

Fitness Focus

Cardiovascular Disease and Risk Factors

The heart and blood vessels help circulate blood and deliver nutrients to all parts of the body. Every day the adult heart, which is the size of your fist and weighs approximately 12 oz., pumps enough blood to fill a 4,630- gallon tank. **Cardiovascular disease** is an abnormal condition of the heart and blood vessels. When blood vessels are blocked, the brain, heart, kidneys, lungs, and other tissues are endangered. Over 20 percent of the U.S. population has some form of cardiovascular disease. **It is the number one cause of death in the United States.**

Arteriosclerosis, a form of cardiovascular disease, is a narrowing or blocking of the arteries due to fat deposits or plaque building up on the vessel's interior walls. Arteriosclerosis takes years to develop and often begins in early childhood and adolescence. The coronary arteries, that which supply blood to the heart, are particularly susceptible.

When the supply of blood to the heart muscle is severely reduced or stopped because of a blockage in the coronary artery, a **heart attack** may result. Heart attacks are the leading cause of disability and death in the United States. They cause nearly 600,000 deaths each year.

Stroke is a term that describes sudden damage to the brain due to oxygen deprivation when arteries to the brain are blocked. Strokes cause approximately 155,000 deaths in the United States each year.

The **development** of cardiovascular disease relates to one or more **risk factors**. Some risk factors are controllable and some are not. **Heredity** you **can't control**. If parents, grandparents, or other close relatives have had cardiovascular disease, you are at a higher risk. **Gender and age** are other factors you can't control. Males have a higher risk than females of developing cardiovascular disease. The older you get, the higher the risk.

Many factors are affected by our **life-styles** and **you do have choices**. The following are factors that you can control:

SMOKING - doubles your chance of cardiovascular disease

HIGH BLOOD PRESSURE - increases risk of stroke, heart attack, and kidney failure

BLOOD CHOLESTEROL - too much cholesterol clogs arteries

LACK OF EXERCISE - most common cause of cardiovascular disease is **INACTIVITY** **OBESITY**
- excess body fat is associated with high blood pressure and high levels of cholesterol

NUTRITION - eating healthy plays an important role in disease prevention

SUBSTANCE ABUSE - alcohol, prescription and illegal drugs will also affect your cardiovascular (heart and blood vessels) system

Lesson Review

1. What is cardiovascular disease?
2. What is arteriosclerosis?
3. What is the difference between a stroke and a heart attack?
4. Describe the controllable and non-controllable risk factors.

5. Describe which factors put you at risk. Describe what you can do to deal with those risk factors?