

# The Process of Food - Through the Digestive System

## Process:

1. Ingestion
2. Digestion
3. Absorption
4. Egestion

Mouth is the starting point for everything that happens in our bodies.

Digesting food takes 10 % of our daily energy requirements.

10 % of our energy is expended in keeping the body idling, maintaining the processes that keep the body running.

However 20 % of our energy output remains for all our activities during the day.

The food takes 14 hours as it journeys through the body.

Food must travel 36 feet through the digestive system.

Food is subjected to physical and chemical reaction as the body breaks food into the nutrients it can use.

Three pairs of salivary glands provide saliva in the mouth to make food easier to swallow and prevent the mouth from drying out.

The mouth has 32 teeth, these are designed to mill, cut and tear food mechanically.

The epiglottis bends backwards to close off the larynx, preventing the food from entering the lungs.

The esophagus connects the mouth to the stomach, and is a muscular tube, made of smooth muscle, through which food passes from the mouth into the stomach.

The contractions that begin in the esophagus and move all along the digestive tract are called peristalsis.

The stomach is a food processor, pulverizing the food, diluting it and preparing it for the next stages of digestion. It is also a reservoir for holding food between meals.

Hydrochloric acid in the stomach breaks down the food but does not harm the stomach lining because of the coating of mucus.

The small intestine is six meters long and narrow in diameter, and is specially designed to absorb broken down constituents of food.

Tiny finger like projections called cilia increase the surface area for absorbing nutrients.

After three hours, food begins its journey through the small intestine.

The liver, the gall bladder and the pancreas secrete juices into the digestive system to help the digestion process.

The liver produces a green liquid called bile, this helps to break up the fat and some vitamins.

The large intestine is ~ 1.5 m long and wider in diameter, receives the indigestible material from the small intestine and absorbs water.

The rectum stores waste material until bowel movement.

Waste material leaves the body through the anus.