

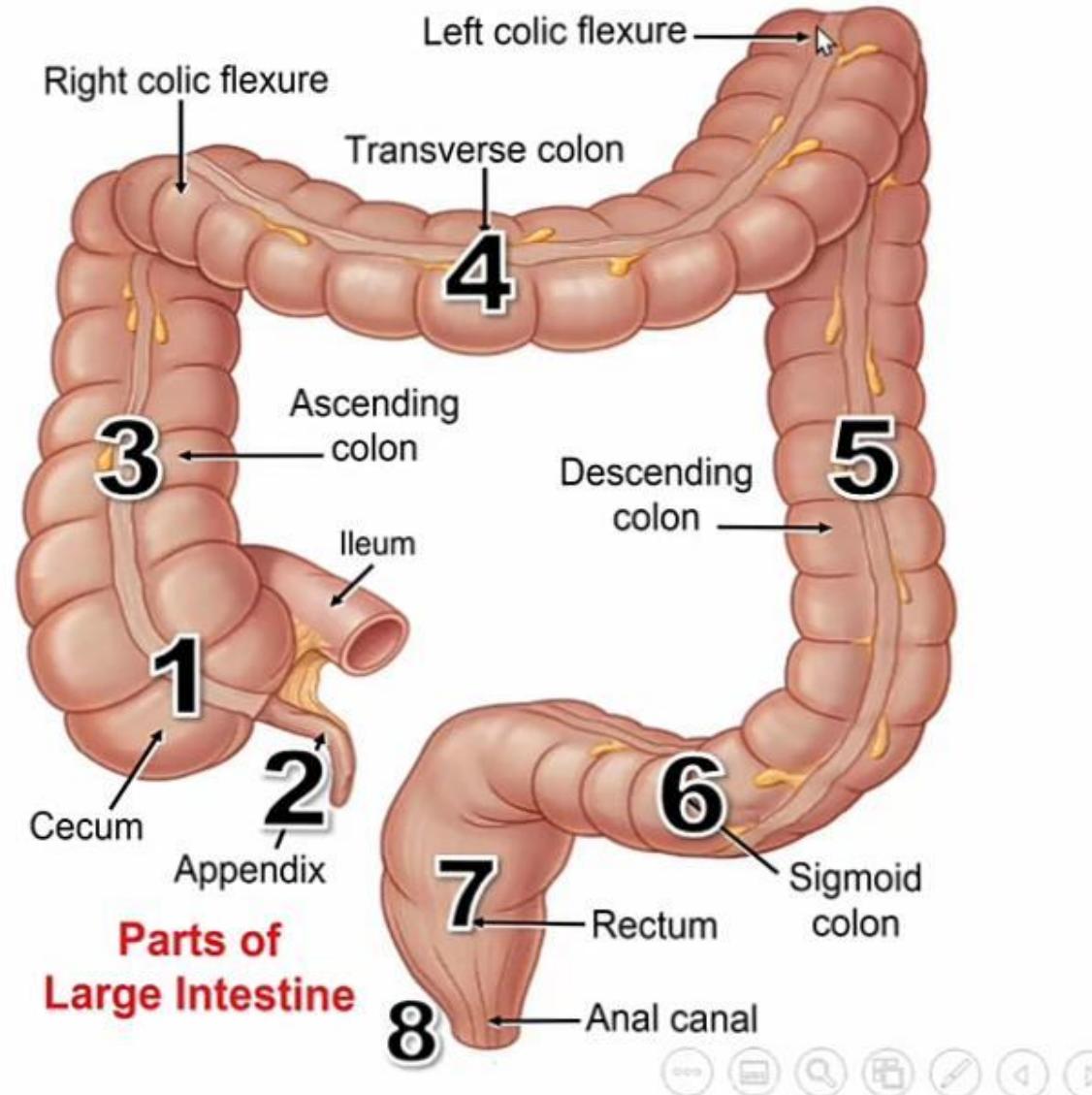
# LARGE INTESTINE

KASHAF HAMEED KHATTAK

2<sup>nd</sup> year MBBS

# PARTS OF LARGE INTESTINE

- ▶ 1.Caecum
- ▶ 2.Vermiform Appendix
- ▶ 3.Ascending Colon
- ▶ 4.Transverse Colon
- ▶ 5.Descending colon
- ▶ 6.Sigmoid Colon
- ▶ 7.Rectum
- ▶ 8.Anal Canal



