

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The word 'Stomach' is centered in the middle of the slide.

Stomach

Synonyms

- Also called **gaseter** or **venter**

Definition

- Muscular bag & most distensible part of digestive tube
- Lower end of oesophagus
- Below duodenum

Location

- Upper and left part of abdomen
- Epigastric, umbilical, left hypochondriac

Shape and position

- Normal person J shaped
- Broad, strong & very active persons-horizontal

Size & capacity

- 25cm long
- At birth-30ml
- At puberty-1 000ml
- In adult-1.5-2litre

External features

- Two orifices
- Two curvatures
- Two surfaces
- Two parts

• Cardiac orifice

- Lower end of oesophagus
- Behind left 7th costal cartilage 2.5cm From junction with sternum , at level of vertebra T1 1

Pyloric orifice

Open into duodenum

Behind Stomach and supine position
lies 1.2cm right to median plane, level of
lower border of vertebra L1

- By a circular groove:-

Pyloric sphincter like nodule

- By prepyloric vein:-

Of Mayo which lines front of construction

Lesser curvature

- Concave
- Form right border of stomach
- Provide attachment to lesser omentum
- Marked by insicura angularis

Greater curvature

- Convex
- Form left border of stomach
- Provide attachment to greater omentum
- 5 times longer than lesser curvature
- Present in cardiac notch

Anterior or anterosuperior surface

- Forward & upward

Posterior or posteroinferior

- Backward & downward

Cardiac part

- Fundus of stomach

- Convex & dome shaped

Body of stomach

- Lies between fundus and pyloric antrum
- Mucous cells
- Oxyntic cells

Pyloric part

Pyloric antrum

It is 7.5cm long

Pyloric canal

- Pyloric gland are richest in mucous cells
- 2.5cm long
- Narrow and tubular

Relation of stomach

- Peritoneal Relation

- Lesser curvature-lesser omentum
- Greater curvature-greater omentum
- Fundus-gastrophrenic ligament
- Cardiac end-gastrophrenic ligament
- Direct contact diaphragm-bare area of stomach

• Visceral Relation



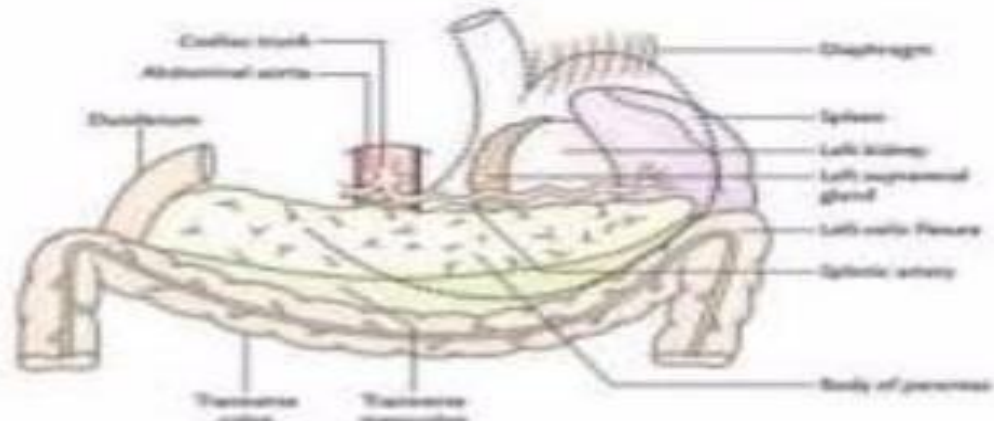
Relations of the stomach

• Anterior relations

- Anterior abdominal wall
- Left costal margin
- Left pleura and lung
- Diaphragm, and the
- Left lobe of the liver.

