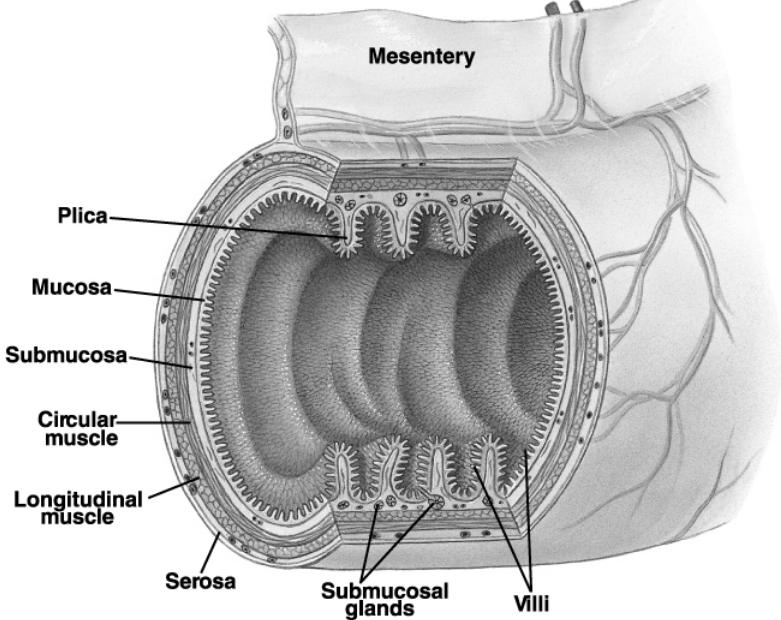
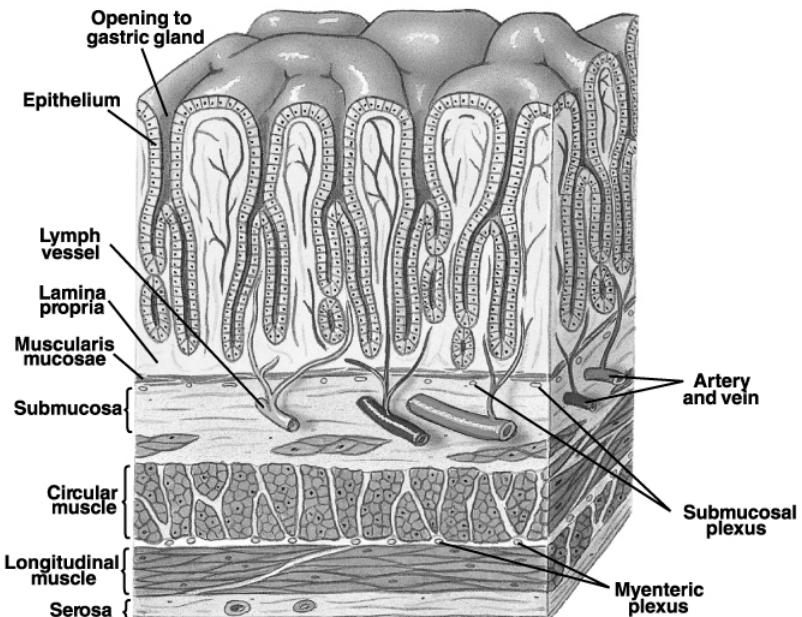
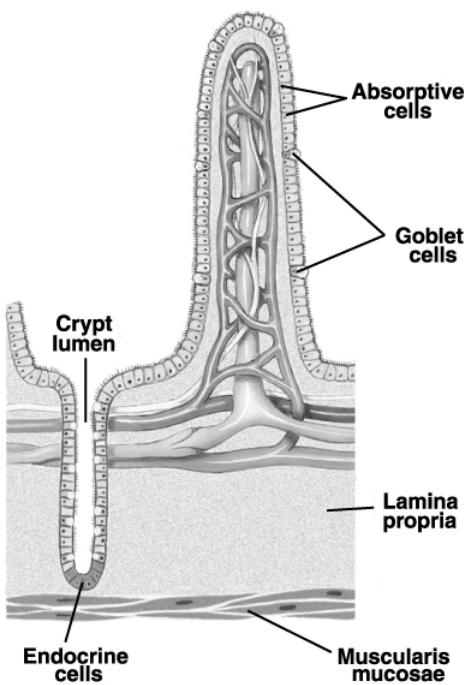
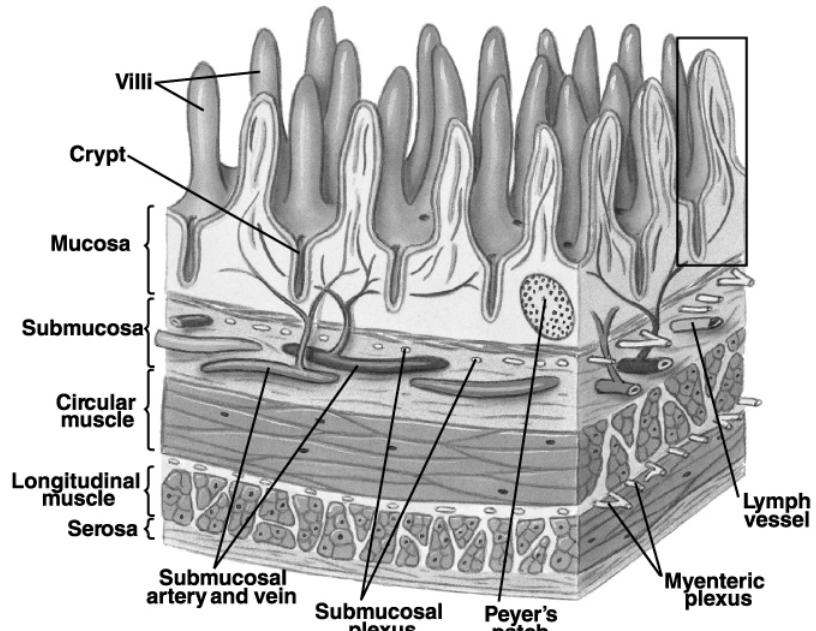
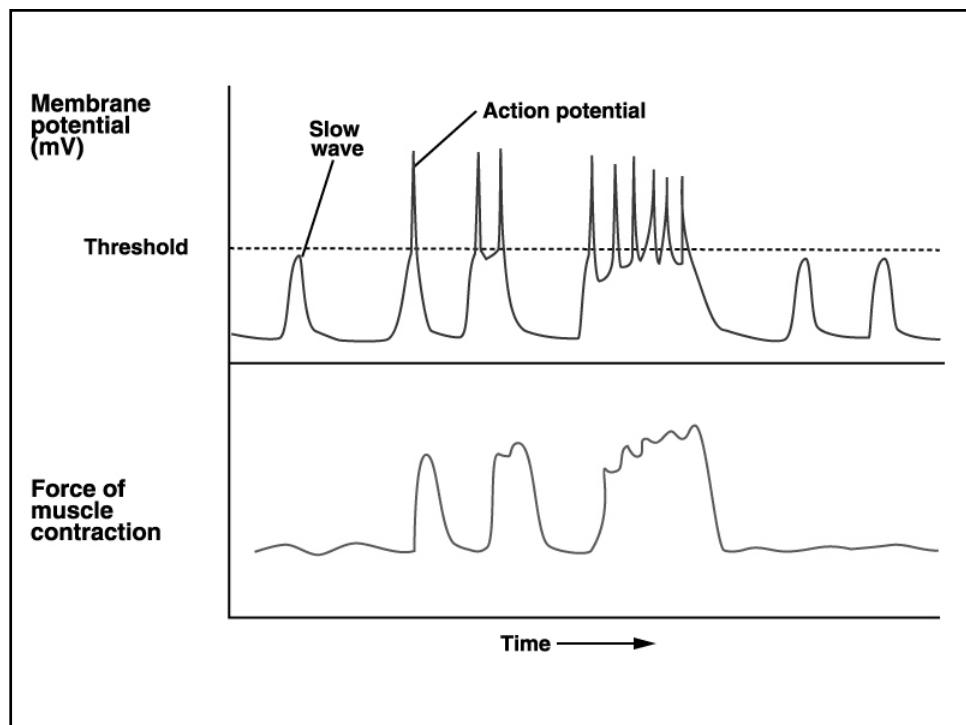
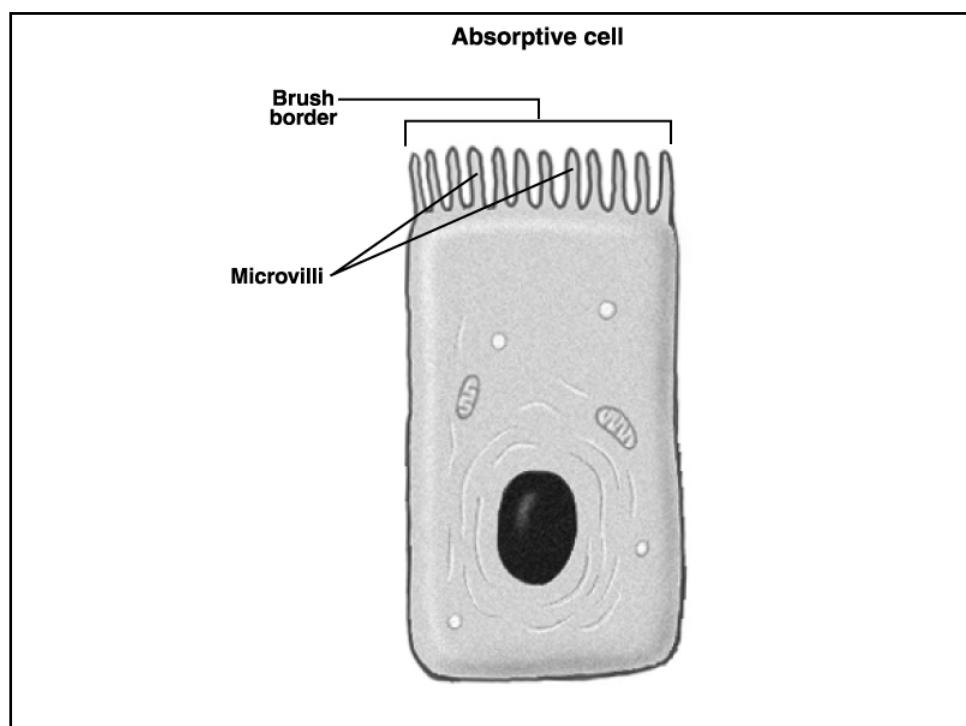


