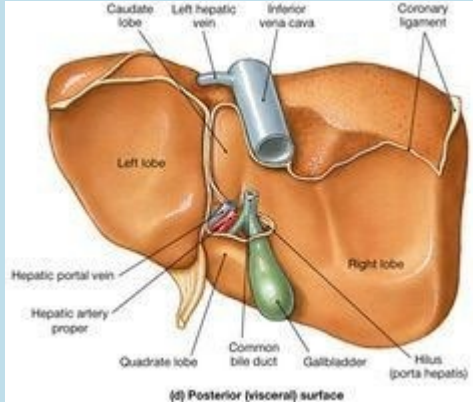


JETRA (*Hepar*)  
GUŠTERAČA (*Pancreas*)  
TRBUŠNA MARAMICA  
(*Omentum*)

Asistent dr Dejana Čupić  
Miladinović

Fakultet veterinarske medicine  
2025.

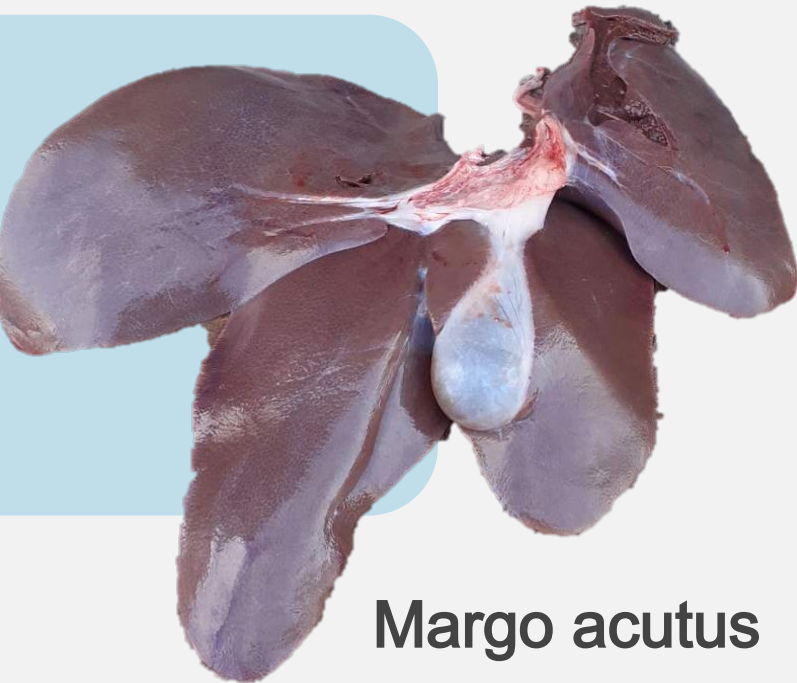
# ULOGA JETRE



- Ekskrecija žuči .
- Metabolizam ugnjenih hidrata, masti i proteina.
- Sinteza proteina (albumina, faktora koagulacije, haptoglobina, trasferina).
- Depo Fe, Cu, vitamina A, D i B12, glikogena i masti.
- Rezervoar krvi.
- Detoksikacija.
- Ekskrecija žučnih boja.

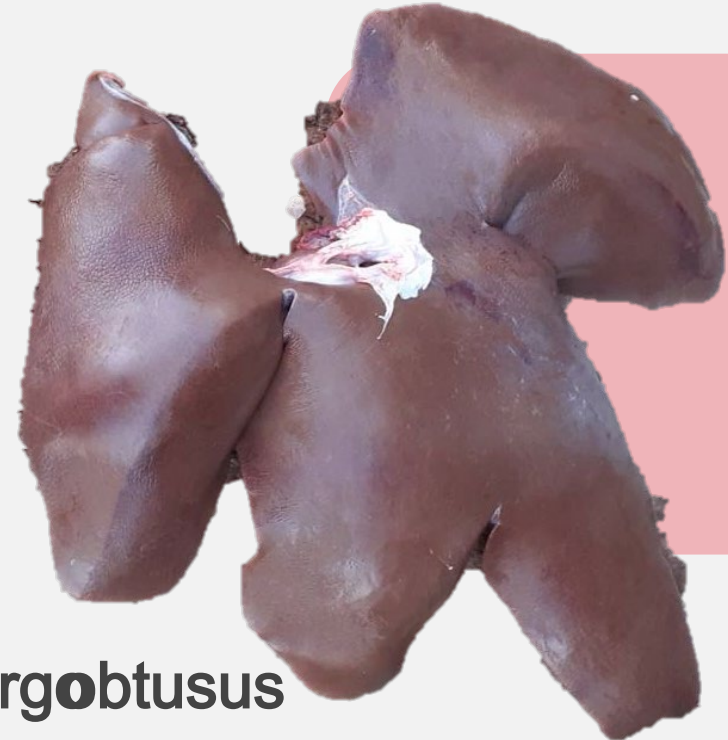
# POVRŠINE JETRE

Facies visceralis



Margo acutus

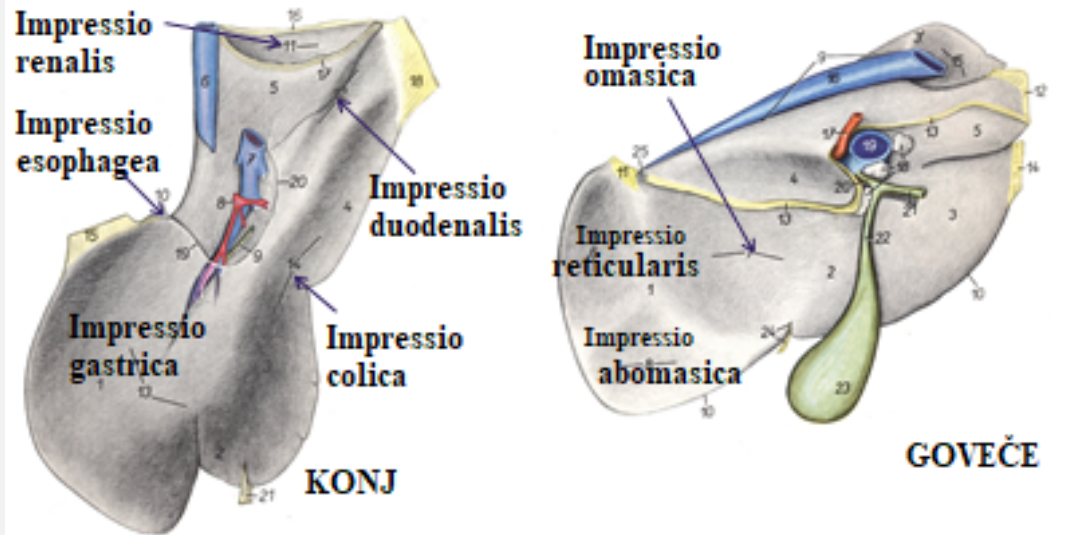
Facies diaphragmatica



Margo obtusus

# OTISCI (Impres

## Facies visceralis



## Margo obtusus

Impressio esophagea  
Fossa v. cavae caudalis

## Margo acutus

Lig teres hepatis

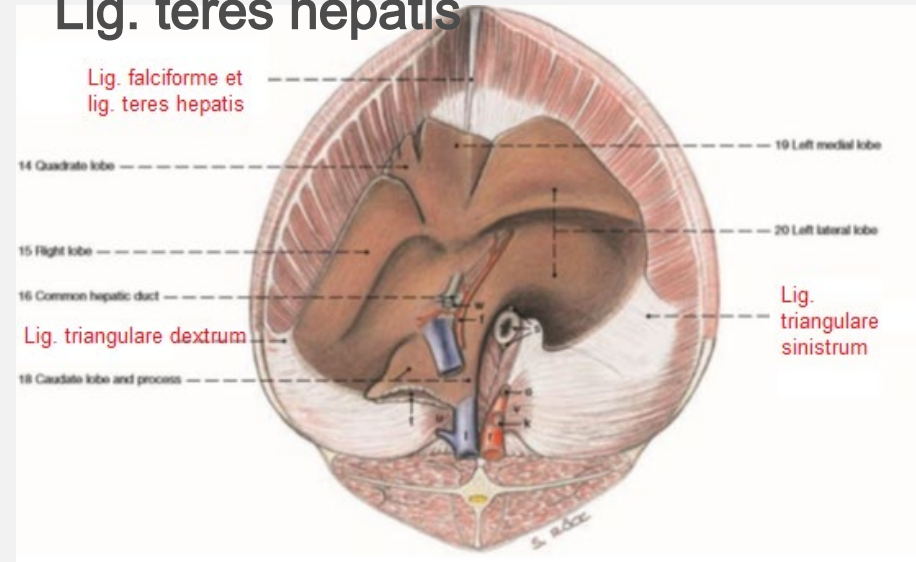
## Veze jetre sa dijafragmom

Lig. coronarium

Lig. triangulare dextrum et sinistrum

Lig. falciforme hepatis

Lig. teres hepatis



Veze jetre sa želucem,  
duodenumom i desnim bubre

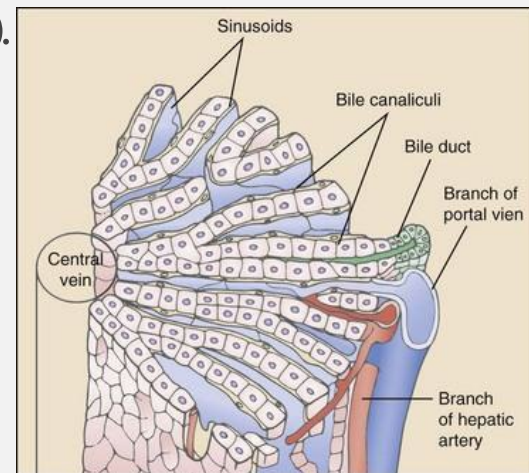
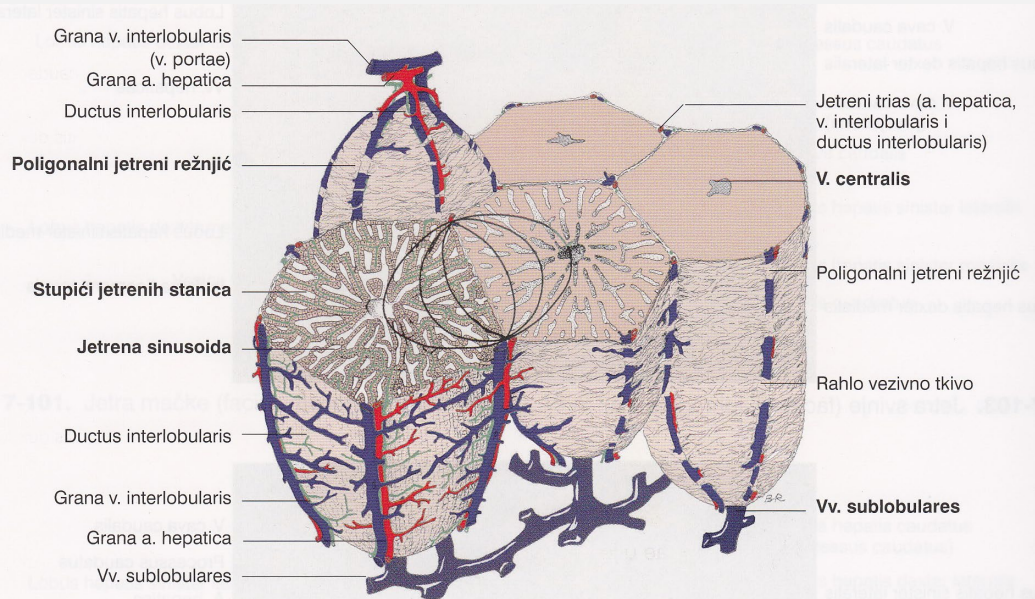
Lig. hepatorenale

Lighepatogastricum  
Lighepatoduodenale

OMENTUM MINUS

# GRAA JETRE

Površina jetre pokriva seroza, ispod koje se nalazi capsula fibrosa. Jetre se sastoji iz režnjića (lobula), koji čine njen parenhim i iz interlobularnog vezivnog tkiva (intersticijuma).



