

Have a  
**Healthy  
Heart**

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**NDSU** EXTENSION  
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## Have you thought about your heart lately?

On average, your heart beats about 100,000 times per day, pumping nutrients and oxygen throughout the body. Taking this hard-working group of muscles for granted can be easy. Heart disease is the leading cause of death for both men and women in the United States.

The purpose of this publication is to increase awareness of heart disease risk factors for women and ways for *everyone* to improve heart health through lifestyle choices. Having regular checkups and discussing any health-related issues with your physician or health-care provider is important.

## Did you know?

- ♥ About 700,000 people die every year from heart disease; 51 percent (360,000) are women.
- ♥ One in eight women ages 45 to 64 has coronary heart disease. One in four women over 65 has coronary heart disease.
- ♥ About 88,000 women age 45 to 64 have a heart attack each year.

## Do you have risk factors for heart disease?

Answer these questions.

Do you smoke?	Yes	No	
Do you have high cholesterol and/or high LDL cholesterol?	Yes	No	Don't know
Do you have diabetes?	Yes	No	Don't know
Do you have high blood pressure?	Yes	No	Don't know
Are you overweight by 20 or more pounds (according to a health-care provider)?	Yes	No	Don't know
Are you physically inactive?	Yes	No	Don't know
Are you 45 or older?	Yes	No	
Are you postmenopausal?	Yes	No	
Do you have a history or family history of heart disease? (Father or brother stricken before age 55; mother or sister stricken before age 65)	Yes	No	Don't know

## Managing risk

When we recognize our risk factors, we can take steps to manage them. Some risk factors, such as age and family history, are not under our control. Other habits, such as smoking, food choices and level of physical activity, can be modified, with some effort. Conditions such as diabetes and high blood pressure can be managed through diet, physical activity, medication (as needed) and regular monitoring by a health-care provider.



# Women and heart attacks

For women, warning signs of a heart attack may differ slightly from those of men.

Chest pain and discomfort are classic warning signs for women and men, but women may have other symptoms, such as shortness of breath, jaw or back pain or nausea/vomiting.

Women tend to wait longer than men to call for help when they are having a heart attack. If warning signs are noted for you or anyone else, don't wait. Call 9-1-1.



## Classic warning signs of a heart attack

- ♥ Uncomfortable pressure, fullness or pain in center of chest
- ♥ Pain that spreads to shoulders, jaw, neck or arms
- ♥ Chest discomfort with lightheadedness, fainting, sweating or shortness of breath

### Other possible warning signs of a heart attack

- ♥ Unusual chest, stomach or abdominal pain
- ♥ Nausea or dizziness — without chest pain
- ♥ Shortness of breath and difficulty breathing — without chest pain
- ♥ Unexplained anxiety, weakness or extreme fatigue
- ♥ Palpitations, cold sweat or paleness



## Do you know your blood cholesterol profile?

The body uses cholesterol to form hormones, cell membranes and other body substances. A high blood cholesterol level is one of the risk factors for heart disease. Many health experts recommend that adults over age 20 have their blood cholesterol level checked at least once every five years.

Total cholesterol includes LDL and HDL cholesterol. Low-density lipoprotein (LDL) is commonly referred to as the “bad” type of cholesterol. LDL cholesterol carries cholesterol through the blood stream and arteries. Excess cholesterol may deposit in arteries, partly or completely blocking the flow of blood and making the heart work harder. A high LDL cholesterol level is associated with greater risk for heart disease.

High-density lipoprotein (HDL) is commonly referred to as the “good” type of cholesterol. HDL cholesterol carries LDL cholesterol away from the arteries. Regular physical activity can increase the HDL cholesterol level. Unlike LDL cholesterol, a *low* HDL cholesterol level is associated with *greater* risk for heart disease.

### Assessing risk with cholesterol level

**Total Cholesterol**

- Optimal: Less than 200 mg/dl
- High: 240 mg/dl and above

**LDL = “bad cholesterol”**

- Optimal: Less than 100 mg/dl
- Near optimal: Less than 130 mg/dl
- High: 160 to 189 mg/dl
- Very high: 190 mg/dl and above

**HDL = “good cholesterol”**

- Optimal: above 60 mg/dl

### What role does genetics play?

Genetics plays a major role in determining blood cholesterol levels. For some people, medication becomes necessary when lifestyle changes (including diet and physical activity) do not significantly lower blood cholesterol levels. It’s an important issue to discuss with your medical provider.

