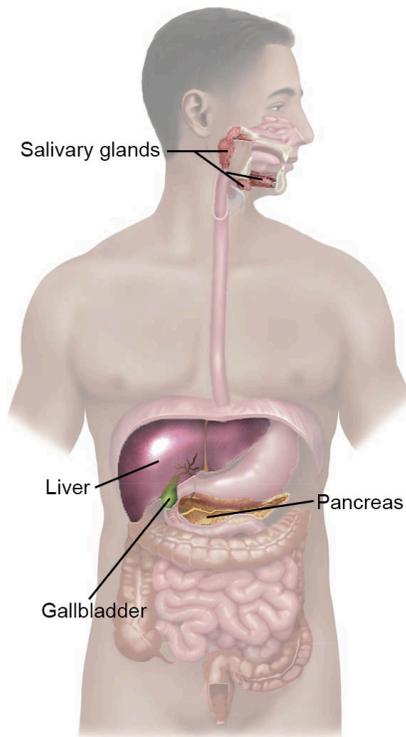
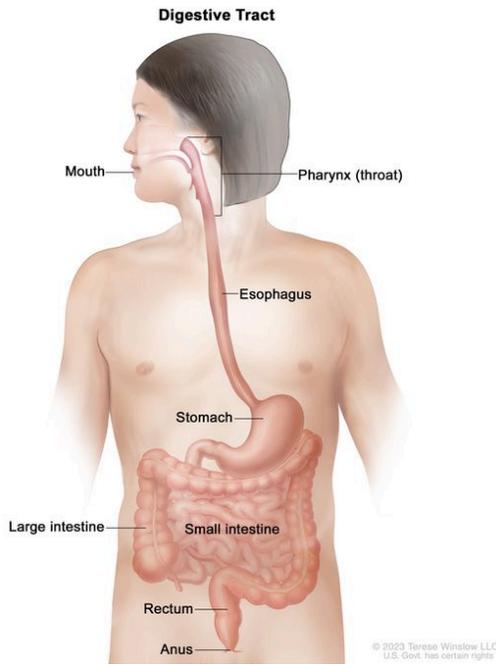
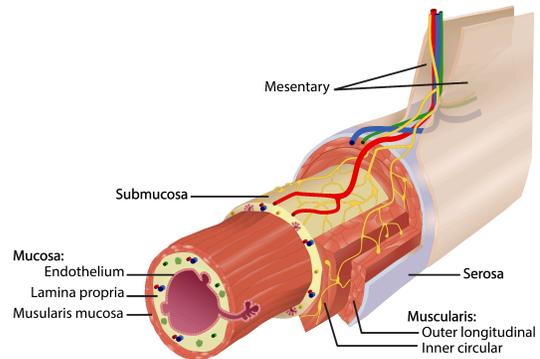


Anatomy Unit 6 Notes



Chemical vs. Mechanical Digestion

- **Chemical:**
 - Enzymes break down food
 - Examples: Amylase (mouth and small intestine)
- **Mechanical:**
 - The physical breakdown of large pieces of food into smaller pieces.
 - Examples: chewing, stomach churning



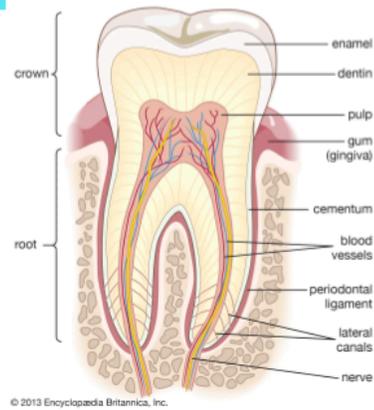
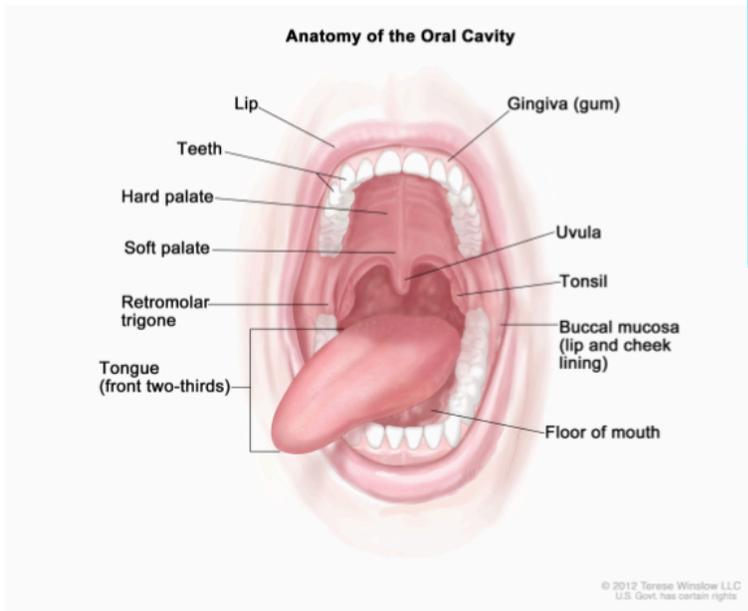
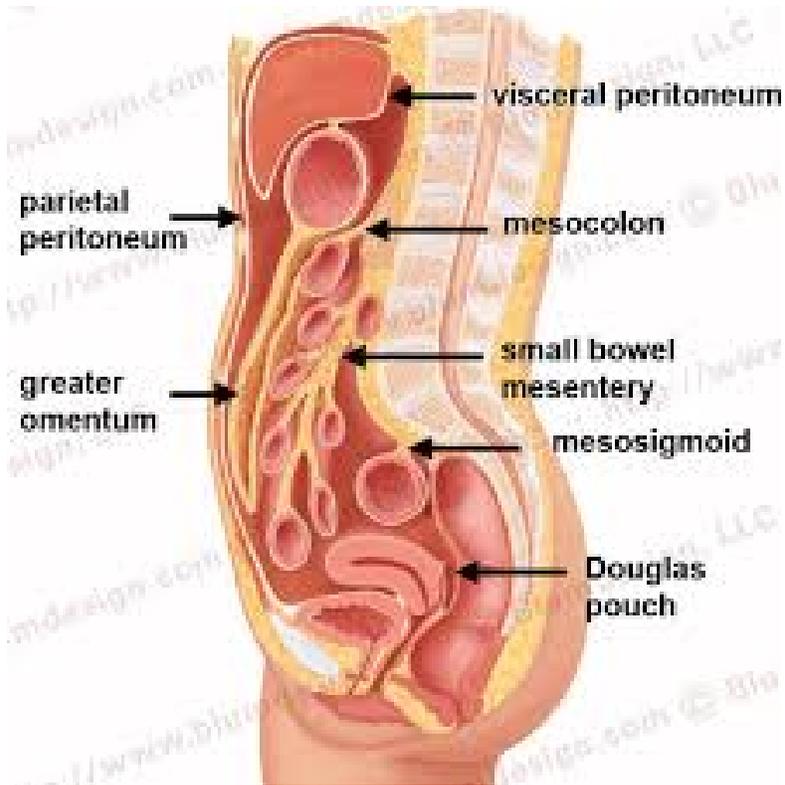
ENTERIC NERVOUS SYSTEM (ENS)