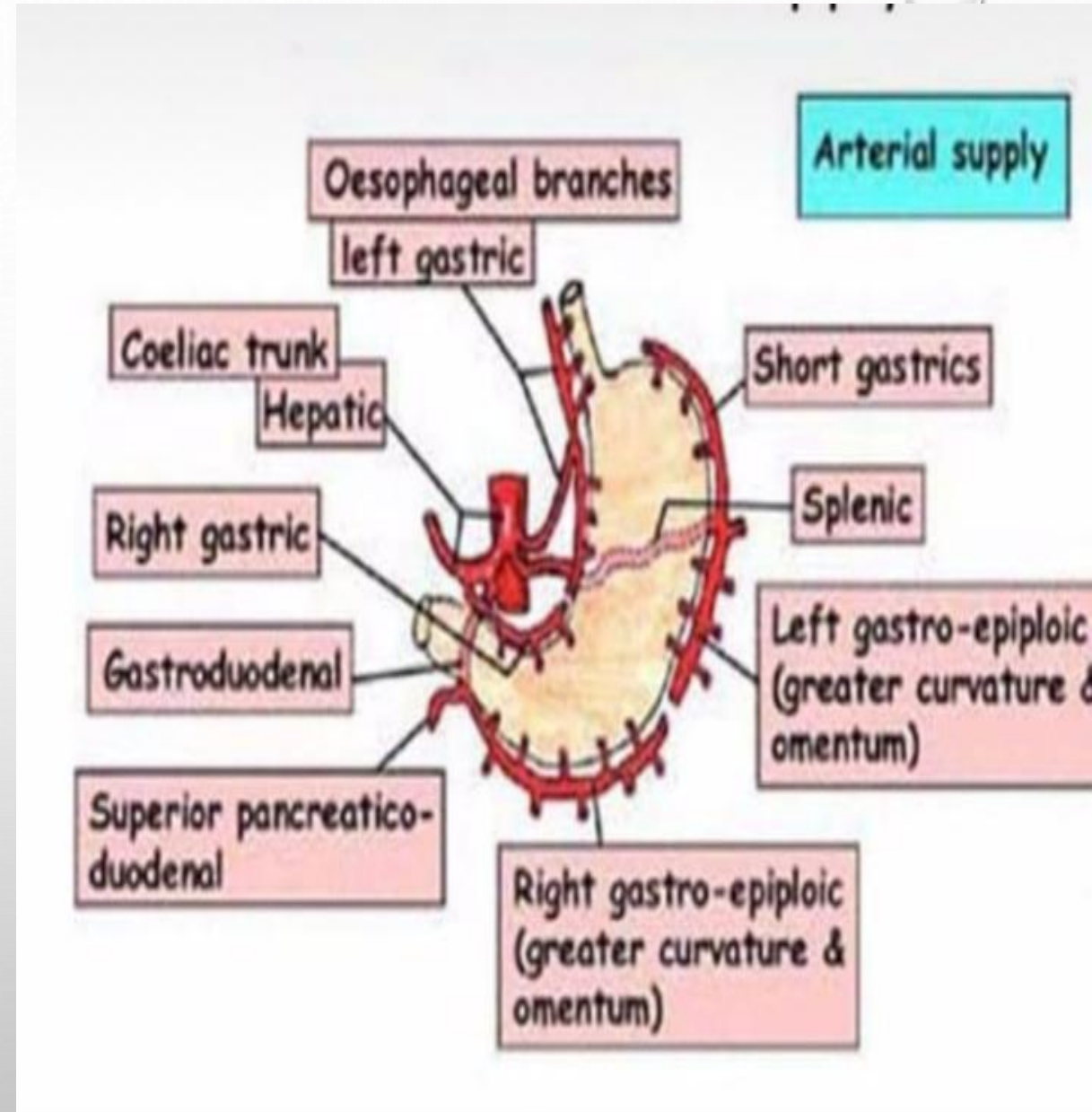
• Posterior relations

- Lesser sac
- Diaphragm
- Spleen
- Left suprarenal gland
- Upper part of the left kidney
- Splenic artery
- Pancreas
- Transverse colon
- Transverse mesocolon



Blood supply of stomach

- Left & Right gastric artery
- Left & right gastroepiploic artery
- 5 to 7 short gastric arteries
- Stomach drain –portal, superior mesenteric , splenic veins