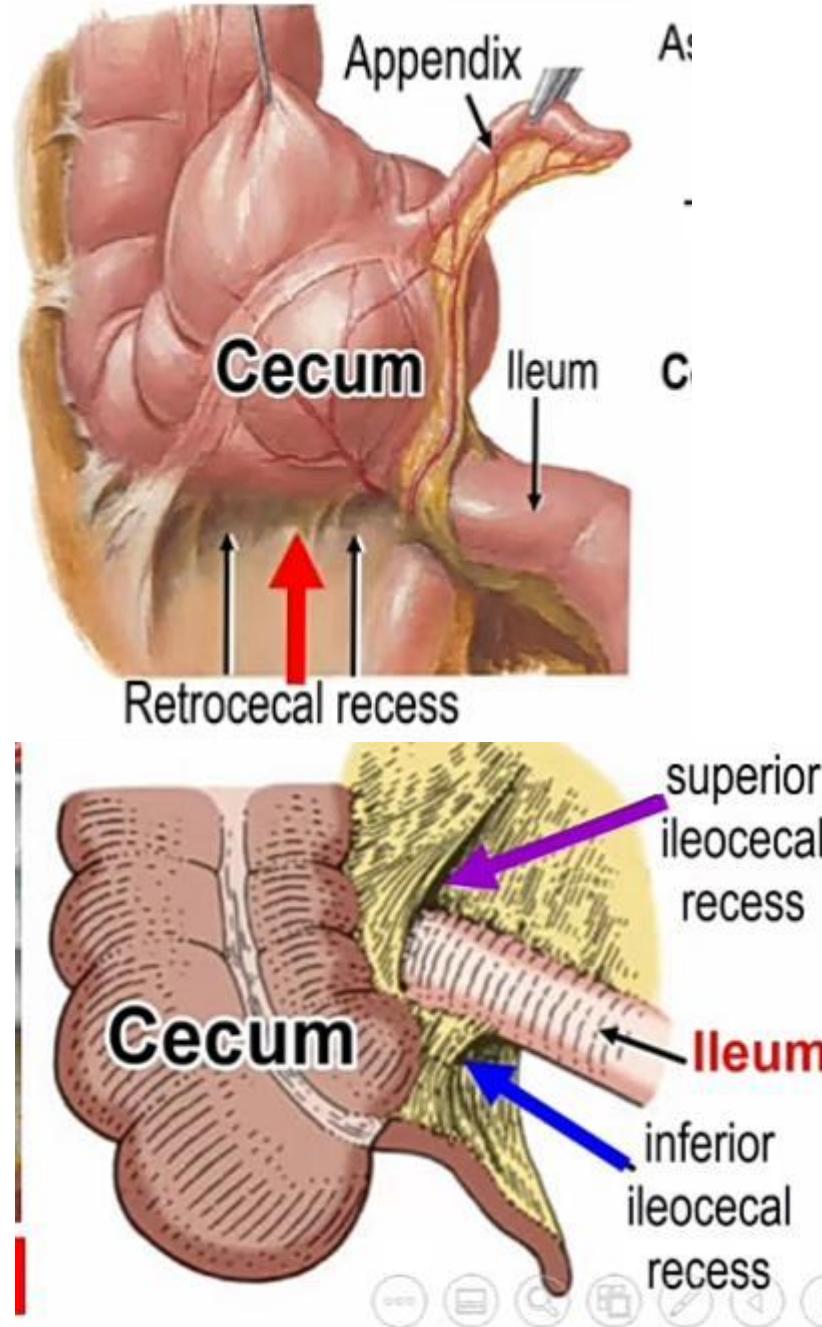
# CECUM

## PERITONEAL COVERING:

Compltely covered

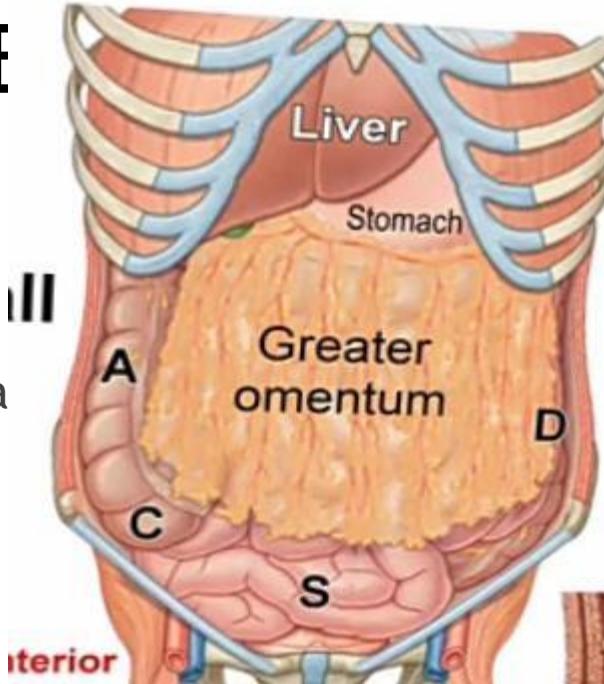
## 3.PERITONEAL RECESSES

- *Retrocecal Recess>Appendix*
- *Superior ileocecal Recess>above the ileum*
- *Inferior ileocecal Recess>below the ileum*



