

Introduction to the Cardiovascular System

What do you do for "cardio"? "Cardio" has become slang for exercise. Cardio is the type of exercise that keeps your heart rate high. Cardio can include biking, running, or swimming. Cardio is short for cardiovascular system. Your heart is in this system. So are your blood and blood vessels. The **cardiovascular system** is the system of organs that delivers blood to all the cells of the body. It's like the body's lifeline. Without the cardiovascular system circulating your blood, you couldn't survive. The cardiovascular system is also called the **circulatory system**.

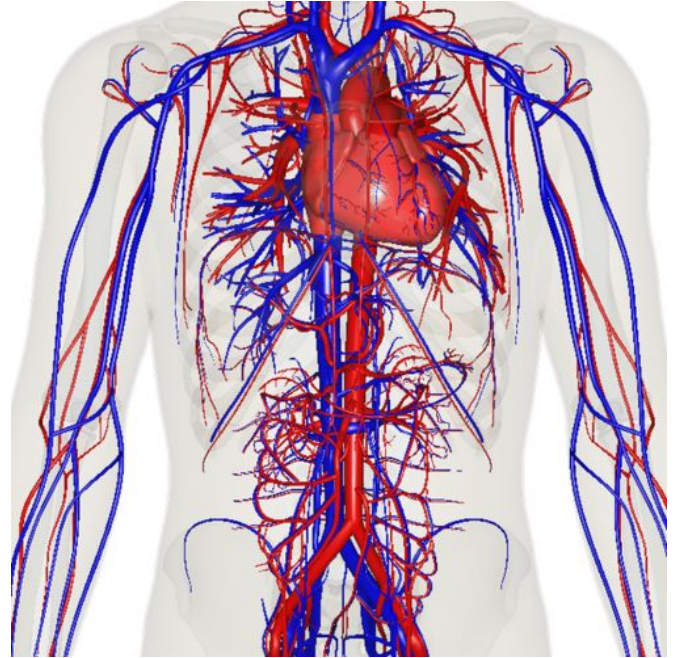
Parts of the Cardiovascular System

Of course, everyone has heard of the heart. It is the engine of your body. The heart and a network of blood vessels make up the cardiovascular system. The network of blood vessels runs throughout the body. The blood in the cardiovascular system is a liquid connective tissue. The Figure below shows the heart and major vessels. You will notice it affects the entire body. The heart is basically a pump. It is what keeps the blood moving through the blood vessels.

Roles of the Cardiovascular System

Your cardiovascular system has many jobs. At times the cardiovascular system can work like a pump. This pump pushes your blood through your body. It helps you control your temperature. It also supplies the cells with what they need to do their job. The cardiovascular system works with all the other organ systems in the body. Every cell in your body depends on your cardiovascular system. If your cells don't receive what they need, they cannot survive.

The main function of this system is to deliver oxygen to your cells. Blood receives oxygen in your lungs, which are a part of the respiratory system. Oxygen-rich blood is then pumped by your heart all around your body. The cardiovascular system also plays a role in keeping your body temperature just right. It helps to keep you warm by moving warm blood around your body. Your blood vessels keep you from getting too hot or too cold. Your brain acts as the control center. If you are getting too hot, it sends a signal to the blood vessels in your skin. The skin receives these messages and the blood vessels expand. This action increases the amount of blood and heat to move near the skin's surface. The heat is then released from the skin. This helps you cool down. What do you think happens when you are cold? How would your blood vessels react?



The cardiovascular system transports many substances to and from cells throughout the body.

Summary

- The cardiovascular system consists of the heart, a network of blood vessels, and blood. Blood is a liquid tissue. The heart is a pump that keeps blood flowing through the vessels of the system.
- The main function of the cardiovascular system is transport. It carries special chemicals, oxygen, nutrients, and cellular wastes around the body. The cardiovascular system also helps regulate body temperature by controlling blood flow.

Other Resources:

Video: <http://kidshealth.org/en/kids/csmovie.html?WT.ac=en-k-htbw-main-page-c>

Article: <http://kidshealth.org/en/kids/heart.html>