

Follow-up Qs :

- What is the purpose of the mineral salts in the saliva? Keep pH around neutral (7) as the optimal pH for amylase to work.
- Why is there no further hydrolysis of starch in food in the stomach? Stomach acid denatures the salivary amylase so it can no longer hydrolyse any starch.
- Pancreatic amylase continues the digestion of starch once food passes into the small intestine. Should the salts secreted by the pancreas & intestinal lining be acidic / neutral / alkaline? Explain why.
Alkaline to neutralise stomach acid passing into the small intestine. This will allow the pancreatic amylase to function efficiently at optimal pH.
- What kind of enzyme is maltase?
Disaccharidase.
- Why is maltase described as a membrane-bound enzyme?
Not released into lumen of ileum, instead is part of the epithelial cell membranes lining the ileum.
- Name two other disaccharide sugars that are hydrolysed by membrane-bound disaccharidases, name the specific enzymes and the monosaccharide products for each.
Lactase: glucose + galactose.
Sucrase: sucrose → glucose + fructose