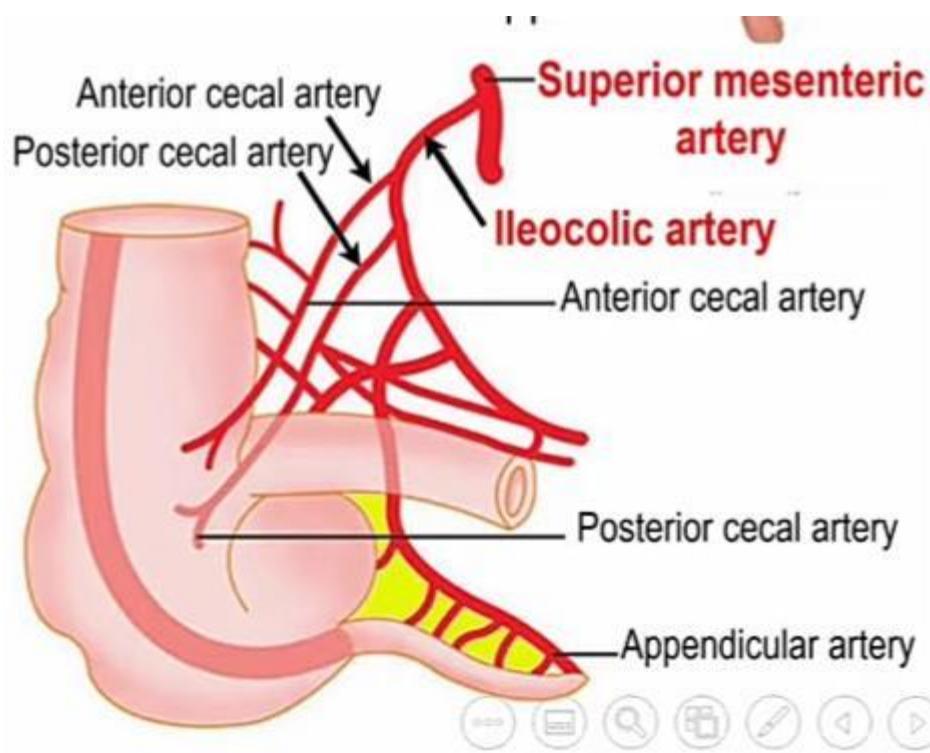
# RELATIONS OF CE

- ▶ ANTERIORLY
  - ▶ •Anterior abdominal wall
  - ▶ •Greater omentum
  - ▶ •Small intestine
- ▶ POSTERIORLY
  - ▶ •Iliacus muscle
  - ▶ •Psoas major muscle
  - ▶ •Femoral Nerve b/w two muscles

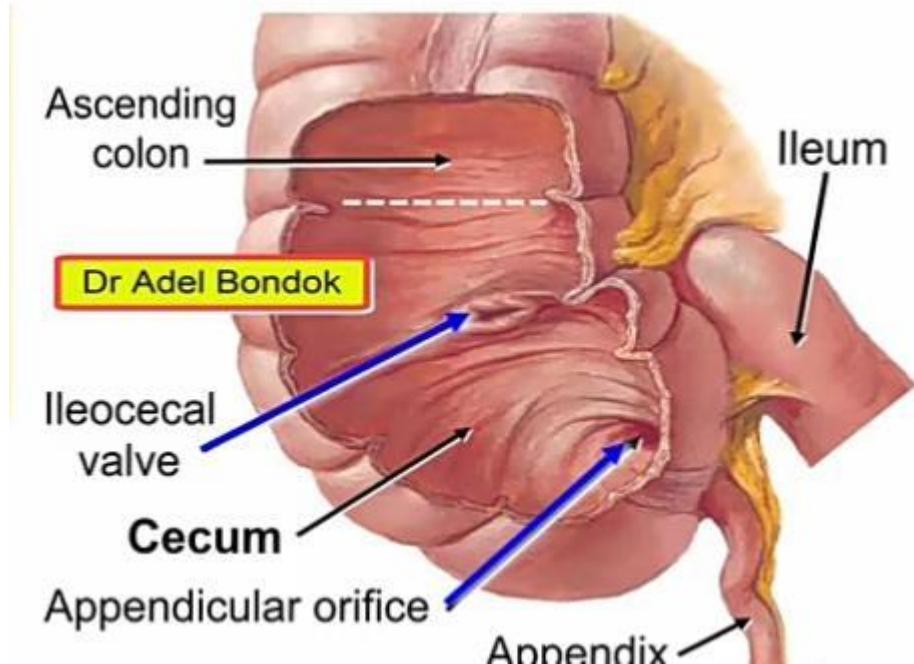


# BLOOD SUPPLY OF CECUM

- ▶ Anterior & Posterior Cecal arteries frm iliocolic artery( Superior mesenteric artery)
- ▶ INTERNAL APPEARANCE OF CECUM
- ▶ Has 2 Openings
  - Ileocecal valve
  - Appendicular Orifice

