Chemical Digestion

Where Process Occurs	Mouth/Duodenum — Duodenum — Duodenum
Steps in Breakdown	**Starches** ----------> **Polysaccharides** ----------> **Disaccharides** ----------> **Monosaccharides**
Enzymes Involved	↑ *Amylase* — ↑ *Polysaccharases* — ↑ *Disaccharases* *(Lactase, sucrase, maltase)*
Where Enzymes are Produced	↑ ***Salivary Glands*** ***Pancreas*** — ↑ ***Pancreas*** ***Intestinal Glands*** — ↑ ***Pancreas*** ***Intestinal Glands***
	Stomach — Duodenum — Duodenum
	Proteins ----------> **Polypeptides** ----------> **Dipeptides** ----------> **Amino acids**
	↑ *Pepsin* (Pepsinogen + HCl) ↑ ***Gastric Glands*** — ↑ *Proteases (Trypsins)* ↑ ***Pancreas*** — ↑ *Proteases (Erepsins)* ↑ ***Pancreas***
	Duodenum
	Lipids ----------> **Fatty Acids + Glycerol**
	↑ *Lipase* + *Bile* ↑ ***Pancreas*** ↑ ***Liver***
	Duodenum — Duodenum
	Nucleic Acids ----------> **Nucleotides** ----------> **Sugar + Nitrogenous Bases**
	Nucleases ↑ ***Pancreas*** ***Intestinal Glands*** — *Nucleases* ↑ ***Pancreas*** ***Intestinal Glands***

Note: All Reactions involve **Hydrolysis** - Molecules are split apart by the addition of water molecules.