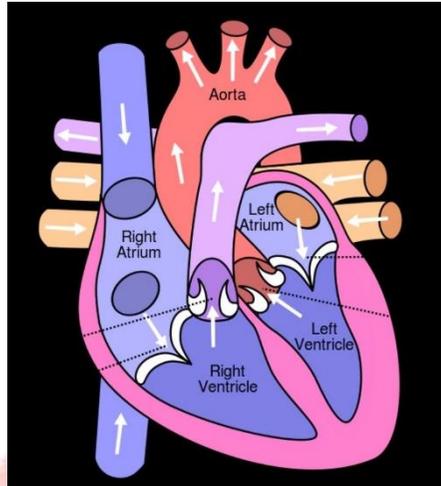


# Blood Heart

## The Heart

The heart is a muscle that is found in the chest cavity between the lungs. It is responsible for pumping blood around the body, through the circulatory system. The heart is made up of four chambers known as the left atrium, right atrium, left ventricle and right ventricle.



The heart is a hardworking organ and it is important to keep it healthy. A balanced diet and regular exercise are vital for heart health. A balanced diet should include a variety of foods, including fruit, vegetables, proteins, carbohydrates and good fats. Eating foods that are high in salt, sugar and fat can be bad for the heart and lead to blockages in the arteries. This means that the heart must work harder to pump blood around the body.

## Blood

Blood is made up of red blood cells, white blood cells, platelets and plasma. Each part is made in a different area of the body and has a special role.

### Plasma

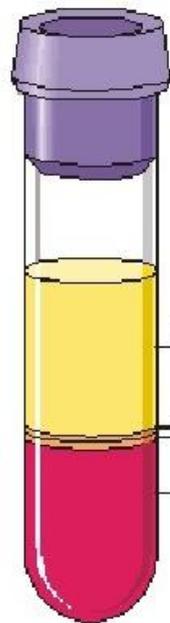
Plasma is the main component of blood. It is the liquid that carries the red blood cells, white blood cells and platelets around the body. It also carries nutrients, hormones and proteins to where they are needed and takes away waste products.

### White Blood Cells

White blood cells protect against illness and disease. They produce antibodies that kill bacteria, viruses, fungi and parasites.

### Red Blood Cells

Red blood cells contain a protein called haemoglobin that carries oxygen from the lungs to different parts of the body. They also take waste carbon dioxide to the lungs to be breathed out.



## Glossary

**Artery** - A blood vessel that carries blood away from the heart to other parts of the body.

**Blood vessel** - A tube that transports blood around the body. Arteries, veins and capillaries are all types of blood vessel.

**Capillaries** - Small, thin walled vessels that connect the arteries and veins.

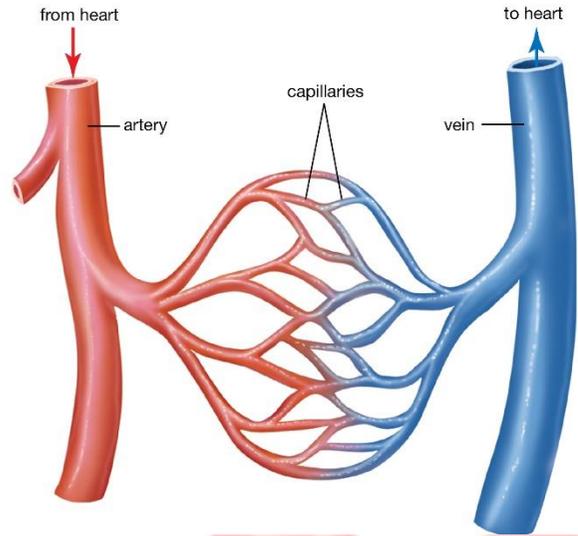
**Hormone** - A chemical that carries messages around the body to control major bodily functions, such as hunger or emotions.

