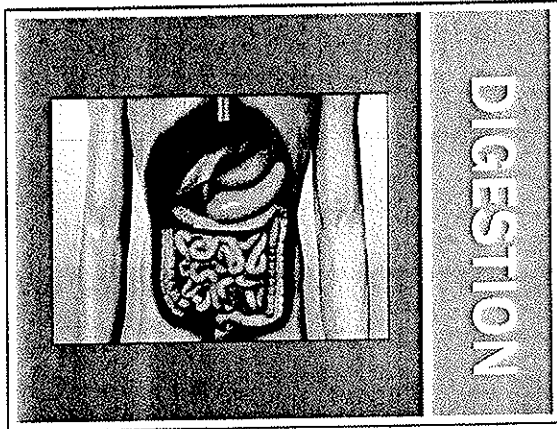


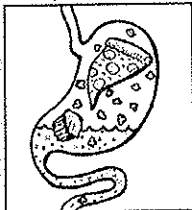
Digestion Presentation

1/04/14



PROCESS OF DIGESTION

⇒ Digestion is the process whereby food is broken down into smaller chemical units that may be absorbed and used by the body.



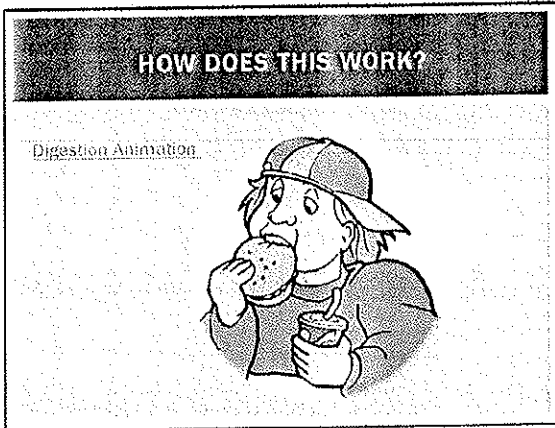
The Digestive system is responsible for supplying the body with nutrients

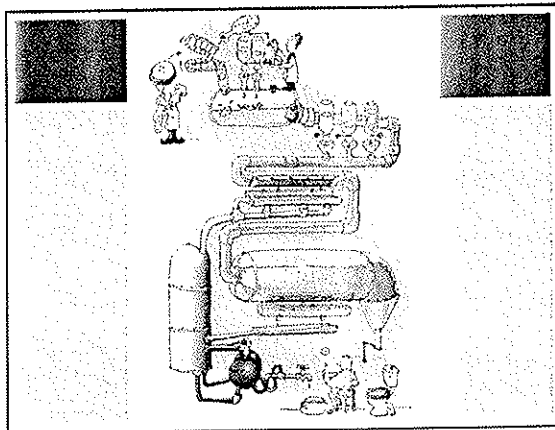
THE GASTRO - INTESTINAL TRACT

⇒ The gastro-intestinal tract, also known as GI tract, is where the digestion of food takes place.

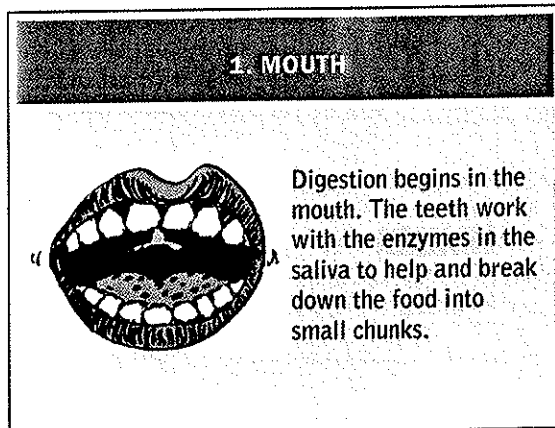
⇒ It begins in the mouth, proceeds through the oesophagus to the stomach, then through the small and large intestines and finally to the rectum.

⇒ This entire tract measures around 8 metres in length!



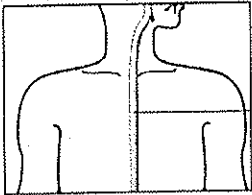


A system that works like a factory.



- * enzyme = analyse
- * Teeth break up food into smaller chunks.
- * Teeth, tongue, cheeks.
- * Tongue allows you to swallow your food

2. OESOPHAGUS

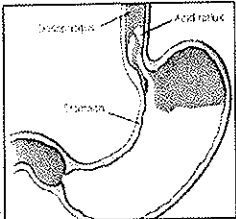


Food passes down the Oesophagus and into the stomach, where it is broken down further.

Chewed food.

* 25cm in length - tube
 * Peristaltic - contracting of muscles moves the bolus from the mouth to oesophagus to the stomach.
 * Reverse Peristalsis
 lasts 8-9 seconds.

3. STOMACH

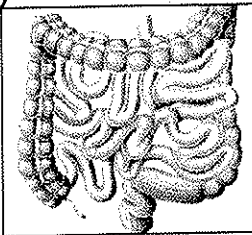


Gastric Juices in the stomach help to Break down food further, before It passes into the small Intestine.

* stomach has a 2L capacity
 * stomach walls churn the food and mix it with gastric juices. (hydrochloric acid).
 * Turns food into chyme.

Food is broken down further by citric acid.

4. SMALL INTESTINE



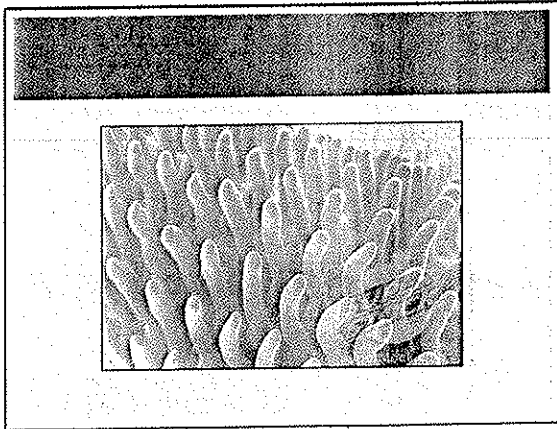
Final digestion and absorption of nutrients takes place in the small intestine.

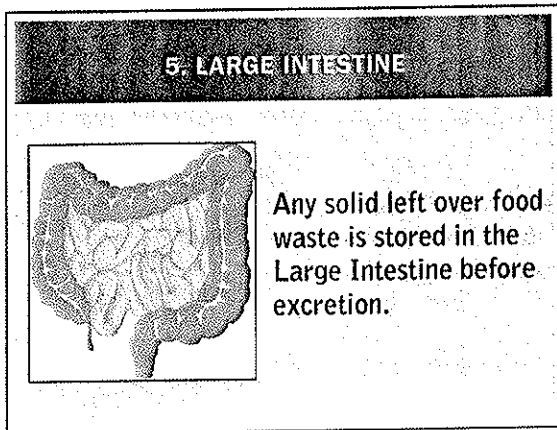
Villi are small finger-like projections in the small intestine that absorb nutrients from food.

villi - finger like projections that absorb nutrients from food and ^{into} blood vessels which are transported then ~~then~~ to diff. parts of the body.

3-4 cm wide and 4-6 cm in length.

example; protein from meat goes to muscles + tissues.





Any solid left over food waste is stored in the Large Intestine before excretion.

Lumps of faeces (referred to as stools) form in the large intestine, eventually to be expelled via the anus.

Water and minerals are absorbed and faeces are formed.

Anus - muscle that contracts and relaxes to expel faeces.