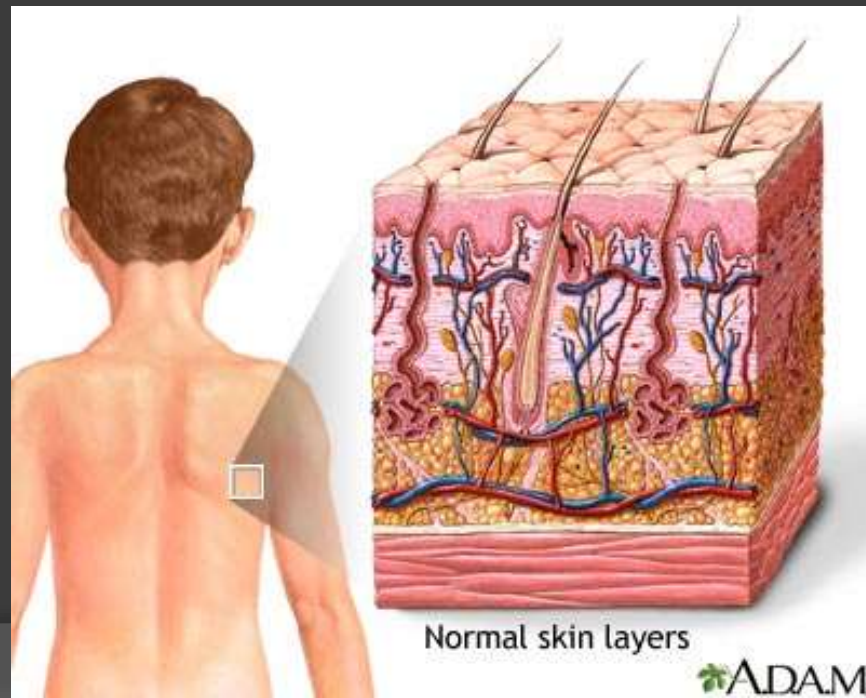


CHAPTER 3 ORGAN SYSTEMS OF THE BODY

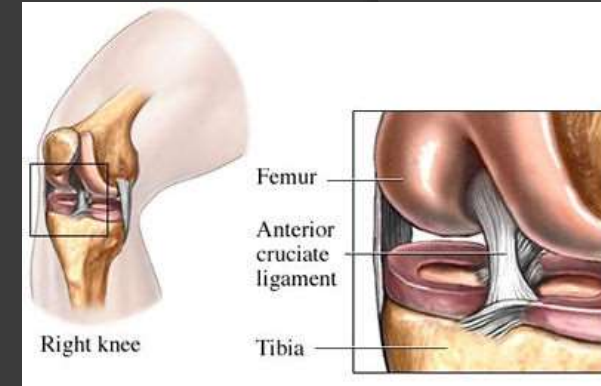
- ① Organ – a structure of two or more kinds of tissues that work together to perform a specific function
- ② System – is a group of organs that perform a specific function
- ③ There are 11 organ systems that make up the body.

- 1) **Integumentary System** – includes the skin, hair, nails, and some glands.
- The integument serves as protection, temperature regulation and as a sense organ.
- The skin is the largest organ in the body and the heaviest at about 20 pounds in adults.



- 2) Skeletal System – includes the bones, joints and ligaments.

- ligament – connects bone to bone

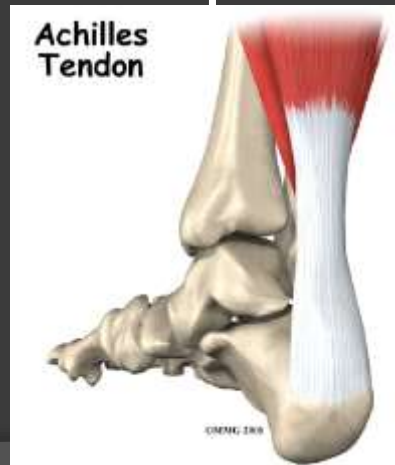


- joint – is a movable junction between bones

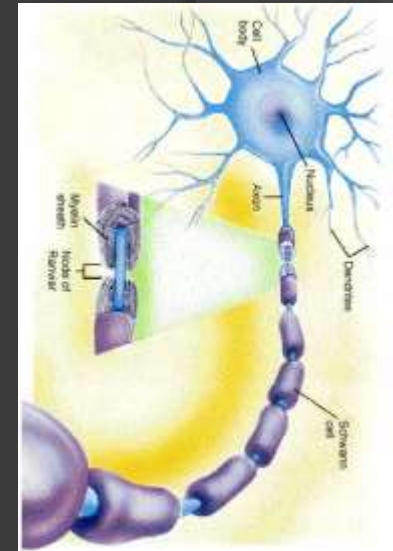
- The skeletal system is important for movement, posture, mineral storage and production of blood cells.



