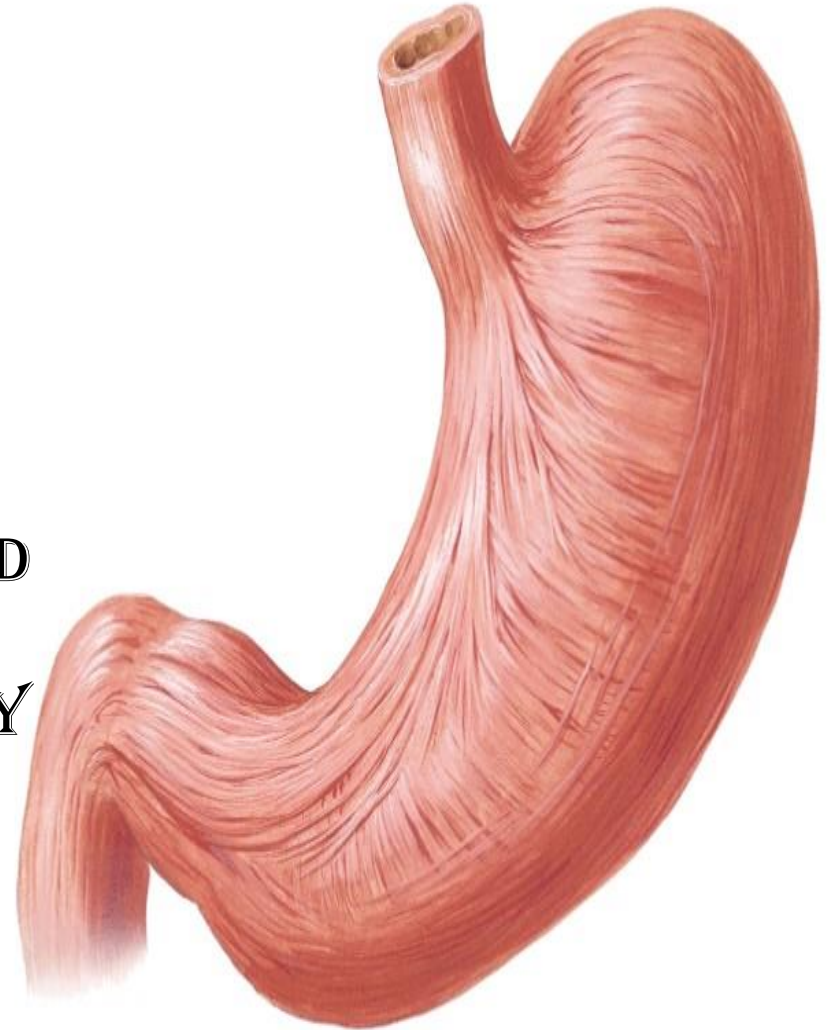


# OESOPHAGUS & STOMACH

BY

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سأخبرنا إذا نسينا أي شيء ارتفعنا .





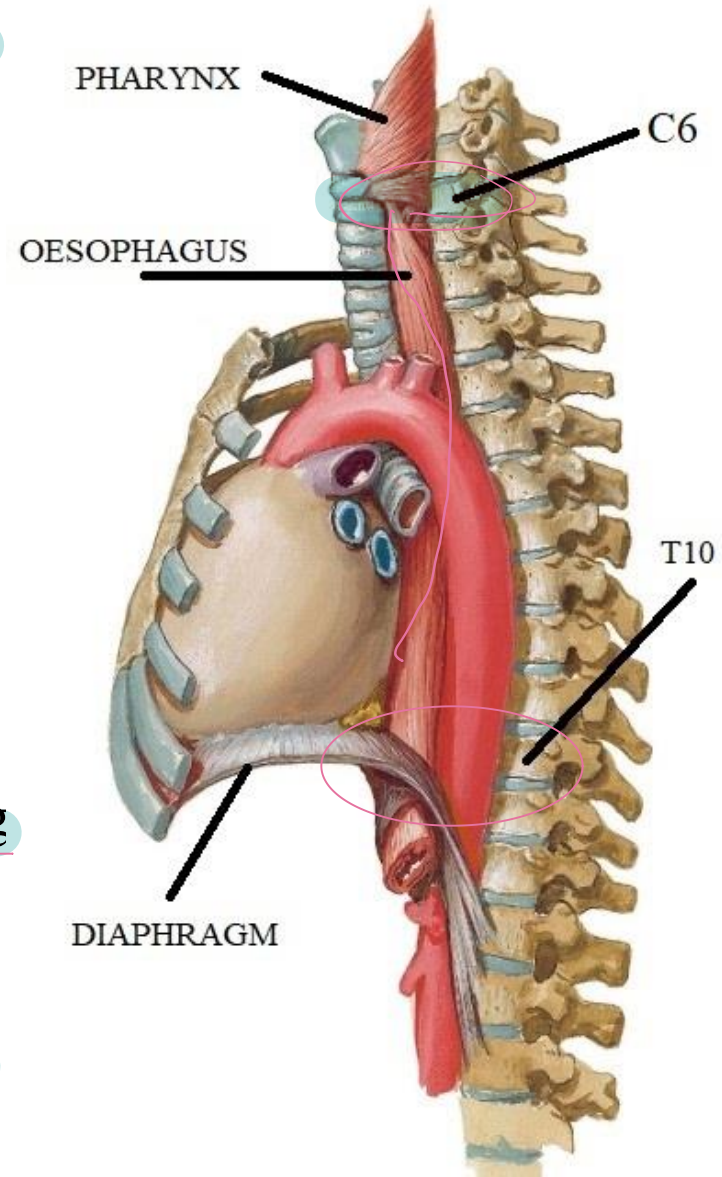
# OESOPHAGUS

# OESOPHAGUS

**Def.** It is a muscular tube 25 cm long with an average diameter 2 cm

## Course

- Begins at the level of 6<sup>th</sup> CV as continuation of pharynx
- It descends generally in a midline position as it moves in the thorax with an anterior to posterior curve
- as it approaches the diaphragm, it moves to the left
- Passes through oesophageal opening of diaphragm at level of 10<sup>th</sup> TV
- Ends at the level of the 11<sup>th</sup> TV at cardiac opening of stomach





# OESOPHAGUS

## Relations

### Right side:

In the neck: - the right lobe of the thyroid gland

In the thorax: - the right pleura

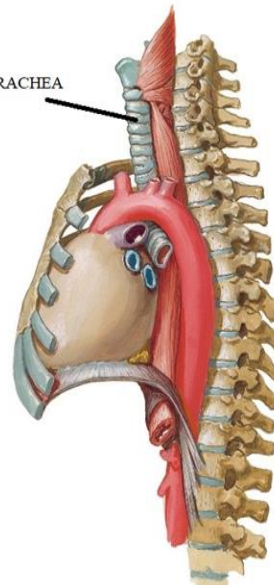
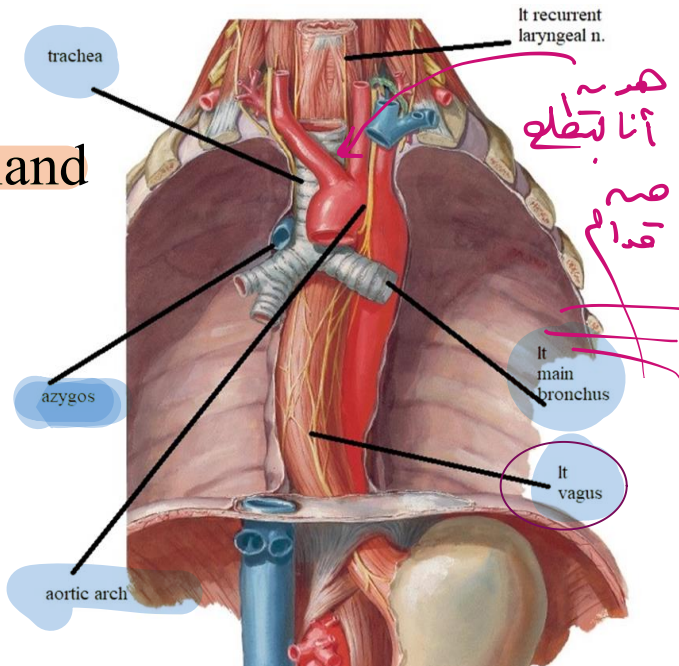
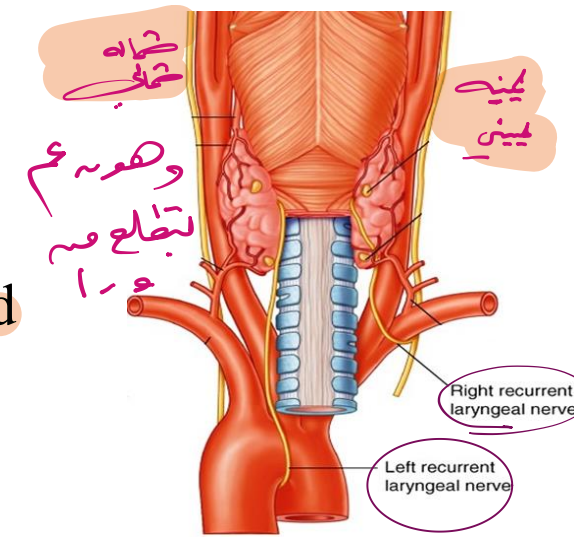
the terminal part  
of the azygos vein

