

MYRTLE

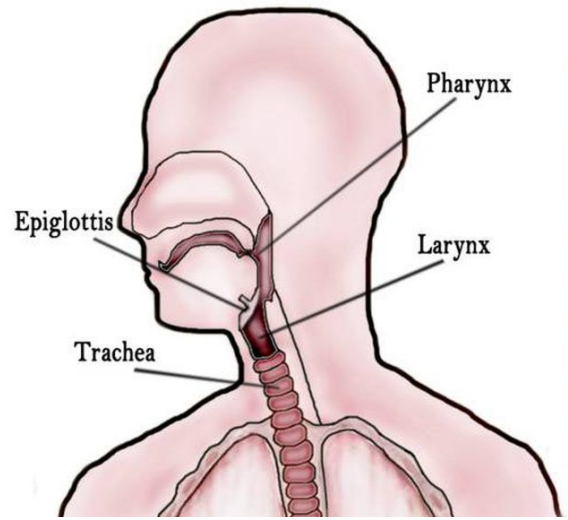
- Full term fetal pig
- Male
- Small Kidneys
- Visible epiglottis



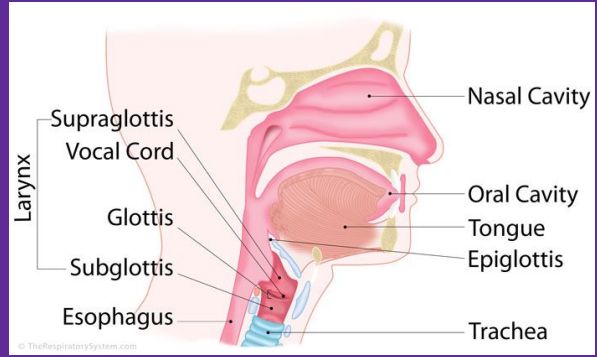
The Larynx

Structure:

The larynx is a hollow, tubular structure connected to the top of the trachea which is composed of thyroid, cricoid, and arytenoid cartilages.

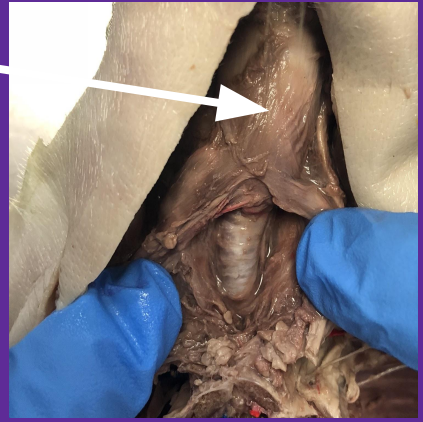


Fact:
Vocal cords vibrate hundreds and even thousands of times per second, producing voice.



Larynx

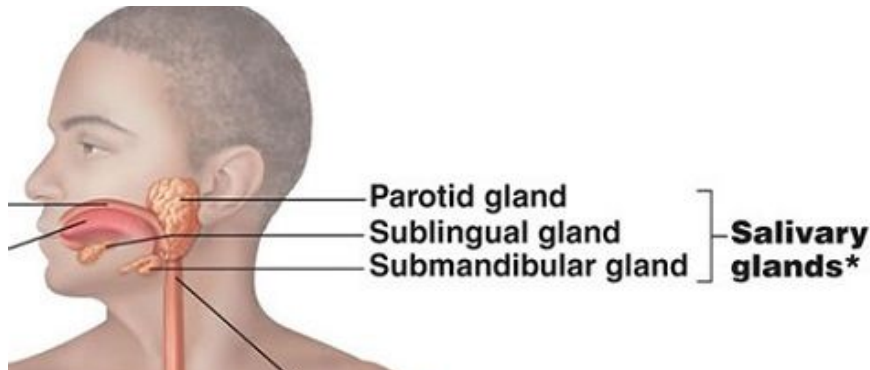
Function:
When muscles pull the vocal cords together, the air moving between them causes the cords to vibrate and produce sounds so we are able to speak.



Salivary Glands

Function of the Salivary Glands: The Salivary Glands produce saliva, which keeps the mouth moist. They also help to break down carbohydrates and lubricates the passage of food down from the oropharynx to the esophagus to the stomach.

