**The Human Heart**

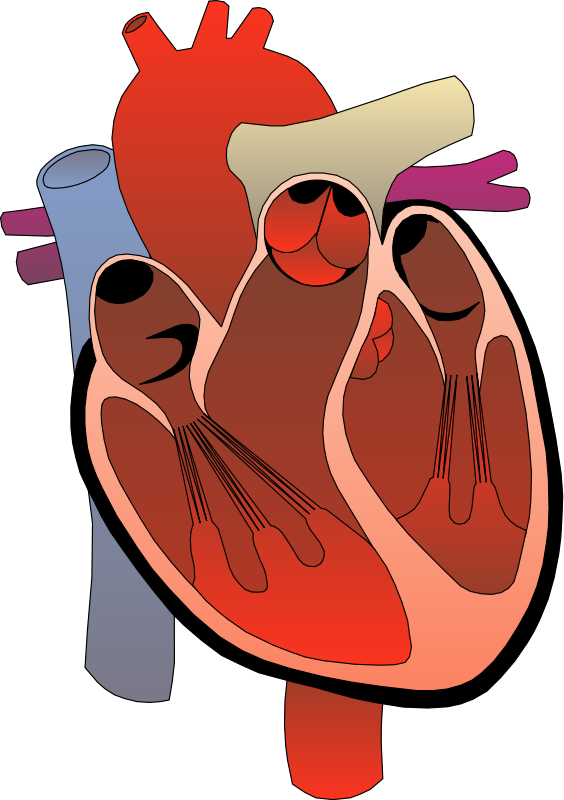


Table of Contents

[**1.** **About:-** 3](#_Toc70616831)

[**2. Exterioir parts of the heart:-** 3](#_Toc70616832)

[**i.** **Aorta:-** 3](#_Toc70616833)

[**II.** **Superior vena cava:-** 4](#_Toc70616834)

[**III.** **Left Pulmanary veins:-** 4](#_Toc70616835)

[**IV.** **Left Pulmanary veins:-** 4](#_Toc70616836)

# **About:-**

The human heart is an organ that pumps blood throughout the body via the circulatory system, supplying oxygen and nutrients to the tissues and removing carbon dioxide and other wastes.

* The four main functions of the heart are:-
* Pumping oxygenated blood to the other body parts.
* Pumping hormones and other vital substances into different parts of the body.
* Receiving deoxygenated blood and carrying metabolic waste products from the body and pumping it to the lungs for oxygenation.
* Maintaining blood pressure.

# **2. Exterioir parts of the heart:-**

## **Aorta:-**

The aorta is the largest artery in the body. The aorta begins at the top of the [left ventricle](https://www.medicinenet.com/image-collection/heart_detail_picture/picture.htm), the heart's muscular pumping chamber. The heart pumps blood from the left ventricle into the aorta through the [aortic valve](https://www.medicinenet.com/heart_disease_pictures_slideshow_visual_guide/article.htm). Three leaflets on the [aortic](https://www.medicinenet.com/heart_disease_pictures_slideshow_visual_guide/article.htm) valve open and close with each heartbeat to allow one-way flow of blood.

The aorta is a tube about a foot long and just over an inch in diameter. The aorta is divided into four sections:

* The [ascending aorta](https://www.medicinenet.com/heart_disease_pictures_slideshow_visual_guide/article.htm) arises
* The aortic arch curves over the heart
* The descending thoracic aorta
* The abdominal aorta

## **II. Superior vena cava:-**

The superior vena cava is very important for the function of the cardiovascular system since it largely contributes to the input of blood to the right atrium. Any hypertensive process in the right half of the heart or the pulmonary circulation retrogradely affects both superior and inferior venae cavae. This is important since the veins are not adjusted to high pressures, which can result in forming an aneurysm or even rupture of the wall of the SVC.

## **III. Left Pulmanary veins:-**

Within the body, there are a total of four pulmonary veins, and all of them connect to the left atrium of the heart. The heart pumps oxygen-depleted blood into the lungs via the pulmonary arteries. Once the blood has been oxygenated, it returns to the heart via the pulmonary veins. Then, the heart circulates this newly oxygenated blood throughout the body. In this way, pulmonary veins are different from other veins in the body, which are used to carry deoxygenated blood from the rest of the body back to the heart. The left pulmonary veins connect with the left lung, and the lungs themselves are filled with hollow air sacs called alveoli. This is where oxygen is removed from inhaled air. This also works as a gas exchange. Oxygen enters the blood while carbon dioxide leaves the blood stream. This carbon dioxide is then exhaled out of the body.

## **IV. Inferior vena cava :-**

The inferior vena cava is formed by the coming together of the two major veins from the legs, the common iliac veins, at the level of the fifth lumbar vertebra, just below the small of the back. Unlike the superior vena cava, it has a substantial number of tributaries between its point of origin and its terminus at the heart. These include the veins that collect blood from the muscles and coverings of the loins and from the walls of the abdomen, from the reproductive organs, from the kidneys, and from the liver. In its course to the heart the inferior vena cava ascends close to the backbone; passes the liver, in the dorsal surface of which it forms a groove; enters the chest through an opening in the diaphragm; and empties into the right atrium of the heart at a non-valve opening below the point of entry for the superior vena cava.