

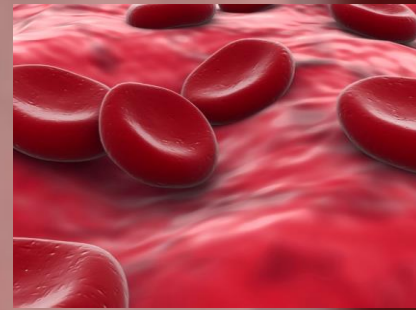
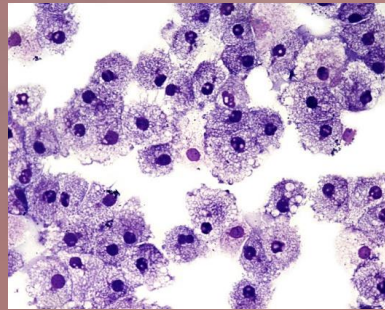
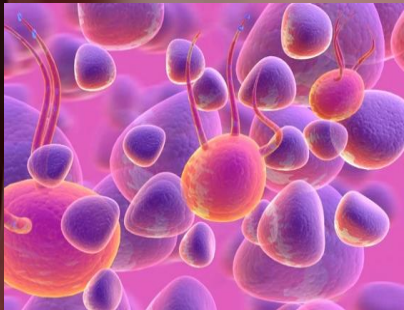


Human Body

The student knows that the human body is made of systems with structure and functions that are related.

Cells

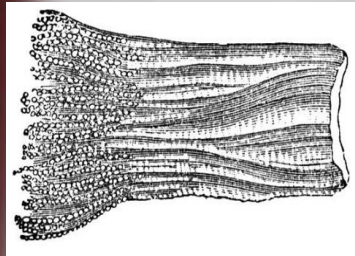
Cells are the smallest living structures.



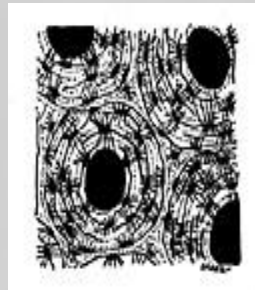
All living things are made up of one or more cells.

Tissue

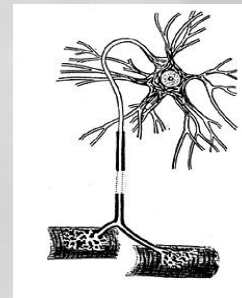
A tissue is a group of the same type of cell working together to do the same job.



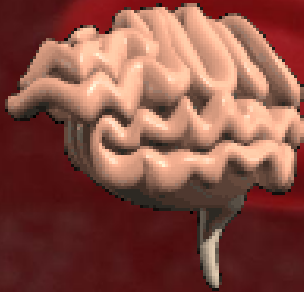
Muscle Tissue



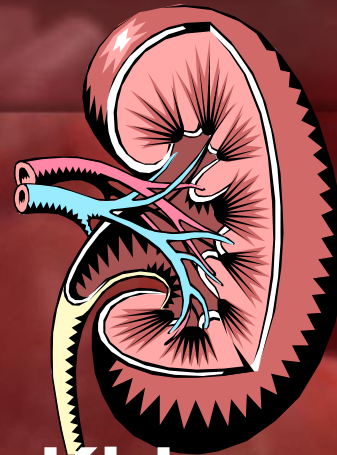
Bone Tissue



Nerve Tissue



Brain



Kidney



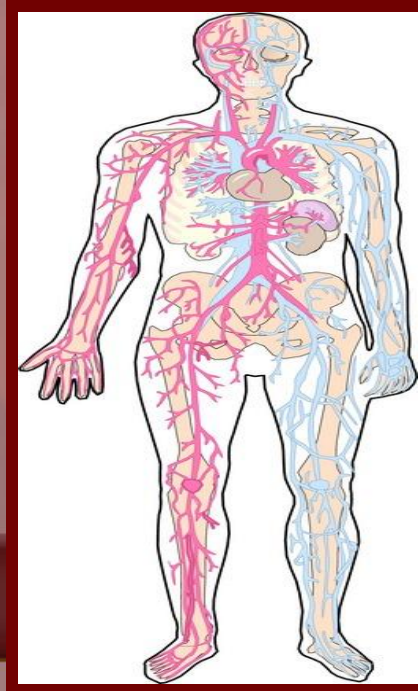
Heart

Organs

An organ is a grouping of different tissues into one structure to perform a specific function.

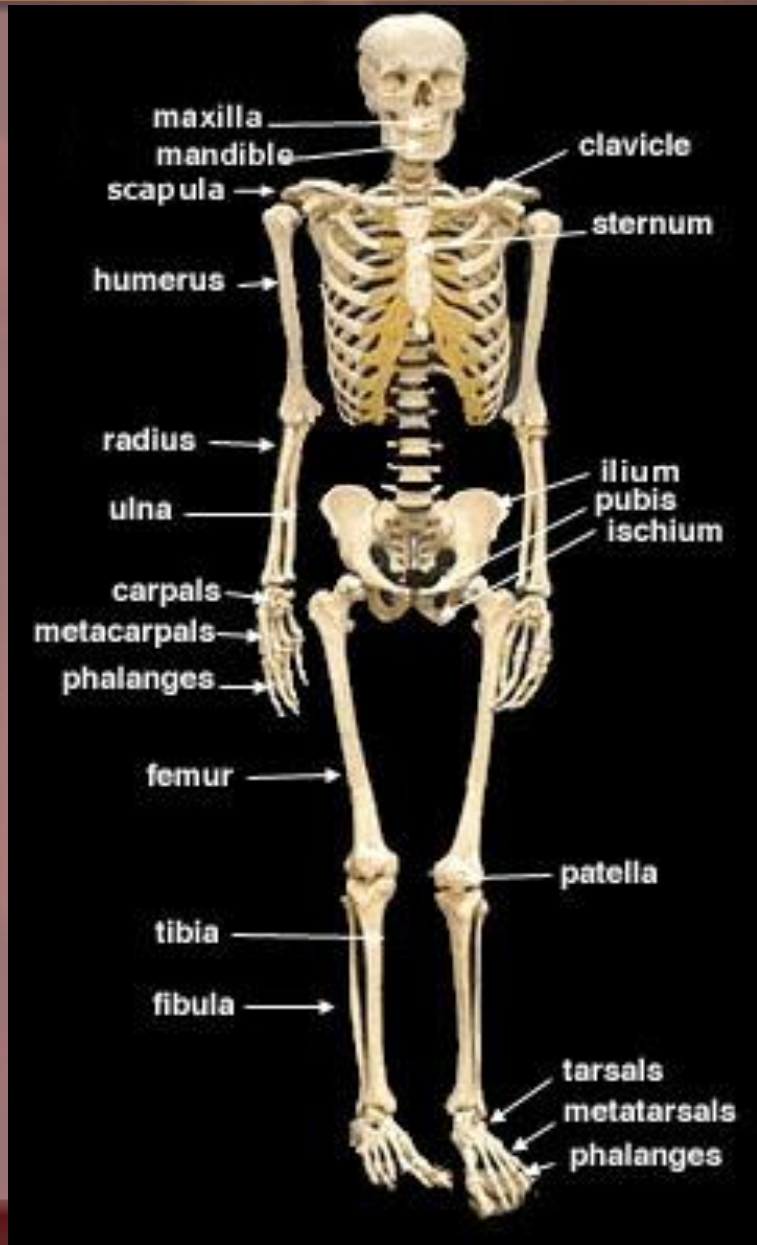
Body Systems

A body system is a group of organs that work together.



