

Abdomen

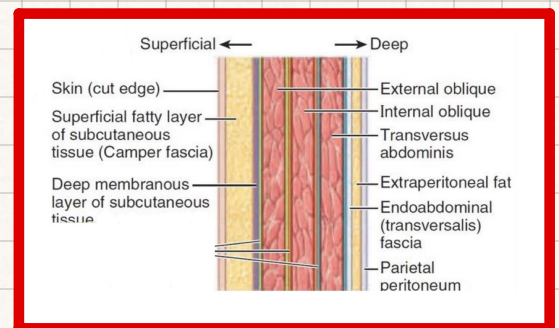
final EXAMS

Layers of the Anterior Abdominal Wall:

1. The skin is loosely attached to the underlying structures **Except** at the umbilicus.
2. Superficial Fascia is divided into a superficial fatty layer "Camper's Fascia" and a deep membranous layer "Scarpa's Fascia"

N.B. The deep fascia

Being rich in collagen, is non-stretchable
is absent from the abdominal wall & perineum



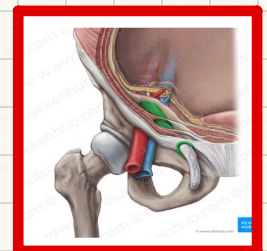
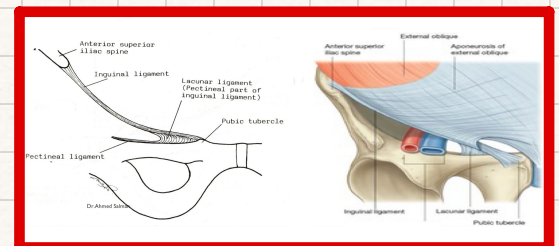
Inguinal Ligament

- It's the lower border of external oblique aponeurosis

Attachment: It attached to anterior superior iliac spine & pubic tubercle

Inguinal Canal

- It's oblique passage in the lower part of the anterior abdominal wall, just above the medial 1/2 of the Inguinal ligament
- It Extends between superficial & deep Inguinal Rings



Structures passing through the Canal:

1. Spermatic cord in males
or
Round ligament in females
2. Iliioinguinal nerve

abdominal regions

"9 Regions"

Two vertical midclavicular lines → Left & Right
Two Horizontal

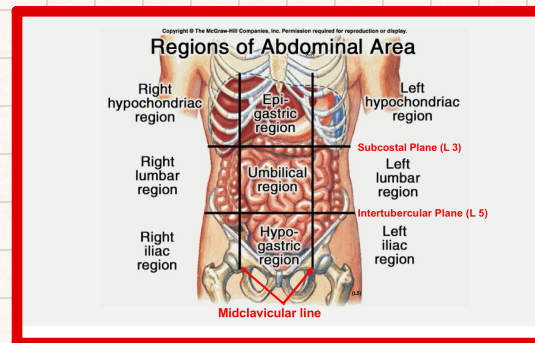
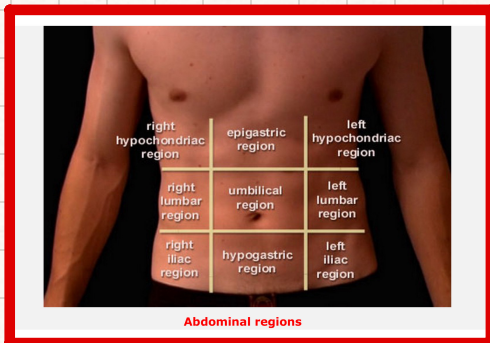
1. Subcostal ; through lower edge of 10th costal cartilage & L3 vertebra
2. Transtubercular ; through tubercles of iliac crests (L5 vertebra)

These lines forms 9 abdominal regions :

- Right Hypochondrium..... epigastrum..... Left Hypochondrium

Right Lumbar..... Umbilical..... Left Lumbar

Right Iliac..... Hypogastrum..... Left Iliac
"Inguinal" "Inguinal"



