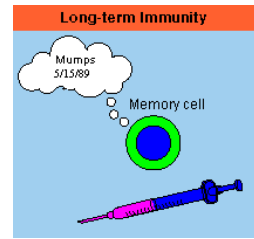
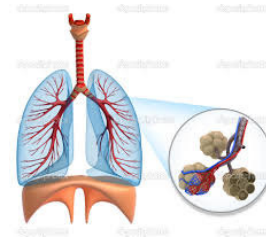


# Active immunity



a type of immunity, or resistance, developed in an organism by its own production of antibodies in response to an exposure to an antigen, a pathogen or to a vaccine

# Alveoli



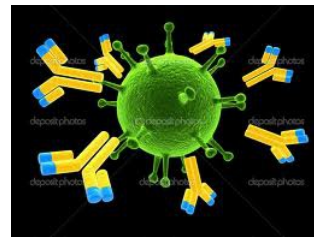
tiny air sacs at the end of a bronchiole in the lungs that provides surface area for gas exchange to occur with the blood

# Antibiotics



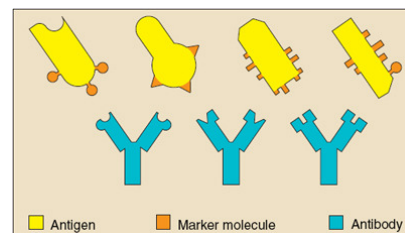
used for treatment or prevention of bacterial infection (NOT for treatment of viral infections)

# Antibodies



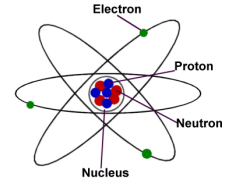
protein produced by the immune system to identify and neutralize harmful antigens such as bacteria and viruses

# Antigen



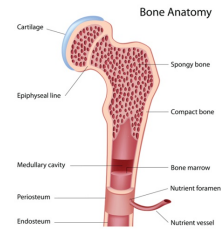
a substance that triggers the production of antibodies (For example: bacteria or virus)

# Atom



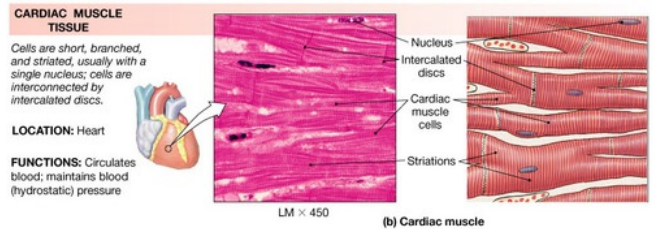
is the smallest representative unit of an element (ex. oxygen)

# Bone marrow



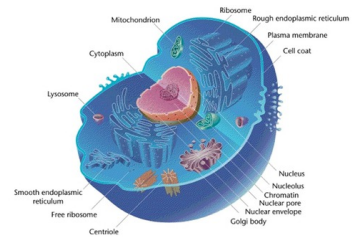
the flexible tissue found in the interior of bones; in humans, red blood cells are produced in the heads of long bones; also a key component of the lymphatic system, producing the lymphocytes that support the body's immune system

# Cardiac muscle tissue



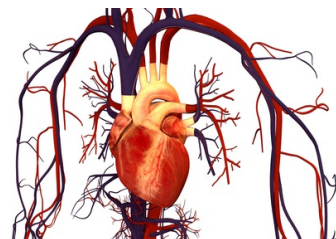
"involuntary muscle" but is more alike in structure to skeletal muscle, and is found only in the heart

# Cell



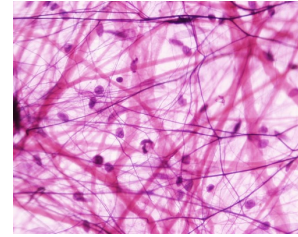
the smallest unit capable of life, made of multiple molecules (Animal example: epithelial cell)

# Circulatory system



This system is responsible for transporting materials such as oxygen, digested foods, wastes, and hormones throughout the body.