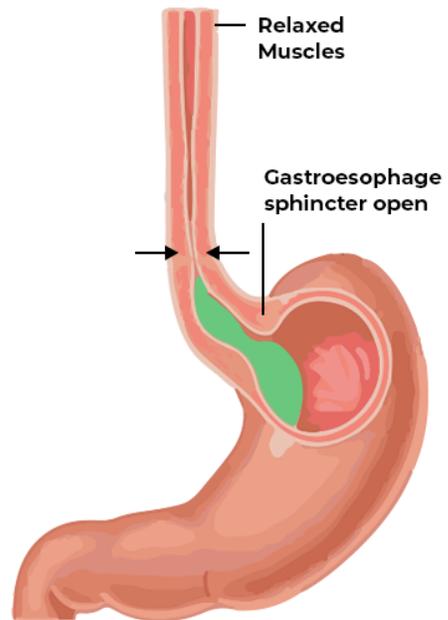
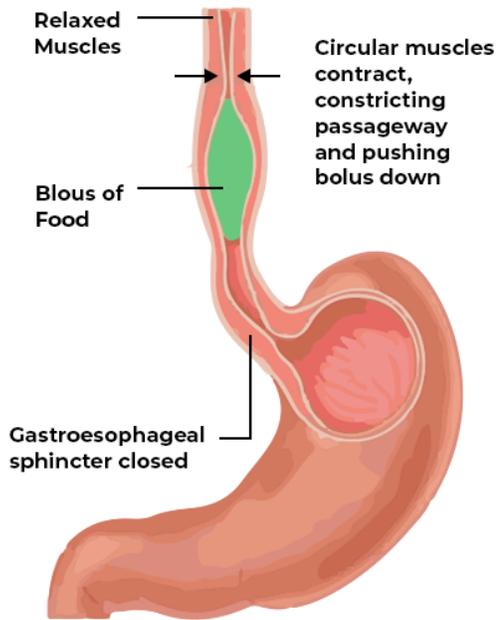
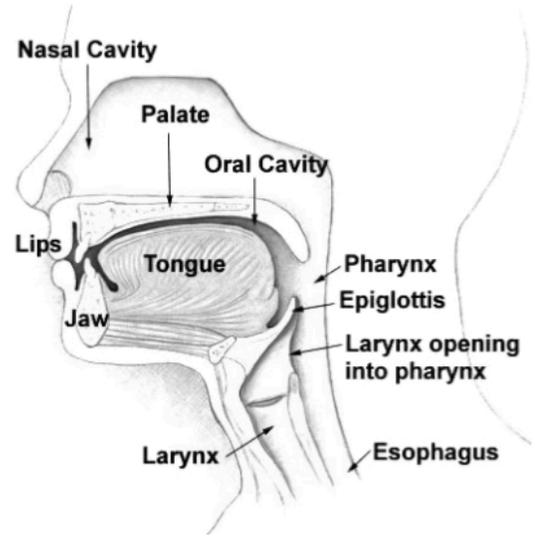
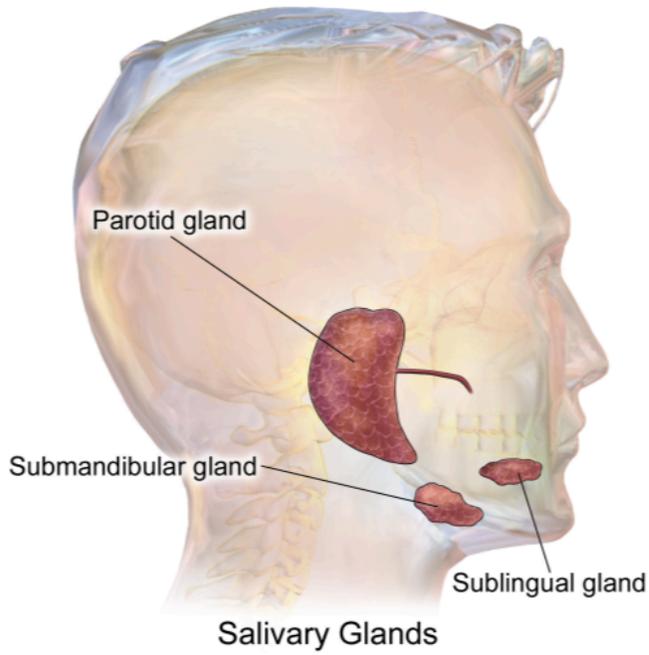
Types of enteric neurons

