

UNIT 4. Anatomy and Physiology

READING – A trip inside the human body

Welcome aboard a journey inside the human body!

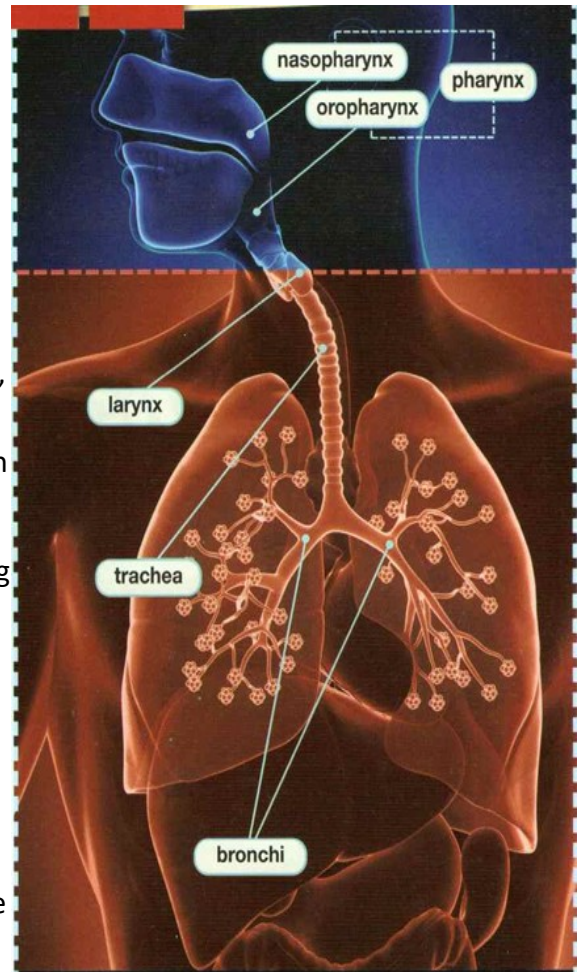
After shrinking to the size of a bacterium, we enter through the nose, where hairs and the **nasal cavity** filter, warm, and humidify the air. We pass through the **pharynx** and we go down, where we can see the back of the tongue from the **oropharynx**. Let's move downwards to the **larynx**, where the vocal cords are located, and then move down the **trachea**, supported by **cartilage rings**.

The trachea splits into two **bronchi**, and we travel into the left one, moving through smaller **bronchioles** until we reach the **alveoli**. These tiny sacs covered in blood capillaries exchange gases: oxygen enters the blood while carbon dioxide leaves it.

From there, we enter the bloodstream and travel through some big **blood vessels** known as **pulmonary veins**, and reach the heart. After passing through the left **atrium** and **ventricle**, we are pumped out through the **aorta artery** (the biggest and strongest artery in the body) to the abdomen. We have travelled from the **lungs** to the abdominal portion of the aorta, which supplies blood to most of its organs.

We branch off into the superior mesenteric artery and arrive at the **pancreas**, which produces **insulin** and **digestive juices** that break food into small particles. These juices flow from the **pancreatic duct** into the **duodenum**, which is the first part of the **small intestine**, a 3 to 5 metre-long tube. There they mix with **bile** from the **gallbladder** to digest food. The bile mainly digests the fats and the pancreatic juices digest the rest of the components. As we move through the small intestine, all the nutrients are absorbed until we reach its last portion, the ileum.

Finally, we enter the **large intestine**, where water is absorbed and bacteria help break down remaining material. The journey ends at the **rectum**, where waste leaves the body.



1. Classify the organs from the text according to their system:

- Respiratory system: _____
- Cardiocirculatory system: _____
- Digestive system: _____

2. According to the text, what organs relate to the following sentences?

- a) It is surrounded by some ring cartilages: _____
- b) It absorbs all the nutrients in the food: _____
- c) The blood vessel that goes out of the left ventricle: _____
- d) It humidifies and heats the air: _____
- e) A sack covered in capillaries that is at the end of the bronchioles: _____

3. Answer the following questions according to the text.

- a) How long is the small intestine?

- b) What two substances does the pancreas produce?

- c) What is the name of the digestive juice produced by the gallbladder?

- d) Where are the vocal cords?