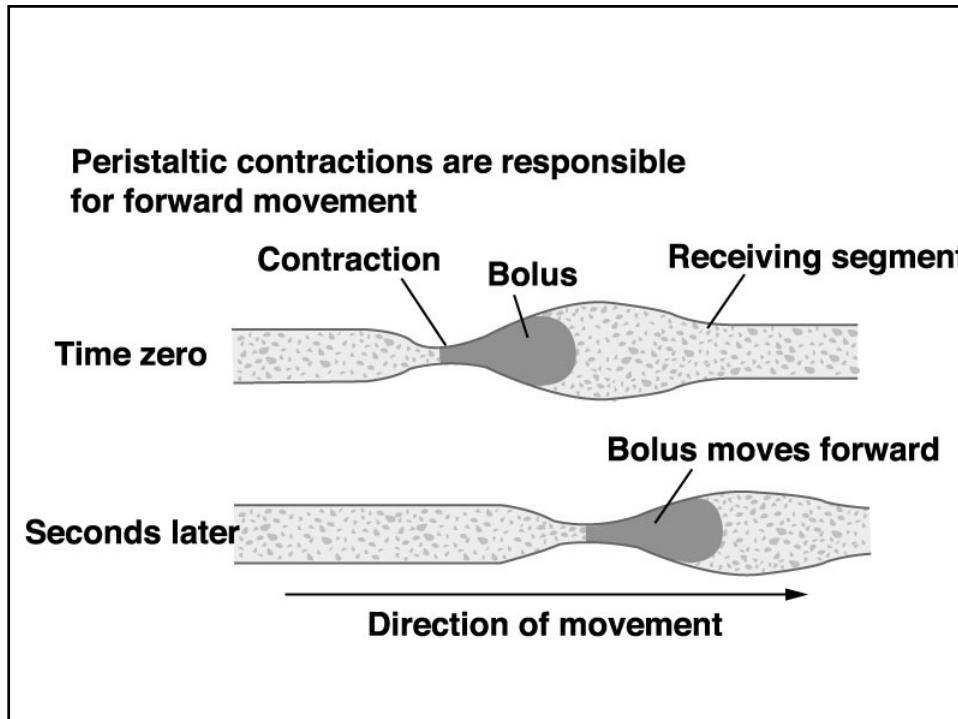
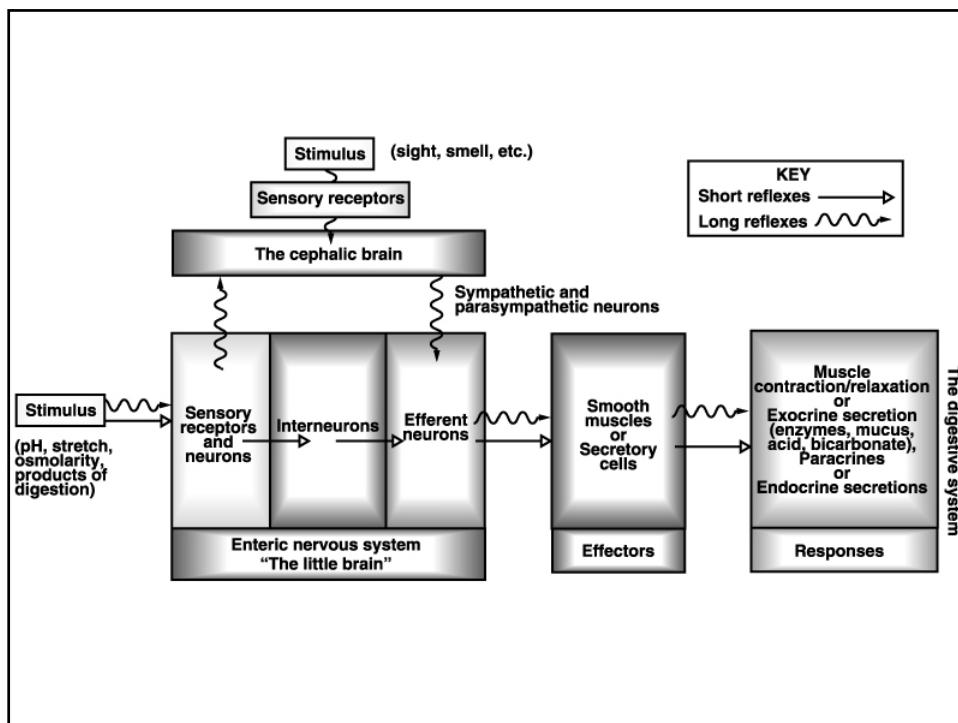
In the stomach, surface area is increased by invaginations called gastric pits.