Organ Structures: Parotid Gland, Sublingual Gland, and Submandibular Gland, which all help in producing saliva



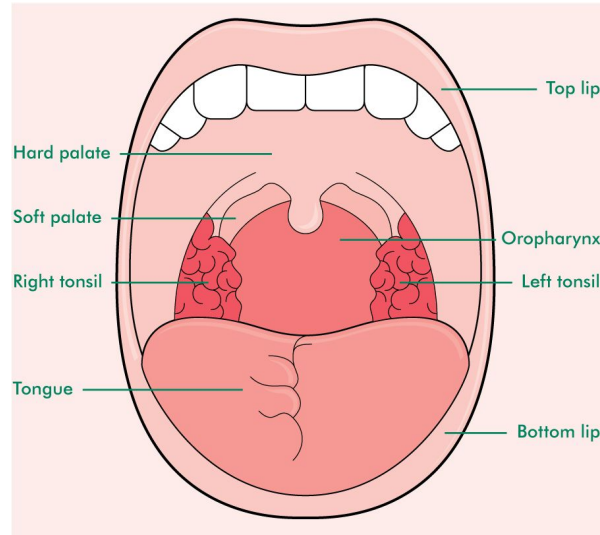
The Parotid Gland

The Sublingual, and Submandibular Glands.

Diseases: The parotid glands can be affected with the mumps virus, and calculi stones can form in a salivary gland or duct. If a stone is in a duct it will cause great pain. If a stone is within a gland it will need surgical removal, which may cause the whole gland to be removed. There can also be bacterial infections in a gland. Tumors may develop but they are slow growing and non cancerous.

Mouth

The main structures inside the mouth are the teeth, tongue, tonsils, & salivary glands.



Facts:

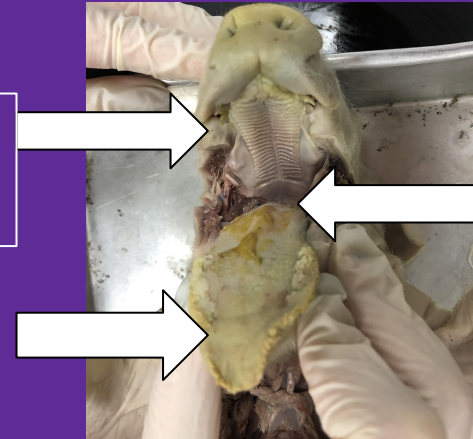
We have four different types of teeth in our mouth.

Teeth, like your bones, are alive. They have their own blood supply and nerves. A tooth can die.

Function: The digestive system begins with the mouth. Chewing begins the process of mechanical digestion. Chemical digestion involves breaking down the food into nutrients that can be used by cells. Chemical digestion begins when food mixes with saliva. Saliva contains an enzyme (amylase) that begins the breakdown of carbohydrates.

Incisor &
Canine
Teeth

Tongue &
papillae

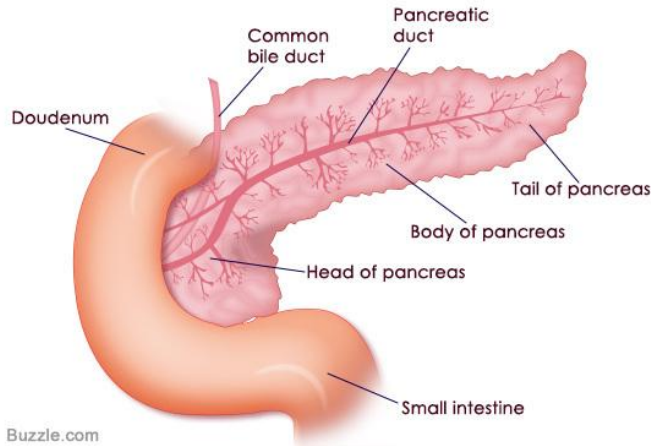
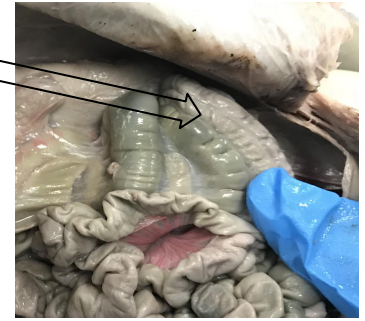


Soft &
hard
palate

Pancreas

Function of the Pancreas: The pancreas helps in converting food that we eat into fuel for the body's cell. The two main functions of the pancreas are the exocrine function, which helps in digestion, and endocrine function, which helps regulate blood sugar.

