THE HEART TRUTH® for Women











THE HEART TRUTH FOR WOMEN: TAKE ACTION TO PROTECT YOUR HEART

The Heart Truth®: Heart disease is the #1 killer of women in the United States. It is also a leading cause of disability among women. If you've got a heart, heart disease could be your problem.

The good news: You have the power to protect your heart and lower your risk for heart disease. This fact sheet will help you find out your personal risk for heart disease. Then, it will show you how you can take steps to improve your heart health and lower your chances of developing heart disease.

WHAT IS HEART DISEASE?

Coronary heart disease (CHD) is the most common form of heart disease. Usually referred to simply as "heart disease," it is a disorder of the blood vessels of the heart that can lead to a heart attack. A heart attack usually happens when an artery becomes blocked, preventing oxygen and nutrients from getting to the heart. If blood flow isn't restored quickly, the section of heart muscle begins to die.

Another type of heart disease is coronary microvascular disease (MVD), which affects the tiny coronary (heart) arteries. In coronary MVD, the walls of the heart's tiny arteries are damaged or diseased. Studies have shown that women are more likely than men to have coronary MVD. Many researchers think the disease is caused by a drop in estrogen levels during menopause combined with traditional heart disease risk factors.

It is important to know that heart disease is a lifelong condition—once you get it, you'll always have it. What's more, the condition of your blood vessels will steadily worsen unless you make changes in your daily habits. That's why it is so vital to take action now to protect your heart.



DO YOU HAVE RISK FACTORS FOR HEART DISEASE?

Risk factors are conditions or habits that increase the chances of developing a disease or having it worsen. Having one or more risk wchance of developing heart disease because risk factors tend to worsen each other's effects.

There are two types of heart disease risk factors—those you can't change and those you can control. Two risk factors that cannot be changed are a family history of early heart disease and age (for women, age becomes a risk factor at 55). Also, preeclampsia, a condition that can occur during pregnancy, is linked to an increased lifetime risk for heart disease, including CHD, heart attack, heart failure, and high blood pressure.

Following a healthy lifestyle can help you prevent or control many CHD risk factors. Why does your lifestyle matter? Because many heart disease risk factors can be controlled by making changes in your lifestyle and, in some cases, by taking medication. Major risk factors that you can do something about include (check all of your risk factors):

- Smoking. Smoking is the most powerful risk factor that women can control. Smoking tobacco or long-term exposure to second-hand smoke raises your risk for CHD, heart attack, and stroke, as well as lung cancer and other serious diseases. Smoking can damage and tighten blood vessels, lead to unhealthy cholesterol levels, and raise blood pressure. Smoking also can limit how much oxygen reaches the body's tissues.
- □ High blood pressure. Normal blood pressure is less than 120 (systolic) over less than 80 (diastolic) mmHg. (The mmHg is millimeters of mercury—the units used to measure blood pressure.) Women who have blood pressure greater than 120/80 mmHg are at increased risk for CHD. Blood pressure is considered high if it stays at or above 140/90 mmHg over time. If you have diabetes or chronic kidney disease, high blood pressure is defined as 130/80 mmHg or higher. High blood pressure can lead to heart disease, stroke, congestive heart failure, and kidney disease.

MENOPAUSAL HORMONE THERAPY AND HEART DISEASE PREVENTION: WHAT YOU NEED TO KNOW

In the past, many postmenopausal women were prescribed menopausal hormone therapy to help prevent heart disease. Menopausal hormone therapy can involve the use of estrogen plus progestin or estrogen alone.

Research now shows that estrogen plus progestin therapy increases the chances of developing heart disease, stroke, blood clots, and breast cancer. It also doubles the risk for dementia and does not protect women against memory loss. Research on estrogenalone therapy shows it increases the risk for stroke and blood clots but has no effect on heart disease and colorectal cancer, and an uncertain effect on breast cancer. Estrogen alone gives no protection against memory loss. If you are on this medication to prevent heart disease or another chronic condition, such as osteoporosis, talk with your health care provider about other approaches.

If you are taking or considering estrogen plus progestin or estrogen alone to relieve menopausal symptoms, consult with your health care provider about whether you should start or continue the treatment. If you decide to go ahead with it, use the lowest dose for as brief of a period as possible.

Also, neither estrogen plus progestin nor estrogen-alone therapy should be used to lower cholesterol. Talk with your health care provider about an alternative cholesterol-lowering medication.

□ High blood cholesterol. High blood cholesterol is a condition in which you have too much cholesterol in your blood. By itself, the condition usually has no signs or symptoms—so many women don't know that their cholesterol levels are too high. A blood test called a lipoprotein panel is used to measure your cholesterol levels, shown in milligrams (mg) of cholesterol per deciliter (dL) of blood. Your risk for CHD increases if you have a total cholesterol level greater than 200 mg/dL,

an LDL ("bad") cholesterol level greater than 100 mg/dL, and/or an HDL ("good") cholesterol level less than 50 mg/dL.

