

UDS

**NOMBRE DE LA ALUMNA :NATALIA DE LA
CRUZ RODRÍGUEZ.**

**NOMBRE DEL MAESTRO : IGNACIO JAVIER
SÁNCHEZ SOSSA .**

**NOMBRE DE LA MATERIA :INGLÉS II
LICENCIATURA: ENFERMERÍA.**

CUATRIMESTRE:2DO CUATRIMESTRE.

Skeletal system

Functions of the skeletal system

1: support: the bones are the support of the soft tissues, and the point of support for most of skeletal muscles.

2: protection: the bones protect the internal organs, for example the skull protects the brain, rib cage to heart and lungs.

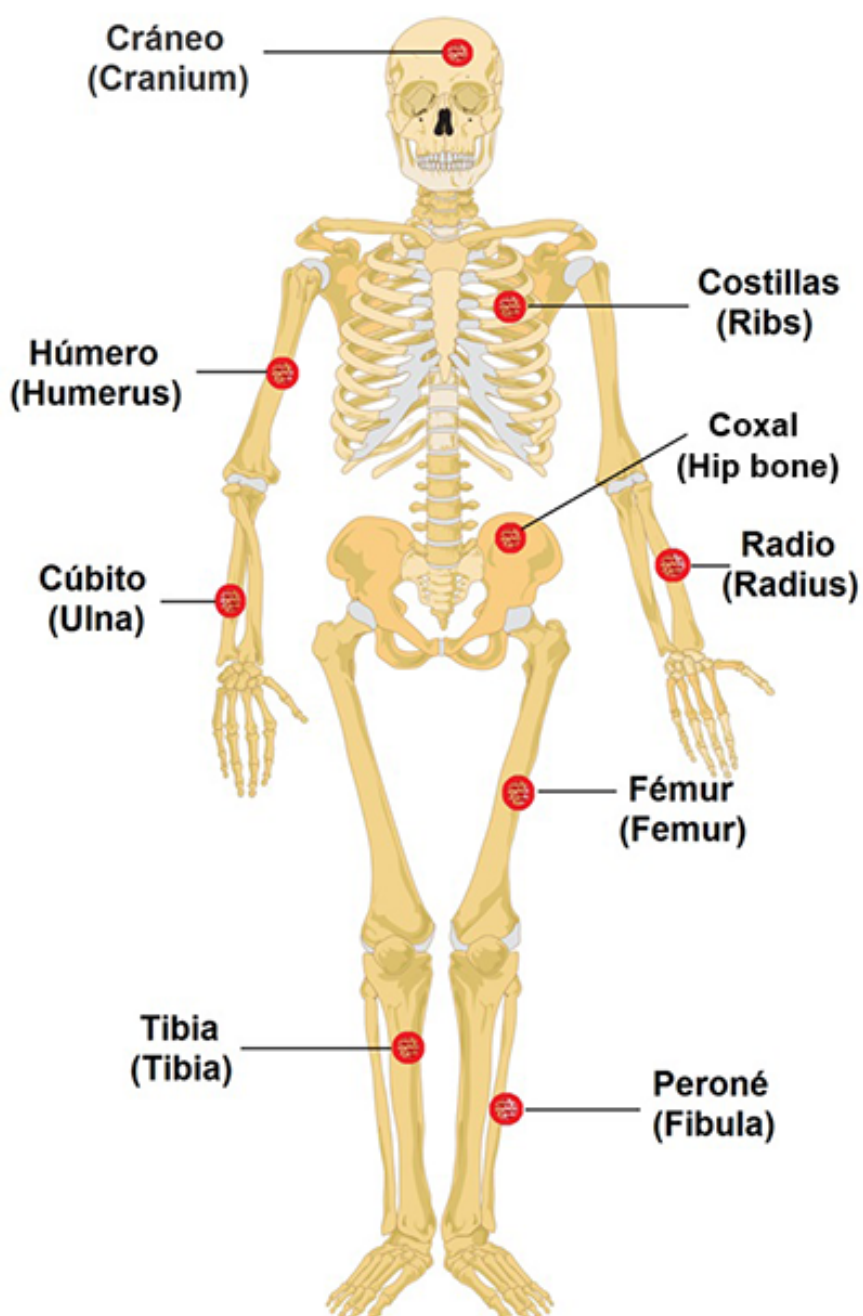
3: movements: in conjunction with the muscles.