Pancreas

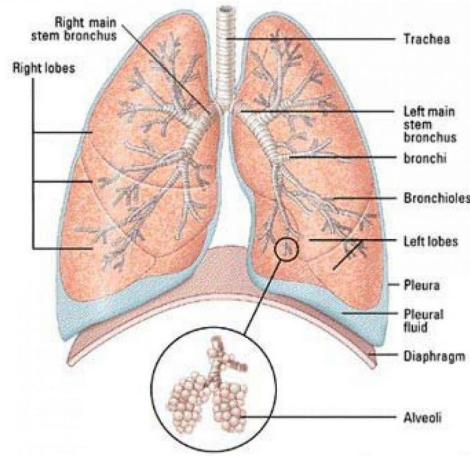


Diseases: Two very common diseases of the pancreas are Pancreatitis, which is an inflammation of the pancreas and Type 1 Diabetes, which is when the pancreas produces little to no insulin.

Organ Structure: Within the pancreas is the pancreatic duct, which collects juices from the branches of the pancreatic stream and exits at the main papilla of Vater.

Lungs

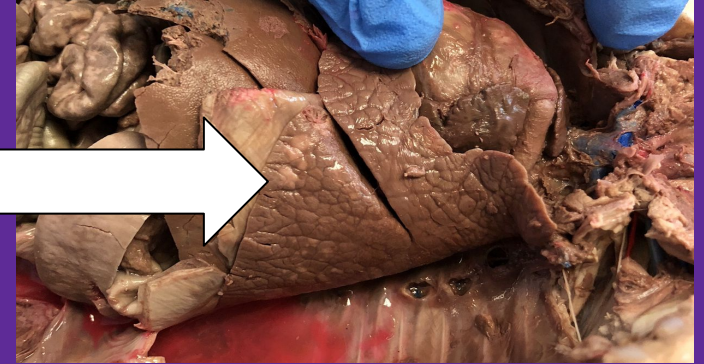
The lungs are a pair of spongy, air-filled organs. The trachea brings inhaled air in through tubular branches, called bronchi. The bronchi then divide into smaller bronchioles. The bronchioles eventually end in microscopic air sacs called alveoli.



Problems with the Lungs:
Acute bronchitis: This can occur as a complication of an upper respiratory tract infection and is usually caused by a virus.
Pneumonia: Pneumonia causes the smallest parts of the lungs (bronchioles) to become inflamed. Pneumonia can be fatal for elderly people, children, and others with lowered or weakened immune systems

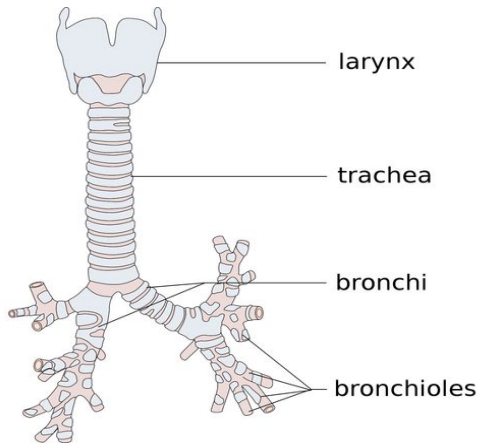
The main function of the lungs is the process of gas exchange called respiration (or breathing). In respiration, oxygen from incoming air enters the blood, and carbon dioxide, a waste gas from the metabolism, leaves the blood. The oxygen brought in then circulates throughout the body in the bloodstream.

Lung

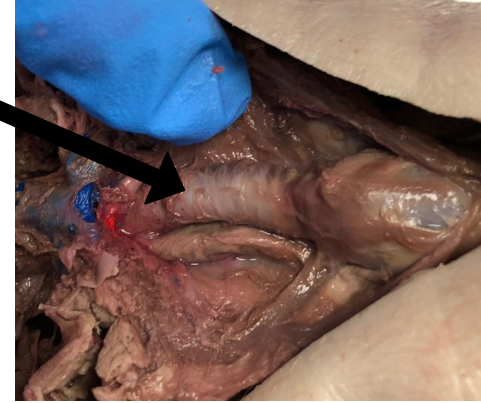


Trachea

Function: The trachea, or windpipe is where air moves from the pharynx. This connects the larynx to the bronchi, and provides air flow to and from the lungs for breathing. The trachea produces mucus to trap inhaled particles, and the cilia lining sweeps the bad particles out, to the pharynx so that they can be disposed of.



