

a) Gastric juices

- The muscle which controls the opening of the stomach is called the **cardiac sphincter**.
- The muscle which controls the closing of the stomach is called the **pyloric sphincter**.
- The stomach contains mainly two enzymes called pepsin and renin.
- Pepsin breaks down **protein into peptides**. Renin breaks down **caseinogen into casein**.
- The stomach produces hydrochloric acid. Hydrochloric acid **provides optimum pH for the enzymes to become activated**.
- **It also kills bacteria taken in with food**. The stomach is lined with mucus to **protect itself from the corrosive properties of hydrochloric acid**.

b) Churning

- Mechanical digestion also occurs in the stomach. The food is mixed by muscle movements of the walls of the stomach.
- This forms a paste known as **chyme**.

c) Temporary storage

- How long food remains in the stomach depends on the nature and physical state of the food.

4. Small intestines

a) Duodenum