

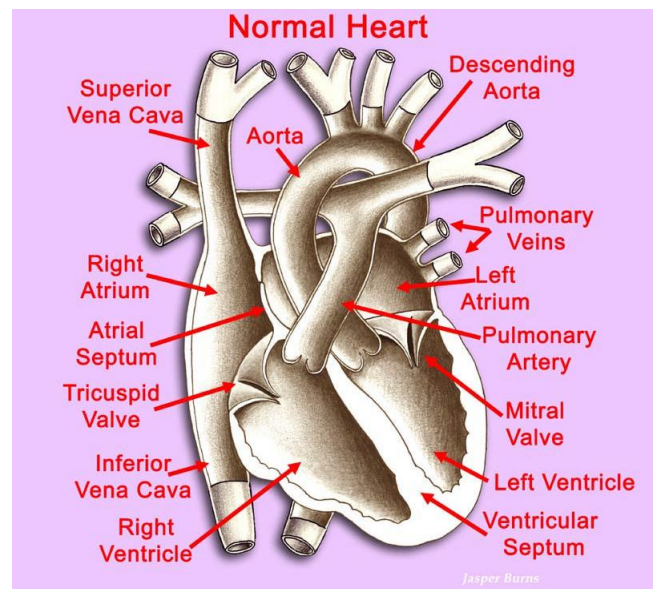
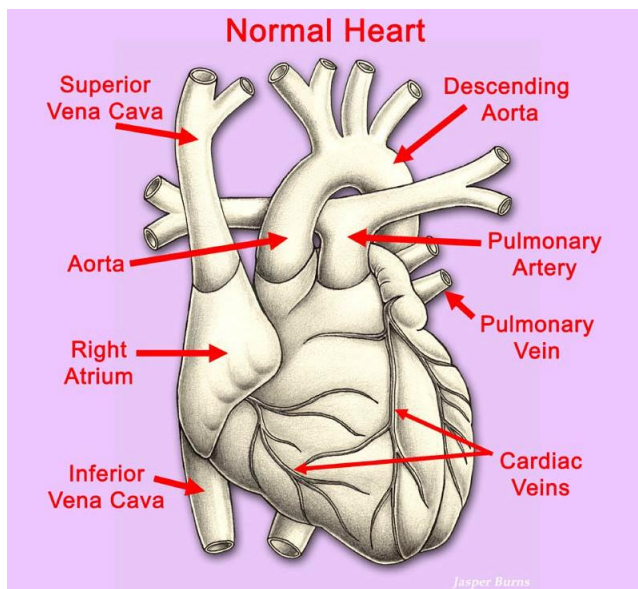
## The Normal Heart



### Anatomy

The normal human heart is a hollow muscular organ that receives blood from the veins and pumps it into the arteries. The heart of an average adult beats more than 100,000 times per day - a child's heart even more.

The heart is divided by muscular walls into right and left halves, each of which is subdivided into two chambers. The upper chambers, or atria (singular atrium), receive blood and pass it on to the lower chambers, or ventricles, which pump it out of the heart to the lungs (through the pulmonary artery) and body tissues (through the aorta).



### Circulation

The left atrium receives freshly oxygenated (or red) blood from the lungs. This blood passes through the mitral valve and enters the left ventricle, which is the heart's main pumping chamber. It propels the red blood through the aorta to the arterial system, which carries it to the body's tissues.

After delivering its supply of life-giving oxygen and picking up waste materials along the way, the blood (now known as blue, deoxygenated, or oxygen-depleted) enters the venous system and is carried back to the heart. The blood from the lower body enters the right atrium through the vein known as the inferior vena cava; the blood from the upper body enters the right atrium through the superior vena cava.

The right atrium passes the blood through the tricuspid valve into the right ventricle, which pumps it into the pulmonary artery. The pulmonary artery divides into two branches, which carry the blood to the lungs. After releasing carbon dioxide as waste material and absorbing a fresh supply of oxygen, this blood is carried back to the left atrium of the heart by the pulmonary veins and the cycle continues.