Trachea

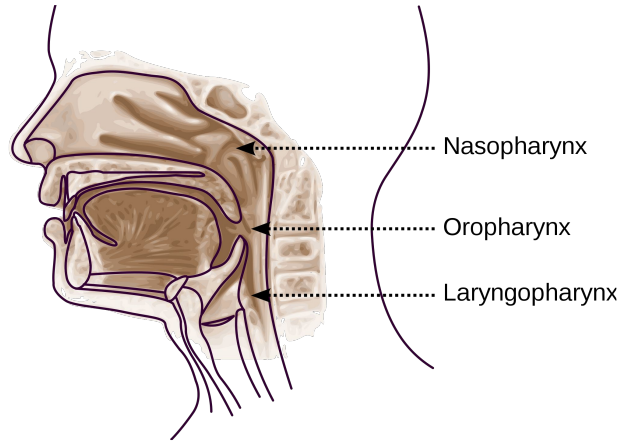


Facts: The trachea is about 4 inches long and less than an inch in diameter in most people. The trachea is composed of about 20 rings of tough cartilage.

How the trachea works with other organs: Air flows from the trachea into the bronchi, and from the bronchi into the bronchioles of the lungs. Without the trachea there would not be a way to get the air to the lungs.

Pharynx

The structure of the pharynx includes three parts. The nasopharynx, the oropharynx and the laryngopharynx.

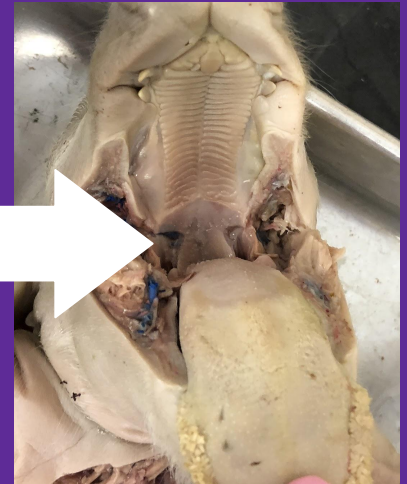


Diseases:

Pharyngitis- an inflammatory condition that causes swelling, pain during swallowing, redness, and scratchiness, along with white patches in the throat.
Tonsillopharyngitis- a viral throat infection that causes pain and difficulty swallowing.

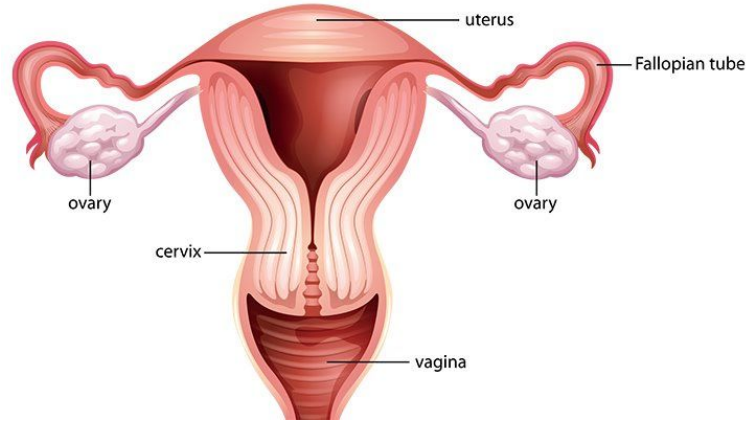
Function: The pharynx muscular walls help to swallow. It serves as pathway for the movement of food to the esophagus. It works with the other speech organs and muscles to produce sounds. Only air passes through the nasopharynx, while both food and air pass into the oropharynx. The laryngopharynx, only permits passage of air going to the lungs.

Pharynx



Female Reproductive System

The structures inside the female reproductive system are ovaries, fallopian tubes, uterus, vagina, vulva, mammary glands and breasts



Facts:

The female ovum is the largest human cell.

On average the vagina has a PH level of 4.5.

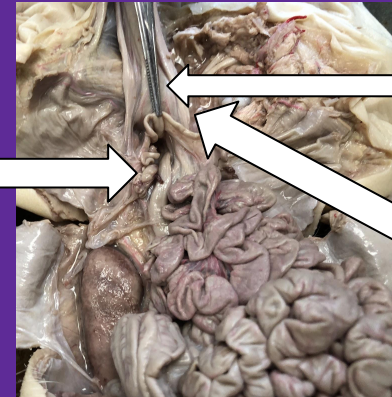
Some women are born with two uterus.

