# Digestive System

**to accompany Audio-Tactile graphic named Digestive System**

**from the St Lucy's Audio-Tactile Graphics Kit**

**Human Biology**

The food you eat provides fuel for all the activities carried out by the body. Every movement the body makes requires energy. This energy comes from food. First the food has to be broken down so that it can be absorbed by the body. This is the role of the digestive system.

Outline of head and body   
parotid gland

## Mouth

#1 teeth grind and mash the food in the mouth while the tongue rolls the food around the mouth, forcing it into a soft ball ready for swallowing.

#2 enzymes in saliva help to break down the starch into more easily digestible sugars.

## Salivary glands

#1 produce saliva, which helps to break down the food while in the mouth and moistens food ready for swallowing.

#2 the salivary glands are activated when a person is about to eat, they are often tricked to secrete when food is smelt or talked about.

## Oesophagus

#1 the oesophagus is a collapsible tube that carries food from the back of the throat to the stomach. The muscles in the oesophagus squeeze rhythmically to push the food down, this is called peristalsis.

#2 food is prevented from going down the windpipe by a small flap called the epiglottis.

## Liver

#1 the liver has many important functions. It is a chemical factory that changes and processes nutrients that are brought in by the blood

#2 the liver breaks down poisons, stores chemicals like glycogen, iron and vitamins and also produces heat which helps to keep our body warm

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Gall bladder

#1 the gall bladder is a small pouch connected to the bile duct behind the liver. It is used to store bile as it moves from the liver into the duodenum.

#2 bile is a bitter tasting, greenish-yellow liquid that helps with the digestion of fat.

Stomach

#1 when the food enters the stomach muscular mixing and gastric juices get to work to digest protein in the food

#2 hunger pangs occur when the stomach is empty and the churning motions of the muscles can be heard

Duodenum

#1 the duodenum is the start of the small intestine, it joins the stomach to the small intestine.

#2 bile from the liver empties into the duodenum.

Pancreas

#1 the pancreas secretes insulin and glucagon, hormones that have major control over carbohydrate metabolism

#2 the pancreas also secretes digestive enzymes that breakdown food chemicals

Small intestine

#1 the small intestine completes the digestion of foods with mucus and many digestive enzymes.

#2 it also absorbs the end products of digestion into the blood and lymph systems. It also produces digestive hormones.

Large intestine

#1 the main functions of the large intestine are absorption of water, and some vitamins and minerals.

#2 the last part of the large intestine (the rectum) stores wastes until they can be eliminated

Anus

#1 after all the nutrients have been absorbed the waste

Gathers in the rectum and is expelled through the anus.