Kroz uzdužnu osovinu režnjića pruža se v.centralis. Udruživanjem više v.centralis nastaju vv. hepaticae.

# REŽNJEVI

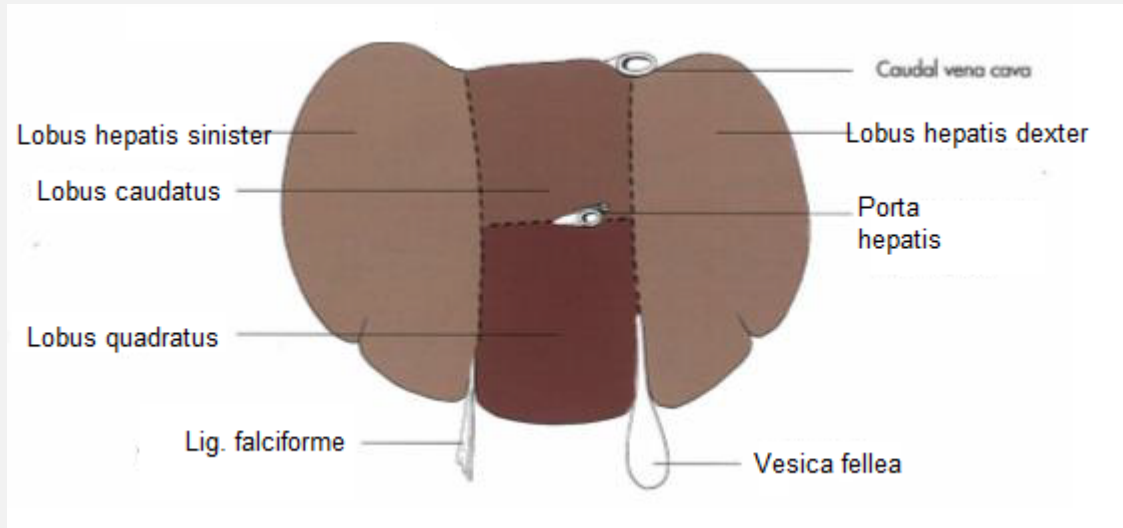
Lobus hepatis sinister

Lobus hepatis dexter

Lobus quadratus

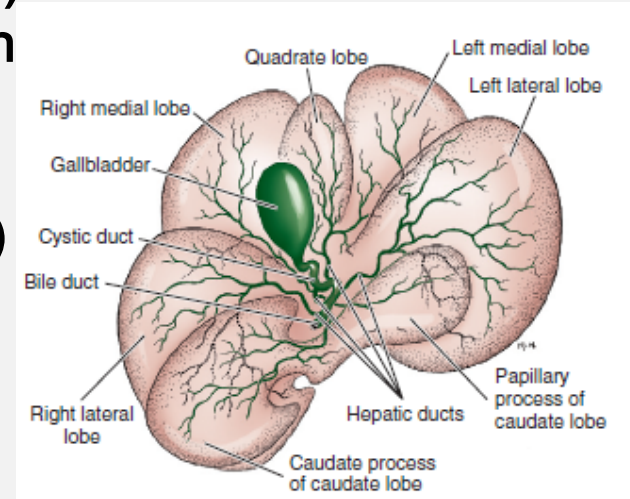
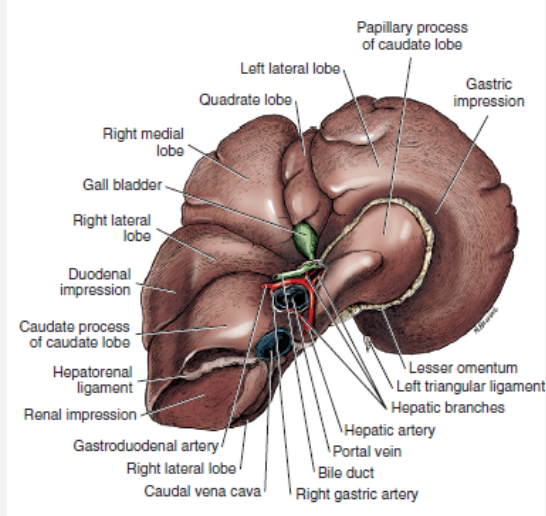
Lobus caudatus

*Incisura interlobares*

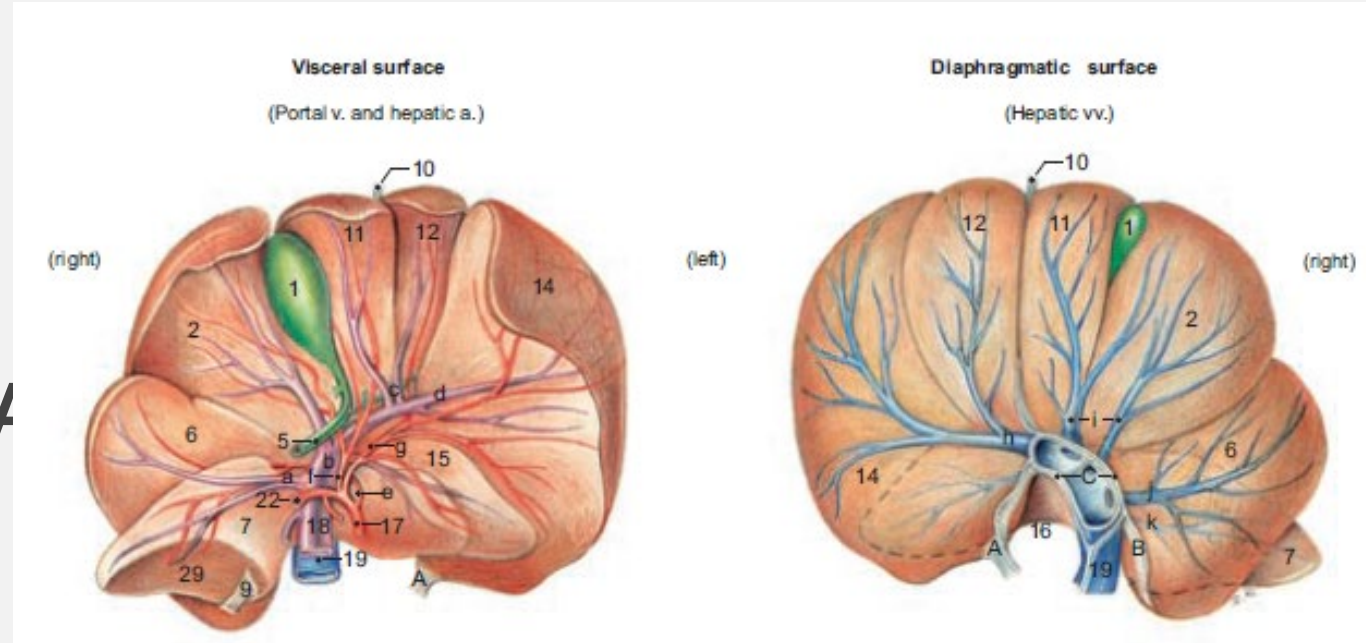


# PORTA HEPATIS (TETRE)

- Krvni sudovi ( A. hepatica, V. porte)
- Žučni kanali ( D. hepaticus commun)
- Limfni sudovi
- Limfni čvorovi (Lnn. hepatici)
- Nervi (grane simpaticusa i vagusa)



# VASKULARIZACIJA



Krv jetre dovodi **A. hepaticae**, **V. portae** koje u jetru ulaze na portalnoj žili (**Porta hepatis**), a njenoj visceralnoj strani (**Facies visceralis**). Krv iz jetre odvodbe 5 većih i nekoliko manjih jetrenih vena (**V. hepaticae**) koje se ulivaju u **V. cava caudalis**.

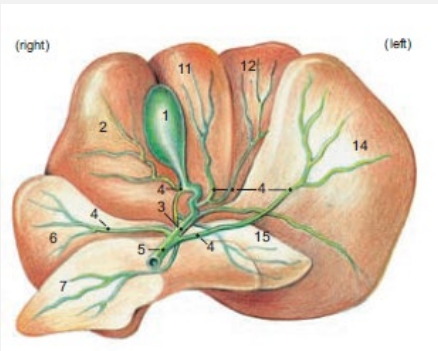
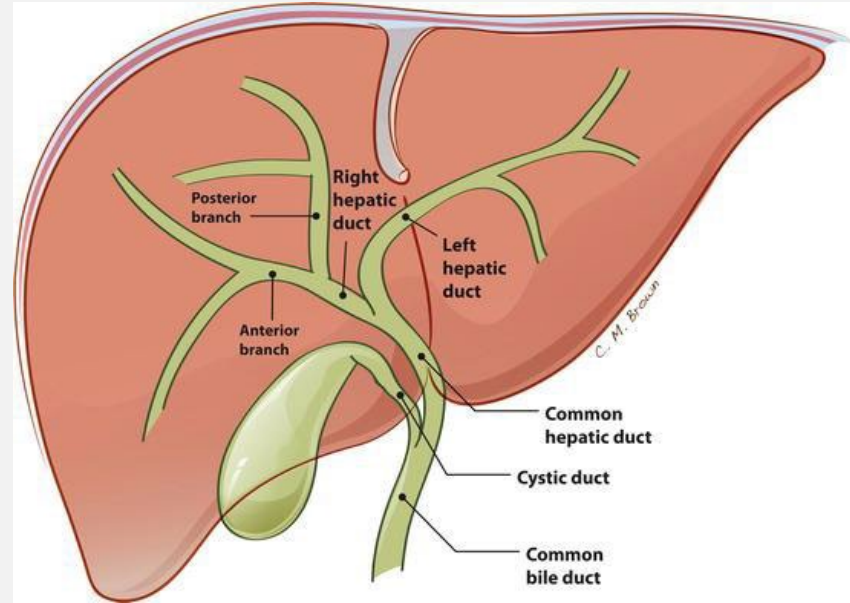
~~ductus cysticus~~ ductus hepaticus sinister ductus hepaticus dexter ductus choledochus

