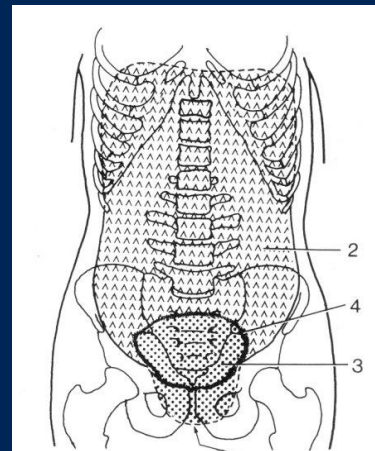
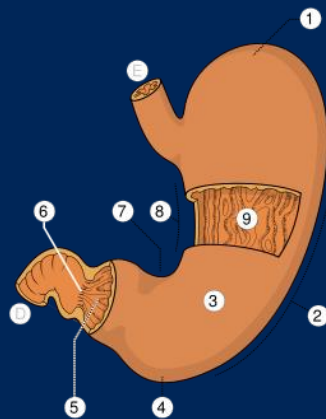


Mave og tarmsystem

- med gennemgang af lag

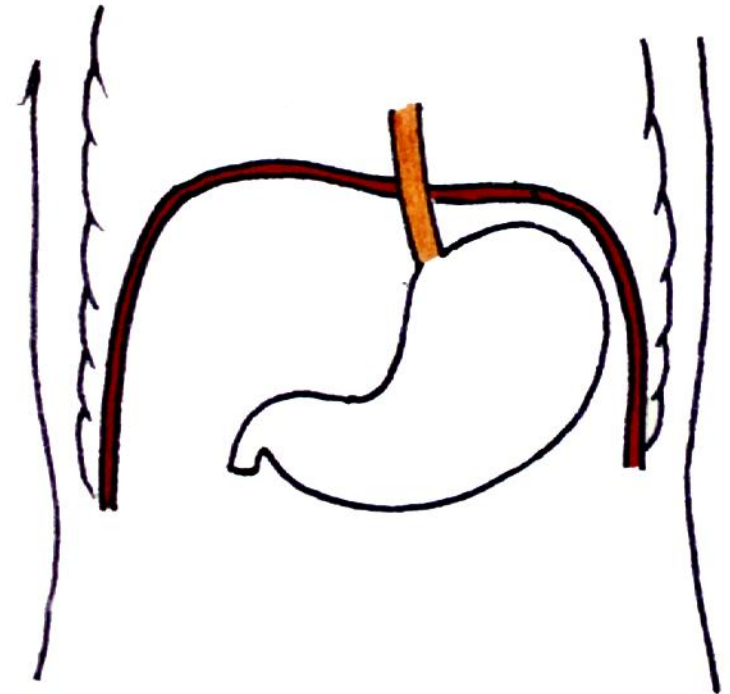


ANATOMI

MAVESÆK

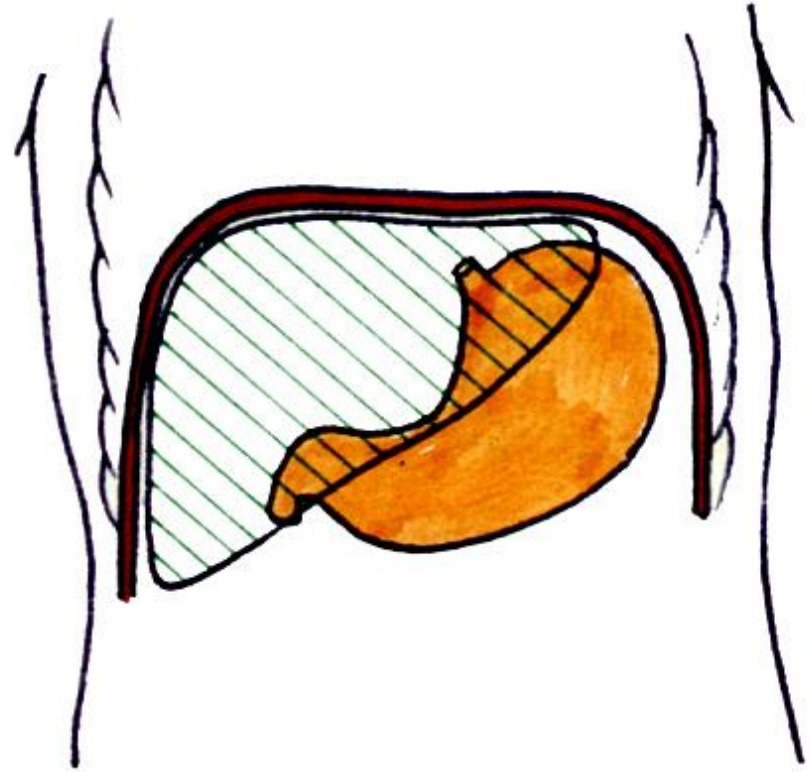
Gaster

- ventriklen / ventriculus
- ligger ud for nederste brysthvirvler



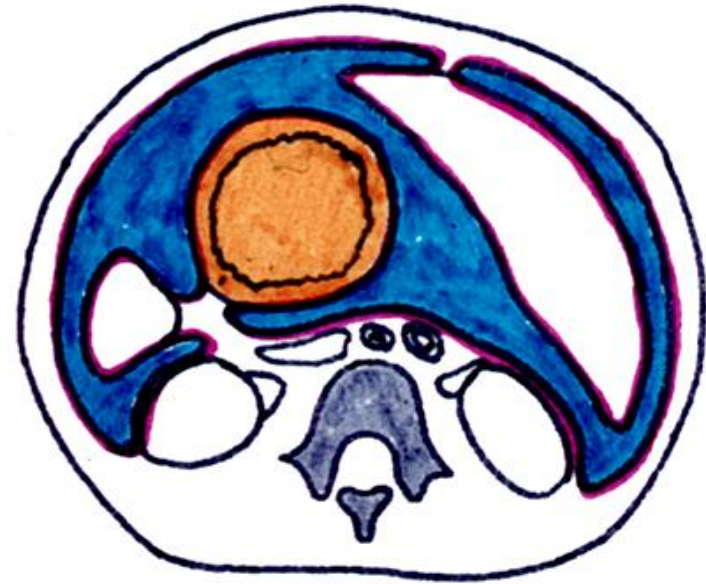
MAVESÆK

- ligger opad til venstre
- under diafragma



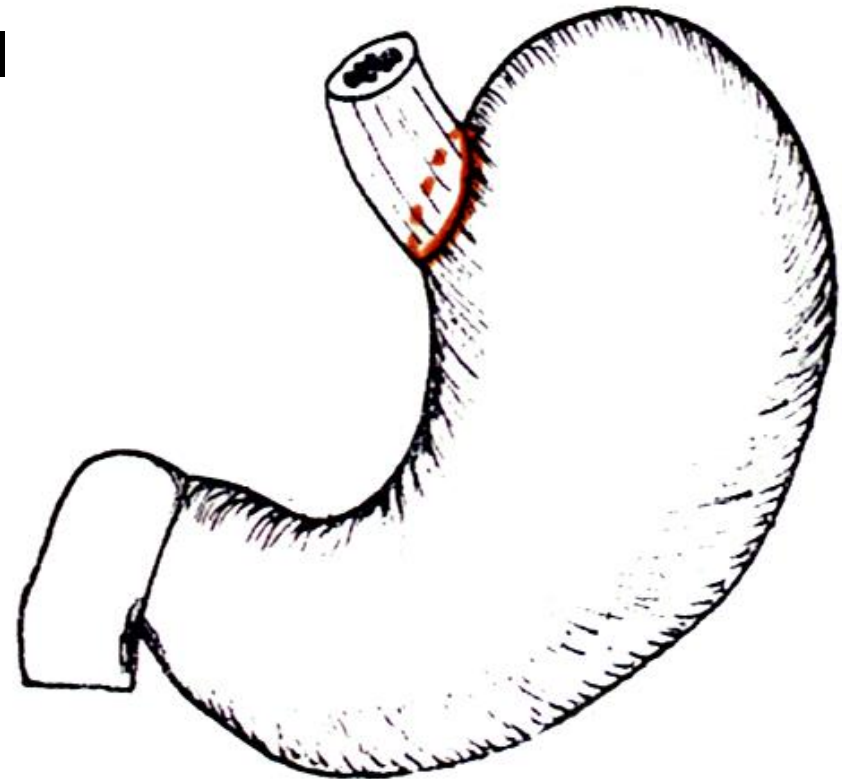
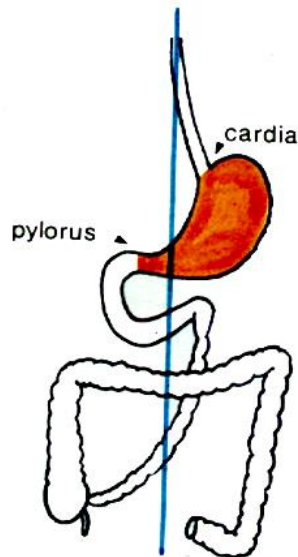
MAVESÆK

- ligger i spatium peritoneale



MAVESÆK

- cardia (mavemunden) ligger til venstre for midtlinjen



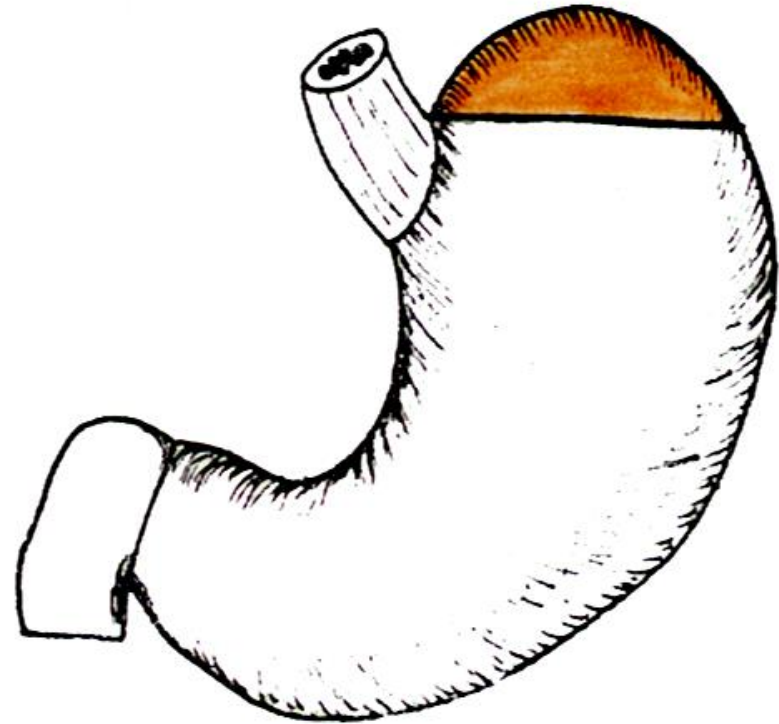
MAVESÆK

- corpus gastricum
(kropsdel)



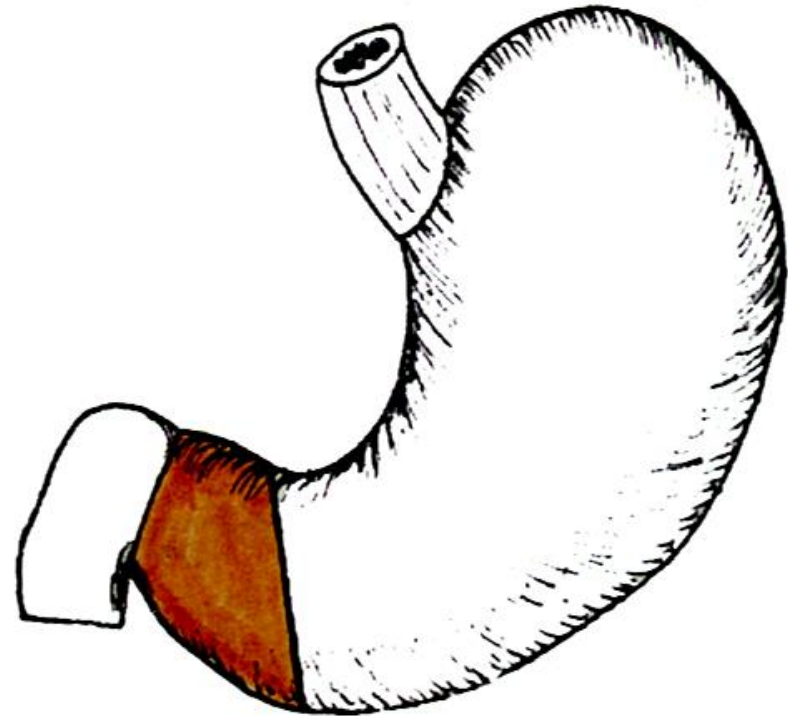
MAVESÆK

- fundus gastricus (kuppeldel)



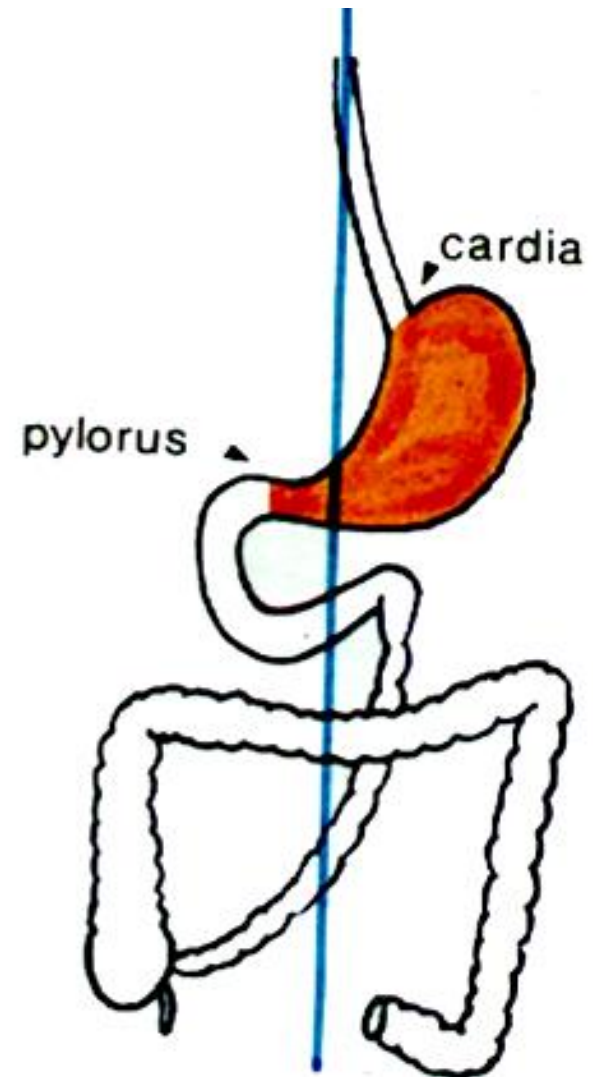
MAVESÆK

- pars pylorica
(nedre del)



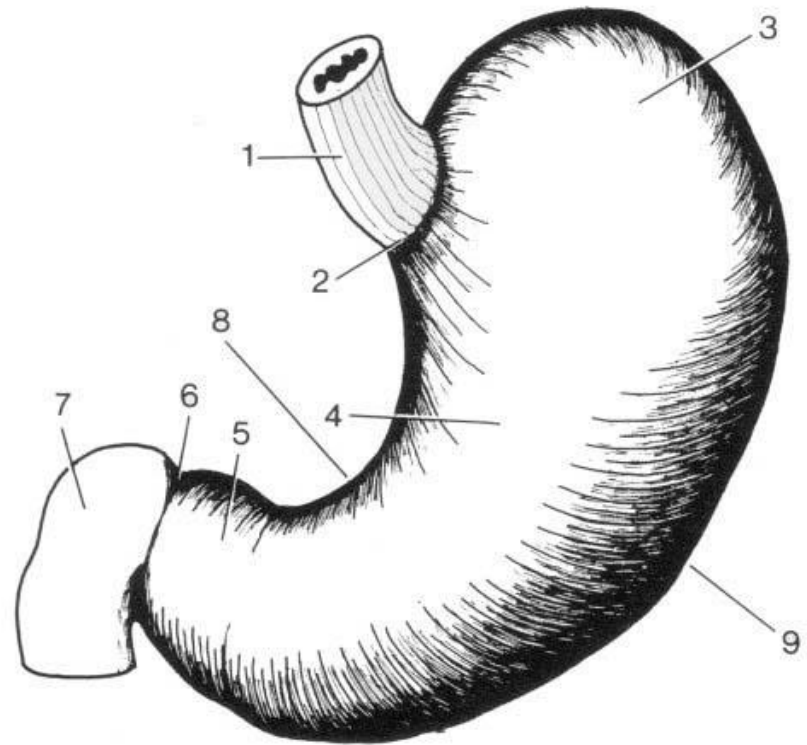
MAVESÆK

- pylorus (maveporten)
 - til højre for midtlinjen
 - ud for øverste lændehvirvel
- bemærk fordøjelsessystemets sik-sak-forløb
- start i en side og slut i den anden