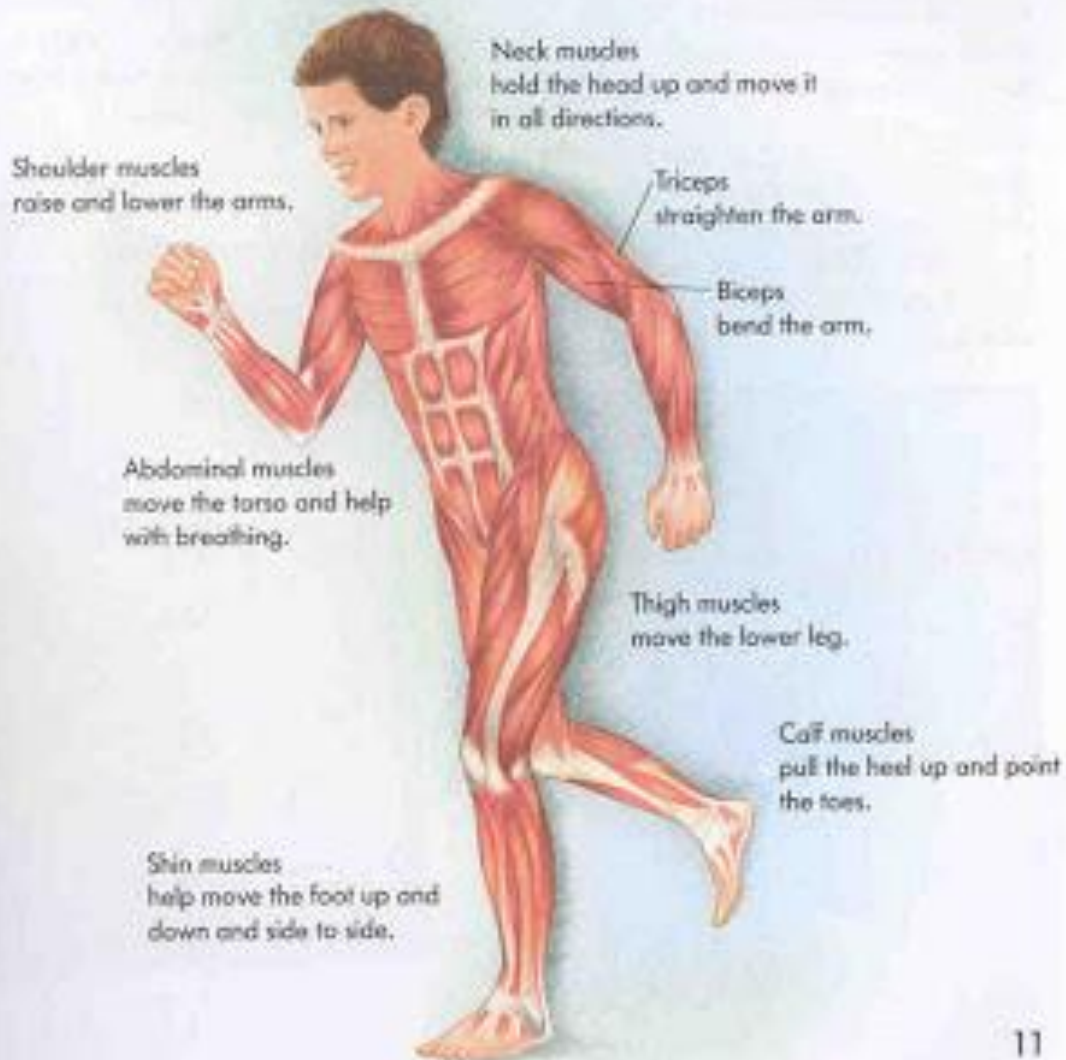
Functions of Body Systems

Body System	Function	Organs Involved
Skeletal System	<ul style="list-style-type: none">• Supports your body and gives it shape• Protects your internal organs• Helps you move• Stores substances	<ul style="list-style-type: none">• bones• cartilage (a strong tissue that is more flexible than bone)• joint (where 2 or more bones meet)
	<ul style="list-style-type: none">• Makes blood cells	



Functions of Body Systems

Body System	Function	Organs Involved
Muscular System	<ul style="list-style-type: none">• Moves your body parts• Moves food through your digestive system• Pumps blood through your circulatory system• Makes you breathe	<ul style="list-style-type: none">• <u>skeletal muscles</u> (move bones)• <u>heart muscles</u> (make your heart beat and pump blood)• <u>smooth muscles</u> (found in many organs, work automatically but you can control too)