### Left side:

In the neck: - the left lobe of the thyroid gland

In the thorax: the left pleura

the aortic arch



# OESOPHAGUS

## Constrictions:-

### 1-At Pharyngo oesophageal junction

approximately 15 cm  
from the incisor teeth

### 2-At Aortic arch

22.5 cm

from the incisor teeth

### 3-At left main bronchus

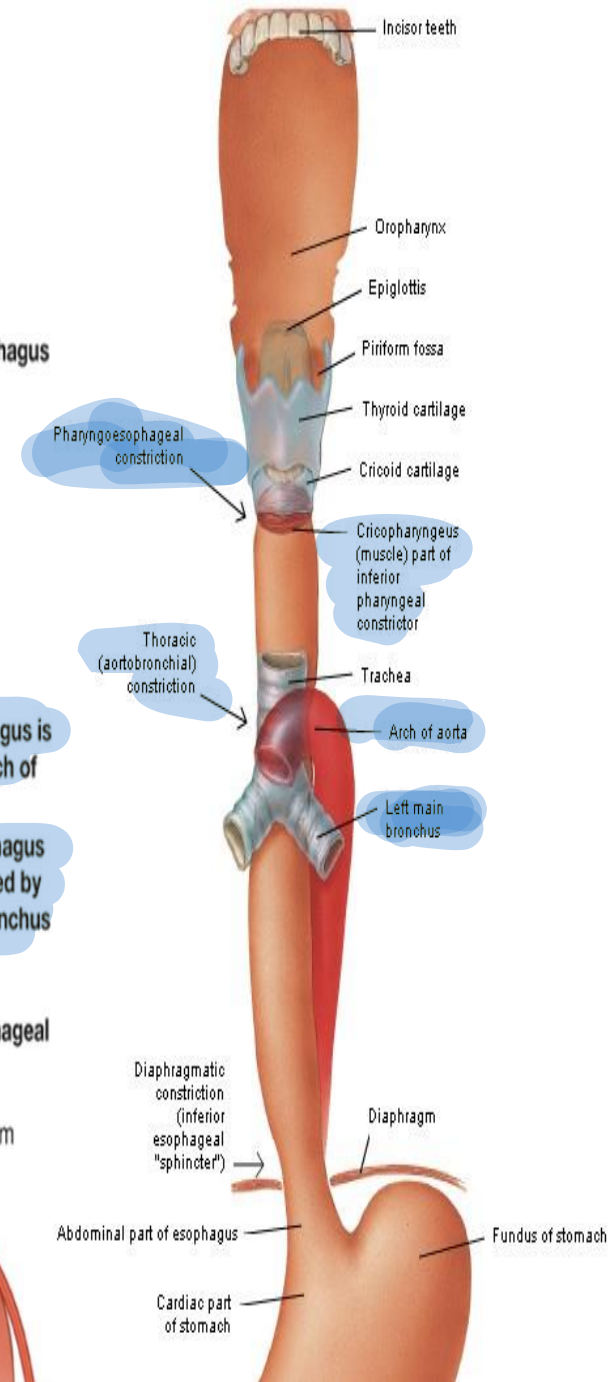
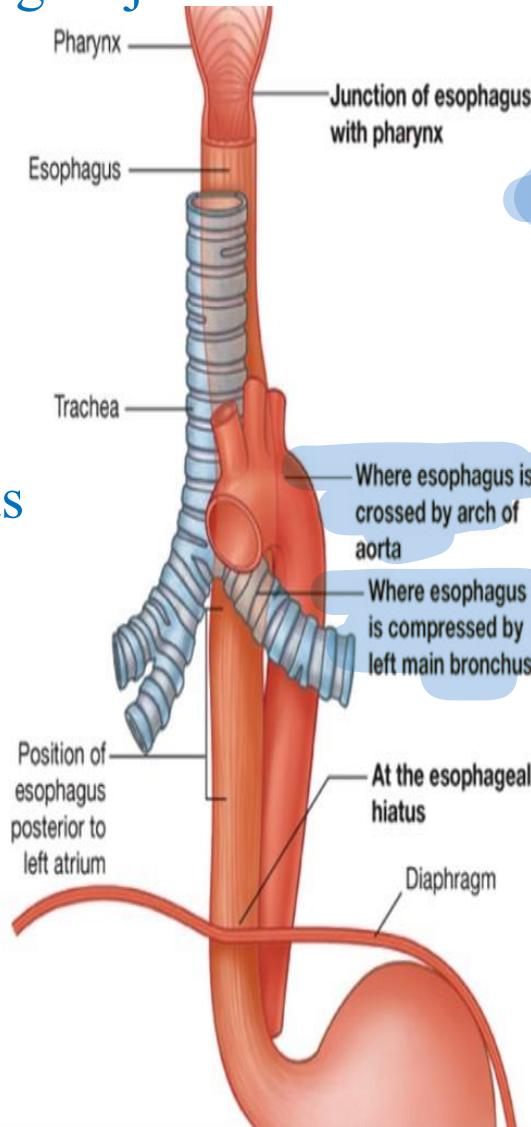
27.5 cm

from the incisor teeth

### 4-At diaphragm

40 cm

from the incisor teeth



*The thinnest place here ever!*

# OESOPHAGUS

A.S.: *لا تتركب من*  
*CS*

the inferior thyroid artery

descending thoracic aorta, bronchial arteries &

lt. gastric artery

V.D.:-

Inferior thyroid vein

Azygos and hemiazygos v  
& lt. gastric vein

L.D.:-

Deep cervical L.N.