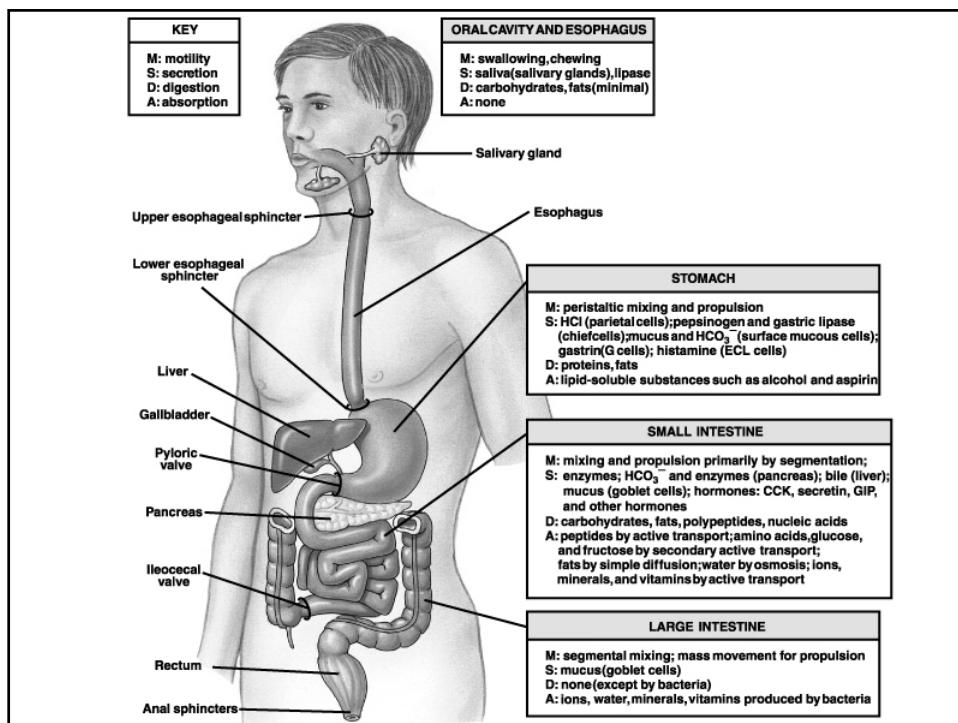
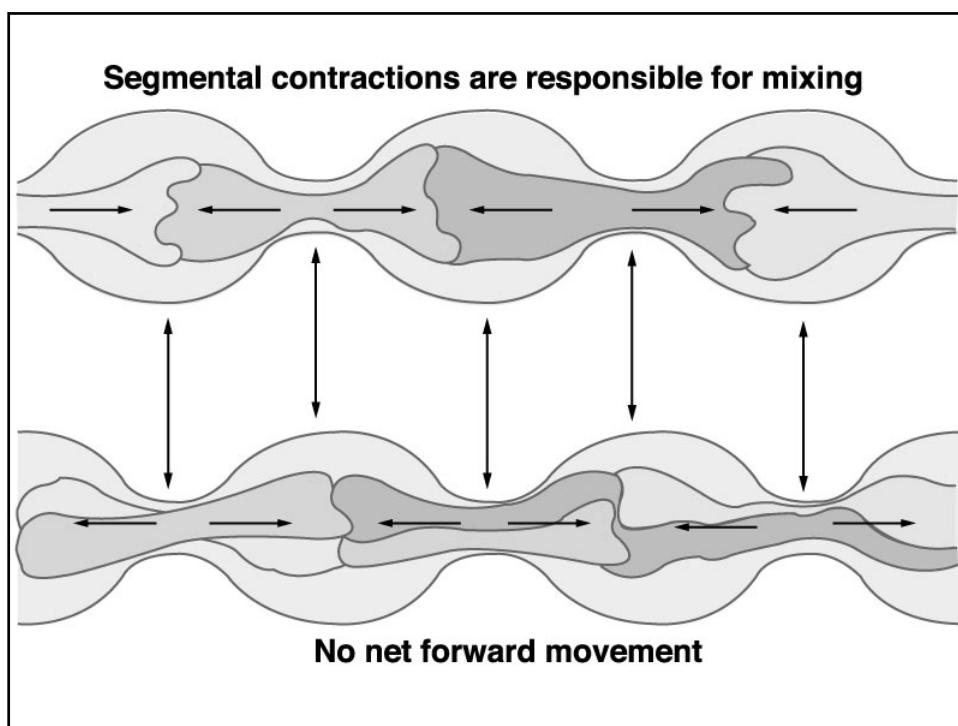


