

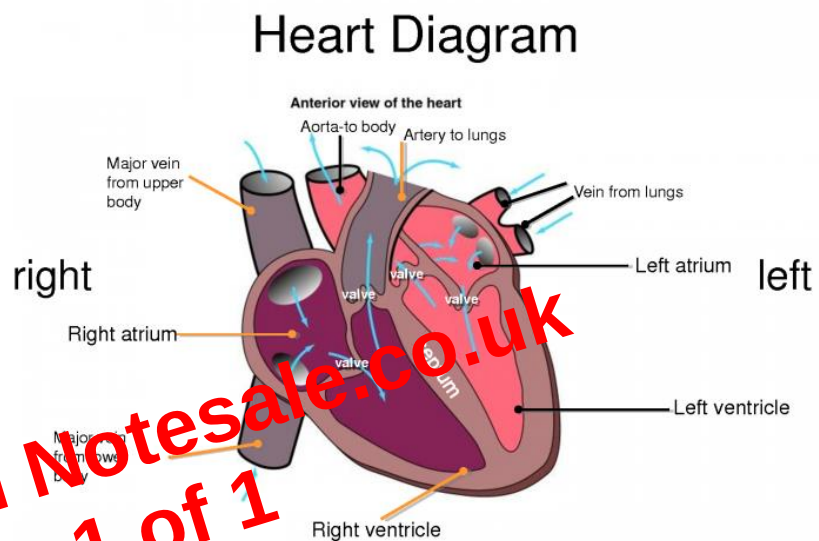
The Heart and Circulatory System

The Circulatory system is made up of the heart, blood vessels and blood. Its function is to transport substances around the body.

The Heart

The Heart is a double pump. The right side of the heart pumps deoxygenated blood, which is high in Carbon Dioxide, but low in oxygen, to the lungs. Here carbon dioxide is diffuses out of the blood and oxygen is collected from the air into the alveoli.

Blood leaving the lungs is therefore rich in oxygen and low in carbon dioxide. It is returned to the left side of the heart, which pumps this oxygenated blood out of the body.



The Heart Muscle is supplied with blood from the coronary arteries.

Sometimes the arteries get blocked with fatty deposits. If this happens in a coronary artery it can cut off blood flow to the heart muscle cells. These cells would not get enough food or oxygen so would die. The person might suffer a heart attack. Surgeons can use a piece of vein from an arm or leg and bypass the narrow or blocked artery. This is called a Coronary Bypass Operation.

The Blood

The main purpose of blood is to transfer substances around the body. Blood is made up of a yellow fluid called Plasma. Food, Carbon Dioxide and other chemicals are dissolved in the plasma. Also, in the plasma are red blood cells, white blood cells and platelets. Red Blood Cells carry oxygen to the rest of the body. White Blood Cells are release antibodies that help your body fight disease. Platelets are fragments of cells that are important in making the blood clot, so a scab forms when you cut yourself and bacteria don't enter your bloodstream.