- **SENSORY NERVES**
It monitor the stimuli – the pressure, chemical composition in the gut and muscle movement
- **MOTOR NEURONS**
It activate the smooth muscles in the gut wall and regulate the secretions of mucus and digestive juices from the glands.
- **INTERNEURON NERVES**
Local neurons called interneurons integrate information from sensory and motor neurons.

Arrangement of enteric neurons

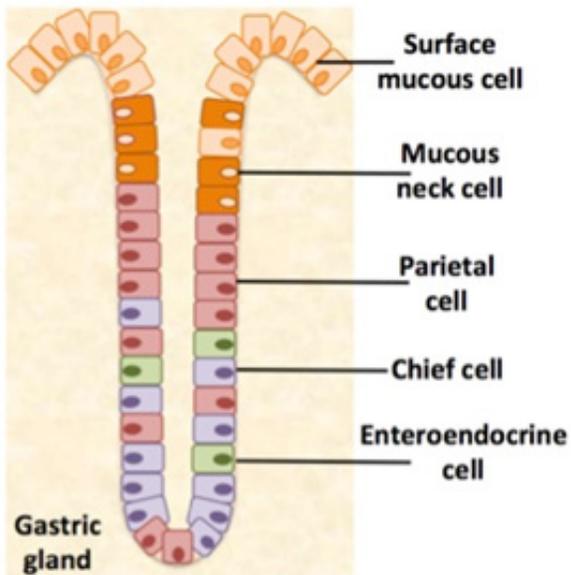
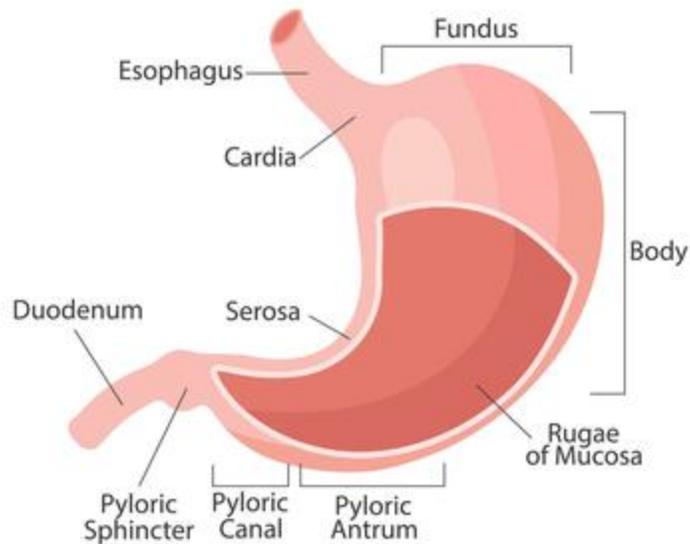
- **MYENTERIC (OR AUERBACH'S) PLEXUS**
Myenteric plexus regulates the workings of gut muscles, resulting in peristalsis and coordinated contraction and expansion of gut muscles.
- **SUBMUCOUS (OR MEISSNER'S) PLEXUS**
Submucous plexus is located under the mucus-secreting layer in the gut. It monitors the chemical composition of the gut and regulates secretion from glands.





STOMACH

INTERNAL STRUCTURE

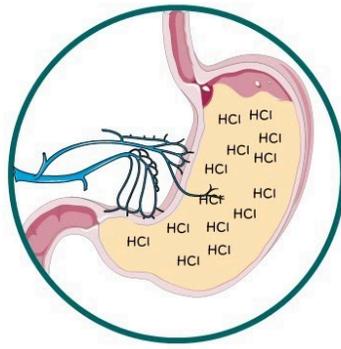


Cells of the gastric glands	Secretory products
Surface mucous cells	Mucin in an alkaline fluid
Mucous neck cells	Mucin in an acidic fluid
Parietal cells	HCl & intrinsic factor
Chief cells	Pepsinogen & lipase
G cells/enteroendocrine cells	Gastrin