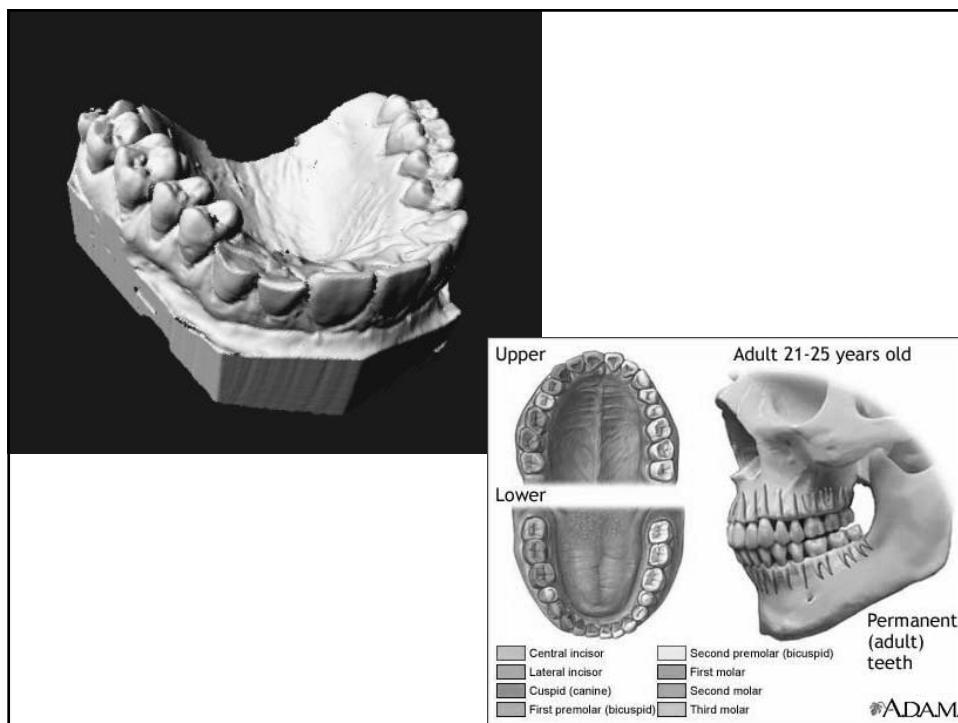
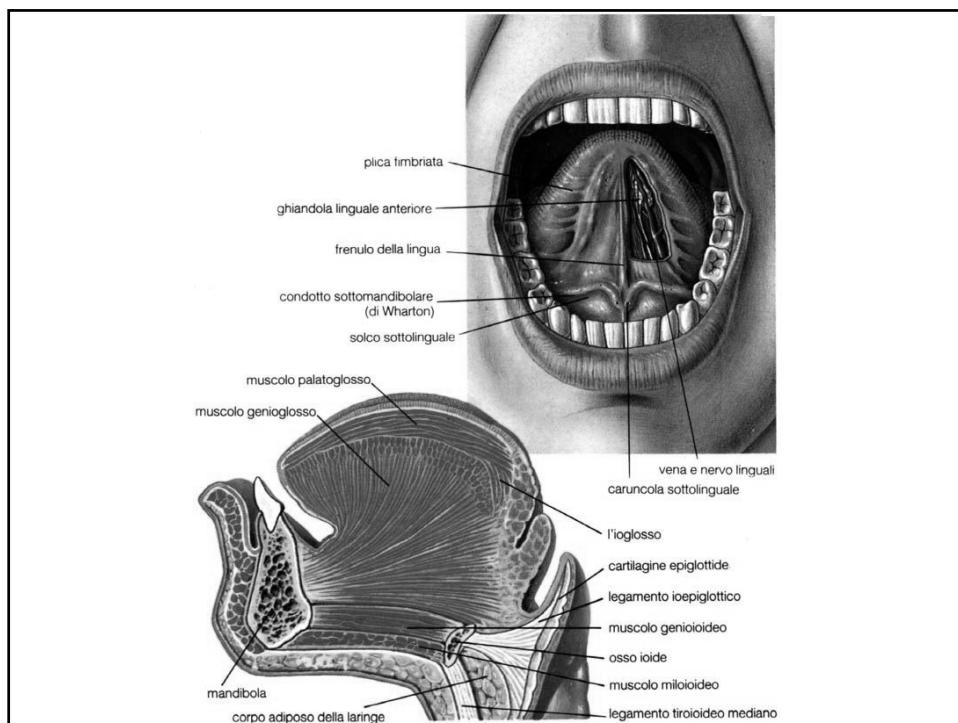
Intestinal surface area is enhanced by finger-like villi.

