



Body System: Cardiovascular

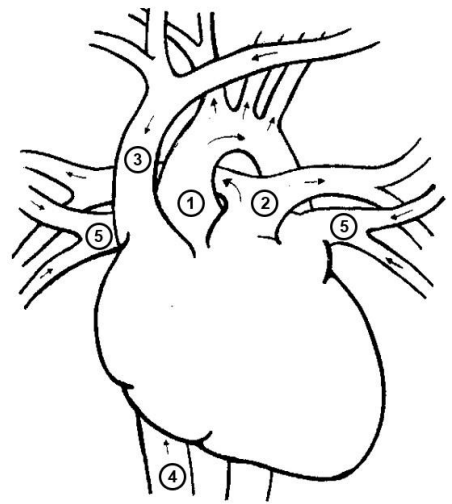
The heart is a very strong muscle that pumps blood through the **arteries** to all parts of the body (Picture 1). Blood comes back to the heart through the **veins**. It is pumped to the lungs where it picks up oxygen.

Major arteries coming from the heart:

- Aorta (1) – Large artery that pumps blood to the head, arms, and body.
- Pulmonary artery (2) – Pumps blood to the lungs.

Major veins going to the heart:

- Superior vena cava (3) – Large vein that brings blood from the head and arms back to the heart.
- Inferior vena cava (4) – Vein that returns blood to the heart from the legs and lower body.
- Pulmonary veins (5) – These veins bring oxygen-rich blood back to the heart from the lungs.



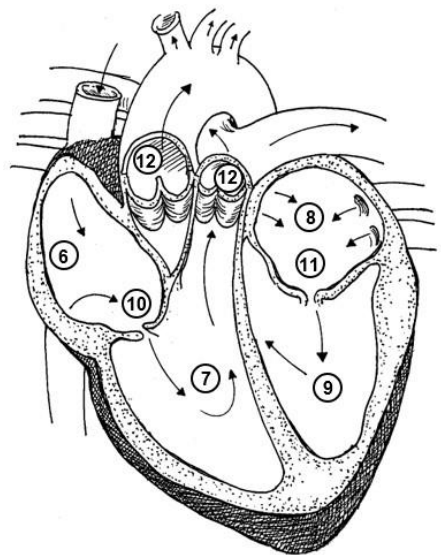
Picture 1 The veins and arteries that carry blood to and from the heart

Inside the Heart

Chambers

There are 4 chambers in the heart:

- Right atrium (6) – Blood comes from the body into this chamber.
- Right ventricle (7) – Blood flows from the right atrium into this chamber. Then it is pumped through the pulmonary arteries to the lungs.