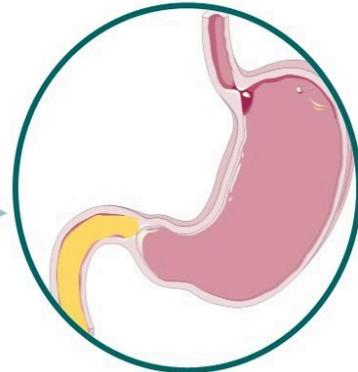
Phases of gastric secretion



Cephalic phase

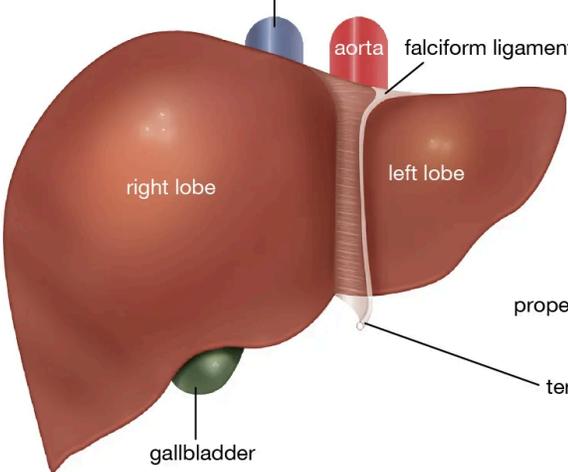


Gastric phase

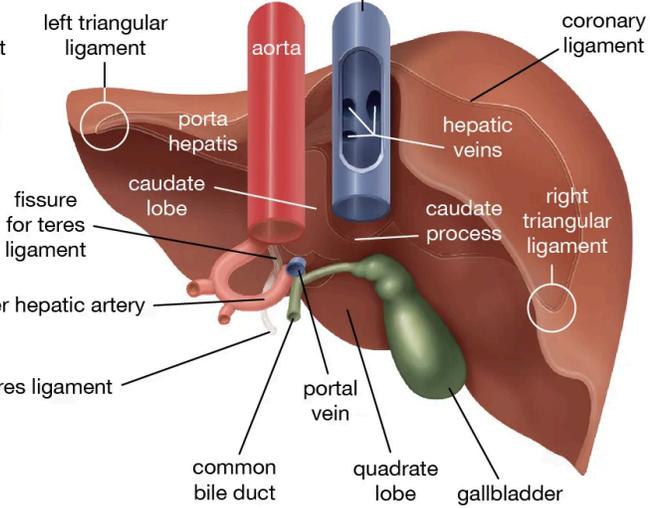


Intestinal phase

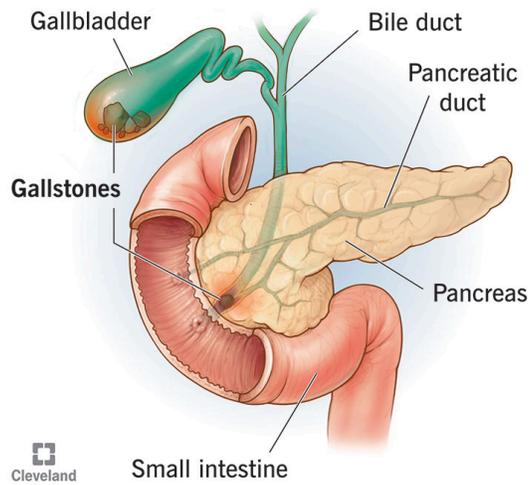
anterior view



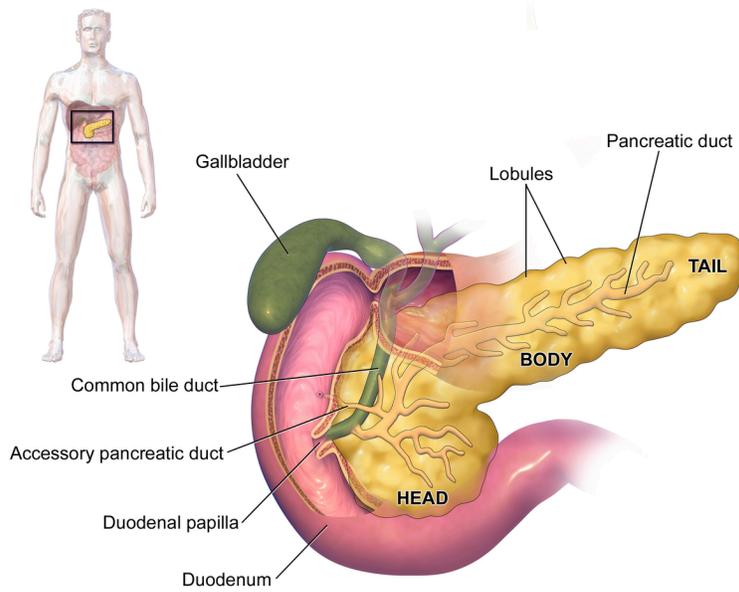
posterior view



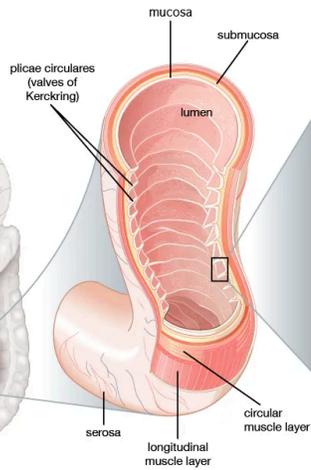
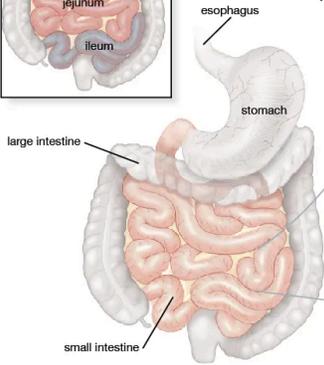
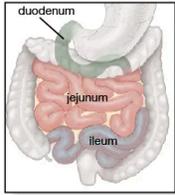
Gallstones



