



SISTEM PENCERNAAN MANUSIA

HUMAN DIGESTIVE SYSTEM

1 Mulut / Mouth

- Makanan dikunyah dan dipecahkan menjadi cebisan kecil.
Food is chewed and broken down into small pieces.
- Amilase liur mencernakan kanji kepada maltosa.
Salivary amylase digests starch into maltose.

2 Esofagus / Oesophagus

- Makanan ditolak melalui esofagus ke dalam perut melalui peristalsis.
Food is pushed through the oesophagus into the stomach through peristalsis.

3 Perut / Stomach

- Dinding perut merembeskan protease dan asid hidroklorik.
Walls of the stomach secrete protease and hydrochloric acid.
- Protease mencernakan protein kepada polipeptida.
Protease digests proteins into polypeptides.

6 Usus besar / Large intestine

- Air diserap semula di dalam usus besar (kolon).
Water is reabsorbed in the large intestine (colon).
- Makanan yang tidak tercerna dibuang daripada badan melalui dubur sebagai tinja.
Undigested food is expelled from the body through the anus as faeces.

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- Usus kecil merembeskan enzyme maltase dan protease.
The small intestine secretes enzymes maltase and protease.
- Maltosa $\xrightarrow{\text{Maltase}}$ Glukosa
Maltose $\xrightarrow{\text{Maltase}}$ Glucose
- Dipeptida $\xrightarrow{\text{Protease}}$ Asid amino
Dipeptide $\xrightarrow{\text{Protease}}$ Amino acid

4 Duodenum / Duodenum

- Amilase pankreas mencernakan kanji kepada maltosa.
Pancreatic amylase digests starch into maltose.
- Protease mencernakan polipeptida menjadi dipeptida.
Protease digests polypeptides into dipeptides.
- Lipase mencernakan lemak menjadi asid lemak dan gliserol.
Lipase digests fat into fatty acids and glycerol.

