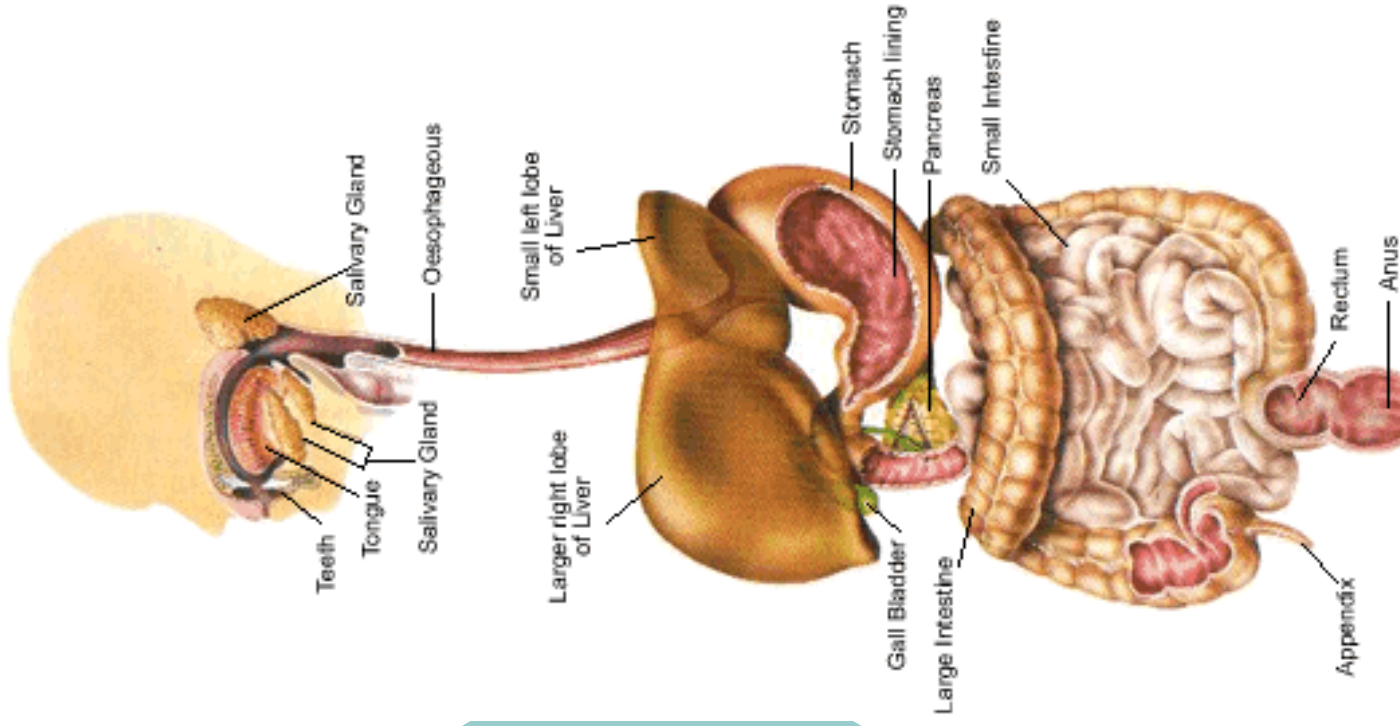


THE DIGESTIVE SYSTEM

by
Geoffrey Axiak
CLINICAL NUTRITION NURSE

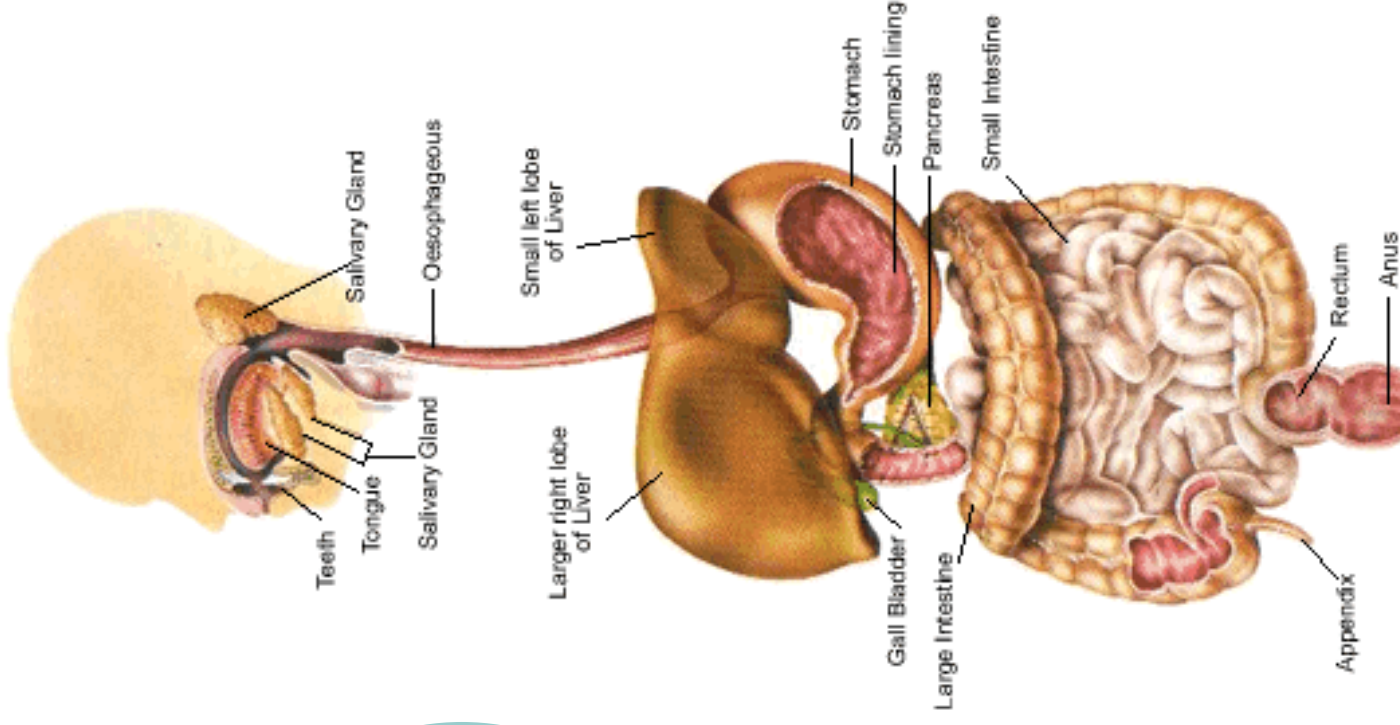


The Digestive System

The Digestive System

Food provides us with fuel to live, energy to work and play, and the raw materials to build new cells. All the different varieties of food we eat are broken down by our digestive system and transported to every part of our body by our circulatory system.