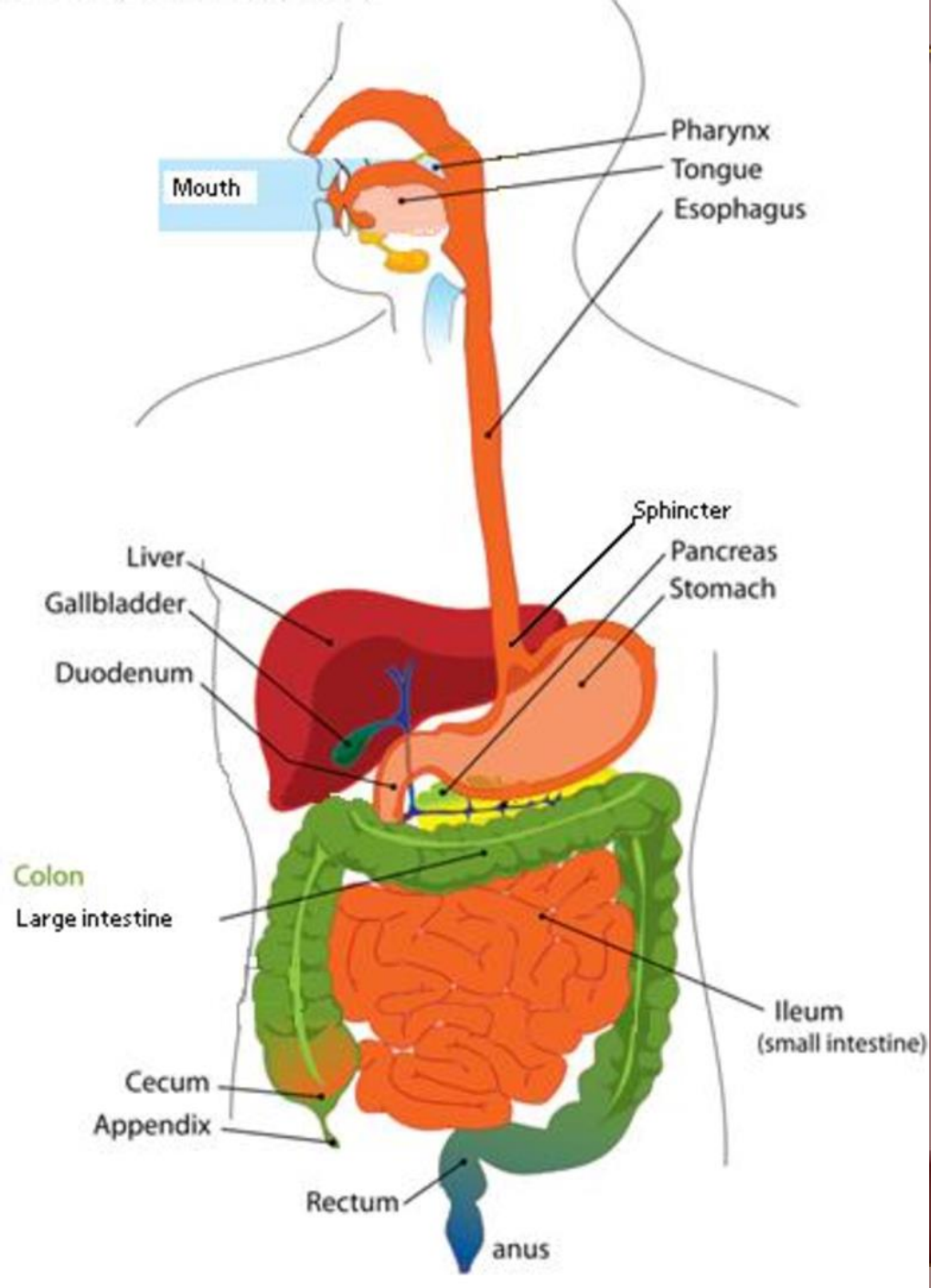
Functions of Body Systems

Body System	Function	Organs Involved
Digestive System	<ul style="list-style-type: none">• Breaks down food into nutrients (simple substances that your cells can use to survive & grow)• Gets rid of solid waste from digestion	<ul style="list-style-type: none">• <u>mouth</u> (digestion begins, teeth grind, saliva breaks down)• <u>esophagus</u> (swallow, takes food to stomach)• <u>stomach</u> (muscles churn food & mix it with digestive juices)

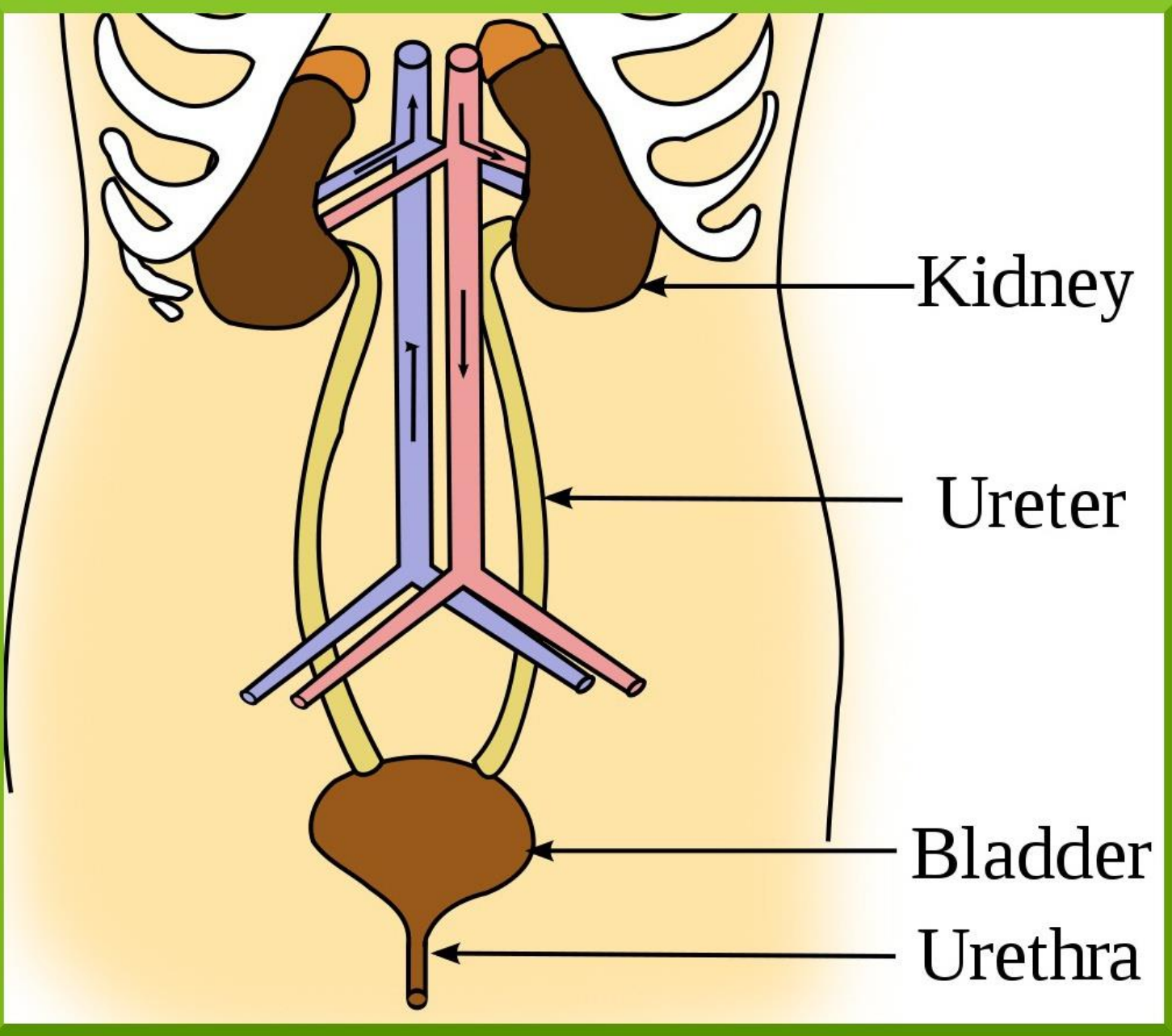
Digestive System continued...