A woman never runs out of eggs.

The uterus is generally 3 inches long, and two inches wide.

The ovaries are the primary reproductive organs, puberty in females begins when the hypothalamus signals the pituitary gland to release FSH and LH. FSH stimulates cells within ovaries to produce increased amount of estrogens and start producing egg cells. The ovary contains primary follicles. The follicles help to mature the egg for release into the reproductive tract. An ovary produces and releases a mature ovum about every 28 days.

Ovary & fallopian tube

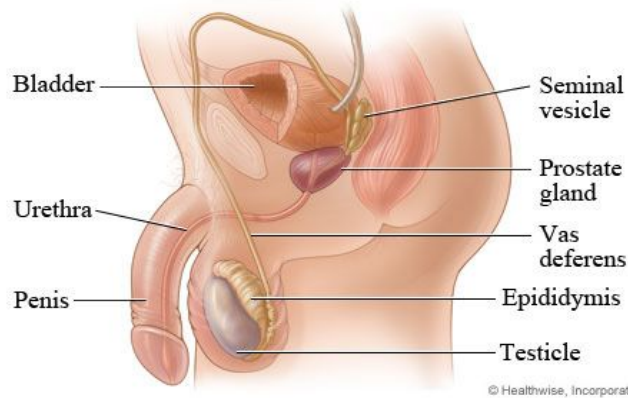


Urinary bladder

Umbilical arteries

Male Reproductive System

The Structures inside the male reproductive system are: testes, scrotum, seminal vesicle, urethra, bulbourethral gland, epididymis, vas deferens, penis, and prostate gland



Fact:
During ejaculation a man can release upward of about 1.2 million sperm cells. This is more gametes released in a single moment, than most women ever have in their lifetime.

Function: Produces, maintains, and transports sperm and protective fluid.

Produces and secretes male hormones.

Discharge sperm within the female reproductive tract during intercourse.

Testosterone and FSH stimulate the development of sperm.

Sperm develops within the seminiferous tubules

Testis

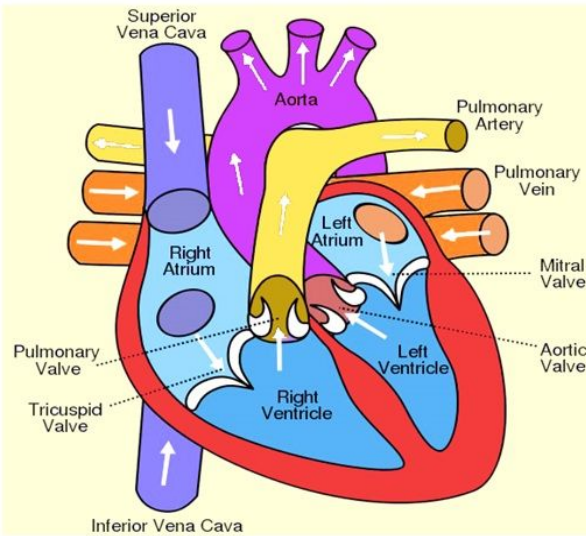
Epididymis



Heart

Structure:

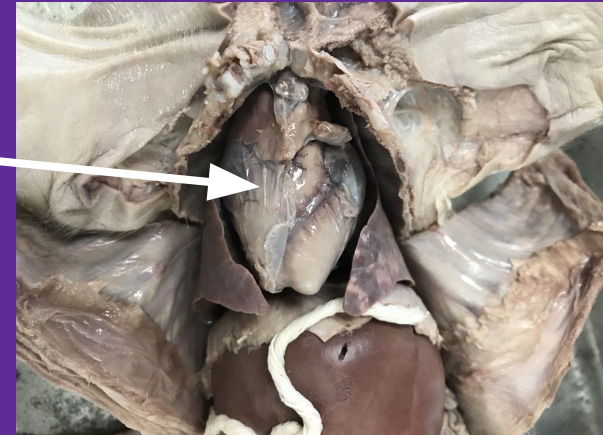
The heart is divided into four chambers consisting of two atria and two ventricles. The heart also includes the aorta, pulmonary artery, and pulmonary vein.



Miscellaneous fact:
The heart pumps about 2,000 gallons of blood every day.

