

What is Heart Disease?

Heart disease, also known as cardiovascular disease, is a group of diseases and conditions that affect the heart (cardio) and blood vessels (vascular). Examples of heart disease include heart attack, high blood pressure, and stroke.

The **American Heart Association (AHA)** has identified the following risk factors for heart disease:

- Increasing age
- Sex (male)
- Heredity (including race)
- Smoking
- Physical inactivity
- High blood cholesterol
- High blood pressure
- Diabetes
- Obesity and overweight



Other factors related to increased risk of heart disease include stress, alcohol, and diet. The more risk factors you have, the greater your risk of heart disease.

Many risk factors for heart disease can be controlled by being physically active and eating a healthy diet.

A heart-healthy lifestyle is your best defense against heart disease.

What is Cholesterol?

Cholesterol is a soft, waxy substance. Your liver makes all the cholesterol your body needs each day. You also get cholesterol from animal products you eat, such as meat, fish, poultry, egg yolk, and dairy products.

Cholesterol is carried through the blood by small particles called **lipoproteins** (lipids).

There are two kinds of lipoproteins: **high-density lipoprotein (HDL)** and **low-density lipoprotein (LDL)**, and it is important to maintain healthy levels of both.

- **HDL, “good cholesterol,”** removes cholesterol from the body, thereby preventing it from building up in the arteries and protecting the body against heart disease.
- **LDL, “bad cholesterol,”** carries harmful cholesterol in the blood. High levels can lead to blockages in the arteries, thus increasing the risk of heart disease.



Remember, you want:

- ✓ **HIGH HDL**
- ✓ **LOW LDL**

You and your health care provider should also monitor **triglycerides**. Triglycerides are formed when you eat more calories than your body needs (especially from carbohydrates and fats). High levels of triglycerides may increase the risk of heart disease.

What is Blood Pressure?

Blood pressure is the force of blood moving against the walls of blood vessels.

Blood pressure is measured with two readings:

- **Systolic** (upper number) is the pressure against the walls of the arteries during a contraction or heart beat.
- **Diastolic** (lower number) is the pressure against the walls of the arteries during the relaxation phase (the heart is at rest).

Think of a garden hose. Water flows through the hose at a certain pressure. What happens when you hold your finger over the part of the hose where the water comes out? Answer: the water comes out of the hose at a higher pressure. The same amount of water needs to flow out of the hose but since the opening is partly blocked, it flows harder and faster. This is what happens when plaque builds up in arteries: the heart has to work harder to push the blood through, and this causes high blood pressure.

Having high blood pressure increases the risk for heart disease and kidney failure. The higher the blood pressure, the greater the risk. High blood pressure is called the “silent killer” because there are usually no symptoms to warn you that something is wrong.

Preventing or Managing Heart Disease

The good news is that there are many things you can do to help prevent heart disease or manage it once it has developed. Below are the “Simple 7” from the **American Heart Association**:



Get active

- At least 30 minutes of moderate physical activity on five days each week



Control cholesterol

- Eat healthy foods that are low in cholesterol, trans fats, and saturated fats, and high in fiber. Eat less than 300 mg of cholesterol each day.
- Schedule a cholesterol screening with your health care provider



Eat a healthy diet

- Eat vegetables and fruits
- Eat at least two 3.5 ounce servings of fish, preferably oily fish, each week
- Eat unrefined, fiber-rich whole-grain foods
- Eat less than 1500 mg of sodium a day



Don't smoke



Maintain a healthy body weight



Work with your health care provider to manage blood pressure



Work with your health care provider to keep blood glucose at healthy levels