Organs Involved

- liver (makes digestive juice called bile, cleans blood coming from your digestive organs)
- gall bladder (stores bile and passes it to your small intestine)
- pancreas (secretes enzymes & breaks down sugars that pass to small intestine)
- small intestine (digestive juices from liver and pancreas finish digesting the food. Nutrients move to your blood stream and undigested materials move to your large intestine)
- large intestine (removes water from undigested material, water passes to your blood, solid waste goes to rectum)
- rectum (stores solid wastes until you are ready to get rid of them)
- anus (waste leaves your body)



Body System	Function	Organs Involved
Excretory System	<ul style="list-style-type: none">• gets rid of waste that cells produce• removes liquid wastes and waste gases	<ul style="list-style-type: none">• <u>kidneys</u> (2 organs, filter waste from the blood)• <u>ureters</u> (2 tubes that carry urine from your kidneys to your bladder)• <u>bladder</u> (collects and stores urine)• <u>urethra</u> (releases stored urine)



Kidney

Ureter

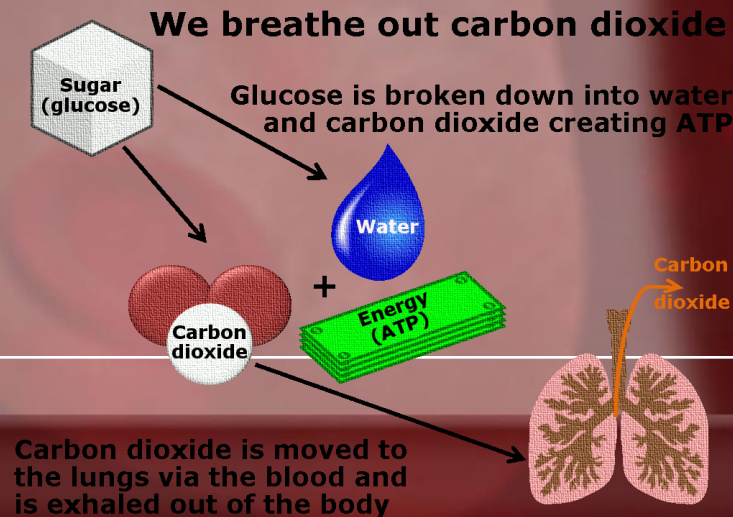
Bladder

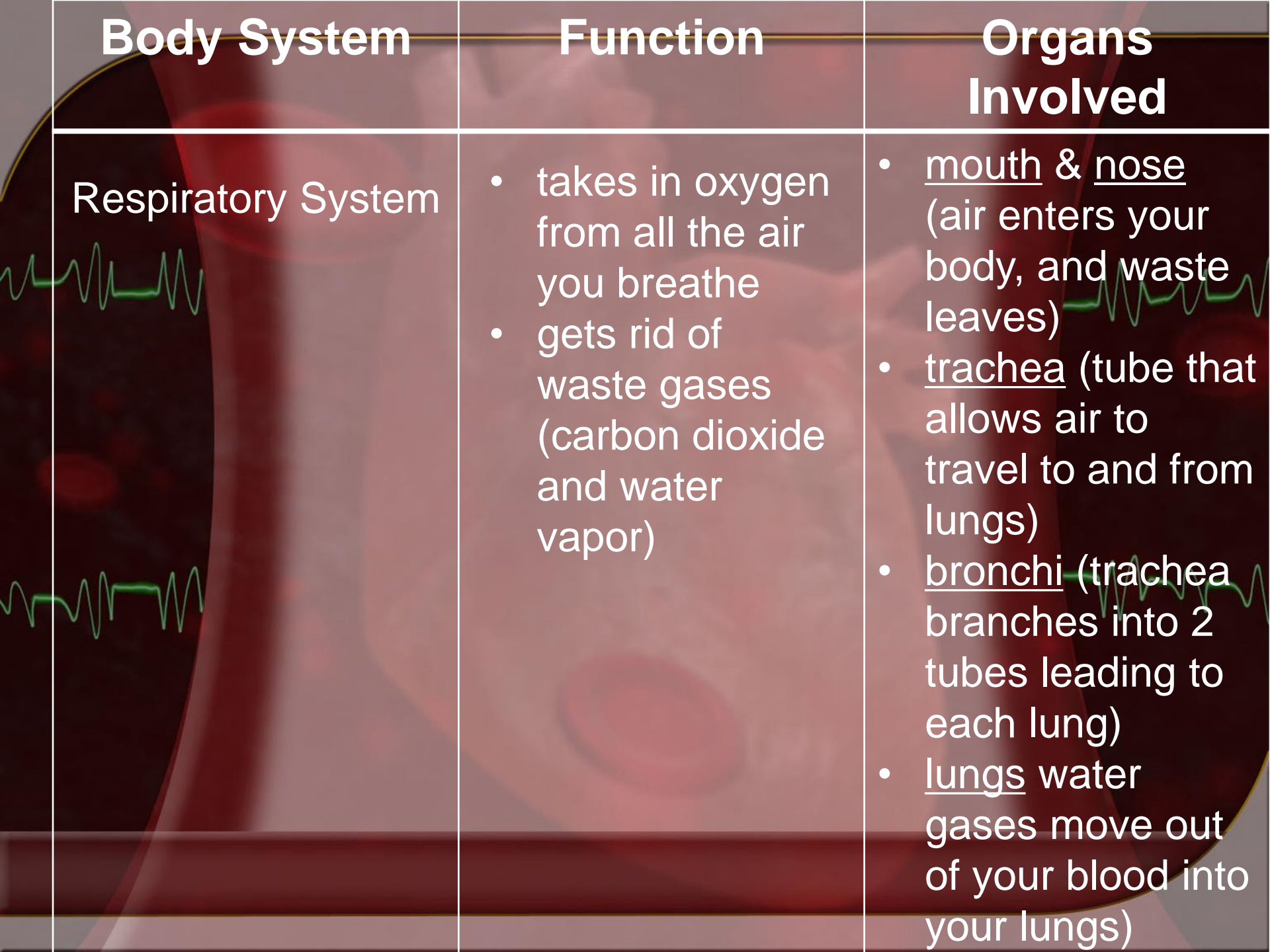
Urethra

Excretory System continued...

