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TABLE 25.1	Major Secretions of the Gastric Glands		
Secretory Cells	Secretion	Function	
Mucous neck cells	Mucus	Protects mucosa from HCI and enzymes	
Parietal cells	Hydrochloric acid	Activates pepsin and lingual lipase; helps liquefy food; reduces dietary iron to usable form (Fe ²⁺); destroys ingested pathogens	
	Intrinsic factor	Enables small intestine to absorb vitamin B ₁₂	
Chief cells Pepsinogen Converted to		Converted to pepsin, which digests protein	
	Gastric lipase	Digests fat	
Enteroendocrine cells	Gastrin	Stimulates gastric glands to secrete HCl and enzymes; stimulates intestinal motility; relaxes ileocecal valve	
	Serotonin	Stimulates gastric motility	
	Histamine	Stimulates HCl secretion	
	Somatostatin	Inhibits gastric secretion and motility; delays emptying of stomach; inhibits secretion by pancreas; inhibits gallbladder contraction and bile secretion; reduces blood circulation and nutrient absorption in small intestine	
	Gut-brain peptides	Various roles in short- and long-term appetite regulation and energy balance	
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		TABLE 25.2	Exocrine Secretions of the Pancreas		
	Secretion	Function			
		Sodium bicarbonate	Neutralizes HCI		
	Zymogens	Converted to active digestive enzymes after secretion			
	Trypsinogen	Becomes trypsin, which digests protein			
	Chymotrypsinogen	Becomes chymotrypsin, which digests protein			
	Procarboxypeptidase	Becomes carboxypeptidase, which hydrolyzes the terminal amino acid from the carboxyl (–COOH) end of small peptides			
	Enzymes				
	Pancreatic amylase	Digests starch			
	Pancreatic lipase	Digests fat			
	Ribonuclease	Digests RNA			
		Deoxyribonuclease	Digests DNA		



