MAVESÆK

- to flader
 - forflade
 - bagflade



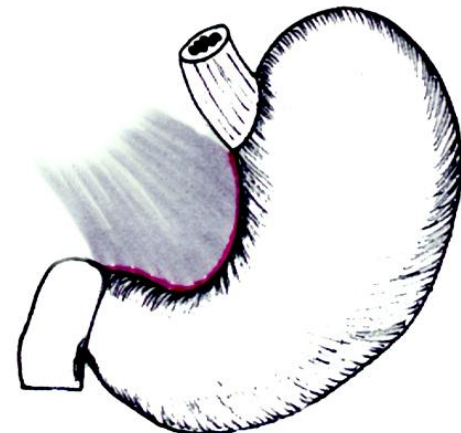
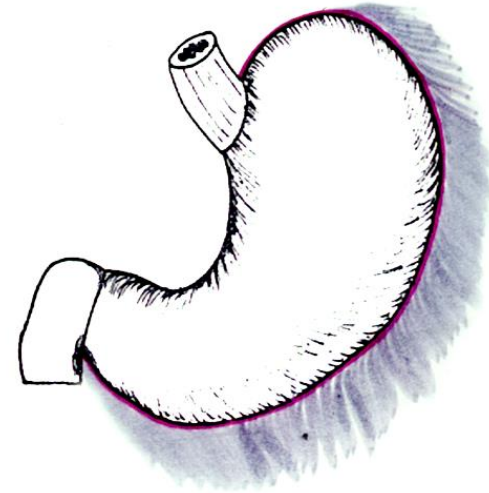
MAVESÆK

curvatura major (til venstre)

- her afgår omentum majus
- der hænger ned foran tarmene

curvatura minor (til højre)

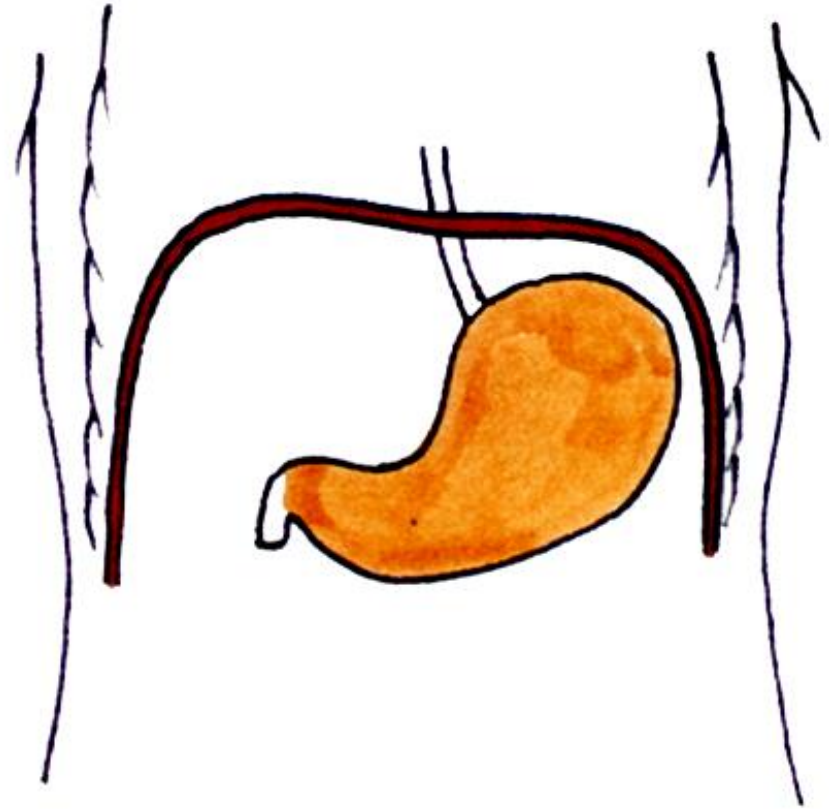
- her afgår omentum minus,
- der forbinder mavesæk og lever



MAVESÆK

relationer

- diafragma opadtil og fortil



MAVESÆK

relationer

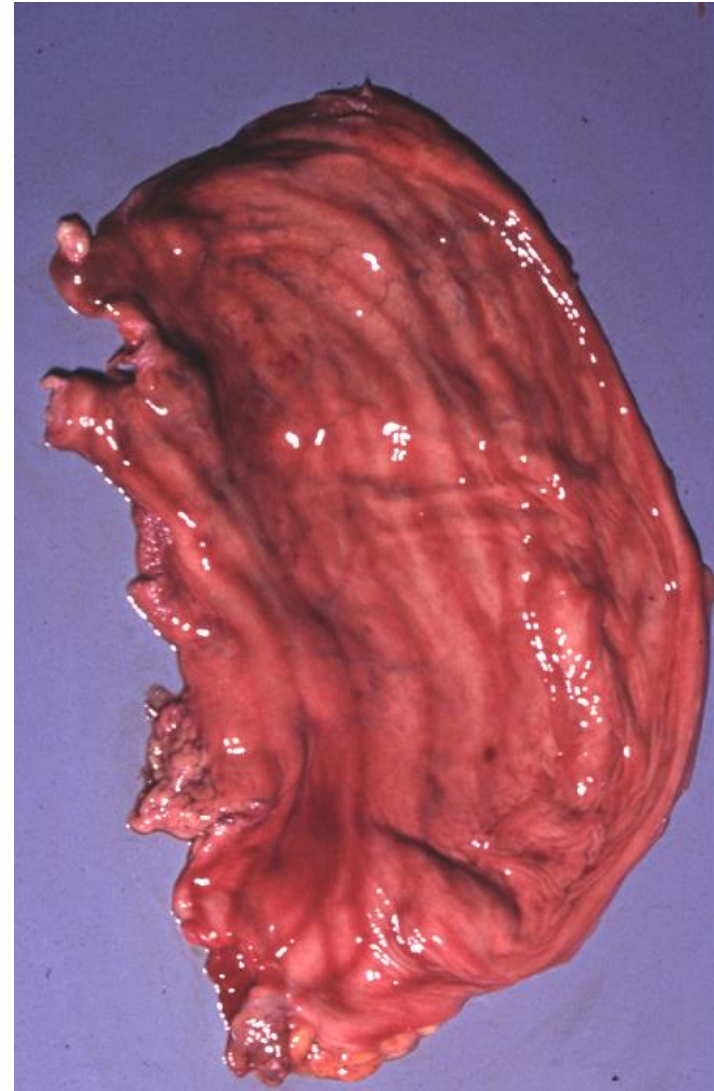
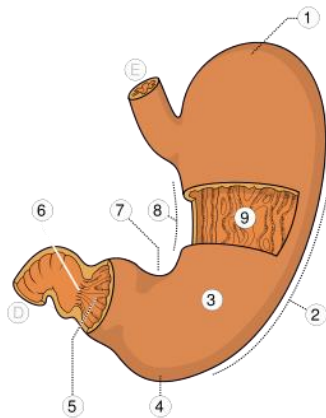
- lever fortil
- bugspytkirtel, milt og venstre nyre bagtil



MAVESLIMHINDENS OVERFLADERELIEF

MAVESÆKKEN:

- længdefolder
(plicae gastricae)
- også mavetragte
(foveolae gastricae)



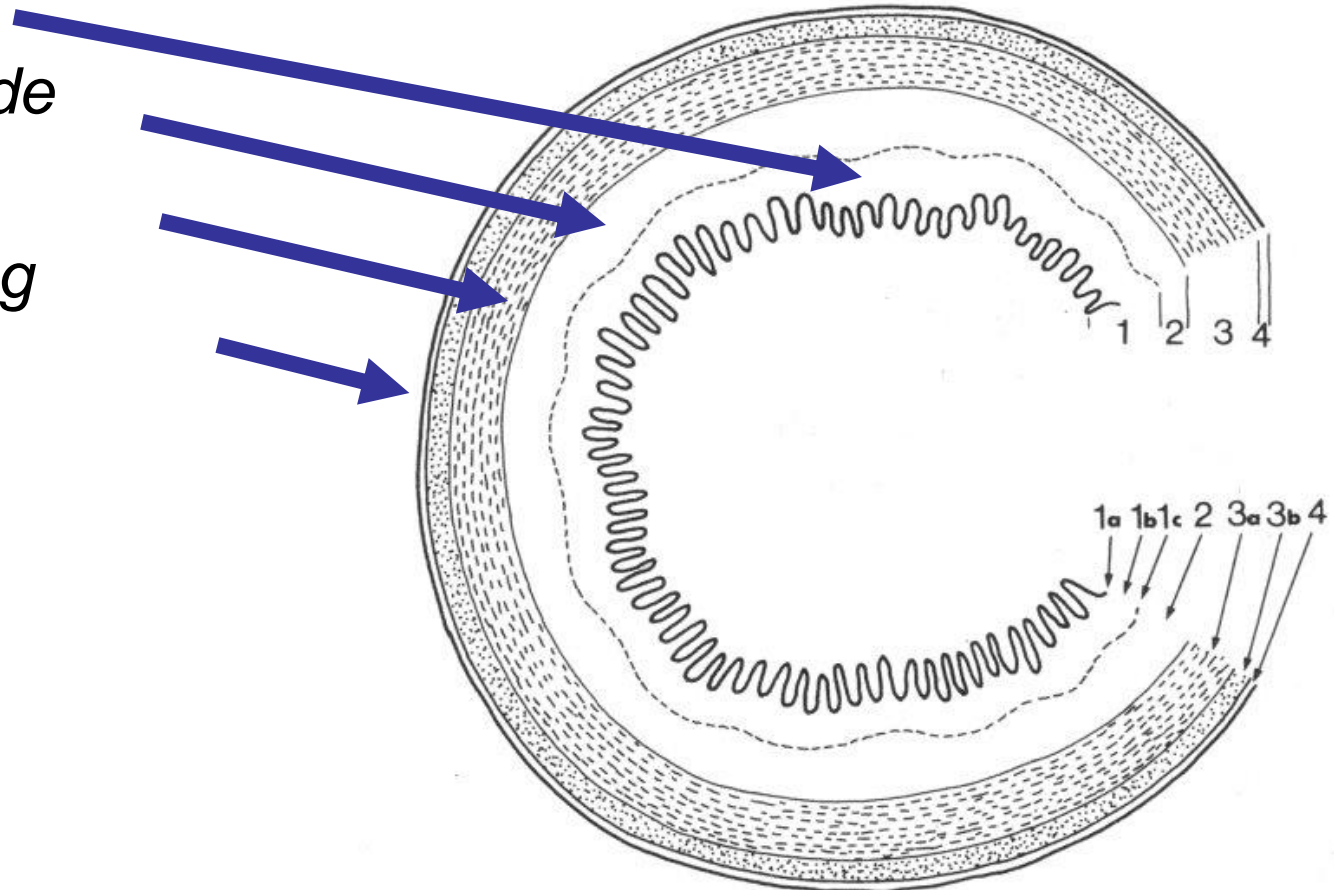
Peerfeedback 2 og 2 - evt 3

Mavesækken

Hvor ligger mavesækken ?		
Hvad er omentum minus ?		
..		

VÆGGENES PRINCIPIELLE OPBYGNING I FORDØJELSESSYSTEMET

- *Slimhinde*
- *Underslimhinde*
- *Muskelkappe*
- *Afsluttende lag*



VÆGGENES PRINCIPIELLE OPBYGNING I FORDØJELSESSYSTEMET

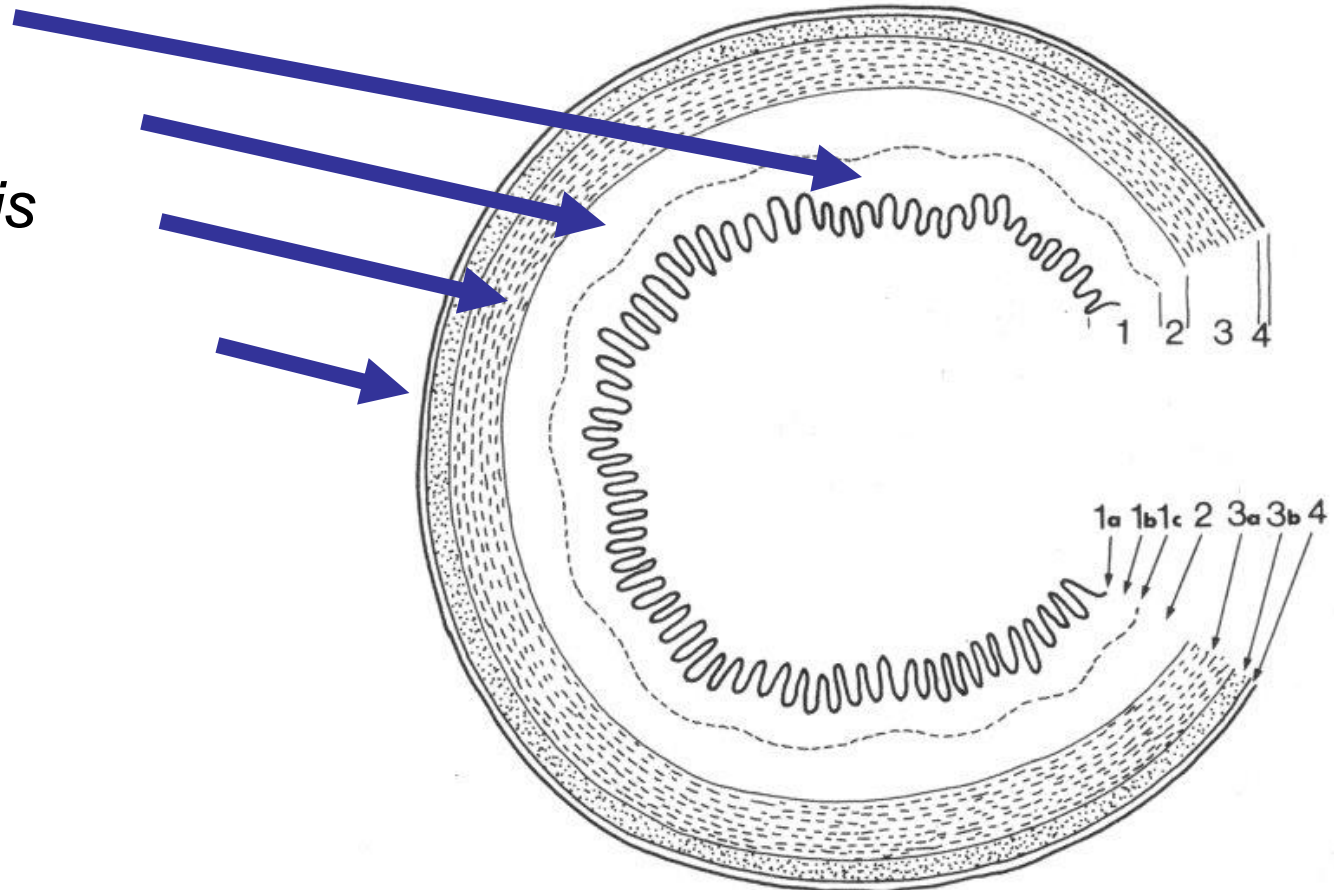
Tunica mucosa

Tela submucosa

Tunica muscularis

Tunica serosa

/Adventitia



LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

- lamina epithelialis
 - enlaget prismatisk epitel
 - epitelet fungerer både som dækeepitel og kirtel
 - udsondrer sekret der beskytter

