

# The Heart Truth® Discussion Guide #1 What is Heart Disease?



Your heart is an amazing organ! This muscle pumps 24 hours a day, 365 days a year. As the heart pumps, it delivers blood full of oxygen and nutrients to all of your body's cells. What happens, though, when the heart stops working as well as it should?

### **Atherosclerosis**

Atherosclerosis, sometimes referred to as "hardening of the arteries," occurs when fatty substances build up in the blood vessels. This build-up narrows the opening inside the blood vessel, which allows less blood to flow through. This narrowing limits the amount of oxygen and nutrients that are able to fuel your body's cells.

# **Coronary Heart Disease (Coronary Artery Disease)**

Your heart muscle needs to receive oxygen and nutrients too. When the blood vessels that supply the heart muscle become clogged, this condition is called *coronary heart disease*. Coronary heart disease is a severe problem because when oxygen and nutrients are cut off from the heart muscle, the heart tissue itself may become weak or even die.

# **Heart Attack (Myocardial Infarction)**

A heart attack occurs when a portion of the heart muscle is damaged by lack of oxygen (sometimes referred to as *ischemia* by healthcare workers), preventing the heart from pumping effectively. The amount of damage depends on how large a portion of the heart was deprived of oxygen and the length of time between the heart attack and treatment. The longer the heart is deprived of oxygen, the worse the damage becomes. If left untreated, the heart muscle may die. The good news is that the heart can recover from some of the damage done during a heart attack. However, people who have suffered a heart attack may always have some scar tissue that limits how well their heart works.

# Discussion Questions and Activities:

- Do you know anyone (yourself, a family member, a friend, etc.) who has suffered from heart disease? How has the disease affected his or her life?
- What questions would you like to ask a healthcare professional about heart disease? Consider discussing these questions with your doctor on your next visit.

Adapted by Catherine Becker, Community Health Intern, UW-Extension, June 2011 from:

The Heart Truth® for Women: A Speaker's Guide. The Heart Truth®, National Heart Lung and Blood Institute, National Institutes of Health, U.S. Department of Health and Human Services. Revised December 2007. Information available at <a href="www.hearttruth.gov">www.hearttruth.gov</a>.

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American Heart Association, 2011. Information available at <a href="www.heart.org">www.heart.org</a>.

United States Department of Agriculture, 2011. Information available at www.choosemyplate.gov.

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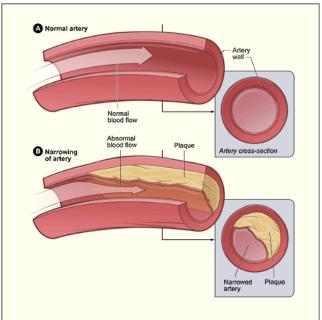
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# Atherosclerosis

Figure A shows a healthy blood vessel. Notice how the blood vessel is clear of any buildup. This allows the blood to flow freely throughout the body.

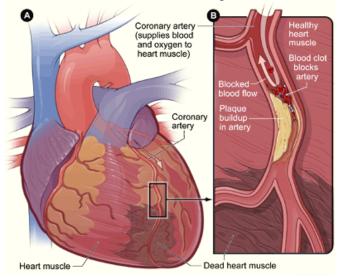
Figure B shows a blood vessel with a buildup of plaque, which is usually made of fat and cholesterol that sticks to the lining of the blood vessel. This blockage impairs blood flow, limiting the amount of oxygen and nutrients that get to the body's tissues. This can happen

anywhere in the body.



# **Heart Attack**

A heart attack occurs when the flow of blood in a coronary artery is blocked, preventing oxygen from getting to the heart muscle. Without oxygen, the heart muscle begins to die (as illustrated by the brown area in the illustration), causing a heart attack.



Illustrations taken from National Heart, Lung, and Blood Institute