# ŽUČNI KANALI

Ductuli biliferi

Ductus hepaticus sinister

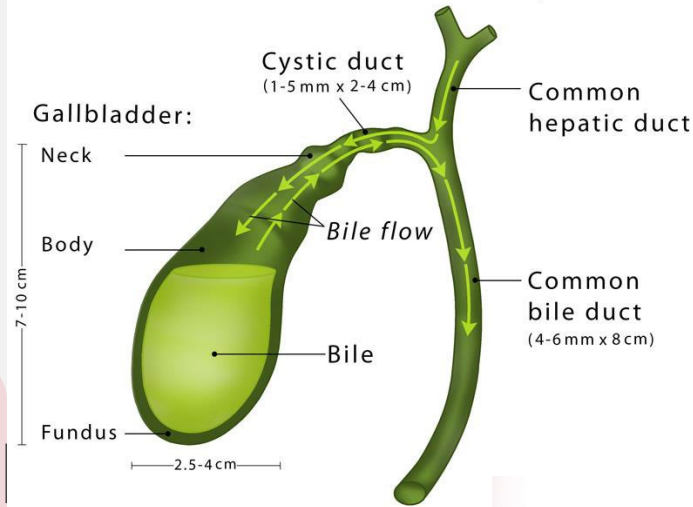
Ductus hepaticus dexter



Žučovod (D. choledochus) prolazi kroz Lig. hepatoduodenale i uliva se u duodenum. Kod konja koji nema žučnu kesu D. hepaticus communis se na Porta hepatis nastavlja u žučovod (D. choledochus) koji se uliva u duodenum.

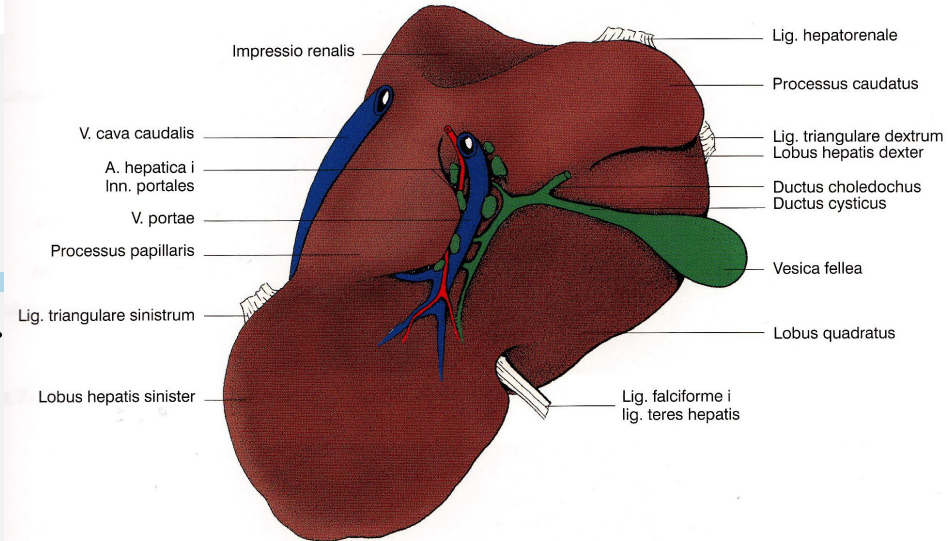
# ŽUČNA BEŠIKA

## Gallbladder Anatomy



Vesicella je rezervoar žuči.  
Kruškolikog je oblika.

Leži između lobus quadratusa i lobus hepatis dexter (ru) ili lob. hepatis dexter medialis (su, ca).



Samo kod preživara visi preko ventralnog ruba jetre.  
Ductus cysticus dovodi i odvodi žuč iz žučne bešike.

Konjemažučnubešiku

KONJ: D. choledochus i D. pancreaticus se ulivaju zajedno u duodenum na  
Diverticulum duodeni 12-15 cm kaudalno od pylorus-a.

GOVEČE: D. choledochus 50-70cm kaudalno od pylorus-a  
D. pancreaticus 80-110 cm kaudalno od pylorus-a

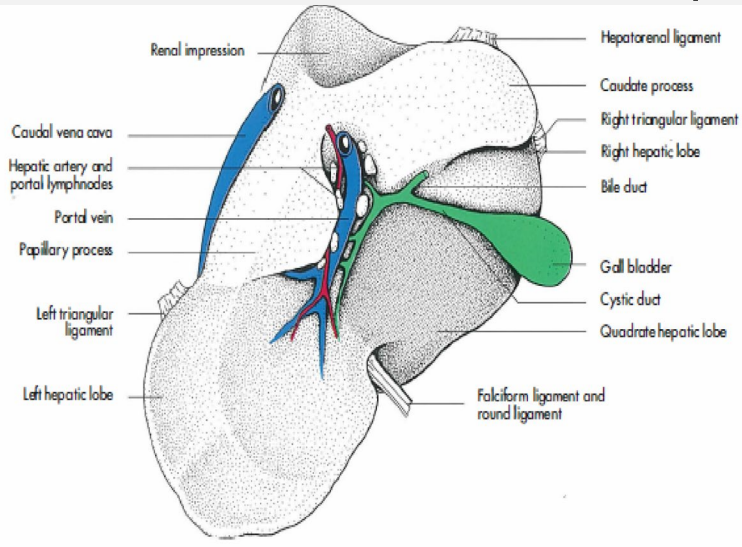
OVCA: zajednički kanal 30-40 cm kaudalno od pylorus-a

SVINJA: D. choledochus: 2-5 cm kaudalno od pylorus-a se uliva u duodenum na  
Papilla duodeni

PAS: Ductuli biliferi se udružuju u 3-5 Ductus hepaticus koji se ulivaju u D.cysticus.  
Od mesta ulivanja poslednjeg D. hepaticus počinje D. choledochus. Ductus  
choledochus: 2,6 – 6 cm kaudalno od pilorusa se uliva u duodenum na  
Papilla duodeni.

# JETRA PREŽIVARA

- 1 Lobus hepatis dexter
- 2 Lobus hepatis sinister
- 3 Lobus caudatus  
(Processus papillaris et Processus caudatus)
- 4 Lobus quadratus

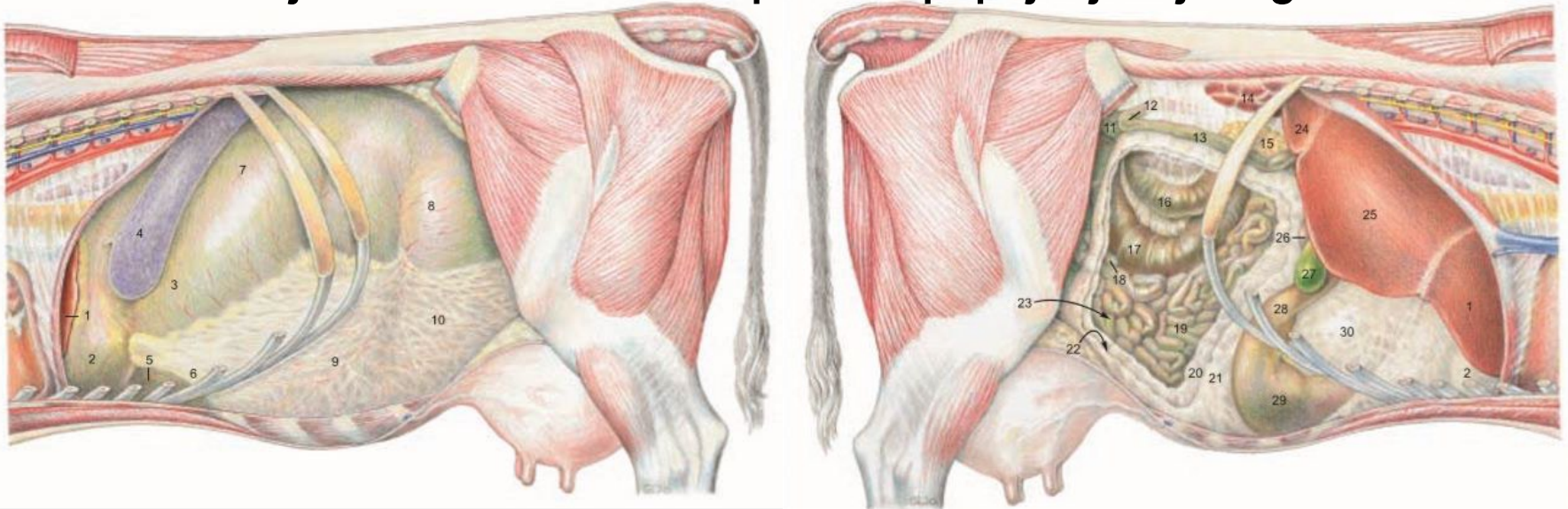


# POLOŽAJ JEKUNE PREŽIVARA

Leži u intratorakalnom delu trbušne duplje *caupije abdominis intrathoracale*

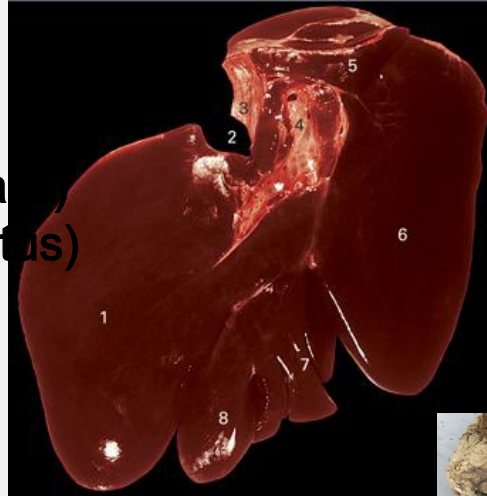
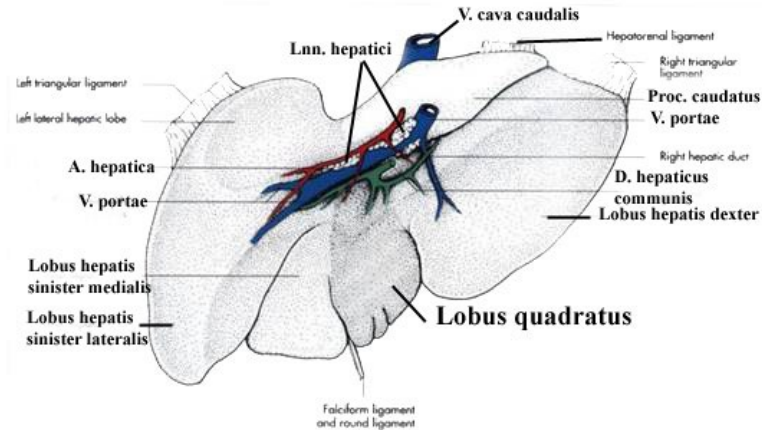
Naleže na dijafragmu

Kod preživara, zbog želuca koji zauzima celu levu polovinu trbušne duplje *caupije abdominis* od medijane rane *Samonaldede* do gežnjaprelazi u levu polovinu trbušne duplje. Up rub leži koso ventroanijalno. Oštar rub leži u predelu pripajanja dijafragme za rebra.