Lymphatic Drainage

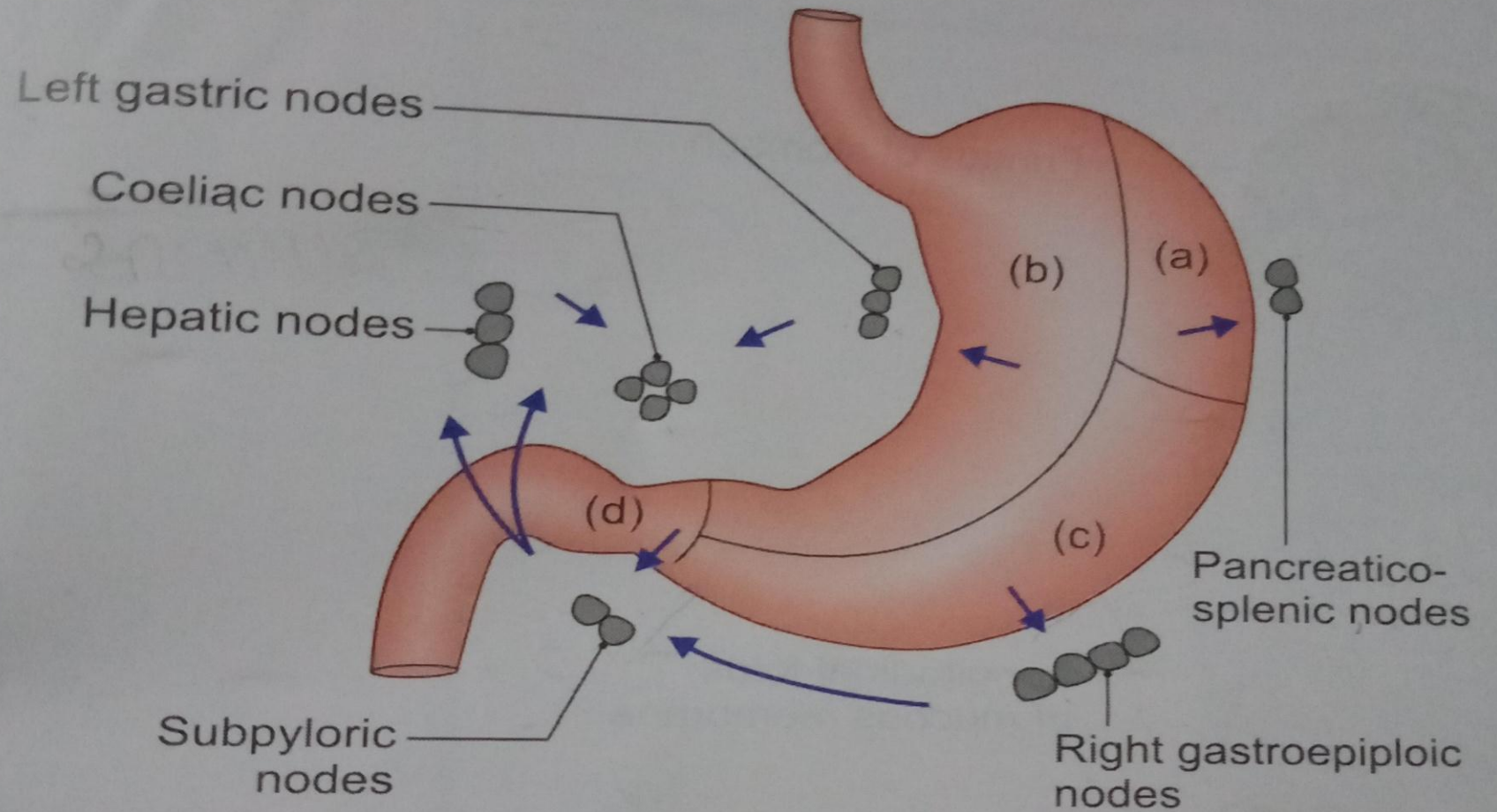


Fig. 19.11: Lymphatic drainage of the stomach. Note the manner in which the organ is subdivided into (a) to (d) different territories