## How does diet affect blood cholesterol levels?

Eating a diet high in fat, especially saturated fat and trans fat, tends to raise blood cholesterol levels. Fat adds flavor and satiety value to foods, but many people eat more fat than recommended. Do the foods you eat provide too much fat? Answer the questions below, then see how your diet stacks up.

How often do you eat:	Seldom or never	1-2 times per week	3-5 times per week	Almost daily
Fried, deep-fat fried or breaded foods?				
Fatty meats such as sausage, luncheon meats or heavily marbled steaks and roasts?				
Whole milk, regular hard cheeses or ice cream?				
High-fat desserts such as pies, pastries or rich cakes?				
Breads with lots of fat, such as croissants or rich muffins?				
Whipped cream, regular sour cream or cream cheese?				
Butter or margarine on vegetables, dinner rolls or toast?				

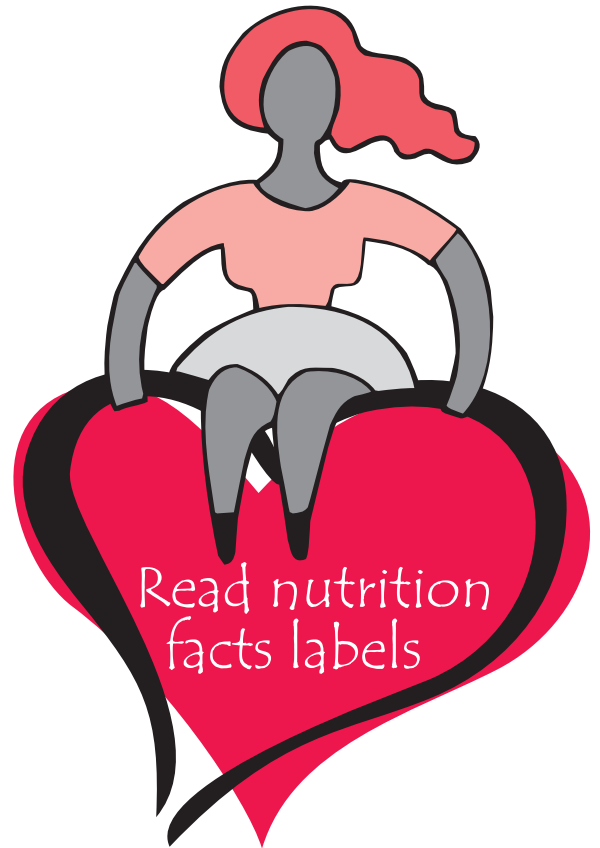
Take a look at your answers. If you have several responses in the last two columns, this indicates that you may have a high fat intake. If so, try to cut back on the amount you eat, as well as the number of times you eat higher-fat foods.

## Tips for trimming fat and saturated fat

You have many ways to cut fat during food preparation and maintain tasty foods. All foods can fit in a healthy diet. If you like high-fat desserts, for example, have a smaller serving or enjoy them less often.

✓ **Check the food preparation tips that you have tried or will try in the future:**

- ♥ Steam, boil, bake or microwave vegetables rather than fry. Or, stir-fry vegetables in a small amount of vegetable oil.
- ♥ Season vegetables with herbs and spices instead of fatty sauces, butter or margarine.
- ♥ Try flavored vinegars or lemon juice on salads or use smaller servings of oil-based or low-fat salad dressings.
- ♥ Use vegetable oil in place of solid shortening, margarine and butter whenever possible. Try using less oil than shortening in baked products.
- ♥ Try whole-grain flours to enhance flavors of baked goods made with less fat and cholesterol-containing ingredients.
- ♥ Replace whole milk with low-fat or skim milk in puddings, soups and baked products.
- ♥ Substitute plain, low-fat yogurt or blender-whipped low-fat cottage cheese for sour cream or mayonnaise.
- ♥ Choose lean cuts of meat and trim fat from meat before and/or after cooking. Remove skin from poultry before or after cooking.
- ♥ Roast, bake, broil or simmer meat, poultry or fish rather than fry.
- ♥ Cook meat or poultry on a rack so the fat will drain. Use a nonstick pan for cooking so adding fat is unnecessary.
- ♥ Chill meat or poultry broth until the fat becomes solid. Spoon off the fat before using the broth.
- ♥ To lower fat and cholesterol, try substituting egg whites in recipes calling for whole eggs. Use two egg whites in place of each whole egg in muffins, cookies and puddings.



Food labels provide lots of information about your food choices. Compare fat, saturated fat, trans fat, cholesterol, fiber and sodium contents of different foods. If a product package says the product is “heart healthy” or carries a health claim, the food has to meet specific regulations.

