

# THE CIRCULATORY SYSTEM

Every cell in the body needs *food, water, and oxygen* to survive. In order to meet the needs of all these cells, we have a complex system that circulates the blood around the body; carrying all the nutrients the cells need to do their various jobs!

The circulatory system performs several important jobs. It carries food, water, oxygen to and wastes from all the cells in the body. The circulatory system consists of five main parts:

1. **Blood**: a red liquid composed of red and white blood cells, plasma, and platelets.
2. **Heart**: the muscular pump that pushes blood to the lungs and around the body.
3. **Arteries**: thick tubes that carry blood away from the heart.
4. **Veins**: thinner tubes that carry blood back to the heart.
5. **Capillaries**: tiny blood vessels where nutrients are passed in and out of the cells.

Through the walls of the capillaries, the blood receives food and water from the digestive system, and oxygen from the lungs.

They are then carried to every cell in the body to provide energy in order for them to carry on their work. Every living cell, tissue, and organ will receive the food, water, and oxygen. The cells give back carbon dioxide and wastes back to the blood. The carbon dioxide will be exhaled through the lungs, and the cellular wastes will be cleaned out when the blood passes through the kidneys and liver. These wastes are then expelled from the body.