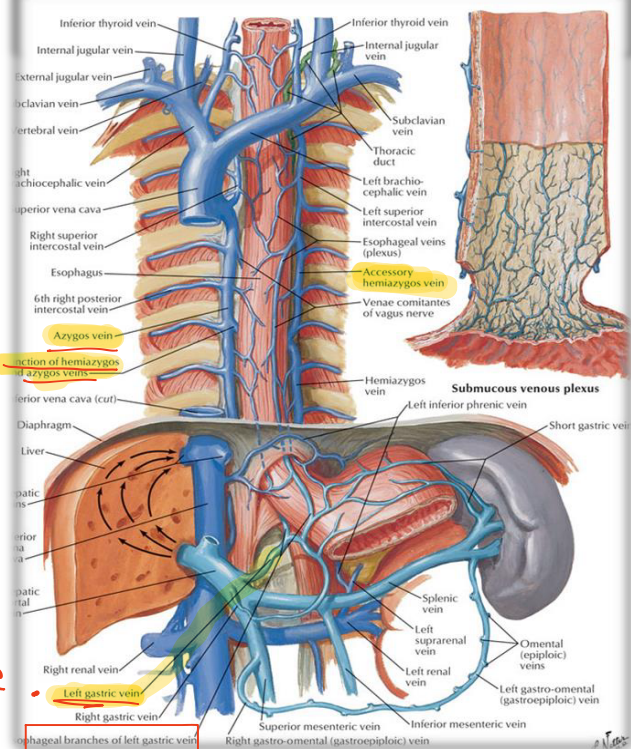
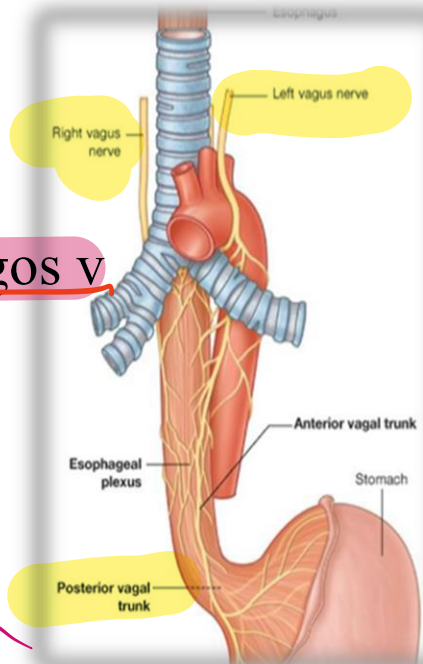
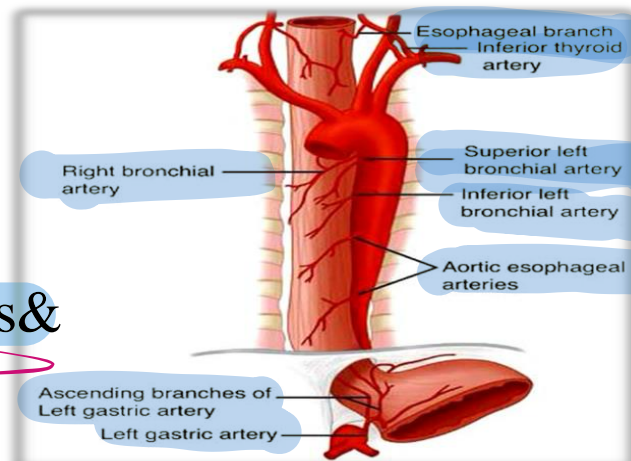
mediastinal L.Ns &

coeliac L.Ns

N.S.:- the 2 vagi &  
sympathetic trunks

Efferent :- vagus *striated muscle part*

Afferent (reflexes) :- vagus Afferent pain :- sympathetic trunks



Neck  
 Throat  
 Abdomin

لا تتركب من  
 لا تتركب من  
 ال  
 side

Related  
 لا  
 لغوفا

Neck

Thorax

abdomin

Smooth muscle part



# STOMACH

# STOMACH

## Position:

left hypochondriac  
epigastric &  
umbilical regions

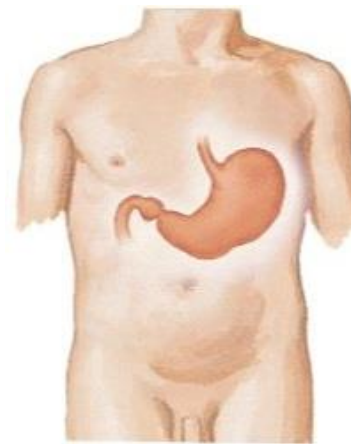
## Shape:

1- J shaped (vertical): more common

2- stear (ox) horn (horizontal): less common

3- intermediate

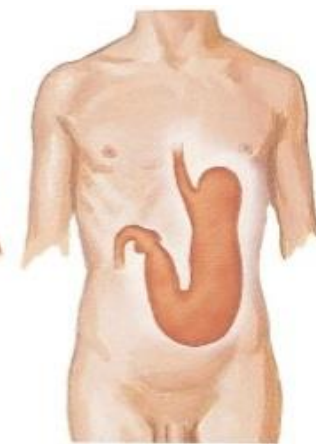
it is more vertical in tall thin person.



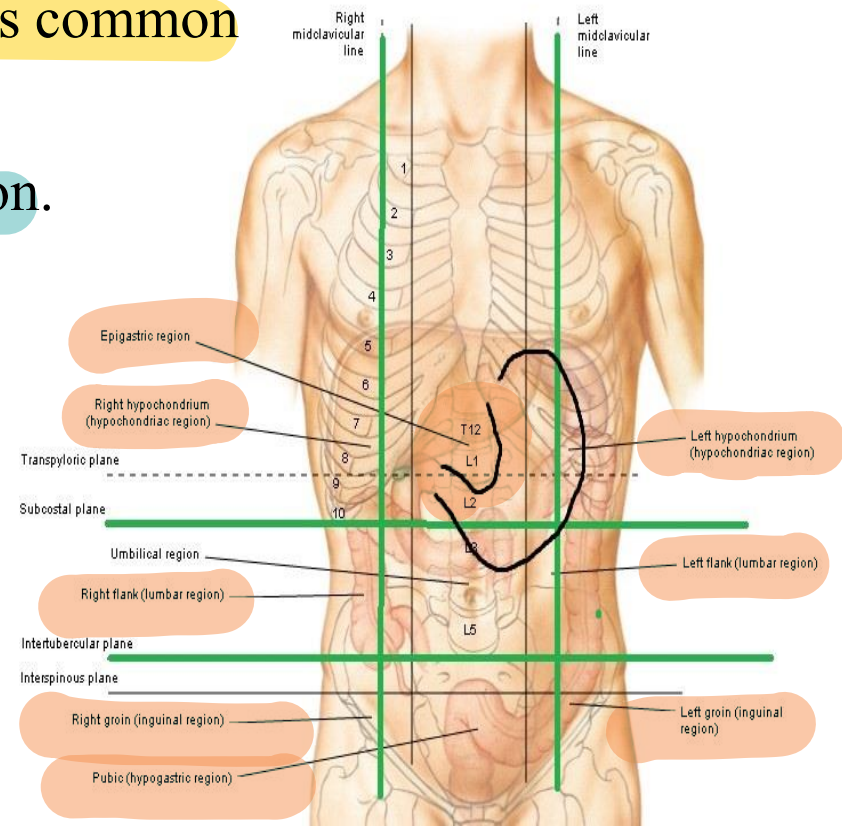
STEER HORN



INTERMEDIATE



J- SHAPE



# STOMACH

## External features:

### 2 orifices:

#### Pyloric orifice

Has a true sphincter

(pyloric sphincter)

that indicated on surface by:

-its thickening.

-pyloric constriction(circular groove)

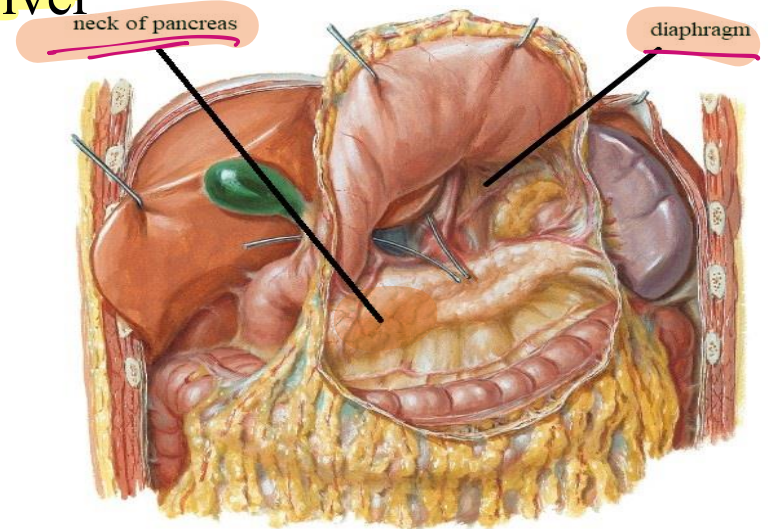
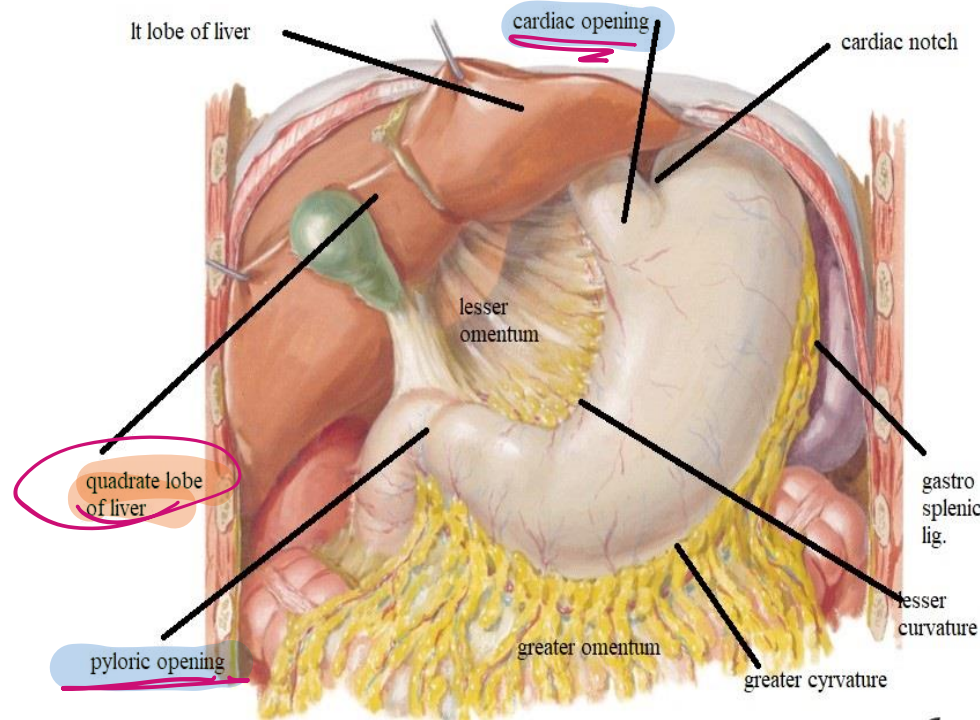
- relation :- Ant. quadrated lobe of liver