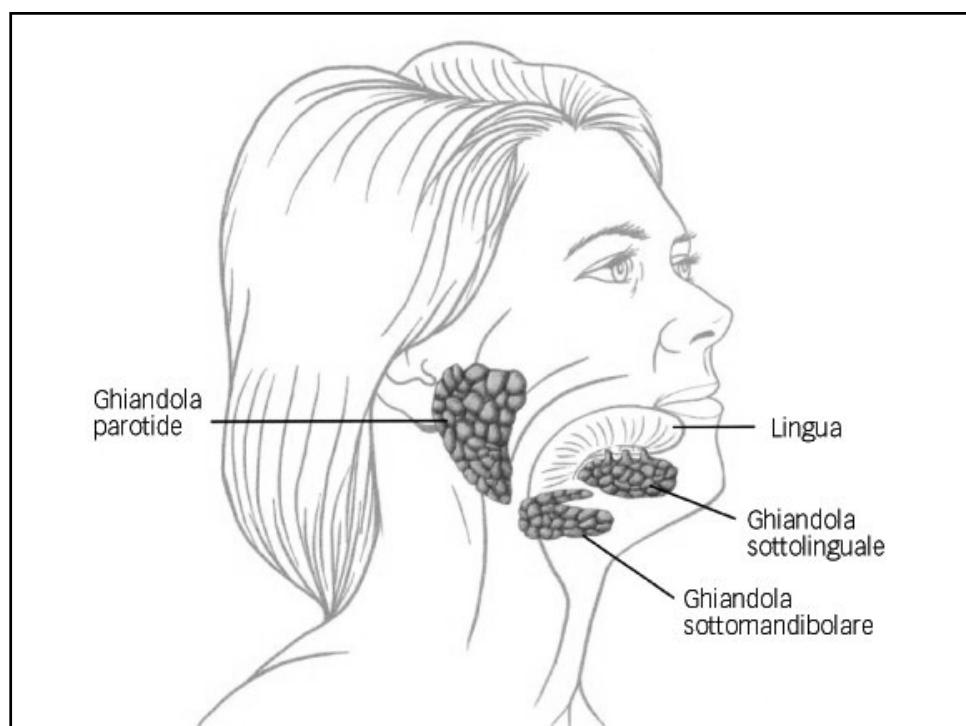
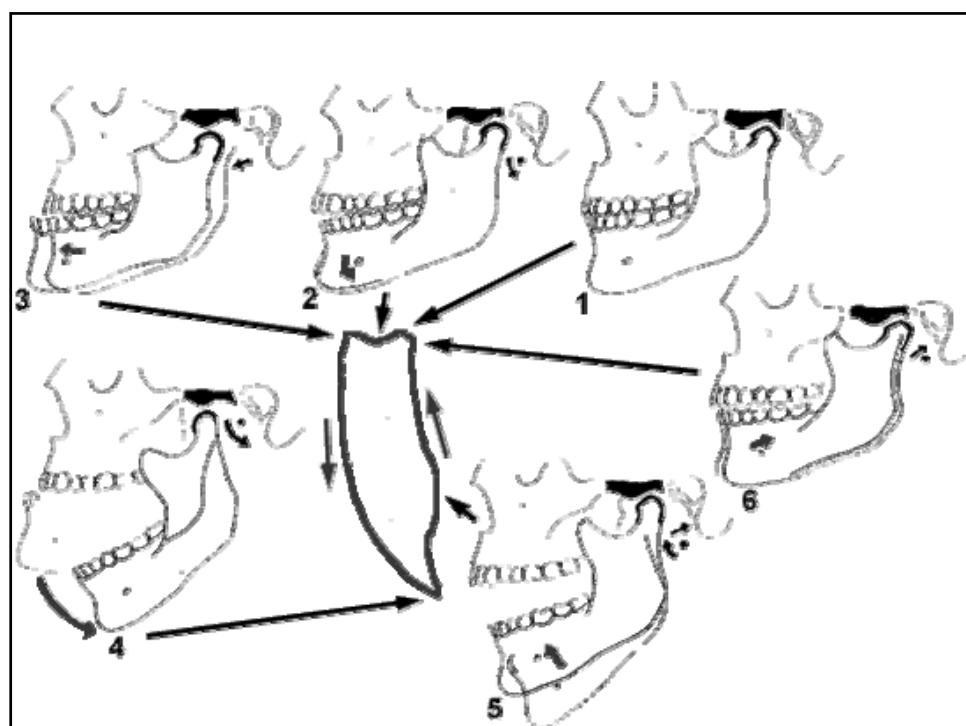