The main part of the digestive system is the digestive tract. This is like a long tube, some nine metres in total, through the middle of the body. It starts at the mouth, where food and drink enter the body, and finishes at the anus, where leftover food and wastes leave the body.



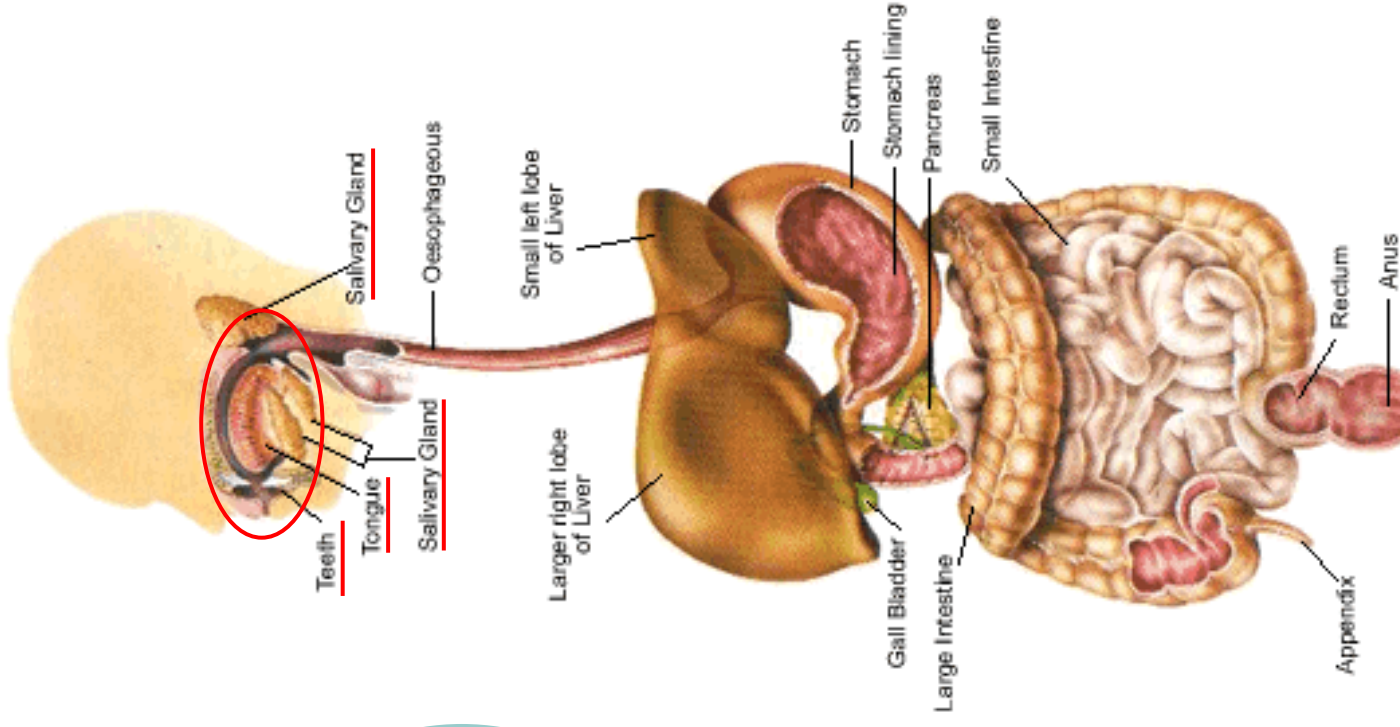
The Digestive System

The Mouth

Teeth bite off and chew food into a soft pulp that is easy to swallow. Chewing mixes the food with watery saliva, from 6 salivary glands around the mouth and face, to make it moist and slippery.



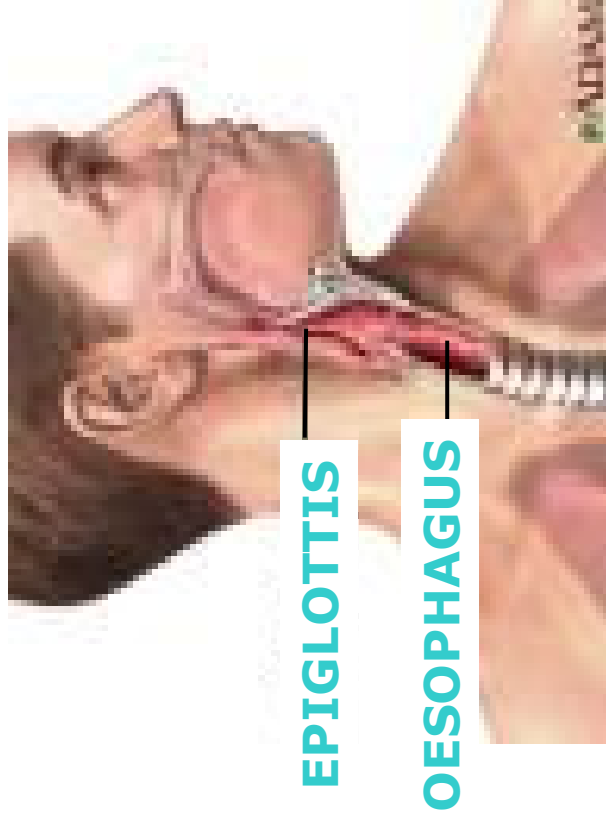
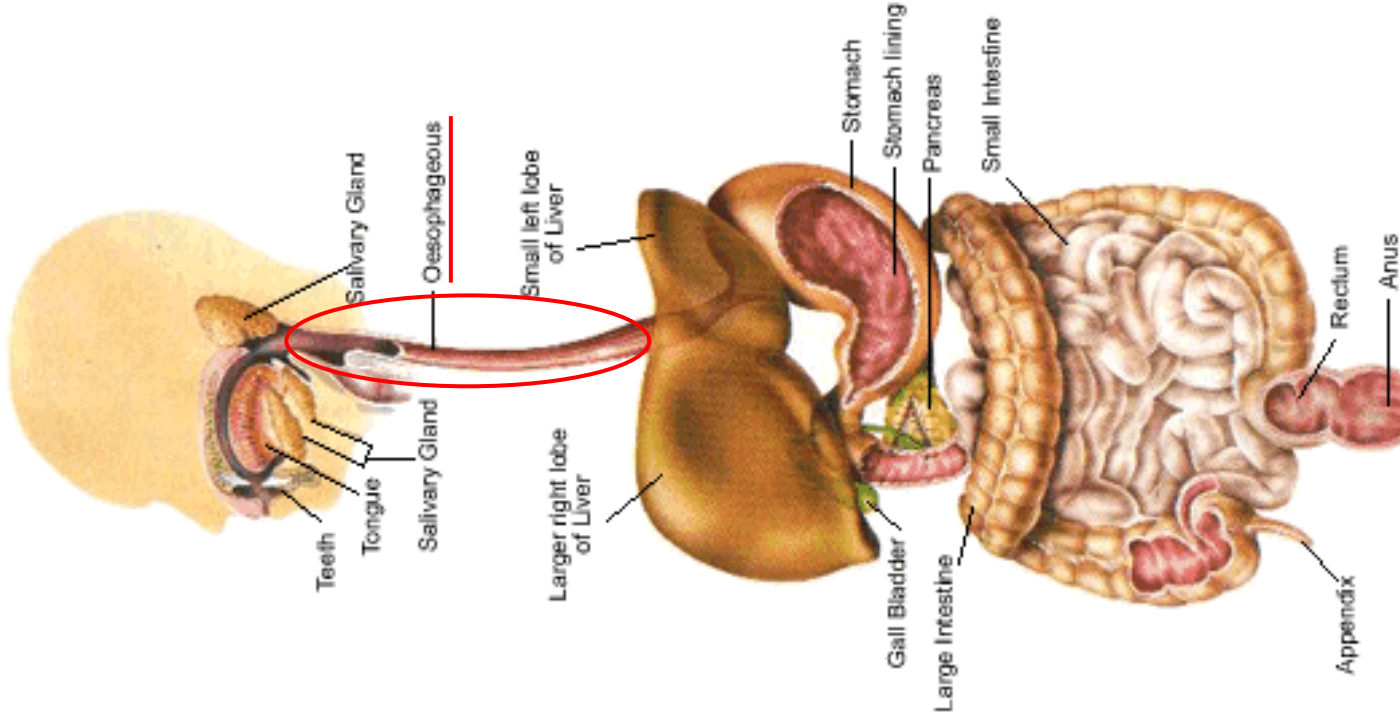
SALIVARY GLANDS



