

Summary for Chapter 6 – Nutrition in Human

Environments of parts of alimentary canal

Part	pH	Digestive enzymes	Digestion	Nutrients
mouth	neutral	<ul style="list-style-type: none"> Salivary amylase (saliva) 	Starch → maltose	Carbohydrates
stomach	acidic (HCl)	<ul style="list-style-type: none"> Pepsin (gastric juice) 	Protein → polypeptides	Protein
small intestine	alkaline (bile)	<ul style="list-style-type: none"> Pancreatic amylase Intestinal maltase Intestinal lactase Intestinal sucrase Pancreatic trypsin Intestinal peptidase Bile (emulsification) Pancreatic lipase Intestinal lipase 	Starch → maltose Maltose → glucose Lactose → glucose + galactose Sucrose → glucose + fructose Protein → polypeptides Polypeptides → amino acid Large fat molecule → tiny fat globules Fat → fatty acid + glycerol Fat → fatty acid + glycerol	Carbohydrates Protein Fats

Secretions of parts of alimentary canal

Part	Source	Secretion	Contents
mouth	Salivary gland	Saliva (via salivary duct)	<ul style="list-style-type: none"> Salivary amylase
stomach	Gastric gland	Gastric juice	<ul style="list-style-type: none"> Pepsin Hydrochloric acid
pancreas	Pancreas	Pancreatic juice (via pancreatic duct)	<ul style="list-style-type: none"> Pancreatic amylase Pancreatic lipase Pancreatic trypsin
liver	Liver	Bile (stored in gall bladder, via bile duct)	
small intestine	Intestinal gland	Intestinal juice	<ul style="list-style-type: none"> Intestinal maltase Intestinal lactase Intestinal sucrase Intestinal peptidase Intestinal lipase