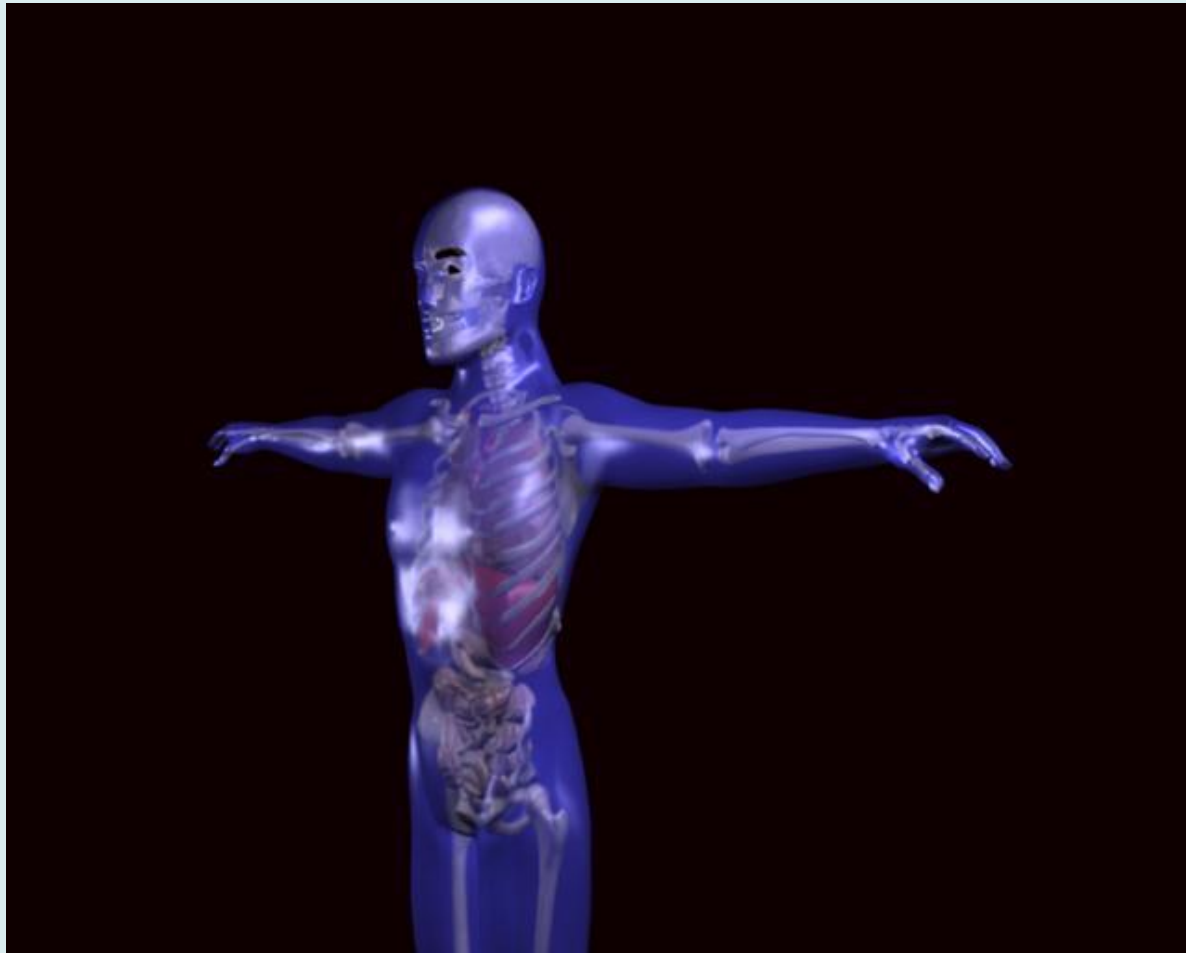
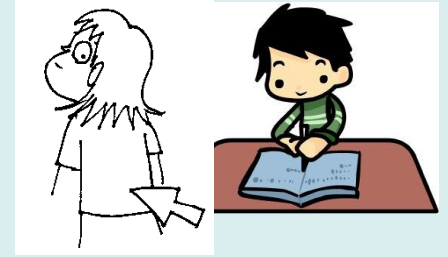


Organ Systems



Lesson 17

Lesson Starter



After the stomach where will food go to be digested?

Small intestine.

Name 2 substances that are present in the stomach to aid digestion.

Acid and enzymes.

Explain what digestion is.

Breakdown of large food molecules to small food molecules.

