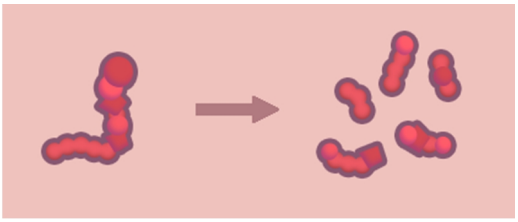
4.2.6

The stomach

THE GASTRIC GLANDS

The stomach has gastric glands integrated in its walls. These glands secrete highly acidic gastric juices that dissolve nutrients. Gastric juices contain hydrochloric acid, which acidifies food and destroys some of the bacteria in the stomach. They also contain many enzymes that trigger chemical reactions.



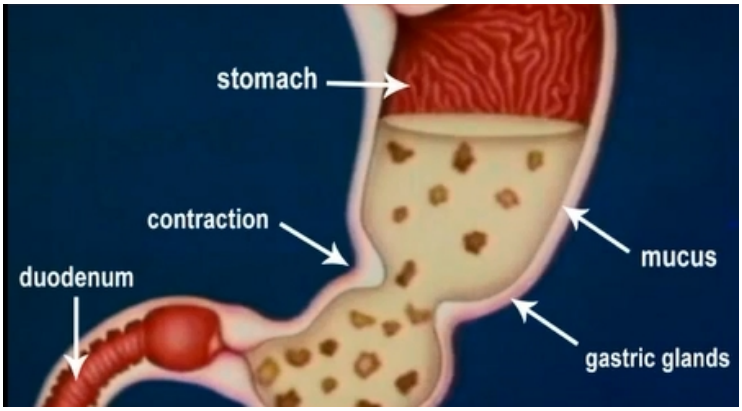
To give you an example, pepsin breaks down proteins into small chains of amino acids called peptides.

There is also gastric lipase, whose main role is to attack complex lipids and transform them into simpler lipids.

A gel-like substance called mucus covers the stomach wall. This mucus protects the stomach against the acidity of gastric juices, otherwise it would digest itself! The burning feeling in your throat after vomiting is due to the acidity of gastric juices.

MIXING

The stomach wall can contract and this mechanical action is called mixing. These contractions ensure that the bolus of food is mixed thoroughly with the gastric juices.



The bolus of food is transformed in a semi-fluid mass called chyme. This is highly acidic and is where some of the complex nutrients are transformed into simpler ones. The content of the stomach is continuously emptied out into the duodenum. In certain cases, chyme can remain in the stomach for 3 or 4 hours.

GASTRIC GLANDS IN DIGESTIX

In DIGESTIX, the ‘gastric glands’ and ‘mixing’ are both digestive pieces associated with the stomach. Gastric glands have two targets in the game. They transform proteins into small chains of amino acids, and complex lipids into simpler lipids.