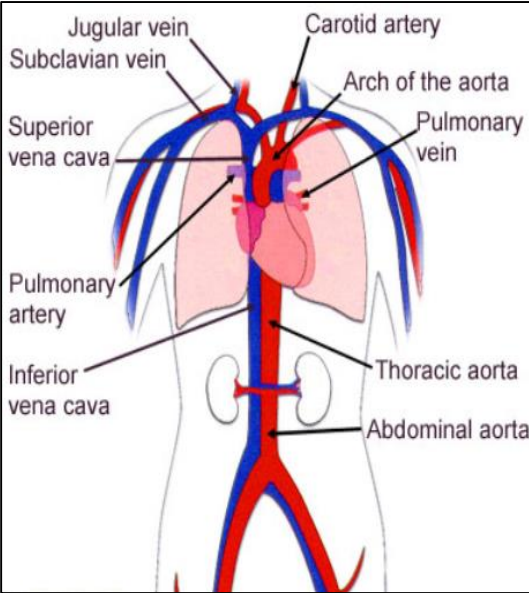


Animals including Humans: *How do the different systems in our body work together?*



- The circulatory system is your body's delivery system. It is made up of your heart, blood and blood vessels.
- The human body needs a constant supply of blood to keep working. Blood delivers oxygen to all of the body's cells - without this, cells would die. The circulatory system gets blood (and the oxygen) all around your body.
- The heart pumps blood to the lungs via the pulmonary artery, where it picks up oxygen. It is then returned to the heart through the pulmonary vein.
- The heart then pumps the oxygenated blood to the rest of the body through the aorta and the other arteries.
- Veins are vessels that bring blood back to the heart.

Key Vocabulary	
arteries	Blood vessels that carry blood away from the heart.
blood	A liquid in the body that transports oxygen, water, nutrients and waste.
blood vessels	Tube-like structures that carry blood around the body. Veins and arteries are two types of blood vessel.
circulatory system	A system that transports substances around the body and includes the heart, blood vessels and blood.
de-oxygenated blood	Where most of the oxygen has already been transferred to the rest of the body.
drug	A chemical that has an effect on your body.
heart	A muscular organ that constantly pumps blood around the circulatory system.
oxygenated blood	Has more oxygen. It is pumped from the heart to the rest of the body.
veins	Blood vessels that carry blood to the heart.

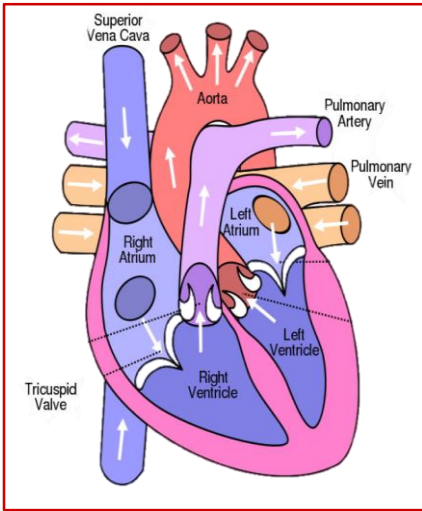


What is the effect of diet, exercise and drugs on the human body?

Top Takeaways

After finishing this topic you should be able to:

- ❑ Identify and describe the components (parts) of blood and explain what each part does.
- ❑ Name three types of blood vessel.
- ❑ Understand the structure and function (what it does) of the heart.
- ❑ Explain how nutrients and water are transported through the body.
- ❑ Discuss how the circulatory system works.
- ❑ Understand the effects of diet, exercise and drugs on the human body.



- The heart is made up of four sections, called chambers. There are two sides to the heart (right and left) each of which have an atrium (at the top) and a ventricle (at the bottom).
- The job of the 'atria' (the word for the two atriums) is to fill with the blood returning to the heart before pushing it to the ventricles.
- The left atrium receives blood from the lungs and the right atrium receives it from the rest of the body.
- The job of the ventricles is to push the blood out of the heart. The left ventricle pushes blood to the lungs and the right ventricle pushes blood to the rest of the body.

Transportation of Water in the Body

Rehydration – water is drunk through the mouth.



Absorption – water is absorbed by the intestines and is carried in the bloodstream.



Transportation – water is taken in blood to different parts of the body.

Excretion – waste water is passed out as urine.