A triglyceride level greater than 150 mg/dL also increases your risk for CHD. A woman's HDL cholesterol and triglyceride levels predict her risk for CHD better than her total cholesterol or LDL cholesterol levels.

- Overweight/obesity. Being overweight or obese can raise your risk for CHD and heart attack. This is mainly because overweight and obesity are linked to other CHD risk factors, such as high blood cholesterol and triglyceride levels, high blood pressure, and diabetes.
- □ Physical inactivity. Being physically active can reduce your risk for CHD and stroke by 20-35 percent. A lack of physical activity can worsen other CHD risk factors, such as high blood cholesterol and triglyceride levels, high blood pressure, diabetes and prediabetes, and overweight and obesity.
- □ Unhealthy diet. An unhealthy diet can raise your risk for CHD. For example, foods that are high in saturated and *trans* fats can raise your LDL cholesterol level. A highsodium (salt) diet can raise your risk for high blood pressure. Foods with added sugars and fats will give you extra calories without nutrients, such as vitamins and minerals. This can cause you to gain weight, which raises your risk for CHD. Too much alcohol also can cause you to gain weight, and it will raise your blood pressure.
- □ Diabetes and prediabetes. Diabetes is a disease in which the body's blood glucose (sugar) level is too high. This is because the body doesn't make enough insulin (a hormone that helps body cells absorb glucose and turn it into energy) or doesn't use its insulin properly. You are more likely to develop this disease if you are overweight (especially with extra weight around your middle), physically inactive, or have a family history of diabetes.

Prediabetes is a condition in which your blood sugar level is higher than normal, but not as high as it is in diabetes.

Prediabetes puts you at higher risk for both diabetes and CHD. Diabetes and prediabetes raise the risk for CHD more in women than in men.

- Metabolic syndrome. Metabolic syndrome, also called insulin resistance syndrome, is a group of traits and medical conditions linked to overweight and obesity that puts people at risk for both CHD and type 2 diabetes.
- □ Preeclampsia. This condition, which develops during pregnancy, is linked to an increased lifetime risk for heart disease, including CHD, heart attack, and heart failure. If you had preeclampsia during pregnancy, you're twice as likely to develop heart disease as women who haven't had the condition. You're also more likely to develop heart disease earlier in life. Preeclampsia is a heart disease risk factor that you can't control. However, if you've had the condition, you should take extra care to try and control other heart disease risk factors.

Other conditions and factors also may contribute to CHD, including:

- Sleep apnea, a common disorder in which you have one or more pauses in breathing or shallow breaths while you sleep. Untreated sleep apnea can increase your risk for high blood pressure, diabetes, and even a heart attack or stroke.
- Stress, which can cause your arteries to narrow. This can raise your blood pressure and your risk for a heart attack. Research shows that the most commonly reported "trigger" for a heart attack is an emotionally upsetting event, especially one involving anger.
- Alcohol—heavy drinking can damage the heart muscle and worsen other CHD risk factors.

TAKE ACTION TO PROTECT YOUR HEART

Find Out Your Risk

To protect your heart health, it is important to find out your personal risk for heart disease. Be aware that every risk factor counts. If you have even one risk factor, you are much more likely to develop heart disease, with its many serious consequences. Having more than one risk factor is especially serious because risk factors tend to "gang up" and worsen each other's effects. Fortunately, you have tremendous power to prevent heart disease, and you can start today.

The first step is to see your health care provider for a thorough checkup. Tell your health care provider you want help in achieving your goal of heart health. And don't hesitate to ask questions, including those on page 6.

MAKE CHANGES FOR A MORE HEALTHY LIFE

- Set realistic, specific goals for a heart healthy lifestyle.
- Act on your goals—take one step at a time.
- Figure out what's stopping you from making or sticking to healthy lifestyle changes.
 Keeping a record of your daily food intake and physical activity may help you identify barriers and inspire you to reach your goals.
- Don't give up—get back on track when you slip up.
- Reward yourself for the gains you've made with something you like to do, not with food.
- Make a plan to maintain your healthy lifestyle changes. Involve friends and family!

Now you're ready for action. In most cases, that means following a heart healthy eating plan, getting regular physical activity, maintaining a healthy weight, and not smoking. Some women also may need to take medication to control heart disease risk factors.



andy's Story

Sandra recognized the signs of her heart attack even when emergency room staff initially did not. After a few short episodes of severe chest pain—what she thought was heartburn—Sandra realized her blood pressure was above normal at 180/110. She called 911, but no additional symptoms were identified in the emergency room. An alert physician admitted Sandra to the cardiac floor for observation, and the next day she suffered a heart attack. A former nurse, Sandra now volunteers her time to educate women across the country about their heart health.



Kick the Smoking Habit

There is nothing easy about giving up cigarettes, but with a plan of action, you can do it. Become aware of your personal smoking "triggers"—the situations that typically bring on the urge to light up—and replace them with new activities. Eat healthfully, get regular physical activity, and ask friends and family for support. You also may want to participate in an organized program to help people quit smoking, offered by many hospitals, health organizations, and workplaces. Also, several medications are now available to help people stop smoking. Ask your health care provider whether you should try any of these medications.