The Digestive System

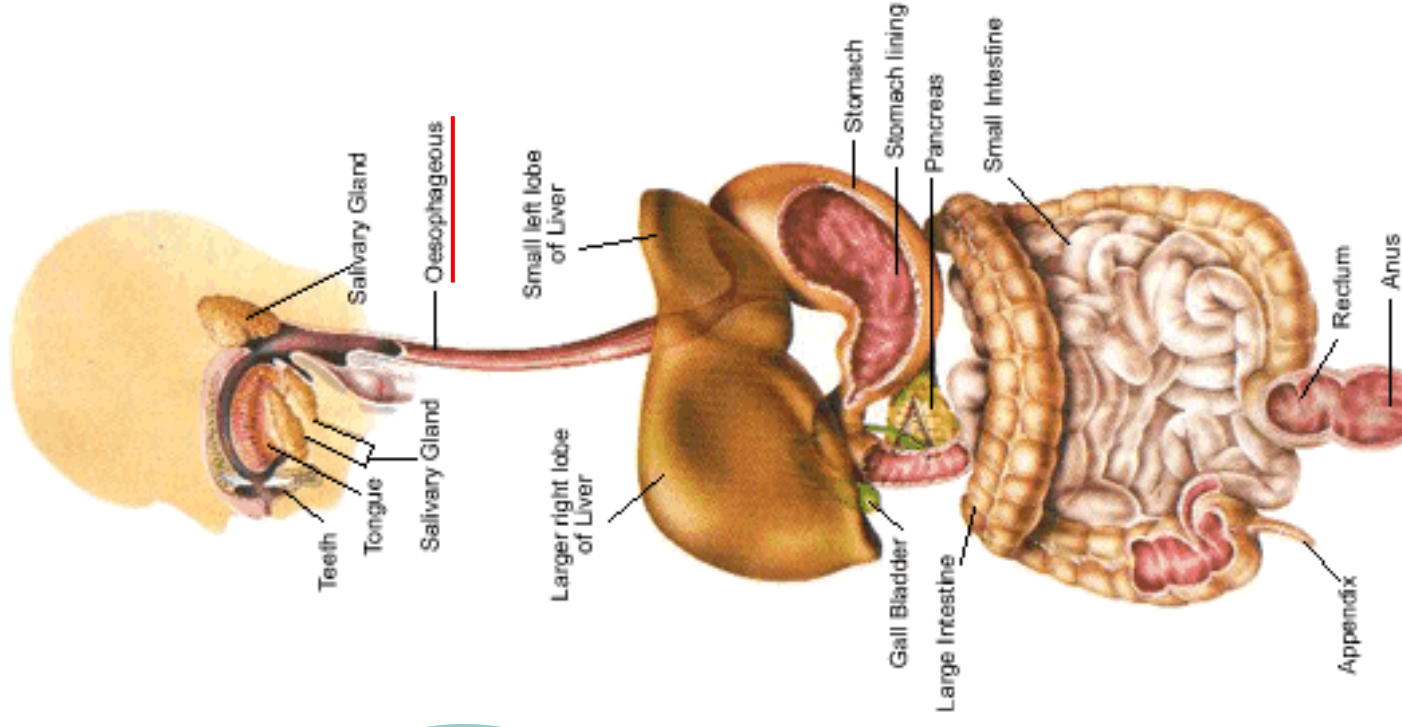
The Oesophagus

The oesophagus is a muscular tube. It takes food from the throat and pushes it down through the neck, and into the stomach. It moves food by waves of muscle contraction called peristalsis.

