## **Enzymes found in the small intestines**

**Trypsin**- this contains the digestion of protein into smaller units called amino acids

Amalyse- this continues to break down starch into maltose and glucose

**Lipase**- this begins the digestion of fats and oils into smaller units called fatty acids and glycerol

Bile is made in the liver and stored in the gall bladder. This helps in the breaking down of fats in the small intestines.

The process of absorption begins in the small intestines (in the illeum). The walls are covered with tiny finger like projections called villi which help with the absorption of the digested food materials.

After disgestion and abosrption assimilitation occurs. Assimilation is the process where the abosrbed food molecules are used to help with growth, tissue repair and reproduction.

The undigested food is then taken to the large intestines where it is passed out the body as feaces. This process of releaing undigested foods from the body is called egestion.

## **Digestive juices**

Digestive juices usually contains enzymes and other chemicals that would determine the pH of the digestive juice.

#### Salvia

this is made by the salivary glands in the mouth and the pH is slightly alkaline. It containts the enzyme amylase which begins the break down of starch to sugars (maltose)

## Gastric juice

This is made by the walls of the stomach and has an acidic pH. It contains the enzyme pepsin whihch breaks down protein in to polypeptides.

#### Bile

This is made by the liver and stored in the gall bladder. Its pH is alkaline and it helps to neutralize the acid from the stomach. Bile also works to break up fats and oils. The bile works along with the enzyme lipase. If the liver is not functioning properly an individual should reduce the intake of fats in the body.

# Pancreatic juice

This in made in the pancreas and has an alkaine pH. It contains the enzymes trypsin that breaks down protein ad amylase which breaks down starch.

Intestinal juice

This is made in the walls of the small intestines. It has a alkaline pH and contains the enzymes amylase which breaks down starch, lipase which breaks down fats and oils