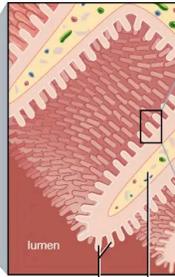
Cleveland
Clinic
©2023



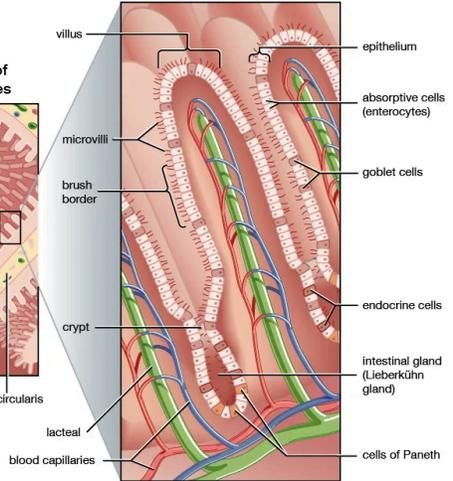
Regions of the small intestine



Enlargement of plicae circulares

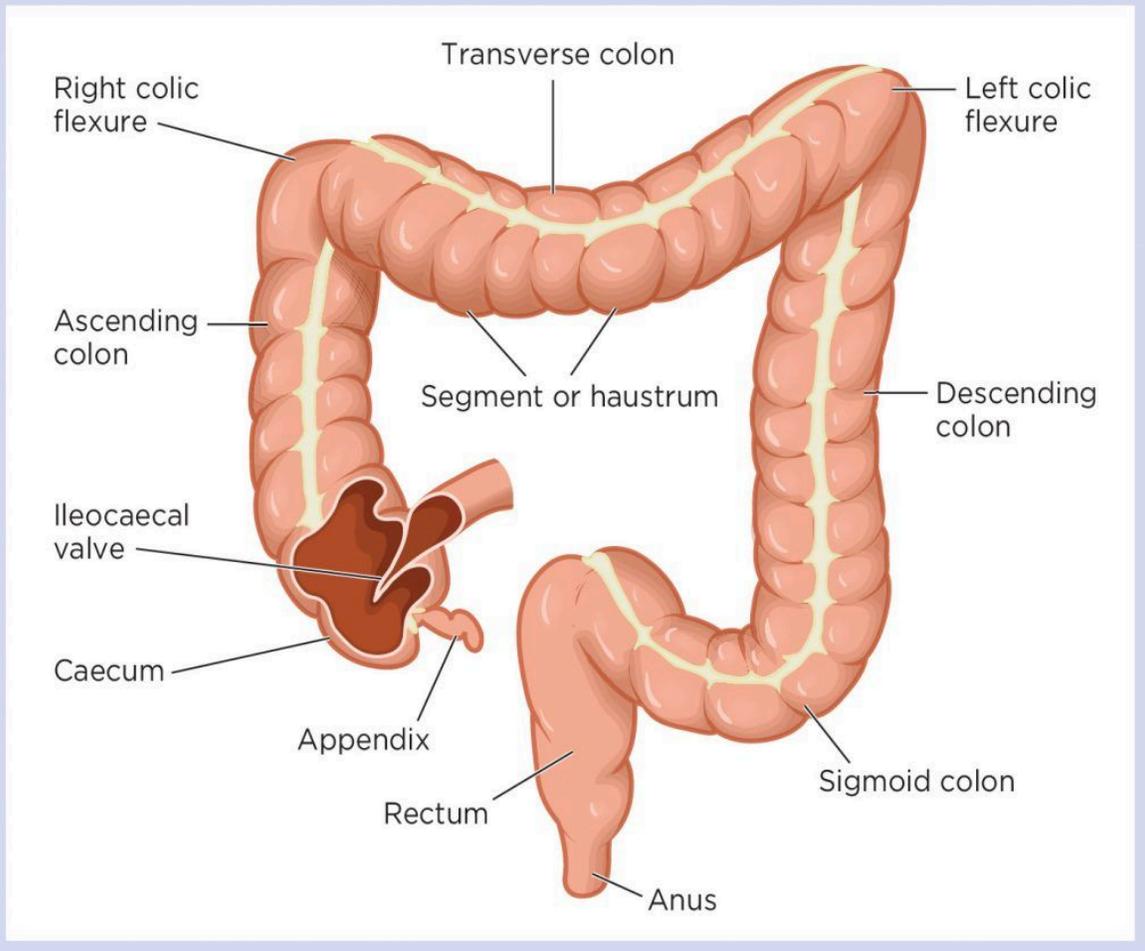


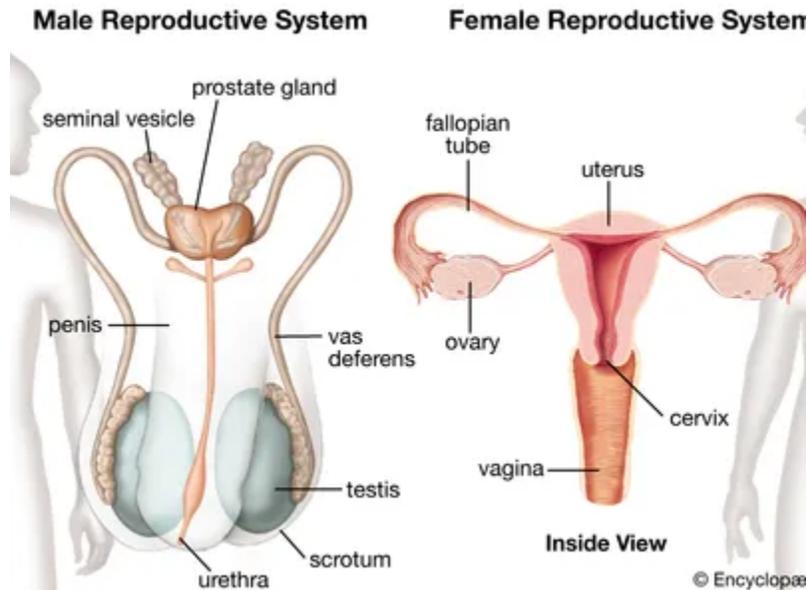
Structure of a villus



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Fig 1. Anatomy of the large intestine





What is the primary sex organ (gonad) and sex cell in males? _____

What is the primary sex organ (gonad) and sex cell in females? _____

What is a secondary sex organ?

What is the main function of the male reproductive system?

What is the function of the testes in the male reproductive system?

What two body systems is the urethra a part of in the male body?

Testes are made up of tubules, which continuously generate sperm, and _____, which passes sperm from the testes to the vas deferens, which joins the seminal vesicle to form the ejaculatory ducts. These pass through the prostate and empty into the _____.

