

The Cardiovascular System

What does your cardiovascular system do?

The **cardiovascular system** delivers nutrients to cells and carries away their wastes. It includes your blood, heart, and blood vessels.

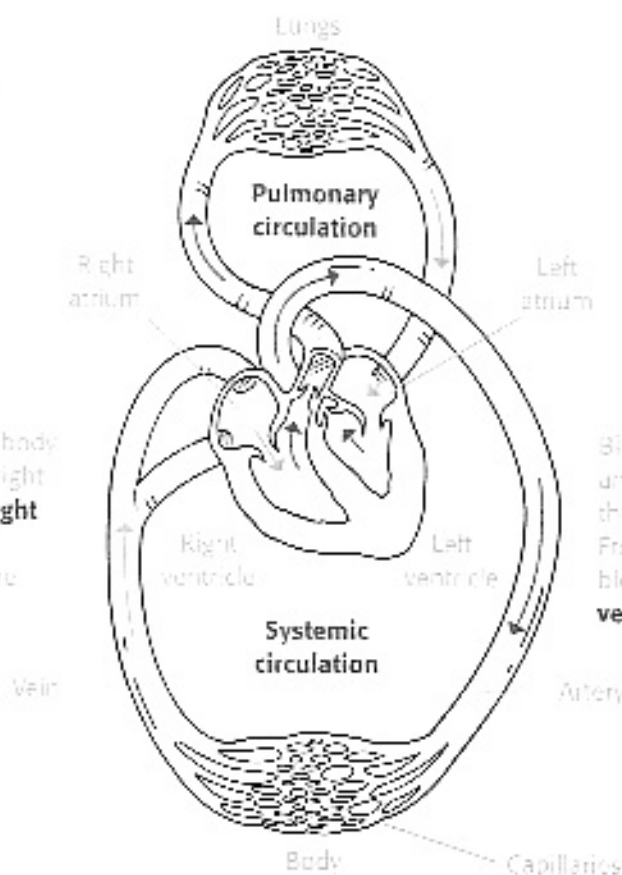
Blood is a tissue made of cells and cell parts floating in a liquid. The liquid is called **plasma**. There are two kinds of blood cells. **Red blood cells** carry oxygen to cells. Cells need oxygen to live.

White blood cells fight germs that invade your body. **Platelets** are cell parts that help blood clot when you are cut.

Oxygen-poor blood from the body enters the **right atrium**. The right atrium pumps blood to the **right ventricle**, which then pumps blood to the lungs through the pulmonary arteries.

How blood flows through the body

The **heart** is a muscular organ that pumps blood through the body in two loops. **Pulmonary circulation** moves blood from the heart to the lungs and back. **Systemic circulation** moves blood from the heart to the body and back. Three types of vessels carry the blood. **Arteries** carry blood from the heart to the body. **Veins** carry blood from the body to the heart. **Capillaries** connect arteries and veins. They have thin walls through which dissolved materials can pass.



Blood gains oxygen in the lungs and returns to the **left atrium** through the pulmonary veins. From there, the oxygen-rich blood is pumped to the **left ventricle** and then to the body.

Show What You Know

Why does blood from the body need to be pumped through the lungs before it is pumped back out to the body?