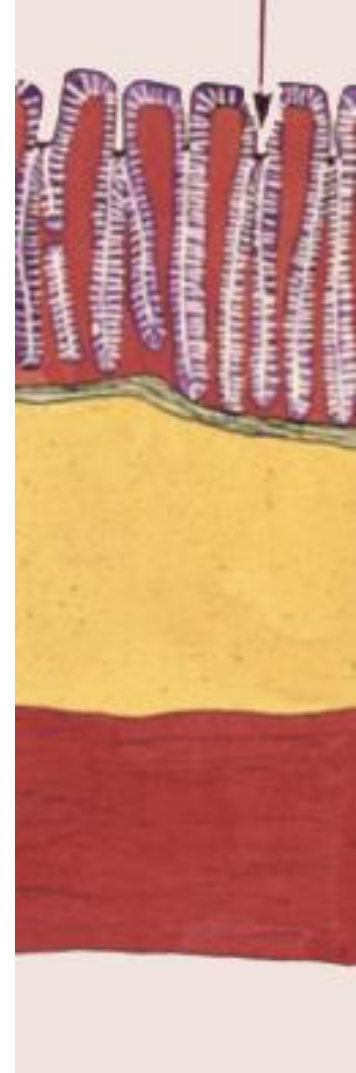


LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

- lamina propria
 - indeholder rørformede kirtler
 - gll gastricae tømmer sig i tragte

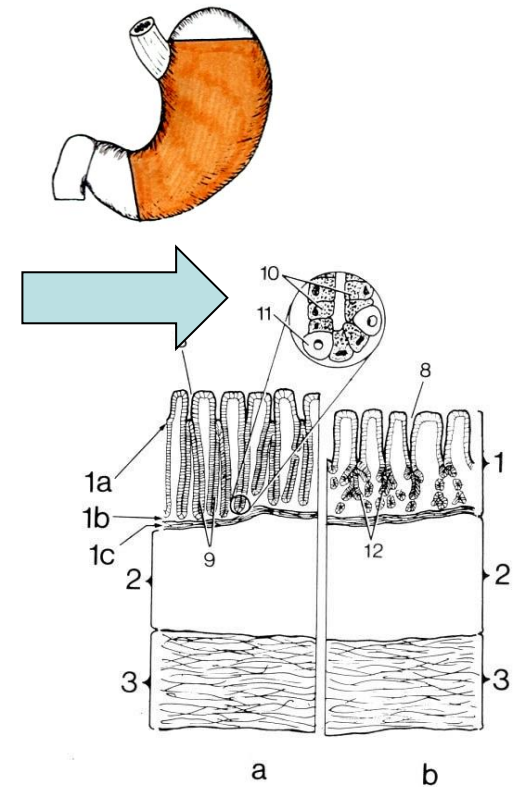


LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

- lamina propria
 - indeholder rørformede kirtler
 - gll gastricae tømmer sig i tragte
 - i corpus
 - hovedceller (10) (enzym)

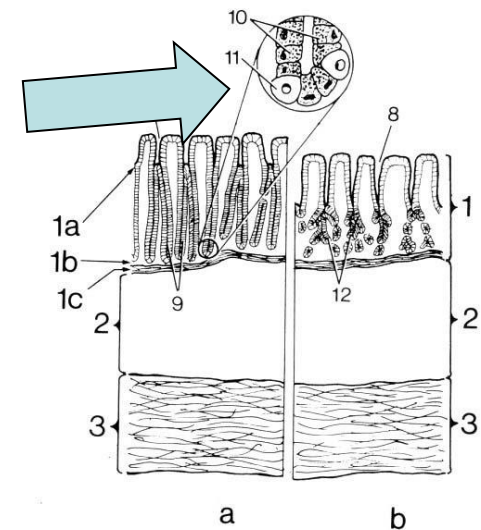
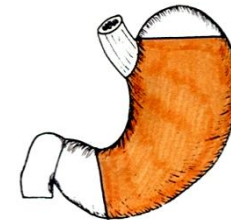


LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

- lamina propria
 - indeholder rørformede kirtler
 - gll gastricae
 - tømmer sig i tragte
 - i corpus
 - hovedceller (enzym)
 - dækceller (11, HCl)

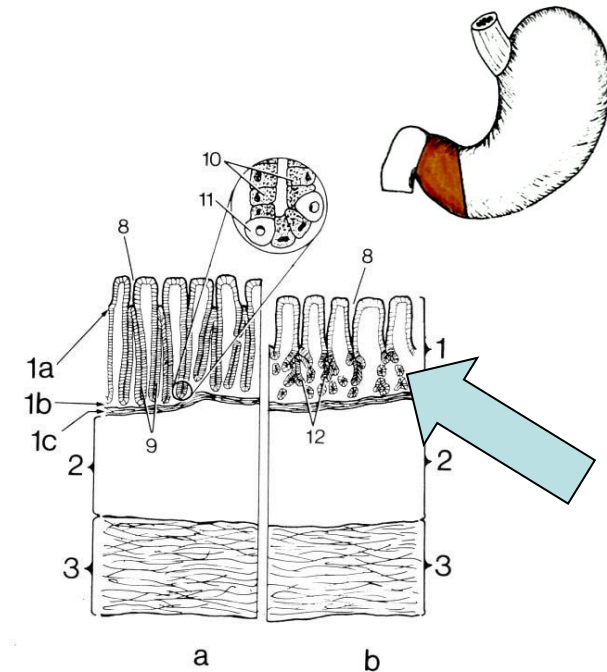


LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

- lamina propria
 - indeholder rørformede kirtler
 - gll gastricae
 - tømmer sig i tragte
 - i corpus
 - hovedceller (enzym)
 - dækceller (HCl)
 - i pars pylorica
 - kun slimproducerende celler

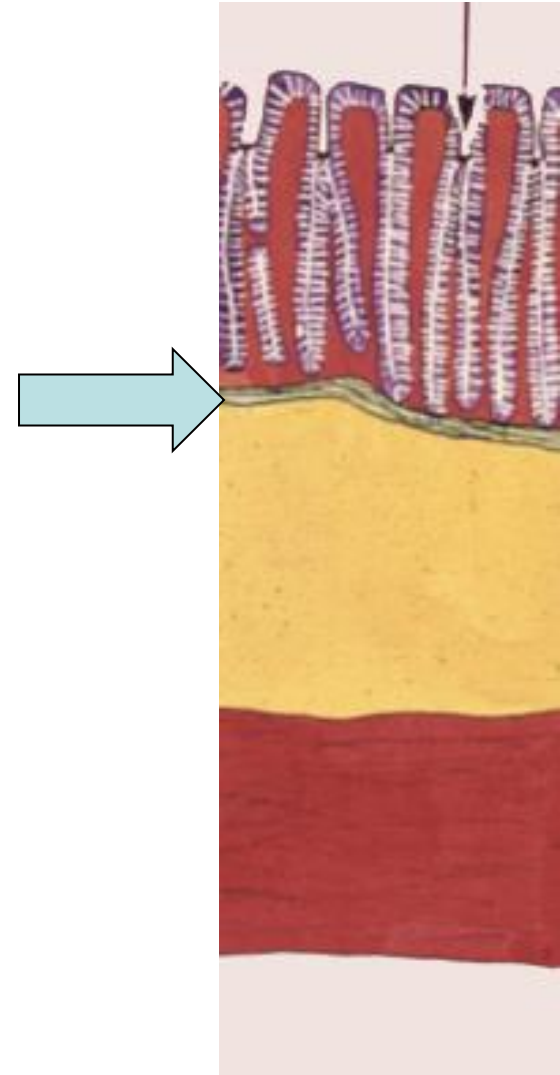


LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

Tunica mucosa:

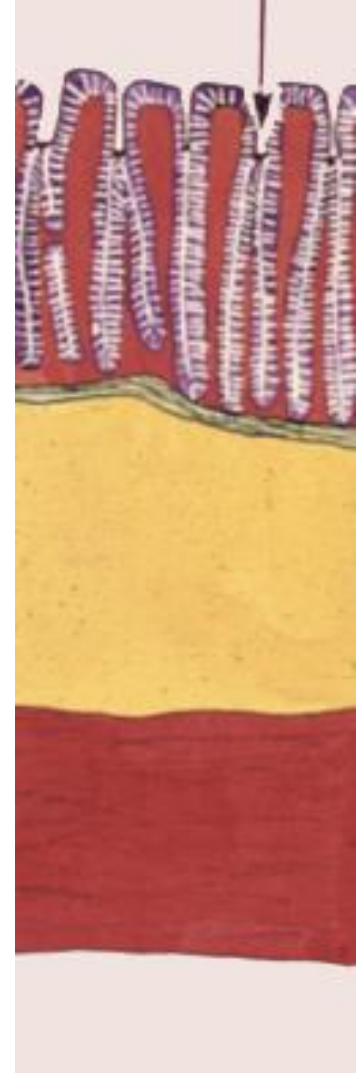
- lamina muscularis mucosae



LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

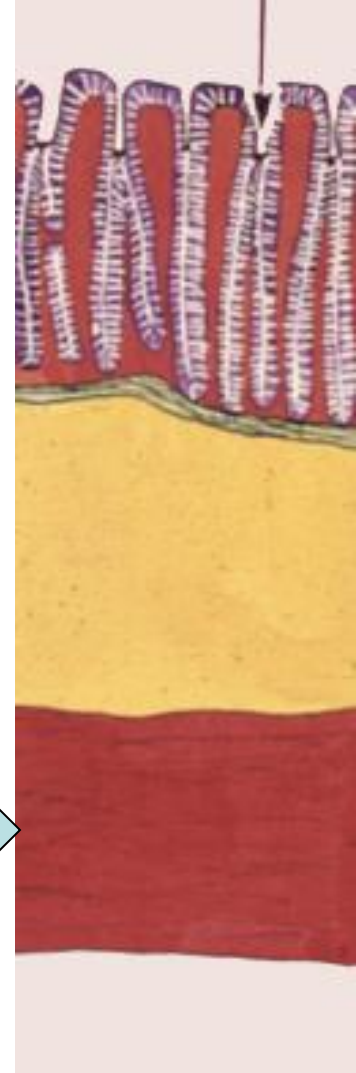
- Tela submucosa
 - løst bindevæv
 - med kar og nerver
 - uden kirtler



LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

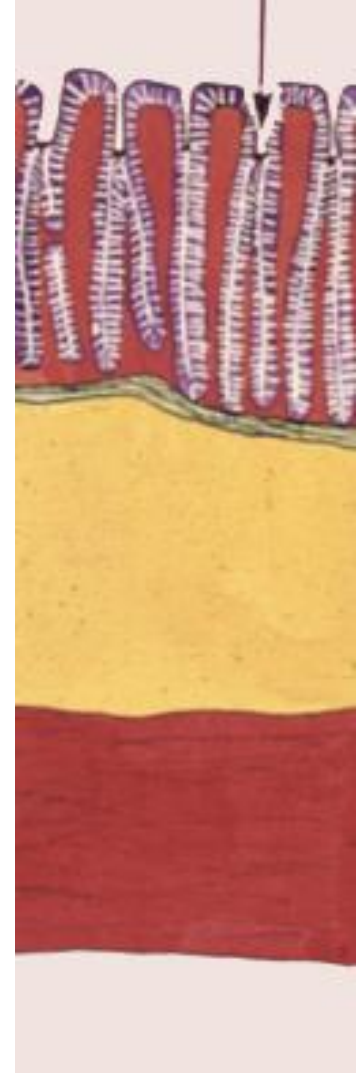
- Tunica muscularis
 - veludviklet muskelkappe
 - stratum longitudinale og circulare



LAG i GASTER

Tunica mucosa
Tela submucosa
Tunica muscularis
Tunica serosa

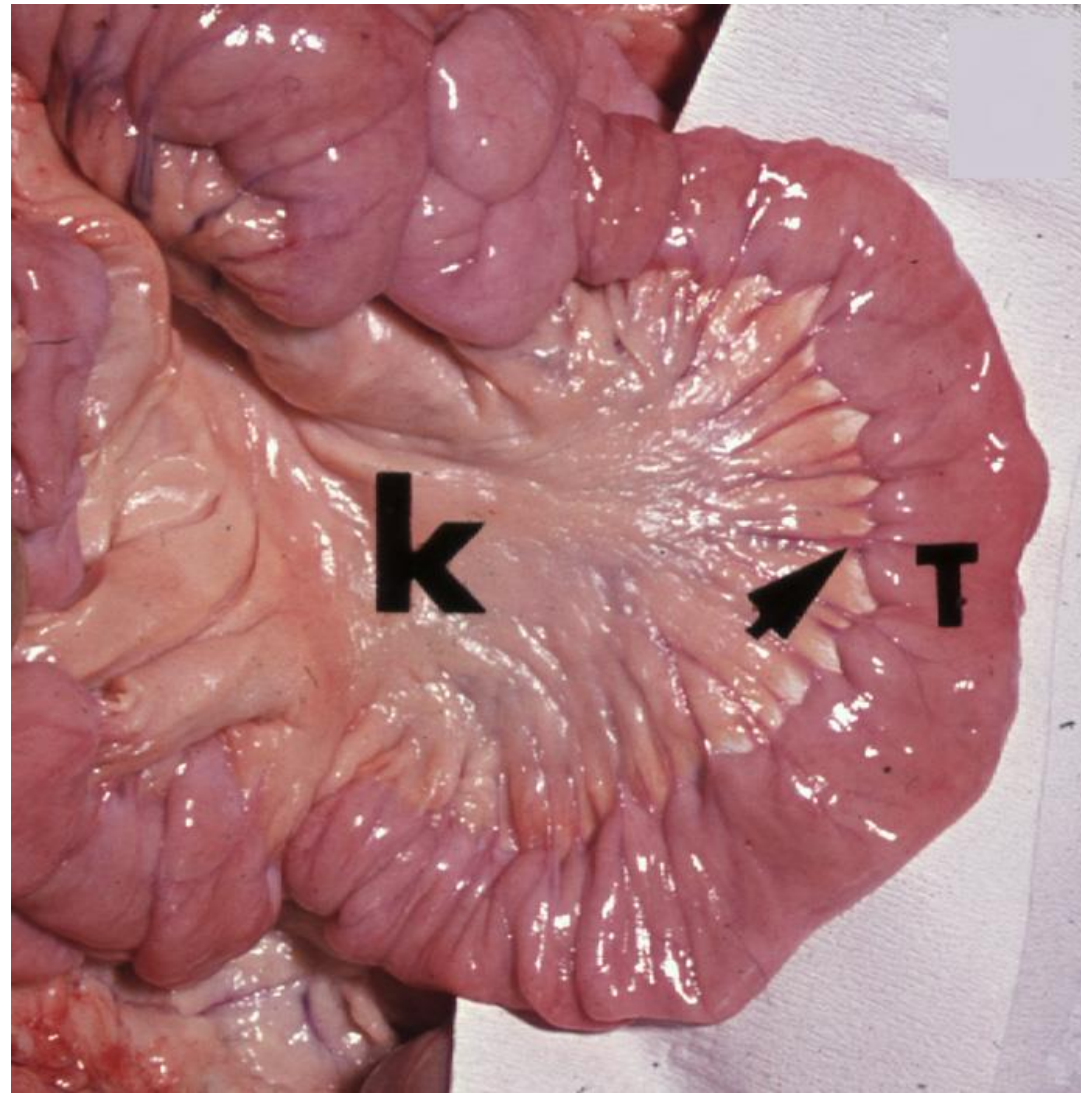
- Tunica serosa
 - peritoneum viscerale
 - på ventriklens overflade



TYNDTARM



- 3-4m lang
- 6-8m i afslappet tilstand

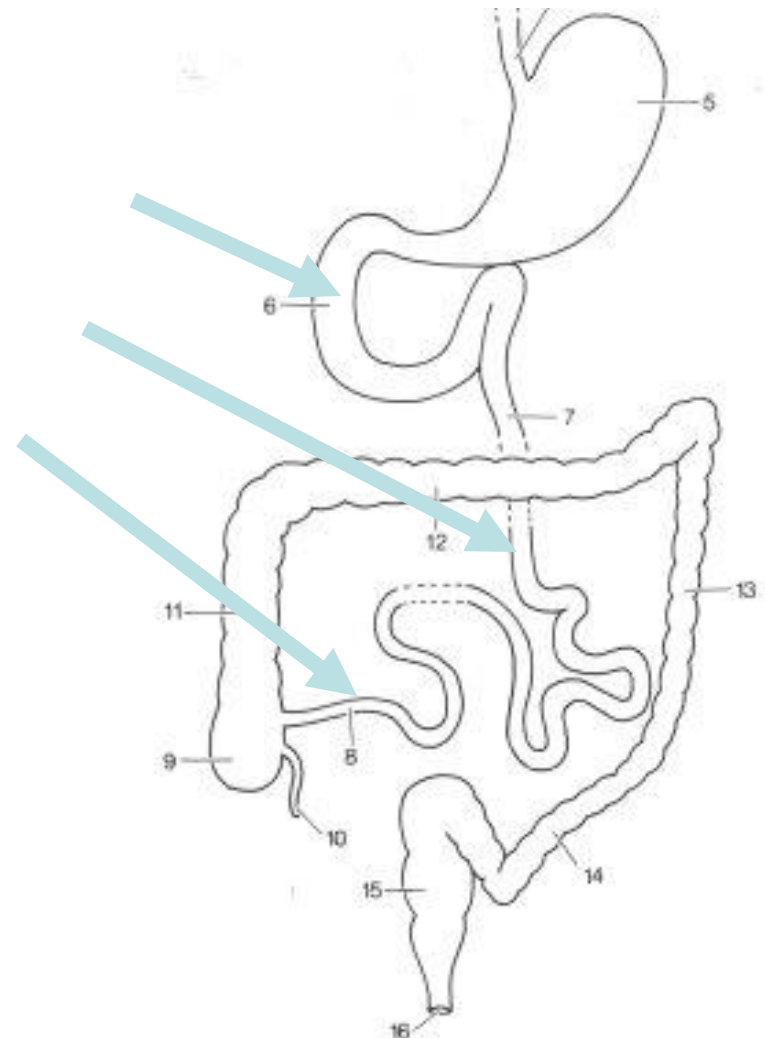


FORDØJELSESKANALEN



TYNDETARMEN består af:

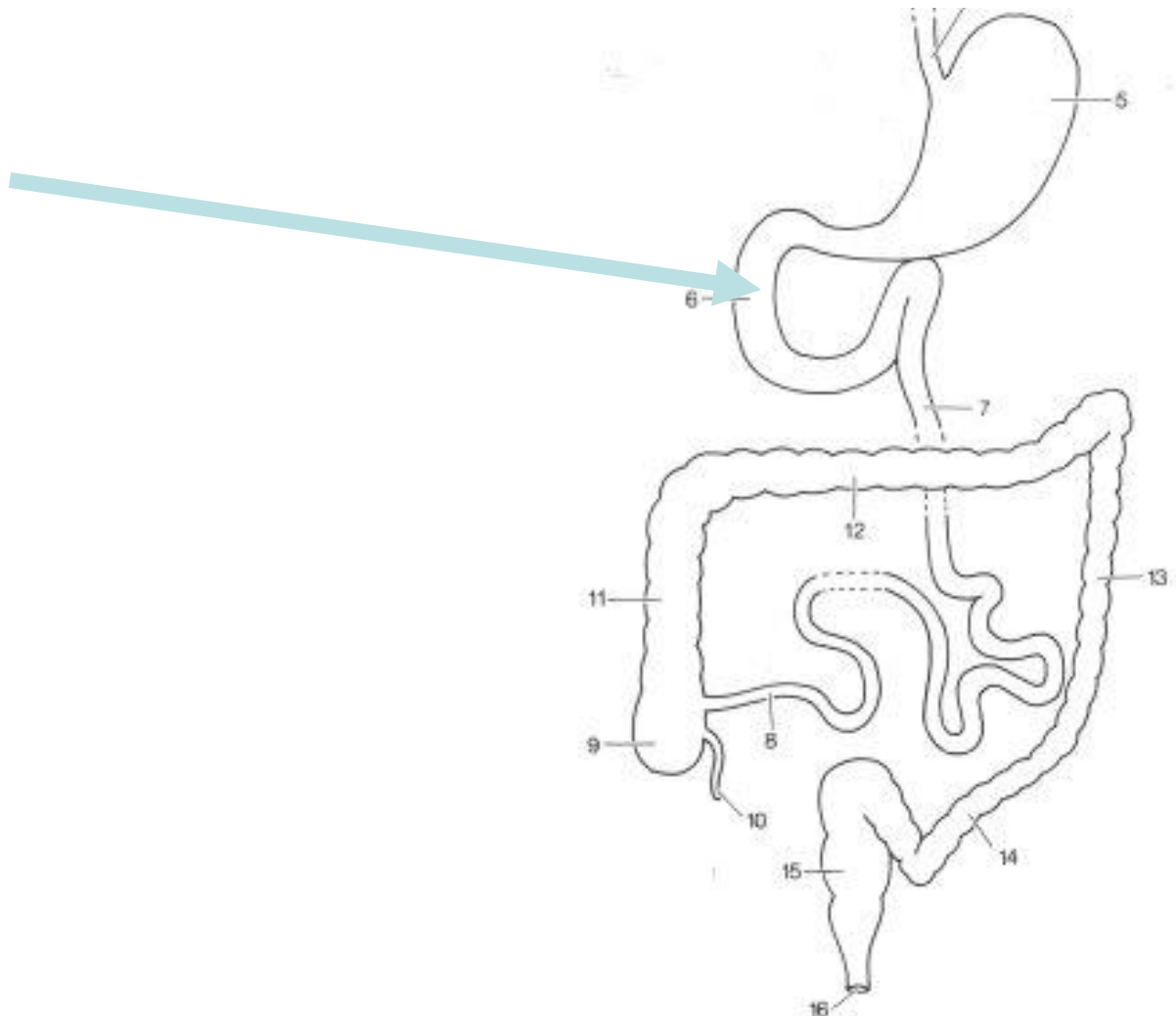
- tolvfingertarmen
- den tomme tarm
- den snoede tarm



DUODENUM



”Tolvfingertarmen”



DUODENUM



- Første 25 cm af tyndtarm
 - begynder til højre for midtlinjen ud for første lændehvirvel
 - løber i hesteskoformet bue, der er konveks mod højre
 - ender lavere og til venstre for midtlinjen

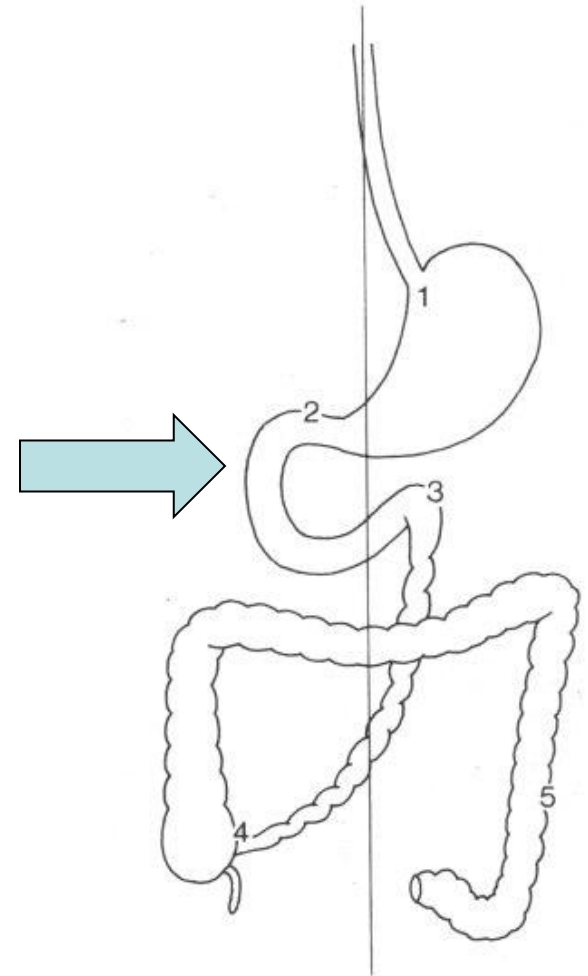


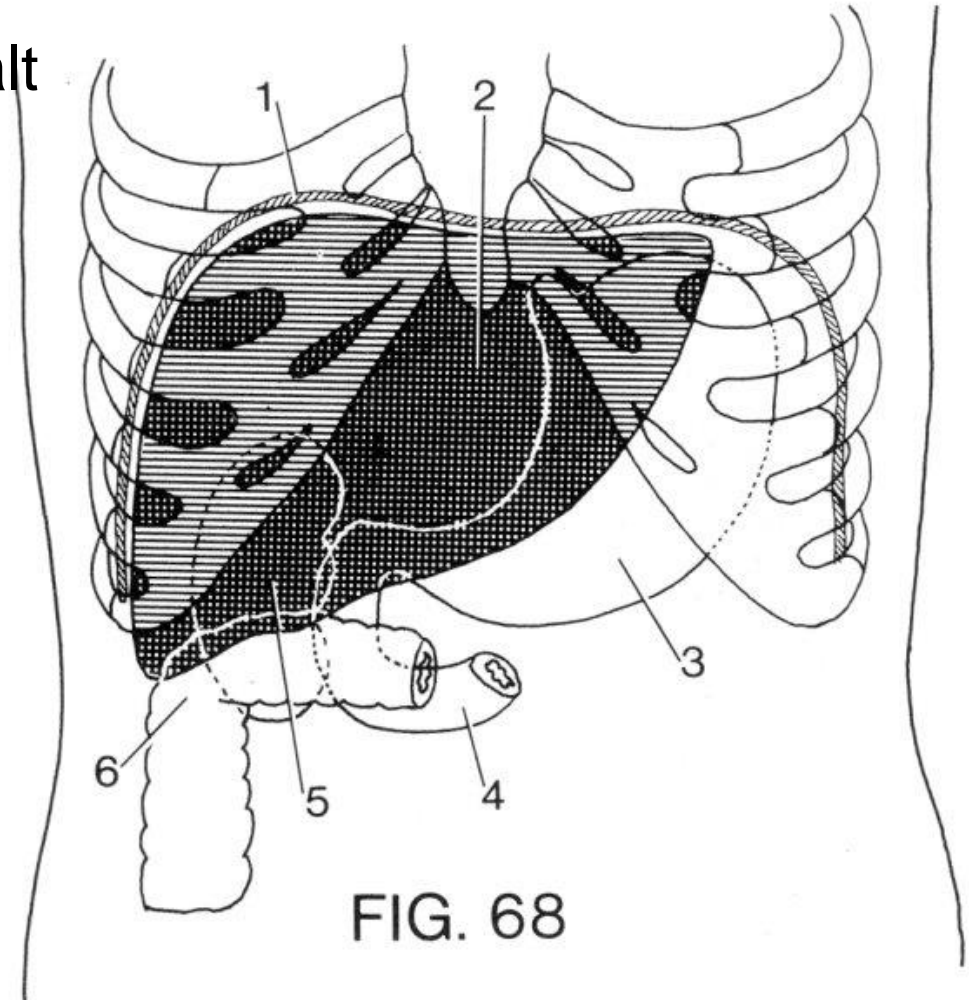
FIG. 50

DUODENUM



- Sekundært retroperitonealt organ:

- bag intraperitoneale organer (lever)
- foran primært retroperitoneale organer (nyre)



DUODENUM



- Galdegangen:
 - ligger bag begyndelses-stykket

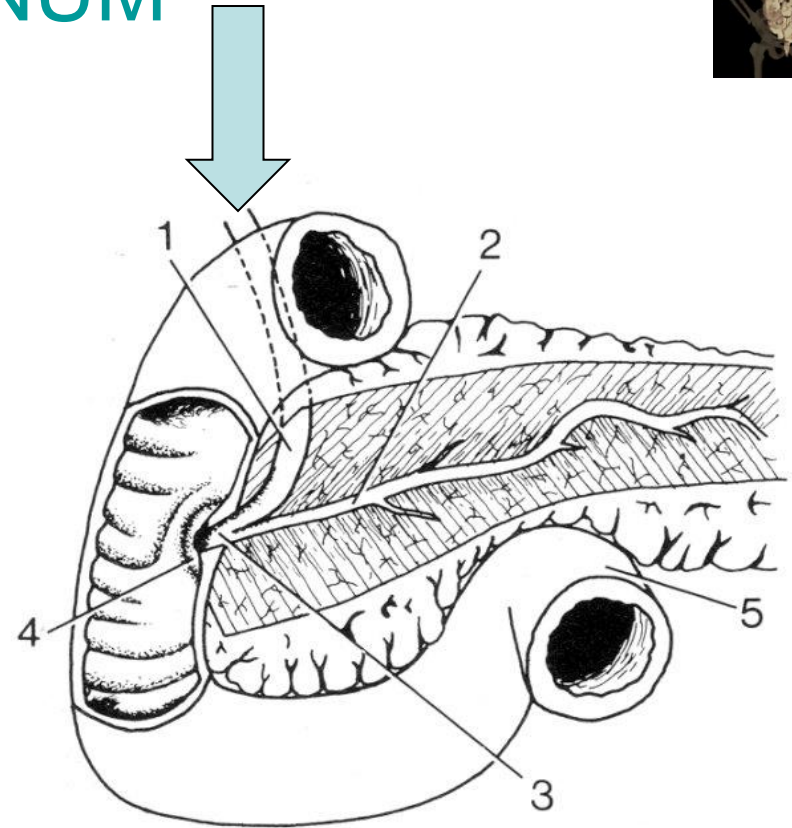


FIG. 53

DUODENUM



- Pancreas:
 - ligger i konkavitet

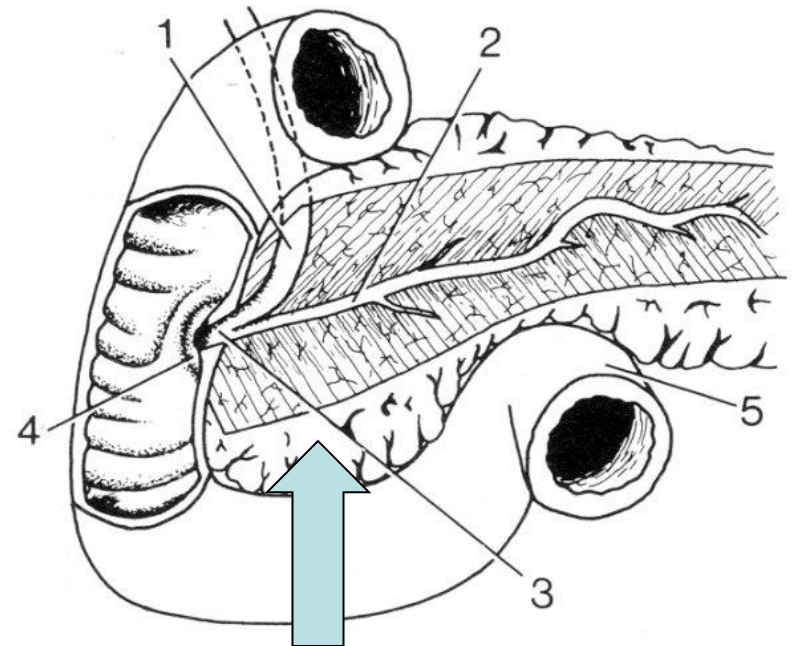


FIG. 53

DUODENUM



1. Galdegangen (ductus biliaris)
2. Pancreasgang (ductus pancreaticus)
3. Fællesgangen
4. Fællesåbning (papilla duodeni major)