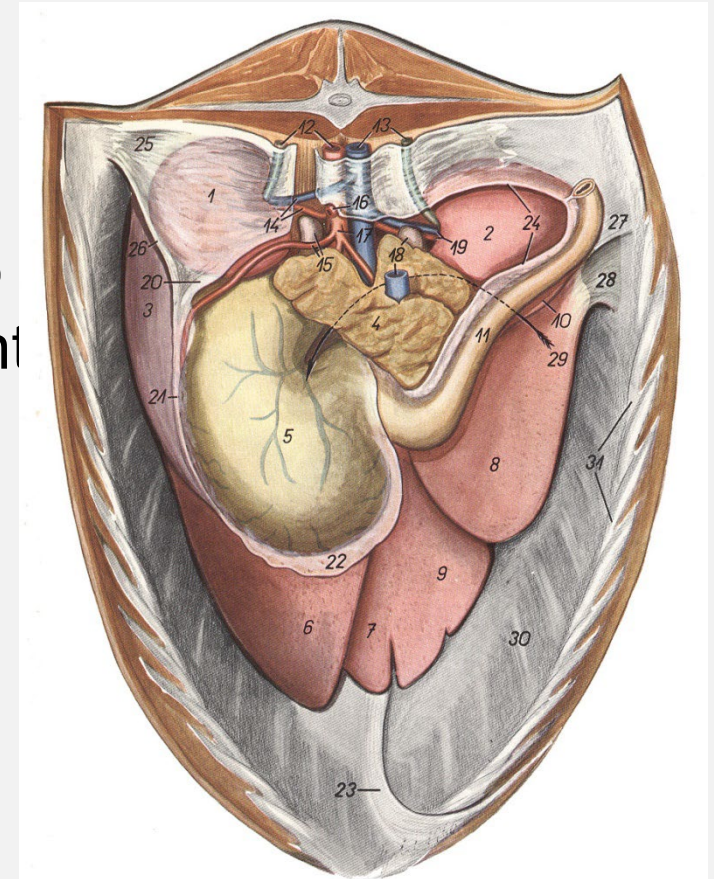
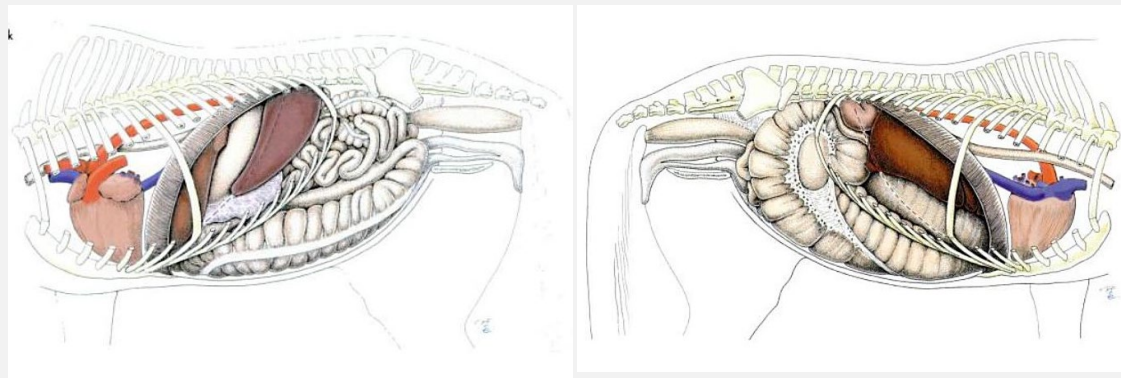
# JETRA KONJA

- 1 Lobus hepatis dexter
- 2 Lobus hepatis sinister lateralis et medialis
- 3 Lobus caudatus (Processus caudatus)
- 4 Lobus quadratus



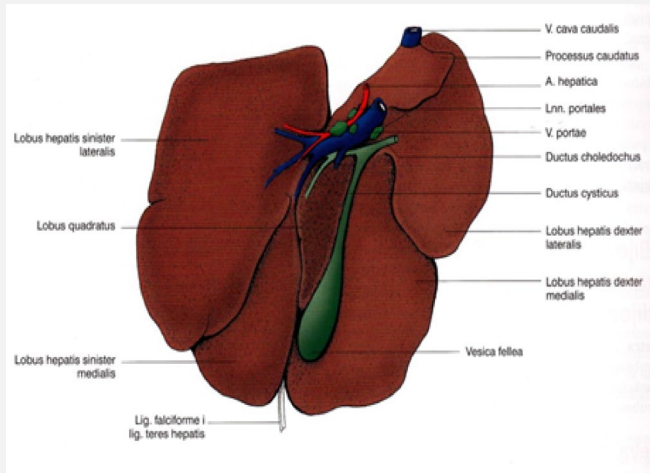
# POLOŽAJ JETRE KONJA

Jetra konja leži 2/5 levo i 3/5 desno medijane ravni. Levi deo leži više ventralno nego desni.



# JETRA SVINJE

- 1 Lobus hepatis dexter (lateralis et medialis)
- 2 Lobus hepatis sinister (lateralis et medialis)
- 3 Lobus caudatus (Processus caudatus)
- 4 Lobus quadratus

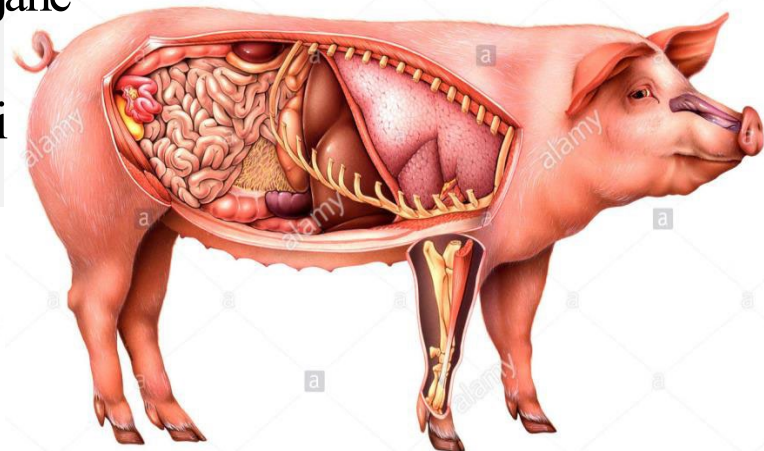
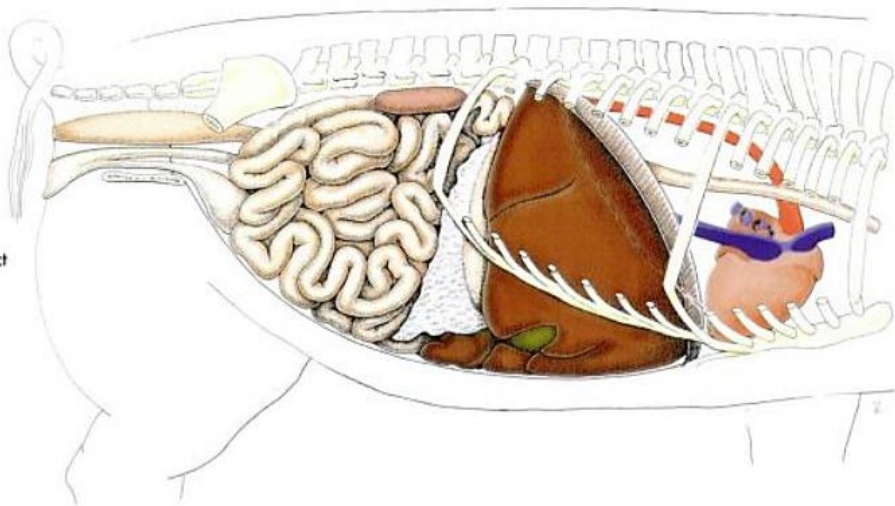


Nema Impressio renalis

# POLOŽAJ JETRE KOD SVINJE

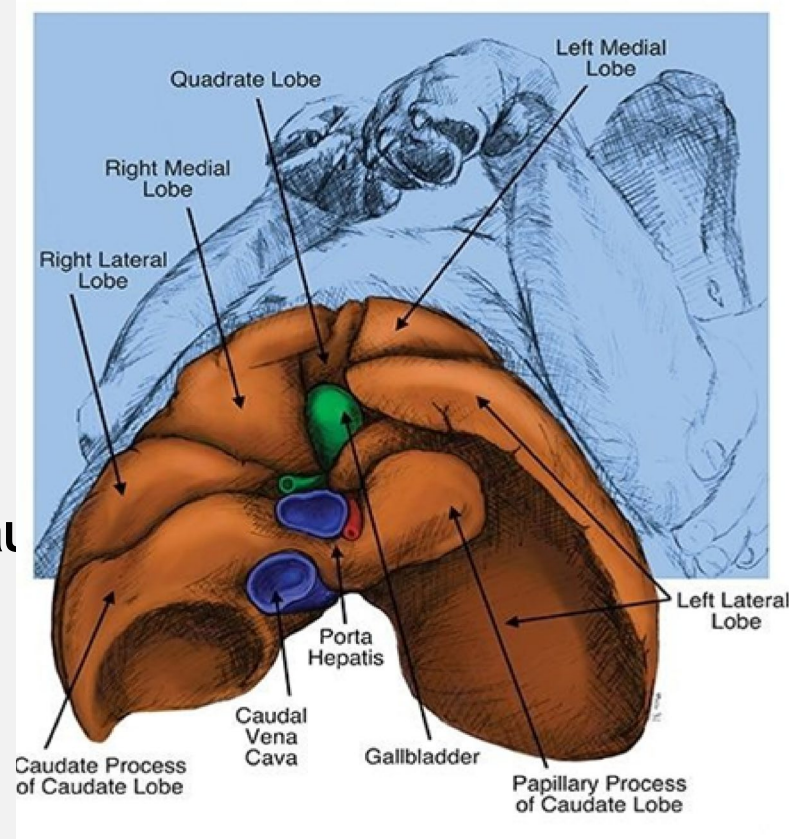
Kod svinje veći deo jetre leži desno, a manji deo levo od medijane ravni. Jetra leži u intratorakalnom delu trbušne duplje, osim ventralnog dela koji leži ekstratorakalno i naleže na ventralni trbušni zid u *Regio xiphoidea*