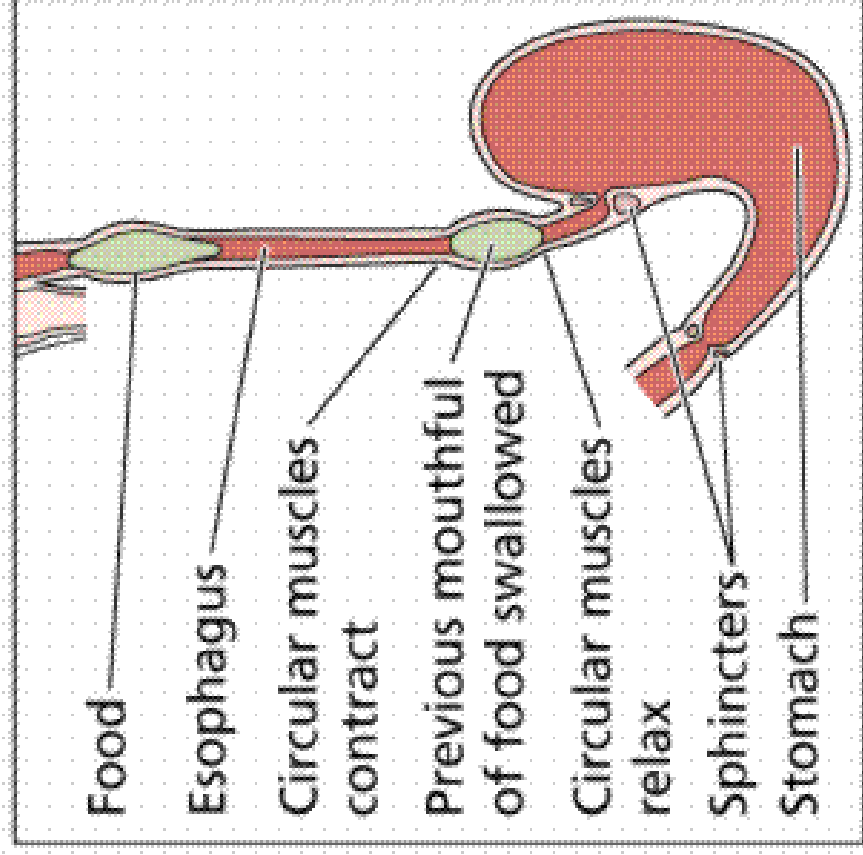


The Digestive System

The Oesophagus



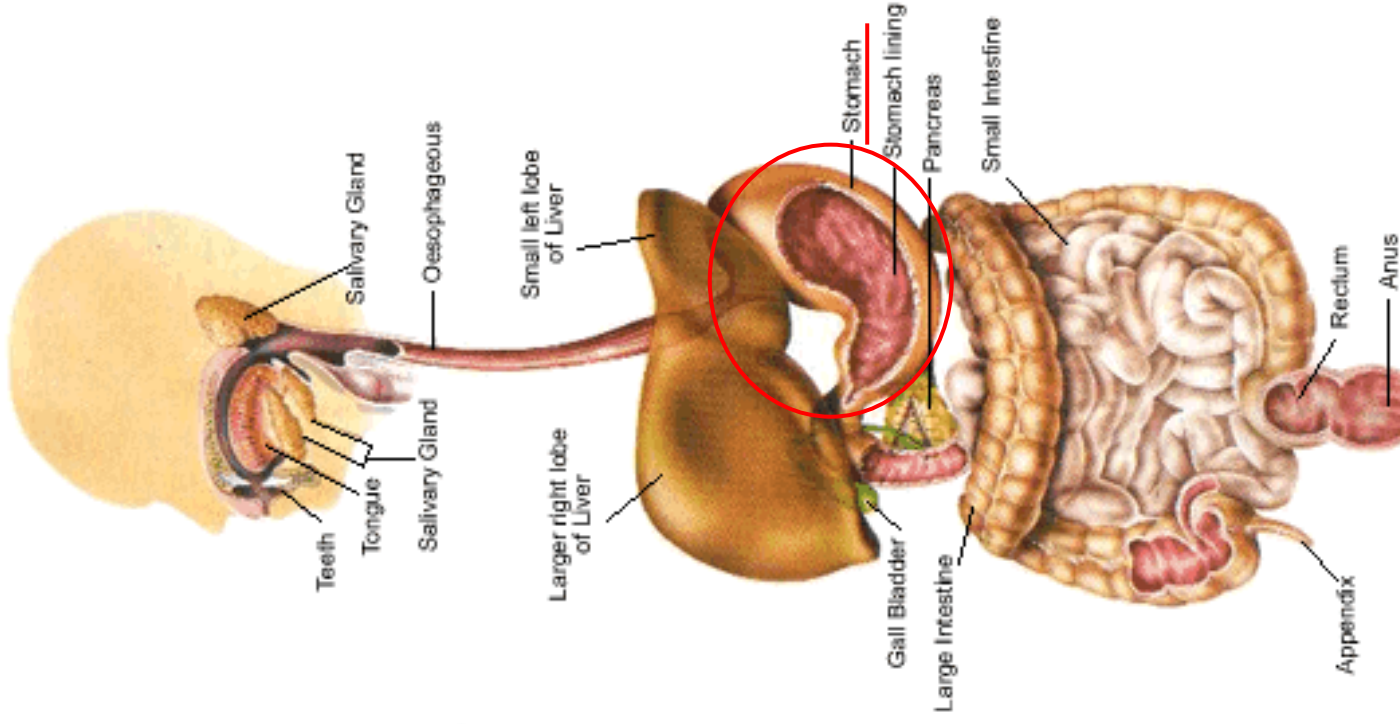
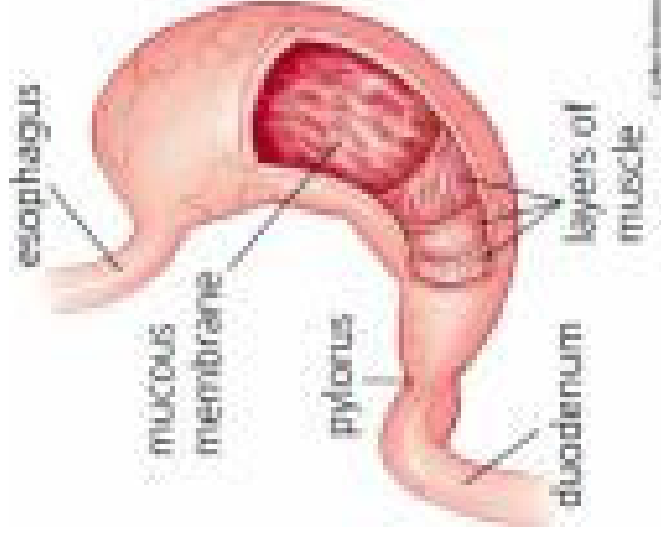
Peristalsis