## Connective tissue



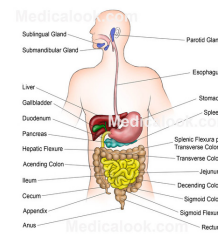
one of the four basic types of animal tissue; supports, connects, or separates different types of tissues and organs of the body (for example: blood, tendons, and fat tissue)

## Diabetes



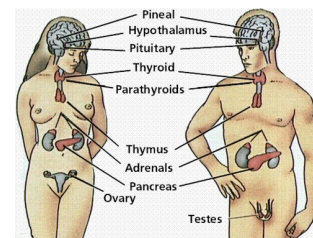
a group of metabolic diseases in which a person has high blood sugar, either because the pancreas does not produce enough insulin, or because cells do not respond to the insulin that is produced

## Digestive system



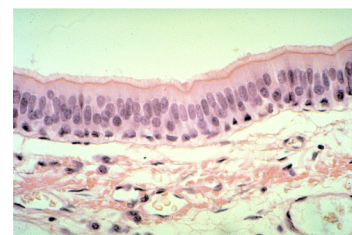
The function of this system is to break down foods (biomolecules) and absorb nutrients so that an organism can use them.

## Endocrine system



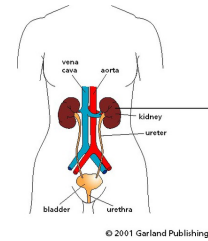
This system helps control the proper function of other systems by releasing hormones in the organism.

## Epithelial tissue



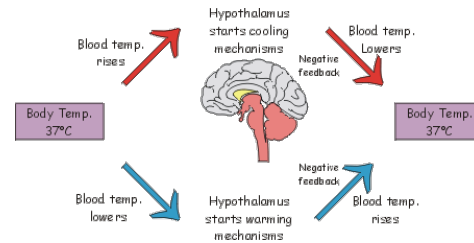
one of the four basic types of animal tissue; located on the very outside of an organ or organism (i.e. skin) or found lining cavities in hollow organs (i.e. stomach lining); it always has a free surface (no contact with another cell).

# Excretory system



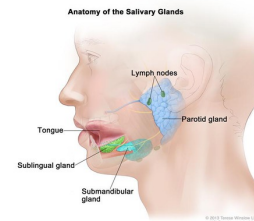
An organism is able to filter the blood to rid itself of liquid wastes, excess water, and poisons through the organs of this system.

# Feedback mechanism



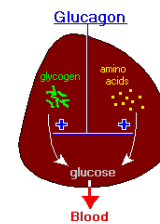
a loop system in which the system responds to perturbation either in the same direction (positive feedback) or in the opposite direction (negative feedback)

# Gland



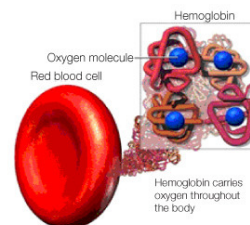
an organ in an animal's body that synthesizes a substance for release of substances such as hormones or breast milk, often into the bloodstream or into cavities inside the body or its outer surface

# Glucagon



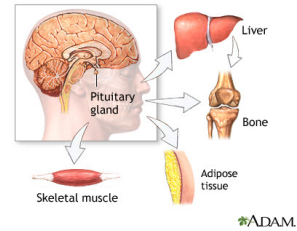
hormone released by the pancreas when blood sugar (glucose) levels fall too low; it causes the liver to release glucose, or sugar, into the blood to stabilize blood sugar levels (effect opposite of insulin)

# Hemoglobin



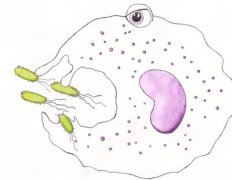
the iron-containing oxygen-transport protein in the red blood cells of many animals

# Hormones



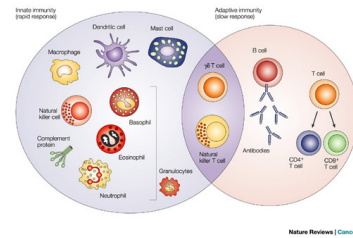
chemical released by a cell, a gland, or an organ in one part of the body that sends out messages that affect cells in other parts of the organism (For example: estrogen, progesterone, and testosterone in reproduction)

# Immune response



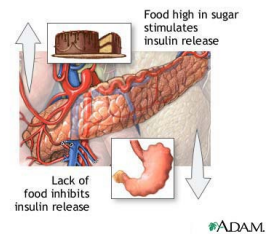
how your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful to the body

# Immune system



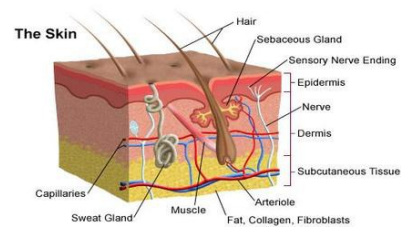
This system destroys harmful microbes that invade an organism and can possibly kill it.

