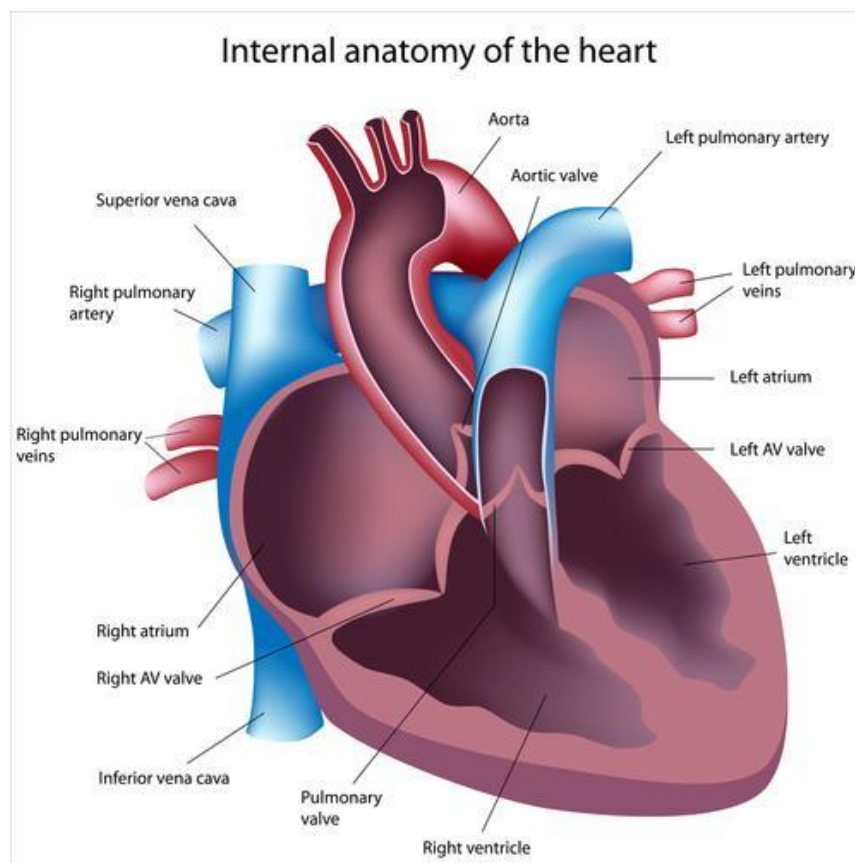


EXPLAINING HOW THE HEART WORKS



The blood enters the right atrium, one of the upper receiving chambers of the heart. Blood is pumped through the tricuspid valve into the right ventricle. The right and left ventricles are larger than the right and left atria because they are responsible for the pumping action of the heart. The right ventricle pumps de-oxygenated blood away from the heart through the T-shaped pulmonary artery. By the time blood arrives in the lungs the body has taken out most of the oxygen and made use of it for tissue function. In a healthy heart, the blood flows efficiently through the heart to the lungs, which re-oxygenate the blood and return it to the heart through the pulmonary vein. Oxygenated blood enters the heart through the left ventricle. The left ventricle is encased in thicker cardiac muscle than the right side because it has to pump oxygenated blood around the entire body via the aorta, the largest artery of the body. The cardiac cycle relies on the efficiency of the four valves between the atria, the ventricles and the pulmonary blood vessels. These valves open to let in sufficient blood flow to fill each heart chamber and then shut to prevent the backflow of blood. Irregularities in blood flow because of blockages in the blood vessels can lead to heart disease.

TEST YOUR KNOWLEDGE

- What is the cardiac cycle?
- What does the heart do during a heartbeat?
- What symptoms does a person have if there is not enough blood flow through the heart?
- Why might medical staff in the Cardiac Unit need to explain the cardiac cycle to their patients?
- Explain how the heart functions. (ROLE PLAY)