Post.: neck of pancreas

- surface anatomy:-

L1 (transpyloric plane)

1/2 inch to Rt of midline



# STOMACH

## External features:

### 2 orifices:

#### Cardiac orifice

- Has NO true sphincter: but cardiac notch
- relation :-

#### Ant.:-

lt lobe of liver  
ant. gastric n.

#### Post.:-

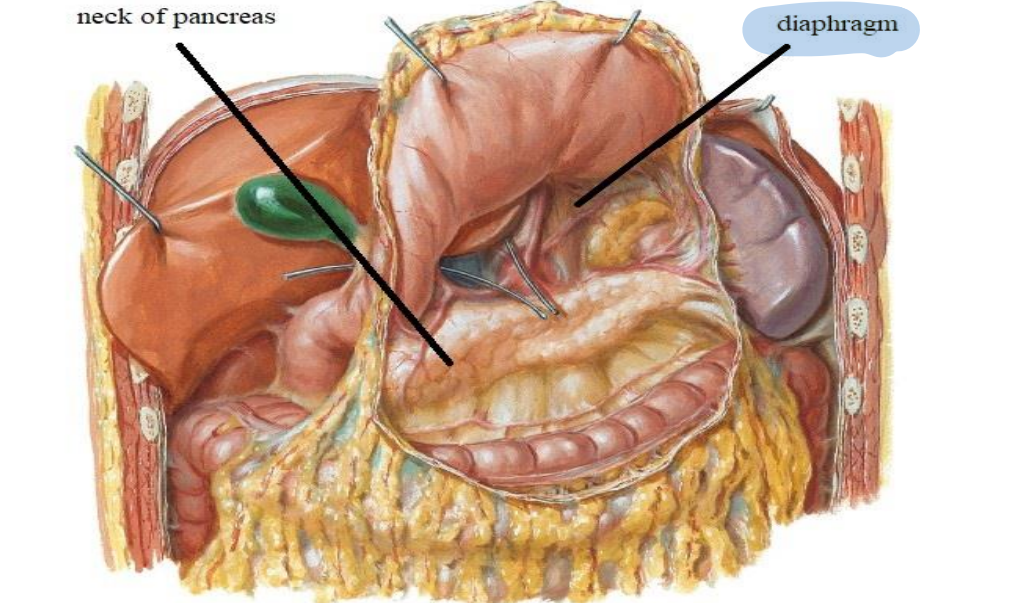
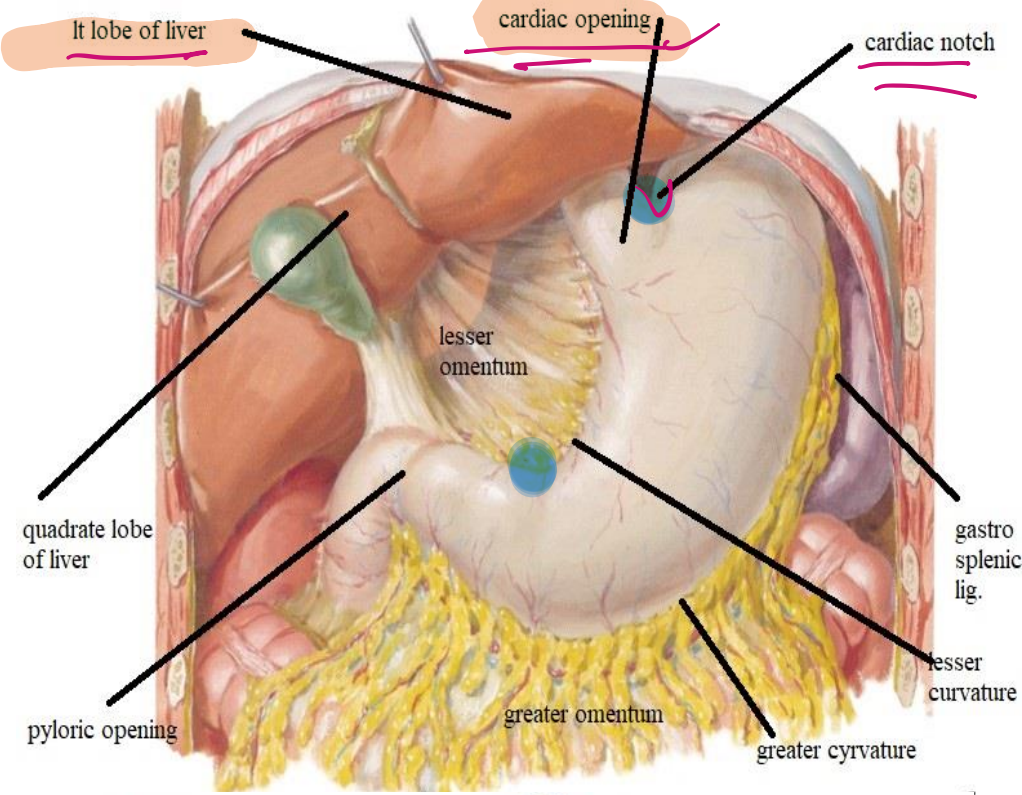
diaphragm  
post. gastric n.

- surface anatomy:

(T11v) 7th costal cartilage

1 inch to left of midline

لا لوز  
Cardiac  
دال  
موجود  
left



# STOMACH

## External features:

2 borders:

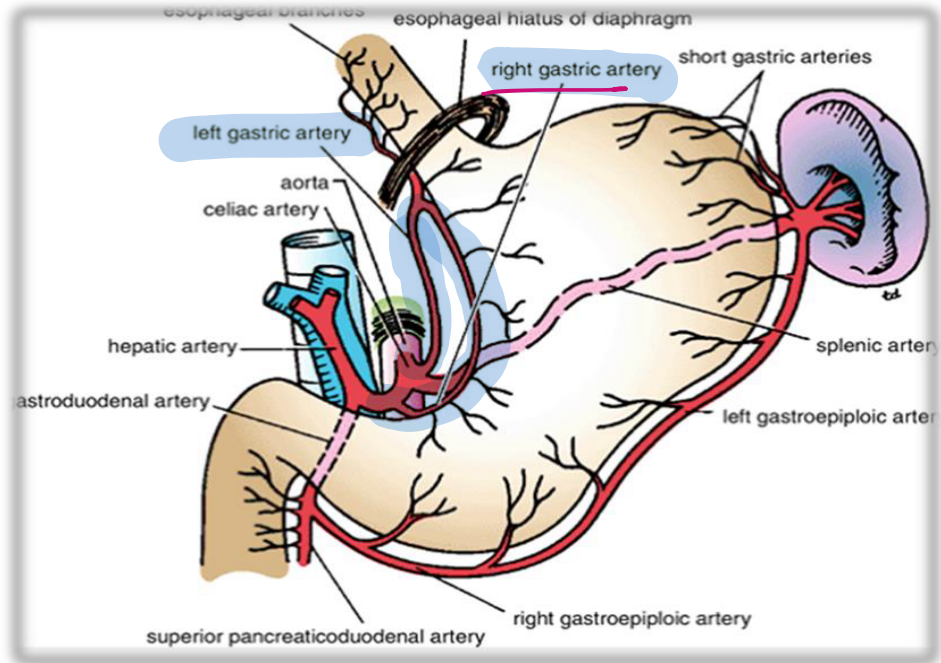
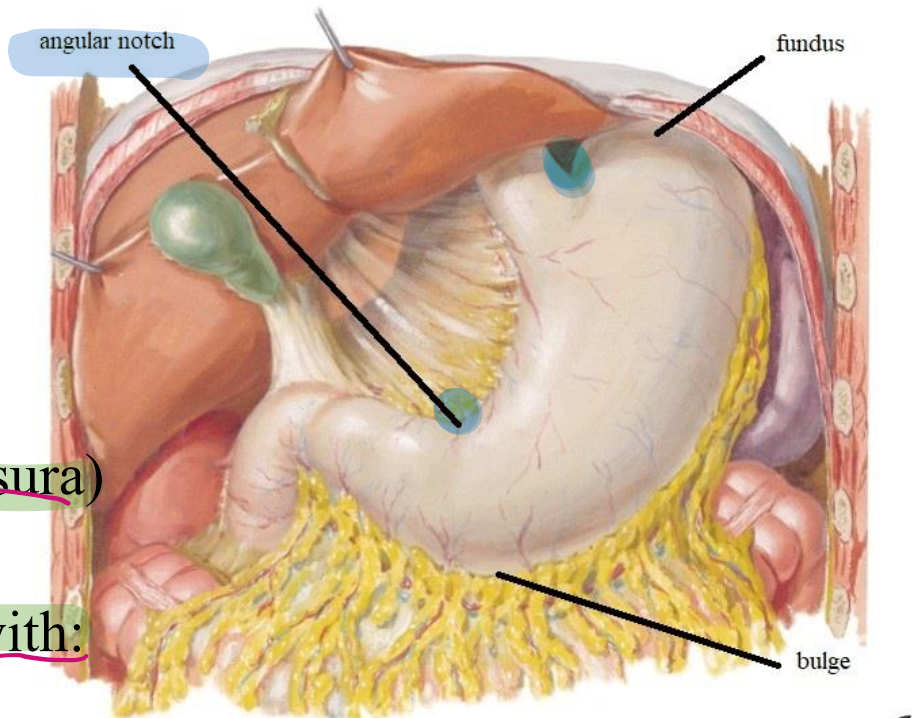
Rt. (lesser curvature)

- concave:  
has the angular notch (incisura)
- Relations  
attach to lesser omentum with:

Rt. & Lt. gastric vessels

( ) 2 layer of omentum

للتعاونة  
folded or bulging  
فوقها البنية



# STOMACH

## External features:

2 borders:

Lt (greater curvature)

• convex:

has

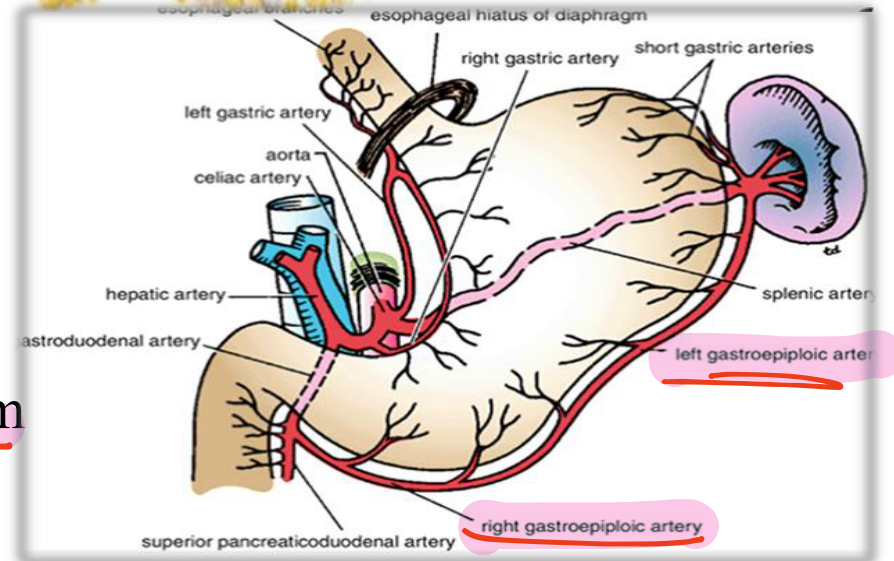
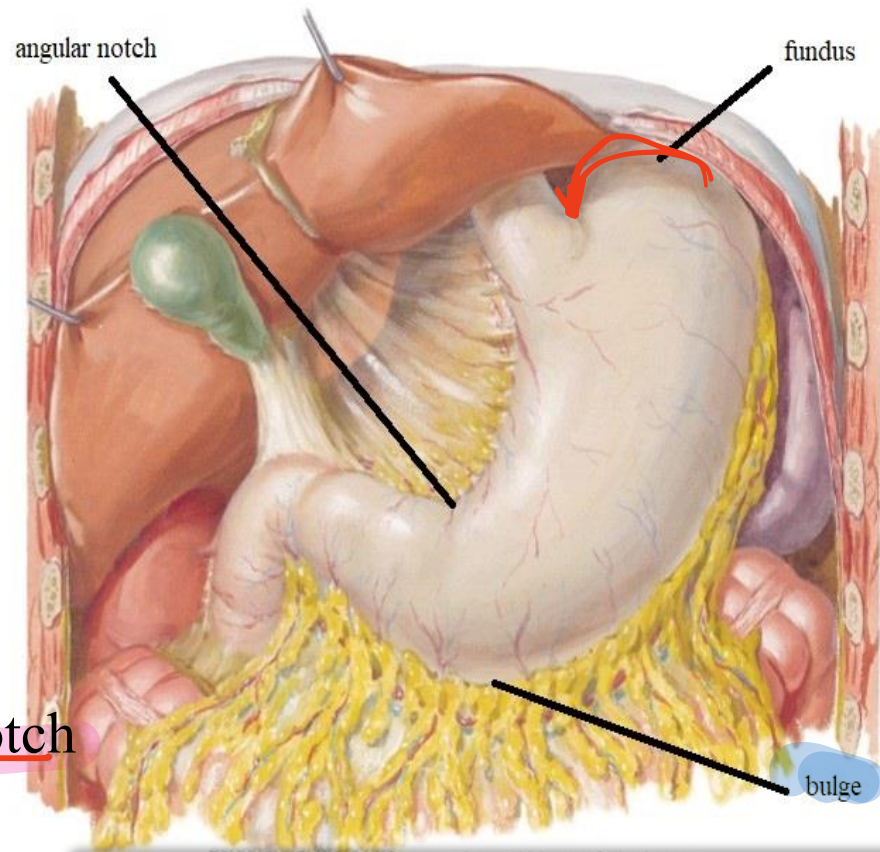
- the cardiac notch
- the fundus
- a bulge opposite angular notch

• Relations:- attach to

- gastrophrenic lig.
- gastrosplenic lig.
- greater omentum with:

Lt & Rt. gastroepiploic vessels

( ) 2 ant. layers of omentum



يعني تقريباً  
تقسيم فقرة  
أضواء

الرباطات الligament  
عبارة عن 4 طبقات

# STOMACH

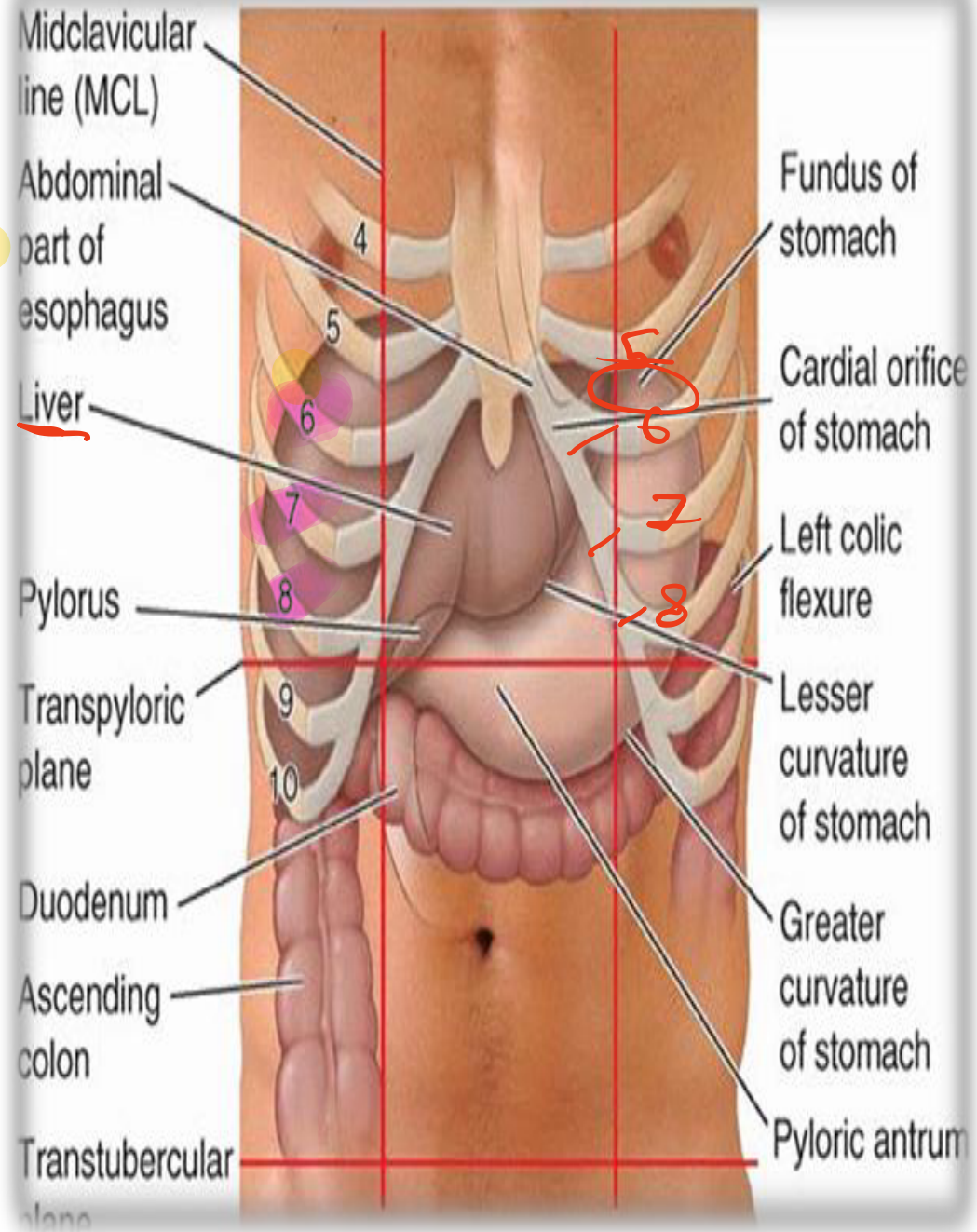
## External features:

2 surfaces:

anterior (antero superior)

## Relations

- Lt lobe of liver.
- diaphragm.
- Lt lung & pleura
- Lt 6, 7, 8 ribs & costal cartilages
- ant. abdominal wall



# STOMACH

## External features:

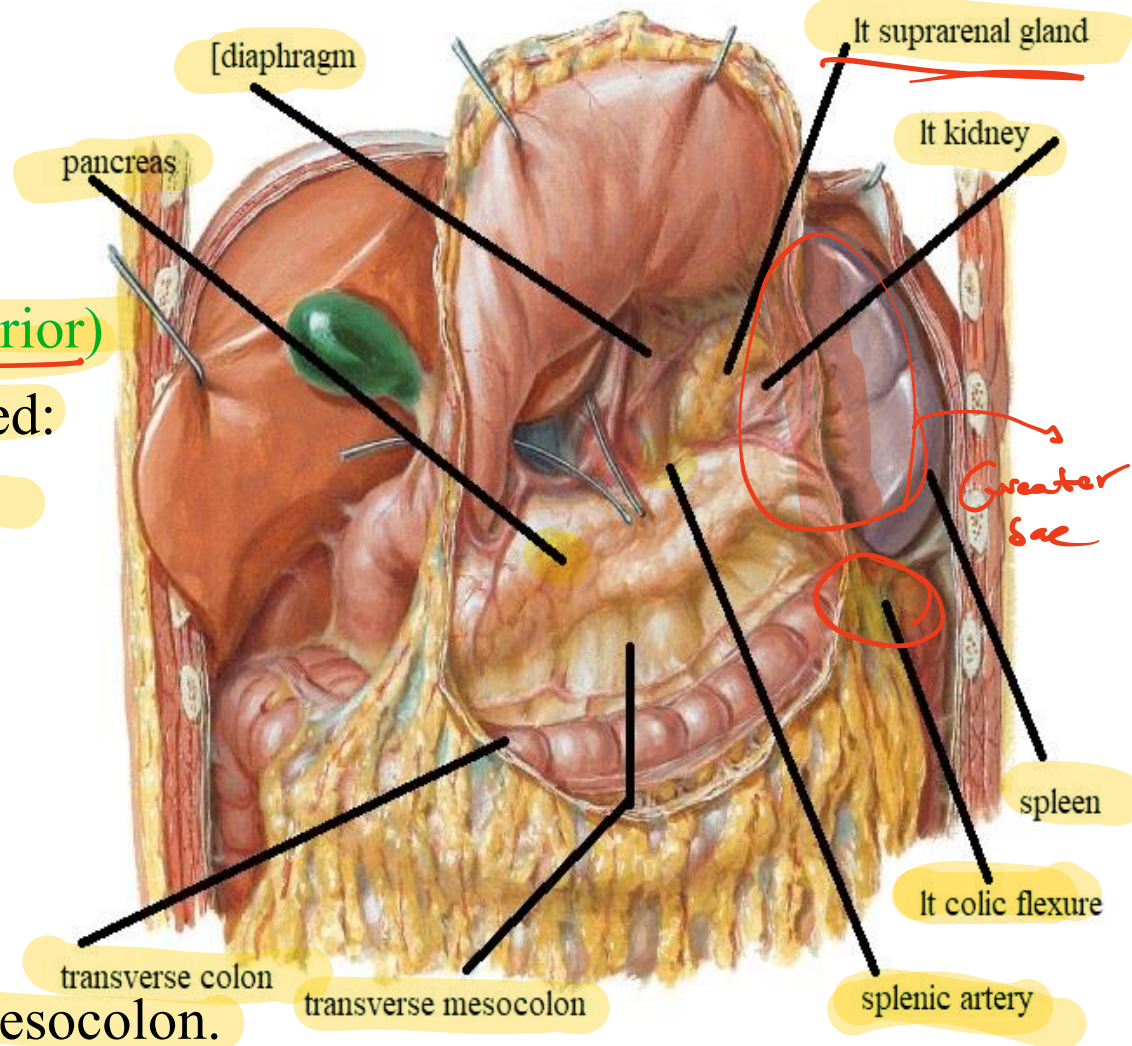
2 surfaces:

Posterior (postero inferior)

Relations: -stomach bed:

- Lt crus of diaphragm.
- Lt kidney & suprarenal gland.
- spleen.
- body of pancreas & splenic art.
- transverse colon & mesocolon.
- Lt colic flexure.

& all these structures are separated from stomach by lesser sac  
except spleen is separated from it by greater sac.



# STOMACH

## PARTS

1-fundus: above cardiac end

Lies in Lt midclavicular line

in Lt 5th intercostal space.

2-body: ( ) cardiac end & angular notch.

3-pyloric part: below angular notch

& is divided into 3 parts.