Organs Involved

- skin (largest organ in your body; water and waste leave your skin in perspiration)
- lungs (cells produce waste, two of those wastes are carbon dioxide gas and water. Both leave your cells and enter your blood. Blood travels to your lungs through blood vessels. Every time you breathe out, carbon dioxide gas and water vapor leave your body)





Nasal Cavity

Pharynx

Larynx

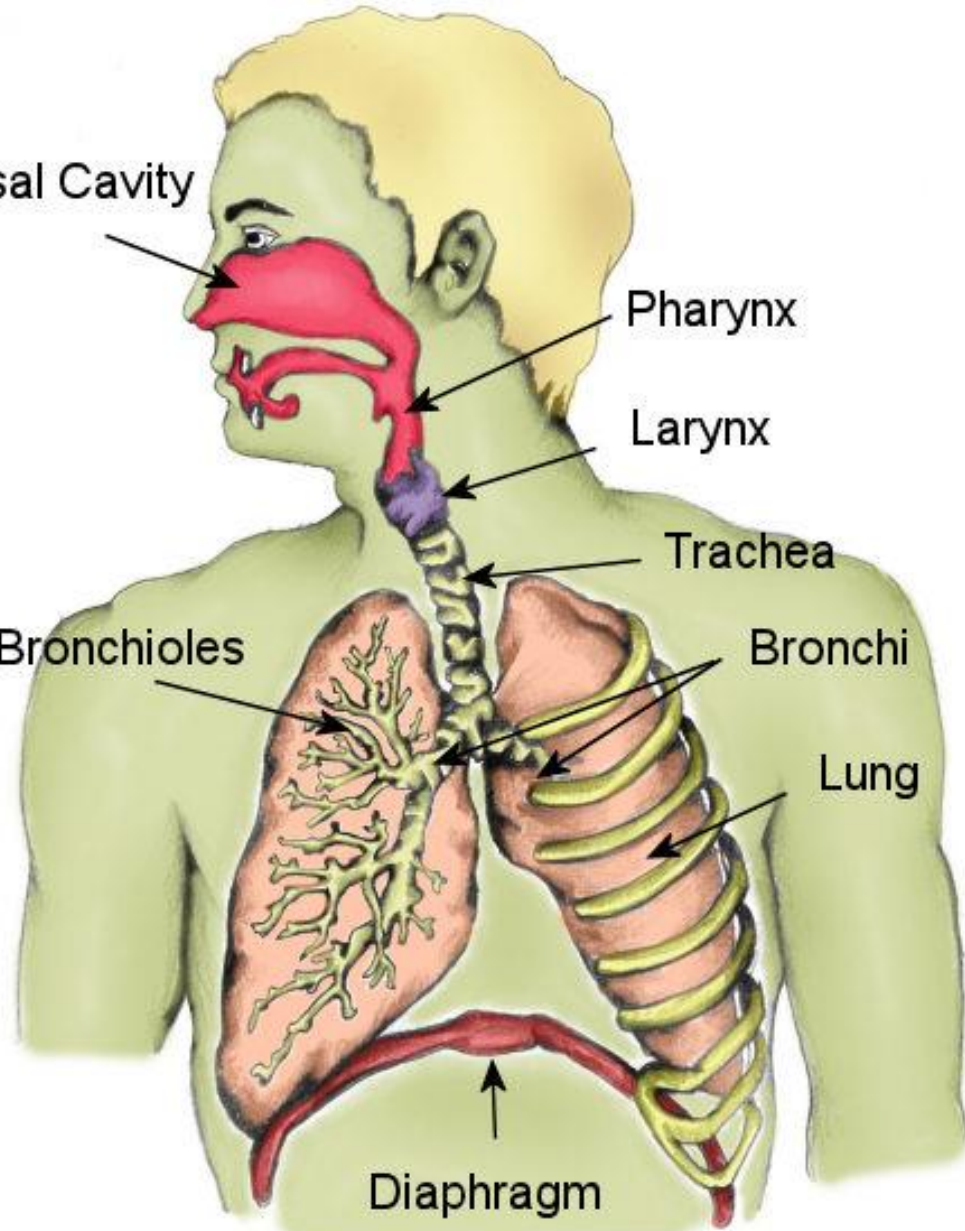
Trachea

Bronchioles

Bronchi

Lung

Diaphragm



Body System	Function	Organs Involved
Circulatory System	<ul style="list-style-type: none">• moves blood throughout your body• delivers nutrients and oxygen to all cells• removes carbon dioxide and wastes from cells• helps fight disease	<ul style="list-style-type: none">• <u>heart</u> (pumps blood through your blood vessels)• <u>arteries</u> (take blood away from the heart to other organs)• <u>capillaries</u> (connect arteries to veins)• <u>veins</u> (carry blood back to the heart)

