**DIGESTIVE SYSTEM – NUTRIENTS AND ORGANS**

 **ORGANS CARBOHYDRATES PROTEINS LIPIDS (FATS)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  Disaccharides |  Starch |   |  |
| MouthType of Digestion:Mechanical or Chemical or both?BOTHEnzyme: amylaseOther: saliva | Mechanical only | Mechanical & chemical.Product of chemical digestion in the mouth: DISACCHARIDES | Mechanical only | Mechanical only |
| Stomach Type of digestion:Enzyme:Other: | Mechanical only | Mechanical only | Mechanical and ChemicalEnzyme: PepsinOther: HClProduct: Smaller Proteins | Mechanical only |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Small IntestineType of digestion:Both Mech & ChemEnzymes:Produced in Small Intestines:Brush Border enzymes: DextrinaseGlucoamylaseLactaseSucrase MaltaseAminopeptidaseCarboxypeptidaseDipeptidaseEnzymes Produced in Pancreas delivered to small intestine:Pancreatic AmylaseTrypsinChymotrypsinCarboxypepsidasesLipaseOther: Bile – (not an enzyme) Produced in liver, delivered to small intestine. | Enzyme:LactaseSucraseMaltaseProduct: Glucose | Enzyme:Pancreatic AmylaseDextrinaseGlucoamylaseProduct: Glucose | Enzyme:TrypsinChymotripsinCarboxypeptidasePeptidase Product: Amino Acids | Enzyme:Pancreatic lipaseProduct: Fatty Acids & Glycerol |
| Small Intestine | CarbohydratesDisaccharides | CarbohydratesStarch | Proteins | Lipids (Fats) |

ACCESSORY ORGANS

 ORGANS CARBOHYDRATES PROTEINS LIPIDS (FATS)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Disaccharides |  Starch |  |  |
| Liver & Gall BladderEnzyme:Other: Bile |  |  |  | Bile acts as an emulsifier (detergent) to break down fats into smaller fat droplets. |
| PancreasEnzymes:Pancreatic AmylaseTrypsinChymotrypsinCarboxypepsidasesLipase | Enzyme:Product: | Enzyme: Pancreatic AmylaseDextrinaseGlucoamylaseProduct: Disaccharides | Enzyme:TrypsinChymotripsinCarboxypeptidasePeptidase Product: Amino Acids | Enzyme: LipaseBreaks down fat droplets.Product: Fatty Acids & Glycerol |