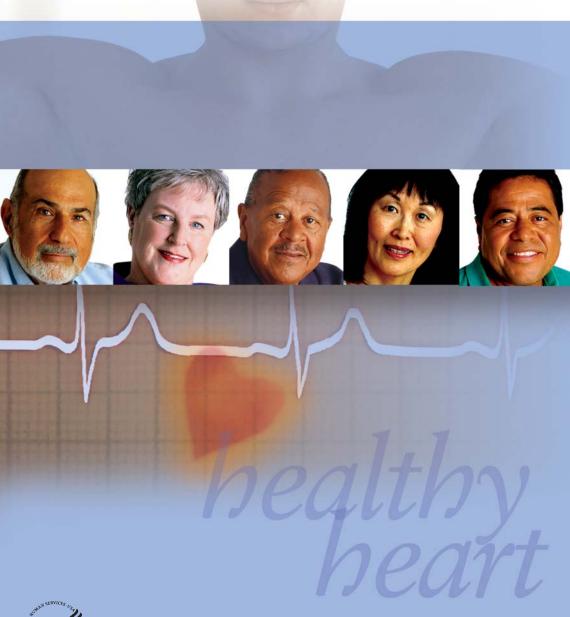


YOUR GUIDE TO

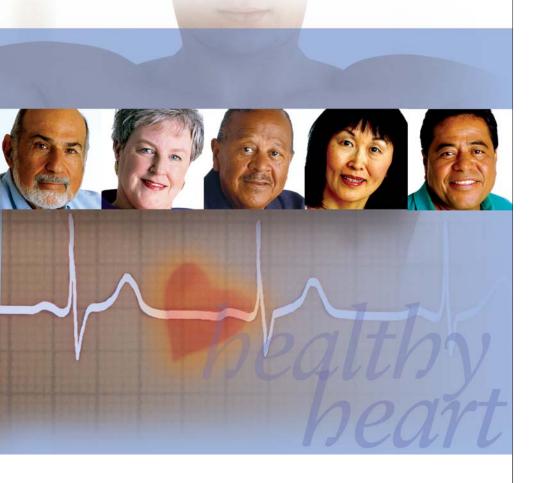
# A Healthy Heart





U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health National Heart, Lung, and Blood Institute

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# Heart Disease: Why Should You Care?

If you're like many people, you may think of heart disease as a problem that happens to *other* folks. "I feel fine," you may think, "so I have nothing to worry about." If you're a woman, you may also believe that being female protects you from heart disease. If you're a man, you may think you're not old enough to have a serious heart condition.

Wrong on all counts. In the United States, heart disease is the #1 killer of both women and men. It affects many people at midlife, as well as in old age. It also can happen to those who "feel fine." Consider these facts:

- Each year, 500,000 Americans die of heart disease, and approximately half of them are women.
- As early as age 45, a man's risk of heart disease begins to rise significantly. For a woman, risk starts to increase at age 55.
- Fifty percent of men and 64 percent of women who die suddenly of heart disease have no previous symptoms of the disease.



Heart Disease: Why Should You Care?

"But," you may still be thinking, "I take pretty good care of myself. I'm unlikely to get heart disease." Yet a recent national survey shows that only 3 percent of U.S. adults practice all of the "Big Four" habits that help to prevent heart disease: eating a healthy diet, getting regular physical activity, maintaining a healthy weight, and avoiding smoking. Many young people are also vulnerable. A recent study showed that about two-thirds of teenagers already have at least one risk factor for heart disease.

Every risk factor counts. Research shows that each individual risk factor greatly increases the chances of developing heart disease. Moreover, the worse a particular risk factor is, the more likely you are to develop heart disease. For example, if you have high blood pressure, the higher it is, the greater your chances of developing heart disease, including its many serious consequences. A damaged heart can damage your life by interfering with enjoyable activities, preventing you from holding a job, and even keeping you from doing simple things, such as taking a walk or climbing steps.

What can you do to reduce your personal risk of heart disease? First, you can learn about your own risk factors. Second, you can begin to make healthful changes in your diet, physical activity, and other daily habits. Whatever your age or current state of health, it's never too late to take steps to protect your heart. It's also never too early. The sooner you act, the better. So use this guidebook to find out more about the state of your heart, and to learn about heart healthy living. Talk with your doctor to get more information. Start taking action to improve your heart health today.