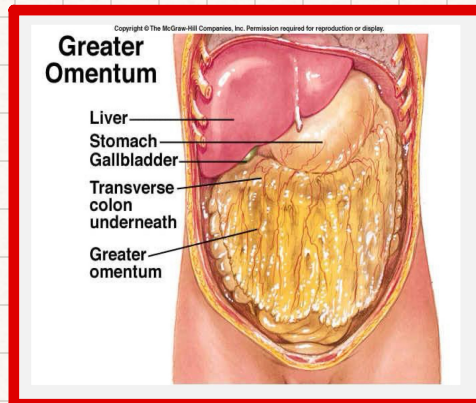
The Peritoneum

is a serous membrane,
which lines the abdominal cavity & is reflected over the visceral

also it has two layers ; **parietal & visceral**
with peritoneal cavity in between

The parietal layer → lines the interior of the anterior
and posterior abdominal walls, the lower surface of the Diaphragm

The visceral layer → Surrounds the abdominal visceral



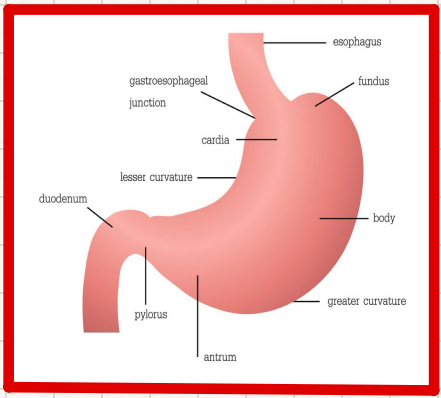
gastrointestinal Tract

The stomach:

it's the widest part of the digestive tube
 it lies in epigastrium, left Hypochondrium & Umbilical Regions

It has 2 ends:

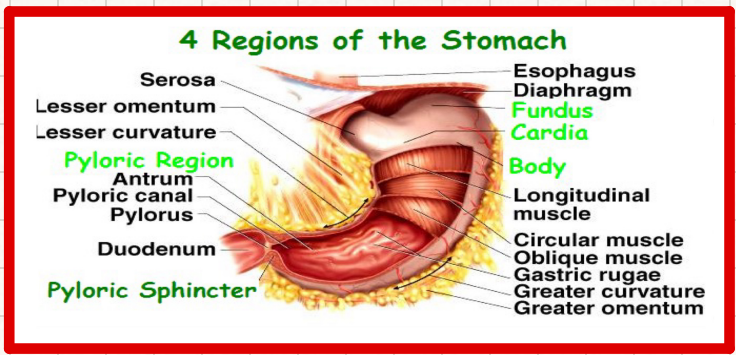
- | | |
|--|---|
| <p>1. Cardiac end</p> <ul style="list-style-type: none"> ★ Connected with the esophagus ★ It's guarded by physiological sphincter | <p>2. Pyloric end</p> <ul style="list-style-type: none"> ★ Connected to the duodenum ★ It's guarded by anatomical sphincter "Hick Circular Fibers" |
|--|---|



It has 2 surfaces: Anterior & Posterior

It has 2 curvatures:

- ★ Lesser curvature above & to the right
- ★ Greater curvature below & to the left



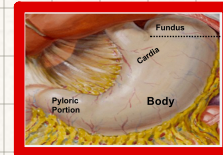
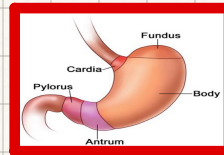
Regions of the stomach:

a) Cardiac portion:

Fundus: above the level of esophageal opening

Cardia: It's the uppermost part of the stomach

Body



b) Pyloric Portion:

The small intestine

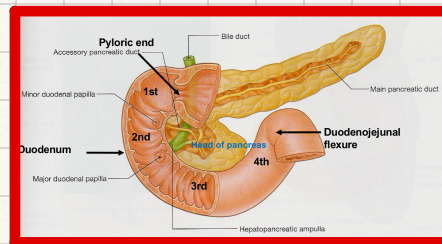
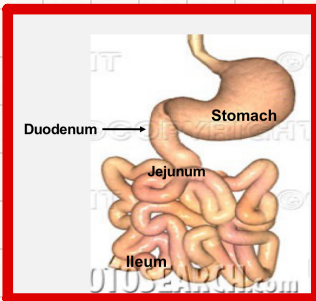
It's divided into 3 parts:

- 1 the duodenum
- 2 the jejunum
- 3 the ileum

The duodenum is divided into 4 parts

" 1st, 2nd, 3rd & 4th "

It receives opening of the pancreatic & common bile ducts
in the middle of its 2nd part



The large intestine

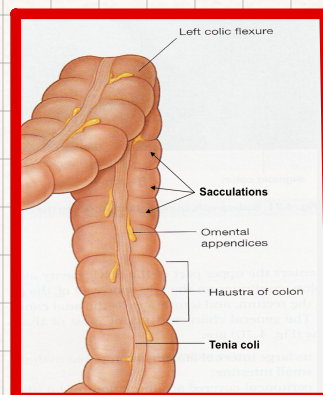
it's characterized by the presence of:

Haustrations (grooves)

Sacculations (it's divided into small sacs)

Teniae Coli: 3 muscular bands

Appendices Epiploicae: Small appendices filled with fat



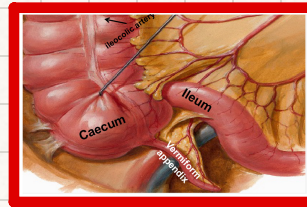
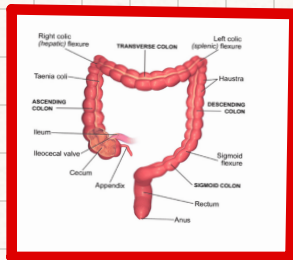
Components of the large intestine:

- The caecum & Vermiform appendix
- The colon (ascending, transverse, descending & sigmoid)
Right & Left colic flexures
- The rectum
- The anal canal

It's attached to the caecum about one inch below the ileocaecal junction

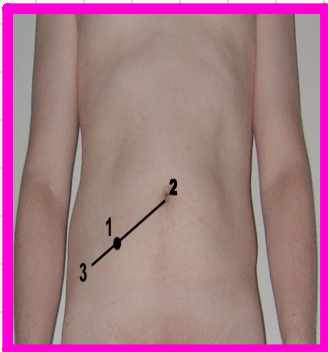
It lies in the right inguinal region

It's very rich in lymphoid follicle → Tonsil of the abdomen



Surface anatomy of the appendix

The base of the appendix is represented by **McBurney's point** which is the point at the junction of the lateral 1/3 & medial 2/3 of a line extending between the anterior superior iliac spine (ASIS) & umbilicus.



The anal canal

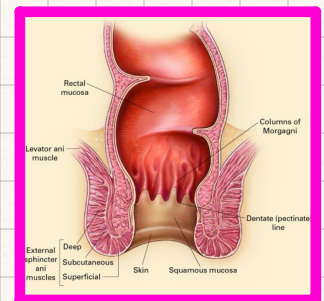
It begins one inch below & in front of the coccyx and is directed downwards & backwards

It's upper part is insensitive to general sensations

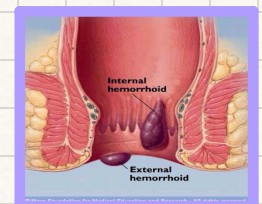
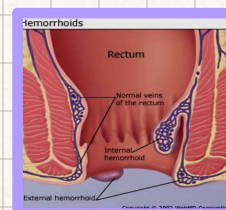
Supplied by **Autonomic fibers**

It's lower part is sensitive to general sensations

Supplied by **Somatic fibers**



Dilatation of the submucosal venous plexus of the rectum & anal canal may result in internal or external hemorrhoids (piles)