Nerve supply of stomach

- Sympathetic nerve-T6 to T10
- Parasympathetic nerve-Vagus

Interior of stomach

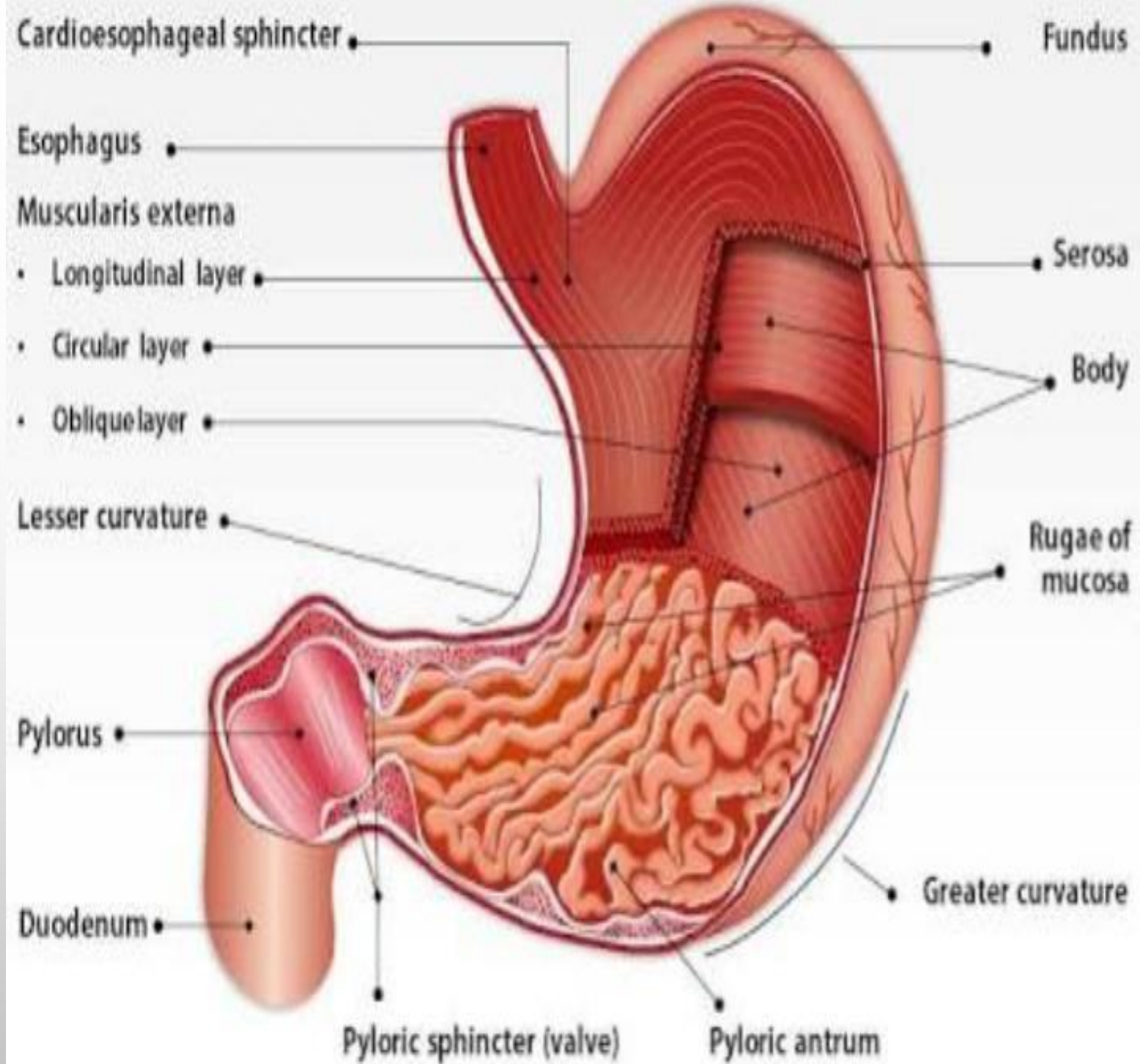
1. mucosa –gastric rugae & Pits

2. Submucous coat-made of connective tissue, arterioles & nerve plexus

3. Muscle coat

- Superficial-Longitudinal
- Inner-circular
- Deepest-Oblique

4. Serous coat - peritoneal covering



Functions of stomach

1-Reservoir of food

2-mixes of food with gastric juice

3-secret enzyme

4-secretion hydrochloric acid

5-protection

6-absorb_alcohol,water,salt,drugs

7-produces intrinsic factor & absorbed of
vitamin B12

Clinical anatomy

- Gastric pain
- Peptic ulcer
 - a. First part of duodenum & lower end of oesophagus
 - b. Common in blood group O
- Gastric ulcer
 - a. Common in hurry
, Worry , Eat spicy
curry
- Gastric carcinoma
 - a. Common in blood group A
- Pyloric obstruction