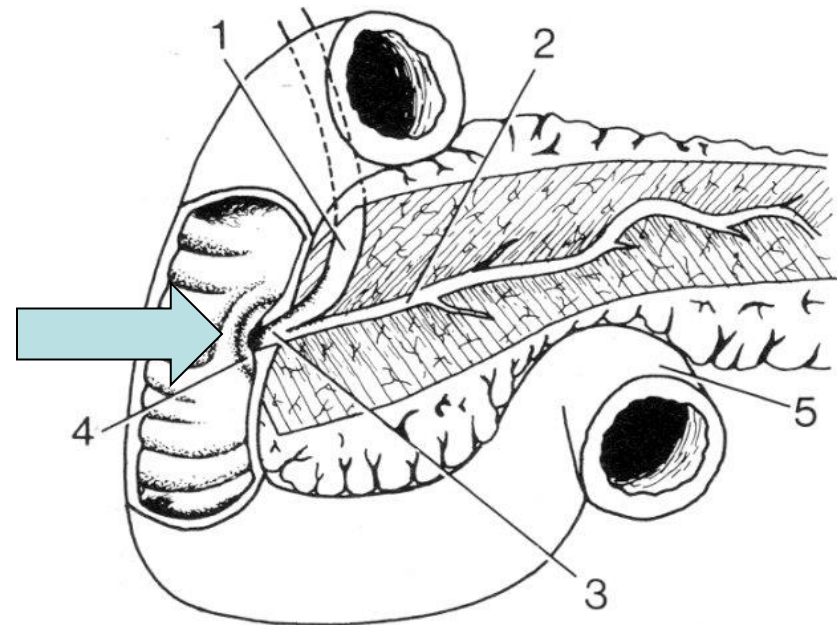
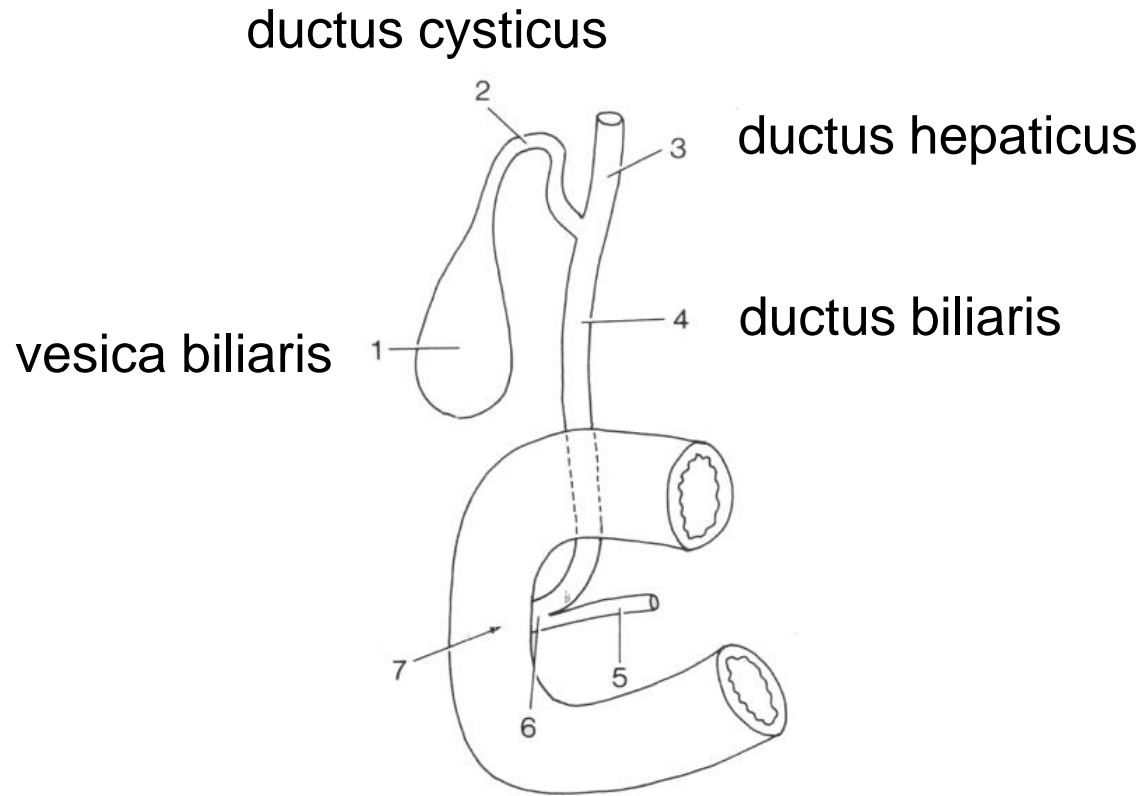


FIG. 53



DUODENUM



Peerfeedback 2 og 2 - evt 3

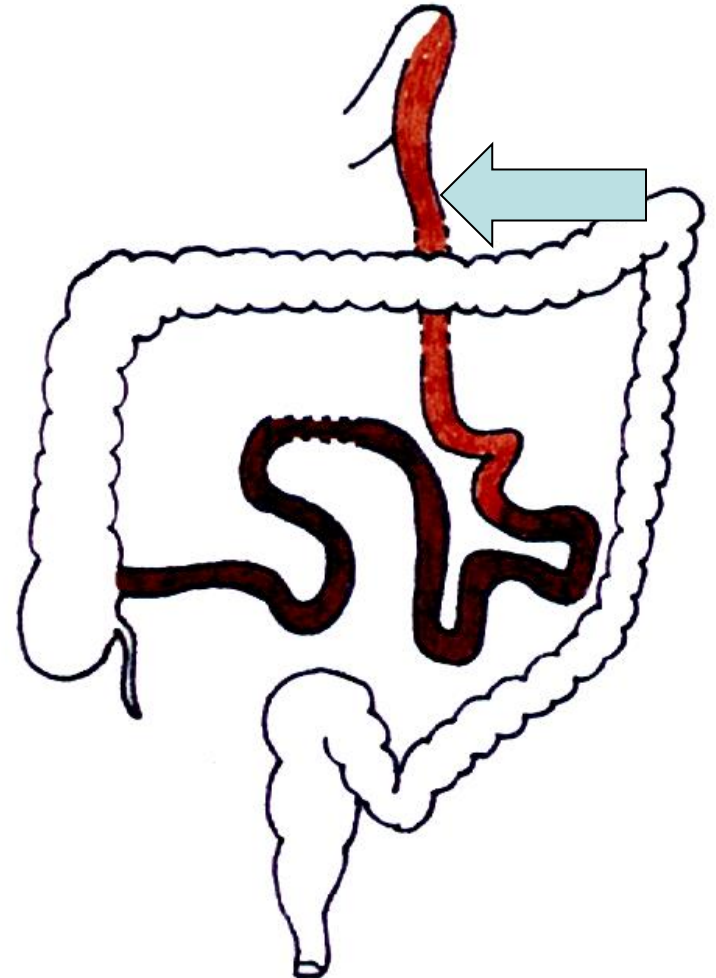
Tolvfingertarmen

Hvor ligger tolvfingertarmen ?		
Hvad udemunder på papilla duodeni major ?		
....		

JEJUNUM



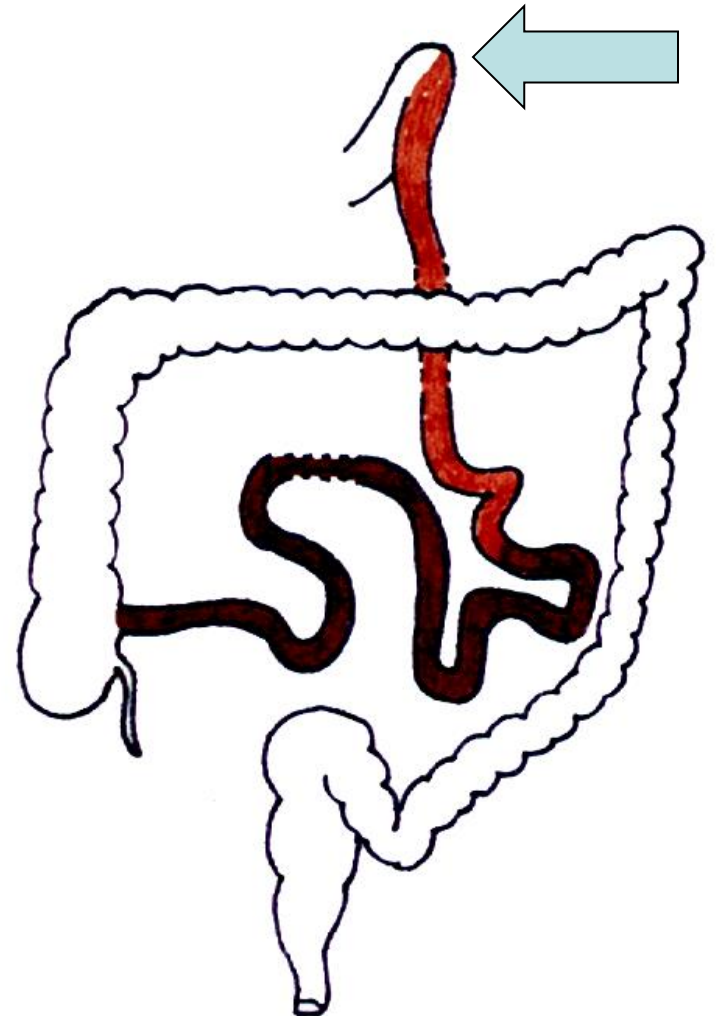
- “Den tomme tarm”
 - ..opad-til-venstre
 - ..første 2/5 af den krøsbærende tyndtarm (intestinum tenue mesenteriale)



JEJUNUM



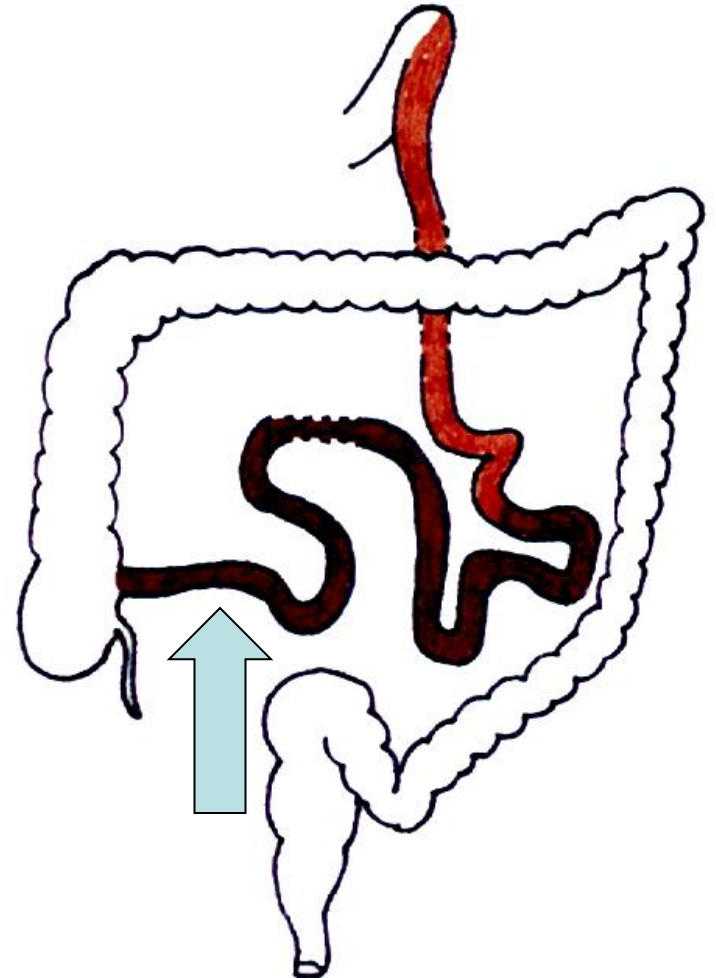
- flexura duodenojejunalis
 - overgang til duodenum
 - ingen speciel overgang til ileum



ILEUM



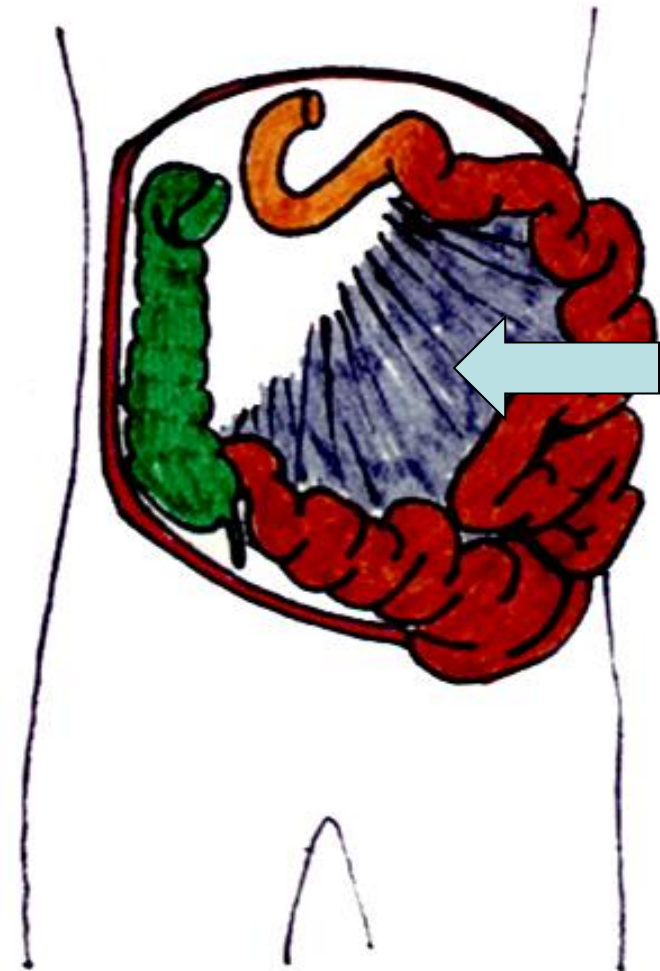
- “den snoede tarm”
 - ..nedad-til-højre
 - sidste 3/5 af intestinum tenue mesenteriale



Mesenterium



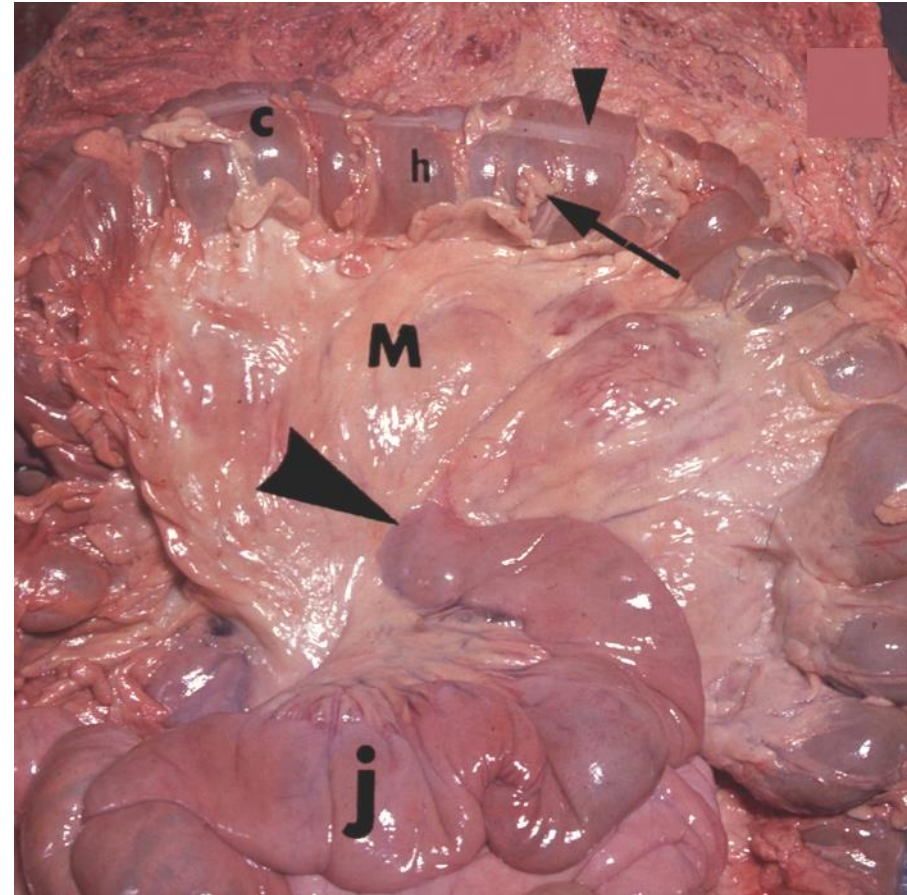
- krøs
- 2 blade af peritoneum viscerale
- vifteformet og meget foldet



