

Chapter 10 - Food and the Digestive System

- 1=D, 2=E, 3=C, 4=B, 5=A, 6=D
- Liver – stores nutrients, pancreas – produces digestive enzymes.
- (a) Ingestion (b) digestion (c) absorption (d) assimilation (e) egestion.
- Mouth and stomach.
- Mouth, stomach and intestines.
- (a) Canines (b) sharp and pointed.

Knowledge and Understanding

- Mucus not thick enough and the acid attacks the lining of the stomach.
- True because the inner lining is highly infolded.
- Digestion – secreted digestive enzymes, absorption – highly folded one cell thick, has a rich blood supply and has lacteals.
- Through the bile duct and pancreatic duct.
- Bile – emulsifies fat. Pancreatic juice contains digestive enzymes.
- To absorb water.
- Produce vitamin B and K, digest cellulose, may have a role in the immune system.
- Fibre prevents constipation. Foods: bran, wholegrain bread and cereals, fresh fruit and vegetables.
- The respiratory system: takes in oxygen and releases carbon dioxide.
The digestive system: digests food into small molecules that can be absorbed into the blood vessels.
- To provide a short-term energy source.
- Reduce the ability to absorb nutrients if the villi are flattened.
- They may kill the bacteria in the large intestine.

Analyse and Interpret

- (a) An enzyme is a chemical made in a living cell which can speed up a chemical reaction without itself being changed.
(c) Enzyme was most effective at 37 degrees Celsius. It was less effective at 22 degrees Celsius and not very effective at 50 degrees Celsius.