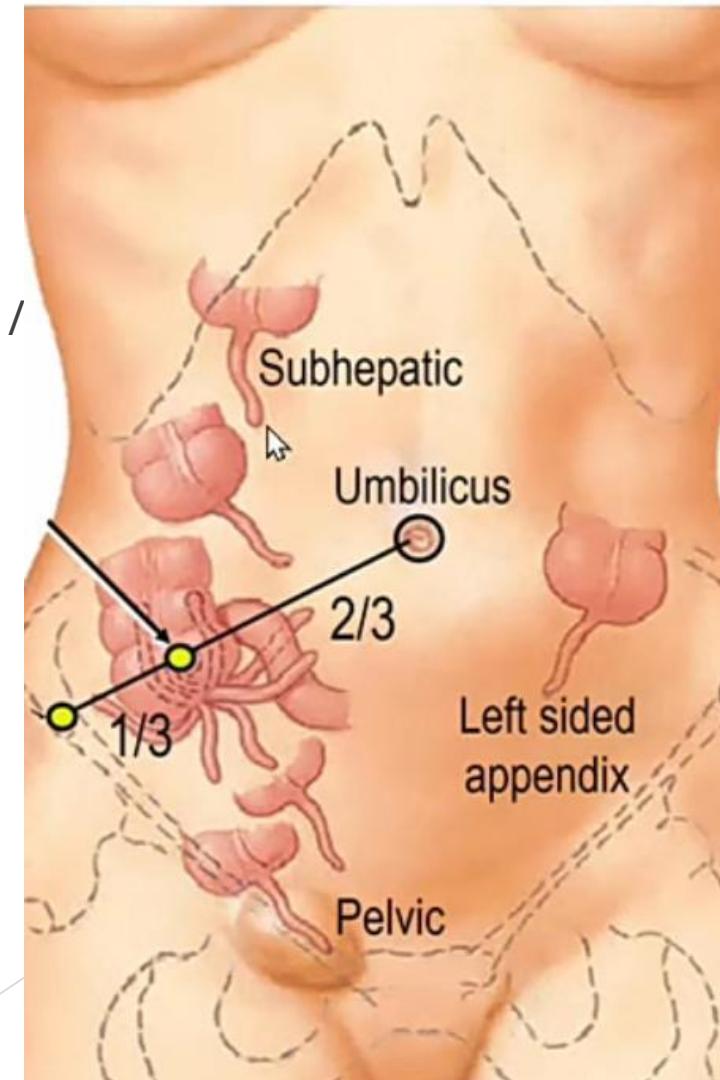


# Openings of Cecum



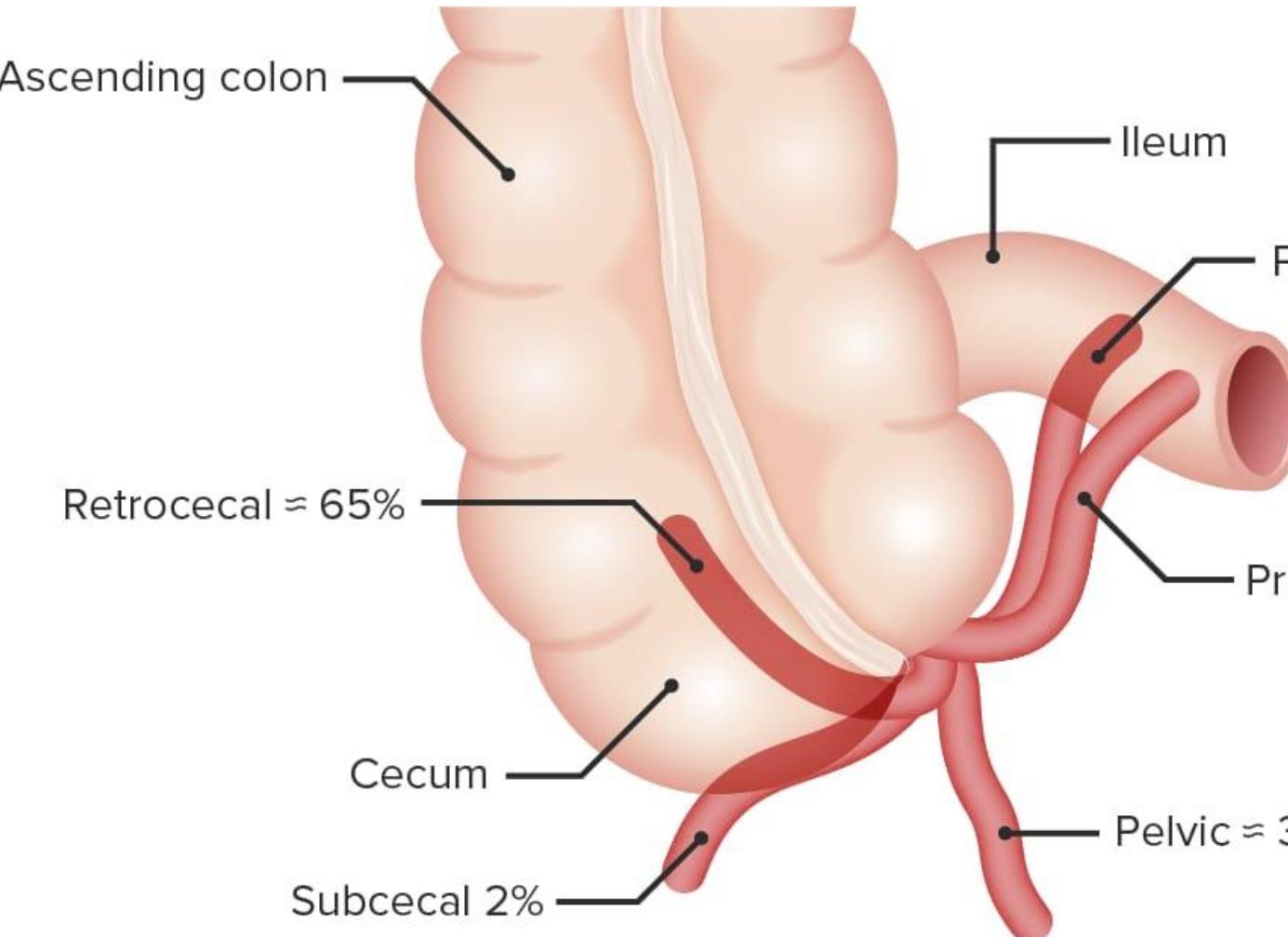
# VERMIFORM APPENDIX

- ▶ Opposite to MC.BURNEY'S POINT
- ▶ Base of appendix lies opposite the junction between medial 2/3 & lateral 1/3 line b/w superior iliac spine & umbilicus
- ▶ PERITONEAL COVERING: completely covered has mesoappendix contains appendicular artery from ileocolic artery



# POSITION OF APPENDIX

- ▶ Base of Appendix lies in Right iliac fossa
- ▶ Position of Tip variable
- ▶ Retrocecal: Behind the cecum( commonest)
- ▶ Pelvic
- ▶ Paracecal
- ▶ Subcecal
- ▶ Preileal
- ▶ Postileal
- ▶ Subheptic



