



## Digestion

### Mouth

Food enters the digestive system through the mouth. Chewing food helps to begin to break it down through the action of the teeth. Saliva contains bacteria that start the process of digesting the food while it is still in the mouth. It also softens food so that it can pass into the oesophagus more easily.

### Liver

You may not know it, but the liver plays a key role in digestion. It releases bile into the small intestine, which helps to break down fats. It takes nutrients the other way and converts them into chemicals for the body. The liver also filters out toxins that may come from food and drink.

### Colon (Large Intestine)

The colon is commonly called the large intestine. It is actually a lot shorter than the small intestine and is barely 2 metres long. The main job of the colon is to process what is left from the small intestine. It converts it into something easy to pass as a stool. Most of the water is removed by the colon. By the time the stool reaches the anus, it is mainly made up of indigestible food and bacteria. It normally takes around 36 hours for a stool to pass through the colon.

### Rectum

The rectum is a short (about 8 inches) chamber that joins the colon to the anus. All of the processing has taken place by this point. The rectum holds on to the stool until a signal to our brain tells the anus to open. Your body can then pass the stool out into the toilet.

### Oesophagus

The oesophagus is a muscular tube about 25cm long. Its only function is to pass food into the stomach. Food isn't digested, and no nutrients are absorbed in the oesophagus. A mouthful of food that enters the oesophagus is called a bolus. Food is passed along the tube by a series of muscular contractions. These squeeze one after the other to push it along. It's a bit like squeezing toothpaste from the end of the tube.

### Pancreas

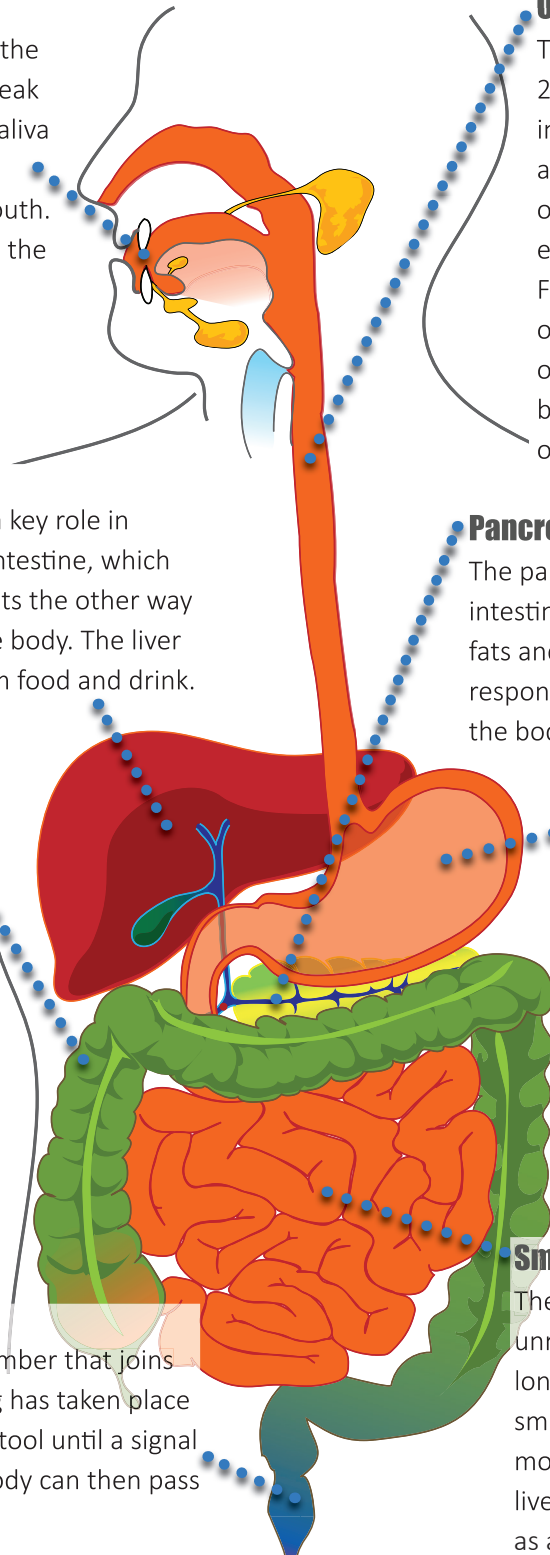
The pancreas secretes enzymes into the small intestine. These help to break down proteins, fats and carbohydrates. The pancreas is also responsible for creating insulin, which assists the body in processing sugar.

### Stomach

Your stomach is basically a large bag that holds onto food while it is broken down into useful chemicals. Cells in the stomach lining release enzymes and strong acid that help to break down the food. Once the food has been broken down sufficiently, it is passed into the small intestine.

### Small Intestine

The small intestine is still big. If you unravelled it all, it would be nearly 7 metres long. During its slow passage through the small intestine, food is broken down even more, and nutrients are absorbed into the liver for processing. The remains are passed as a liquid into the colon.



## RETRIEVAL FOCUS

1. Where does food begin to be digested?
2. What is about 7 metres long?
3. Complete: \_\_\_\_\_ helps the body to process sugars.
4. Which part of the stomach releases enzymes?
5. The large intestine is a common name for what?

## VIPERS QUESTIONS

**S**

What are the main functions of the liver?

**V**

What is the root word of unravelled?

**S**

What happens to a stool after it leaves the colon?

**V**

Which word or phrase tells you that the liver is important for digestion?

**E**

Is the use of a diagram effective in this text? Why?

Answers:

1. In the mouth
2. Small intestine
3. Insulin (not the pancreas)
4. Cells in the [stomach lining]
5. The colon

S: It releases bile, it takes in nutrients and processes them, it filters out toxins

V: Ravel

S: It is passed into the rectum until the person is ready to pass it out.

V: Key role

E: Accept well-reasoned answers