# What You Need To Know About Heart Disease

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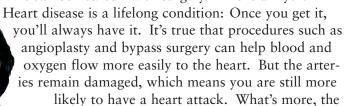
### What Is Heart Disease?

Coronary heart disease—often simply called heart disease—occurs when the arteries that supply blood to the heart muscle become hardened and narrowed due to a buildup of plaque on the arteries' inner walls. Plaque is the accumulation of fat, cholesterol, and other substances. As plaque continues to build up in the arteries, blood flow to the heart is reduced.

Heart disease can lead to a heart attack. A heart attack happens when an artery becomes totally blocked with plaque, preventing vital oxygen and nutrients from getting to the heart. A heart attack can cause permanent damage to the heart muscle.

Heart disease is one of several cardiovascular diseases, which are disorders of the heart and blood vessel system. Other cardiovascular diseases include stroke, high blood pressure, and rheumatic heart disease.

Some people aren't too concerned about heart disease because they think it can be "cured" with surgery. This is a myth.



condition of your blood vessels will steadily worsen unless you make changes in your daily habits and control your risk factors.

Many people die of complications from heart disease, or become permanently disabled. That's why it is so vital to take action to prevent this disease.

### Who Is at Risk?

Risk factors are conditions or habits that make a person more likely to develop a disease. They can also increase the chances that an existing disease will get worse. Important risk factors for heart disease that you can do something about are cigarette smoking, high blood pressure, high blood cholesterol, overweight, physical inactivity, and diabetes. Recent research shows that more than 95 percent of those who die from heart disease have at least one of these major risk factors.

Certain risk factors, such as getting older, can't be changed. After menopause, women are more likely to develop heart disease. For both women and men, middle age is a time of increasing risk because people are more likely to develop heart disease risk factors during this stage of life.

Family history of early heart disease is another risk factor that can't be changed. If your father or brother had a heart attack before age 55, or if your mother or sister had one before age 65, you are more likely to get heart disease.

While certain risk factors cannot be changed, it is important to realize that you *do* have control over many others. Regardless of your age or family history, you can take important steps to lower your risk of heart disease.

#### **How Risk Works**

It may be tempting to believe that doing just one healthy thing will take care of your heart disease risk. For example, you may hope that if you walk or swim regularly, you can still eat a lot of fatty foods and stay fairly healthy. Not true. To protect your heart, it is vital to make changes that address each and every risk factor you have. You can make the changes gradually, one at a time. But making them is very important.

While each risk factor increases your risk of heart disease, having more than one risk factor is especially serious. That's because risk factors tend to "gang up" and worsen each other's effects. For example, if you have high blood cholesterol and you smoke, your heart disease risk increases enormously. The message is clear: You need to take heart disease risk seriously, and the best time to reduce that risk is now.

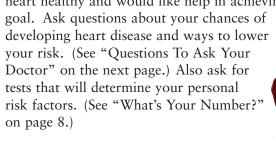
### What's Your Risk?

The first step toward heart health is becoming aware of your own personal risk for heart disease. Some risks, such as smoking cigarettes or being overweight, are obvious: All of us know whether we smoke or whether we need to lose a few pounds. But other risk factors, such as high blood pressure or high blood cholesterol, have few visible signs or symptoms. So you'll need to gather some information to create your own personal "heart profile."

#### **How To Talk With Your Doctor**

The first step in finding out your risk is to make an appointment with your doctor for a thorough checkup. Your physician can be an important partner in helping you set and reach goals for heart health. But don't wait for your doctor to mention heart disease or its risk factors. Many physicians don't routinely bring up the topic, especially with their female patients. New research shows that women are less likely than men to receive heart healthy recommendations from their doctors. Here's how to speak up and establish good, clear communication between you and your doctor.

Ask for what you need. Tell your doctor that you want to keep your heart healthy and would like help in achieving that



Be open. When your doctor asks you questions, answer them as honestly and fully as you can. While certain topics may seem quite personal,



discussing them openly can help your doctor find out your chances of developing heart disease. It can also help your doctor work more effectively with you to reduce your risk.

