutrition Facts labels

To improve your heart health by eating healthier and controlling your weight, you will need to make wise food choices. This means reading food packages and Nutrition Facts labels. Food labels can help you learn how much fat, fiber, sugar and sodium are in the foods you choose.

Make sure to check the serving size of a food and compare it to your portion size (the amount you choose to eat) whenever you read a food label. This will help you figure out how many calories or how much of a specific nutrient is in a food.

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
	<b>% Daily Value*</b>
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
<i>Trans</i> Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

### Check “nutrient content” claims

These food packaging terms describe the level of a nutrient in 1 serving of a product.

<b>Fat free</b>	Less than 0.5 grams of fat and no ingredient that is fat
<b>Low fat</b>	3 grams fat or less
<b>Reduced fat</b>	At least 25% less fat than the regular product
<b>Sugar free</b>	Less than 0.5 grams sugar and no ingredient that is a sugar
<b>Reduced sugar or less sugar</b>	At least 25% less sugar than the regular product
<b>Cholesterol free</b>	Less than 2 mg cholesterol and no ingredient contains cholesterol
<b>Low cholesterol</b>	20 mg cholesterol or less
<b>Sodium free, salt free or no sodium</b>	Less than 5 mg sodium and no ingredient that is sodium chloride or contains sodium
<b>Very low sodium</b>	35 mg or less of sodium
<b>Low sodium</b>	140 mg or less of sodium

## Tips to add fiber to your diet

Soluble fiber, a type of dietary fiber, helps bind cholesterol from the foods you eat. Here are tips for getting more fiber in your diet:

- Eat whole fruit rather than drinking juice
- Choose vegetables such as Brussels sprouts and broccoli
- Look for whole-grain products, especially those with oats and barley
- Eat raw veggies or pita chips with bean dip or hummus as a snack
- Increase your fiber gradually to meet your goal
- Drink plenty of fluids, such as water

The following foods are good sources of soluble fiber.

Food Source	Soluble Fiber (grams)	Food Source	Soluble Fiber (grams)
<b>Cereal and Grains</b>		<b>Legumes (1/2 cup cooked)</b>	
Barley (1/2 cup cooked)	1	Lima beans	3.5
Oat bran (1/4 cup cooked)	1.7	Kidney beans	3
Oatmeal, regular, uncooked (1/2 cup)	2	Black, navy or pinto beans	2
Oatmeal, instant, 1 package	1.4	Northern beans	1.5
Bran flakes (1/2 cup)	1	Lentils or chickpeas	1
Raisin bran (1 cup)	0.7	Black-eyed peas	1
Flaxseed meal (2 tablespoons)	1.1	<b>Vegetables (1/2 cup cooked)</b>	
<b>Fruits</b>		Brussels sprouts	3
Pear	2	Broccoli	1.4
Orange (medium)	1.8	Carrots	1
Prunes (1/4 cup)	1.5	Eggplant	1.3
Blackberries (1/2 cup)	1	Okra	1
Banana (medium)	0.7	Baked potato with skin (small)	0.9
Apple, nectarine, peach or plum (medium)	1		

## Sample menu

Breakfast	Lunch	Dinner	Evening Snack
1 cup oatmeal 2 tablespoons walnuts 1/2 cup skim milk 1/2 cup berries	1 to 2 cups bean soup Salad with oil/vinegar dressing 1/4 avocado	3 to 4 ounces fish, broiled 1 small sweet potato with 2 tablespoons plant sterol spread 1 cup broccoli and zucchini, steamed	1 fresh fruit with low-fat yogurt

