

Human Heart: Word Heart is derived from Greek word Cardio means heart, which is a muscular pumping organ.

Location: It is located in the chest cavity between lungs behind the sternum. It is the left side of thoracic cavity is mediastinum.

Size: Human heart is about size of clenched fist.

Weight: Its mass is round about 300 g.

Shape: It is Cone shaped with upper broad base and lower pointed apex.

Protection: Heart is sensitive organ, thus, well protected by various organs.

Ribcage: Heart is protected by ribcage.

Pericardium: Heart is protected by double membrane called pericardium.

Pericardial fluid: The cavity between two pericardium is called pericardial cavity which is filled by pericardial fluid. It acts as shock absorber and limitise heart beats during contraction. It reduces friction during heart movements.

Heart walls: Heart walls are made of special muscles called cardiac muscles.

Cardiac muscles:

- i. Epicardium (outer)
- ii. Myocardium (Middle)
- iii. Endocardium (inner)

Heart Chambers: Human heart is consists of 4 chambers i.e. 2 atria & 2 ventricles.

Atria/ Auricles: Atria are thin walled upper chambers of the heart, both atria are separated by inter auricular septum. The right auricle receives deoxygenated blood from anterior part (head region) through superior venacava and from posterior part through inferior venacava while left auricle receives oxygenated blood from lungs through pulmonary vein.

Ventricles: Ventricles are comparatively thick walled lower chambers of heart. Right ventricles receives deoxygenated blood from right atrium & left ventricle receives oxygenated blood from left atrium which is then pumped into lungs & to the whole body through pulmonary artery & aorta respectively. Both the ventricles are separated by inter ventricular septum.

Heart valves: Valve or sphincter is any structure which normally prevent back flow. There are three types of heart valves.

Tricuspid valve: The right auricle opens into right ventricles through aperture known as right auricular ventricular aperture and it is guarded by tricuspid valve. It is made of three flaps of connective tissues. It allows only one way blood flow form right auricle to right ventricle.

Bicuspid Value: The left auricle opens into left ventricle through left auricular ventricular aperture which is guarded by bicuspid value. It is made of two flaps of connective tissues. It also known as mitral valve. It allows only one way blood flow form left auricle to left ventricle.

Semilunar value: It is located at the base of superior, inferior venacava, pulmonary artery pulmonary vein and aorta. Semilunar valves are structurally half-moon shaped.

Blood supply: Blood is supplied to heart muscles through coronary arteries.

