Body System: Cardiovascular

Blood Flow through the Heart

The heart is a very strong muscle that pumps oxygen-rich 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.

- The major arteries coming from the heart are:
  1. The aorta - This large artery pumps blood to the head, arms, and body.
  2. Pulmonary artery - This artery pumps blood to the lungs.

- The major veins going to the heart are:
  5. Superior vena cava - This large vein brings blood from the head and arms back to the heart.
  6. Inferior vena cava - This vein returns blood to the heart from the legs and lower body.
  7. Pulmonary veins - These veins bring oxygen-rich blood back to the heart from the lungs.

Inside the Heart

The heart has four sections, called chambers. These chambers are:

  8. Right atrium - Blood comes from the body into this chamber.

  9. Right ventricle - Blood flows from the right atrium into this chamber and then is pumped through the pulmonary arteries to the lungs.

  10. Left atrium - Oxygen-rich blood comes from the lungs into this chamber.
Inside the Heart, continued

11. **Left ventricle** - Blood flows from the left atrium into this chamber and then is pumped through the aorta to the body.

As blood goes through the heart, the valves open and close. The valves of the heart are:

12. **Tricuspid valve** - Opens to let blood go from the right atrium to the right ventricle.
13. **Mitral valve** - This valve opens to let blood flow from the left atrium to the left ventricle.
14. **Pulmonary and aortic valves** - These valves open to let blood flow to the lungs and rest of the body.