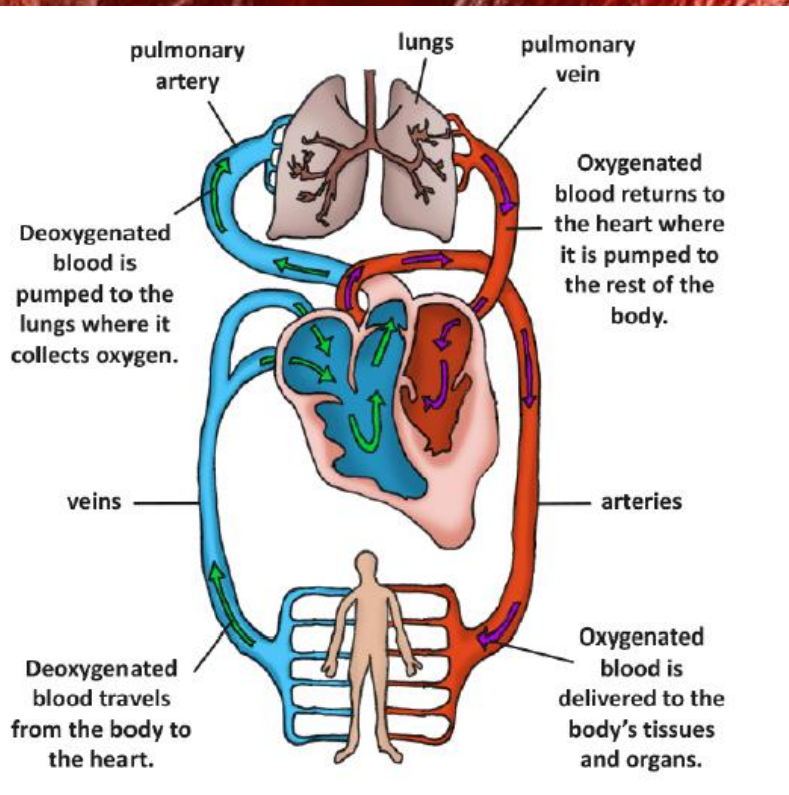


Why is it important to have a healthy heart?

Sticky Knowledge

The Circulatory System.

The body's circulatory system is responsible for transporting nutrients, water and oxygen to the billions of cells all around your body. It also carries away waste, such as carbon dioxide, that the cells produce. It is an amazing system that travels through your entire body connecting all your body cells.



Blood

Blood is made up of four components: plasma, red blood cells, white blood cells and platelets. Each of these components have a different function.

Plasma

Transports nutrients, hormones, and proteins. It is a yellow liquid that makes up about 55% of the body's blood volume.

Red blood cells

Carry fresh oxygen through the body and remove carbon dioxide. Red blood cells make up about 40 to 45% of blood.

White blood cells

Part of the body's immune system, detect and fight viruses and bacteria. There are five major types of white blood cells, and they make up less than 1% of blood.

Platelets

Form clots to stop bleeding. Platelets make up less than 1% of blood.



Blood Groups

A blood group describes the type of blood a person has. Humans have four main blood groups: A, B, AB and O. Each of these groups can also be described as Rhesus positive or Rhesus negative, depending if you have a particular protein in the blood.

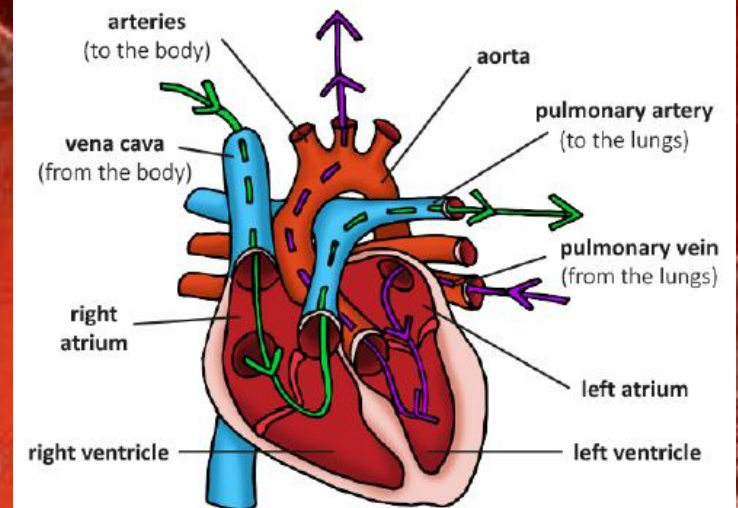
Sometimes, after surgery, because of illness or disease, a person may need a blood transfusion from a donor. It is important that you get blood matched to your blood group.

Key Vocabulary

aorta	The main artery in the circulatory system.
arteries	The tubes that transport the oxygenated blood around the body.
atrium	The two upper chambers of the heart.
capillaries	The smallest of the blood vessels and they connect arteries.
deoxygenated	Refers to the blood that is not carrying oxygen.
nutrients	Substances that are essential for the growth in plants and animals.
oxygenated	Refers to blood that is carrying oxygen,
plasma	A yellow liquid which is the main component of blood.
platelets	Small blood cells that help the body stop bleeding after a cut.
veins	The tubes that carry deoxygenated blood to your heart from the rest of your body.
vena cava	The large vein that carries deoxygenated blood in to the heart.
ventricles	The two main chambers of the heart.

The Heart

The heart is the hardest working muscle in our body. It is responsible for pumping blood around the body, through the circulatory system. It is made up of four chambers: the left and right atrium and the left and right ventricles.



Because it works so hard, it is important that we keep our heart healthy. We can do this by eating a balanced diet and by exercising regularly.