

## KEY – summary of digestive enzymes

<b>Enzyme</b>	<b>Where prod.</b>	<b>Where active</b>	<b>hydrolyzes</b>	<b>Optimum pH</b>
Salivary amylase	Salivary glands	Mouth	Starch + H <sub>2</sub> O → maltose	7
Pancreatic amylase	Pancreas glands	Small intestine	Starch + H <sub>2</sub> O → maltose	8.5
Maltase	Intestinal glands	Small intestine	Maltose + H <sub>2</sub> O → glucose (absorbed by villi)	8.5
Pepsin	Gastric glands	Stomach	Protein + H <sub>2</sub> O → peptides	2-3
Trypsin	Pancreas glands	Small intestine	Protein + H <sub>2</sub> O → peptides	8 – 8.5
Peptidases	Intestinal glands	Small intestine	Peptides + H <sub>2</sub> O → amino acids	8.5
Lipase	Pancreas glands	Small intestine	Fat + H <sub>2</sub> O → glycerol + fatty acids	8.5
Nucleases	Intestinal glands	Small intestine	Nucleic acids + H <sub>2</sub> O → nucleotides	8.5
<i>Lactase</i>	<i>Intestinal glands</i>	<i>Small intestine</i>	<i>Lactose + H<sub>2</sub>O → glucose + galactose</i>	<b>8.5</b>

**Digestive hormones diagram:** In text on page 220, figure 12.7.