4: mineral homeostasis: bone tissue stores calcium and phosphorus to give resistance to the bones, and also releases them into the blood to keep their concentration in balance.

5: blood cell production: in the red bone marrow (specialized connective tissue)

Hemopoiesis occurs to produce red blood cells, white blood cells, and platelets.

6: storage of triglycerides: the red bone marrow is gradually replaced in adults by yellow bone marrow, which contains adipocytes.

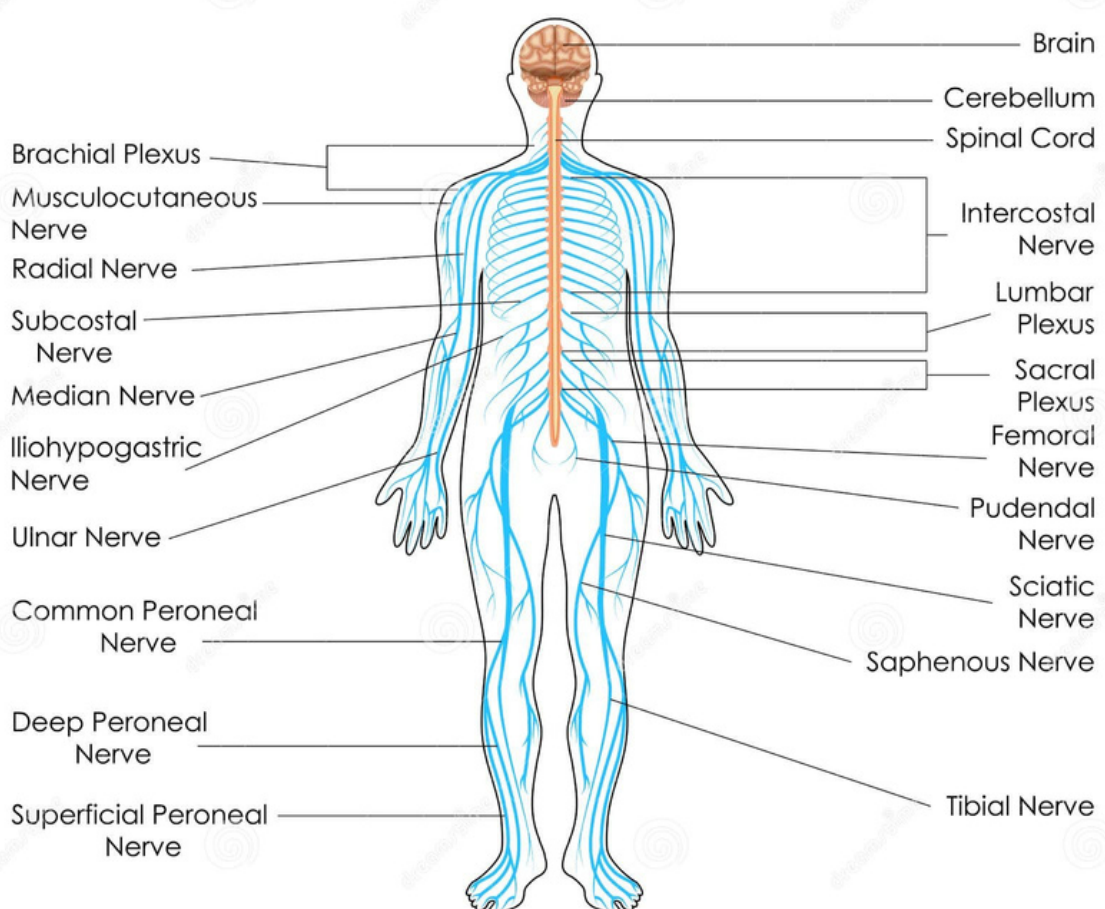


Nervous system

Responsible for processing information collected by the senses and taking conscious actions. It is made up of the following bodies:

ΔThe brain Its most voluminous part, which encompasses the brain, divided into its two hemispheres; the cerebellum, which integrates motor functions and is in the neck region; and the brain stem that connects the spinal cord to the brain, composed of the midbrain, pons and medulla oblongata.

