

Gland (organ)	Enzyme	Action
Salivary Glands	Amylase	Polysaccharides ----> Disaccharides
Stomach	HCl Pepsinogen Intrinsic Factor	Needed for activating pepsinogen with HCl ----> Pepsin Polysaccharides ----> Disaccharides Needed for absorption of vitamin B12
Pancreas	Amylase Lipase Trypsinogen Chymotrypsinogen Bicarbonate	Polysaccharides ----> Disaccharides Lipids ----> Fatty acids & glycerol Protein ---> Dipeptides Protein ---> Dipeptides Neutralizes chyme
Liver	Bile Other functions	Emulsifies fatty acids and glycerol Glycogen <-----> Glucose Proteins & Fats ----> Glucose Fatty acid oxidation -----> Energy Deamination ----> Oxidation + urea
Small Intestine (Brush border enzymes)	Pepsidase Sucrase Maltase Lactase Lipase Enterokinase	Dipeptides Disaccharides Pepsids ---> Amino acids Sucrose ---> Glucose & fructose Maltose ---> Glucose & glucose Lactose ---> Glucose & galactose Lipids -----> Fatty acids & glycerol Trypsinogen ----> Trypsin
<u>Metabolism of end products</u>		
Glucose	Oxidation for energy, needed for RNA synthesis, Glycogenesis (glycogen synthesis) for storage, Lipogenesis (fat synthesis) for storage.	
Fatty Acids	Oxidation for energy, synthesis of triglycerides, phospholipids, lipoproteins, cholesterol, stored as adipose tissue.	
Glycerol	Converted to glucose	
Amino Acids	Oxidised for energy, cell structure, enzymes, hormones, antibodies, conversion to glucose or fats	
<u>Know these terminology</u>		
Glycolysis	Breakdown of glucose	
Glycogenesis	Synthesis of glycogen from glucose	
Glycogenolysis	Breakdown of glycogen to glucose	
Gluconeogenesis	Synthesis of glycogen from non carbohydrate source (fats and proteins)	
Lipogenesis	Synthesis of fats	
Lipolysis	Breakdown of fats	