- Aorta
- Venae cavae
- Heart
- Oesophagus
- Diaphragm
- Liver
- Gall bladder
- Gastrointestinal tract
- Kidney
- Urogenital tract
- Greater omentum



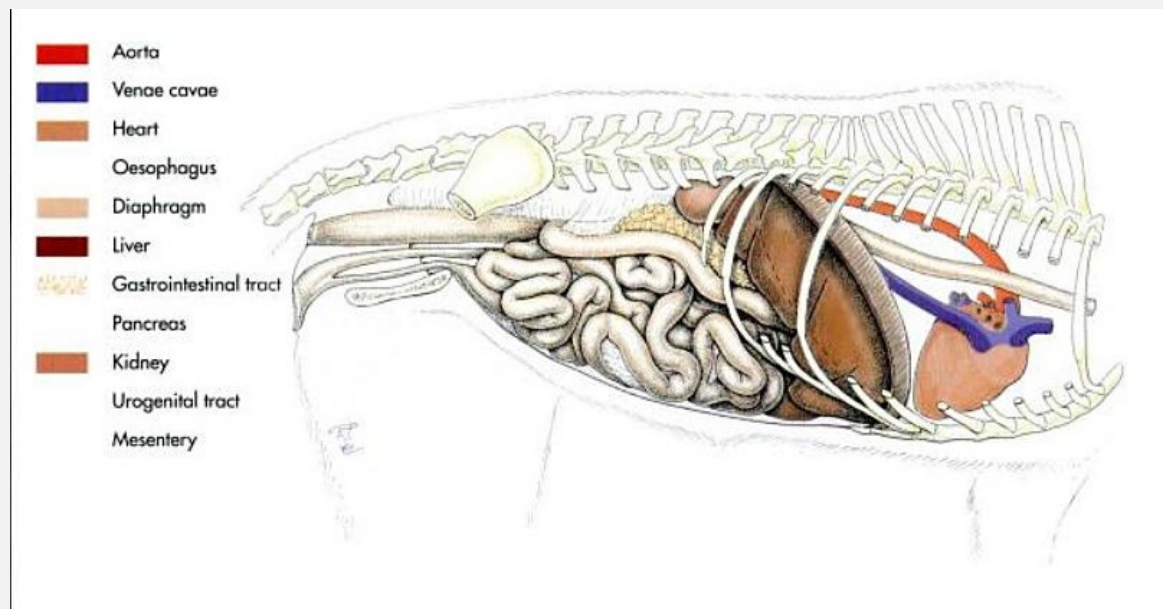
# JETRA PSA

- 1- Lobus hepatis dexter (lateralis et medialis)
- 2- Lobus hepatis sinister (lateralis et medialis)
- 3- Lobus caudatus  
(Processus papillaris et Processus caudatus)
- 4- Lobus quadratus



# POLOŽAJ JETRE KOD PSA

Kod psa lateralne žanije processus xiphoidei žede od medijane vidoke ostale delove jetre nalaze desno. Ventralni rub jetre dopire do ventralnog trbušnog z *regio xiphoideae* iz torakalnog dela trbušne duplje.

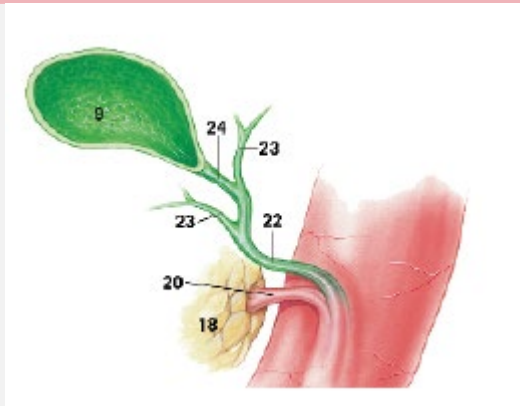


# Pankreas

# GLAŽERJA-PANCREAS (endokrini egzokrini žlezda)

## ENDOKRINI DEO PANKREASA

-Hormoni insulin i glukagon (se direktno u krv)

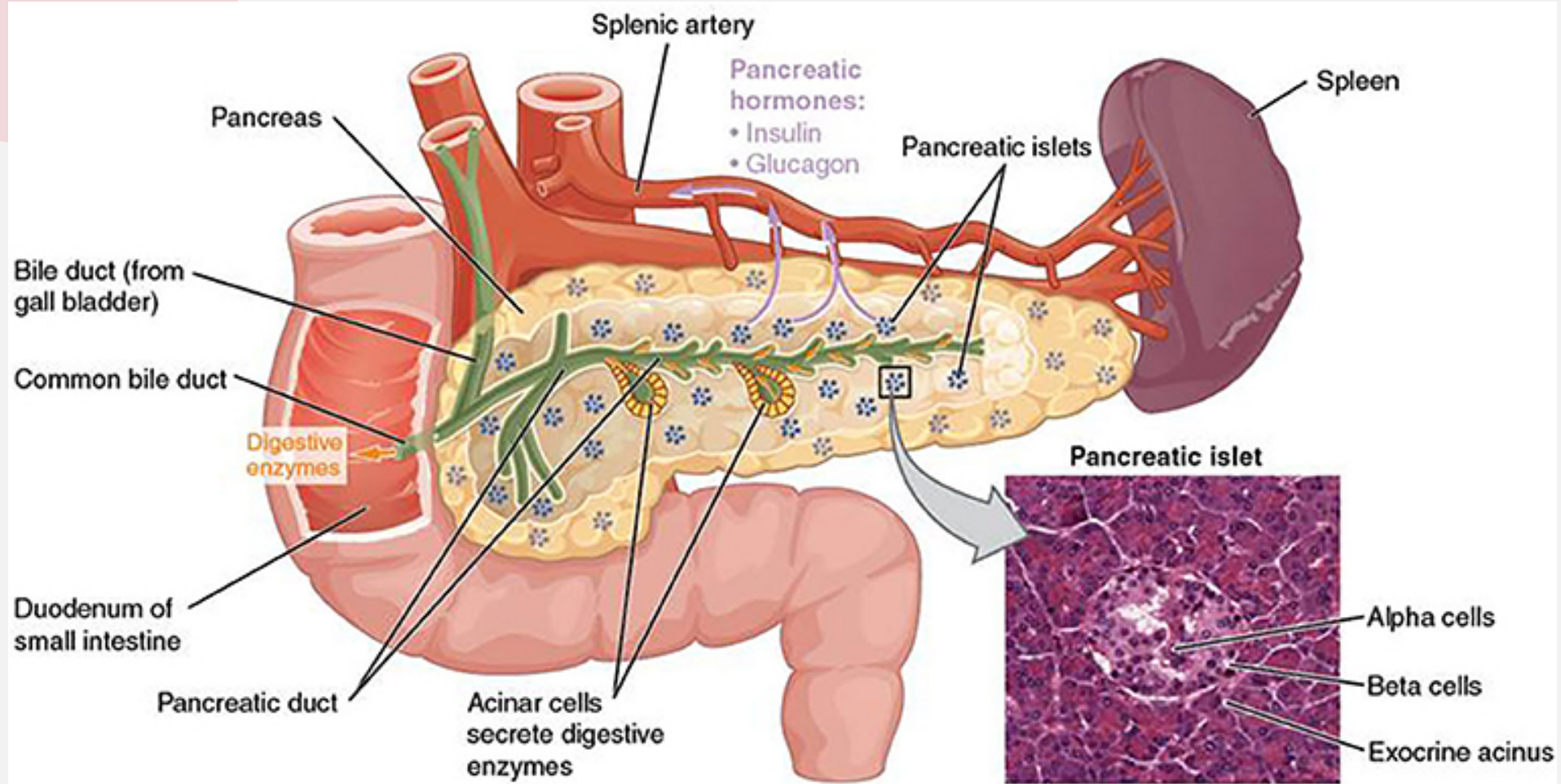


## EGZOKRINI DEO PANKREASA

- Pankreasni sok (u duodenum preko jednog ili dva izvodna kanala)

Ductus pancreaticus

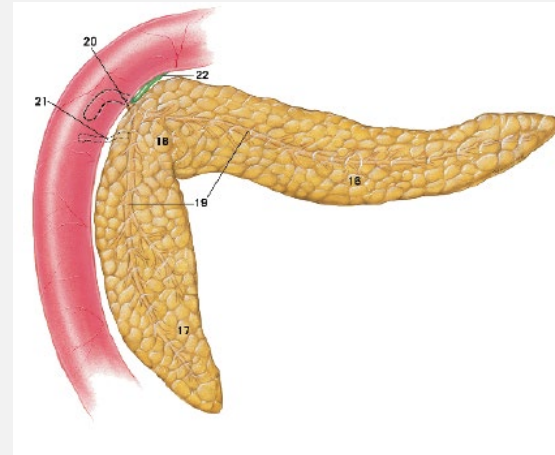
Ductus pancreaticus accessorius



Pankreas leži u dorzalnog delu trbušne duplje.  
Desno dopire do duodenuma i leži u mezoduodenumu.  
levo se pruža preko želuca do slezine i levog bubrega