Learning Intention



Circulation and blood vessels

- Heart
- Circulation
- Blood vessels

Success Criteria



If this is a successful lesson you should be able to:

- Identify the circulatory system and the major organs involved.
- State what the heart is made of and what its function is.
- State the function of the three types of blood vessels

Thinking Skills



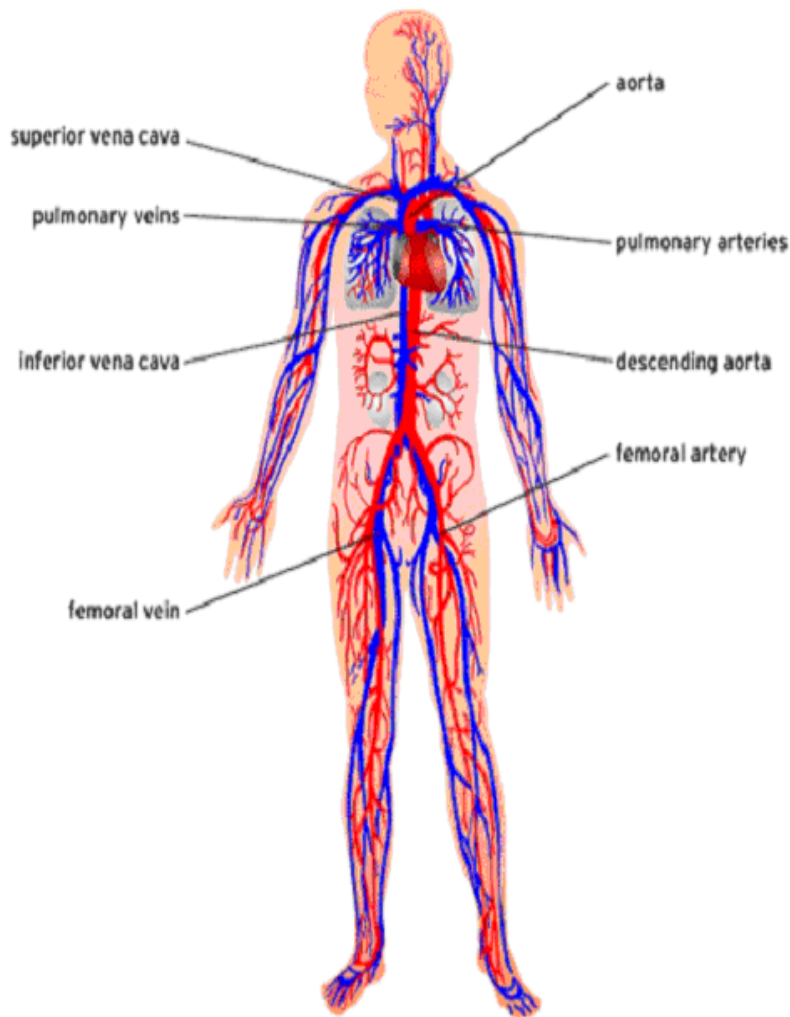
REMEMBERI
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The Circulatory System



The Heart and Blood vessels are part of the circulatory system.

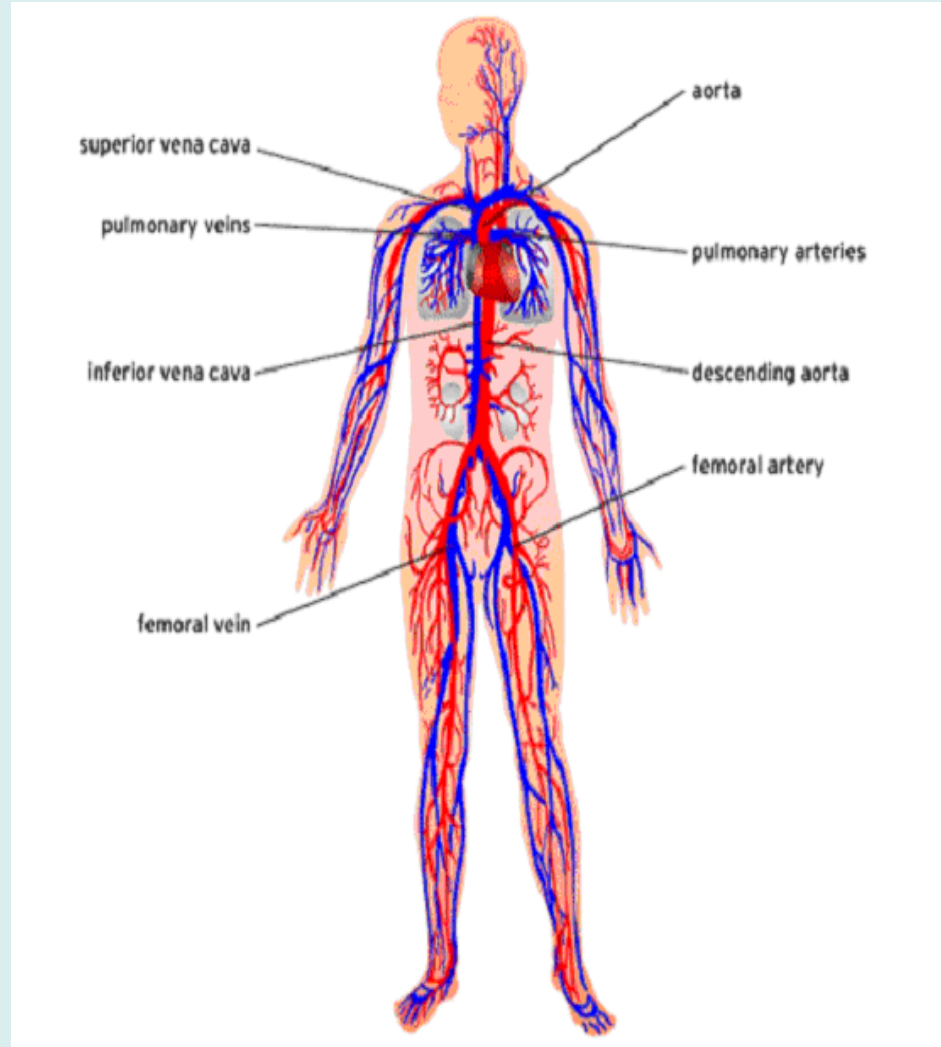
Blood carries oxygen and nutrients **to** the body's cells, and waste products **away** from them.



