

Heart Chapter 4

Heart and Artery Diseases

Attack

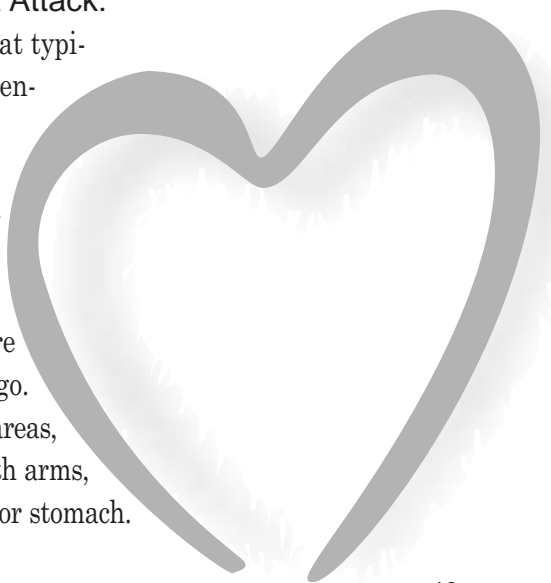
You may not know that diseases of the heart and arteries (primarily heart attack, heart disease, high blood pressure, and stroke) are just as dangerous for women as for men. Diseases of the heart and arteries—cardiovascular disease—are the biggest killer of women, accounting for the deaths of more than half a million American women each year.

Warning Signs and What to Do:

You need to be familiar with the warning signs of heart attack and stroke. It is also important to know what to do if you believe you are having a heart attack or stroke.

Warning Signs of Heart Attack:

- ♥ Chest discomfort that typically occurs in the center of the chest and can feel like an uncomfortable pressure, squeezing, fullness, or pain. It may be mild or severe and may come and go.
- ♥ Discomfort in other areas, such as in one or both arms, the back, neck, jaw, or stomach.



- ♥ Shortness of breath, either before or during chest discomfort.
- ♥ Other signs, such as nausea, light-headedness, or breaking out in a cold sweat.

Warning Signs of Stroke:

- ♥ Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body.
- ♥ Sudden confusion, trouble speaking or understanding.
- ♥ Sudden trouble seeing in one or both eyes.
- ♥ Sudden trouble walking, dizziness, loss of balance or coordination.
- ♥ Sudden severe headache with no known cause.

What To Do...

If you experience any of these symptoms that last up to five minutes, call 911 or the emergency medical services (EMS) immediately. Make note of what time your symptoms started. If your symptoms last less than five minutes, you should still call your doctor. If you can't get help from EMS, have someone drive you to the nearest emergency room. Do not drive yourself unless you have no other choice.

What Happens In Heart and Artery Diseases?

Atherosclerosis is the underlying process in most heart attacks and strokes. It is the gradual clogging of an artery, the type of blood vessel that carries oxygen-containing blood away from the heart and throughout the body. When the inside of the artery wall is damaged, a series of changes takes place. These changes result in the buildup of material, called *plaque*, on and in the artery's inner wall, narrowing the artery and reducing blood flow. The complete blockage of a narrowed artery is often caused by a blood clot, which acts like a cork in a narrow-neck bottle.

When cells that depend on the atherosclerotic artery for blood—the source of oxygen and nutrients—are left totally without blood flow, they can become damaged and even die. A blocked artery in the heart causes the most common type of heart attack. A blockage

in an artery in the neck or the brain results in the most common kind of stroke.

Risk Factors for Heart and Artery Disease.

There are two types of risk factors for heart disease—those you can change and those you can't. Many of the major risk factors for heart and artery disease are changeable—you can do something about them. Since both heart disease and stroke are often the result of atherosclerosis, they have many of the same risk factors.

- ♥ High blood level of cholesterol—especially a high level of low-density-lipoprotein cholesterol (LDL-cholesterol).
- ♥ High blood pressure.
- ♥ Smoking (see page 68).
- ♥ Inactive lifestyle.
- ♥ Overweight and obesity (see page 76), especially excess weight carried around the waist (The American Heart Association added obesity to the list of major risk factors for heart disease in 1998.)

Other changeable risk factors are—

- ♥ Low blood level of high-density-lipoprotein cholesterol (HDL-cholesterol).
- ♥ High blood level of triglycerides.
- ♥ Diabetes (see page 35).

You have an increased risk of stroke when you have heart disease, artery disease, atrial fibrillation (upper chamber of the heart quivers instead of contracting), transient ischemic attacks (TIAs) or “mini-strokes,” and/or certain blood disorders.

Unchangeable risk factors for heart disease and stroke include age, sex, race, and family history.



