Digestive System Notes

There are five types of nutrients you can obtain from food

The quickest form of energy for the body
______ carbohydrates are sugars, the mitochondria in cells use sugar to make ATP which is the energy the cell uses.
A ______ carbohydrate is a chain of simple carbohydrates all joined together, when you eat a complex carbohydrate the body has to break it down before it can use the energy in it. Pasta is a complex carbohydrate

Generally complex carbohydrates are healthier than simple carbohydrates.

_____: Used to build muscles, skin, hair and nails

: Used to build cell membranes and can be stored for future energy use.

_____: Needed by the body in small amounts to perform a variety of functions.

Your body also needs water, water is not a nutrient but is used to transport nutrients and wastes and in necessary for many chemical reactions in your body. The human body needs between ______ liters of water per day.

Digestion which is how food is broken down and nutrients absorbed into the body. There are four stages:

Stage 1 is ______ it starts when food enters your mouth.

Stage 2 is ______ it takes place in several organs.

Mouth: _______digestion occurs when you use your tongue and teeth to chew food. _______digestion begins as amylase begins breaking down complex carbohydrates. Each piece of swallowed food is called a bolus.

Esophagus: Pushes bolus to stomach by a process called ______.

Stomach: Gastric juices which are very acidic are secreted by the stomach lining. Food is broken down and turned into a liquid called chyme. This takes between ______ hours.

Duodenum: The first metre of the six meter small intestine is called the duodenum. The pancreas, liver and gall bladder are connected to the duodenum and release enzymes which finish breaking down the chyme.

Stage 3 of digestion is called _____

The small intestine is covered in villi. Villi look like folds in the wall of the small intestine, their job is to absorb nutrients from the digested chyme. It takes ______hours for food to pass through the small intestine.

The large intestine's main function is reabsorbing water, ______of the water that entered your small intestine will be reabsorbed by the large intestine. It takes ______hours for this to occur.

The final stage of digestion is called ______

Any undigested materials from the digestion process are called feces. Feces are stored in the rectum until they are expelled from the body through the anus.