## REŽNJEVITOST GRA

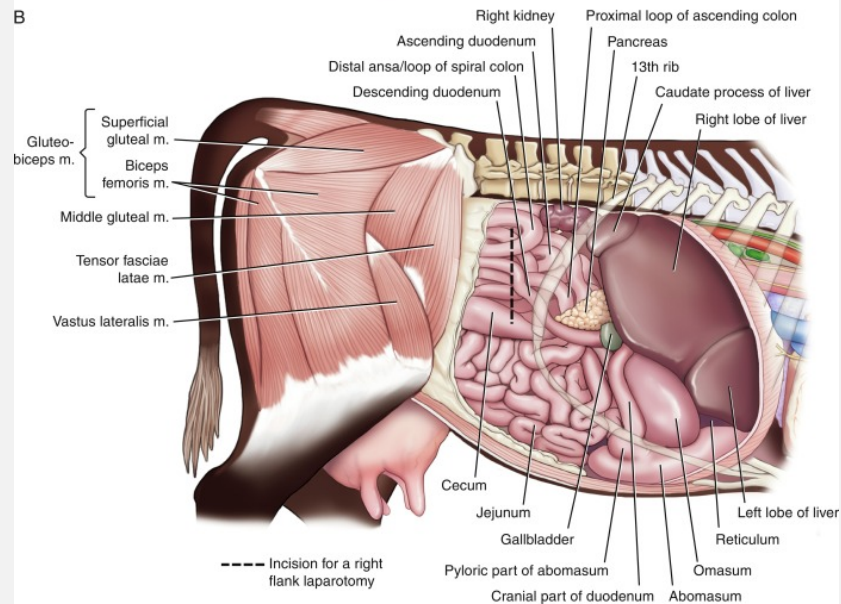
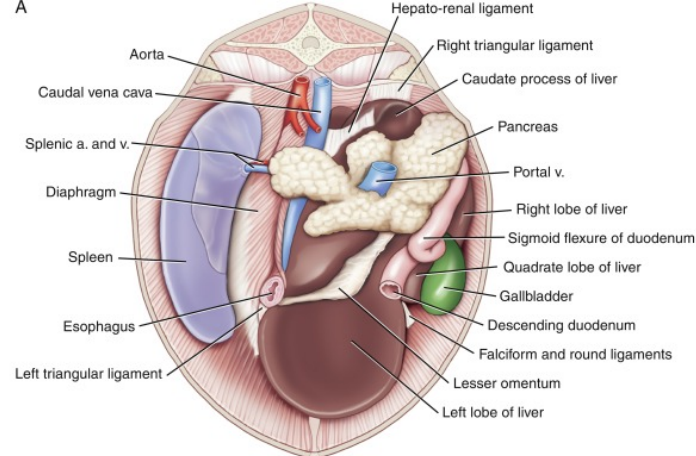
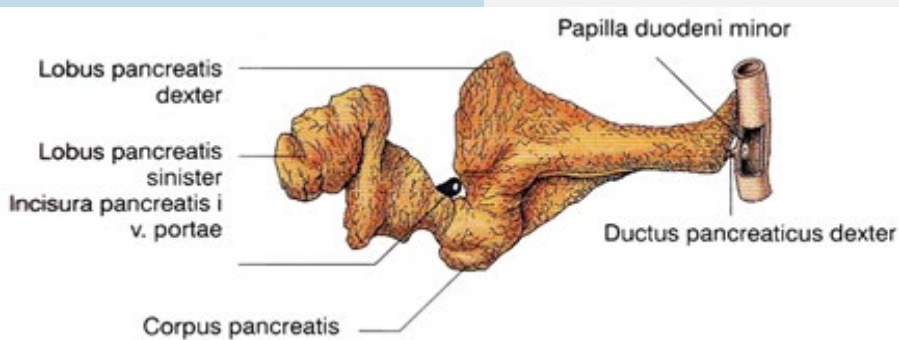
- *Corpus pancreatis*
- *Lobus pancreatis sinister*
- *Lobus pancreatis dexter*



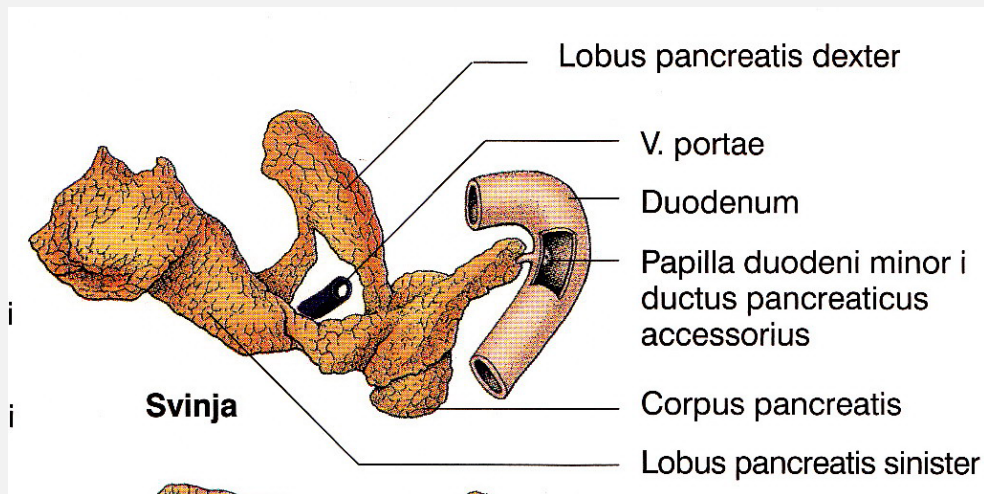
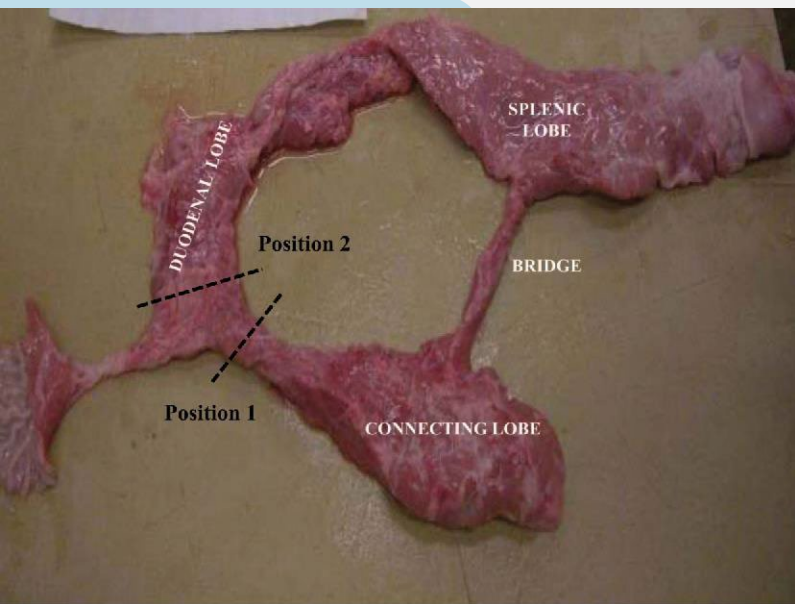
# Pankreas preživara

**GOVJE:** D pancreaticus 110 d caudal mod pylorus  
se uliva u duodenum

**OVCA:** zajednikana 40 cr caudal mod pylorus  
uliva u duodenum

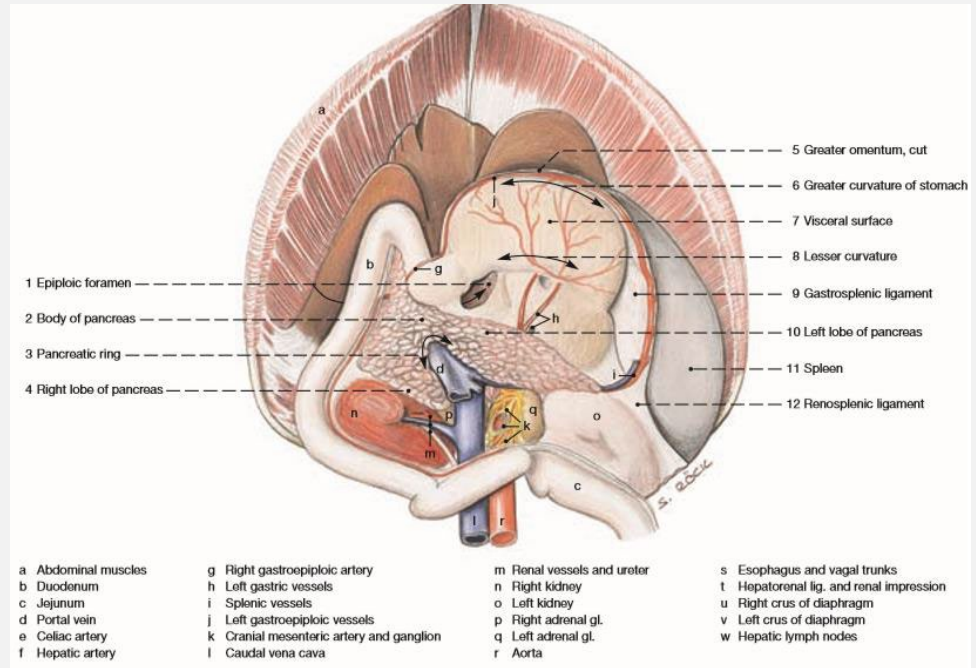
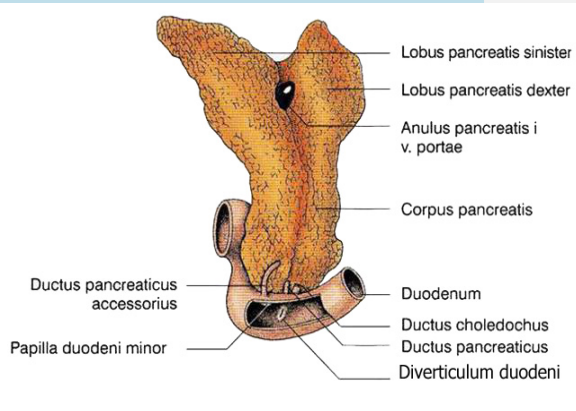


# Pankreas svinje



**Ductus pancreaticus accessorius:**  
**15-25cm kaudalno od pilorusa**

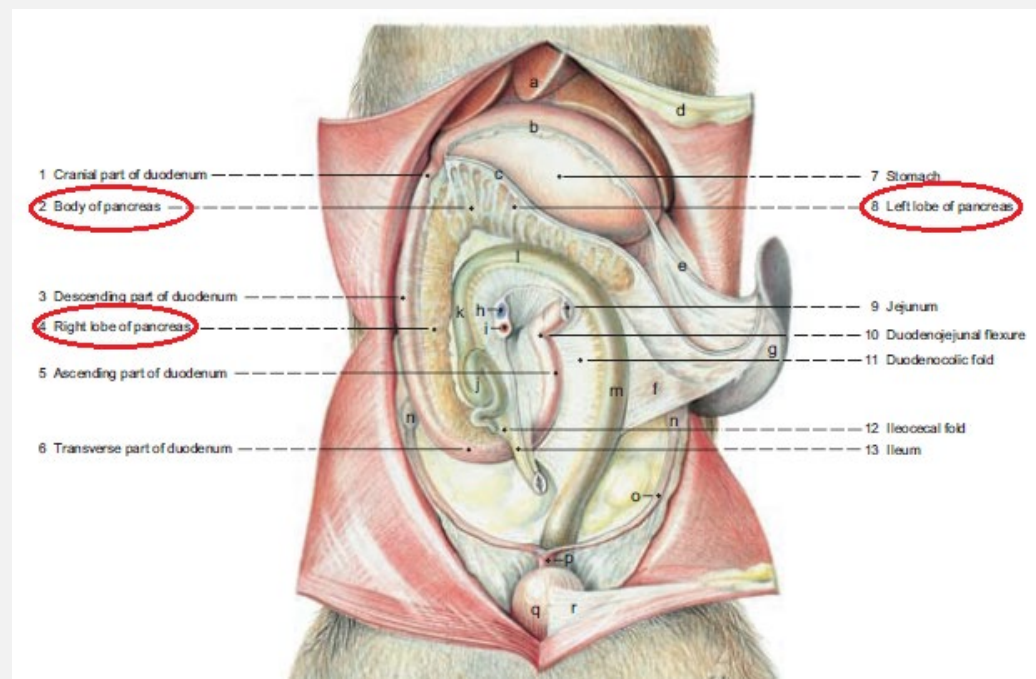
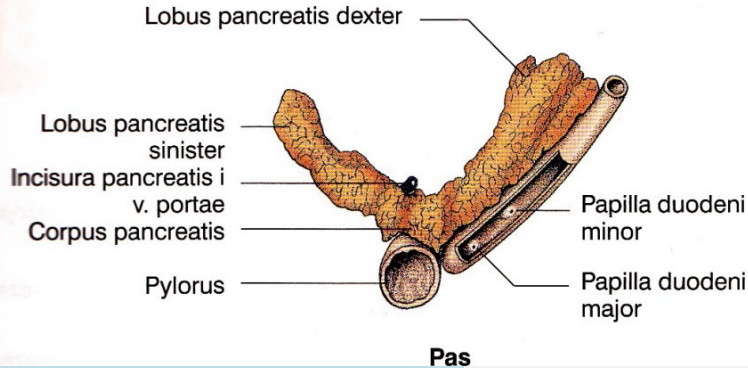
# Pankreas konja