The Digestive System

The Stomach

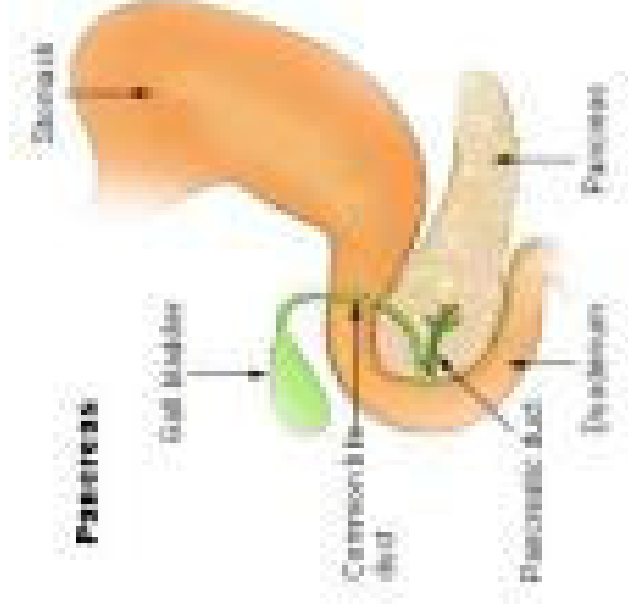
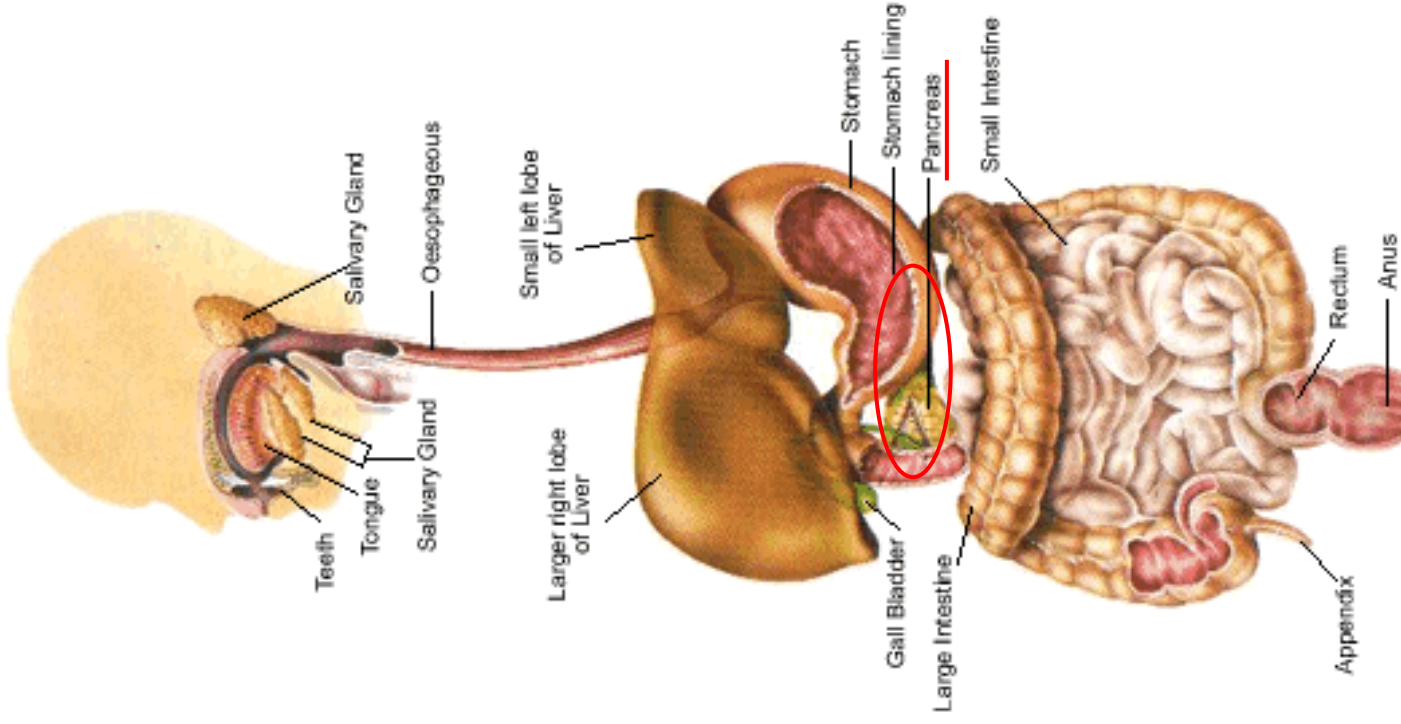
The stomach has thick muscles in its wall. These contract to mash the food into a sloppy soup. Also the stomach lining produces strong digestive juices. These attack the food in a chemical way, breaking down and dissolving its nutrients.



The Digestive System

The Pancreas

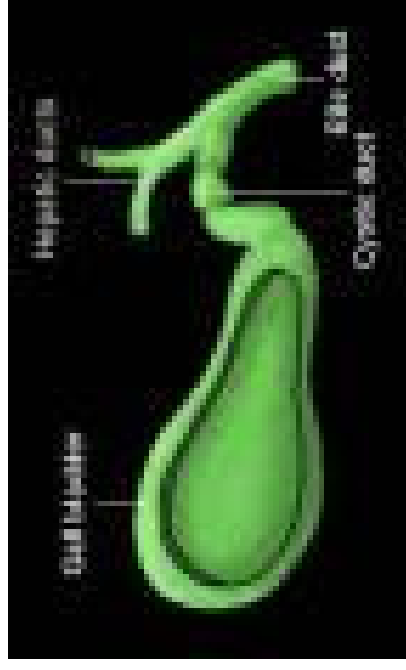
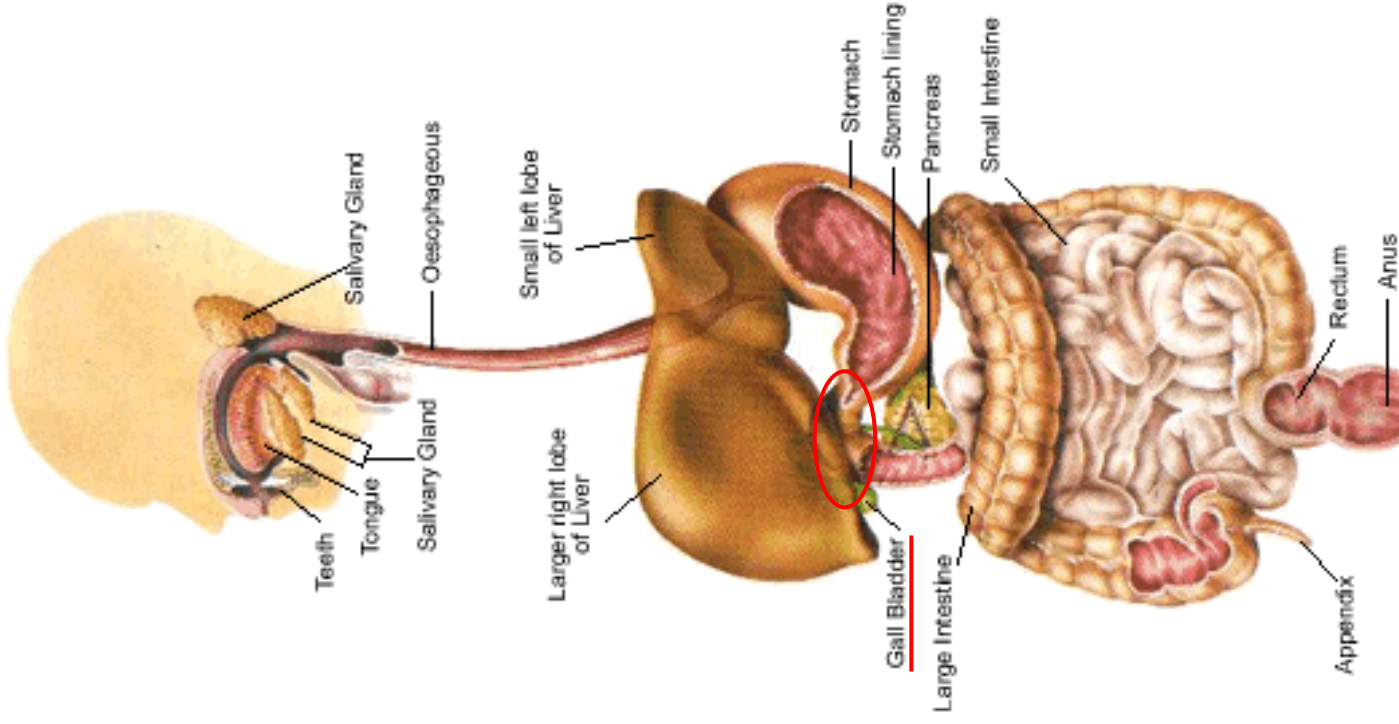
The pancreas, like the stomach, makes powerful digestive juices called enzymes which help to digest food further as it enters the small intestines.