## Heart-healthy food choices

Food Category	Recommended Foods	Foods to Limit or Avoid
<b>Breads and Grains</b>	<ul style="list-style-type: none"> <li>• Whole-grain breads and cereals</li> <li>• Whole-grain foods such as farro, bulgur, oats, oatmeal, quinoa and barley</li> <li>• Whole-wheat pasta, brown rice</li> <li>• Low-fat whole-grain crackers</li> </ul>	<ul style="list-style-type: none"> <li>• High-fat cookies or foods such as croissants, cheese breads, egg noodles, biscuits, doughnuts, pastries and pies</li> <li>• White bread, white rice and foods made with white flour</li> <li>• Snacks made with partially hydrogenated oils, such as chips, cheese puffs, snack mixes, butter-flavored popcorn and regular crackers</li> </ul>
<b>Fruits and Vegetables</b>	<ul style="list-style-type: none"> <li>• Fresh or frozen</li> <li>• Canned without salt or syrup</li> <li>• Prepared without creams or sauces</li> </ul>	<ul style="list-style-type: none"> <li>• Fried fruit or vegetables</li> <li>• Fruit or vegetables prepared with butter, cream, cheese or high-fat sauces</li> <li>• Fruit with syrup or whipped cream</li> <li>• Dried fruit and fruit juice</li> </ul>
<b>Meat and Protein Foods</b>	<ul style="list-style-type: none"> <li>• Fish, shellfish, shrimp, lobster and scallops</li> <li>• Skinless poultry (chicken, turkey)</li> <li>• Trimmed or drained lean cuts of beef and pork (loin, leg, round, extra-lean hamburger)</li> <li>• Roasted low-sodium turkey or chicken breast lunch meat</li> <li>• Venison and wild game</li> <li>• Eggs, egg substitute and egg whites</li> <li>• Tofu, soy, edamame, tempeh and seitan</li> <li>• Meat alternatives made with soy or textured vegetable protein</li> <li>• Dried beans, peas and legumes (see page 5)</li> <li>• Nuts (especially walnuts) and nut butters</li> </ul>	<ul style="list-style-type: none"> <li>• Processed or fried meats and fish</li> <li>• Organ meats (liver, brains, sweetbreads)</li> <li>• Higher-fat cuts of meat (ribs, T-bone steak, regular hamburger)</li> <li>• Bacon, sausage, corned beef, cold cuts, salami, bologna and hot dogs</li> <li>• Poultry with skin</li> </ul>

Food Category	Recommended Foods	Foods to Limit or Avoid
<b>Milk and Milk Products</b>	<ul style="list-style-type: none"> <li>• Skim or 1% milk</li> <li>• Buttermilk made from fat-free or 1% fat milk</li> <li>• Evaporated fat-free milk</li> <li>• Fat-free or low-fat yogurt (Greek yogurt or no-sugar-added options are best)</li> <li>• Frozen fat-free or low-fat yogurt</li> <li>• Low-fat cheeses (no more than 3 grams of fat and no more than 2 grams saturated fat per ounce)</li> <li>• Fat-free or low-fat ice cream (no more than 3 grams of fat per 1/2 cup serving)</li> </ul>	<ul style="list-style-type: none"> <li>• Whole milk, milkshakes, eggnog, cream, half-and-half, and whole-milk ice cream and yogurt</li> <li>• Regular cheese, cream cheese and sour cream</li> </ul>
<b>Fats and Oils</b>	<ul style="list-style-type: none"> <li>• Unsaturated or trans fat-free vegetable oils such as olive, canola, peanut, soy, sunflower, avocado and grapeseed</li> <li>• Soft or liquid margarine or vegetable oil spreads</li> <li>• Low-fat or fat-free mayonnaise</li> <li>• Vinegar-based salad dressings</li> </ul>	<ul style="list-style-type: none"> <li>• Butter, stick margarine, shortening and lard</li> <li>• Partially hydrogenated margarine and oils (check the ingredients list)</li> <li>• Tropical oils (coconut, palm and palm kernel)</li> </ul>
<b>Soups</b>	<ul style="list-style-type: none"> <li>• Low-sodium and low-fat soups or broth-based soups, especially with beans</li> </ul>	<ul style="list-style-type: none"> <li>• Creamed soups</li> </ul>
<b>Sugar, Sweets and Snacks</b>	<ul style="list-style-type: none"> <li>• Low-fat and low-sugar cookies, desserts and beverages</li> <li>• Popcorn, plain (without butter, salt or cheese)</li> </ul>	<ul style="list-style-type: none"> <li>• Cookies, sweets and desserts (See Breads and Grains section)</li> <li>• Fruit juice and dried fruits</li> <li>• Sugar added to beverages</li> </ul>

### For more information

The Northwestern Memorial Hospital *Risk Reduction for Heart and Vascular Disease* brochure explains other ways to lower your risk of CAD.

If you have any questions, please talk with your healthcare provider.