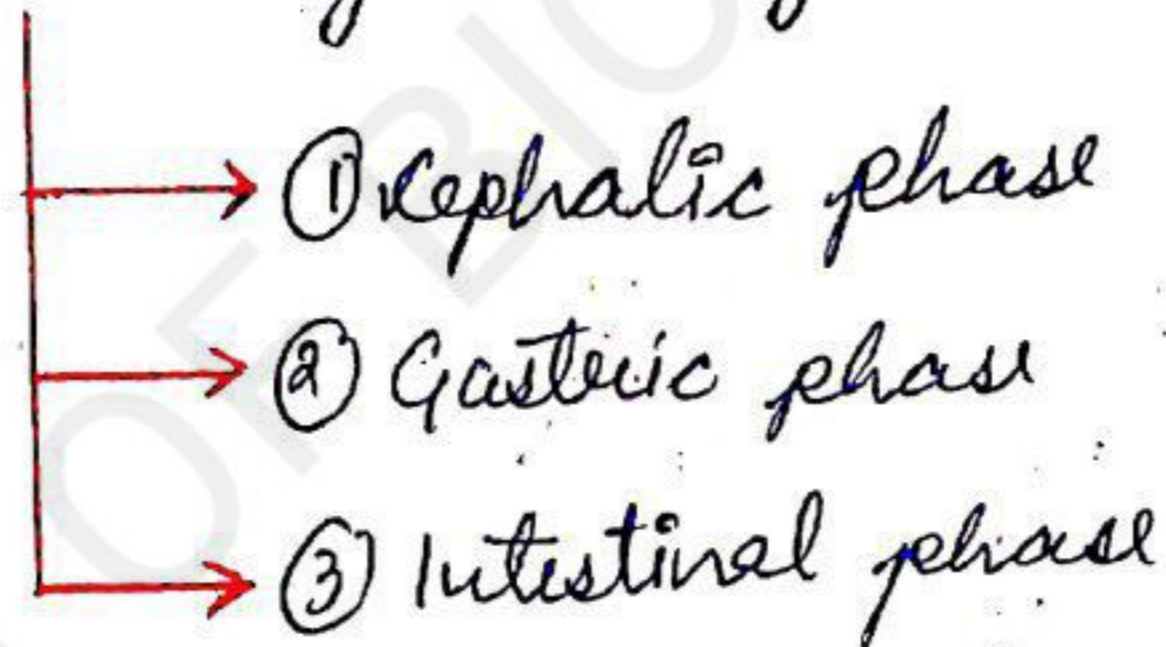


Regulation of Acid Production through PNS

- Acid production is regulated by the P.N.S.



[DEPTH OF BIOLOGY]

① Cephalic phase

- This phase begins before the food enters into the body merely by the sight, smell, Taste, Thought.

Secretion of

HCl → from parietal cells

Gastrin → from G cells [DEPTH OF BIOLOGY]

Pepsinogen → from peptic cells.

are stimulated by the efferent fibers of Vagus

- Anger increases gastric secretions while fear and depression decreases it.

* rate of secretion of gastric juice is high i.e. (500 ml/h) in this phase.

② Gastric Phase

* lesser secretion (200 ml/h) gastric juice till the time food stays in stomach.

↓
Food enters, Antrum expands, Gastrin is released from G-cells.

[DEPTH OF BIOLOGY]

↓
Gastrin secretion is also stimulated by the product of partial protease

③ Intestinal Phase

This phase starts when chyme moves from stomach to intestine

↓
This mainly exerts an Inhibitory effect on gastric secretions

↓
due to the following Mechanism

↓
Enterogastric reflex

[DEPTH OF BIOLOGY]

↓
Hormonal Mechanism

↓
Like different Hormone

↓
CCK, GIP, VIP

↓
Inhibit Gastric secretion

[DEPTH OF BIOLOGY]