

(GK Pal Physiology)

Mastication / Chewing Reflex

Food in mouth

Reflex inhibition of muscles of mastication

Drop of lower jaw

Reflex contraction of jaw muscles

Jaw is raised

→ Bolus is compressed

Achalasia Cardia

- lower oesophageal sphincter fails to relax during swallowing
- due to deficient myenteric plexus at lower oesophagus
- gastroesophageal reflux is caused (acidic stomach contents reflux into oesophagus) leading to heartburn & oesophagitis, ulceration & stricture of oesophagus

Stomach Movements

Movements in Empty Stomach: Type I - mild

Type II → hunger contractions

Type III → hunger pangs

Receptive Relaxation: after a meal

↳ causes ↑ in stomach volume

↳ caused by vagovagal reflex originating in Pharynx & Oesophagus

Digestive Peristalsis: as soon as food enters stomach

↳ indentations in wall of stomach (of progressively increasing strength)

→ propulsion carries food towards pylorus

→ pyloric sphincter closes to push food downward ⇒ Rotropulsion.

Gastric Emptying - Pyloric Pump

SI Movements

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Mixing Movements - mixing of food with juices

Segmentation Contraction ← eccentric contr. (outer longitudinal)
concentric contr. (inner circular)
Pendular mnts.

Propulsive Mnts. - Peristalsis

Mnts of Villi

GI Movements

Mixing Movements (Haustrations)

Propulsive Movements (Mass Mnts.)