- Spinal cord. Extension of the brain that goes inside the bones of the spine and to which all the nerve endings of the body are connected.
- Peripheral Nervous System (PNS). The peripheral nervous system is made up of nerves, which run through the body and are divided into two groups:
 - Cranial nerves. There are 12 pairs of nerves located, as their name indicates, in the head, where they control information pertinent to the face, neck and main senses, connecting everything to the brain.
 - Spinal nerves. There are 31 pairs of nerves that control information from the trunk and extremities, connecting to the spinal cord.



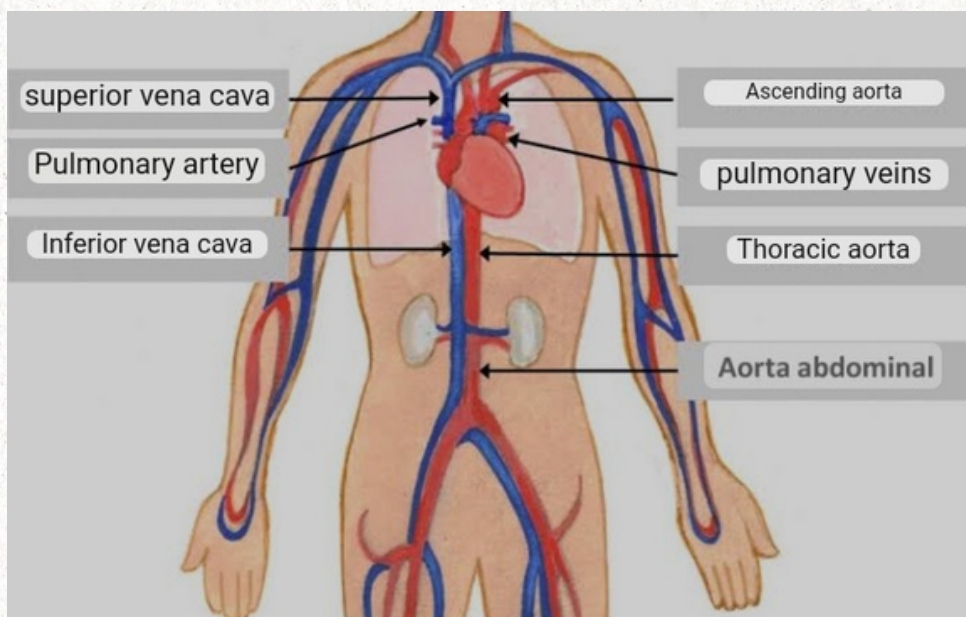
Circulatory system

The cardiovascular system, or circulatory system, of the body is made up of the heart, blood, and blood vessels (arteries and veins).

The term cardiac and vascular services refers to the branch of medicine that focuses on the cardiovascular system. The right atrium receives deoxygenated blood from the body. That blood then flows to the right ventricle, which pumps it to the lungs.

The left atrium receives oxygenated blood from the lungs. From there, blood flows to the left ventricle, which pumps it out of the heart to the rest of the body.

- The heart. This muscular organ functions to pump blood throughout the body through an intricate network of blood vessels.
- The arteries. These thick-walled blood vessels carry oxygenated blood away from the heart.
- The veins. These blood vessels carry deoxygenated blood to the heart.
- The capillaries. These tiny blood vessels facilitate the exchange of oxygen, nutrients, and waste between your circulatory system and your organs and tissues.