# Insulin



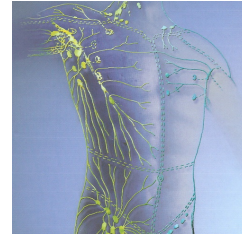
hormone released by the pancreas when blood sugar (glucose) levels get too high; it causes cells in the liver, skeletal muscles, and fat tissue to absorb glucose, or sugar, from the blood to stabilize blood sugar levels (effect opposite of glucagon)

# Integumentary system



This system protects the body from harmful organisms that try to enter it. The system also prevents the organism from drying out.

Lymph



the fluid that circulates throughout the lymphatic system; it returns protein and excess interstitial fluid to the blood

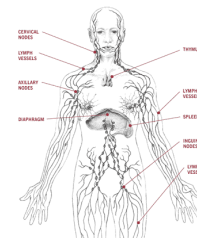
Lymph nodes

Lymph Nodes of the Head and Neck



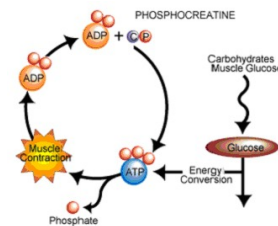
an oval-shaped organ distributed widely throughout the body including the armpit and stomach linked with lymph vessels; act as filters or traps for foreign particles

Lymph system



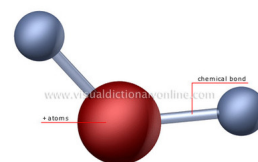
This system is part of the circulatory system. It produces lymphocytes to fight infection that may be found in the blood stream. It also collects, filters (lymph nodes), and transports fluids from around the tissues back to the veins of the circulatory system.

Metabolism



the set of life-sustaining chemical transformations within the cells of living organisms. These enzyme-catalyzed reactions allow organisms to grow and reproduce, maintain their structures, and respond to their environments

Molecule

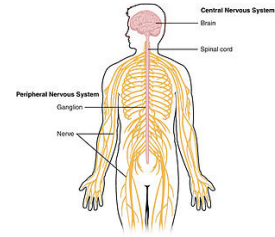


two or more atoms bonded together (ex. RNA molecule)



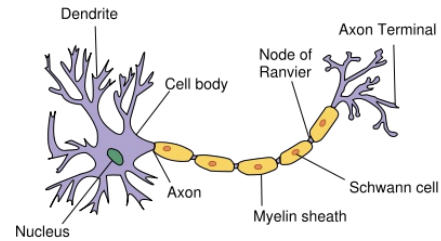


# Nervous system



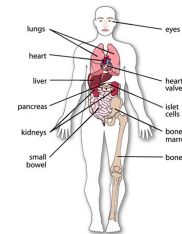
Messages can be sent all over the body of an organism through this system. It directs the behavior and processes such as digestion, circulation, movement, etc.

# Neuron



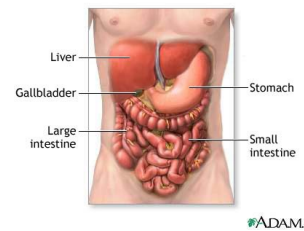
an electrically excitable cell that processes and transmits information through electrical and chemical signals; also known as a nerve cell

# Organ



a group of tissues working together to perform a particular function (Animal example: stomach)

# Organ System



a group of organs working together to perform a particular function (Animal example: digestive system)

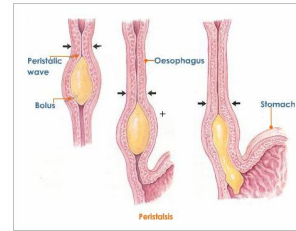
# Passive immunity



a type of immunity acquired by the transfer of antibody from one individual to another, such as from mother to offspring (ex. breast feeding)