The Digestive System

The Gall Bladder

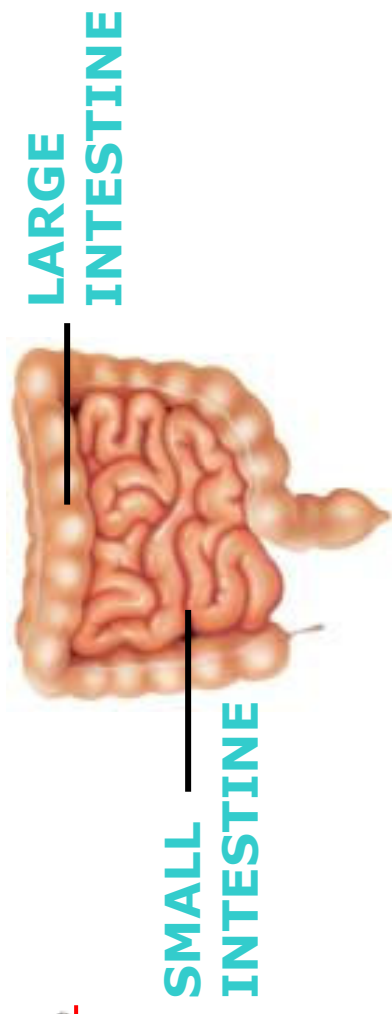
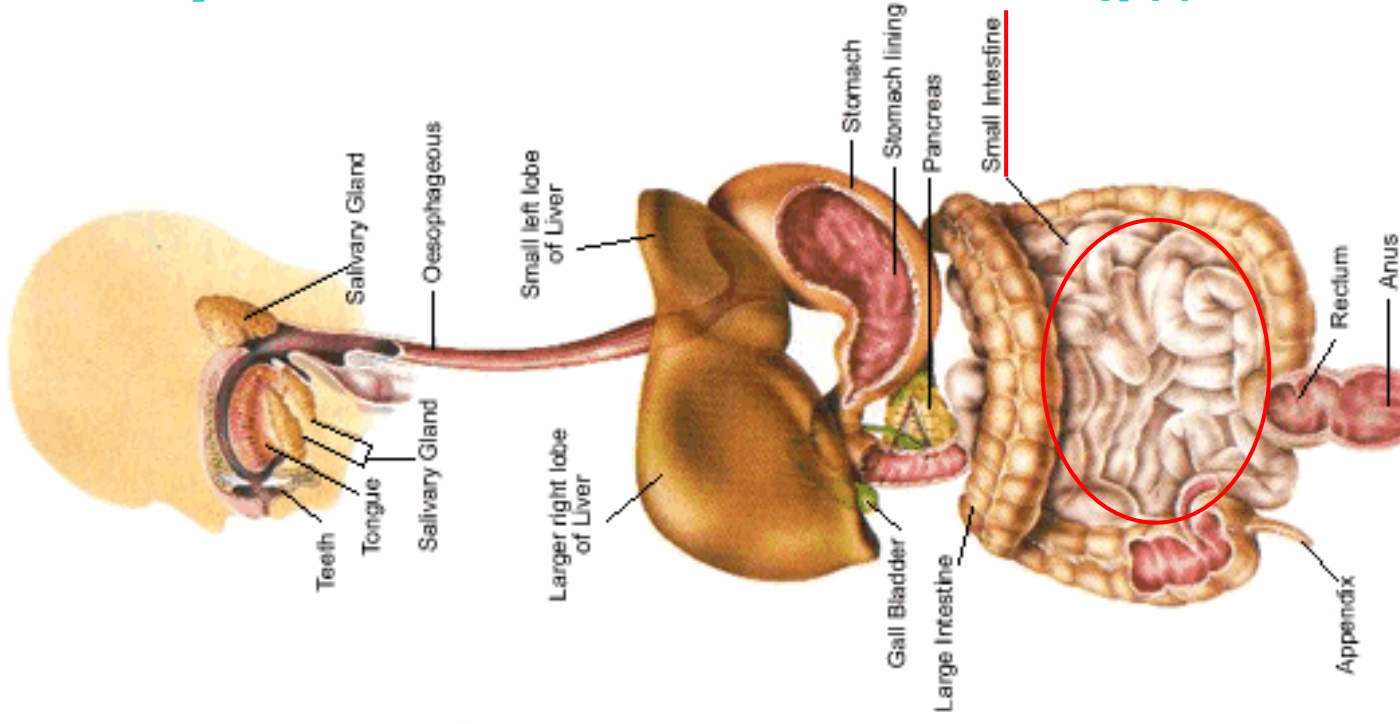
This small baglike part is tucked under the liver. It stores a fluid called bile, which is made in the liver. As food from a meal arrives in the small intestine, bile flows from the gall bladder along the bile duct into the intestine. It helps to digest fatty foods and also contains wastes for removal.



