

High blood cholesterol is one of the major risk factors for heart and vascular disease.

Risk Reduction for Heart and Vascular Disease

Risk factors are habits, traits or conditions that may increase a person's chance of developing atherosclerosis, a major cause of stroke, heart and vascular disease. Atherosclerosis is a slow process in which deposits of fat, cholesterol and calcium build up inside the artery. Atherosclerosis cannot be cured. However, you can take steps to halt its progress. The key is to know your own risk factors and to modify them. Studies show that this can both prolong your life and improve its quality. Talk with your healthcare providers to find ways to achieve this goal.

Risk factors for cardiac or vascular disease that cannot be changed include:

Age

- Men age 45 or older.
- Women age 55 or older.

Gender

- Male.
- Post-menopausal female.

Family history of the onset of disease in:

- Men at age 55 or younger.
- Women at age 65 or younger.

Other risk factors that can be controlled are described below.

High Blood Cholesterol

High blood cholesterol is one of the major risk factors for heart and vascular disease. Cholesterol and other fats (lipids) are carried in the blood along with certain proteins called lipoproteins. These are measured by a blood test called a “lipid panel or profile.”

The lipids that are tested most often are:

- **Cholesterol:** Your total blood cholesterol level should be less than 200 mg/dL. All the cholesterol you need can be made by your liver, but we also eat cholesterol in food. As your cholesterol rises above 200, your risk for heart attack and stroke also increases.
- **High-density lipoproteins (HDL)** are known as the “good” cholesterol. They help remove excess cholesterol from the body cells and tissues. Higher levels of HDL are linked with lower risk of heart attack. Desirable levels are greater than 40 mg/dL for men and 50mg/dL for women.
- **Low-density lipoproteins (LDL)** also are known as the “bad” cholesterol. They cause the build-up of cholesterol in the arteries. High levels may increase the risk of heart attack and stroke. Desirable levels are less than:
 - 160 mg/dL if you are at low risk for heart and vascular disease (0 to 1 risk factors).
 - 130 mg/dL if you have 2 or more risk factors.
 - 100 mg/dL if you have cardiac or vascular disease or are a diabetic (70 mg/dL is an option for “high risk” individuals).
- **Triglycerides** are transported in the blood and are broken down for energy. Sugar, alcohol and saturated fat in foods may increase triglyceride levels. Normal levels are less than 150 mg/dL.

To keep your lipid profiles within the needed range:

- Follow a diet low in fat and cholesterol.
- Maintain a normal weight.
- Exercise.
- Take needed lipid-lowering medicines, as prescribed.

The TLC (Therapeutic Lifestyle Change) Guidelines suggest a diet that limits fat intake to about 30 percent of total calories. Only 7 percent of the total calories should be from saturated fat. They also suggest that you limit your intake of cholesterol and sodium. More information on low fat, low cholesterol eating can be found in the Northwestern Memorial Hospital publication, *Heart-Healthy Nutrition*. A Northwestern Memorial Hospital dietitian can discuss ways for you to reduce your fat and cholesterol intake.

Smoking/Chewing Tobacco

The American Heart Association has identified tobacco use to be the single most important risk factor for heart and vascular disease. Tobacco use causes:

- Artery damage.
- Increased deposits of plaque.
- Reduced HDL.
- Increased risk for blood clots.
- Elevated heart rate and blood pressure.
- Limited blood supply to the arms and legs.

These same effects also can occur if you are exposed to high amounts of “second-hand” or environmental smoke. If you need help with quitting, talk with your doctor or nurse. Smoking cessation programs are available through Northwestern Memorial Hospital’s Center for Integrative Medicine and Wellness. For more information, call 312-926-WELL (9355).

High Blood Pressure

High blood pressure raises your risk for heart disease, stroke and kidney disease. Since high blood pressure often goes undetected, have regular check-ups with your doctor. Know your target blood pressure. For most, the goal is less than 120/80. Follow your doctor’s advice should you need to:

- Lose weight.
- Reduce salt intake.
- Start a regular exercise program.
- Take prescribed medicine.
- Quit smoking.
- Reduce stress.

Lack of Exercise

Lack of regular exercise (sedentary lifestyle) increases your risk for heart and vascular disease. If you do not exercise, talk with your healthcare provider. Regular aerobic exercise on most days of the week makes your heart and body stronger. It also helps reduce other risk factors, such as:

- High blood pressure.
- High cholesterol.
- Diabetes.
- Excess weight.
- Stress.

If you have heart disease, ask your doctor about a cardiac rehabilitation program. This can help you become heart-healthy through safe exercise and risk factor control.

Diabetes

Heart and vascular disease often occur at an earlier age and progress at a faster rate in persons with diabetes. If you have diabetes, it is very important to keep your blood sugar under control at all times. Daily exercise, diet and prescribed medicines can help you control your diabetes.

Excess Weight

You are overweight if you have a body mass index (BMI) of 25 or greater (see below) or a waist size of more than 40 inches in men and more than 35 inches in women.

Excess weight can lead to:

- High blood pressure.
- Diabetes.
- Elevated cholesterol.

Body Mass Index (BMI) Calculator

BMI measures body fat based on height and weight. The measurement applies to both men and women. Higher BMI may indicate higher risk for obesity-related disease. (A BMI chart is found on the American Heart Association Web site, www.americanheart.org.)

Diet and exercise are key to weight loss. You need to lower your total calorie intake by 500 calories per day to have a one pound weight loss per week.

Weight management help is available through the Center for Integrative Medicine and Wellness.

Stress

High levels of stress can increase your risk for heart and vascular disease. Stress can lead to overeating and increased heart rate and blood pressure. Know the sources of stress in your life. To reduce your stress level:

- Know your limits
- Find social release, get involved in hobbies, exercise.
- Balance work with play.
- Delegate the things you can.
- Seek counseling to help you deal with stress.
- Assistance is available through the Wellness Institute.

Warning Signs for Heart Attack & Stroke

Reducing your risk also means knowing the warning signs for Heart Attack and Stroke.

Heart Attack	Stroke, Mini-stroke, TIA (transient ischemic attack)
<ul style="list-style-type: none">▪ Uncomfortable pressure, fullness, squeezing or pain in the center of the chest lasting more than a few minutes.▪ Pain spreading to the shoulders, neck or arms.▪ Chest discomfort with lightheadedness, fainting, sweating, nausea or shortness of breath.	<ul style="list-style-type: none">▪ Sudden weakness or numbness of the face, arm or leg on one side of the body.▪ Sudden dimness or loss of vision, particularly in one eye.▪ Loss of speech, or trouble talking or understanding speech.▪ Sudden, severe headaches with no apparent cause.▪ Unexplained dizziness, unsteadiness or sudden falls, especially along with any of the above symptoms.

Heart Attack And Stroke Are Medical Emergencies

Not all of these signs occur in every attack. If you notice one or more of these signs, don't wait. Call 911 and get medical help right away.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

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