

Physical Activity: The Heart Connection

It's worth repeating: physical inactivity greatly increases your risk of developing heart disease. 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 a cholesterol-rich plaque bursts and releases its contents into the bloodstream. This causes a blood clot to form over the plaque, totally blocking blood flow through the artery and preventing vital oxygen and nutrients from getting to the heart. A heart attack can cause permanent damage to the heart muscle.

Some people aren't too concerned about heart disease because they think it can be cured with surgery. This is a myth. Heart disease is a lifelong condition. It's true that certain procedures can help blood and oxygen flow more easily to the heart. But the arteries remain damaged, which means you are still more likely to have a heart attack. What's more, the condition of your blood vessels will steadily worsen unless you make changes in your daily habits and control other factors that increase risk.

Heart disease is a serious disease-and too often, a fatal one. It is the number one killer of Americans, with 500,000 people in the United States dying of heart disease each year, according to the National Heart, Lung, and Blood Institute (NHLBI). Many others with heart problems become permanently disabled. That's why it's so vital to take action to prevent this disease. Getting regular physical activity should be part of everyone's heart disease prevention program.

Heart Disease Risk Factors

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. Certain risk factors for heart disease-such as getting older or having a family history of early heart disease-can't be changed. But **physical inactivity is a major risk factor for heart disease that you have control over**. You can make a decision to get regular physical activity, and this information can help you create a workable, enjoyable program that will help you protect your heart.

Other major risk factors for heart disease that you can change are smoking, high blood pressure, high blood cholesterol, overweight, and diabetes. Every risk factor counts. Research shows that each individual risk factor greatly increases the chances of developing heart disease and having a heart attack. A damaged heart can damage your life, by interfering with enjoyable activities and even keeping you from doing simple things, such as taking a walk or climbing steps.

But it's important to know that you have a lot of power to protect your heart health. Getting regular physical activity is an especially important part of your healthy heart program, because physical activity both directly reduces your heart disease risk and reduces your chances of developing other risk factors for heart disease. For example, regular physical activity may reduce low-density lipoprotein or LDL (bad) cholesterol, increase high-density lipoprotein or HDL (good) cholesterol, and lower high blood pressure. It can also protect your heart by helping to prevent and control diabetes. Finally, physical activity can help you to lose excess weight or stay at your desirable weight, which will also help to lower your risk of heart disease.

You have control.

Physical inactivity is one of several major risk factors for heart disease that you can do something about. The others are:

- **Smoking.** 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. Quitting will greatly reduce your risk. Check with local community groups for free or low-cost programs designed to help people stop smoking.
- **High Blood Pressure.** Also known as hypertension, high blood pressure increases your risk of heart disease, stroke, kidney disease, and congestive heart failure. Your health care provider can check your blood pressure by means of a simple test using an inflatable arm cuff. Blood pressure often can be entirely controlled by getting regular physical activity, losing excess weight, cutting down on alcohol, and changing eating habits, such as using less salt and other forms of sodium. For some people, medication is also needed.

Preventive Health Systems	Occupational Medicine Centers	CONCERN[®] Services	SHARE[®] Occupational Health Program	Work Capacity Services	TriHealth Fitness & Health Pavilion	TriHealth Executive Health Program
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- **High Blood Cholesterol.** High blood cholesterol can lead to the buildup of plaque in your arteries, which raises the risk of a heart attack. Starting at age 20, everyone should have their cholesterol levels checked by means of a blood test called a "lipoprotein profile." You can lower high blood cholesterol by getting regular physical activity, eating less saturated fat and trans fat, and managing your weight. In some cases, medication is also needed.
- **Overweight.** If you are overweight or obese, you are more likely to develop heart disease even if you have no other risk factors. Ask your doctor to help you determine whether you need to lose weight for your health. The good news: losing just 5-10 percent of your current weight will help to lower your risk of heart disease and many other medical disorders, according to the National Institutes of Health.
- **Diabetes** greatly increases your risk for heart disease, stroke, and other serious diseases. Ask your doctor whether you should be tested for it. Many people at high risk for diabetes can prevent or delay the disease by reducing calories as part of a healthy eating plan, and by becoming more physically active. If you already have diabetes, work closely with your doctor to manage it.

Source: U.S. Department of Health and Human Services (DHHS), National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI). (June 2006). Physical activity: The heart connection. In *Your guide to physical activity and your heart* (NIH Pub. No. 06-5714). Retrieved February 2, 2007 from <http://www.nhlbi.nih.gov>.