The blood vessels in your body

Red shows
oxygen rich blood

Blue shows
oxygen poor blood

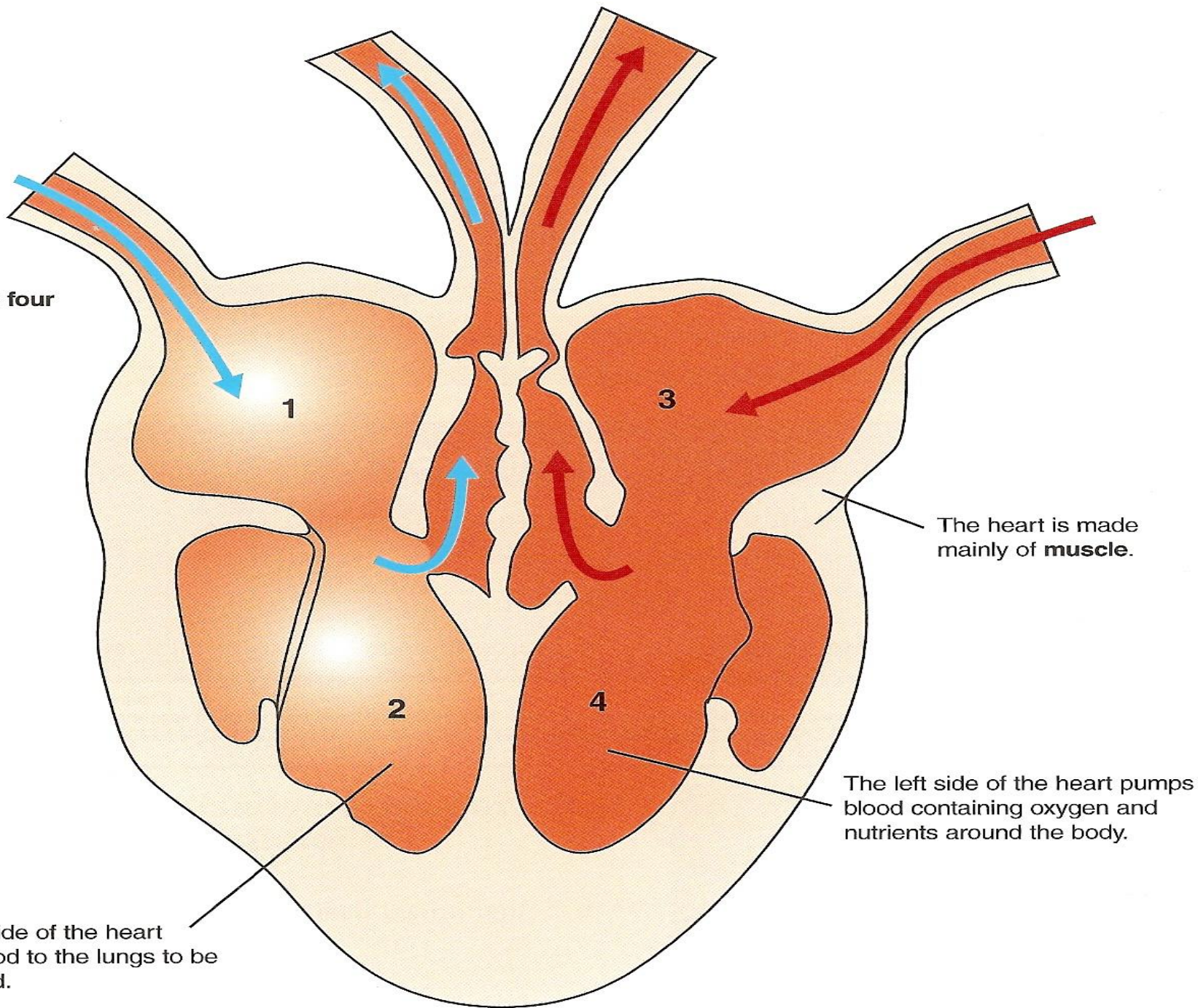


Heart



The Heart is made of muscle, its function is to pump blood around the body.

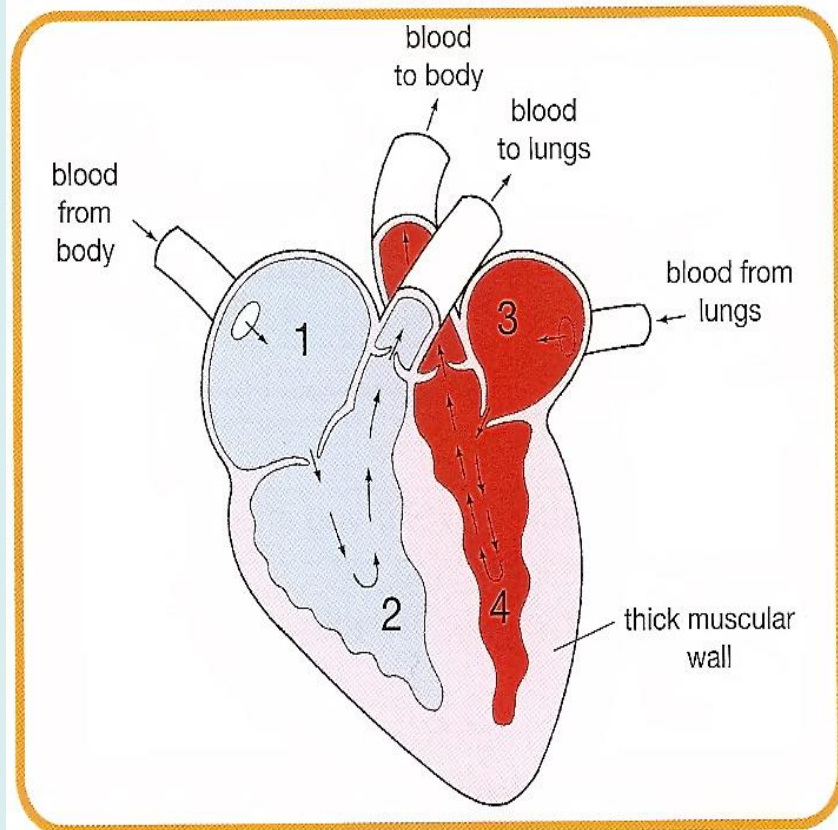
The heart has **four** chambers.



Valves in the Heart



Activity 14



- There are _____ inside the heart
- Each valve _____ to allow blood to pass in the correct direction
- Valve _____ to prevent the blood flowing in the wrong direction

