Healthy Choices for a Healthy Heart

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In the United States, two people die every minute from heart disease. Currently, heart disease is the number one killer in the United States, killing more people than cancer, AIDS, and car wrecks combined. In addition, around 35 percent of the population is living with some form of heart disease.

What is heart disease?

Heart disease and cardiovascular disease are two terms that mean the same thing. These terms refer to all diseases of the heart and blood vessels. For example, heart disease includes heart attacks, strokes, atherosclerosis, heart failure, and other conditions of the heart and blood vessels. Many of these diseases have a similar underlying cause – a build-up of fat in blood vessels. We'll cover blood vessels in the next section.

The Cardiovascular System

The Cardiovascular System, also called the Circulatory System, is made up of the heart and all of the blood vessels that carry blood away from and to the heart. Blood vessels that take blood away from the heart are called arteries. Blood vessels that bring blood back to the heart are called veins. As the heart pumps, it pushes blood through the blood vessels to all parts of the body. Blood carries the oxygen and nutrients the body needs to function. Together, the heart and blood vessels make a giant loop that recirculates blood over and over again. It is important to know the parts of the Cardiovascular System in order to understand heart disease.

Figure 1. The cardiovascular system.
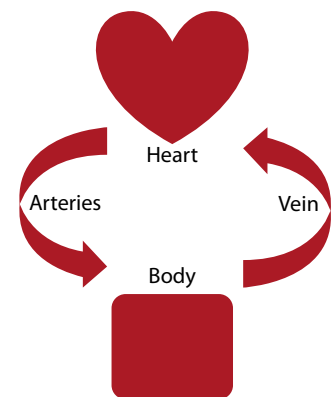
What are the most common causes of heart disease?

In order to understand what causes heart disease, we must first learn about cholesterol and triglycerides.

Cholesterol is a fat-like substance that our body needs. Our body makes enough cholesterol for us to have healthy levels, but we can also take in cholesterol through our diet. Two types of cholesterol travel through our body in our blood stream. These two forms are called LDL and HDL.

- LDL cholesterol is considered the "bad" type of cholesterol. Foods that come from animals, like red meat, are a common source of LDL cholesterol. When levels are too high or when LDL becomes damaged, it begins to stick to the inside of our blood vessels. The blood vessel will become blocked and blood can no longer flow through easily. Unhealthy levels of LDL cholesterol could be a part of your family history, but for most people it is the result of unhealthy food choices and a lack of physical activity.

- HDL cholesterol is considered the "good" type of cholesterol. HDL works like a scavenger – flowing in our blood to pull excess LDL cholesterol off the inner walls of our blood vessels. This keeps blood flowing and our blood vessels healthy.

Triglycerides are fats that travel through our blood stream. This fat comes from the food we eat in our diet. When levels of fat in our blood are high, it is more likely to stick to the inner walls of blood vessels and cause a fatty build up with LDL cholesterol.

Another word to describe high levels of cholesterol and triglycerides in the blood is hyperlipidemia. This word is easy to remember if we break the word down into three parts. "Hyper" means too much or high amounts; "lipid" means fat and "-emia" means blood. If someone has hyperlipidemia,

Too much + Fat + In the Blood = Hyperlipidemia
↓ ↓ ↓
Hyper + Lipid + Emia = Hyperlipidemia

the risk of developing heart disease is high.

Some forms of heart disease may not have a specific cause. These include abnormal heartbeats, heart valve problems, birth defects, and some forms of heart failure.

What's the difference between a heart attack and a stroke?

Heart attacks and strokes are similar health conditions, but they take place in different places in the body. In the most common forms of heart attacks and strokes, blood flow is blocked by the fatty build-up of LDL cholesterol and triglycerides along the inner lining of blood vessels.

The most common type of heart attack is caused when blood vessels carrying blood to the heart become blocked and the heart does not receive the oxygen and nutrients it needs to pump. This causes a part of the heart or even the entire heart to stop beating. Someone in the United States has a heart attack every 43 seconds.