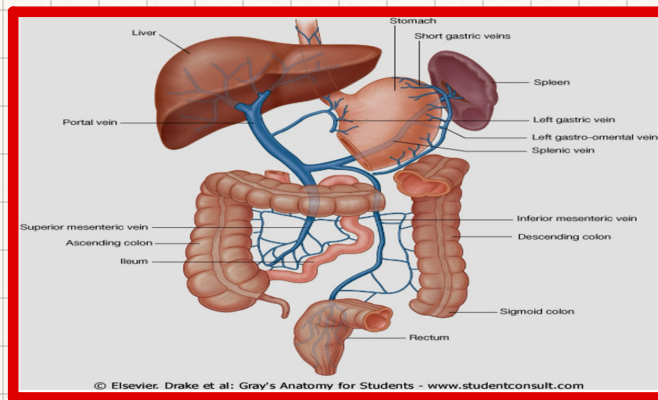


Portal Circulation

The portal vein

drains the alimentary canal from the esophagus to the upper 1/2 of the anal canal, pancreas & spleen to the liver.

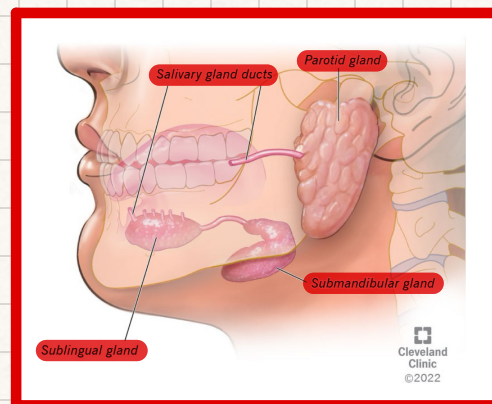
- Is formed by the union of the splenic and superior mesenteric veins **Behind neck of Pancreas**
- It ends in porta hepatis



The Salivary Glands

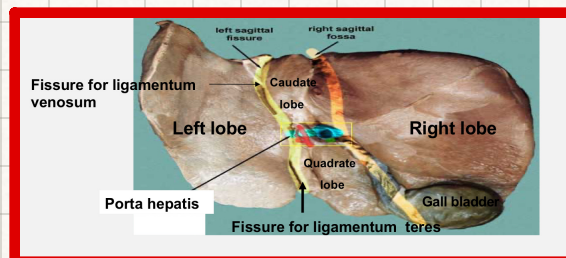
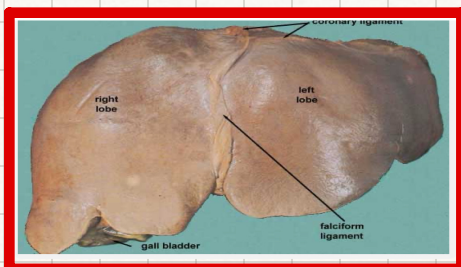
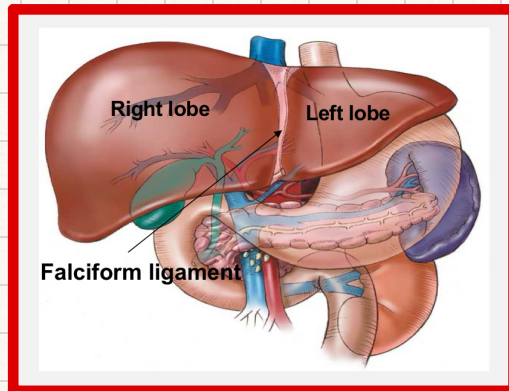
there are 3 pairs of salivary glands

Parotid
& Submandibular
& Sublingual salivary gland



The Liver

- ✨ It's the largest organ in the body
- ✨ It lies in the right Hypochondrium, epigastrium and left Hypochondrium
- ✨ It's divided into large right and left lobe
- ✨ The right lobe contains 2 additional lobes ;
Quadrato lobe and Caudate lobe



The Biliary System

It consist of:

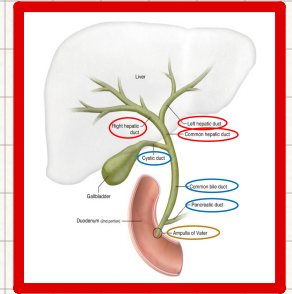
★ gall bladder

★ Right and left hepatic ducts from the right and left lobes of the liver

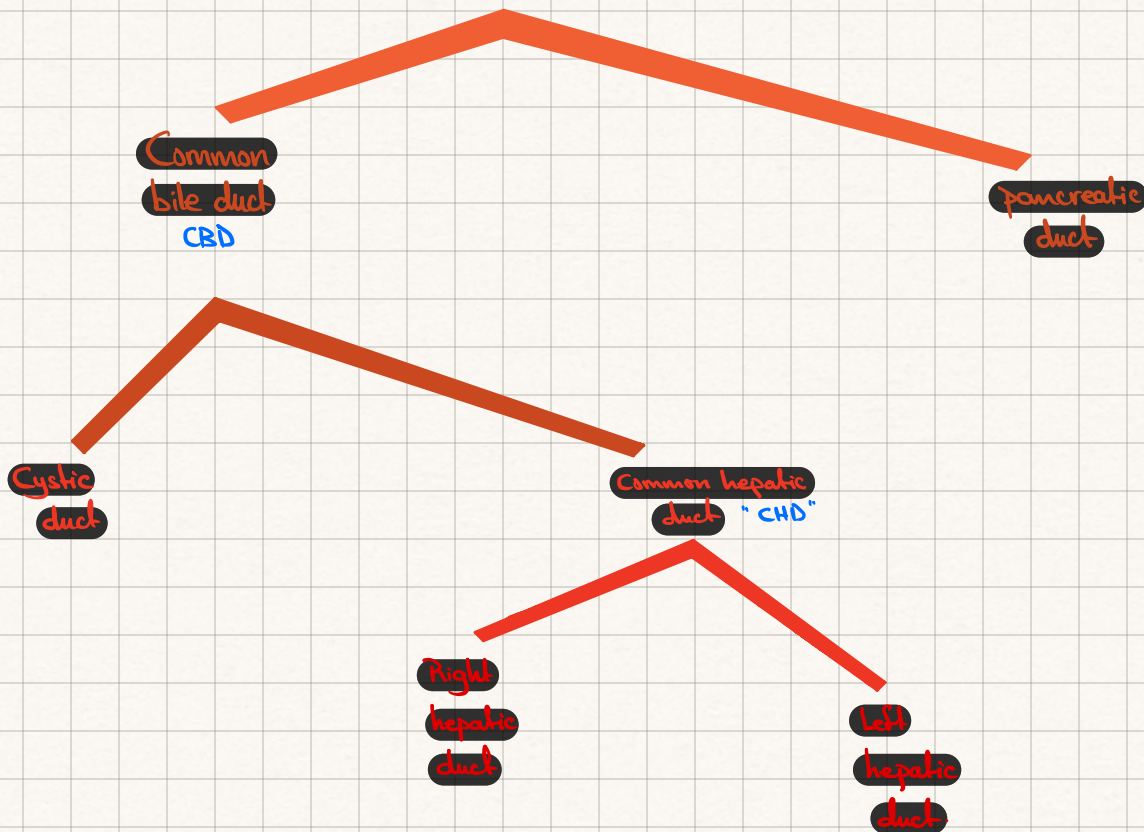
★ They join to form common hepatic ducts (CHD)

★ CHD joins the cystic duct of the gall bladder and form together the common bile duct (CBD)

★ CBD joins the main pancreatic duct that opens in the middle of the second part of the duodenum



Opens in the middle of the second part of the duodenum

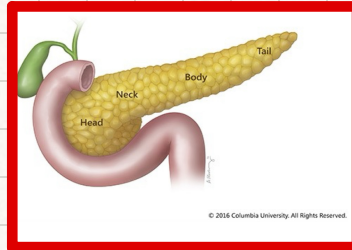


Pancreas

★ It's both exocrine & endocrine gland

★ It's divided into 4 parts:

- ★ Head
- ★ neck
- ★ Body
- ★ Tail

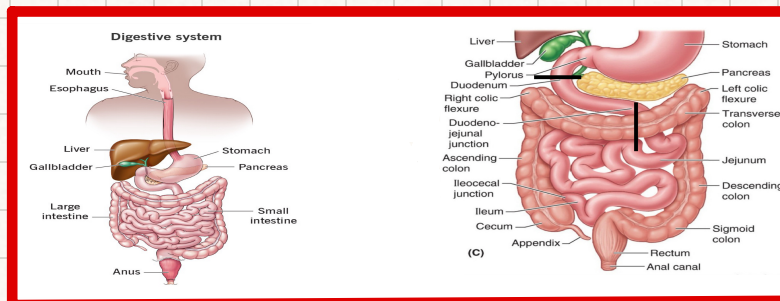


General topography of GIT

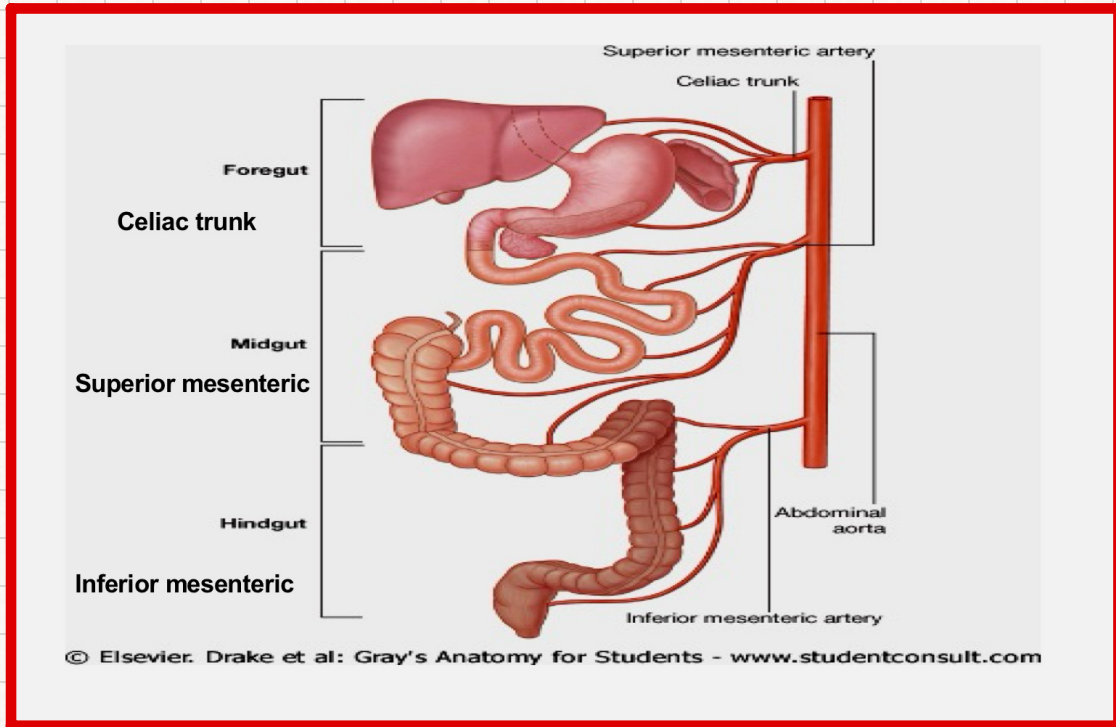
Is divided into 3 parts:

Foregut, **midgut**, **Hindgut**

	Foregut	midgut	Hindgut
Components	abdominal end of esophagus, stomach, duodenum down to entrance of bile duct, liver, spleen, pancreas	Lower 1/2 of the duodenum, jejunum, ileum, large intestine as far as the right 2/3 of the transverse colon	the rest of large intestine down to the pectinate line of the anal canal
Arterial supply	Coeliac artery	Superior mesenteric artery	Inferior mesenteric artery



Blood supply of the gut



DONE!