Heart beat sounds



The sounds of valves opening & closing are heard using a



Blood vessels

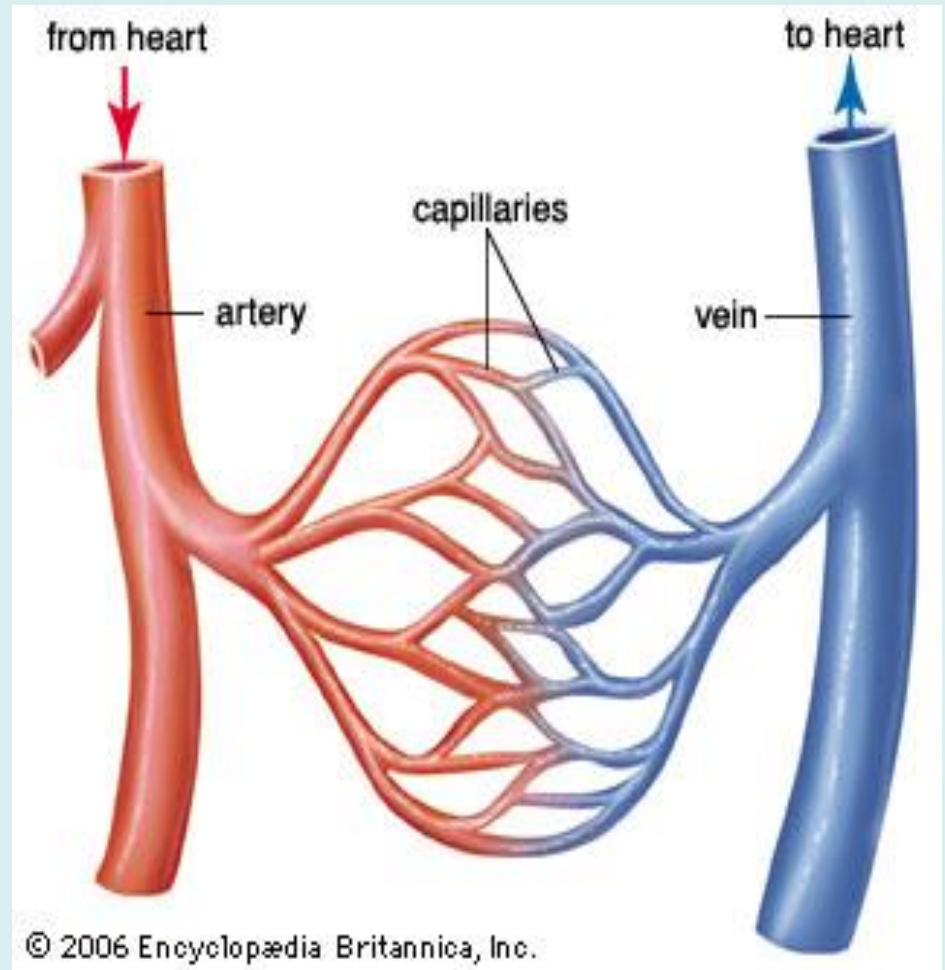


Tubes that carry blood to all parts of body

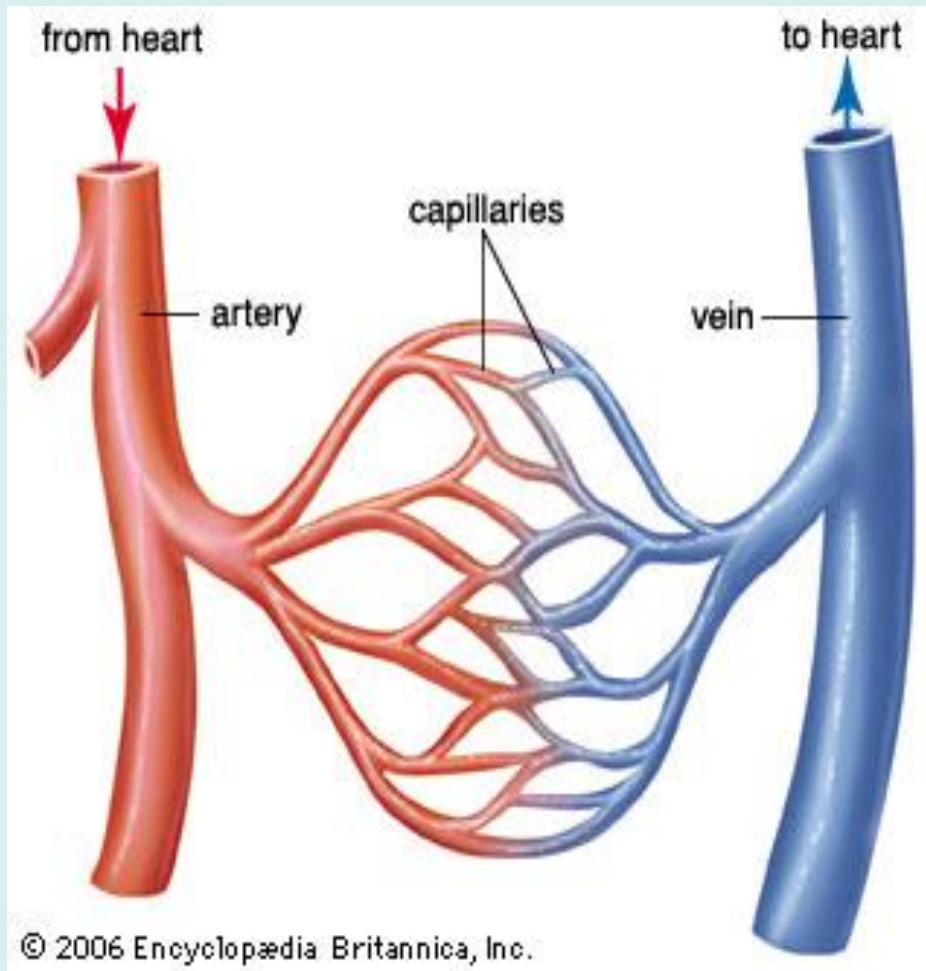
Activity 15

3 main types:

- Arteries
- Capillaries
- Veins



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- Artery divides into smaller microscopic vessels called capillaries
- Capillaries join up to make larger vessel called a vein

Arteries



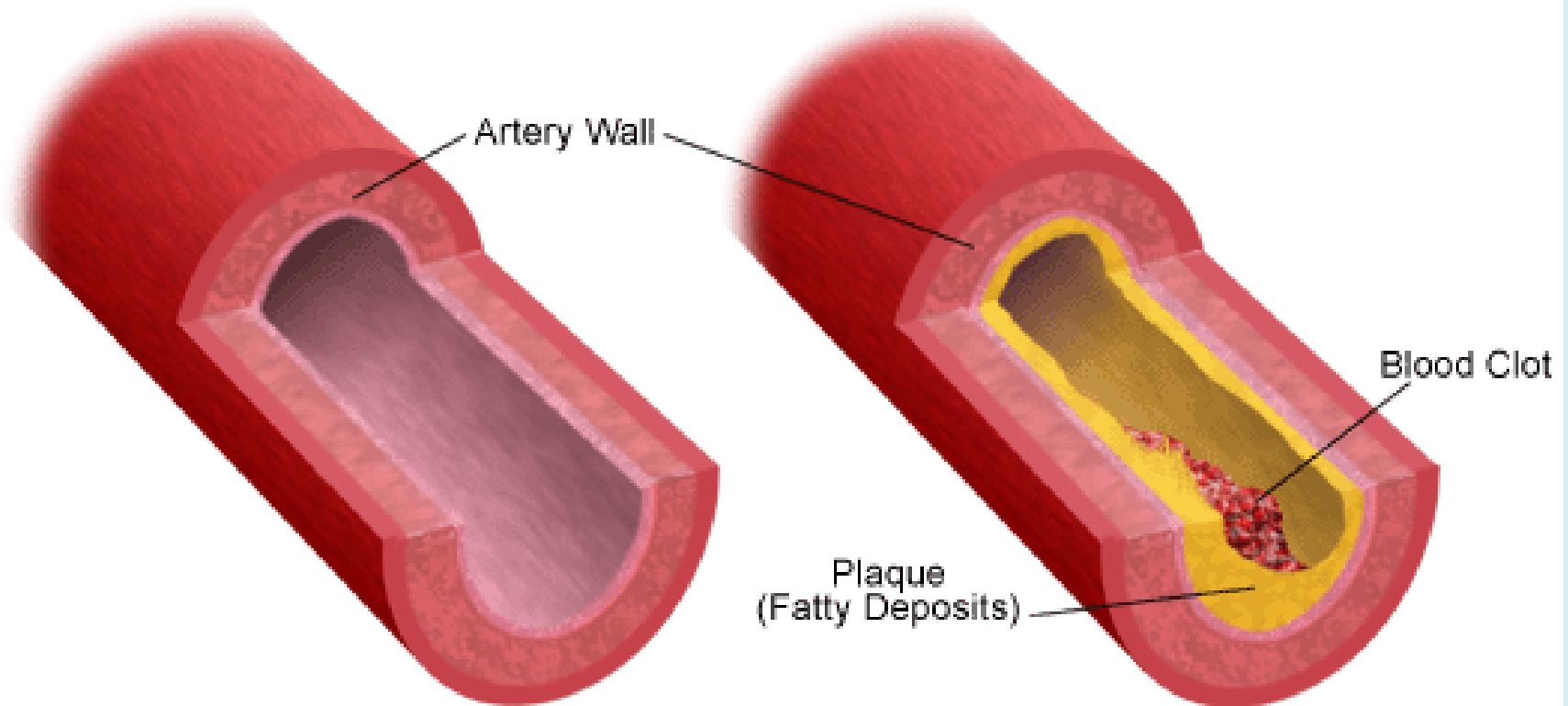
- Carry blood away from the heart towards all tissues & organs
- Has thick muscular wall
- Carries blood at high pressure from the heart