**Immunity** - The body's way of fighting disease or infection.

**Veins** - A blood vessel that transports blood to the heart.

## Blood Vessels

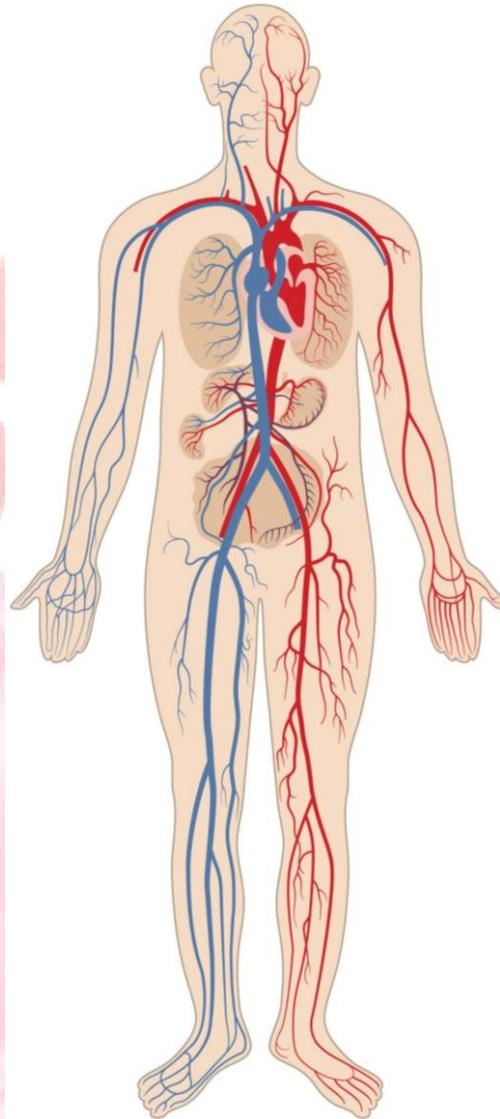
There are three types of blood vessels: arteries, veins and capillaries.



Blood is pumped away from the heart in the arteries. Arteries carry oxygenated blood, except for the pulmonary artery.

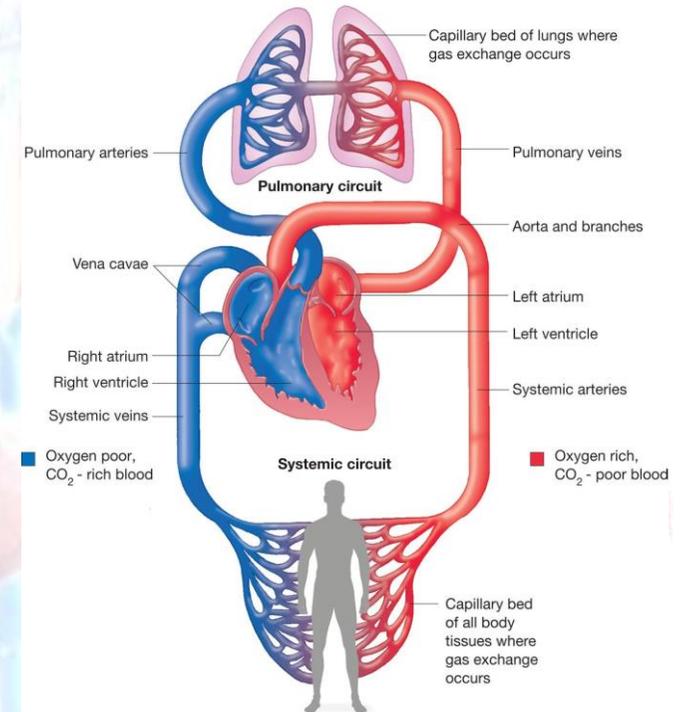
Blood is returned to the heart in the veins. Veins carry deoxygenated blood, except from the pulmonary vein.

The capillaries connect the two types of blood vessel and molecules are exchanged between the blood and the cells across their walls.



## The Circulatory System

The circulatory system is made up of the heart, blood vessels and blood. It is responsible for transporting nutrients, oxygen, water and waste products around the body.



The heart pumps between four and six litres of blood around the body every day. The heart rate, also known as the pulse, is the number of times the heart beats in a minute. The heart pumps faster during exercise to deliver more oxygen around the body.