- pyloric antrum :

dilated part below body

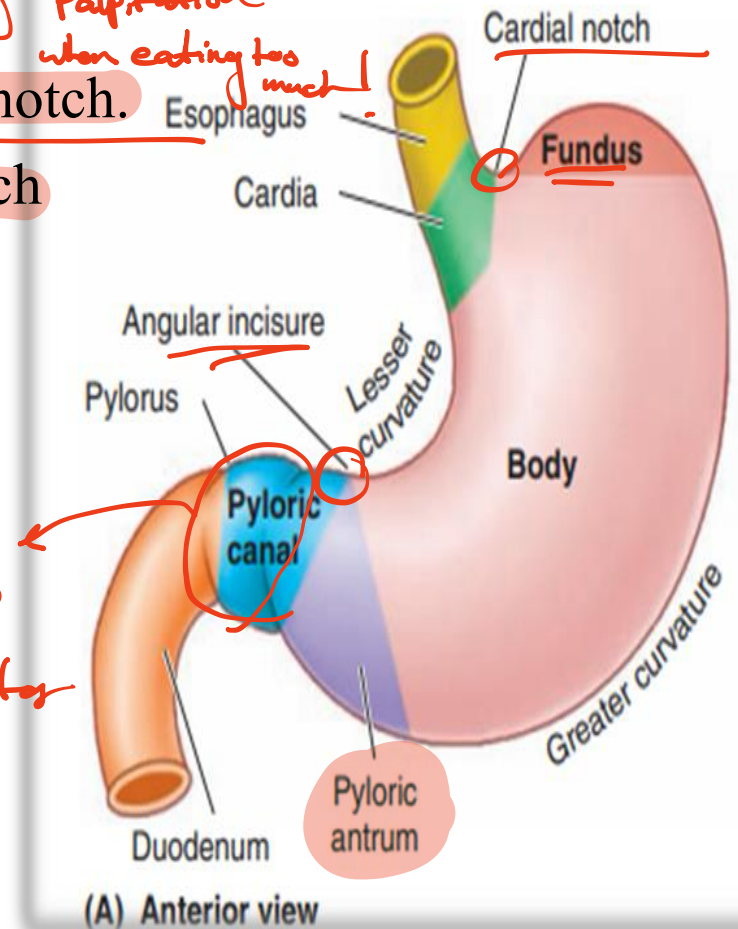
- Pyloric canal.

- pyloric orifice with

pyloric sphincter.

*That's why we feel palpitation when eating too much!*

*Orifice + sphincter*



# STOMACH

arterial supply:

1-Lt gastric art.

2-Rt gastric art.

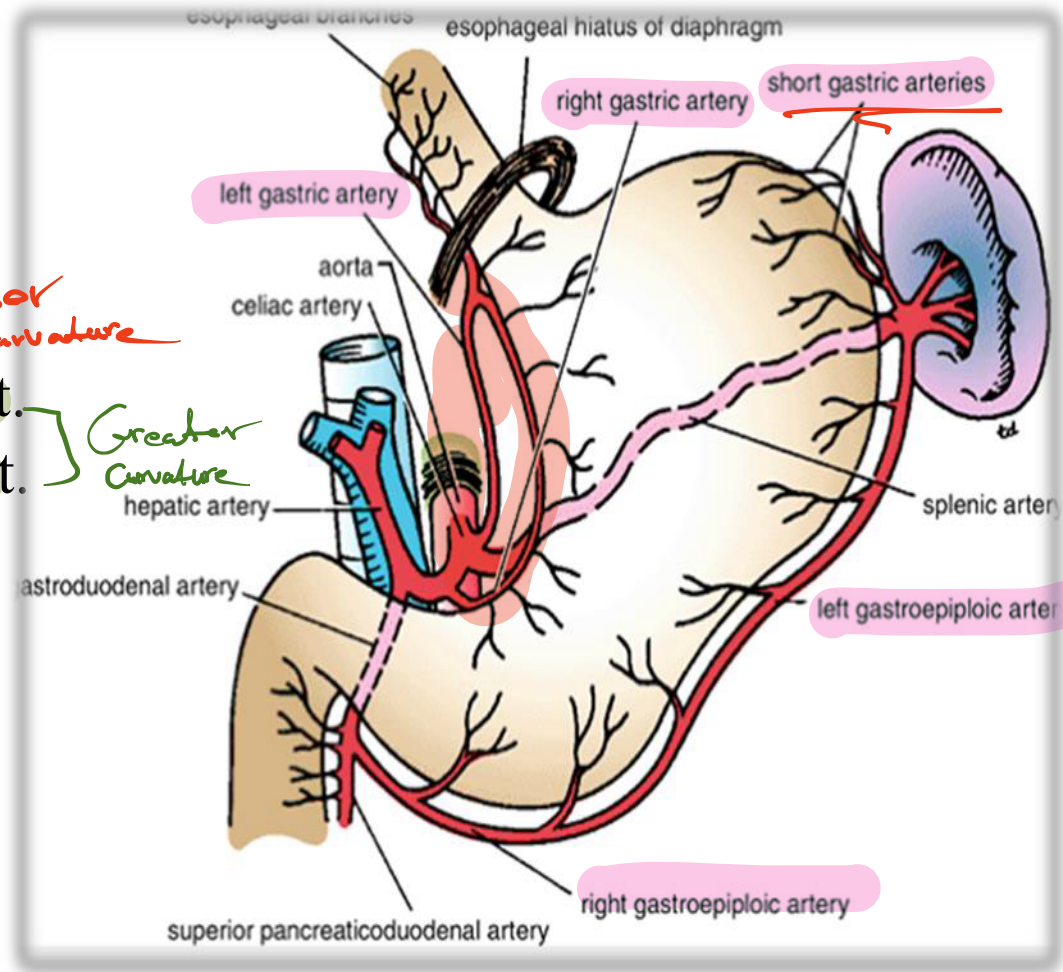
3-Lt gastro-epiploic art.

4-Rt gastro-epiploic art.

5-Short gastric art.

*Lesser Curvature*

*Greater Curvature*



# STOMACH

## Venous drainage:

The veins drain into the portal circulation.

The left and right gastric veins

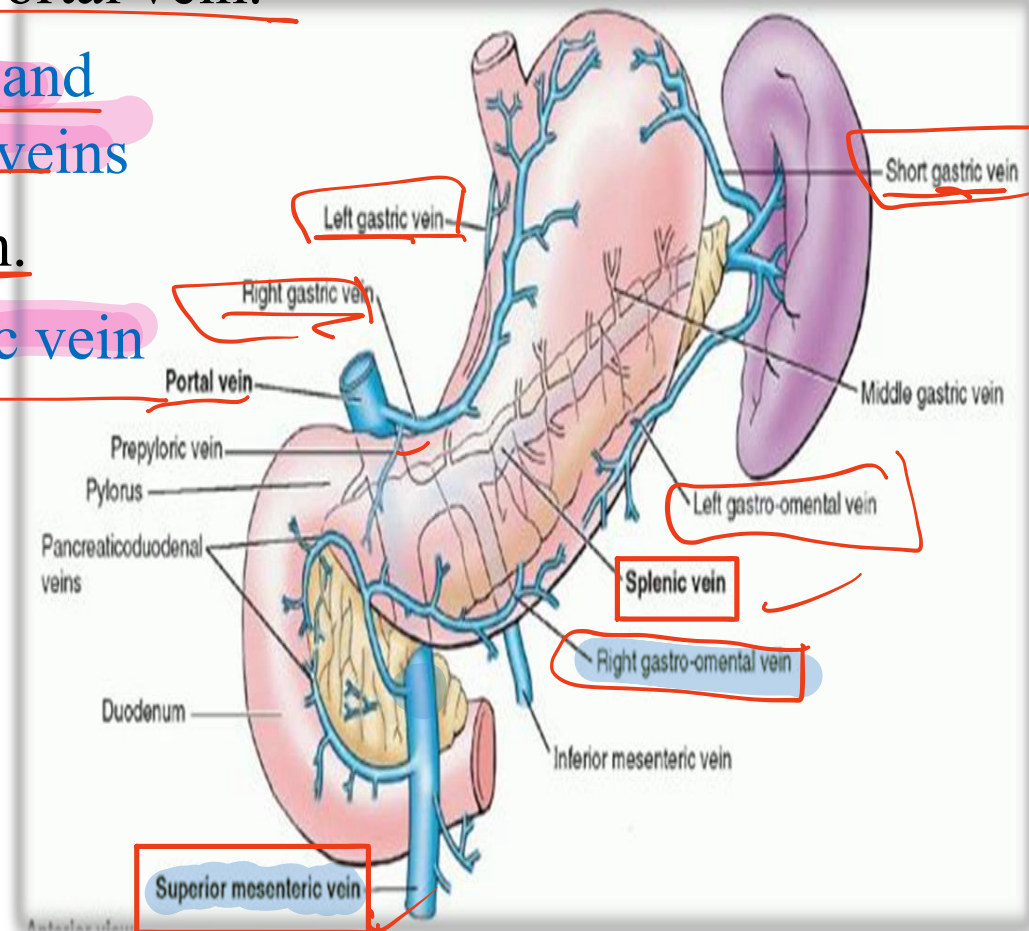
drain directly into the portal vein.