<b>Nutrition Facts</b>			
Serving Size 3 oz (85g)			
Servings Per Container 1			
Amount Per Serving			
<b>Calories</b>	180	Calories from Fat 90	
		<b>% Daily Value*</b>	
<b>Total Fat</b>	10g		<b>15%</b>
Saturated Fat	40g		<b>20%</b>
Trans Fat	0.5g		
<b>Cholesterol</b>	70mg		<b>23%</b>
<b>Sodium</b>	60mg		<b>3%</b>
<b>Total Carbohydrate</b>	0g		<b>0%</b>
Dietary Fiber	0g		<b>0%</b>
Sugars	0g		
<b>Protein</b>	22g		
Vitamin A	0%	•	Vitamin C 0%
Calcium	2%	•	Iron 15%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your caloric needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			



What can you do  
to improve heart health?

Eat **MORE** of certain foods!

### Fruits and vegetables and low-fat dairy products

Eating more fruits and vegetables daily is associated with improving health.

Nutrition experts now recommend that adults, on average, consume 2½ cups of vegetables and 2 cups of fruit daily. See [www.choosemyplate.gov](http://www.choosemyplate.gov) for more information.

The DASH diet, which stands for “Dietary Approaches to Stop Hypertension,” includes at least nine servings of fruits and vegetables, along with low-fat, calcium-

rich dairy products. Research has shown that the DASH diet — especially in combination with reduced dietary sodium — can significantly lower blood pressure, one of the risk factors for heart disease.

### Fiber

Fiber, especially soluble fiber found in barley, oatmeal, legumes such as cooked beans and produce such as carrots and apples, may reduce blood cholesterol levels if eaten regularly and in combination with a diet low in saturated fat.

In the DASH diet, what’s a serving of fruits or vegetables?

- ¾ cup 100% fruit or vegetable juice
- 1 medium-size piece of fruit
- ½ cup cooked, canned or raw fruits or vegetables
- 1 cup salad greens
- ¼ cup dried fruit

For more information about the DASH diet, visit this website:  
[www.nhlbi.nih.gov/health/public/heart/hbp/dash/](http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/)

## Whole grains

Make at least half your grains whole grains. Aim for at least three of your servings from the grain group to be whole grains. Whole-wheat bread and oatmeal are examples of whole-grain foods.

How do you know a whole grain? Look for the “whole grain” seal on product packages, look for a health claim, or look at the ingredient label for “whole grain,” “whole wheat” or “whole grain oats” as the first ingredient.

## Polyunsaturated and monounsaturated fatty acids

Substituting polyunsaturated fats (such as sunflower, safflower, corn and soybean oils) or monounsaturated fats (such as olive, canola and peanut oils) for solid fats can help improve your cholesterol profile.

## Fish

Fatty fish, such as salmon, tuna, herring, mackerel, bass and halibut, contain omega-3 fatty acids, which are considered more heart healthy. Fish oil dietary supplements don't appear to have the same effect.

## Soy foods

Tofu, soy milk, soy-based burgers and soy nuts are examples. Soy-based foods can carry a health claim linking soy to improved heart health if the foods meet certain criteria. To carry the health claim, the product must contain 6.25 grams of soy protein or more and be low in fat (less than 3 grams per serving), low in saturated fat (less than 1 gram per serving) and low in cholesterol (less than 20 milligrams per serving).



## Move more!

Aim for at least 30 minutes of moderate physical activity, such walking, on five or more days of the week. Three 10-minute segments count. Regular physical activity strengthens the heart, improves oxygen delivery to tissues, may lower blood pressure and may increase HDL cholesterol levels.

### To add some activity to your life:

- ♥ Park your car in the back of the parking lot instead of near the entrance.
- ♥ Take the stairs instead of the elevator.
- ♥ Walk at a mall or gym.
- ♥ Go dancing.
- ♥ Play with children or grandchildren.



In the blanks below, list at least two goals to keep your heart healthier that you will try in the next month.

Today's Date \_\_\_\_\_

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**Check back** in a month to see your progress toward your goals. Then set some new ones!

For more information about food and nutrition, contact your local office of the NDSU Extension Service or visit our website:

**[www.ndsu.edu/eatsmart](http://www.ndsu.edu/eatsmart)**

**Web-based Resources with Heart Health Information**

- ♥ **American Heart Association:** [www.americanheart.org](http://www.americanheart.org)
- ♥ **National Institutes of Health:** [www.nlm.nih.gov/health/public/heart](http://www.nlm.nih.gov/health/public/heart)

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