Body System

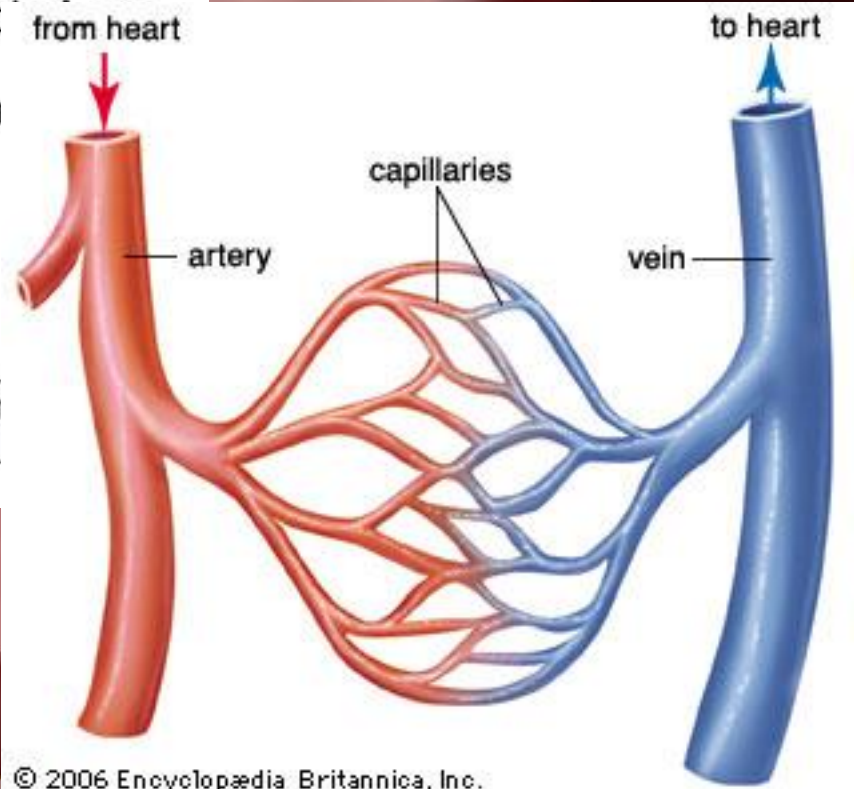
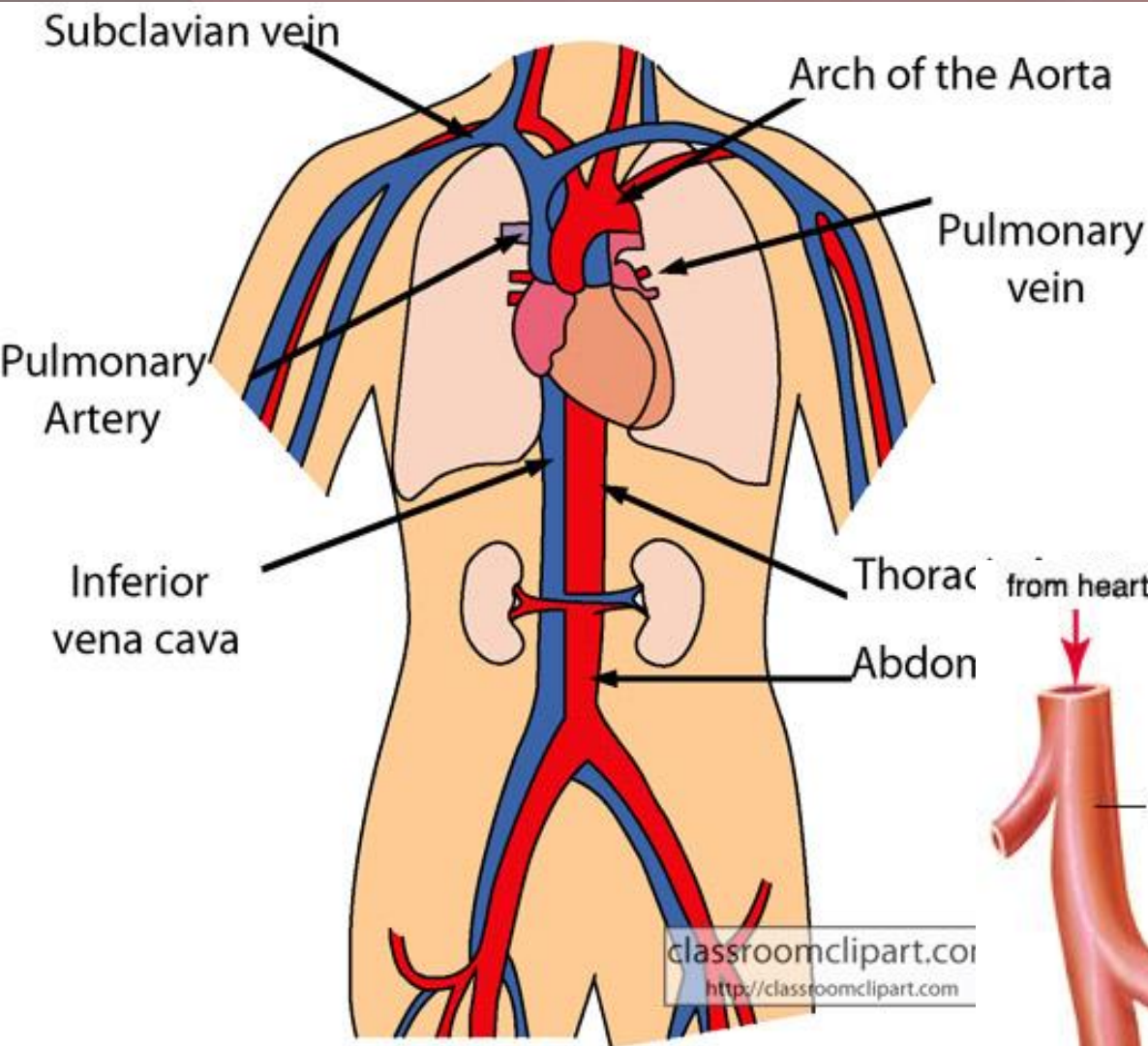
Function