The short gastric veins and the left gastroepiploic veins

end in the splenic vein.

The right gastroepiploic vein

End in the superior mesenteric vein.

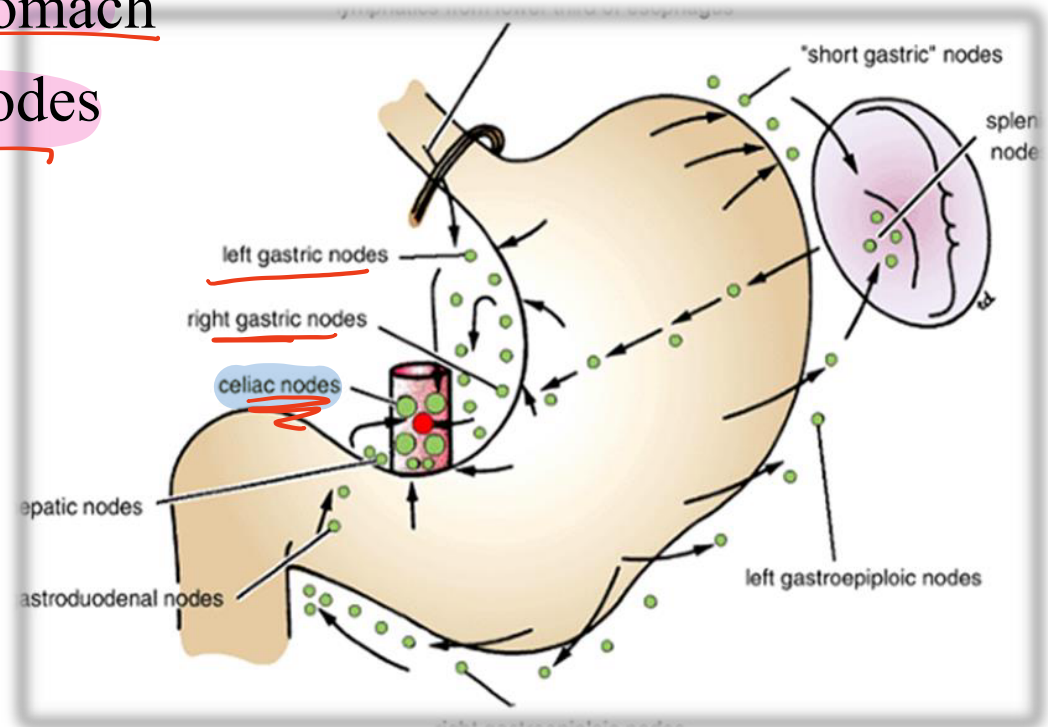


# STOMACH

## lymph drainage:

The lymph vessels follow the arteries into the left and right gastric nodes, the left and right gastroepiploic nodes, and the short gastric nodes.

All lymph from the stomach passes to the celiac nodes

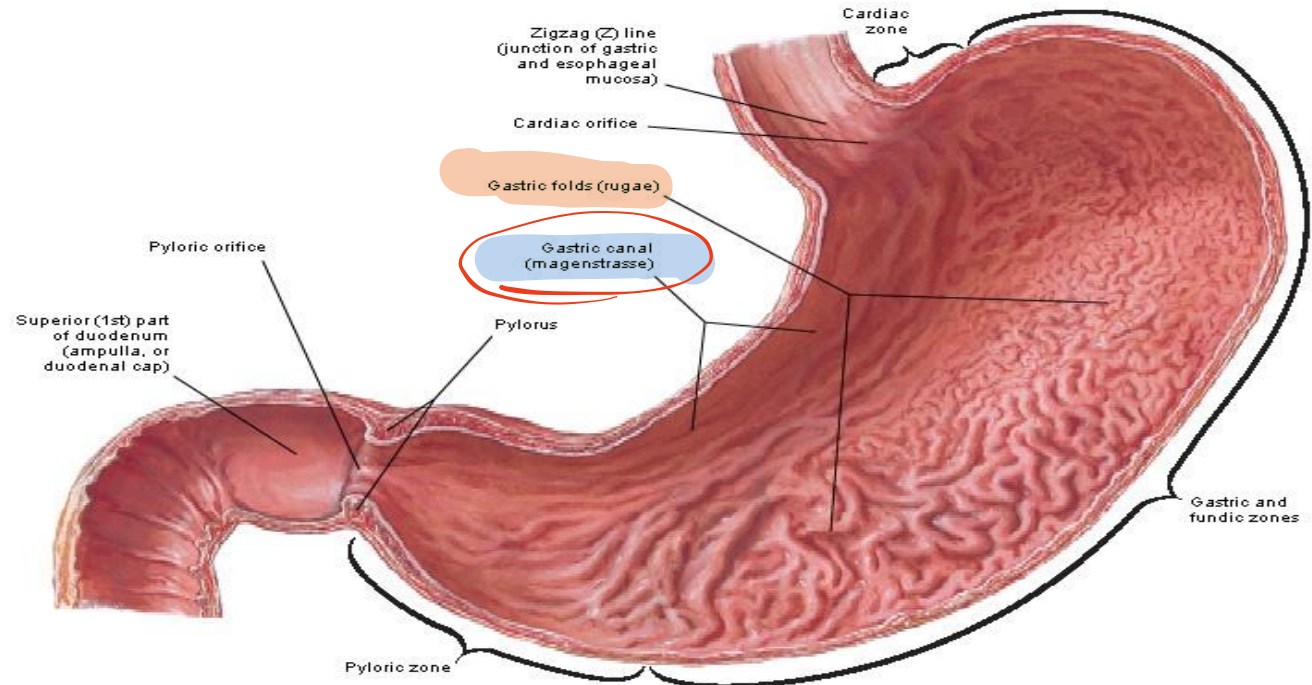


# STOMACH

## Mucosa (interior):

there are longitudinal folds called rugae that disappear in full stomach

2 of them are present along lesser curvature forming gastric canal. the liquids and food eaten at beginning of the meal run along the gastric canal to pyloric portion



# STOMACH

## nerve supply of stomach:

### sympathetic:

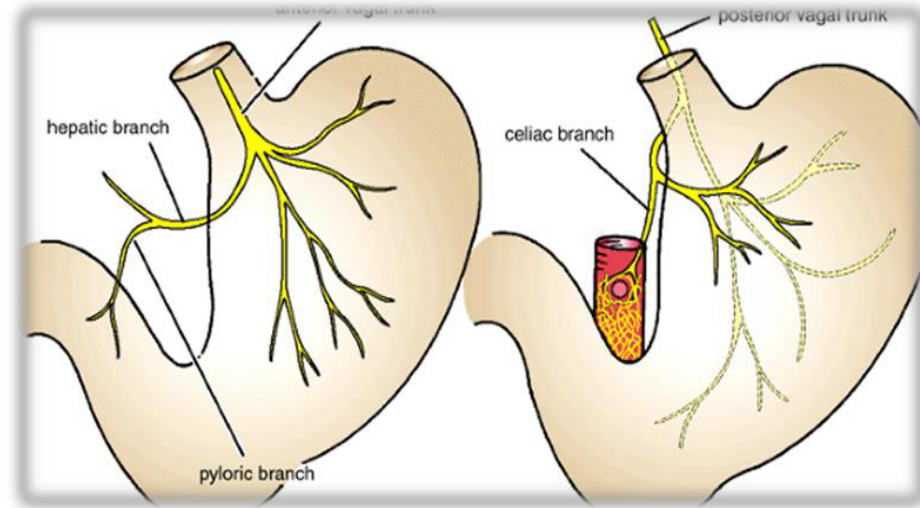
- from T6- 10 segments of spinal cord *Thoraco lumbar*

### parasympathetic:

- from 2 vagi that continue as 2 gastric nerves.

## applied anatomy:

- gastric ulcer is common in lesser curvature at pyloric part due to less blood supply



① عضلات آمنة مائل  
نبتير less blood supply  
② لثقل بمره صرر بلوطة وندرا بالقرودت  
تدريج بالناكيجاد Facidity



THANQ