Intestinum tenue mesenteriale



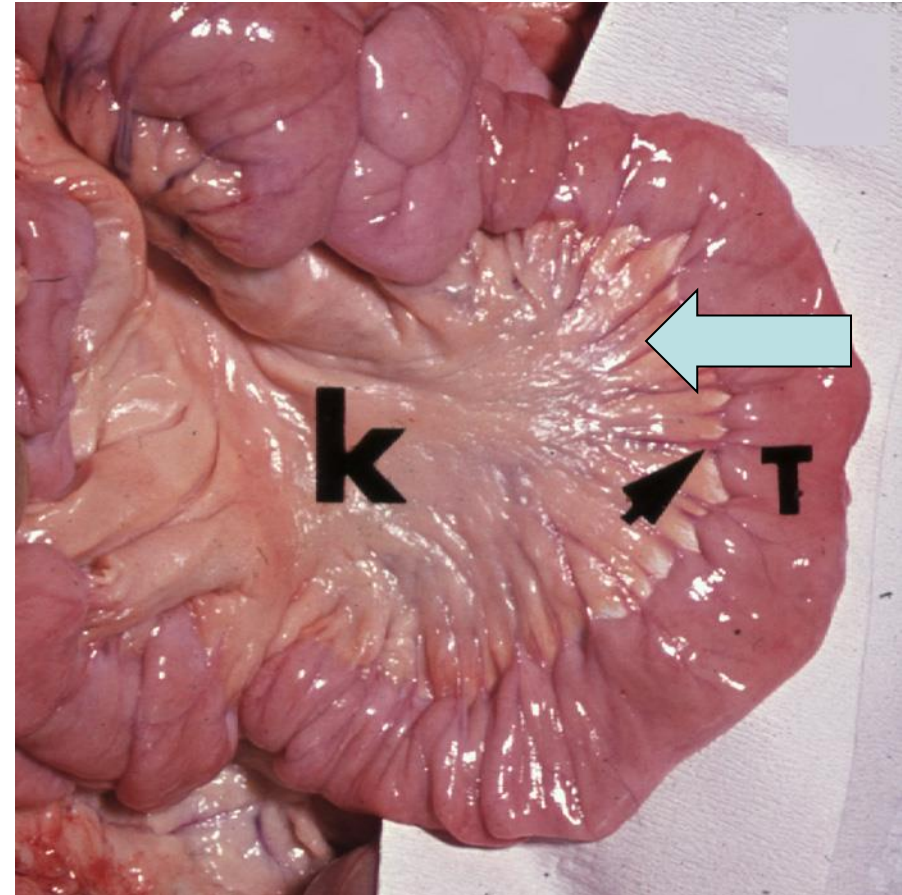
- ligger i “ramme” dannet af colon



Mesenterium



- fedt, kar og nerver mellem bladene

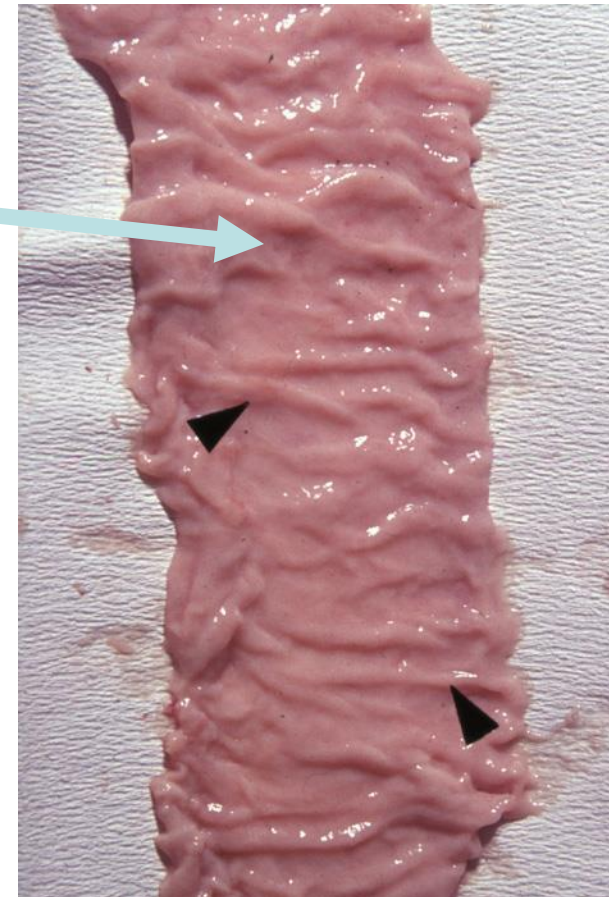


TYNDTARMENS INDRE OVERFLADERELIEF



CIRCULÆRE FOLDER:

- Plicae circulares

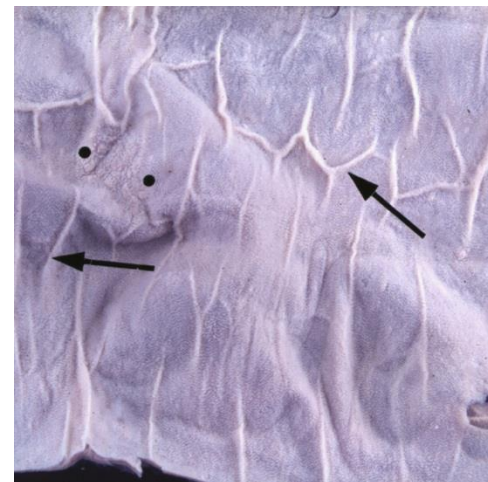
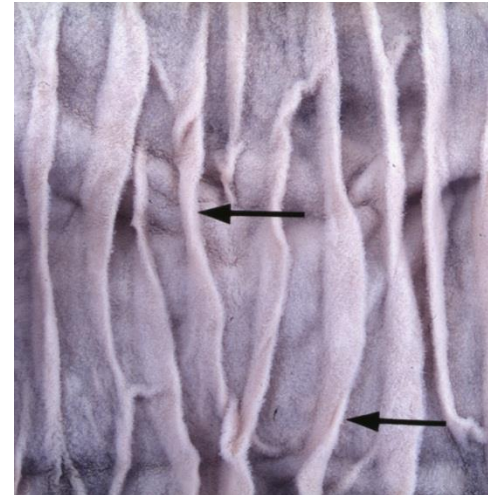


TYNDETARMENS INDRE OVERFLADERELIEF



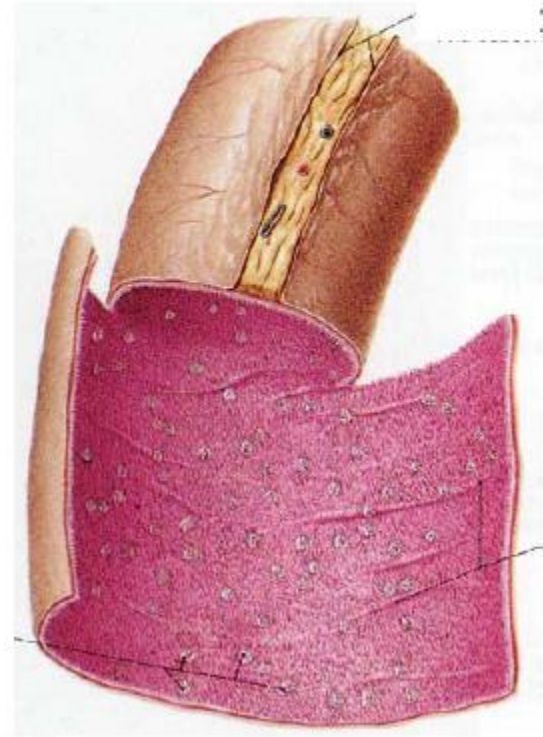
CIRCULÆRE FOLDER:

- ca 1 cm høje
- består af Tunica mucosa og Tela submucosa
- aftager i størrelse i anal retning





Jejunum



Ileum

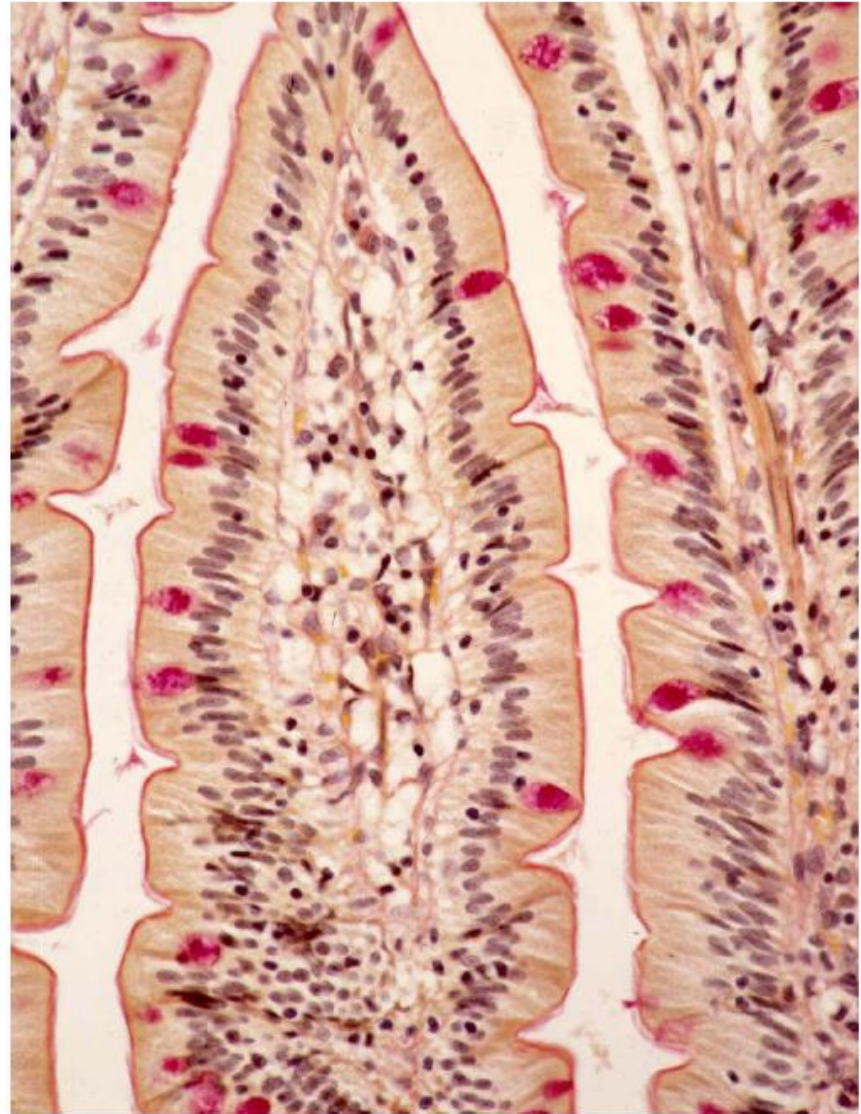
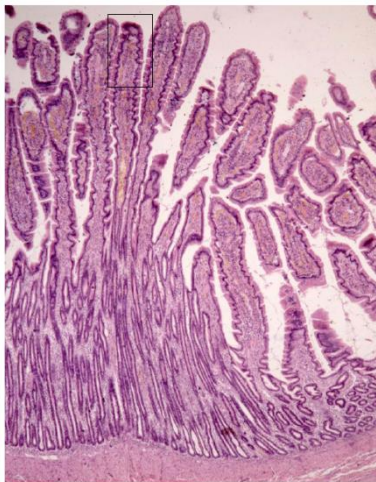


Tunica mucosa

Tela Submucosa

Tunica muscularis

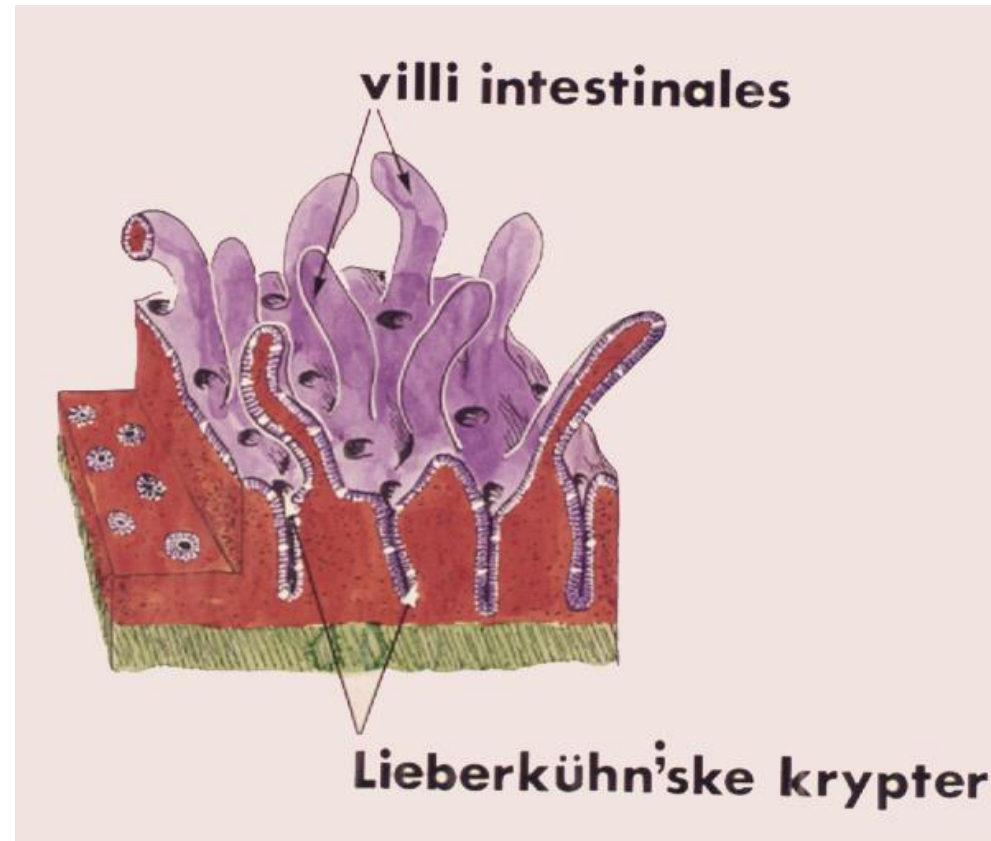
Tunica serosa





TYNDTARMENS INDRE OVERFLADERELIEF

TARMTRÆVLER



<https://www.youtube.com/watch?v=P3om5aofVuc>

TYNDTARMENS INDRE OVERFLADERELIEF

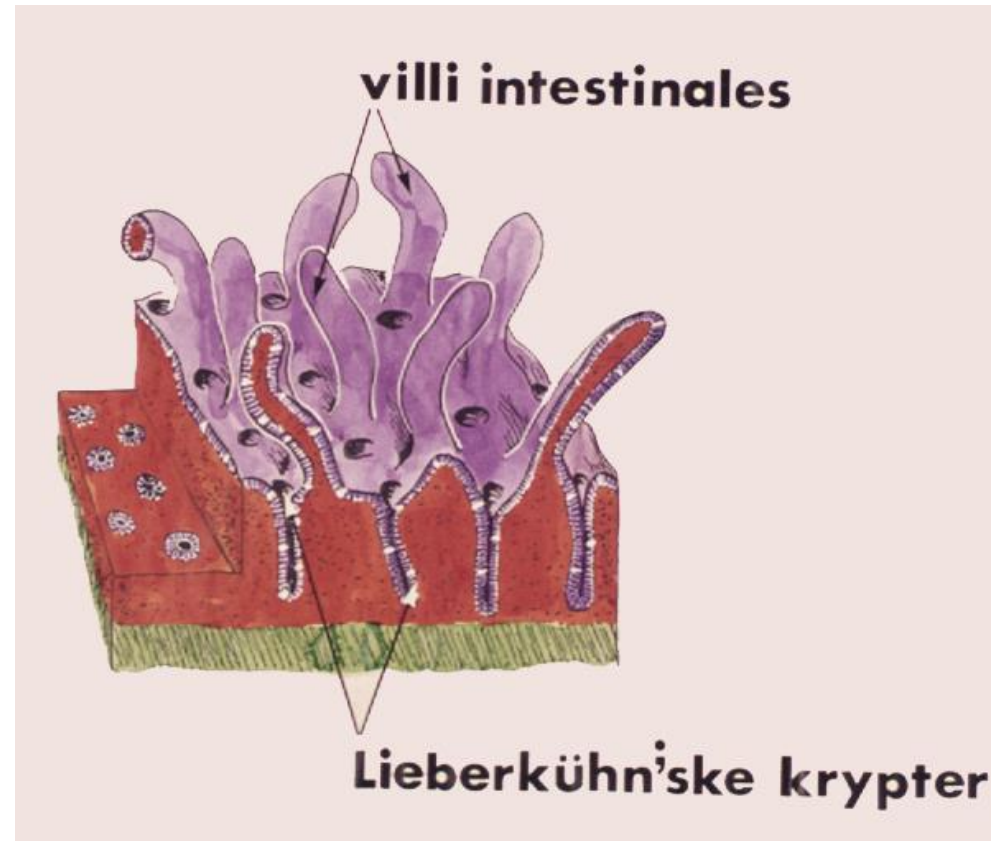


TARMTRÆVLER

- ca 1 mm høje
- består af lamina epitelialis og lamina propria

TARMKRYPTER

- ca ½ mm dybe



LYMFATISK VÆV



LYMFENODULI

- enkelte lymfeknuder (folliculi lymphatici) i hele tyndtarmen
- desuden er der grupper af lymfeknuder (Peyers plaques) i ileum