**D. pancreaticus** postaje od izvodnih kanala levog i desnog režnja i udružuju u telu pankreasa se zajedno sa D. choledochus na D. duodeni-12 cm kaudalno od pylorus

**D. pancreaticus accessorius** odvaja se u telu pankreasa od glavnog pankreasnog kanala levog režnja i uliva se na suprotnu stranu pankreasa

# Pankreas psa



Pankreas psa je dugi, plavan, u obliku latinskog slova U

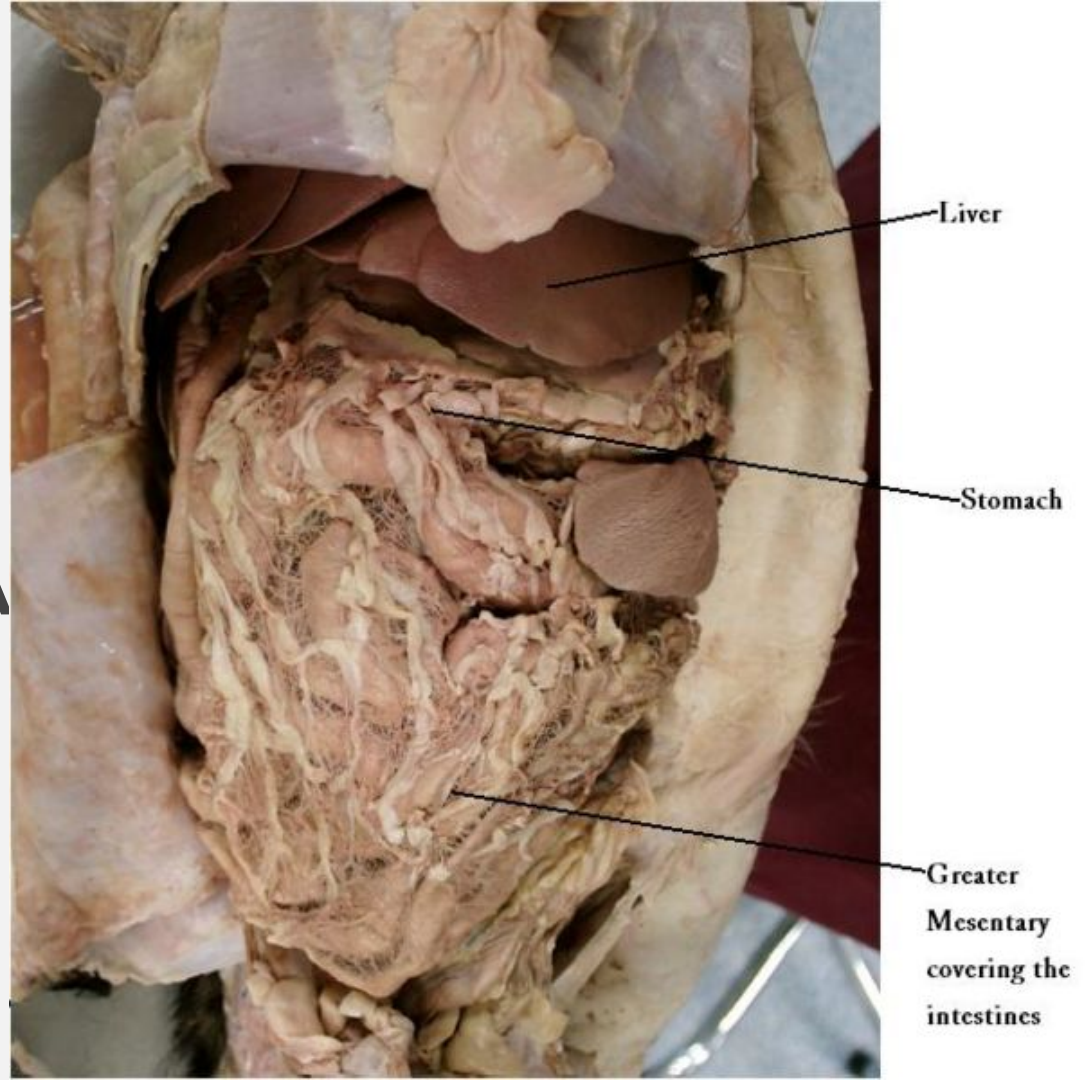
- Papilla duodeni majora choledocus i D. pancreaticus zajedno kaudalno od pilorusa
- Papilla duodeni minor pancreaticus accessorius kaudalno od pilorusa



