



Key Vocabulary	Definition
Blood Vessels	The tube-like structures that carry blood through tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
Circulatory System	A system which includes the heart, blood vessels, lungs and blood; it transports substances around the body.
Oxygenated Blood	Oxygenated blood has more oxygen which is pumped from the heart to the rest of the body.
Deoxygenated Blood	Deoxygenated blood is blood where most of the oxygen has already been transferred around the body and replaced with carbon dioxide.

The **lungs** and the **heart** are the two **organs** found in the **circulatory system**. When we breathe in, we take **oxygen** into our lungs. The oxygen is absorbed into the blood in our **lungs** through tiny **blood vessels**. Once in the **blood**, it is taken to the **heart** to be pumped around the body.

Respiration happens in the body and the **oxygen** is used up leaving **carbon dioxide** in its place. This **carbon dioxide** is **transported back into the blood** and taken **back to the heart** where it is sent to the lungs to be **oxygenated** again.

Lifestyle is an important factor in keeping our bodies healthy. **Diet, exercise** and **drugs/alcohol** can all have an affect on our health.

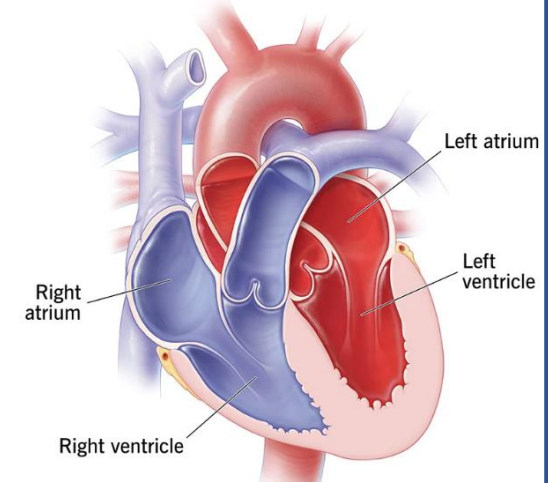
Some **drugs** can help us to **feel better** when we are unwell, but some drugs have **detrimental effects** on our bodies, e.g. cigarettes contain tobacco which causes damage to the lungs whilst paracetamol can provide pain relief.

Exercise helps to maintain **healthy physical and mental health**. It releases healthy hormones and helps to keep vital organs working well.

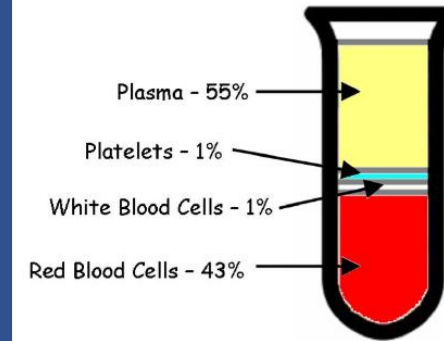
Humans should eat a **balanced diet** comprised of **fruit and vegetables, carbohydrates, dairy, protein, and oils and spreads**. Foods that are high in **fat** or **sugar** should be eaten less often and in small amounts.

The heart is an **important organ** which we need in order to survive! Its main purpose is to **pump blood around the body**. The heart is split into four main chambers: the right atrium, the right ventricle, the left atrium and the left ventricle.

Deoxygenated blood enters the right atrium and passes through a valve into the right ventricle. The blood is then **pumped to the lungs to be oxygenated**. This **oxygenated blood** then travels **back to the heart** and enters the left atrium. It then passes through a valve into the left ventricle. It is then pumped through the aorta to **oxygenate the rest of the body**.



Blood is made up of four components: **red blood cells, white blood cells, plasma and platelets**.



- **Plasma** carries hormones, nutrients and proteins around the body which we need to survive.
- **Platelets** play a major role in blood clotting by plugging holes in injured blood vessels and stopping bleeding.
- **White blood cells** protect the body by killing harmful bacteria and viruses.
- **Red blood cells** carry oxygen around the body and carbon dioxide out of the body.