- 3) Muscular System – includes the muscles and the tendons.
- tendon – connects muscle to bone
- The muscular system provides movement and posture.



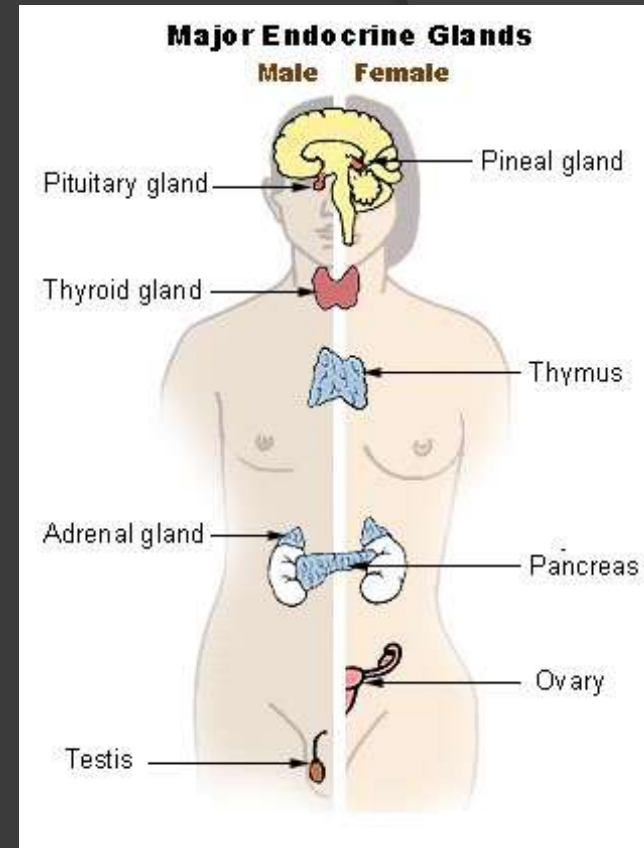
- ④ 4) Nervous System – includes the brain, spinal cord and nerves.
- ④ The nervous system communicates and integrates all body functions.
- ④ nerve impulse – are special signals used by the body for communication
- ④ The nervous system responds to stimuli such as temperature, light or pressure.
- ④ The organs that respond to a certain stimuli are called sense organs.



- 5) Endocrine System – include specialized glands that secrete hormones into the bloodstream. Examples: pineal, thyroid, thymus, pancreas

- hormones – chemical that is released and causes something to happen

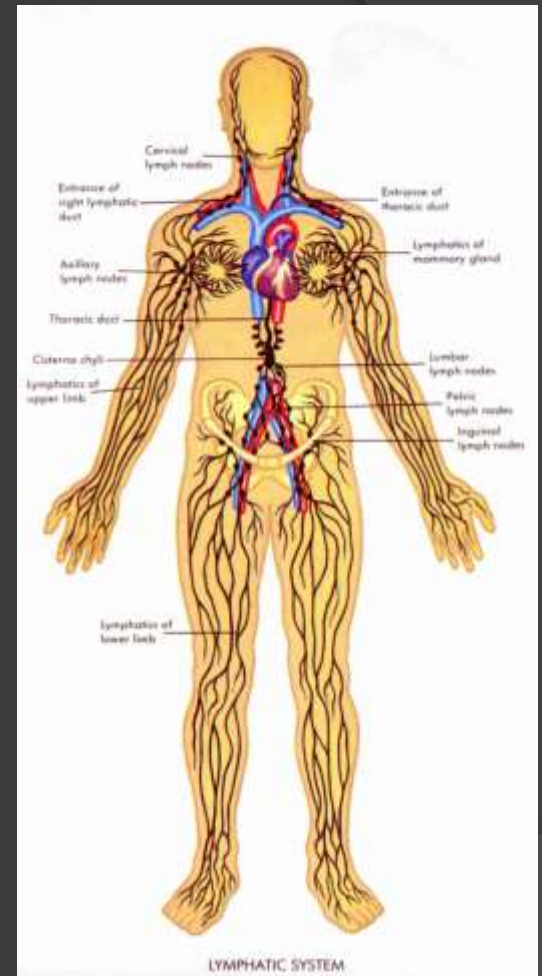
- The endocrine system provides slower, longer-lasting communication for the body.