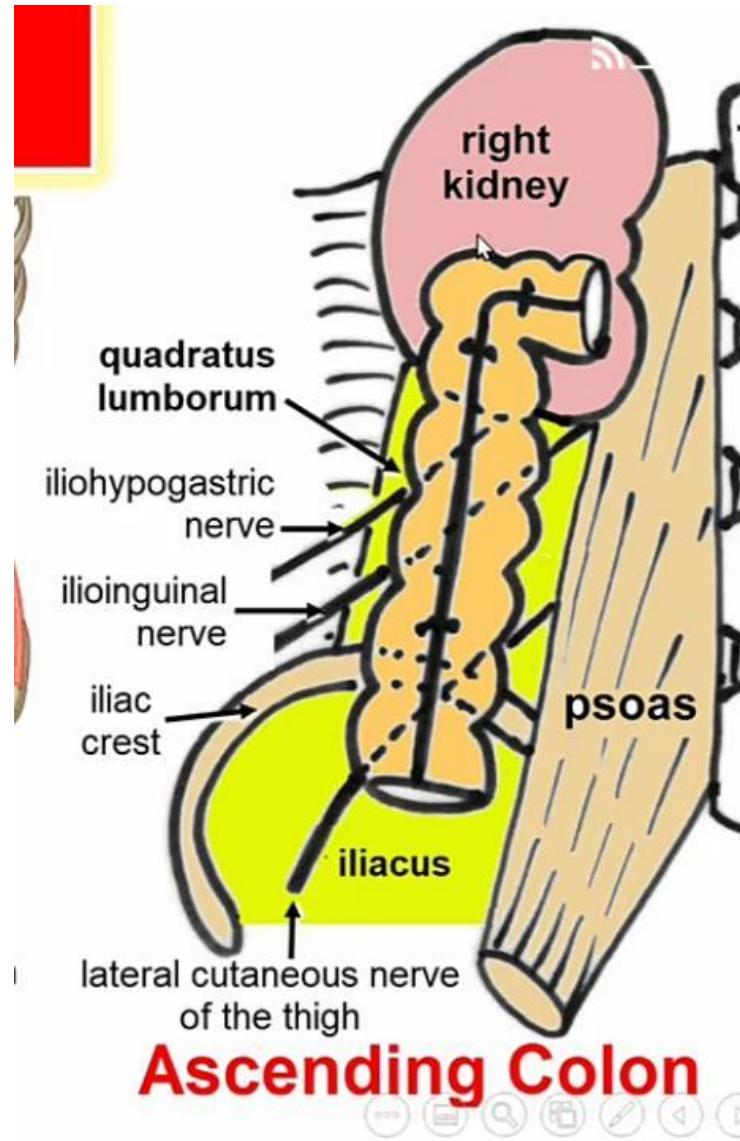
# ASCENDING COLON

- ▶ Relations
- ▶ Anteriorly:
  - ▶ Anterior abdominal wall
  - ▶ Small intestine
  - ▶ Greater Omentum
- ▶ Posteriorly
  - ▶ Iliacus muscle
  - ▶ Iliac crest
  - ▶ Quadratus lumborum
  - ▶ ( Separated by 2 Nerves)

