Process of digestion and absorption after eating a hamburger essay sample

Health & Medicine, Hospital



After someone eats a hamburger with the works, they do not really think of what nutrients are in that hamburger, what the body does to get those nutrients out of the food, or even what process is used, they just think of how good it tasted. To get all the nutrients out of the food the human body uses processes called absorption and digestion. Some of the processes of digestion are mechanical and chemical; these are the step before the food is absorbed into the body.

The first step of digestion is mechanical digestion. Mechanical digestion starts in the mouth. The food is chewed by the action of the jaw moving up and down where the food is crushed and broken up into smaller pieces.

Saliva is produced in the mouth also to help break the food down. Saliva is part of chemical digestion. The food is broken up into smaller pieces so that the food can be passed down the oesophagus into the stomach. A form of mechanical digestion in the stomach is when the food has entered the stomach, the stomach contracts and makes wave like movements. The stomach does this to mix the gastric juice inside the stomach with the food. When food enters the stomach chemical digestion mainly takes place.

The second step of digestion is chemical digestion. Chemical digestion first takes place inside the mouth and then takes place in the stomach. Chemical digestion involves in a liquid that is acidic. The first part of chemical digestion is in the mouth, this liquid is called saliva. Saliva is a clear type liquid; this liquid is thicker than water. Saliva is produced in the mouth by salivary glands. Saliva has a medium pH level (6-7), so it is slightly acidic so it does not digest the food into smaller atoms as much as the stomach. When

the food goes down the oesophagus to the stomach, saliva is used as a lubricant to help the food slide down the tube. Once the food has reached the stomach the food gets chemical digested by gastric juice. Gastric juice is made up of hydrochloric acid, mucus and digestive enzymes.

Hydrochloric acid has a low pH level (1-3); this means that the acid is highly acidic. Hydrochloric acid breaks the food down into smaller pieces so that the digestive enzymes can break the food into even smaller parts. The digestive enzyme called amylase breaks down the carbohydrates up so the body can absorb them. The lipase enzyme breaks down lipids so the body can absorb them. The protease enzyme breaks down proteins so the body can absorb them. Once the food has been digested in the stomach the food heads towards the small intestine. In the small and large intestine it has a high pH level, therefore it is not really acidic, this means that there is a bit of a chemical reaction in the stomach. The food needs to broken up into small pieces so that they can be absorbed.

Absorption takes place in the small intestine and the large intestine. It mostly takes place in the small intestine. On the wall of the intestine there is villus. Villus is finger like shaped objects which line the wall of the small intestine. The villus are the small objects which collect the small atoms that are travelling through the intestines and then absorb them into the blood stream, so that the proteins, carbohydrates, and lipids can be carried various parts of the body. The small particles are absorbed by the villus when the food hits the goblet cell. The goblet cell then passes the atoms into the capillaries where it gets absorbed by the blood cells. Then the blood takes

the particles around the body. The left over particles which do not get absorbed by the villus enters the large intestine and makes a slimy substance; this substance is not needed in the body, so the body disposes it as soon as it can.

The body goes through a long process to get the nutrients it needs into the blood stream to be used throughout the body. Digestion and absorption are the processes that the body goes through to get the nutrients out of food and to where it is needed.