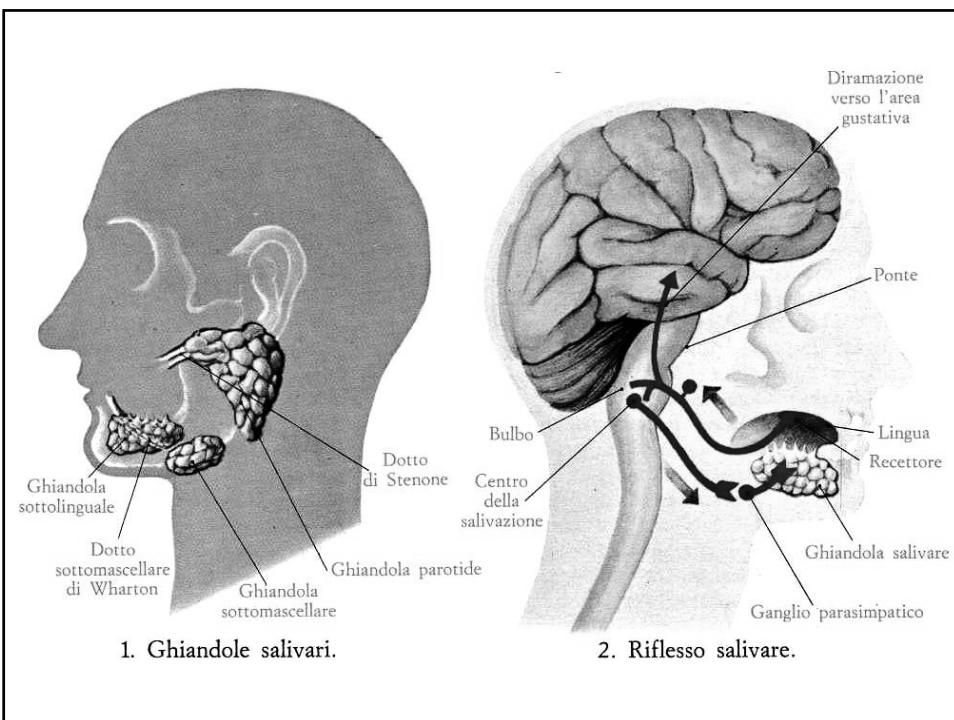






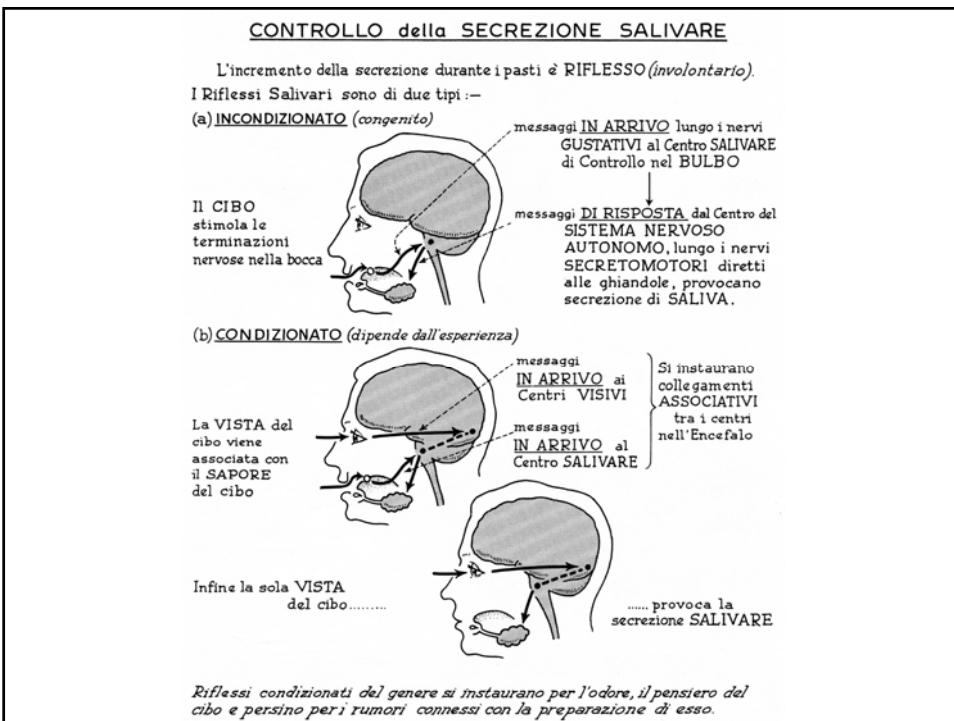




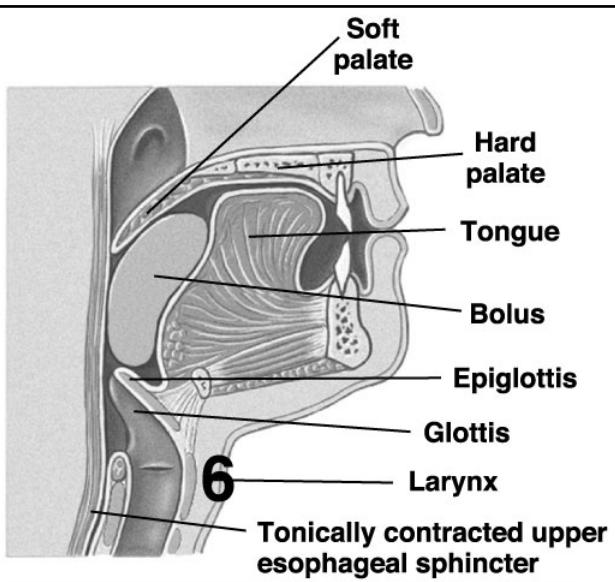


1. Ghiandole salivari.

2. Riflesso salivare.

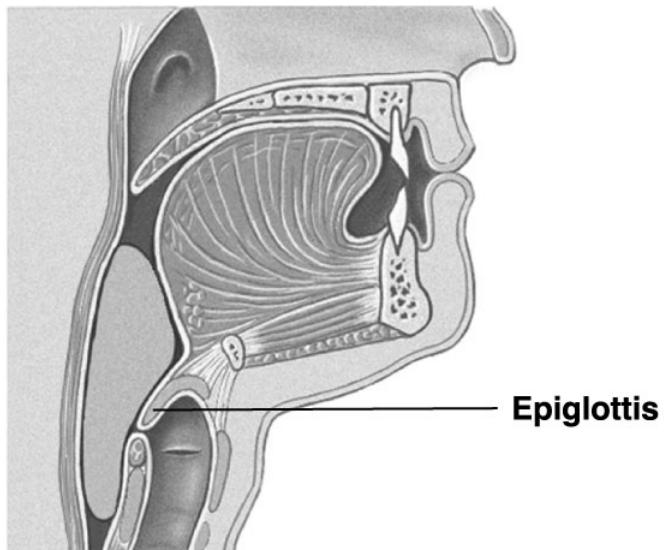


Step 1



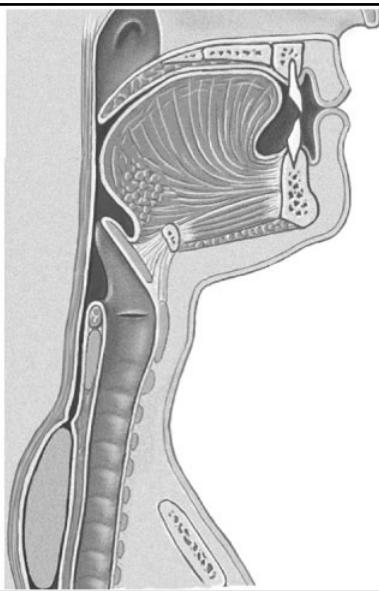
1. Tongue pushes bolus against soft palate and back of mouth, triggering swallowing reflex.