Eat for Health

You can greatly improve your heart health by eating healthfully. Put together an eating plan that offers the balance of calories that is right for you, including vegetables, fruits, whole grains, and low-fat or fat-free dairy products. The number of calories you need each day depends on your age and how physically active you are. Add seafood, lean meats, poultry, beans, eggs, and unsalted nuts for protein. Limit saturated and *trans* fats, sodium (salt), and added sugars. Grill, steam, or bake instead of frying and flavor with spices, not sauces.



Learn New Moves

Regular physical activity is a powerful way to keep your heart healthy. Aim for a total of 2 hours and 30 minutes of moderate-intensity aerobic activity each week—spending at least 10 minutes at a time. This level of activity can reduce your risk for heart disease and your chances of developing other risk factors, such as high blood pressure, diabetes, and being overweight. Other lifestyle benefits include providing energy, reducing stress, and building confidence.



Aim for a Healthy Weight

If you are overweight, taking off pounds can directly lower your chances of developing heart disease. Even a small weight loss will help lower your risk for heart disease and other medical conditions.

When it comes to weight loss, there are no quick fixes. Lasting weight loss requires a change of lifestyle, which includes adopting a healthy, lower-calorie eating plan and getting regular physical activity. Aim to lose no more than 1 to 2 pounds per week. If you have a lot of weight to lose, ask your health care provider, a registered dietitian, or a qualified nutritionist to help you develop a sensible plan for gradual weight loss.



High Blood Pressure and the DASH Eating Plan

If you have high blood pressure or high normal blood pressure, you can help lower it by adopting the DASH eating plan. DASH, which stands for "Dietary Approaches to Stop Hypertension," emphasizes fruits, vegetables, whole grains, and fat-free or low-fat dairy products. It is rich in potassium, calcium, and magnesium, as well as fiber and protein. It is low in saturated and trans fats and limits red meat, sweets, and sugar-containing beverages. Salt (sodium chloride) and other forms of sodium affect blood pressure. You should consume no more than 2,300 mg of sodium a day-1,500 mg per day is even better. If you follow the DASH eating plan and cut down on sodium, you will get even greater blood pressure benefits.



High Blood Cholesterol and the TLC Program

If you need to lower your LDL cholesterol, you may want to consider a program called TLC, which stands for "Therapeutic Lifestyle Changes." The TLC program calls for increased physical activity, weight control, and a special eating plan. On the TLC eating plan, you should have less than 7 percent of your day's calories from saturated fat; no more than 25-35 percent of your daily calories should come from all fats, including saturated, trans, monounsaturated, and polyunsaturated fats; less than 200 mg of dietary cholesterol per day; and just enough calories to achieve or maintain a healthy weight. If cholesterollowering medications are needed, they're used with the TLC program to help lower your LDL cholesterol level.

THE HEART TRUTH®

The Heart Truth® (www.hearttruth.gov), sponsored by the National Heart, Lung, and Blood Institute (NHLBI), part of the National Institutes of Health, is a national education program for women that raises awareness about heart disease and its risk factors and educates and motivates them to take action to prevent the disease.

The centerpiece of *The Heart Truth* is the *Red Dress*[®], which was created by the NHLBI and introduced as the national symbol for women and heart disease awareness in 2002. *The Red Dress*[®] is a powerful red alert that inspires women to learn more about their personal risk for heart disease and take action to protect their heart health.

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

Getting answers to these questions will give you vital information about your heart health and what you can do to improve it. You may want to bring this list of questions and the list of heart disease risk factors you checked off in this fact sheet to your health care provider's office.

- 1. What is my risk for heart disease?
- 2. What is my blood pressure? What does it mean for me, and what do I need to do about it?
- 3. What are my cholesterol numbers? (These include total cholesterol, LDL, HDL, and triglycerides.) What do they mean for me, and what do I need to do about them?
- 4. What are my "body mass index" (BMI) and waist measurement? Do they mean that I need to lose weight for my health?
- 5. What is my blood sugar level, and does it mean I'm at risk for diabetes? If so, what do I need to do about it?
- 6. What other screening tests for heart disease do I need?
- 7. What can you do to help me quit smoking?
- 8. How much physical activity do I need to help protect my heart?
- 9. What's a heart healthy eating plan for me?
- 10. How can I tell if I may be having a heart attack? If I think I'm having one, what should I do?







NHLBI RESOURCES

NHLBI website: www.nhlbi.nih.gov

The Heart Truth website: www.hearttruth.gov

Health Topics, which provides science-based, plain-language information related to heart, lung, and blood diseases and conditions and sleep disorders: www.nhlbi.nih.gov/health/health-topics/by-alpha

Deliciously Healthy Eating Web pages, which feature healthy recipes, tools, and cooking resources: healthyeating.nhlbi.nih.gov

NHLBI Health Information Center: Email: NHLBIinfo@nhlbi.nih.gov

Phone: **301-592-8573**

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