Diseased artery

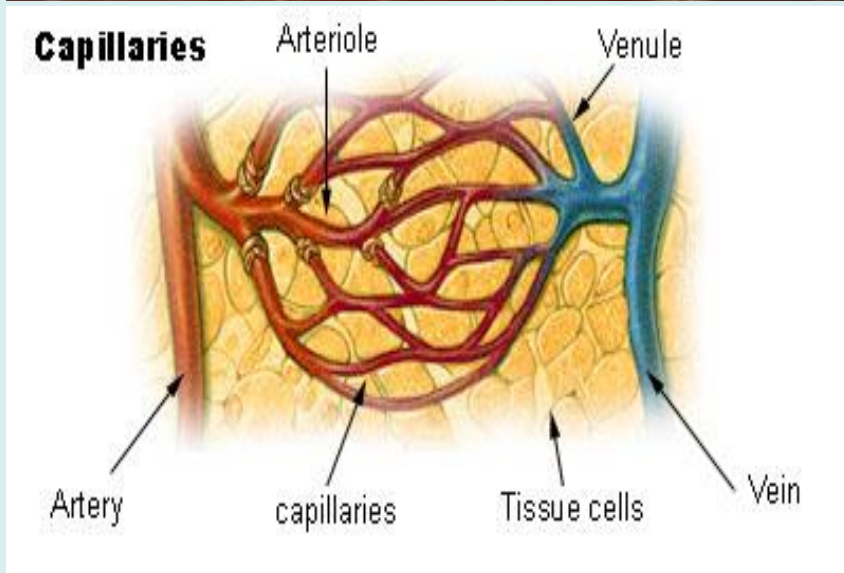
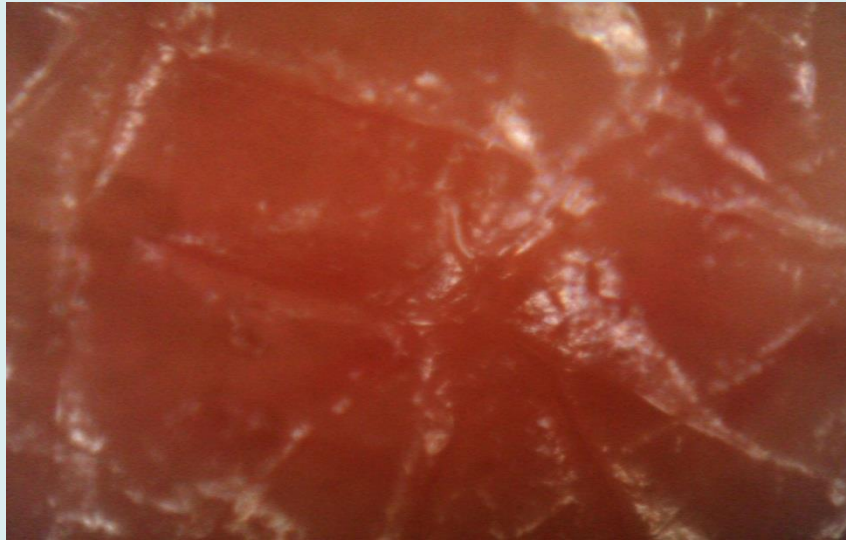
Diseased Artery

