



Additional Information

The circulatory system consists of the heart, blood and a vast network of blood vessels. It is responsible for the movement of nutrients, salts, hormones, gases and metabolic waste products around the human body.

The circulatory system does not just function as a means of transporting oxygen and nutrients throughout the body. It can also be used as a thermoregulatory (heating and cooling) system. To cool the body's core temperature, blood vessels in the body's extremities increase in diameter in a process called vasodilation. This process allows more heat to be transferred to the external environment, cooling the body. To increase the body's core temperature, blood vessels in the body's extremities decrease in diameter in a process called vasoconstriction. As a result, less heat is lost to the external environment and the body is warmed as a result.

Blood is composed of red blood cells, white blood cells, platelets and plasma. Red blood cells are the cells that bind to oxygen and transport it around the body. White blood cells are part of the immune system and help protect the body from disease and viruses. Platelets are cells that help the blood clot and prevent excessive bleeding. These three cell types are suspended in plasma, a fluid composed mostly of water.