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| Biological molecule | Where digested? | Enzymes involved | Process of absorption |
| Carbohydrates | MouthSmall intestine/ ileum | **Carbohydrases**Salivary amylase hydrolyses alternate glycosidic Pancreatic amylase bonds in starch molecules to maltoseMaltase membrane-bound disaccharidase on cell  surface of ileum epithelial cells. Sucrose hydrolyses single glycosidic bond in Lactase disaccharide to form monosaccharide | Co-transport of glucoseDiffusion |
| Lipids | Small intestine | Bile salts from Liver (not an enzyme) emulsifies large fat droplets to small droplets called micelles. Increases surface area for lipases to act on**Lipases**Produced in pancreas and hydrolyse ester bonds in triglycerides to fatty acids and monoglycerides. | * **diffuse** across the cell-surface membrane into the epithelial cells.
* They are then transported to the **endoplasmic reticulum** where they are recombined to form **triglycerides**. In the ER and Golgi apparatus they associate with cholesterol and lipoproteins which become surrounded by a protein coat to form structures called **chylomicrons.**
* The chylomicrons are **water soluble** lipoproteins and are too big to pass into blood capillaries but can enter the large pores of the **lacteals**. Thus the chylomicrons move out of epithelial cell by **exocytosis** and enter the lymphatic capillaries called l**acteals.**
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| Proteins | StomachSmall intestine/ ileum | **Proteases*** **Endopeptidases**: hydrolyse peptide bonds between specific amino acids in the middle of a polypeptide
* **Exopeptidases**: hydrolyse peptide bonds between specific amino acids at the ends of a polypeptide (produced by pancreas)
* **Dipeptidases**: hydrolyse the peptide bond in a dipeptide (membrane-bound on cell surface of ileum epithelial cells)
 | Co-transport of amino acidsDiffusion |