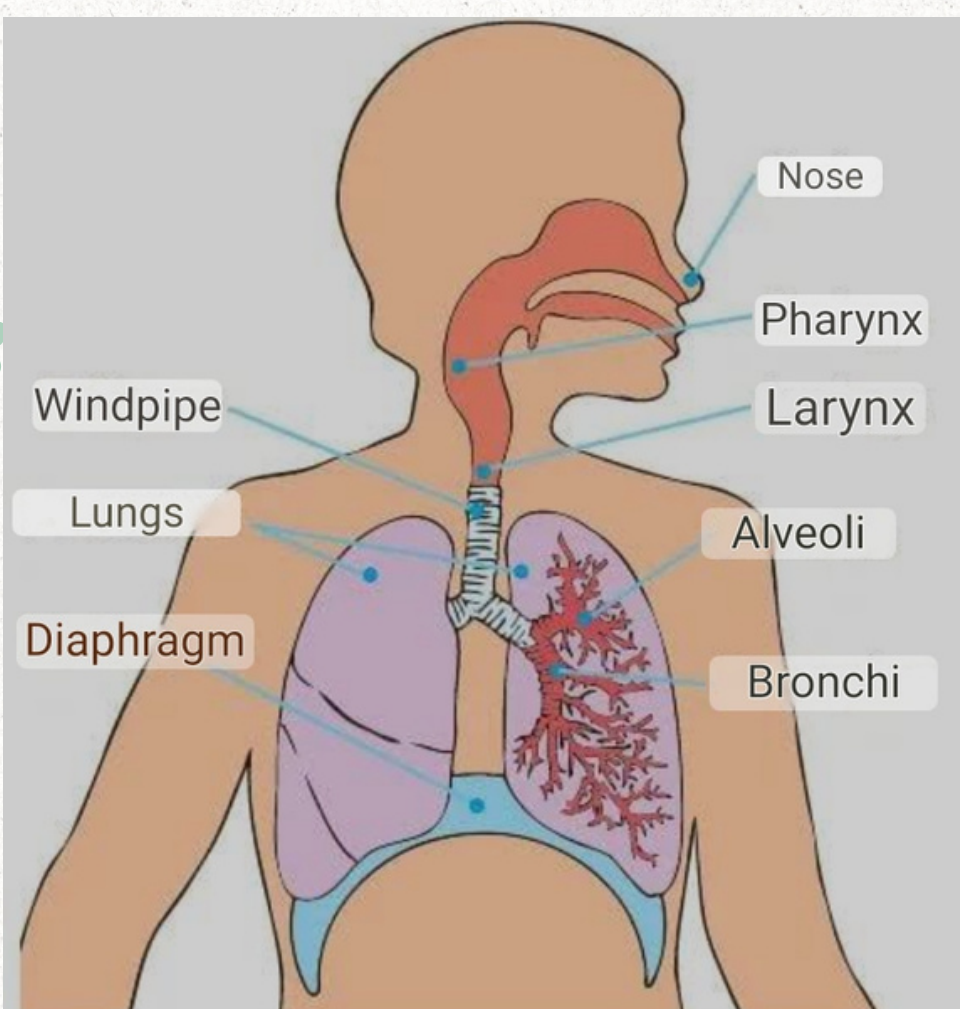
Respiratory System

Nose . The air from outside enters the respiratory system through the nasal passages where it is: Filtered by fimbriae, hairs that clean the air of large particles. . It is the organ where the vocal cords are located, responsible for the voice. The larynx is partially covered by the epiglottis, a kind of plug that closes when we swallow so that food does not enter the airways.

Trachea . Going down the larynx, the air reaches the trachea, a tube about 12cm long, located in front of the esophagus. The trachea is covered by numerous cilia (small extensions of tubular structure) that help to expel any dust that may have passed into the pharynx. It is also composed of cartilaginous rings that allow it to always remain open. In its final portion, the trachea, gives rise to 2 branches called bronchi, composed of cartilaginous rings with the same characteristics.

Bronchi, Bronchioles and Alveoli . The bronchi penetrate the lungs where they divide again into finer branches called bronchioles. Each bronchiole ends in dozens of sacs called pulmonary alveoli that are lined with small blood vessels through which gas exchange occurs (O₂ passes from the alveoli to the blood and CO₂ passes from the blood to the alveoli to be expelled during expiration).

Lungs . Finally, the lungs are two reddish spongy organs, located in the thorax, on both sides of the heart and protected by the ribs. The right lung consists of 3 fragments, while the left, slightly smaller, consists of only two, since it has to share the space of the left hemithorax with the heart.