Keep it simple. If you don't understand something your doctor says, ask for an explanation in plain language. Be especially sure you understand why and how to take any medication you're given. If you are worried about understanding what the doctor says, or if you have trouble hearing, bring a friend or relative with you to your appointment. You may want to ask that person to write down the doctor's instructions for you.

## Questions To Ask Your Doctor

Getting answers to these questions will give you important information about your heart health and what you can do to improve it. You may want to bring this list to your doctor'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, low-density lipoprotein (LDL) "bad" cholesterol, high-density lipoprotein (HDL) "good" cholesterol, 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 indicate that I need to lose weight for my health?
- 5. What is my blood sugar level? Does it mean I'm at risk for diabetes?
- 6. What other screening tests for heart disease do I need? How often should I return for checkups for my heart health?
- 7. For smokers: What can you do to help me quit smoking?
- 8. How much physical activity do I need to help protect my heart? What kinds of activities are helpful?
- 9. What is a heart healthy eating plan for me? Should I see a registered dietitian or qualified nutritionist to learn more about healthy eating?
- 10. How can I tell if I'm having a heart attack?

### ANN STIEGLER

I just didn't think I could be having a heart attack. I didn't expect it to happen to me. I was overweight and had high cholesterol but thought I was in good health. I'd had diabetes about 4 years, but I had no idea that it was a risk factor for heart disease. Most women don't know they're at risk for heart disease. I have several friends who have a lot of the same risk factors that I do, but they're just not tuned in to them. They need to know that, and they need to take better care of themselves.



# Your Guide to a Healthy Heart

# What's Your Number? Tests That Can Help Protect Your Health

Ask your doctor to give you these tests. Each one will give you valuable information about your heart disease risk.

### **Lipoprotein Profile**

**What:** A blood test that measures total cholesterol, LDL "bad" cholesterol, HDL "good" cholesterol, and triglycerides (another form of fat in the blood). The test is given after a 9- to 12-hour fast.

**Why:** To find out if you have any of the following: high blood cholesterol (high total and LDL cholesterol), low HDL cholesterol, or high triglyceride levels. All affect your risk for heart disease.

**When:** All healthy adults should have a lipoprotein profile done at least once every 5 years. Depending on the results, your doctor may want to repeat the test more frequently.

### **Blood Pressure**

What: A simple, painless test using an inflatable arm cuff.

**Why:** To find out if you have high blood pressure (also called hypertension) or prehypertension. Both are risk factors for heart disease.

**When:** At least every 2 years, or more often if you have high blood pressure or prehypertension.

### **Fasting Plasma Glucose**

**What:** The preferred test for diagnosing diabetes. After you have fasted overnight, you will be given a blood test the following morning.

**Why:** To find out if you have diabetes or are likely to develop the disease. Fasting plasma glucose levels of 126 mg/dL or higher in two tests on different days mean that you have diabetes. Levels between 100 and 125 mg/dL mean that you have an increased risk of developing diabetes and may have prediabetes. Diabetes is an important risk factor for heart disease and other medical disorders.

**When:** At least every 3 years, beginning at age 45. If you have risk factors for diabetes, you should be tested at a younger age and more often.

### Body Mass Index (BMI) and Waist Circumference

**What:** BMI is a measure of your weight in relation to your height. Waist circumference is a measure of the fat around your middle.

**Why:** To find out if your body type raises your risk of heart disease. A BMI of 25 or higher means you are overweight. A BMI of 30 or higher means you are obese. Both overweight and obesity are risk factors for heart disease. For women, a waist measurement of more than 35 inches increases the risk of heart disease and other serious health conditions. For men, a waist measurement of more than 40 inches increases risk.

When: Every 2 years, or more often if your doctor recommends it.

There are also several tests that can determine whether you already have heart disease. Ask your doctor whether you need a stress test, an electrocardiogram (ECG or EKG), or another diagnostic test.



## Rating

## Your Risk

Here is a quick quiz to find out if you have an increased risk for a heart attack. If you don't know some of the answers, ask your health care provider.

