

The left ventricle is thicker than the right because it needs to pump blood around the rest of the body and the valves stop the backflow of blood. When a chamber contracts, the pressure inside it increases. The coronary arteries supply the heart with blood – it needs a rich blood supply because it has a high respiration rate and it is continually contracting, so it needs a lot of oxygen and glucose mapillary muscle and cardiac muscle are found in the heart. The cardiac muscle is my get ic which means it initiates its own heartbeat.

The atrioventricular valve **opens** when the press **registreatrium** is **higher** than in the ventricle and **closes** when the pressure in the **ventricle s higher** than in the atrium.

The semilunar valves one in the pressure in the **centricle** is **higher** than in the arteries and **closes** when the present the **arteries** of ign of an in the ventricles.



Atrial and Ventricular Diastole

Blood flows into the atria and there is low pressure in the atria, helping to draw blood into the heart. The atrioventricular valves are closed. As the ventricles begin to relax, the semilunar valves close, causing the second heart sound, 'dub'.

Atrial Systole

The pressure in the atria increases as blood is drawn in, so the atrioventricular valves are pushed open. The atria contract simultaneously, forcing the blood into the ventricles.

Ventricular Systole

The ventricles contract, increasing the blood pressure in the ventricles so the atrioventricular valves close. This causes the first heart sound, 'lub'. Blood is forced into the arteries as the semilunar valves open.