The Digestive System

The Small Intestines

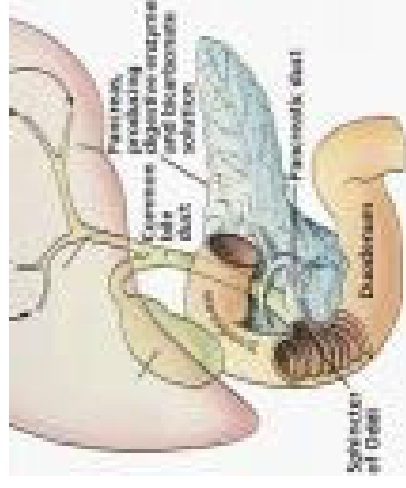
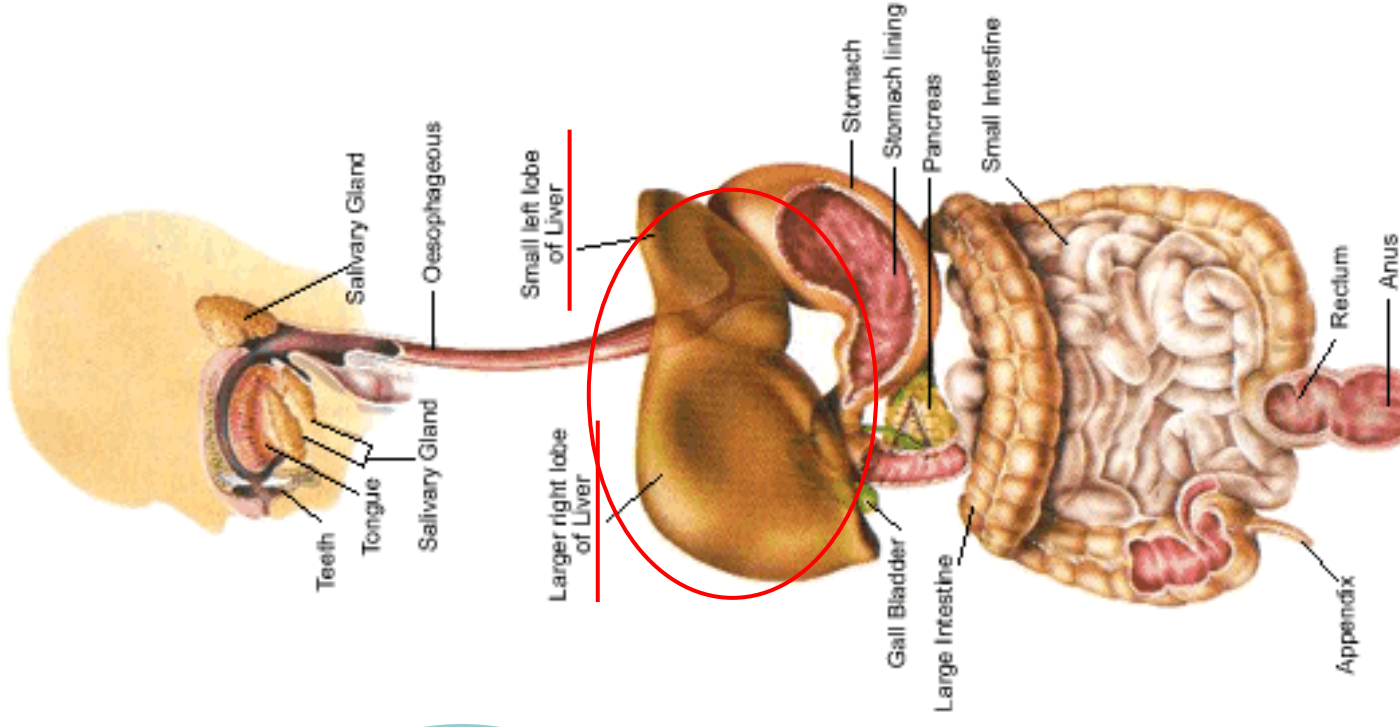
This part of the tract is narrow, but very long - about 20 feet. Here, more enzymes continue the chemical attack on the food. Finally the nutrients are small enough to pass through the lining of the small intestine, and into the blood. They are carried away to the liver and other body parts to be processed, stored and distributed.



The Digestive System

The Liver

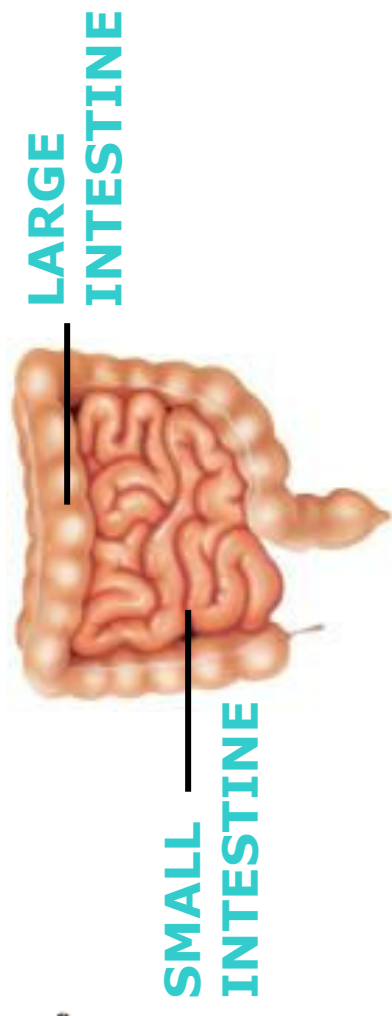
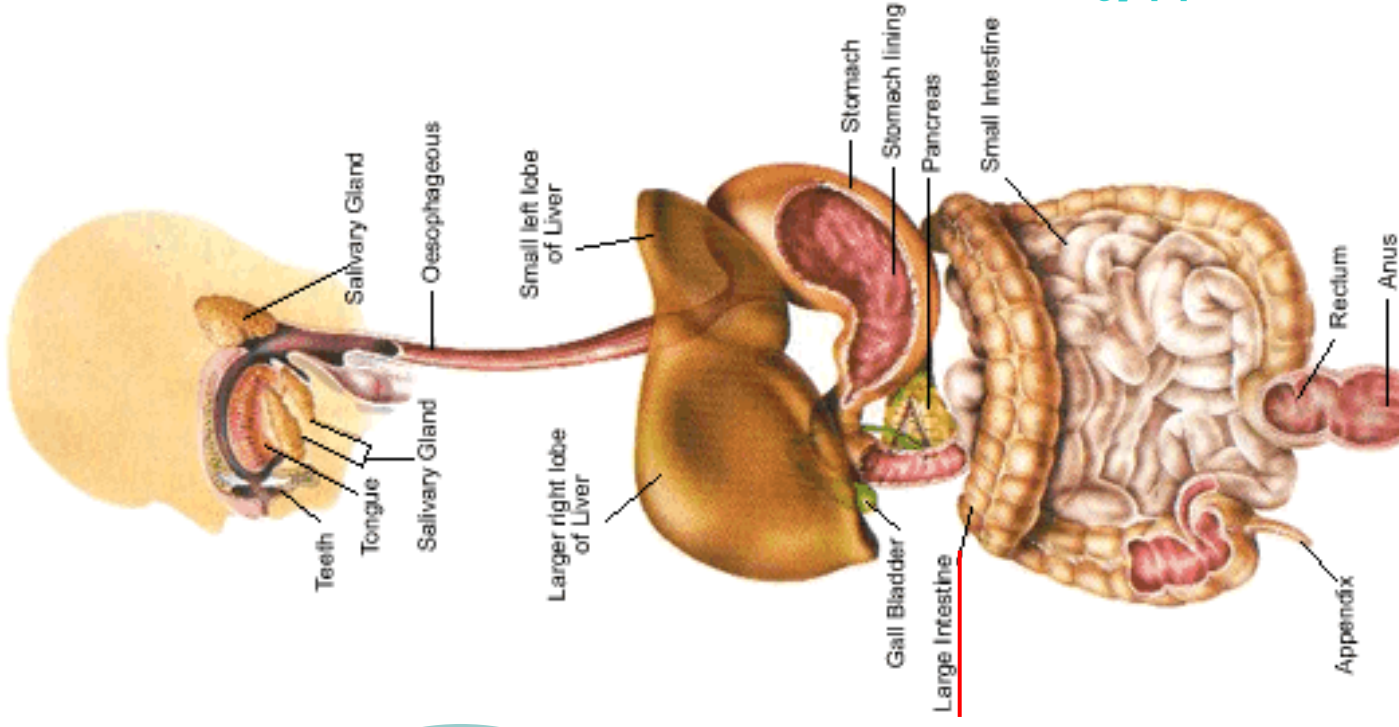
Blood from the intestines flows to the liver, carrying nutrients, vitamins and minerals, and other products from digestion. The liver is like a food-processing factory with more than 200 different jobs. It stores some nutrients, changes them from one form to another, and releases them into the blood according to the activities and needs of the body.