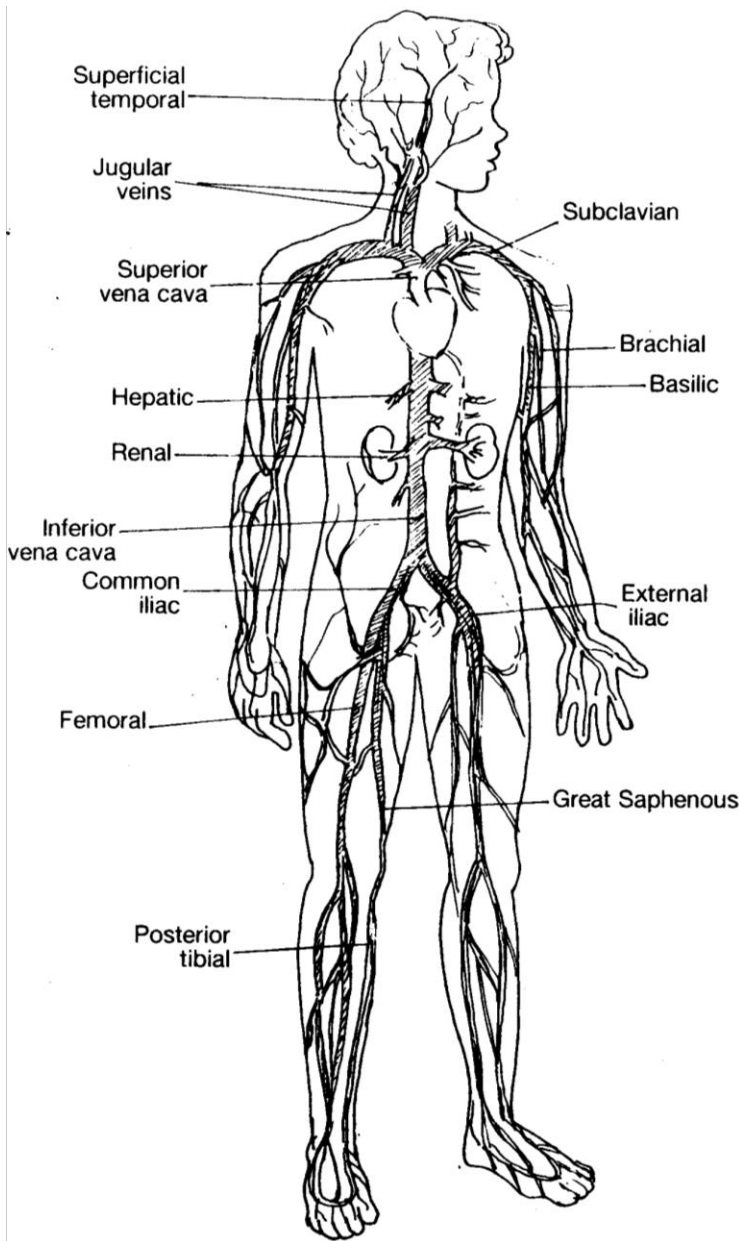


- Left atrium (8) – Oxygen-rich blood flows from the lungs into this chamber.
- Left ventricle (9) – Blood flows from the left atrium into this chamber. Then it is pumped through the aorta to the body.

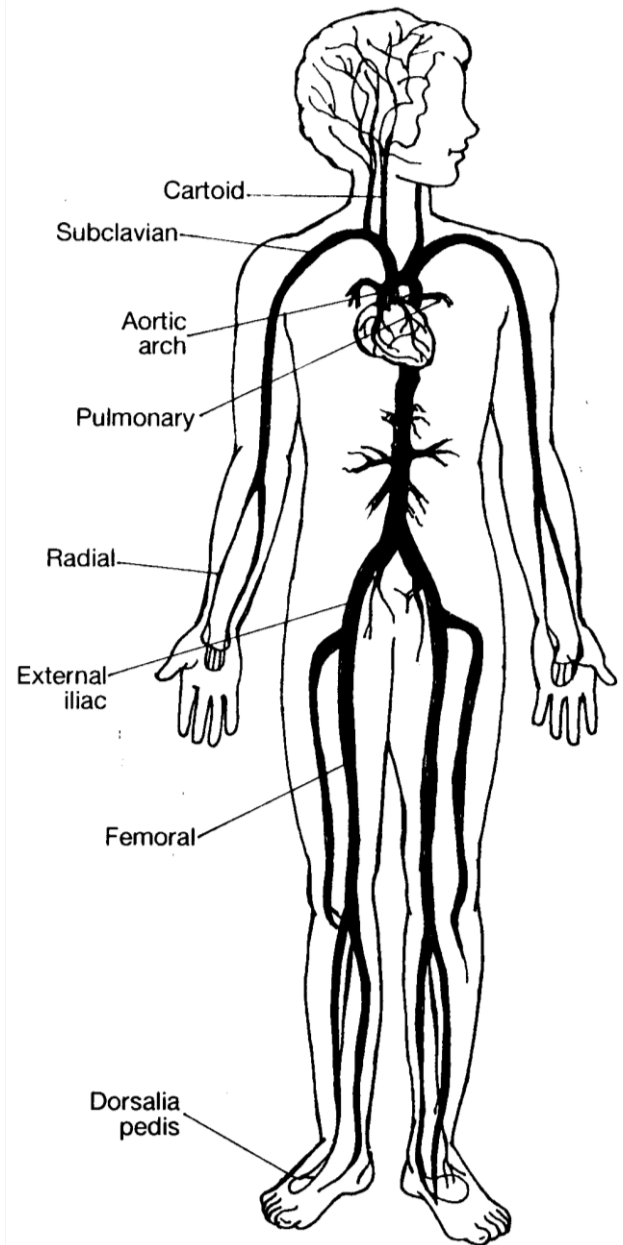
Valves

As blood goes through the heart, 4 valves open and close:

- Tricuspid valve (10) – Opens to let blood go from the right atrium to the right ventricle.
- Mitral valve (11) – Opens to let blood flow from the left atrium to the left ventricle.
- Pulmonary and aortic valves (12) – Open to let blood flow to the lungs and body.



MAJOR VEINS



MAJOR ARTERIES