

Brian Fuller

Instructor Sue Hawes

Pharmacology & Physiopathology

July 27, 2020

Blood

Blood is responsible for transporting oxygen and removing carbon dioxide. It carries nutrients, ions, water, hormones, and enzymes. It also carries away the waste products. Blood also regulates the pH and temperature of the body.

Blood is composed of plasma and water. Plasma proteins in blood include albumin, globulin, and fibrinogen. Fibrinogen is an essential component for blood clotting. Elements known as formed elements include red blood cells, leukocytes, and platelets.

Red blood cells have no nucleus and do not divide. Therefore, they only live for 120 days. Red blood cells carry oxygen to all the cells of the body. They also carry away carbon dioxide.

There are five types of white blood cells, three granular and two non-granular. The granular cells include neutrophils, eosinophils, and basophils. Neutrophils destroy bacteria by generating lysosomes. Eosinophils release histamines that combat irritants. Basophils release heparin, histamines, and serotonin to combat allergic reactions.

Lymphocytes produce antibodies and are crucial to the body's immune system. Platelets initiate the clotting process.