Step 2

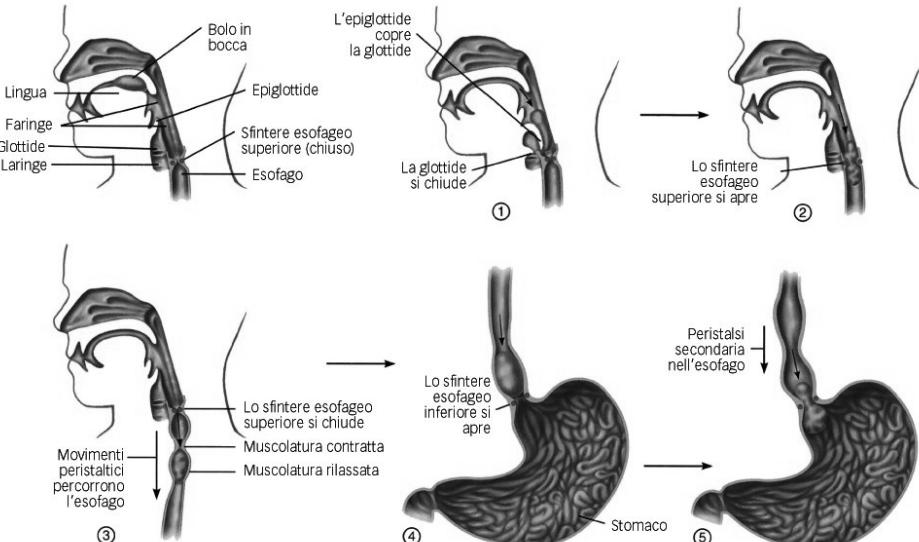


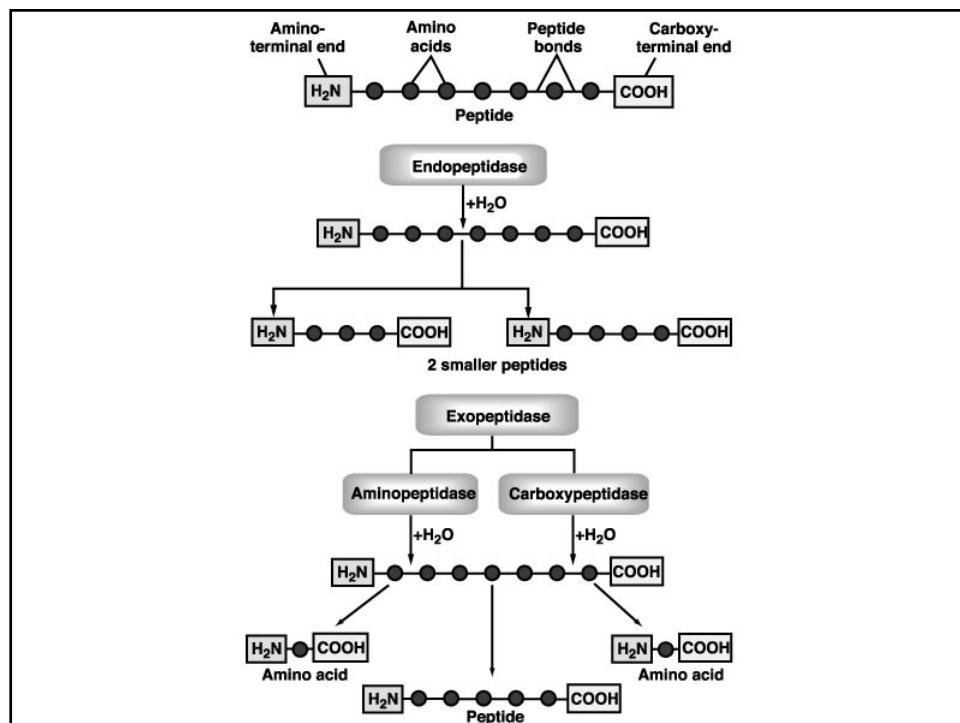
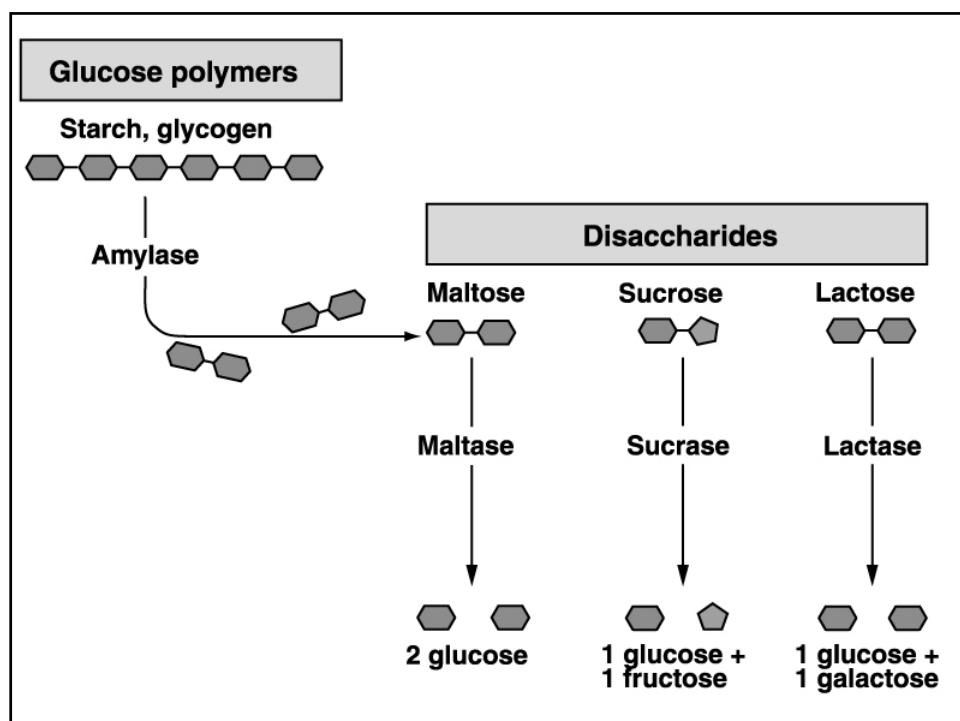
2. Upper esophageal sphincter relaxes while epiglottis closes to keep swallowed material out of the airways.