Write the function of each gland in the male reproductive system:

Seminal vesicles:

Prostate gland:

Define "secondary sex characteristic":

Draw a Venn Diagram comparing and contrasting mitosis and meiosis.

What is the process of sperm formation called? _____

What hormone controls spermatogenesis? _____

_____ is the whitish fluid containing both sperm and secretion of the accessory glands.

What are two major functions of the female reproductive system?

What is the function of the ovaries in the female reproductive system?

What are the 3 accessory organs of the female reproductive system?

What is the name of the tube that extends from the ovary to the uterus?

What is the role of the uterus?

What structure links the cervix to the vagina? _____

What 3 roles does the vagina play in the female reproductive system?

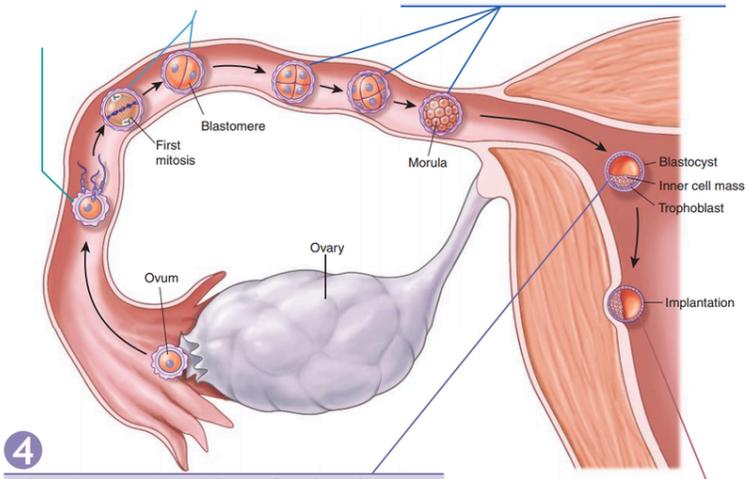
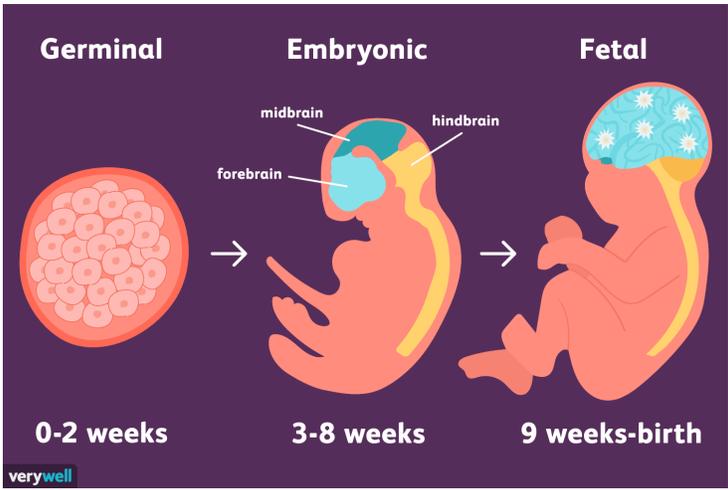
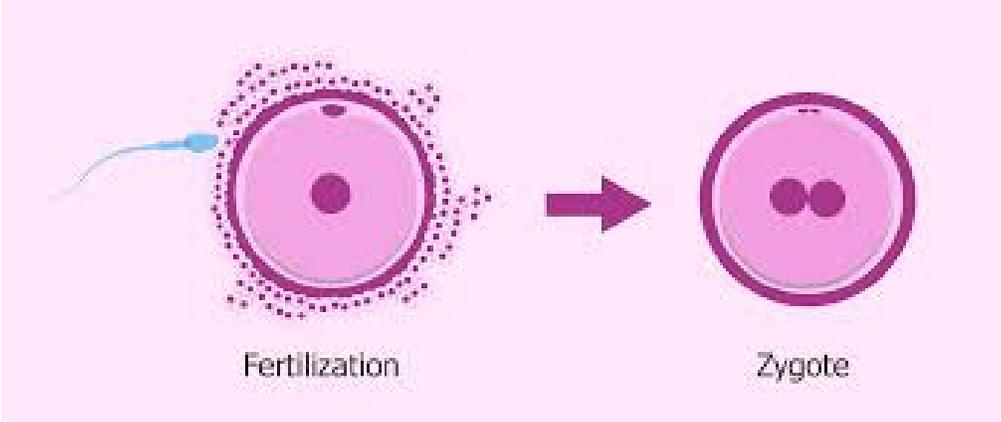
What are all the external genitals of the female reproductive system collectively called?