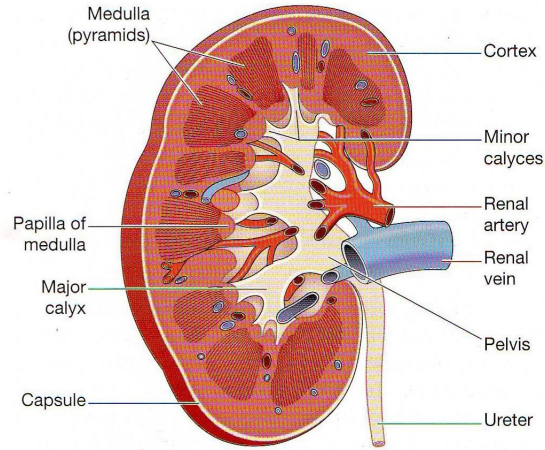
The functions of the heart, blood vessels, and blood are to transport oxygen, protect the body, and regulate the system. The heart and vessels transport nutrients and oxygen throughout the body and remove metabolic wastes including carbon dioxide. The heart protects the body by using white blood cells to fight against toxins. The blood also helps regulate the body temperature and water content.

Heart



Kidneys

The structures in the Kidney are the, Renal vein, Nephrons, and Renal artery.

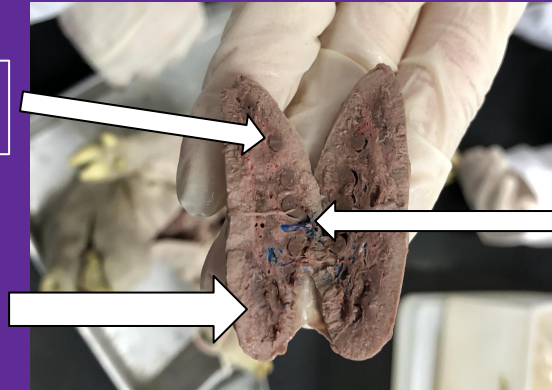


Diseases: There are many different diseases that you can get within the kidneys. One being Kidney cancer, which is when kidney cells become malignant, grow out of control, and form a tumor. Another common disease is Kidney Failure, which is when 85-90% of your kidneys are not functioning, and they do not have enough function to keep you alive.

Function: The kidneys filter out toxins, excess salts, and urea, a waste created by cell metabolism. Urea is synthesized in the liver and transported through the blood to the kidneys for removal. To balance water, kidneys are key, they chemically breakdown urine, and react to changes in the body's water level throughout the day. As water intake decreases, the kidneys adjust accordingly and leave water in the body instead of excreting it. When the kidneys need more oxygen, they send out a "distress call" erythropoietin, a hormone that stimulates the bone marrow to produce more oxygen-carrying red blood cells. Lastly, the kidneys function in helping the body balance acids from food.