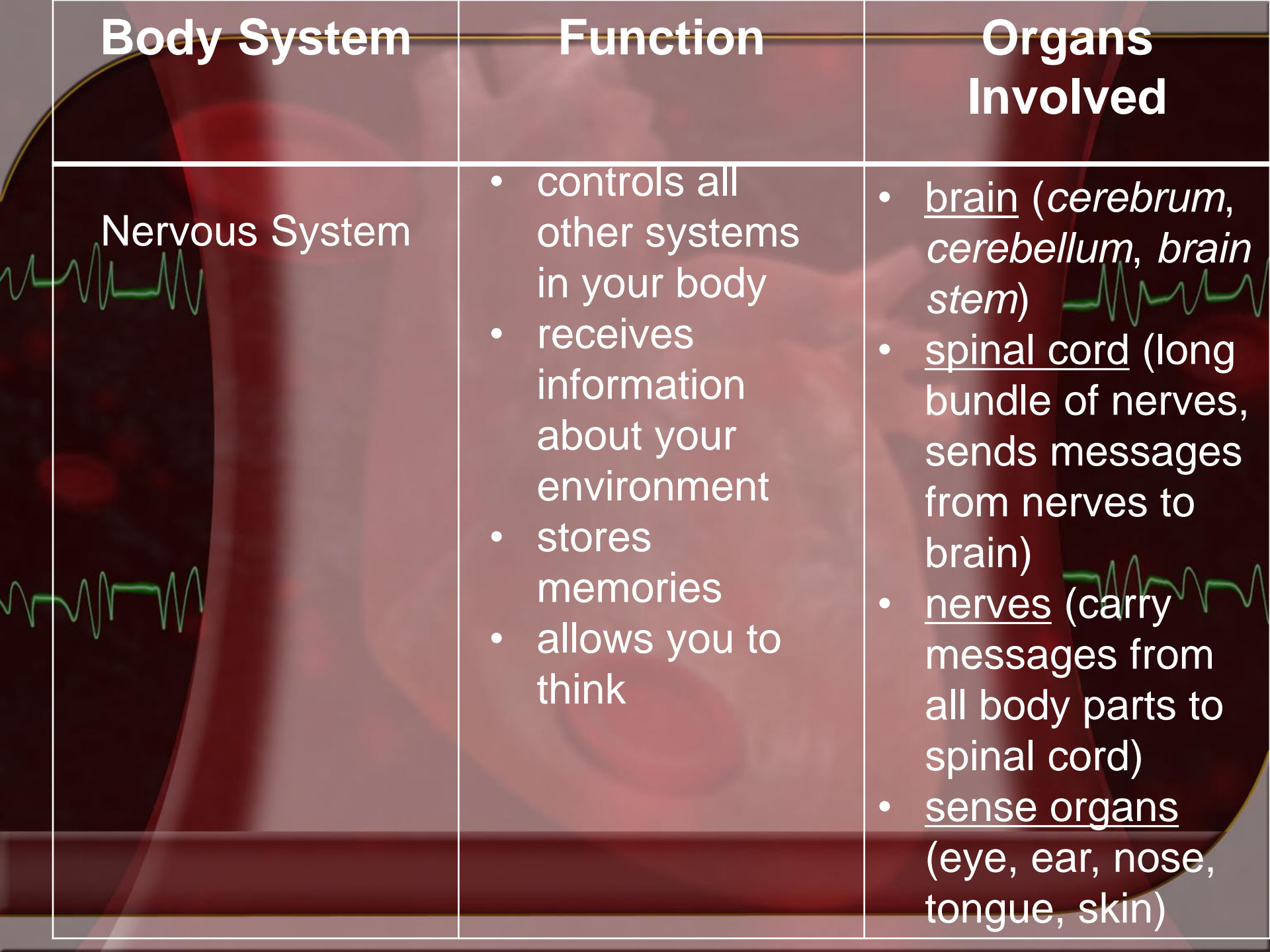
Organs Involved

Circulatory System

- moves blood throughout your body
- delivers nutrients and oxygen to all cells
- removes carbon dioxide and wastes from cells
- helps fight disease

- heart (pumps blood through your blood vessels)
- arteries (take blood away from the heart to other organs)
- capillaries (connect arteries to veins)
- veins (carry blood back to the heart)





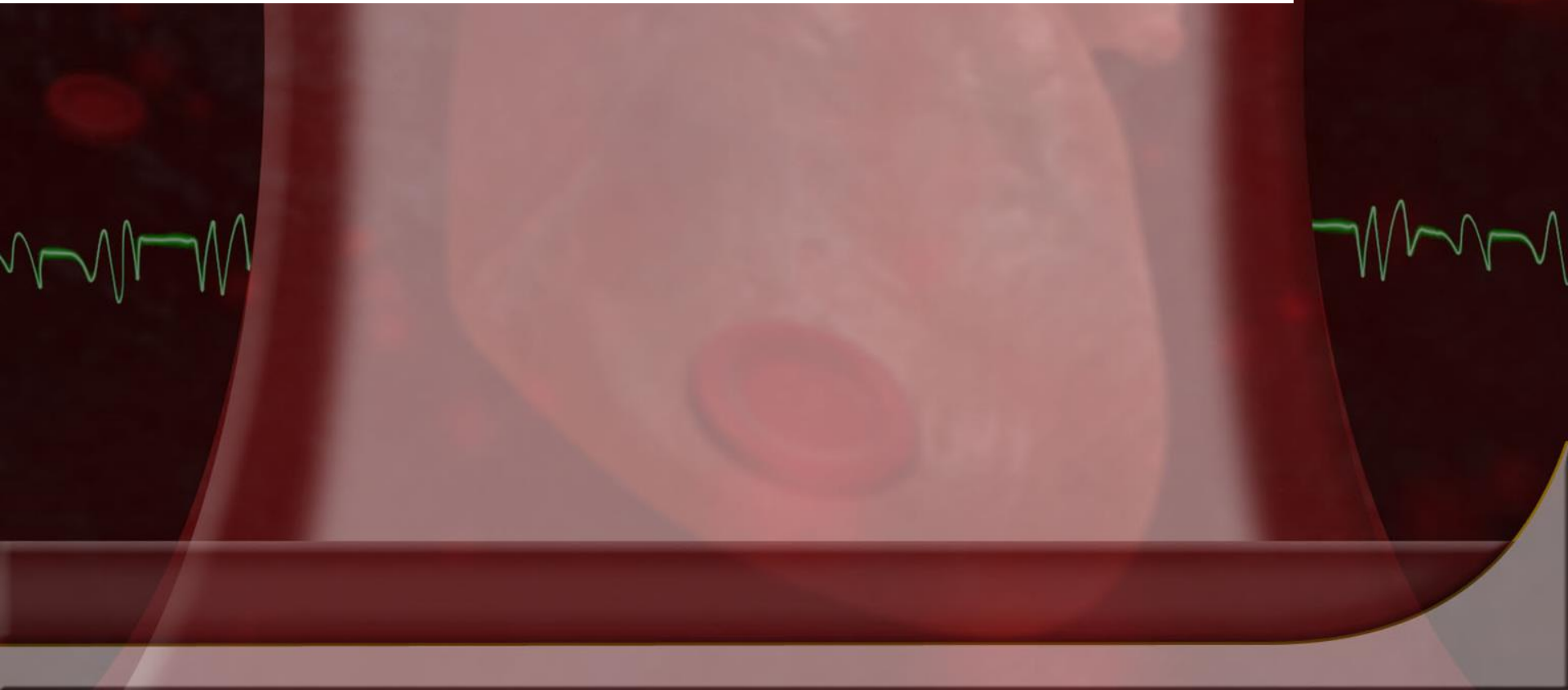
Which of the following organs helps with digestion and processes sugar in the body?

- A.** the kidneys
- B.** the liver
- C.** the lungs
- D.** the pancreas



Which organ cleans the blood coming from the digestive organs?