In the female reproductive system, tiny clusters of sac-like acini do what?

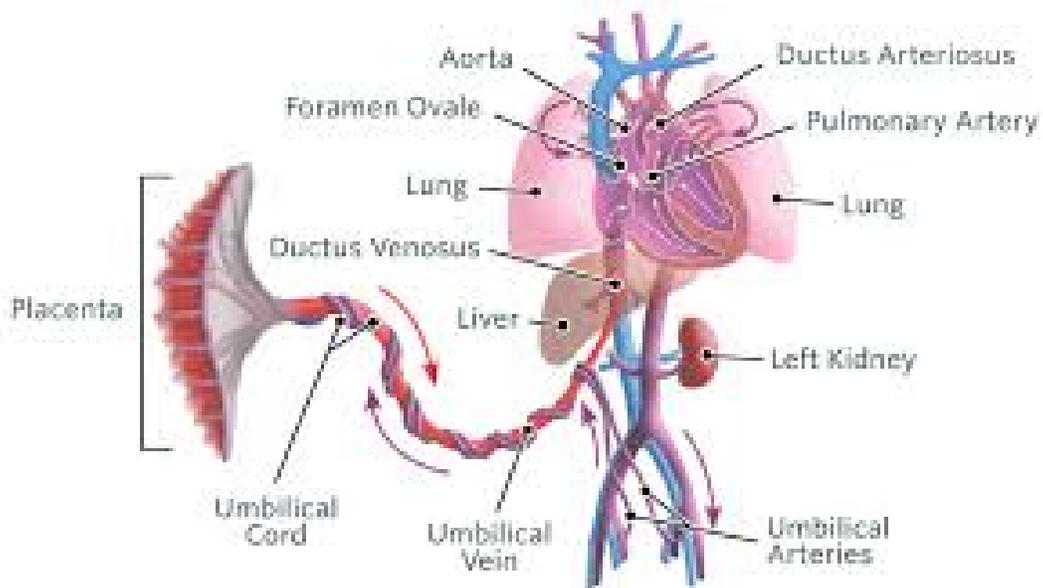
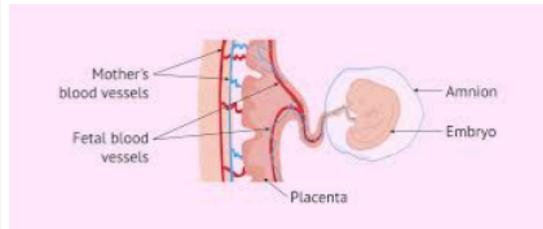
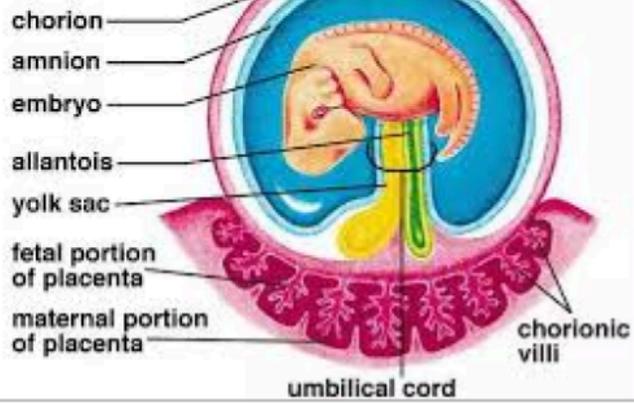
What hormone is responsible for producing the feminine physical changes during puberty? _____

What two cycles happen each month in the female reproductive system to prepare for the possibility of pregnancy? _____