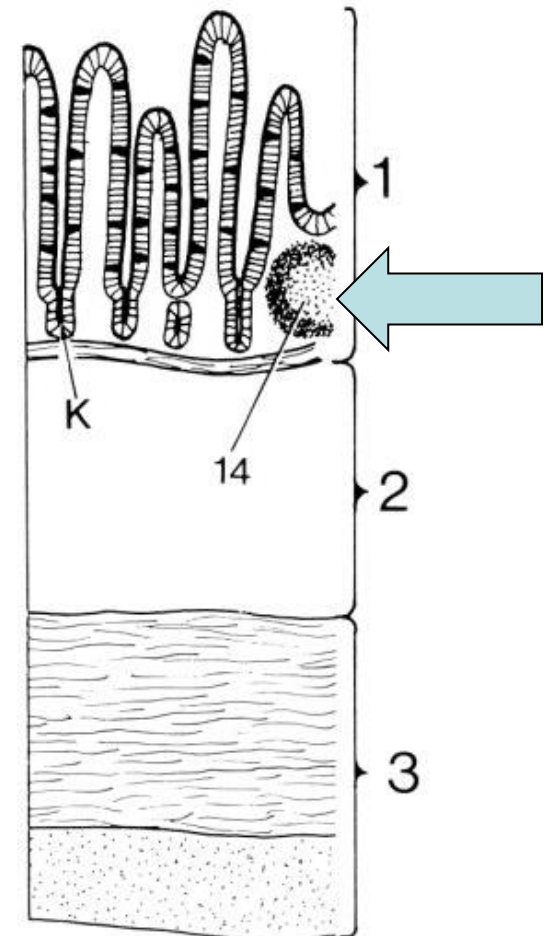
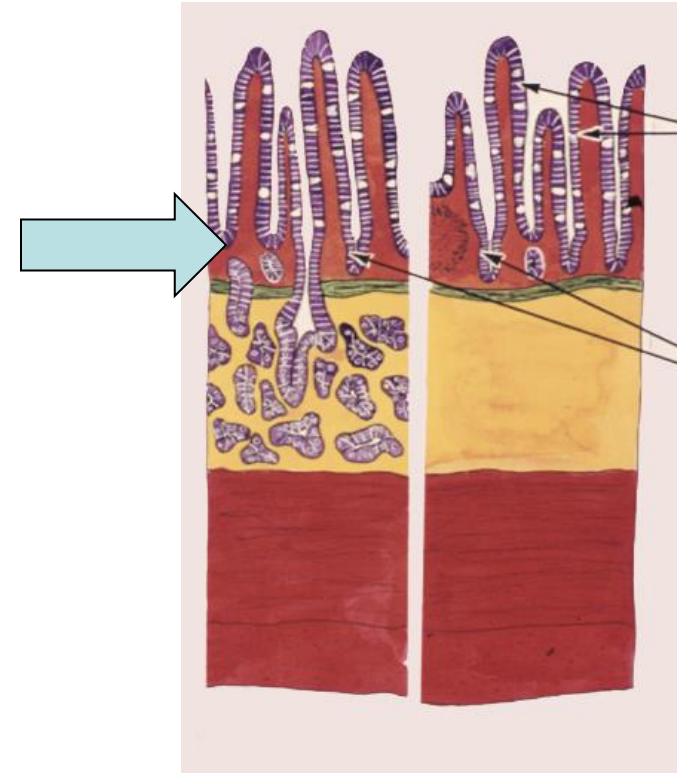


FIG. 9b

TYNDTARMENS LAG



- Tunica mucosa
 - Lamina epithelialis
 - enlaget prismatisk epitel
 - secernerende bægerceller
 - Lamina propria
 - løst bindevæv (også retikulært)
 - Lamina muscularis mucosae
 - glat muskulatur



TYNDTARMENS LAG



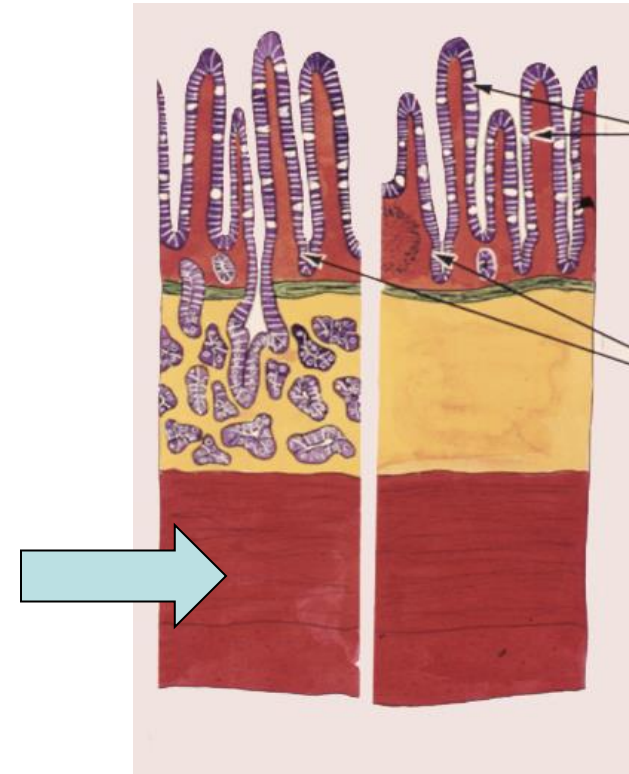
- Tela submucosa
 - kun kirtler i duodenum (Brunners)



TYNDTARMENS LAG



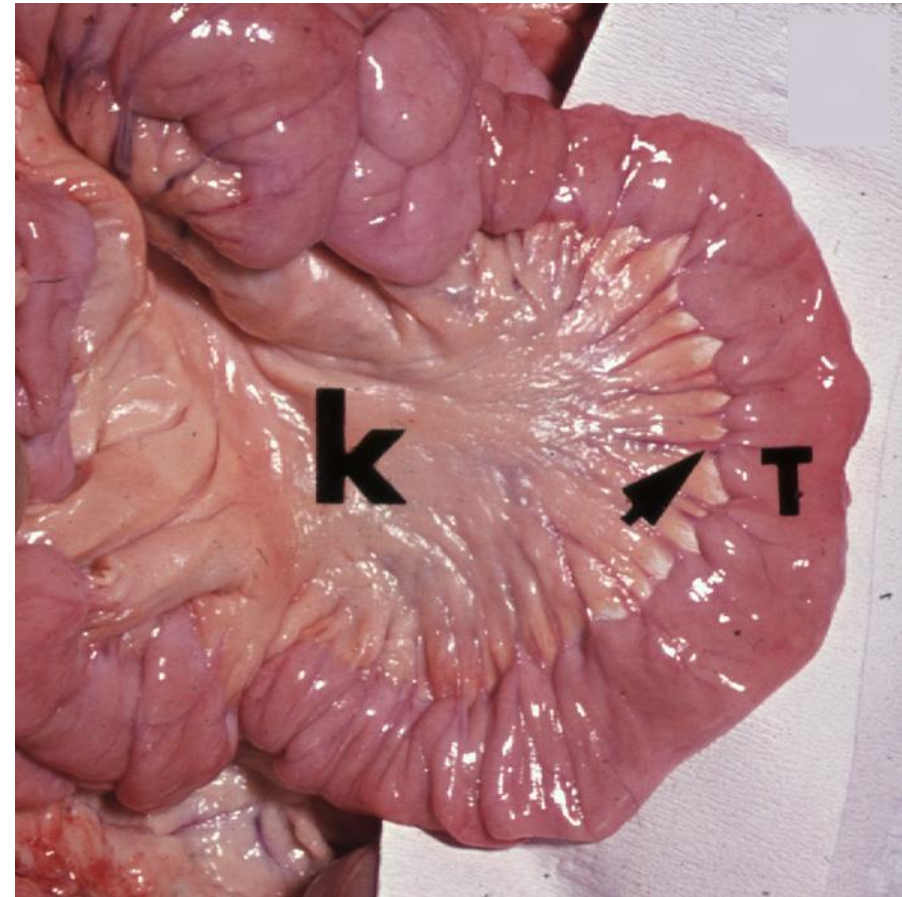
- Tunica muscularis
 - glat muskulatur
 - stratum circulare (tykt)
 - stratum longitudinale (tyndt)



TYNDTARMENS LAG



- Tunica serosa
 - på næsten hele overflade
 - dog kun på forflade af duodenum



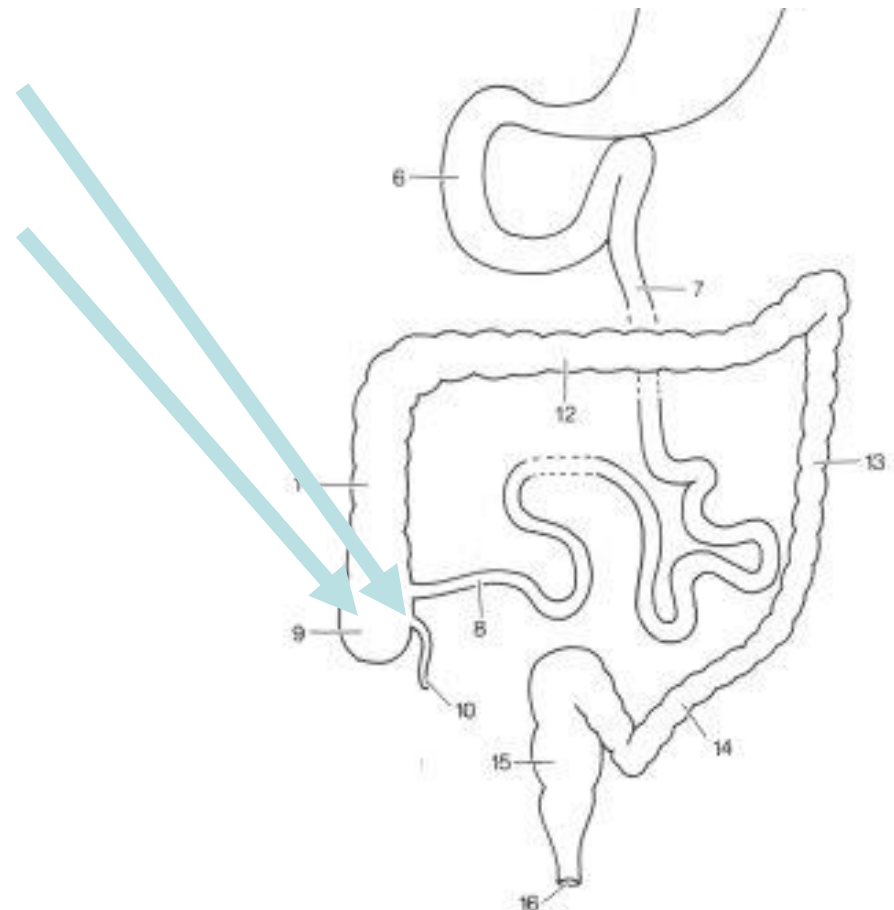
Tyktarm peristaltik

<https://www.youtube.com/watch?v=Ujr0UAbyPS4>

TYKTARMEN



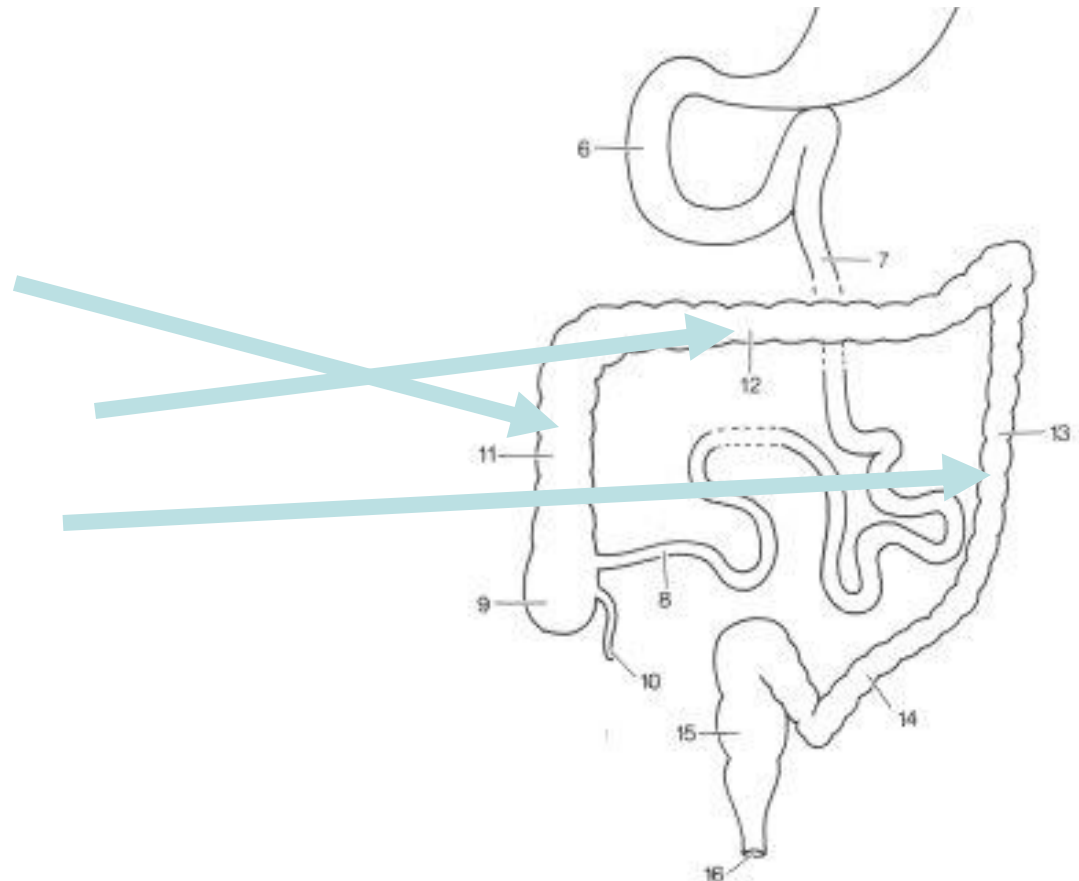
- appendix vermiformis
- caecum (blindtarmen)



TYKTARMEN



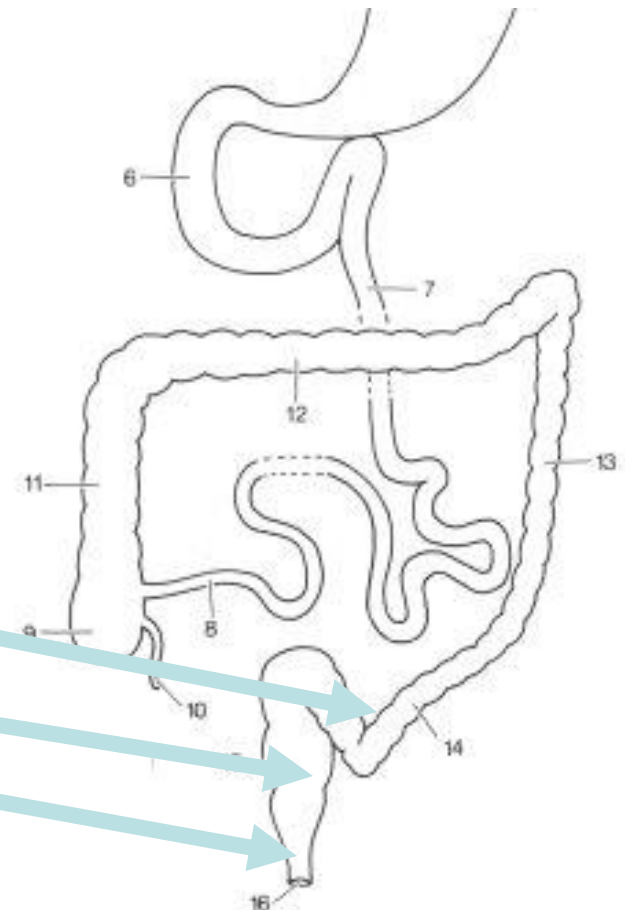
- colon ascendens
- colon transversum
- colon descendens



TYKTARMEN



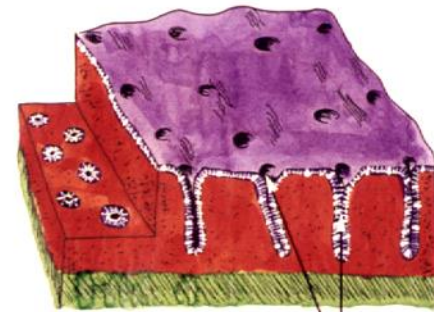
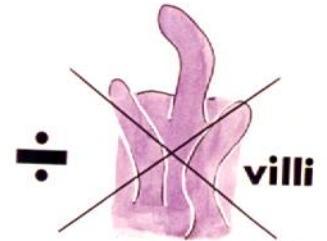
- colon sigmoideum
- rectum (endetarm)
- anus (endetarmsåbning)



