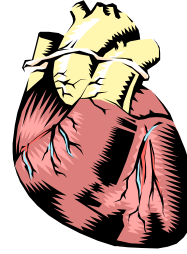


Your Heart



What is your heart?

Your heart is really a muscle. It's about the size of your fist. It is in the middle of your chest, a little bit to the left side. It is very strong and very powerful. The heart's job is to pump blood filled with oxygen and parts of food (nutrients) to the rest of your body. It also brings back the blood filled with garbage (waste parts) that your body needs to get rid of.



How does the heart pump?

The heart fills with blood. Then it squeezes (contracts) to push or pump the blood along. In a usual day, the heart pumps about 2,000 gallons of blood around and around again. It takes about 20 seconds for the heart to pump blood out to your body and back again. Blood is pumped from your heart with oxygen and nutrients for your cells to use. Then it brings back blood with the waste parts to get rid of. On the way, the blood goes through the kidneys to get rid of some of the waste parts. Then the blood comes to the right side of the heart. The blood is pumped from the right side to the lungs, where carbon dioxide goes from the blood to the lungs, where you breathe it out. You breathe in oxygen, which comes into your lungs, and into the blood. Then this blood goes to the left side of the heart, where it is pumped out to the body, and the whole thing starts all over again.



What are the parts of the heart?

The heart is made up of four large areas, called chambers. The two chambers on top are called the atria (ay-tree-ah), one is called an atrium. The two chambers on the bottom are called the ventricles (ven-trick-ulz), one is called a ventricle. Their job is to pump the blood out of the heart. There are one atria and one ventricle on each side of the heart, the right and the left. The septum (sep-tum) is a thick wall of muscle that separates the left side and the right side of the heart.



How does the blood get around?

The heart is attached to blood vessels, which are like pipes. They carry the blood around the body. The ones that carry blood away from the heart (full of oxygen) are called arteries, and the ones that carry blood back to the heart (full of waste) are called veins. There are lots of veins and arteries of all sizes all over your body. Actually, there are miles of blood vessels in your body, enough to wrap around the earth more than two times.



How about the electricity?

Your heart needs electricity to work, just like all the muscles in your body. The heart contracts when an electrical signal tells it to. This signal comes from special cells in your heart. The signal spreads from these cells to all the cells in your heart, and that makes the heart contract, and pump the blood out.

Does the heart make noise?

Your heart makes a "lub-dub" sound with each beat. This sound comes from the valves shutting inside the heart. The first sound (the "lub") is from the mitral and tricuspid valves between the atria and ventricles. The next sound (the "dub") is from the aortic and pulmonic valves that close up after the heart pumps its blood out. You can use a stethoscope to listen to your heart to hear these sounds.

Can you feel your heart work?

Even though your heart is inside you, there is a way to feel it work from the outside. This is called your pulse. You can feel your pulse by lightly pressing on the inside of your wrist, just below your thumb. It is best to use your index or middle finger of your other hand. You will feel a little "bumping" under your skin. This is the blood flowing through the artery in your wrist with every heart beat. You can count how fast your heart is beating by counting how many beats you feel in one minute. The number of beats will be higher when you are exercising, because your heart pumps faster at that time. This is to get more blood to your body because you are using more oxygen and nutrients when you exercise.

What can you do for your heart?

Your heart is an amazing muscle. In fact, you couldn't live without it. To learn more about the things that can cause damage to your heart, read about the Risk Factors for heart disease.

Take good care of your heart and it will take good care of you!