

Human Heart:

The heart is a triangular shaped, hollow muscular pumping organ.

- It is situated in the left side in between the two lungs.
- Heart consists of special involuntary muscles.
- Heart is surrounded by a thin membrane which is called pericardium.

The heart of the wall consists of three layers, such as—

(1) Epicardium:

- ✓ Basically it consists of connective tissue.
- ✓ This layer is covered with epithelial tissue.
- ✓ Fat bodies remain scattered on it.

(2) Myocardium:

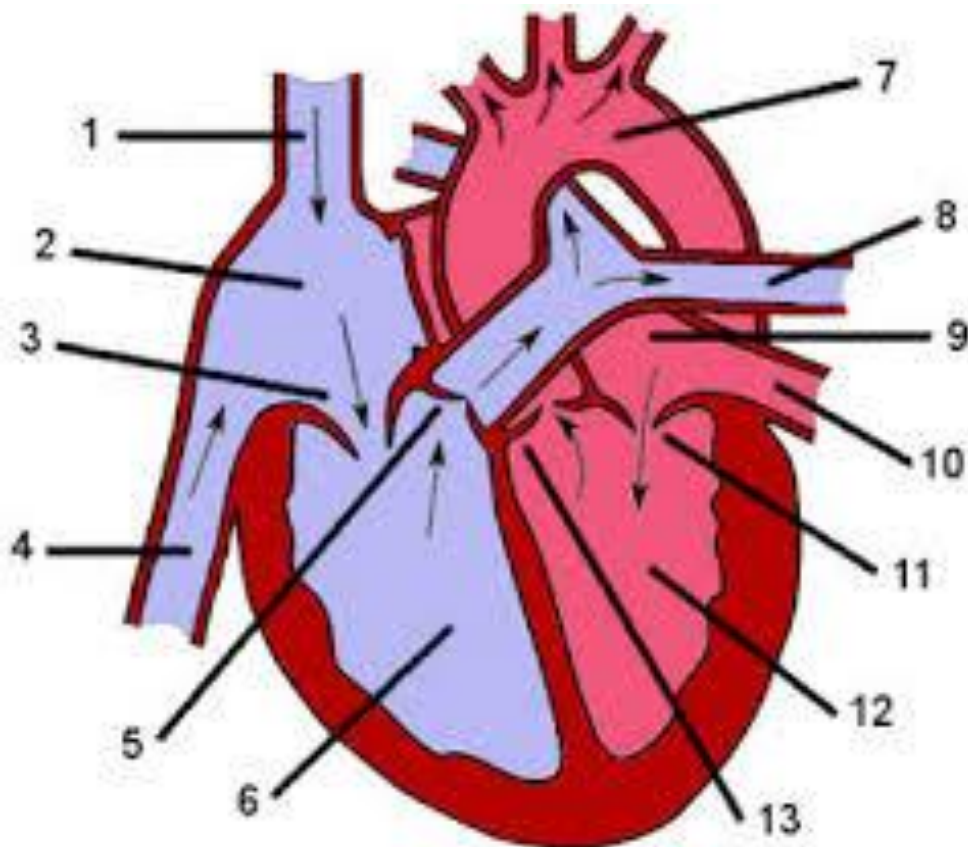
- ✓ This layer is in between epicardium and endocardium.
- ✓ It consists of strong involuntary muscles.

(3) Endocardium:

- ✓ It is the inner most layer.
- ✓ The chambers of the heart are surrounded by this the endocardium.
- ✓ This layer also covers the valves.
- ✓ The inner part of the heart is hollow and four chambered.
- ✓ The upper chambers are right and left auricle or atrium and lower chambers are right and left ventricles.
- ✓ The right auriculoventricular aperture guarded by a tricuspid valve made up of three flaps.
- ✓ Left atrium and ventricle is guarded by a bicuspid value made up of two flaps.
- ✓ The opening of the aorta and the pulmonary artery is guarded by valves called semilunar valves allow the transport of blood in one direction and prevents the back flow of blood.

Q. Select the names of the parts of the heart from the box below and write next to the number.

Pulmonary artery, Aorta, Superior vena cava, Left atrium, Semilunar valve, Right ventricle, Inferior vena cava, Right atrium, Bicuspid valve, Left ventricle, Tricuspid valve, Pulmonary vein



Some interesting facts about human heart:

There are numerous interesting facts about human heart which we are not aware of. Some facts about human heart are listed in the points below.

Fact No.-1

A human heart beats about 1,15,000 times each day, pumps about 2,000 gallons of blood every day. The average size of an adult heart is the size of our two hands clasped together and a child's heart is about the size of a fist.

Fact No.-2

On an average, our heartbeats 70 to 72 times per minute, 100,000 times per day, 3,600,000 times per year, and 2.5 billion times in a complete lifetime.

Fact No.-3

According to the records, the symptoms of cardiac diseases and heart attack varies between men and women. The reason behind these may be the risk factors.

Fact No.-4

The woman's heart pumps faster than a man's, and women's are more prone to cardiac diseases.

Fact No.-5

Researchers have found evidence that the heart diseases are 3,000 years old and was found in Egyptian mummies.

Fact No.-6

Heart cancer is very rare compared to other cancer because the heart cells stop dividing in its early age.

Fact No.-7

The right side of our heart, pumps deoxygenated blood into our lungs and left side of our heart pumps oxygenated or oxygen-rich blood from our lungs to different parts of our body.

Fact No.-8

The heartbeat which we all can hear is caused by the opening and closing of the heart valves.