- ♥ The older you are, the greater your risk of developing heart disease or having a stroke.
- ♥ Until women reach menopause, they are at lower risk than men for heart disease. More men than women have strokes, but more women die of stroke.
- ♥ More men than women have strokes, but more women die of stroke.
- ♥ Compared with white women, African-American women have twice the risk of heart attack and a one-third higher death rate from heart disease and a much higher risk of dying from a stroke.
- ♥ You are at increased risk if you have close relatives who developed heart disease, especially at an early age or who had a stroke.

Cholesterol

Cholesterol is a fatty substance naturally present in your body. In order for your blood to carry it throughout your body, cholesterol is combined with protein to form a particle called a lipoprotein.

Cholesterol combined in LDL is deposited in your artery wall, making plaque larger. However, HDL actually removes cholesterol from plaque, making it smaller. This is why LDL is often called *bad cholesterol* and HDL is referred to as *good cholesterol*.

As a rule, you want your blood level of total cholesterol to be less than 200 mg/dl, your LDL less than 130 mg/dl, and your HDL 35 mg/dl or above (the higher the better!).

(Remember, you want the LDL level to be low and the HDL level to be high!)

To lower your blood level of LDL and raise your HDL, you should—

- ♥ Eat a diet with no more than 25-30% of calories from fat and less than 7% of calories from saturated fat (see page 6).
- ♥ Limit your average intake of dietary cholesterol to less than 200 milligrams per day.
- ♥ Consume 20-30 grams of fiber each day.

- ♥ Increase your physical activity, taking part in regular moderate exercise.
- ♥ Balance the calories you consume with your physical activity to reach a desirable weight.

Triglycerides

Triglycerides are the most common type of fat in food and in your body. High levels of triglycerides in the blood increase the risk of heart disease, especially in women. (A normal triglyceride level is less than 150 mg/dl.) You may be able to reduce your triglyceride level by losing excess weight, increasing your exercise, stopping smoking, and limiting your intake of sugar, sugar-containing foods, and alcohol (which can cause large increases in triglyceride). In addition to reducing your intake of saturated fat to less than 7% of calories and your cholesterol to no more than 200 mg per day, you might want to include oily fish in your diet (contain omega-3 fatty acids, which help lower triglyceride levels).

High blood pressure

High blood pressure, or hypertension, is one of the major risk factors for heart disease and the greatest risk factor for stroke. Blood pressure is a measurement of the pressure that blood exerts on the inside of an artery wall. The first number in a blood pressure reading—systolic blood pressure—is taken while your heart is pumping. The second number—diastolic blood pressure—measures pressure when the heart is relaxed. There have been changes in the guidelines determining when blood pressure is normal and when it is high. Blood pressure is now considered normal when the systolic pressure is below 120 and the diastolic pressure is below 80. An example of a typical healthy blood pressure might be 118/78. You have high blood pressure or hypertension if your systolic pressure is 140 or higher and your diastolic pressure is 90 or higher. Health experts have added a condition called “prehypertension,” which is a systolic pressure between 120 and 139 and a diastolic pressure is from 80 to 89. These new guidelines reflect the

importance of controlling your blood pressure.

You may be able to lower your high blood pressure by—

- ♥ Quitting smoking (see page 68).
- ♥ Reaching and maintaining a desirable weight (see page 77-78).
- ♥ Taking part in regular physical activity (see page 10).
- ♥ Avoiding excessive alcohol intake (see page 8).
- ♥ Cutting down on your sodium intake if you are one of the people in whom sodium increases blood pressure (see page 7).
- ♥ Consuming adequate amounts of potassium, calcium, and magnesium.

Early diagnosis and treatment is an important part of preventing the negative side effects of high blood pressure. Be sure that your blood pressure is checked every time you visit your doctor or clinic. If you do have high blood pressure, it is very important that you take your prescribed medication as directed by your doctor.

Additional resources include—

Women Are Not Small Men: Life-Saving Strategies for Preventing and Healing Heart Disease in Women by Nieca Goldberg. Ballantyne Books, 2003.

The Women's Heart Book by Fredric J. Pashkow and Charlotte Libov. Hyperion, 2001.

50 Ways Women Can Prevent Heart Disease by M. Sara Rosenthal. Lowell House, 2000.

The Female Heart: The Truth About Women And Heart Disease by Marianne J. Legato and Carol Colman. Quill, 2000.

The Healthy Heart Handbook for Women by Marian Sandmaier, 2003. You may print this book without cost from the US Department of Health and Human Services website at www.nhlbi.nih.gov/health/public/heart/other/hhw/hdbk_wmn.pdf. (You will need the Adobe Acrobat reader, which is free, to access this 108-page handbook.)