What is the process by which a mature ovum is formed? _____



Extraembryonic Membranes



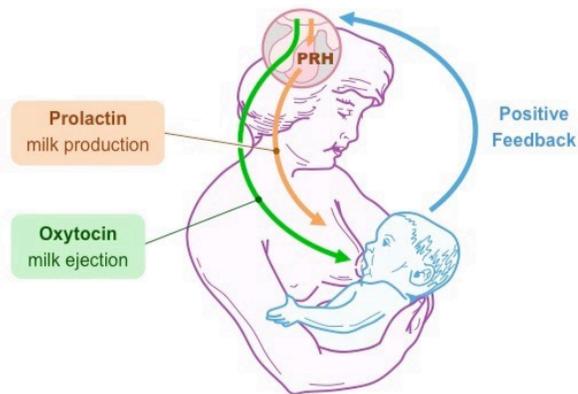


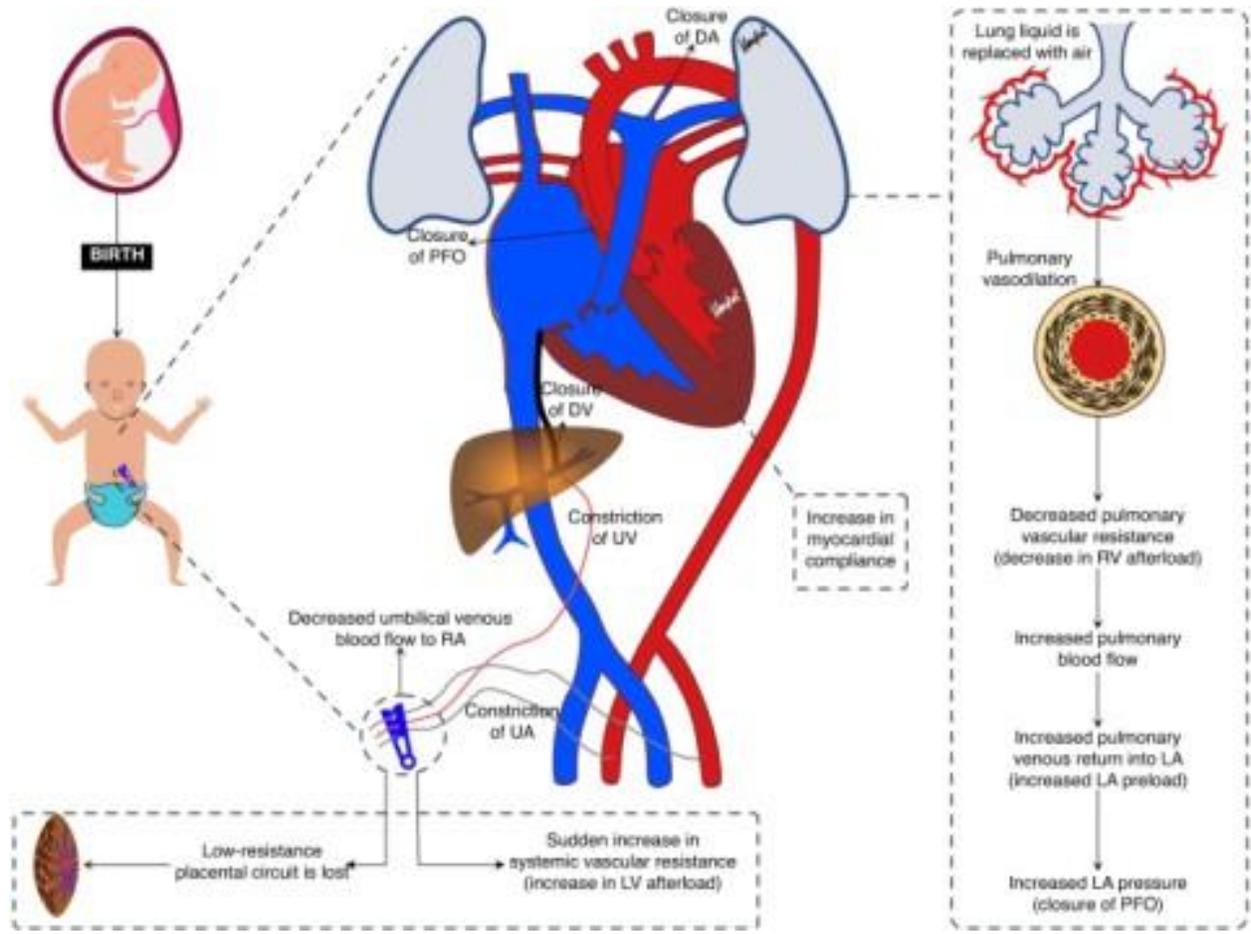
Hormones prompt labor:
Decline in progesterone
Release of oxytocin

Labor contractions begin



Changes in mother





Apgar Scoring System

Indicator		0 Points	1 Point	2 Points
A	Activity (muscle tone)	Absent	Flexed limbs	Active
P	Pulse	Absent	< 100 BPM	> 100 BPM
G	Grimace (reflex irritability)	Floppy	Minimal response to stimulation	Prompt response to stimulation
A	Appearance (skin color)	Blue Pale	Pink body Blue extremities	Pink
R	Respiration	Absent	Slow and irregular	Vigorous cry