During a stroke, blood vessels carrying blood to the brain become blocked and blood flow is unable to reach the brain. As a result, parts of the brain are unable to function or the brain stops working all together. Someone in the United States has a stroke every 40 seconds.

Are certain people more likely to be diagnosed with heart disease than others?

Many of the factors that lead to heart disease are things we can control. This means we can take control of our health by making small lifestyle changes. Individuals with a family history, who are older, or certain races/ethnicities like African Americans or Mexican Americans are at increased risk for

developing heart disease. However, the following risk factors can be managed:

- Smoking
- Diets high in sodium, added sugar, processed foods, and unhealthy fats
- Lack of exercise
- Unmanaged stress
- Overweight/Obesity
- Hyperlipidemia (High LDL cholesterol and triglycerides in the blood)
- High blood pressure (also known as hypertension)
- Being diagnosed with Type 2 Diabetes

Metabolic Syndrome

People who have metabolic syndrome have a group of health problems that greatly increases the risk of heart disease compared to someone who only has one risk factor. It is estimated that almost 25 percent of the United States adult population has metabolic syndrome. Someone is diagnosed with metabolic syndrome if they have any three of the following conditions:

- Obesity (specifically in the stomach area)
- High triglycerides
- Low HDL cholesterol
- High blood pressure
- High fasting blood glucose

What can you do to prevent heart disease?

Many of the effects of heart disease are a result of unhealthy habits over a long period of time. We can improve our health by taking action and following these heart-healthy recommendations. These include:

Choose a heart-healthy diet. In order to act now, start by choosing heart-healthy foods low in saturated fat or trans fat.

Great options include whole grains, fruits, and vegetables. These foods are high in fiber, which can help prevent the development of fatty build up in the blood vessels and make a difference in the levels of bad cholesterol in the blood.

Saturated fats are solid at room temperature. These are the types of fats that can build up in your blood vessels. Examples of foods with saturated fat include:

- Cheese
- Butter
- Lard
- Fatty meats like beef, lamb, pork, or processed meats
- Packaged cookies, pastries, and desserts

There are other types of fats that are considered healthier. These are called "unsaturated fats" and they are liquid at room temperature. Examples of foods with unsaturated fats include:

- Nuts
- Seeds
- Fish
- Oils from plants like vegetable oil, olive oil, and canola oil

Picture your blood vessels as a straw. Imagine trying to push saturated fat through your blood vessels. What happens? It gets clogged because it's solid at room temperature and blood

can't flow through. Imagine trying to pour unsaturated fats through your straw. They flow right through! Now you can see why liquid fats are healthier than solid ones.

By following these recommendations, you will limit the amount of unhealthy fats and cholesterol in your diet. Research shows that following these suggestions can reduce the risk of developing heart disease.

Exercise regularly. It is recommended that children and youth get at least 60 minutes of physical activity each day. Adults should get 150 minutes of physical activity each week. Find ways to make exercise a regular part of your day. Break it up into smaller amounts of time to fit it into your schedule, even if it is a short, 10-minute walk.

Manage stress. Everyone has stress and everyone manages it differently. When stress becomes too much, some people begin to choose behaviors that are bad for our heart health, like eating unhealthy foods or smoking. Find healthy ways to

manage stress like exercising or spending time with family and friends.

Say no to tobacco. Choosing not to smoke or use tobacco products will reduce your chance of developing heart disease. People who smoke or use tobacco are 2-4 times more likely to develop heart disease.

If my family member has heart disease, how can I help them make heart-healthy choices?

- Be a role model. No one is too young to be a role model of healthy behaviors. Your family will notice when you start to think about how your actions affect your health.

- Encourage exercise as a family. Ask them to take a walk with you or try a new sport.

- Ask to try a new fruit or vegetable. If your family sees you wanting to try these foods, they may want to join you!

- If your family doesn't eat meals together, ask that you start having family mealtime when possible. Research

shows that families that prepare food and eat together make healthier choices and have better trust and communication!

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