TYKTARMEN



- ingen villi intestinales
- mange dybe tarmkrypter
- meget lymfatisk væv



tarmkrypter

TYKTARMEN

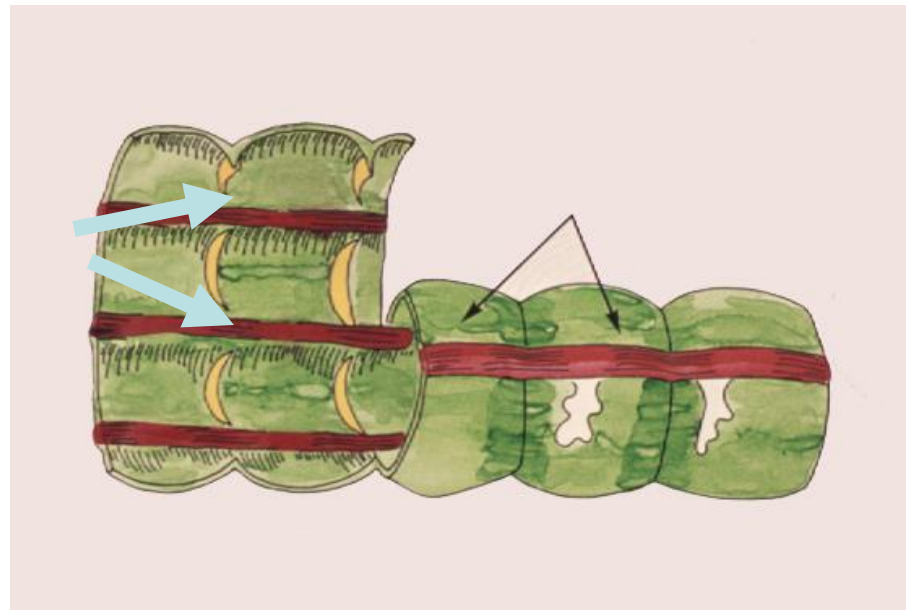


- meget lymfatisk væv



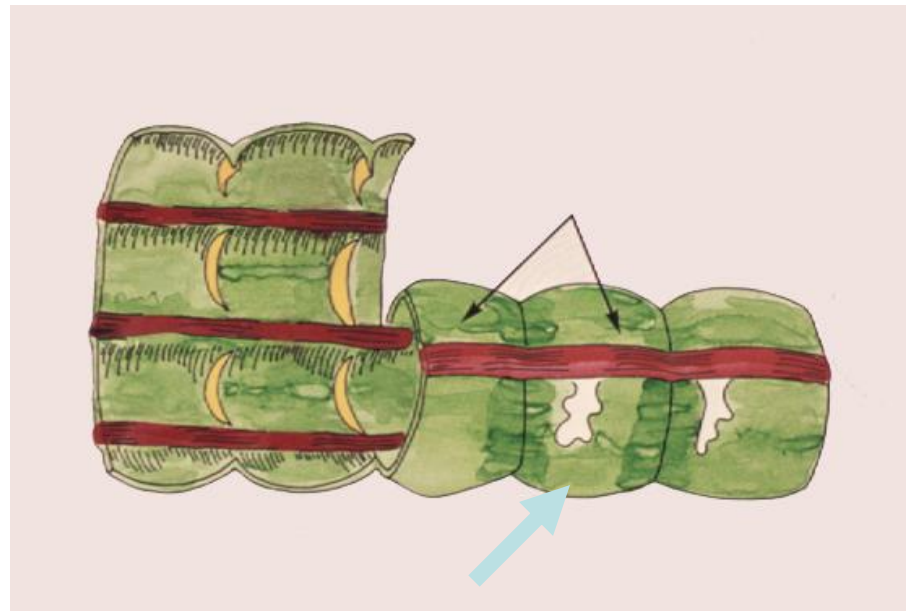
TYKTARMENS YDRE

- stratum longitudinale er samlet i 3 længdegående muskelbånd (taeniae)



TYKTARMENS YDRE

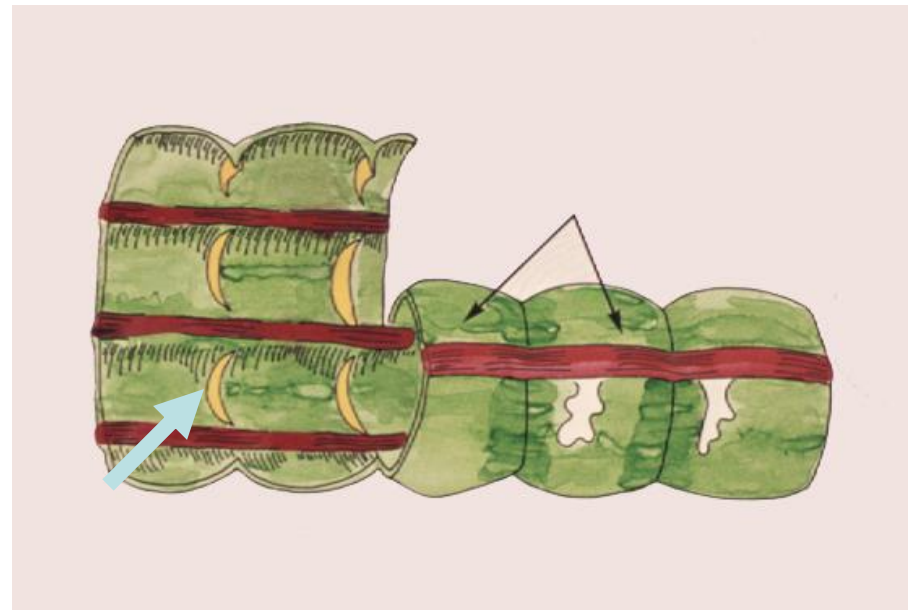
- stratum longitudinale er samlet i 3 længdegående muskelbånd (taeniae)
- udposninger: ml ydre furer (haustra)





TYKTARMENS INDRE

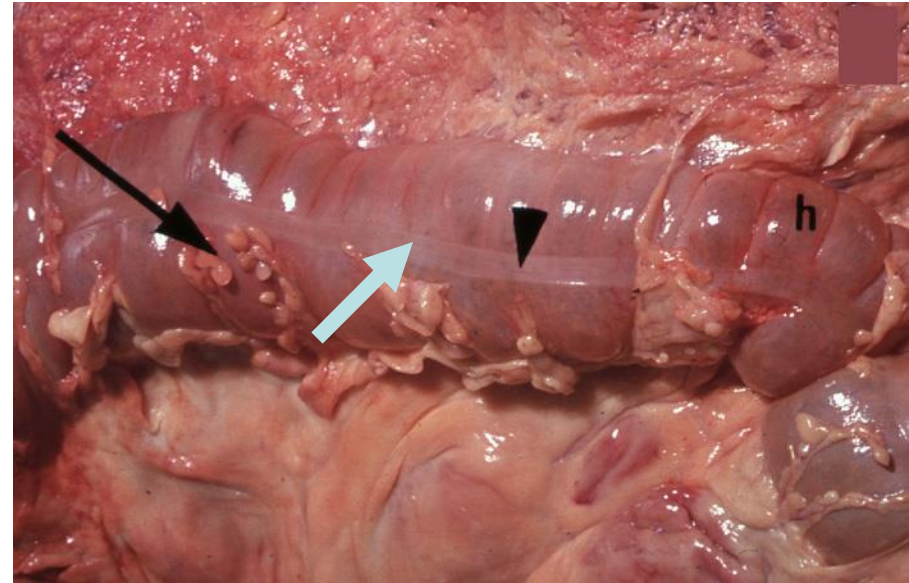
- stratum longitudinale er samlet i 3 længdegående muskelbånd
taeniae
- udposninger: ml ydre furer
haustra
- indre halvmåneformede folder
plicae semilunare



TYKTARMEN



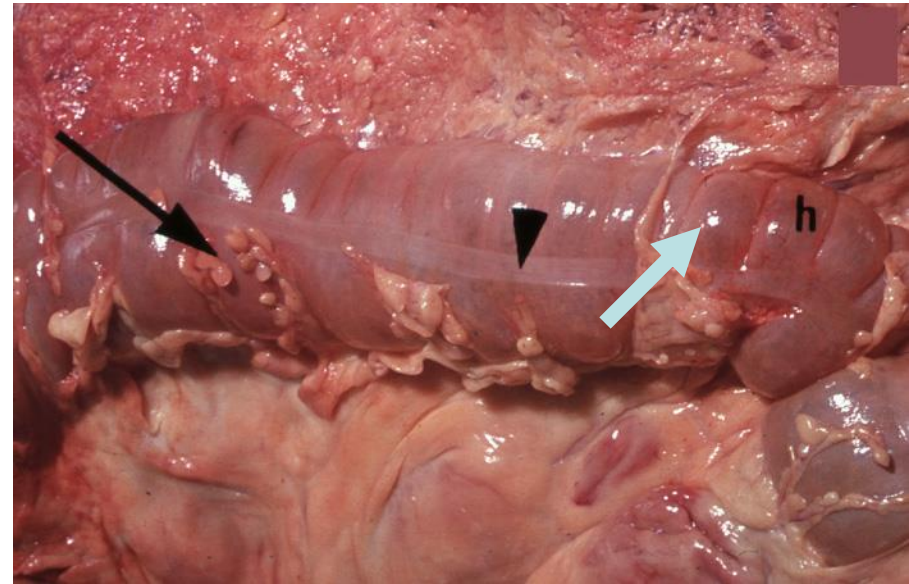
- stratum longitudinale i tre bånd
taeniae



TYKTARMEN



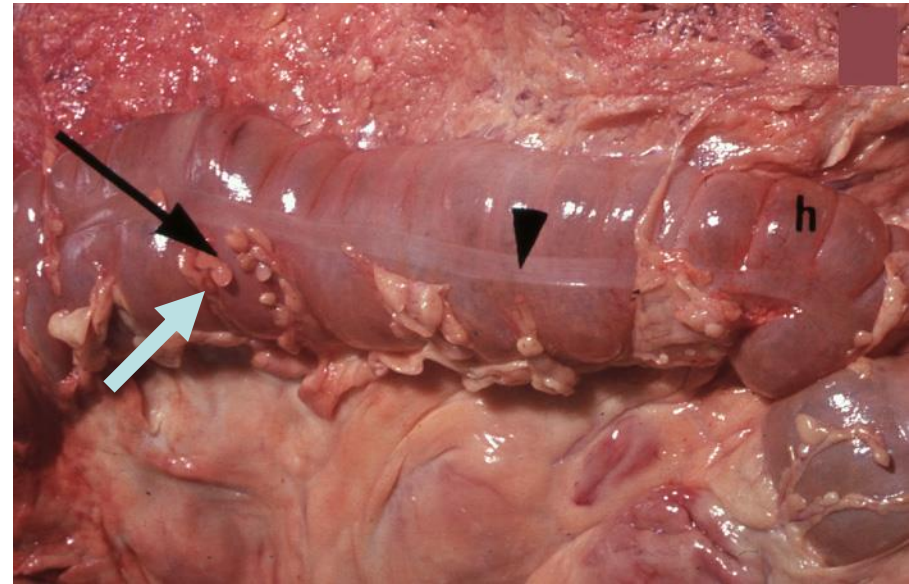
- stratum longitudinale i tre bånd
taeniae
- udposninger **haustra**



TYKTARMEN



- stratum longitudinale i tre bånd (taeniae)
- udposninger (haustra)
- dråbeformede fedtfyldte sække **appendices epiploica**

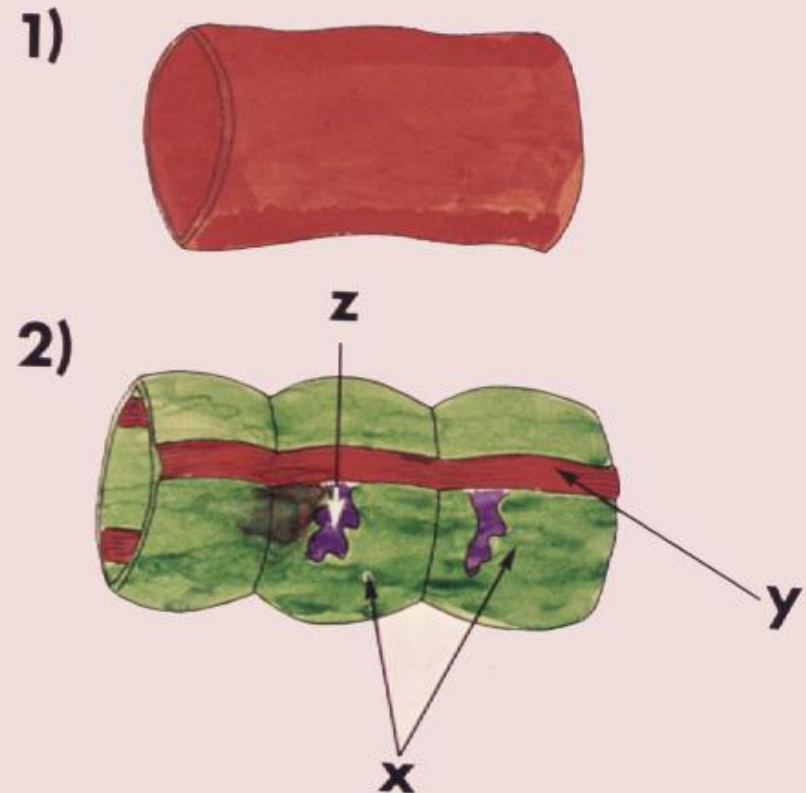


TARMENES YDRE



TYNDDTARM

TYKTARM



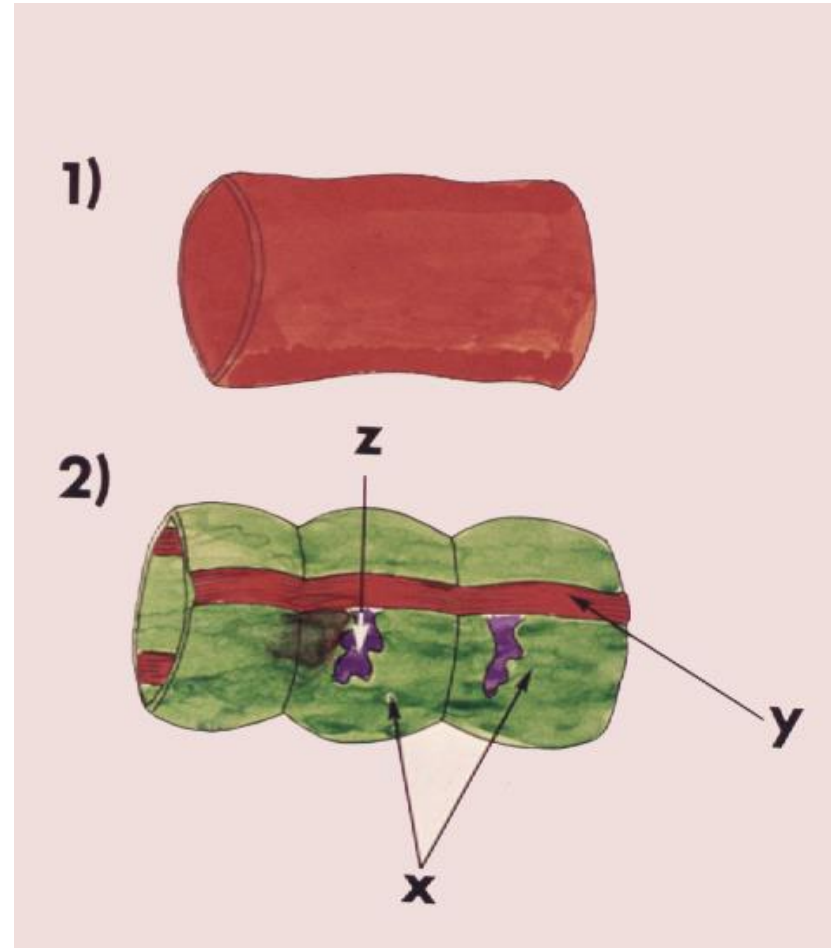
SLIMHINDE - UNDRSLIMHINDE - MUSKELKAPPE - AFSLUTTENDE LAG

TARMENES YDRE



TYKTARMEN HAR:

- haustra
- taeniae
- appendices epiploica



SLIMHINDE - UNDRSLIMHINDE - MUSKELKAPPE - AFSLUTTENDE LAG

Peerfeedback 2 og 2 - evt 3

Tyktarmen		
taeniae	?	
haustra	?	
plicae semilunare	?	
..		