- A. the bladder
- B. the heart
- C. the liver
- D. the pancreas



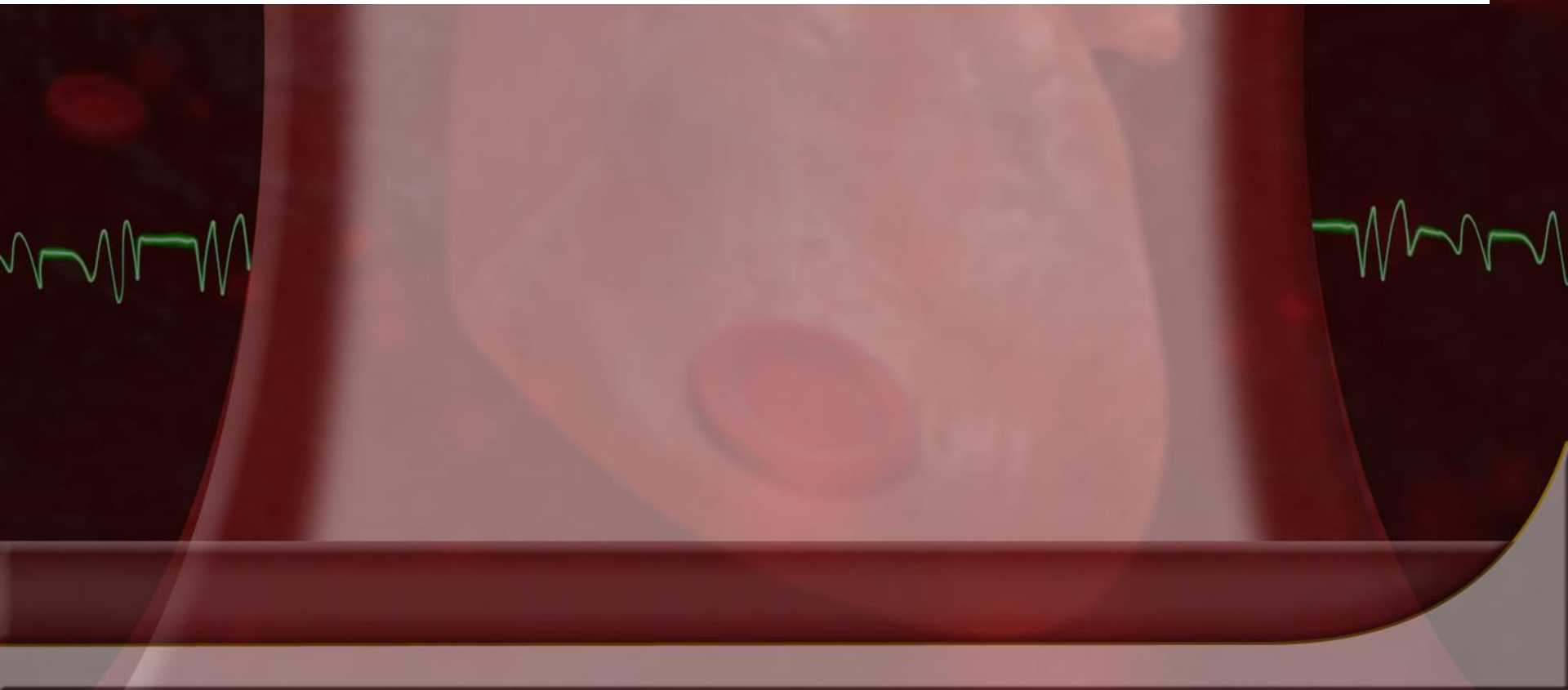
Which answer **best** describes the purpose of the liver in the human body?

- A.** The liver mixes blood and oxygen.
- B.** The liver removes excess fluids from the body.
- C.** The liver stores large quantities of blood and oxygen.
- D.** The liver cleans the blood coming from the digestive organs.



What is the purpose of the kidneys in the human body?

- A.** Kidneys mix blood and oxygen together.
- B.** Kidneys store unwanted fluids until they can be removed.
- C.** Kidneys help to clean the oxygen that comes from the lungs.
- D.** Kidneys help balance the salts and acids in the body by filtering blood.



Which part of the body protects organs, provides support, and forms blood cells?

- A. the brain
- B. the heart
- C. the liver
- D. the skeleton



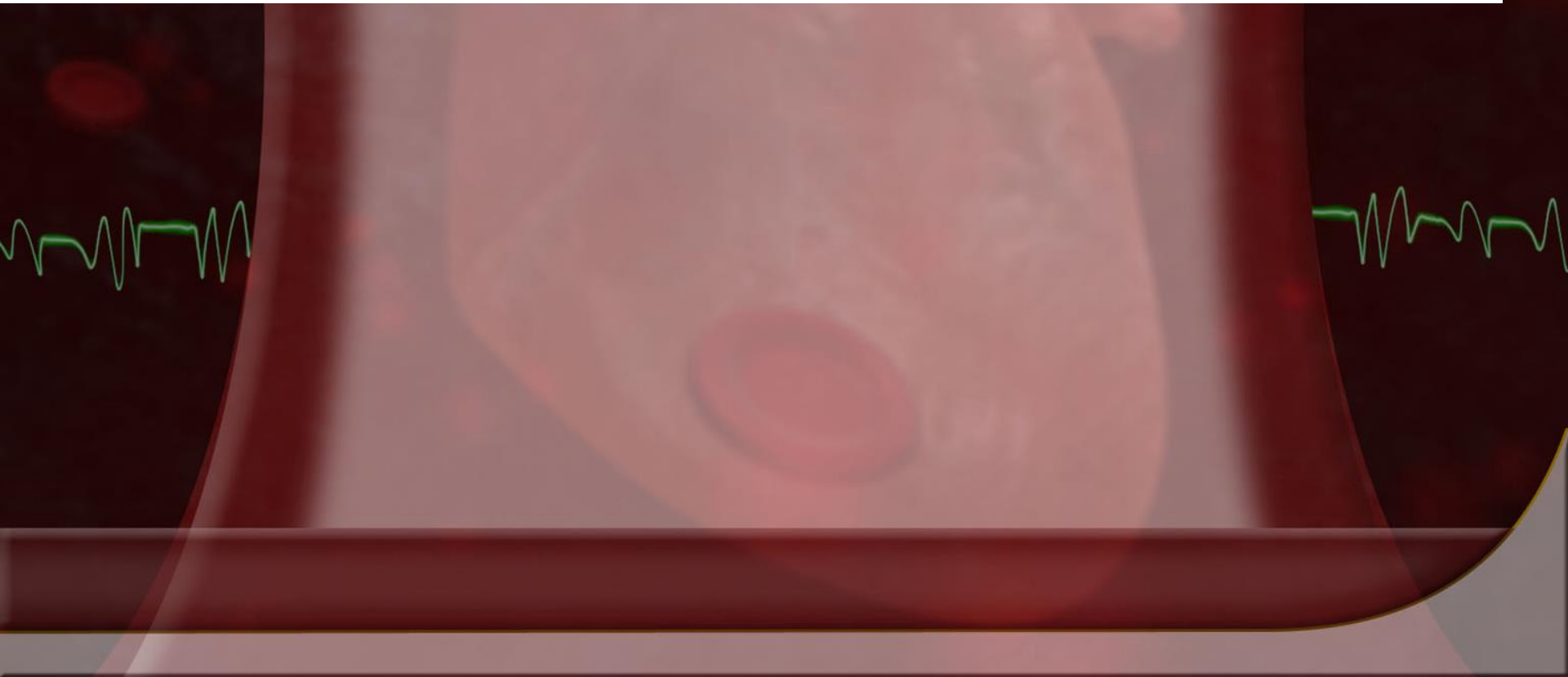
Which organ does most of the processing of nutrients in the human body?

- A. the kidneys
- B. the large intestine
- C. the pancreas
- D. the small intestine



Which answer best describes the purpose of the muscles in the human body?

- A.** to protect tissues and form blood
- B.** to remove and use nutrients from food
- C.** to produce movement and provide support
- D.** to combine blood and oxygen needed for movement



What is the purpose of the small intestine in the human body?

- **A.** combines oxygen and blood
- **B.** stores urine for later removal
- **C.** removes water from waste matter
- **D.** digests and absorbs nutrients from food