Iliohypogastric Nerve

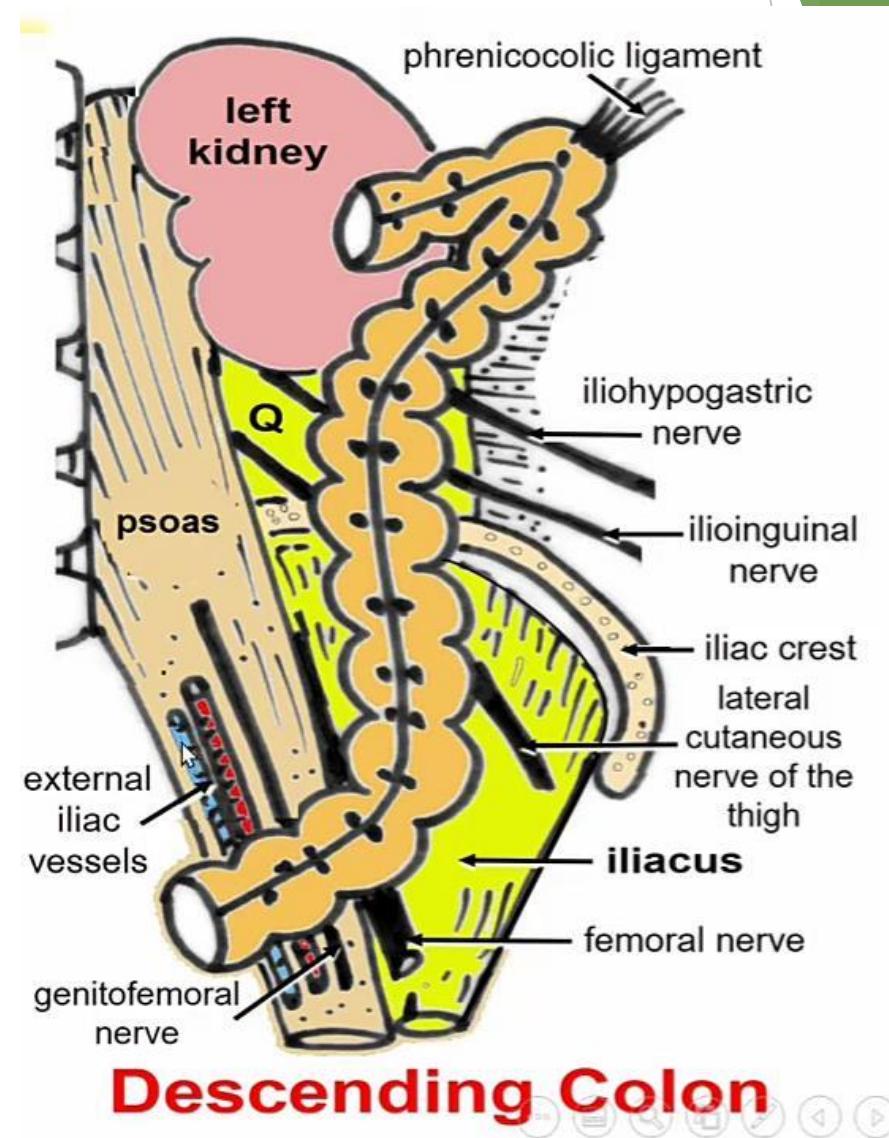
Ilioinguinal canal

•Right Kidney



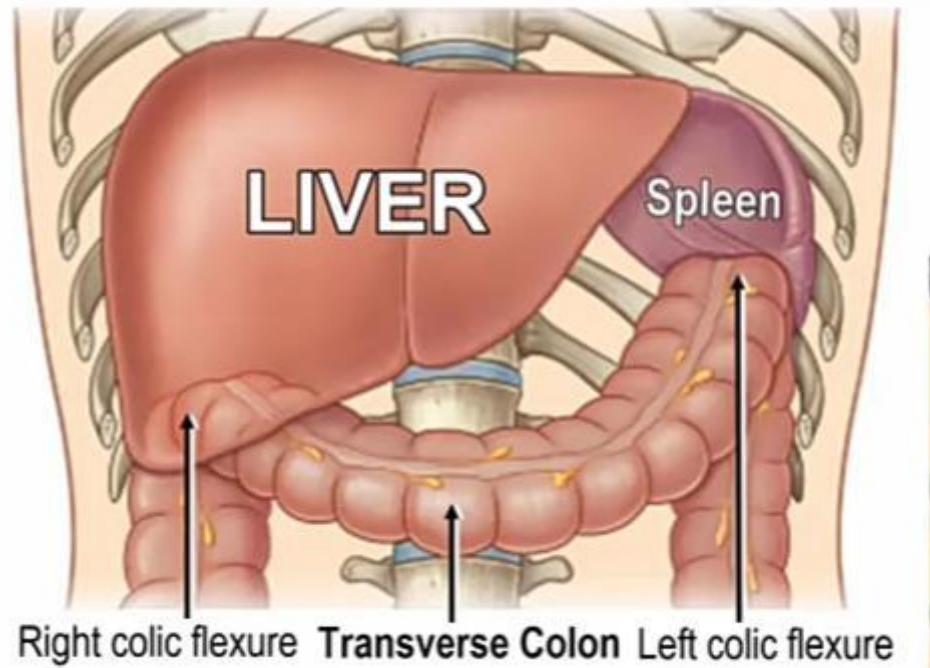
# DESCENDING COLON

- ▶ Same anterior relations as Ascending Colon
- ▶ POSTERIOR RELATIONS:
- ▶ Left Kidney
- ▶ Quadratus Lamborum
- ▶ (iliohypogastric Nerve,ilioinguinal Nerve)
- ▶ Iliac Crest
- ▶ Iliacus muscle
- ▶ Lateral cutaneous Nerve of Thigh
- ▶ Femoral Nerve



# TRANSVERSE COLON

- ▶ Begins at Right colic flexure in Right Hypochondrium below liver
- ▶ Ends at left colic flexure in left hypochondrium below spleen
- ▶ PERITONEAL COVERING: all covered except 1<sup>st</sup> 2 inches are adherent to duodenum & pancreas
- ▶ Has Transverse mesocolon