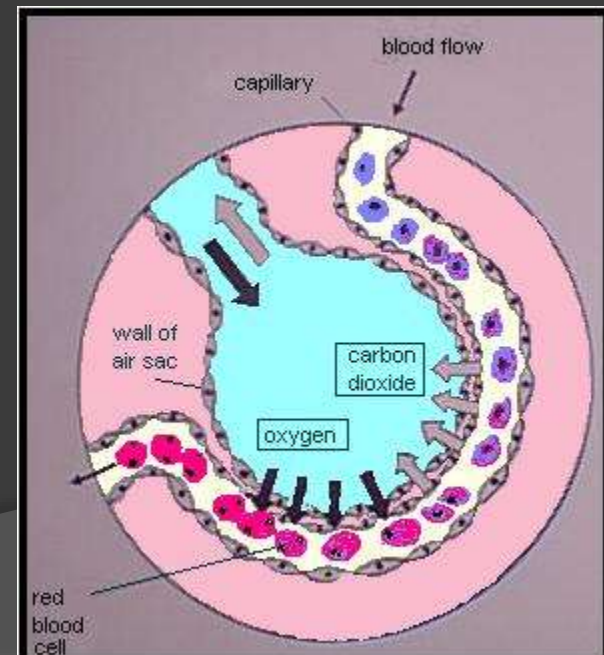
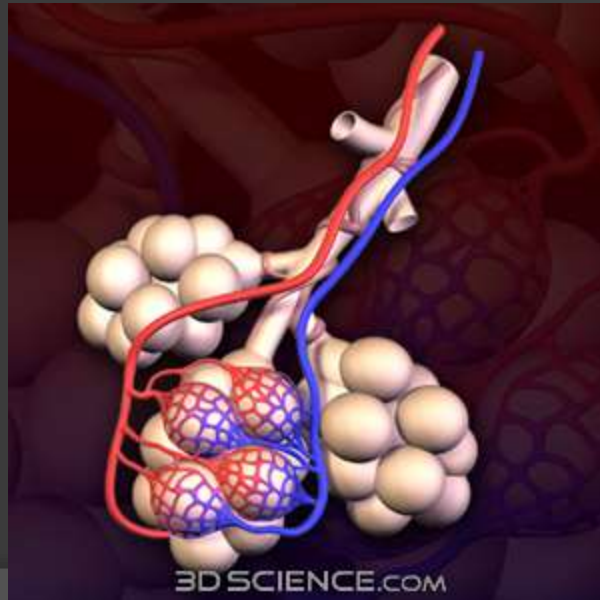
- 6) Cardiovascular (Circulatory) System – includes the heart, blood and blood vessels.
- The blood vessels consists of veins, arteries and capillaries.
- The function of the cardiovascular system is transportation. This moves oxygen, carbon dioxide, hormones and nutrients throughout the body.



- 7) Lymphatic System – includes lymph nodes, lymphatic vessels and lymph organs.
- Some examples of lymph organs are the thymus, tonsils and spleen.
- The lymphatic vessels are a set of tubes that carry a fluid called lymph.
- The lymphatic system provides the body with transportation and defense against diseases.

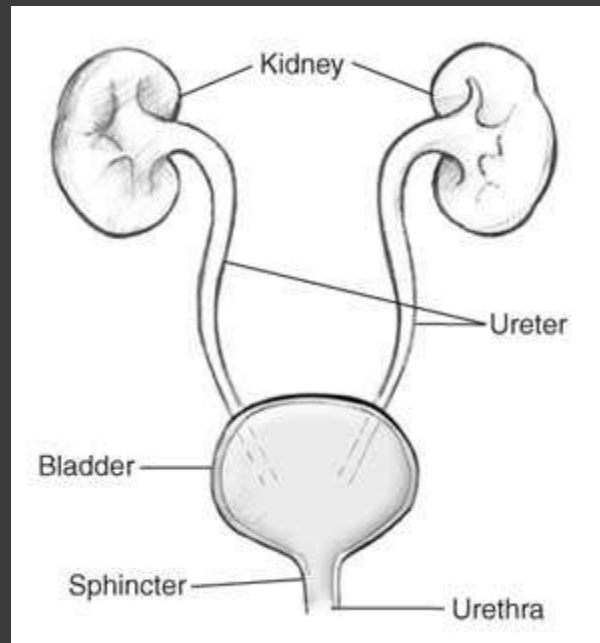


- 8) Respiratory System – includes the nose, trachea, lungs and alveoli.
- alveoli – tiny, thin-walled air sacs in the lungs.
- The main function of the respiratory system is to exchange oxygen and carbon dioxide in the blood.



- 9) Digestive System – includes the mouth, stomach, liver, gall bladder, large intestines and small intestines.
- The main organs of the digestive tract are hollow tubes and this whole system is called the gastrointestinal tract or GI tract.
- The function of the digestive system is to break down food so the body can absorb the nutrients.
- The things that are left over after digestion are wastes which are often called feces and must be expelled from the body.

- 10) Urinary System – include the kidneys, ureters, bladder and the urethra.
- The main function of the urinary system is to clear out waste products from the blood and expel them from the body.



- ① 11) Reproductive System – include the testes and penis in the male and ovaries, vagina and uterus in females.
- ① The reproduction system is vital for reproduction to carry on the species.