- HCl (150-160 mEq/L),
- KCl (15 mEq/L),
- NaCl (small amounts),
- 4. Protection of the Stomach:
- Water (osmosis).
  ection of the Stomach:
  The stomach protect itself from its own aeld by producing alkaline mucus and having tight junctions between ells. Damage (e.g., by excessive aspirin or alcohol) can cause the acid to leak into the stomach lining, leading to mucosal damage.

**Factors That Stimulate Gastric Secretion** 

- **1.** Three Main Stimulants:
  - Acetylcholine: Triggers secretion of pepsinogen (protein-digesting enzyme), HCl, and mucus. 0
  - Gastrin: Hormone that mainly stimulates HCl secretion by parietal cells. 0
  - Histamine: Works with gastrin to stimulate HCl secretion. 0

**Pepsinogen and Pepsin Activation** 

**Stimulation of Gastric Acid Secretion** 

1. Parietal Cells:

2. ECICEN

- 0
- The only cells that secrete INIO
  Work closely with enterochromation like (ECL) cells.
  Dage
- Found near parietal cells. Ο
- Secrete histamine, which directly stimulates HCl secretion. Ο
- 3. Role of Gastrin:
  - Gastrin (from G cells in the pyloric glands) stimulates ECL cells to release histamine, which enhances HCl Ο secretion.

## **Pancreatic Secretion**

- 1. Dual Role:
  - Secretes digestive enzymes into the small intestine. 0

- Local tactile stimuli. 0
- Parasympathetic stimulation (e.g., pelvic nerves). 0
- Excessive stimulation may lead to frequent mucus-only bowel movements. •

## **Electrolyte Content**

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Contains moderate HCO3- to neutralle acidic waste products. **Freview from 18 Of Preview page**