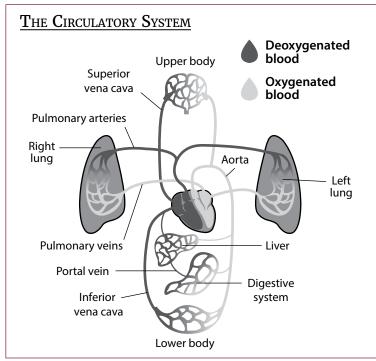
Anatomy & Physiology: THE CARDIOVASCULAR SYSTEM



► The **circulatory system** carries nutrients, gases, and hormones in blood throughout the body.



THE HUMAN HEART cava from upper To upper body hody To lower body Pulmonary artery Pulmonary artery to right lung to left lung Pulmonary veins from left lung Pulmonary veins Mitral valve right lung Pulmonic valve Aortic valve Tricuspid valve Right ventricle Inferior Aorta to lower vena cava from body lower body

TERMS

aorta: artery from which oxygenated blood is pumped from the heart to the rest of the body

arteries: large, firm vessels that transport oxygenated blood throughout the body from the heart

atria: chambers of the heart that receive the blood

blood: fluid composed of plasma, red blood cells, white blood cells, and other molecules; delivers nutrients and gases to body locations and removes waste

blood pressure: pressure exerted on the vessels of the cardiovascular system as the heart pumps blood throughout the body

capillaries: small vessels where oxygen, nutrients, and other materials are exchanged with tissue

diastole phase: period of ventricle relaxation

heart: muscular organ that continuously pumps oxygenated blood throughout the body

left atrium: chamber of the heart that receives oxygenated blood from the lungs

left ventricle: chamber of the heart that pumps oxygenated blood to the rest of the body

mitral valve: separates left atrium from left ventricle

plasma: fluid that transports red and white blood cells as well as other molecules in the blood

pulmonary circuit: term for blood flow from the lungs to the heart

red blood cells (hemoglobin): transport oxygen in the blood

right atrium: chamber of the heart that receives oxygen-poor blood from throughout the body

right ventricle: chamber of the heart that receives oxygenpoor blood from the right atrium and pumps it out to the lungs

systemic circuit: term for blood flow from the heart to the rest of the body

systole phase: period of ventricle contraction

tricuspid valve: separates right atrium from right ventricle

valves: prevent blood from flowing backwards from the ventricle to the atrium

veins: vessels that carry deoxygenated blood back to the heart from the rest of the body

ventricles: chambers of the heart that pump blood to the body and lungs