# RELATIONS

## Anteriorly

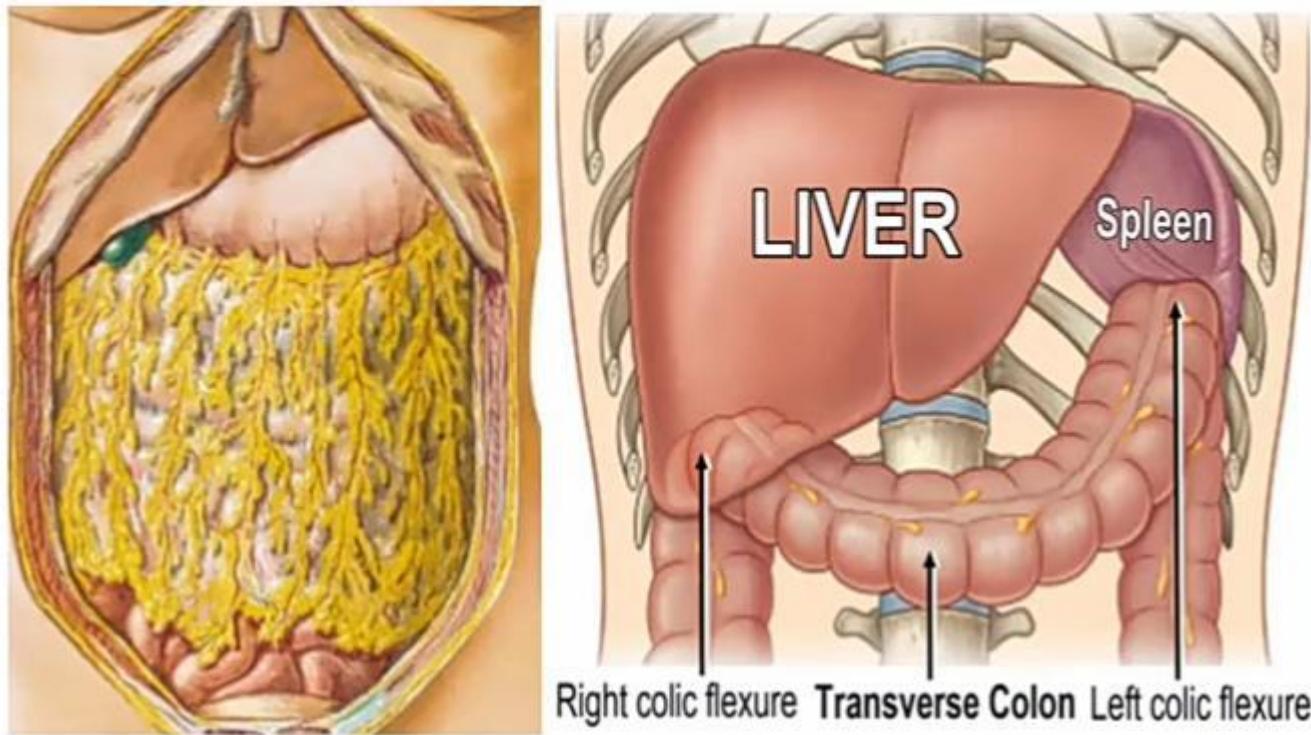
Anterior abdominal wall

Greater Omentum

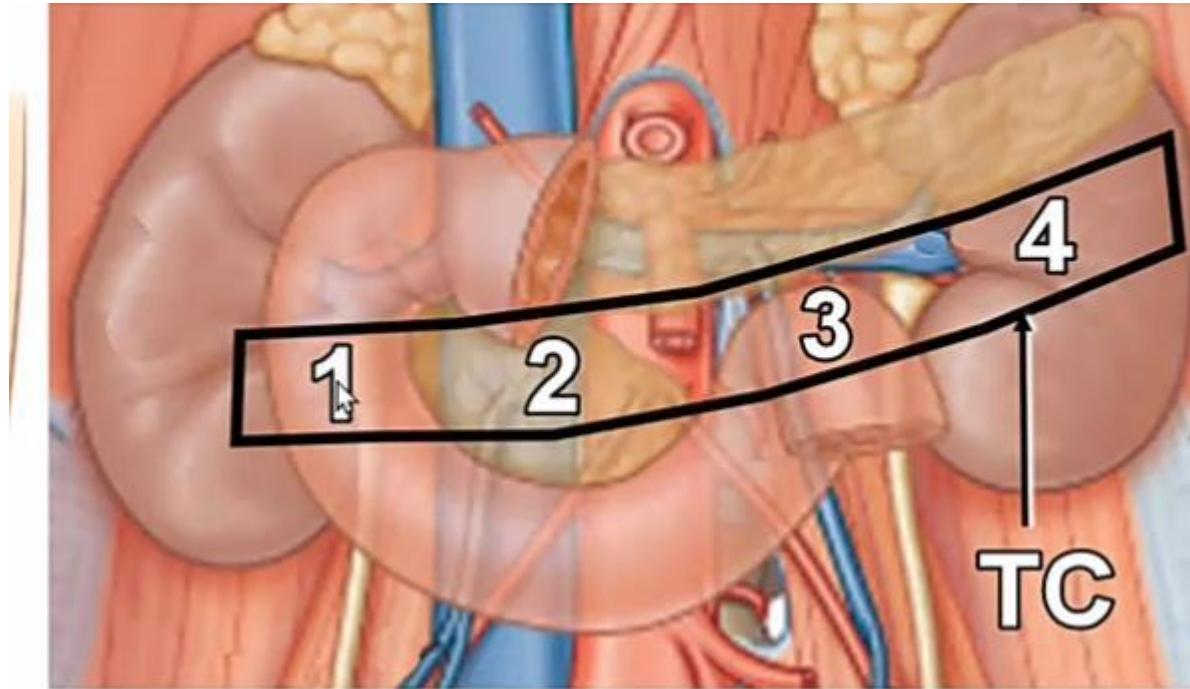
Greater Sac

Liver above Right colic flexure

Spleen above Left colic flexure



- ▶ Posteriorly
- ▶ 2<sup>nd</sup> part of Duodenum
- ▶ Head of Pancreas
- ▶ Small intestine
- ▶ Left Kidney



# Length & Position of Each part

Length & Position of Each Part		
Part	Length	Position
Cecum	3 inches	Right iliac fossa
Appendix	3 inches	Right iliac fossa (65% retrocecal)
Ascending C	5 inches	<b>From</b> right iliac fossa <b>to</b> right hypochondrium (in right lumbar)
Transverse C	15 inches	<b>From</b> right hypochondrium <b>to</b> left hypochondrium
Descending C	10 inches	From left hypochondrium to left pelvic brim (in the left lumbar)
Sigmoid C	10 inches	<b>Begins at</b> the pelvic brim and <b>becomes</b> the rectum at the level of the 3 <sup>rd</sup> sacral vertebra
Rectum	5 inches	Posterior part of the pelvis
Anal canal	1.5 inches	Perineum (anal triangle)

(2): 3" cecum & appendix  
(2): 5" AC & rectum  
(2): 10" DC & SC  
(1): 15" TC

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# BLOOD SUPPLY OF EACH PARTS

- ▶ Superior mesenteric Arteries:
- ▶ Midgut: Cecum, Appendix, Ascending Colon & Right 2/3 of Transverse Colon
- ▶ Inferior Mesenteric Artery:
- ▶ Hindgut: left 1/3 of Transverse colon, Descending & sigmoid colon , Rectum, & upper part of Anal canal
- ▶ Caecum: Anterior & Posterior cecal arteries frm iliocolic artery( Superior mesenteric artery)
- ▶ Appendix: Appendicular artery