The Digestive System

The Large Intestines

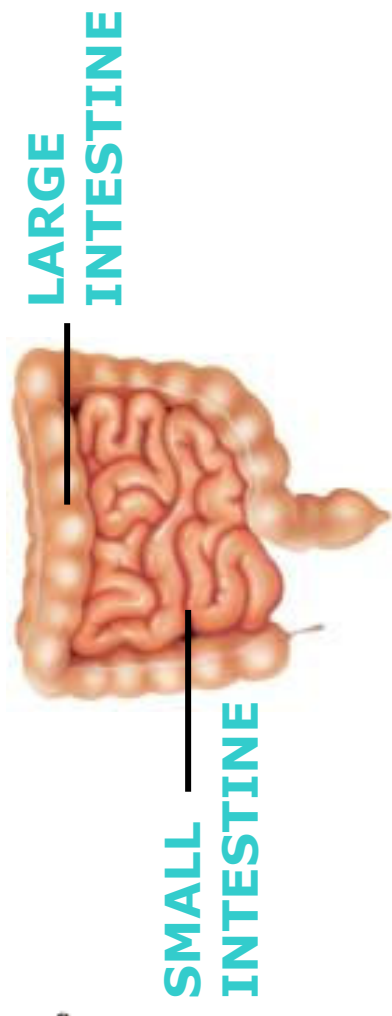
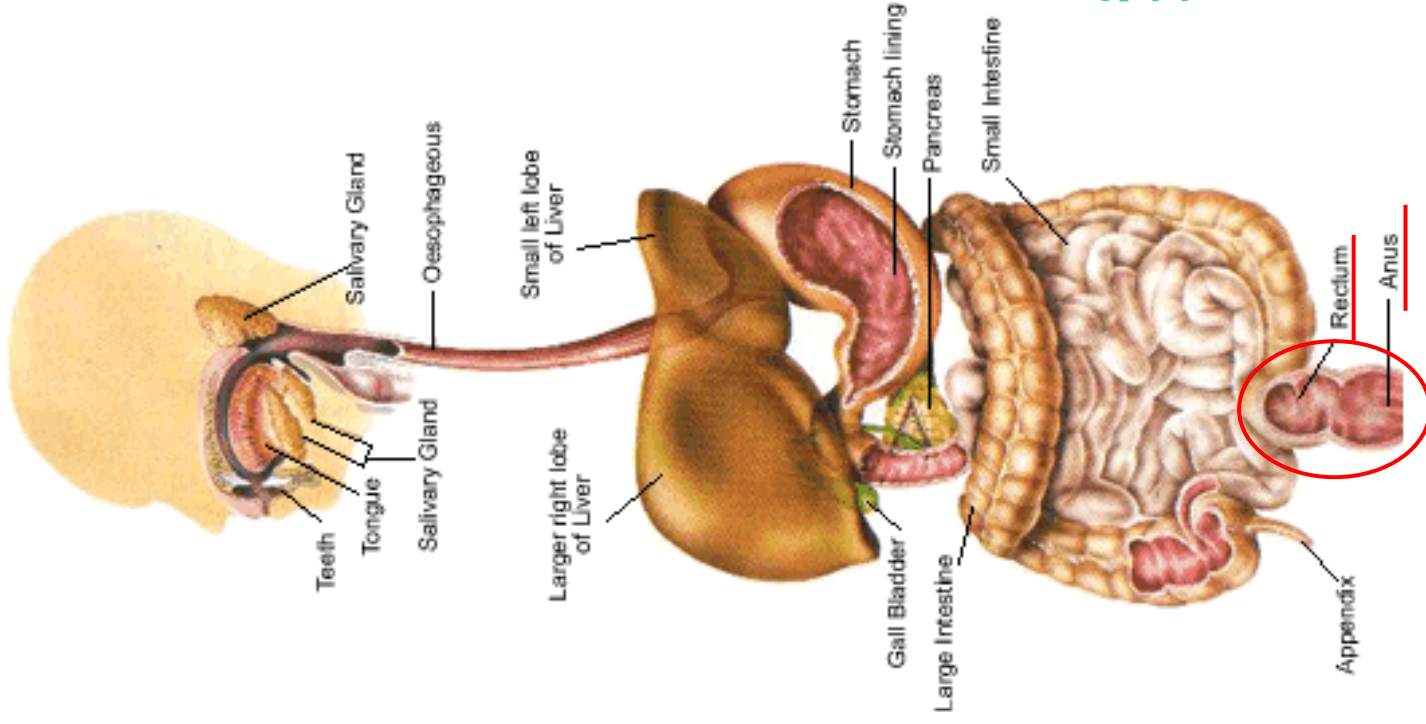
Any useful substances in the leftovers, such as spare water and body minerals, are absorbed through the walls of the large intestine, back into the blood. The remains are formed into brown, semi-solid faeces, ready to be removed from the body.



The Digestive System

Rectum and Anus

The end of the large intestine and the next part of the tract, the rectum, store the faeces. These are finally squeezed through a ring of muscle, the anus, and out of the body.



Finally!
Thanks!