Fact No.-9

The heart rate usually decreases when we are sleeping, which varies between 40 to 60 bpm—beats per minute. This is mainly because of the slow body's metabolism.

Fact No.-10

During stress, women's heart pumps more blood, her pulse rate increases. In the case of man, the arteries of his heart contracts, raising his blood pressure.

Fact No.-11

As heart has its own electrical system, it helps in controlling the rhythm of our heart and beating even after separation from the body, with sufficient oxygen supply.

Fact No.-12

In the entire animal kingdom, whales are the mammal with the largest heart weighing about 180 tons and about 30 m its length.

Fact No.-13

Eating dark chocolate every day and by maintaining a balanced diet and a healthy lifestyle can reduce the risk of heart disease by one-third.

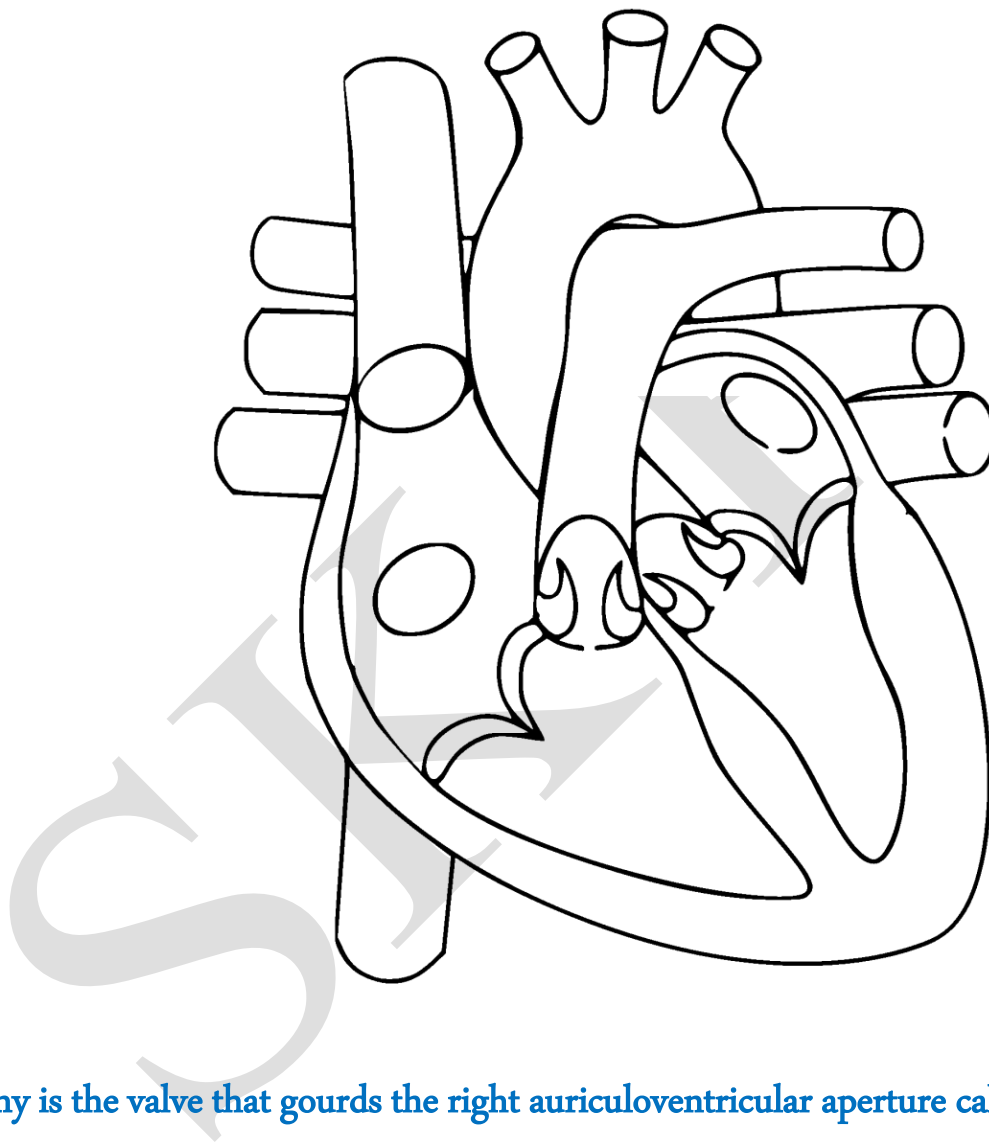
Fact No.-14

The heart pumps blood through its arterial system to almost all the seventy-five trillion cells. Corneas, the transparent front part of the eye is the only part in the entire human body with no blood supply.

Fact No.-15

On an average, human heart pumps around 1.5 million barrels of blood during the lifetime which is enough to fill about 200 train tank cars.

Q. In the picture below, identify and write the different parts of the heart.



Q. Why is the valve that guards the right auriculoventricular aperture called a tricuspid valve?

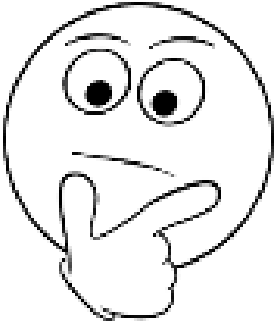
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Q. Draw a figure of human heart and identify the following parts.

Pulmonary artery, Aorta, Superior vena cava, Left atrium, Semilunar valve, Right ventricle, Inferior vena cava, Right atrium, Bicuspid valve, Left ventricle, Tricuspid valve, Pulmonary vein



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