# NERVE SUPPLY

## Nerve Supply of the Large Intestine

**Midgut:** Cecum, Appendix, Ascending Colon and Rt 2/3 of the Transverse Colon

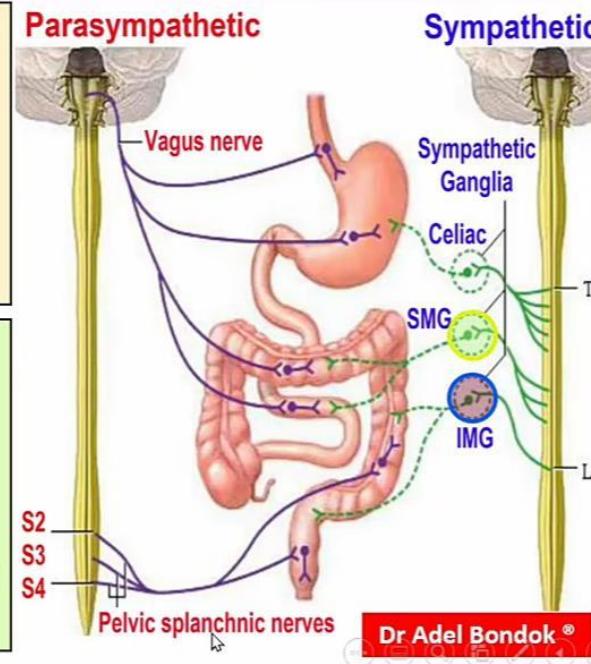
**1. Sympathetic:** superior mesenteric plexus  
(by the lesser splanchnic nerve)

**2. Parasympathetic:** Vagus nerve

**Hindgut:** Descending Colon, Sigmoid Colon, Rectum & Upper part of the Anal Canal

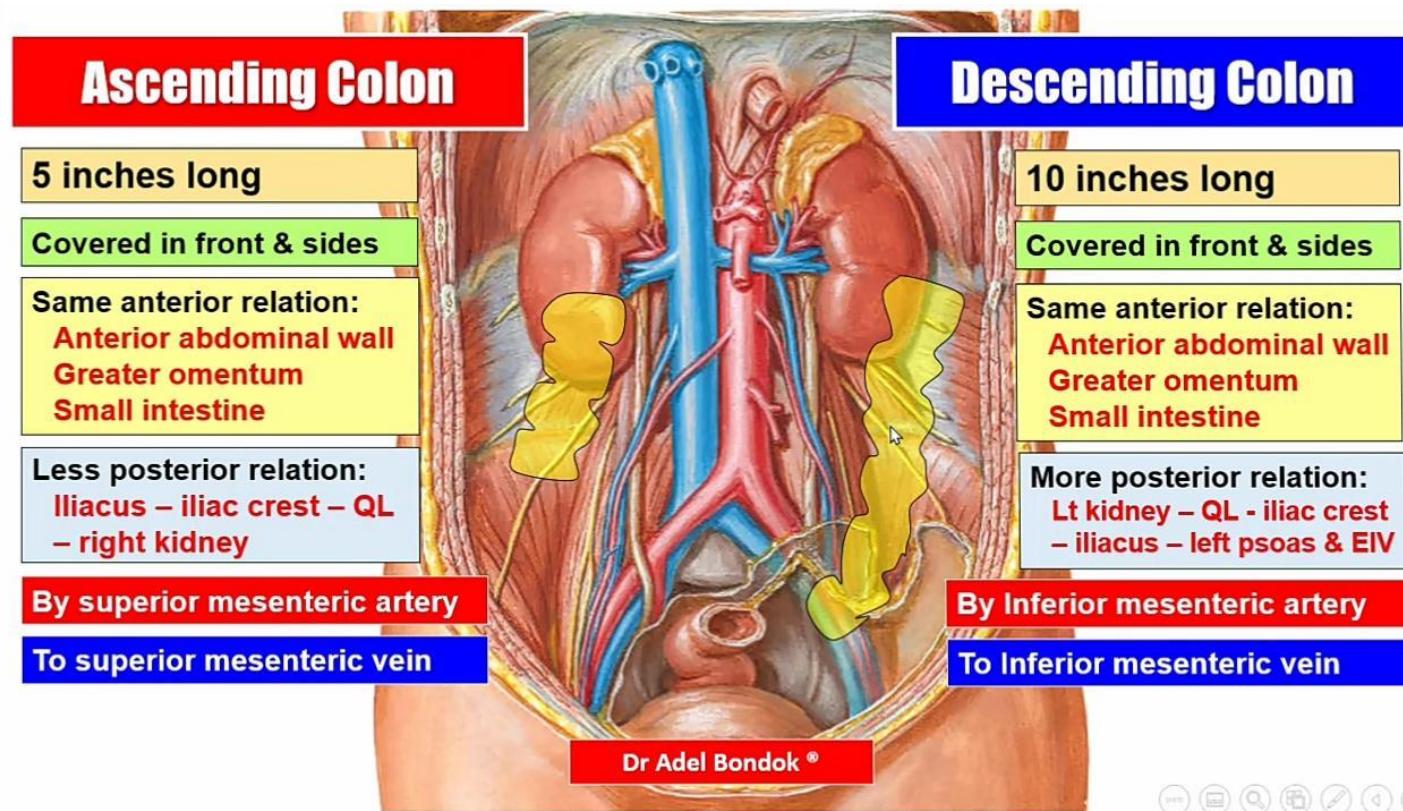
**1. Sympathetic:** inferior mesenteric plexus  
(by the lumbar splanchnic nerves)

**2. Parasympathetic:** pelvic splanchnic nerves S2, 3, 4



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# Difference



**Thank You**  
For Your Attention!

Any Questions