Phases of GI secretion

Cephalic
Gastric
Intestinal

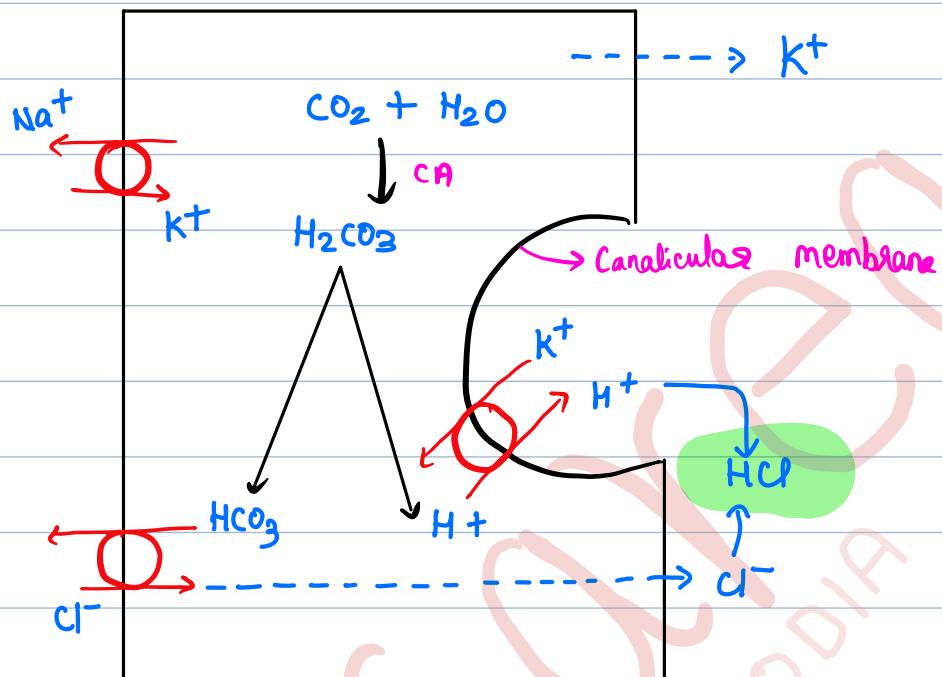
HCl Secretion

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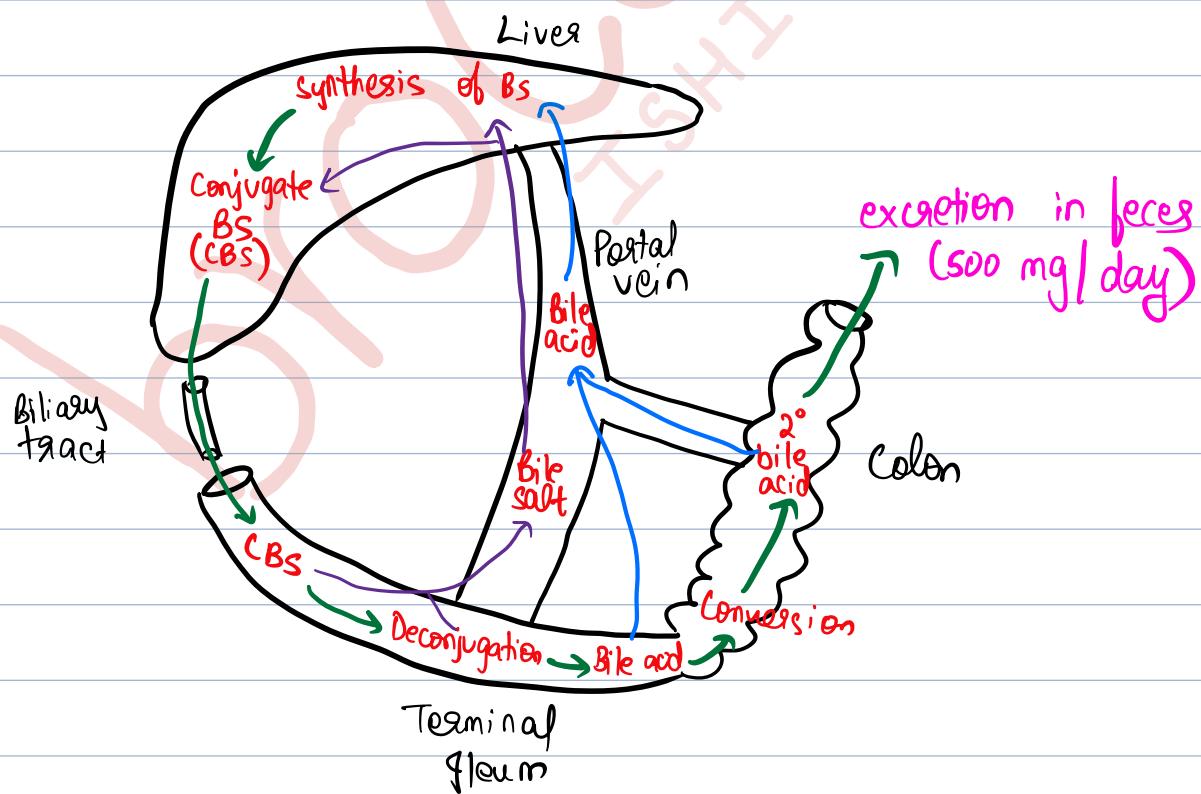
Parietal Cell

Gastric
Lumen

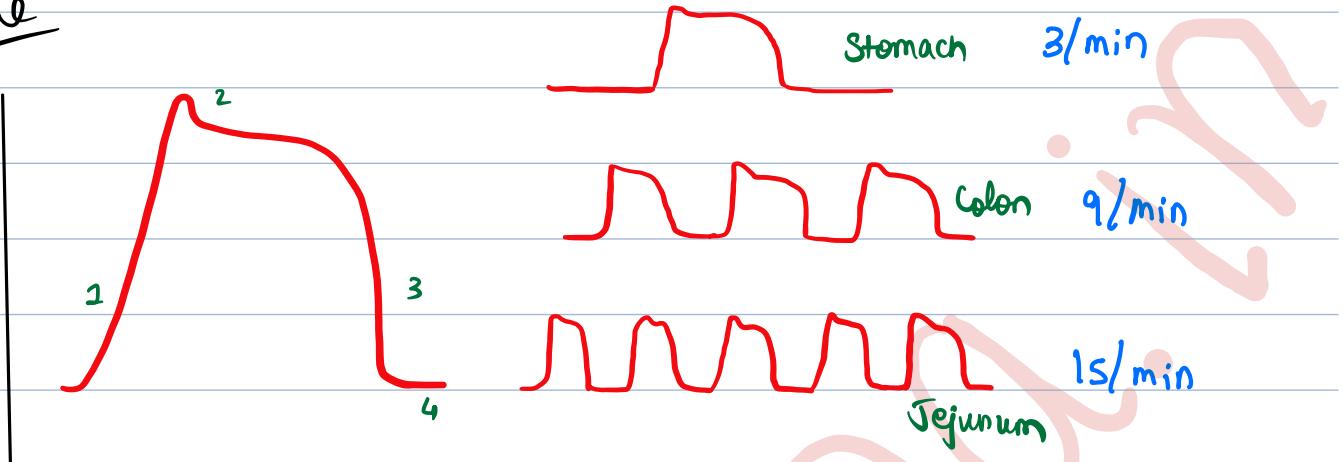


BS = bile salts

Enter hepatobiliary Circulation



Electrical slow wave



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