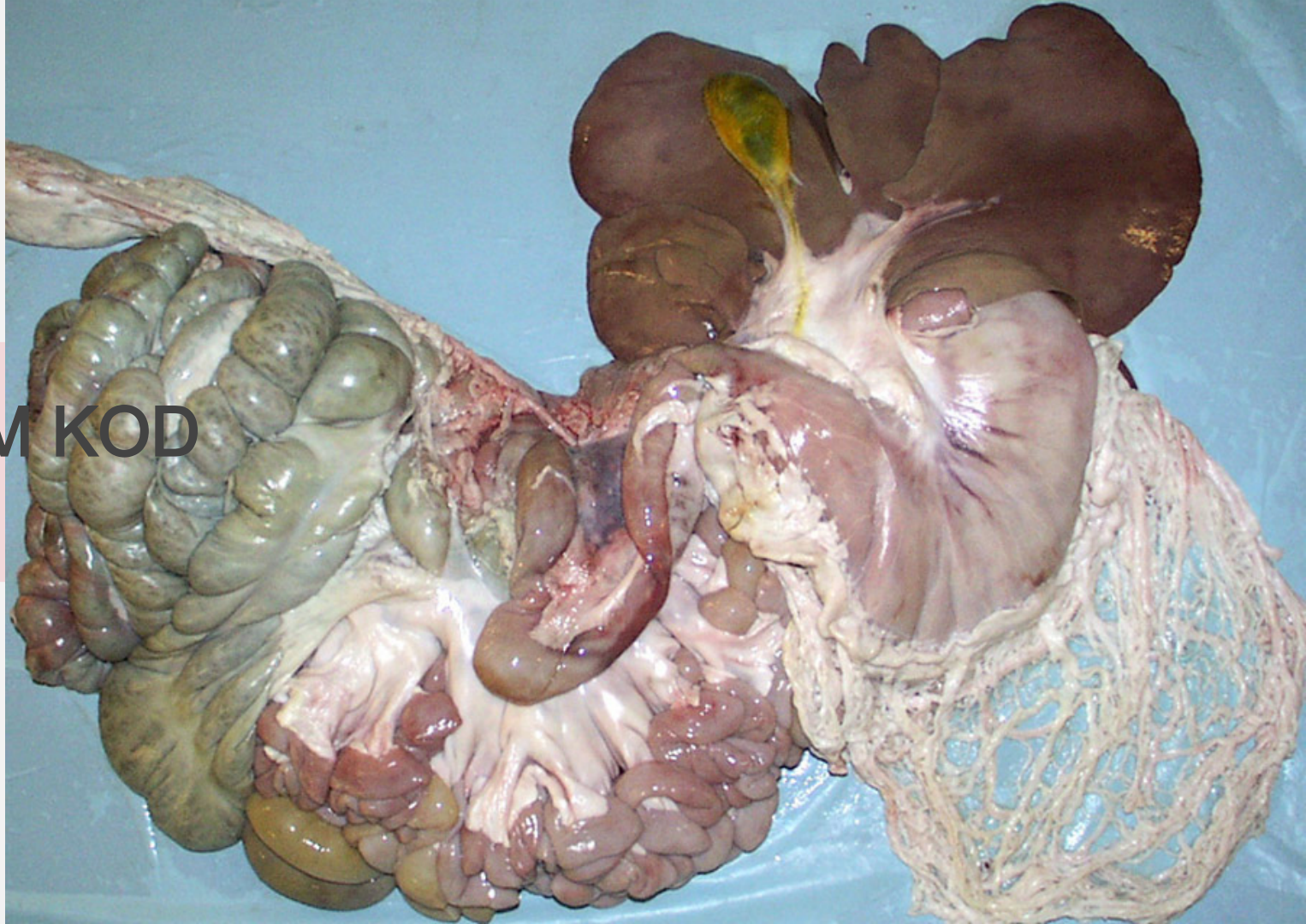
OMENTUM



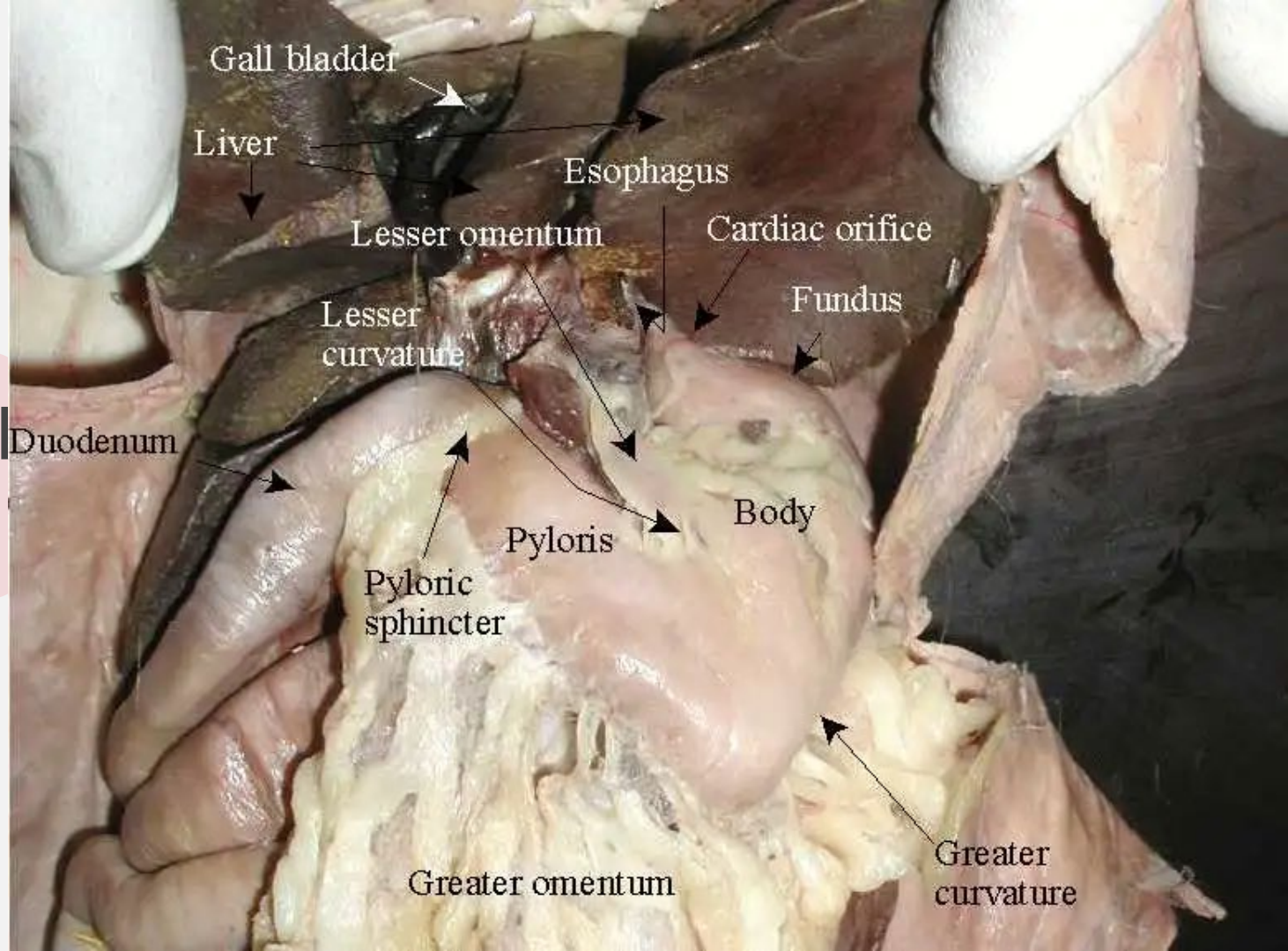
# OMENTUM KOD PSA



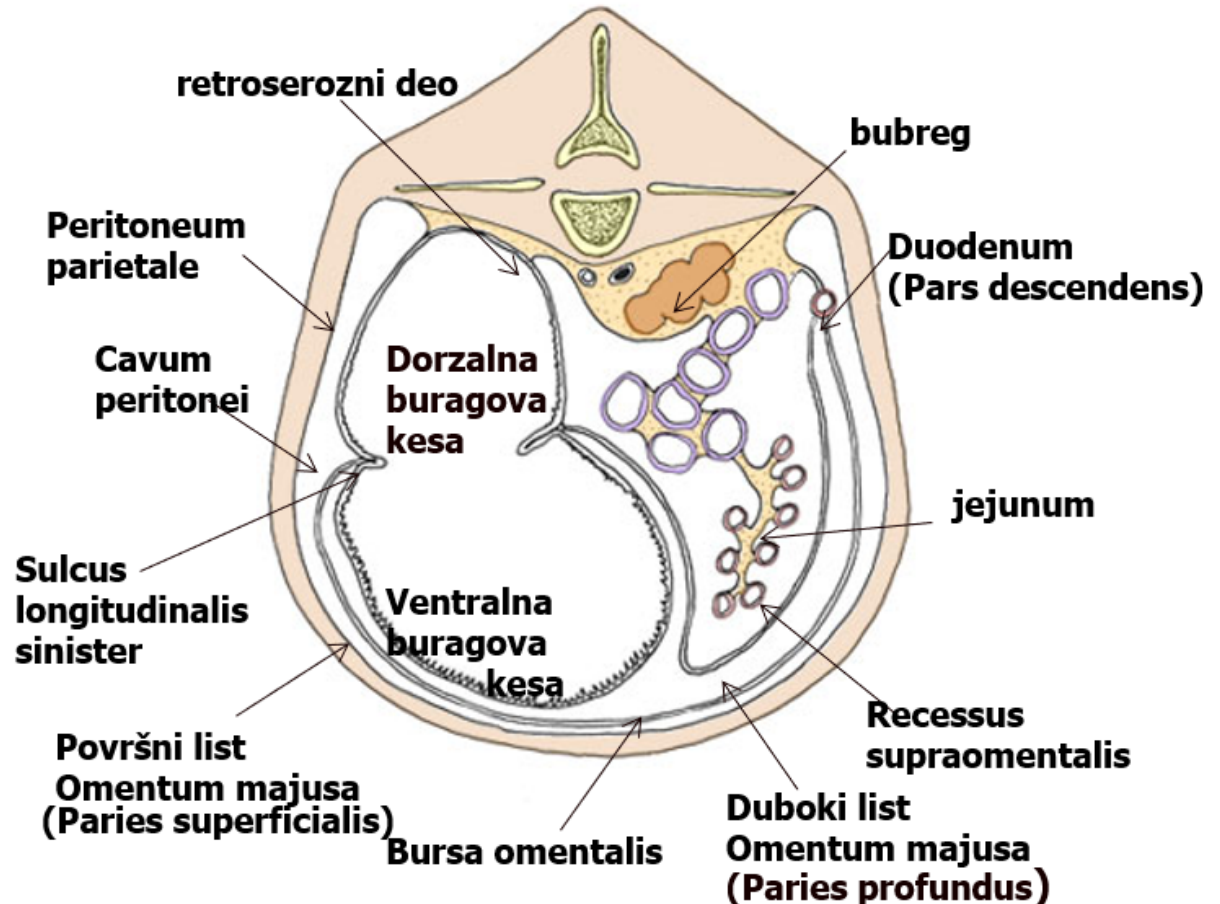
# OMENTUM KOD SVINJE



# OMENTUM MAČKE

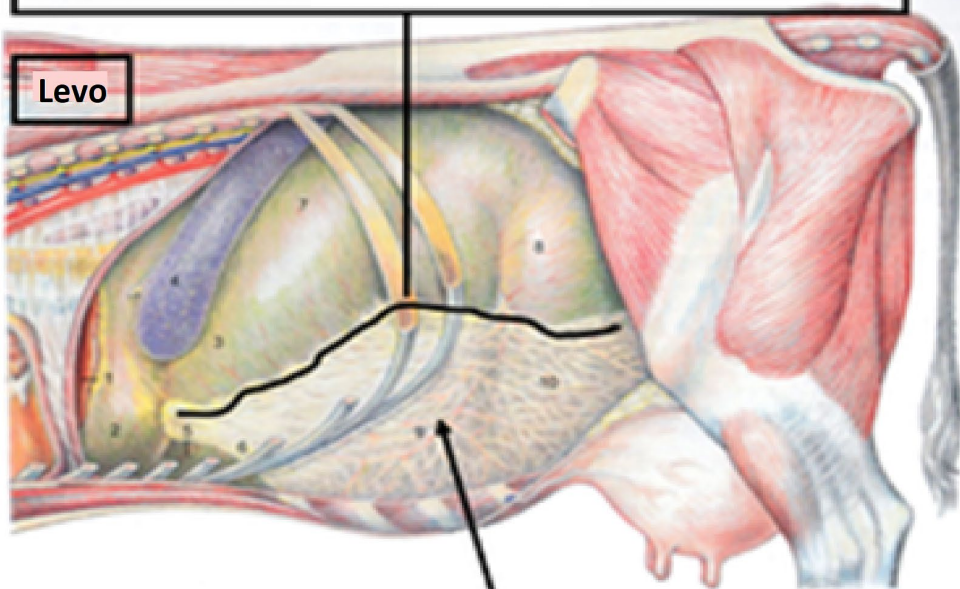


# OMENTUM KO, PREŽIVARA

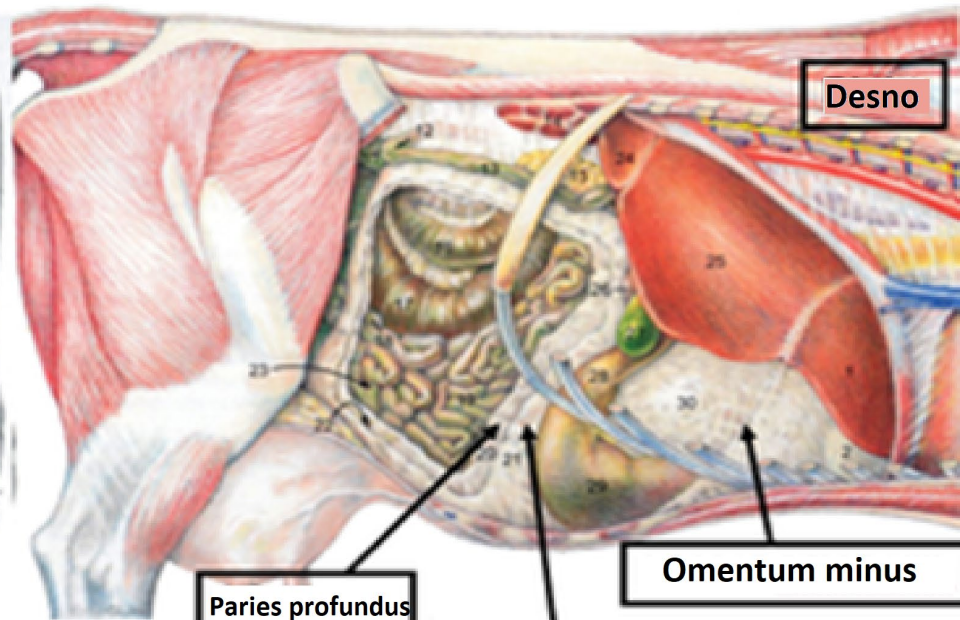


Početak ventralnog lista (paries superficialis) omentuma majus sa levog longitudinalnog žleba buraga

Levo



Paries superficiales



Desno

Paries profundus

Paries superficiales

Omentum minus

# ULOHA OMENTUMA

- Zaštitna
- Mehačka
- Termika