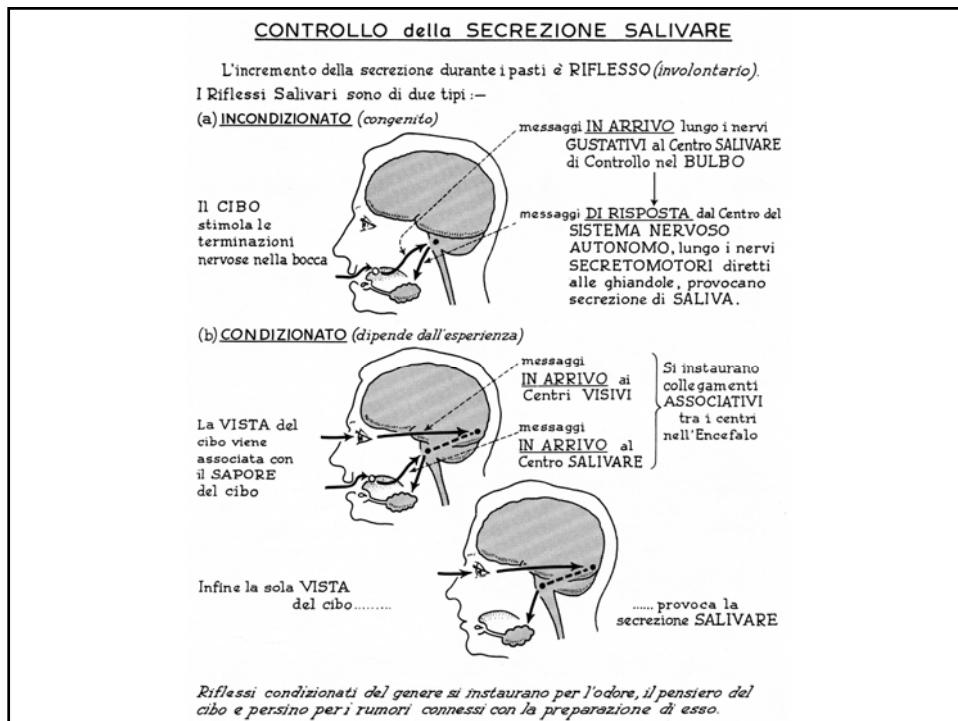
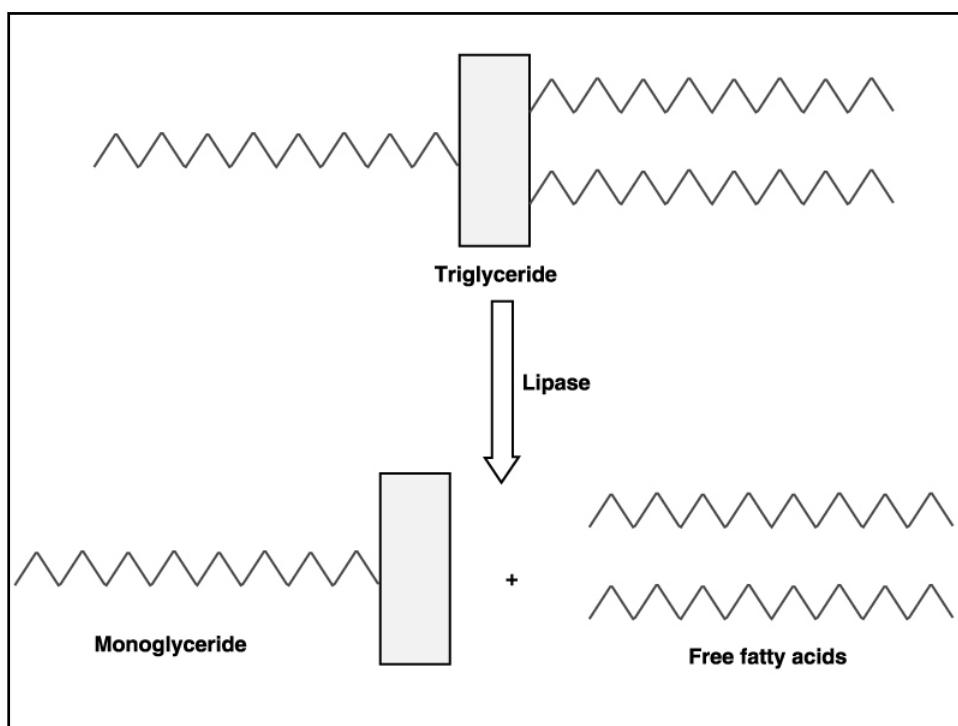
Step 3



3. Food moves downward into the esophagus, propelled by peristaltic waves and aided by gravity.







The diagram illustrates the structure of the stomach. On the left, a schematic of the human torso shows the location of the stomach. An arrow points from the stomach area to a detailed histological drawing of the mucosal lining. This drawing shows the lumen of the stomach at the top, followed by several layers of epithelial cells. Within these layers, various types of cells are identified with arrows pointing to them:

- Mucous neck cell**: Secrete mucus.
- Parietal cells**: Secrete gastric acid (HCl) and intrinsic factor.
- Enterochromaffin-like cell**: Secrete histamine.
- Chief cells**: Secrete pepsinogen and gastric lipase.
- D cells**: Secrete somatostatin.
- G cells**: Secrete gastrin.

Below this histological view is a table summarizing the secretions of these different cell types:

Source	Substance Secreted	Stimulus for Release	Function
Mucous neck cell	Mucus	Tonic secretion; increased with irritation of mucosa	Physical barrier between lumen and epithelium
	Bicarbonate	Secreted with mucus	Buffers gastric acid to prevent damage to epithelium
Parietal cells	Gastric acid (HCl)	Acetylcholine, gastrin, histamine	Activates pepsin; kills bacteria
	Intrinsic factor		Complexes with vitamin B ₁₂ to permit absorption
Enterochromaffin-like cell	Histamine	Acetylcholine, gastrin	Stimulates gastric acid secretion
	Chief cells	Pepsin(ogen) Gastric lipase	Digests proteins Digests fats
D cells	Somatostatin	Acid in the stomach	Inhibits gastric acid secretion
G cells	Gastrin	Acetylcholine, peptides, and amino acids	Stimulates gastric acid secretion

This table summarizes the components and actions of the four main digestive juices:

Succo	Enzimi	Substrato	Prodotti finali
Saliva	Ptialina	Amido	Destrine maltosio
Succo gastrico	Pepsina	Proteine	Proteasi, peptoni
	Caglio	Caseino-geno	Caseina
	Tripsina	Proteine	Ammino-acidi
Succo pancreatico	Lipasi	Grassi	Ac. grassi, glicerina
	Amilasi	Amido	Maltosio
	Disaccarasi	Disaccaridi	Monosaccaridi
	Enterochinasi	Tripsino-geno	Tripsina
Succo enterico	Peptidasi	Poli-peptidi	Ammino-acidi
	Amilasi	Amido	Maltosio
	Lipasi	Grassi	Ac. grassi, glicerina