- Do you smoke?
- Is your blood pressure 140/90 mmHg or higher; OR, have you been told by your doctor that your blood pressure is too high?
- Has your doctor told you that your LDL "bad" cholesterol is too high; that your total cholesterol level is 200 mg/dL or higher; OR, that your HDL "good" cholesterol is less than 40 mg/dL?
- Has your father or brother had a heart attack before age 55;
   OR, has your mother or sister had one before age 65?
- Do you have diabetes OR a fasting blood sugar of 126 mg/dL or higher; OR, do you need medicine to control your blood sugar?
- For women: Are you over 55 years old?
- For men: Are you over 45 years old?
- Do you have a Body Mass Index score of 25 or more? (To find out, see page 27.)
- Do you get less than a total of 30 minutes of physical activity on most days?
- Has a doctor told you that you have angina (chest pains);
   OR, have you had a heart attack?

If you answered "yes" to any of these questions, you have a higher risk of having a heart attack. Read on to learn what you can do to lower your risk.

Rating Your Risk

## Major Risk Factors

A strong partnership with your doctor is a vital first step in protecting your heart health. But to make a lasting difference, you'll also need to learn more about heart disease and the kinds of habits and conditions that can increase your risk. It's your heart, and you're in charge. What follows is a guide to the most important risk factors for heart disease and how each of them affects your health.

### **Smoking**

Smoking is "the leading cause of preventable death and disease in the United States," according to the Centers for Disease Control and Prevention (CDC). People who smoke are up to six times more likely to suffer a heart attack than nonsmokers, and the risk increases with the number of cigarettes smoked each day. Smoking can also shorten a healthy life, because smokers are likely to suffer a heart attack or other major heart problem at least 10 years sooner than nonsmokers.

But heart disease is far from the only health risk faced by smokers. Smoking also raises the risk of stroke and greatly increases the chances of developing lung cancer. Smoking is also linked with many other types of cancer, including cancers of the mouth, urinary tract, kidney, and cervix. Smoking also causes most cases of chronic obstructive lung disease, which includes bronchitis and emphysema. If you live or work with others, your secondhand smoke can cause numerous health problems in those individuals. A recent study shows a 60-percent increased risk of heart disease for nonsmokers who are regularly exposed to secondhand smoke.

Currently, 25 percent of American men and 20 percent of American women are smokers. Even more disturbing, 26 percent of high school seniors smoke. In young people, smoking can interfere with lung growth and cause more frequent and severe respiratory illnesses, in addition to heart disease and cancer risks. The younger people

Your Guide to a Healthy Heart

start smoking cigarettes, the more likely they are to become strongly addicted to nicotine.

There is simply no safe way to smoke. Low-tar and low-nicotine cigarettes do not lessen the risks of heart disease or other smoking-related diseases. The only safe and healthful course is not to smoke at all. (For tips on quitting, see "You *Can* Stop Smoking" on page 76.)

### **High Blood Pressure**

High blood pressure, also known as hypertension, is another major risk factor for heart disease, as well as for kidney disease and congestive heart failure. High blood pressure is also the most important risk factor for stroke. Even slightly high blood pressure levels increase your risk for these conditions.

New research shows that at least 65 million adults in the United States have high blood pressure—a 30-percent increase over the last several years. Equally worrisome, blood pressure levels have increased substantially for American children and teens, which increases their risk of developing hypertension in adulthood.

Major contributors to high blood pressure are a family history of the disease, overweight, and dietary salt. Older individuals are at higher risk than younger people. Among older individuals, women are more likely than men to develop high blood pressure. African Americans are more likely to develop high blood pressure, and at earlier ages, than Whites. But nearly all of us are at risk, especially as we grow older. Middle-aged Americans who don't currently have high blood pressure have a 90-percent chance of eventually developing the disease.

High blood pressure is often called the silent killer because it usually doesn't cause symptoms. As a result, many people pay little attention to their blood pressure until they become seriously ill. According to a national survey, two-thirds of people with high blood pressure do not have it under control. The good news is that you can take action to control or prevent high blood pressure, and thereby avoid many life-threatening disorders. A new blood pressure category, called prehypertension, has been created to alert people to their increased risk of developing high blood pressure so that they can take steps to prevent the disease.

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