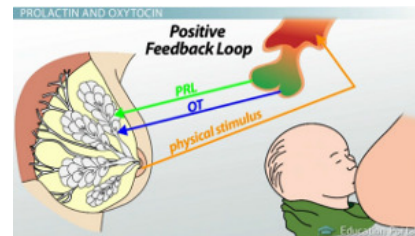


# Peristalsis



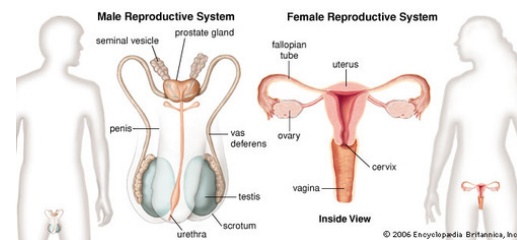
involuntary contraction of smooth muscles to propel contents through the digestive tract

# Positive feedback loop



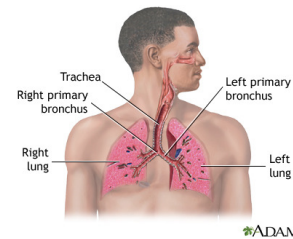
A process in which the effects of a small disturbance on (a perturbation of) a system include an increase in the magnitude of the perturbation. (Examples are: child birth, lactation, menstration & blood clotting)

# Reproductive system



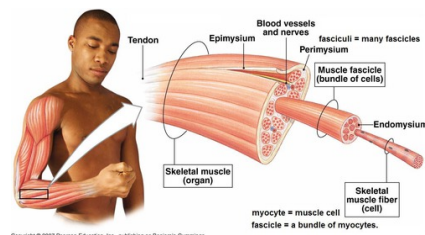
This system develops specialized cells that enable organisms to produce offspring.

# Respiratory system



If an organism did not have this system, gases could not be exchanged between the atmosphere and the blood of an organism.

# Skeletal muscle tissue



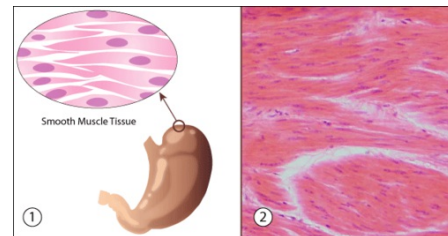
"voluntary muscle" is anchored by tendons to bone and is used to effect skeletal movement such as locomotion and in maintaining posture

## Skeletal system



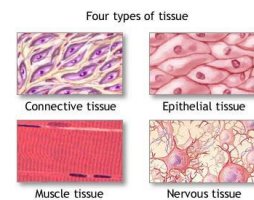
This system forms a framework for muscles to attach to, and it serves to protect organs inside the organism. It is found on the outside of some organisms and the inside of others. It also plays a role in the immune system.

## Smooth muscle tissue



involuntary muscle is found within the walls of organs and structures such as the esophagus, stomach, intestines, bronchi, uterus, urethra, bladder, blood vessels, and the arrector pili in the skin (in which it controls erection of body hair)

## Tissue



#ADAM

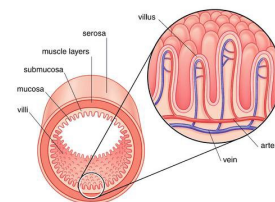
a group of cells working together to perform a particular function (Animal example: epithelial tissue layer)

## Vaccine



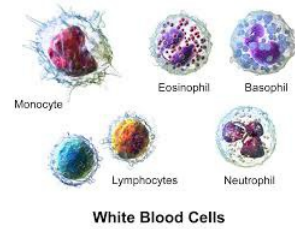
a preparation of weakened or killed pathogens that improves immunity to a particular disease or illness

## Villi



finger-like projections along the wall of the small intestine that aid in the absorption of nutrients into the blood

# White blood cell



cells of the immune system involved in defending the body against both infectious disease and foreign materials; also known as leukocytes (leuko- meaning "white" and -cytes - meaning "cells")