Normal Artery

Diseased Artery

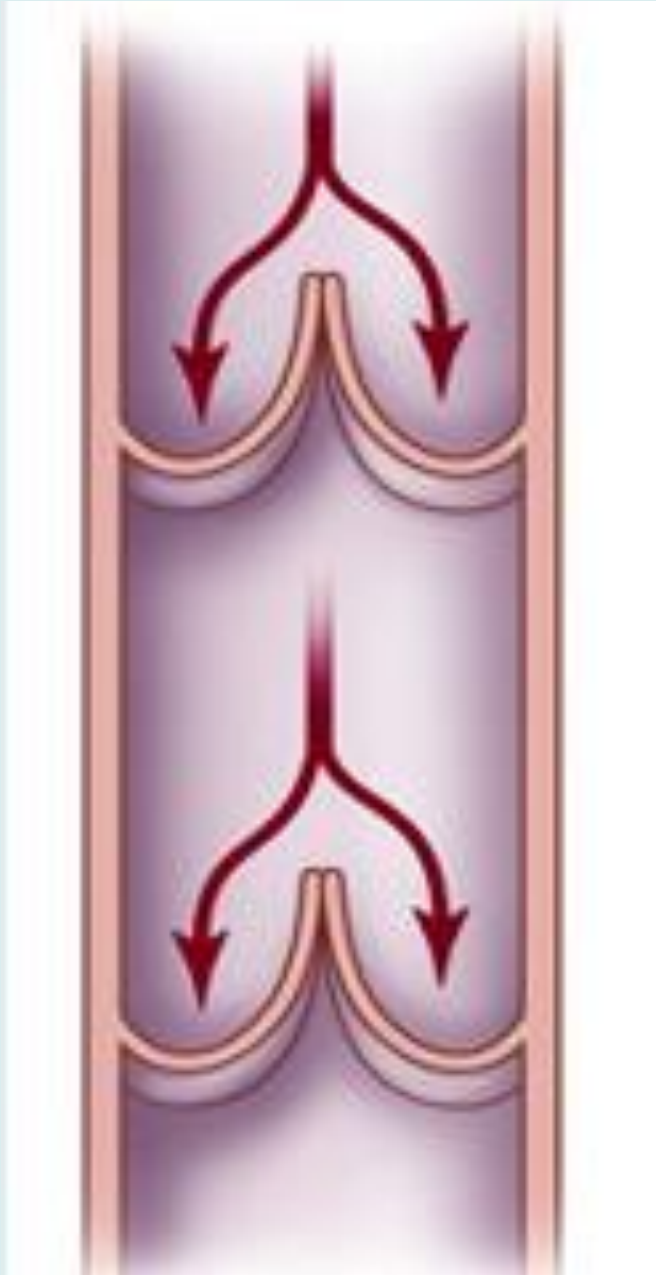


Capillaries



- Have very thin walls & in close contact with all living cells & tissues
- This allows nutrients & oxygen to pass out of the blood and into the cells of the tissues and organs
- Carbon dioxide & other wastes leave the tissues back into the capillaries and transported away to be removed by body

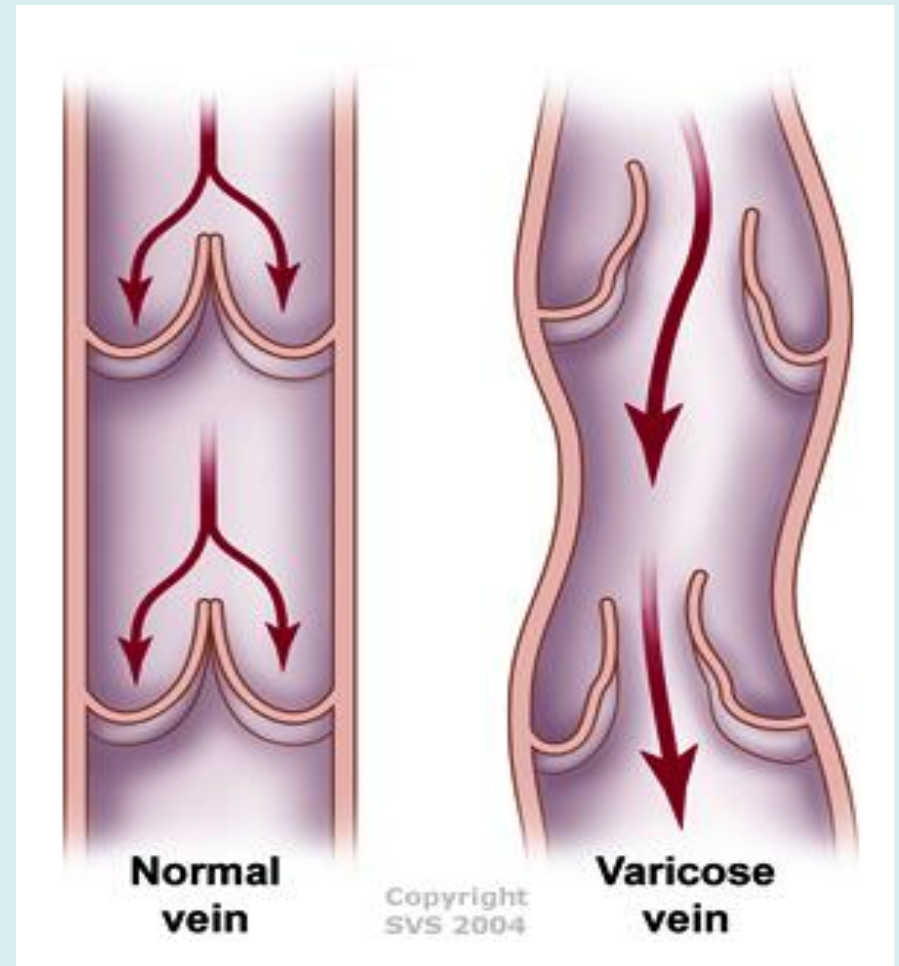
Veins



- Carries blood towards the heart from the body tissues & organs
- Have thin muscular wall
- Have valves present to prevent backflow of blood

A person with varicose veins!

This is what happens when the valves don't work properly



Activity 15

Blood Vessel Name	Condition of the Blood in the Vessel

Check for Success

What is the heart made up of *Muscle*

Name the function of the heart.

Pumps blood around the body.

Describe 1 difference between the artery and the vein.

Artery carries blood away from the heart/vein carries blood to the heart

OR

Arteries doesn't have valves/veins do

OR

Arteries have thick muscular walls/veins have thin muscular walls.

Success Criteria

If this is a successful lesson you should be able to:

- Identify the circulatory system and the major organs involved.
- State what the heart is made of and what its function is.
- State the function of the three types of blood vessels

