## Mouth

At the beginning of the alimentary canal is the mouth. The mouth contains many part which help aid the process of digestion. The first part of the mouth is the lips. The lips are two folds of flesh on the outside of the mouth with mucous membranes on the inside. The superior (upper) lip is closest to the nose whereas the inferior (lower) lip is closest to the chin. Then there is the hard and soft palates. The Hard Palate extends over the roof of the mouth and is made up of the maxillae and palatine bones. The Soft Palate is located at the back of the hard palate and is primarily made up of muscle tissue. Next is the Uvula which is a piece of soft tissue that hangs down from the soft palate and moves up to close off the nasal cavities when swallowing to prevent food/liquid from entering the nasal cavities. After this is the gums which anchor the teeth in place and act as a shock absorber during mechanical digestion. Finally there are the teeth. There are 4 types of teeth, each with a different function; Incisors, Canines, Premolars and Molars. The incisors are located at the front of the mouth, are flat and are used for cutting food. Then you have the canines (cuspids), they are single pointed and are used for tearing and shredding food. Next are the premolars (bicuspids), they have two cusps which are used for crushing and grinding food. Finally there are the molars which have 3-4 blunt cusps which are used for crushing and grinding food. Covering the trachea is the epiglottis, a thin piece of cartilage, which prevents food and liquid from entering the trachea and instead enter the oesophagus.

## Oesophagus

The Oesophagus is a tubular structure which is collapsable and roughly 10 inches long the Oesophagus connects the pharynx to the stomach. It runs parallel to the trached us primary function is allow a bolus of food to travel from the mouth to the storn the lt does this via contractions called peristalsis. It is lined with non keratinising Starked squamous epithelium.

ike organ who she band and shrink. It has roughly 1500ml capacity but The stomach is and is capable of expanding to allow more in the way of capacity. To protect itself, the stomach contents hydrochloric acid which kills bacteria and also mucus which protects the stomach itself from alcohol, NSAID's, aspirin etc. The stomach contains enzyme secreting cells which help to break down the food to allow the essential nutrients to be absorbed by the body.

## Duodenum

The duodenum is roughly 30cm long and is shaped like the letter 'c'. It connects the stomach to the Ileum. Calcium and Iron are primarily absorbed in the duodenum.

The duodenum is used for absorption and has a very large surface area which contains plicae, villi and microvilli.

The duodenum contains exocrine secretions from the pancreas and gall bladder;

- Trypsinogen
- Amylase
- Bile salts (emulsify fatty foods)
  - Lipase

Secretion from the duodenum:

- Enterokinase
- Secretin
- Cholecystokinin
- Oligosaccharidases
- Mucous (and some bicarbonate) from the brunner's glands