Digestive System

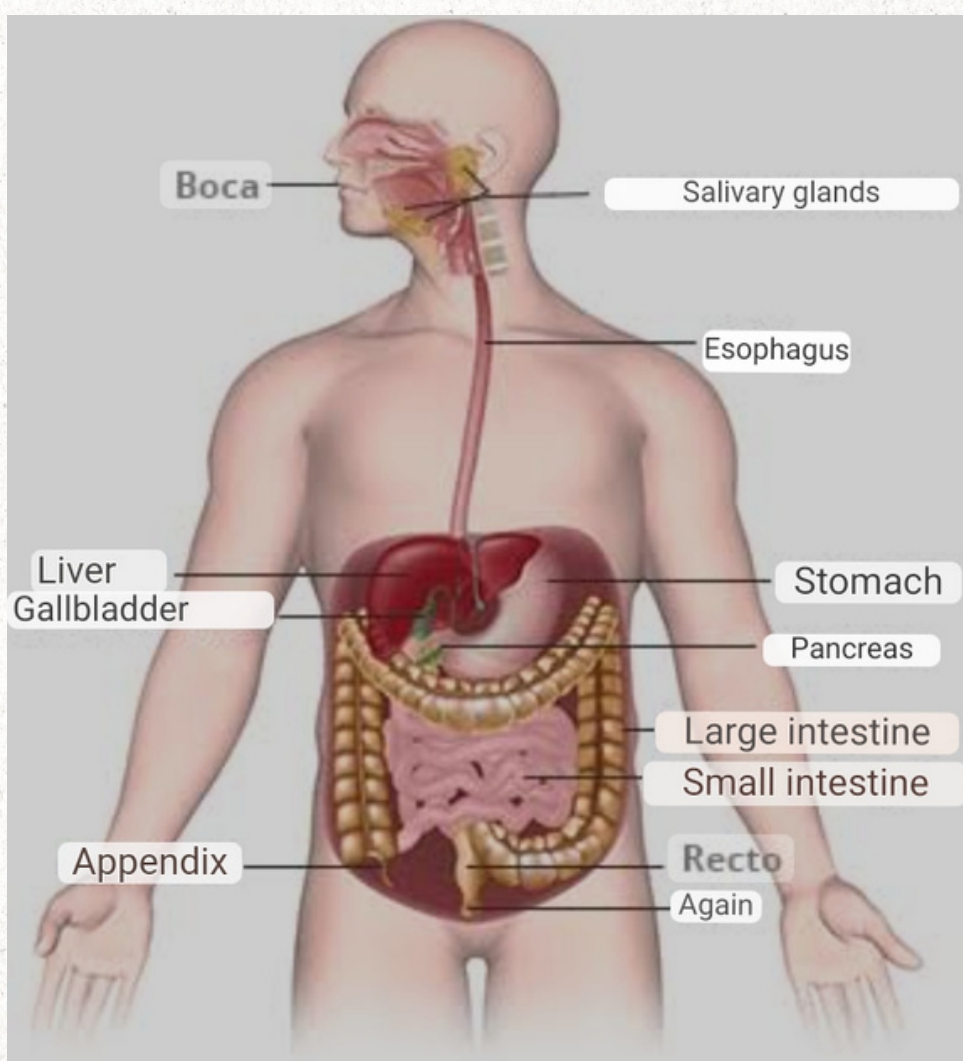
Mouth —Food begins to move through the gastrointestinal tract when a person eats. When a person swallows, the tongue pushes food down the throat. A small flap of tissue, called the epiglottis, folds over the trachea to prevent the person from choking and so food passes into the esophagus.

Esophagus — Once a person begins to swallow, the process becomes automatic. The brain sends signals to the muscles of the esophagus and peristalsis begins. —After food enters the stomach, the stomach muscles mix the food and liquid with digestive juices. The stomach slowly empties its contents, called chyme, into the small intestine.

Small intestine —The muscles of the small intestine mix food with digestive juices from the pancreas, liver, and intestine and push the mixture forward to continue the digestion process. The walls of the small intestine absorb water and digested nutrients into the bloodstream. As peristalsis continues, waste products from the digestive process pass into the large intestine.

Large intestine —Waste products of the digestive process include undigested parts of food, fluids, and old cells from the lining of the gastrointestinal tract. The large intestine absorbs water and changes waste from liquid to feces. Peristalsis helps move stool into the rectum.

Rectum —The lower end of the large intestine, the rectum, stores stool until it is pushed out of the anus during defecation.



Muscle System

- Fusiform muscles. Those with a spindle shape, thick in the central part and thin at the ends, like those present in the upper and lower limbs.
- Flat and wide muscles. Present especially in the abdominal wall, they mobilize and protect the lower internal organs.
- Fan muscles. As their name indicates, they are fan-shaped, and two important examples are the pectorals (on the chest) and the temporals (on the jaw).
- Circular muscles. They are ring-shaped, so they serve to close (when contracting) or open (when relaxing) various ducts, such as the anal opening through which we defecate.
- Orbicularis muscles. Similar to fusiform ones, but they have a hole in the center, so they allow other structures to open and close. An example is the orbicularis muscle in our eyelids.