Medulla

Cortex

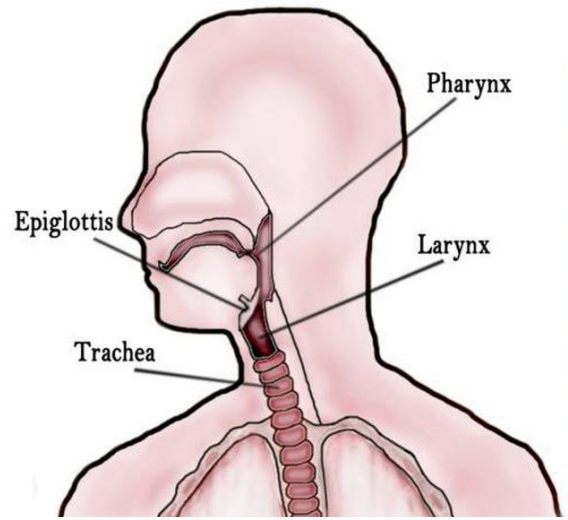


Renal artery and renal vein

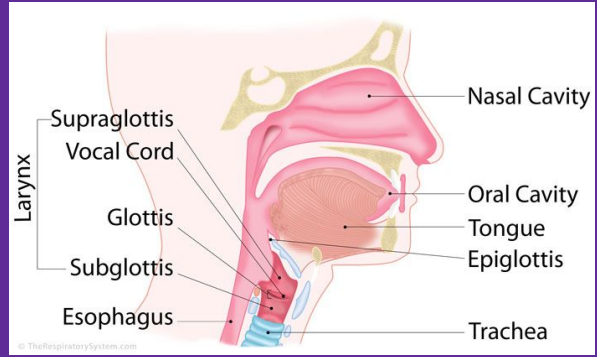
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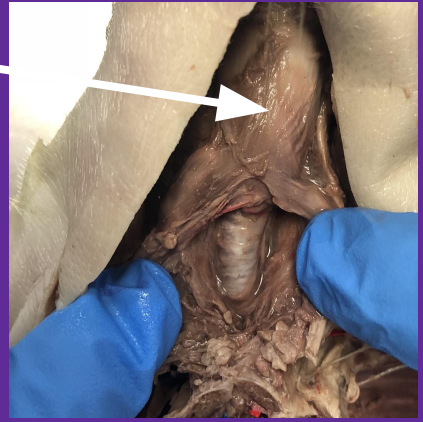


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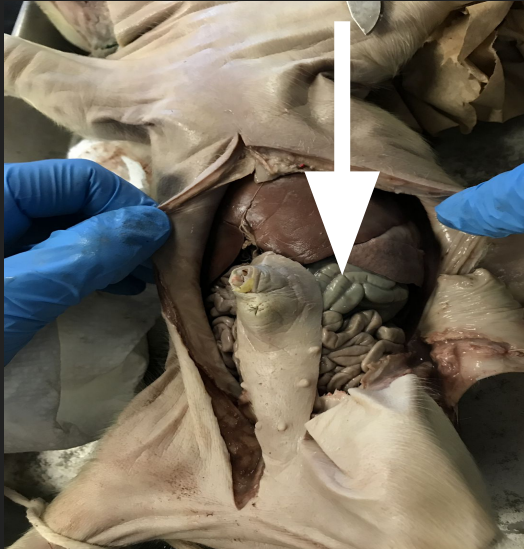


Larynx

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Large Intestine



Structure

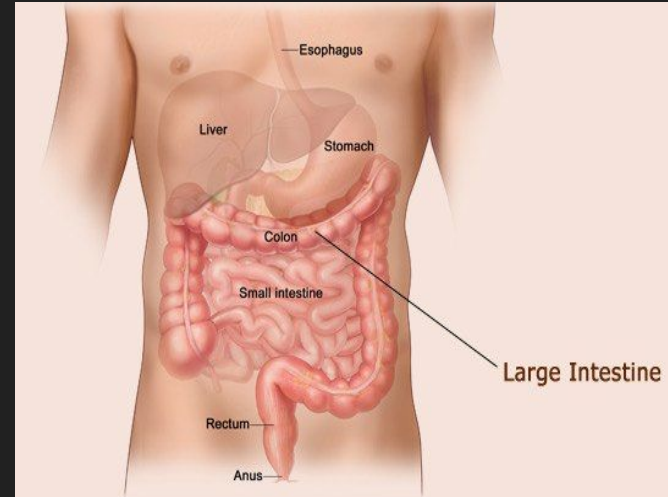
Made up of the colon and rectum, the large intestine is 1.5 meters (5 feet) long. The large intestine is attached to the small intestine starting at the right hip.

Function

The primary function of the large intestine is to remove water from the undigested material that is left.

Miscellaneous fact

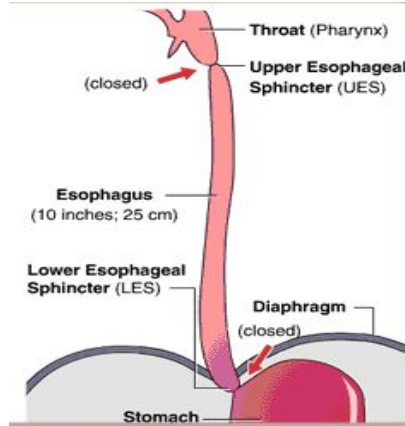
You can live without a large intestine, you just need to drink more water.



Digestive System Esophagus

Structure

a muscular tube connecting the pharynx with the stomach. The esophagus is about 8 inches long, and lined by pink tissue called mucosa. The esophagus runs behind the trachea and the heart.



Possible Disease

Esophagitis, may damage tissues of the esophagus causing painful and difficulty in swallowing. Caused by stomach acids being backed up, allergies, oral medications, and infection.

Function

The upper esophageal sphincter controls the movement of food from the throat to the stomach.

The lower esophageal sphincter controls the movement of food from the esophagus to the stomach.

Esophagus is under the larynx.