Histology of stomach

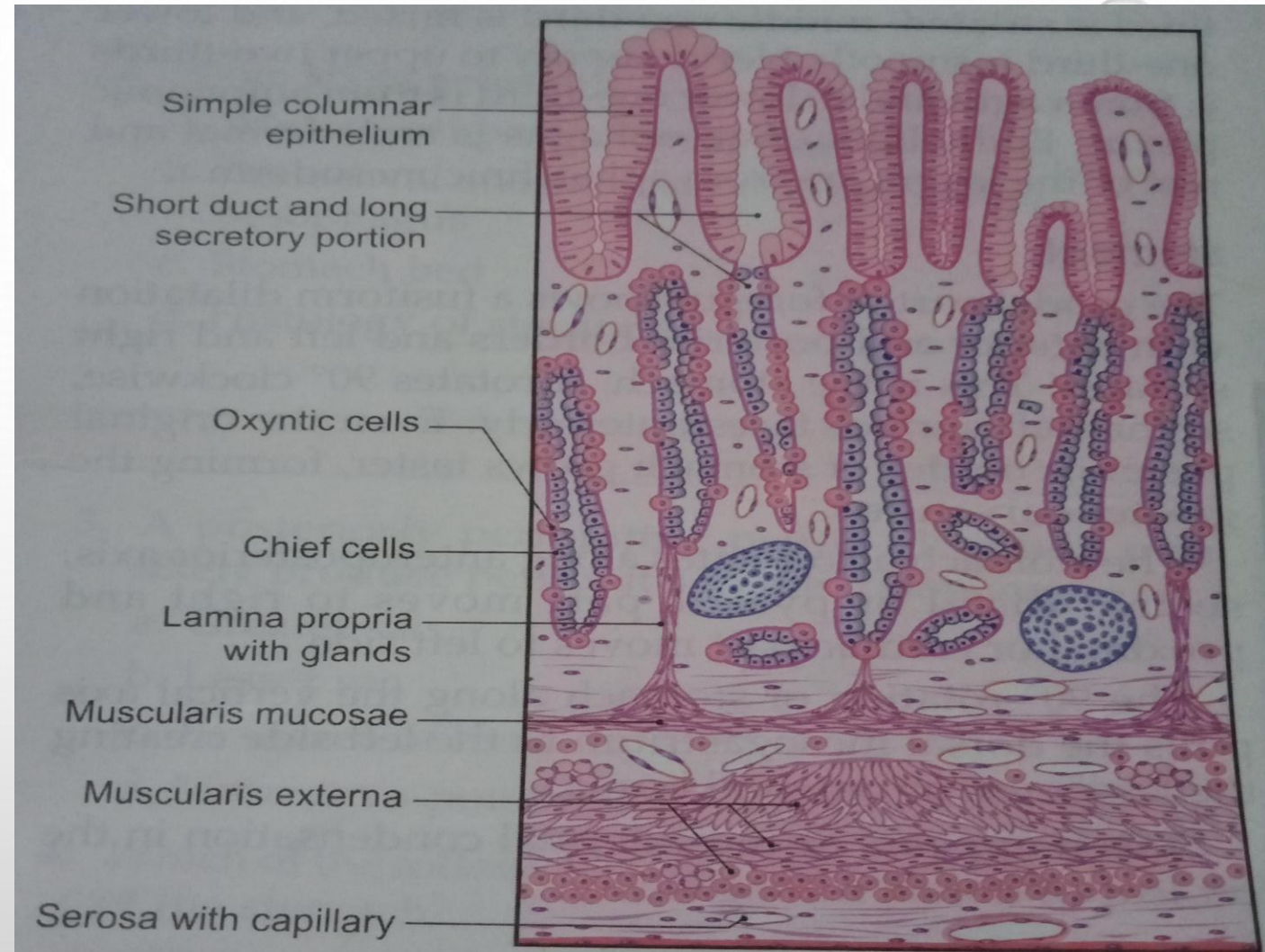
- Cardiac end

Mucous membrane: - simple columnar epithelium

Submucosa: loose connective tissues

Muscularis externa: longitudinal & inner circular

Serosa:. Single layer of squamous epithelium cells



- All epithelial cells are simple columnar in type
- Parietal cells are large and pink, chief cells are small and blue
- Duct is one-third and secretory part is two-thirds

Fundus & body of stomach

Mucous membrane:

Upper one-third conducting & lower one-third secretory

Pyloric part of stomach

Lower one-third secretory & upper one-third conducting