

Digestive System – Part 2

The Stomach

The next stop on the journey through the digestive system is the **stomach**. This organ is a strong muscular sac that actually uses **mechanical** and **chemical** digestion. In your stomach, **enzymes** and the **muscular walls** of the stomach help to further break down the food you consumed. This makes it so that once your food moves into the small intestine, it is even easier for nutrients to be extracted. Your stomach is also filled with a very strong **acid**. But this acid doesn't break down the food, it actually **kills any germs or bacteria** that might be in the food that you consumed so that you don't get sick. But don't worry, your stomach actually has a protective layer of mucus that protects it from this acid.

Fun fact: Did you know that when you blush, the lining of your stomach blushes (turns red) as well?

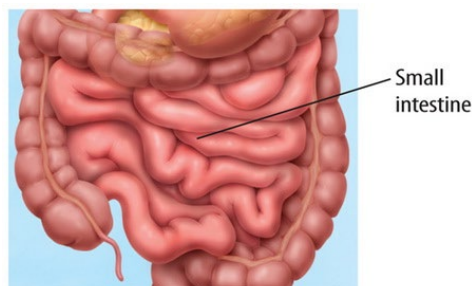


Watch this video below to learn more about the stomach: <https://youtu.be/ggCBtbRkOIU>

The Small Intestine and The Liver

The **small intestine** is where the **majority of digestion takes place**. Oftentimes people think that their stomach does most of the work but this isn't true, your small intestine is actually the star of the show! Here, a mix of **bile** and **enzymes** work together to decompose your food completely and extract (take out) nutrients for your body to use. **Nutrients** (vitamins, minerals, proteins, carbohydrates, etc.) are absorbed through the small intestine, then move on to the **liver**.

Did you know that the small intestine isn't small at all? It's actually **7 m** (23 ft) long, while the large intestine is only **1.5 m** (5 feet)



The liver is the small intestine's best friend. While the liver is not a central organ in the digestive system, it works hard to **support** other organs such as your small intestine. The liver **creates bile**, which is a fluid that helps break down food. It also **processes the nutrients** that your small intestine extracts so that they can be shared throughout the rest of your body.

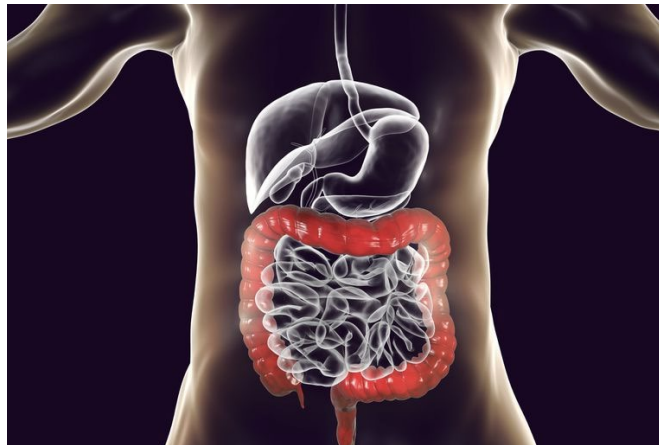
Fun fact: Did you know that the liver can **regenerate**? which means that if a piece of your liver is taken out to share with someone who needs it, it can actually re-grow!



The Large Intestine

The **large intestine** is the final destination before solid waste leaves your body. This is where **salt** and **water** from your food is **absorbed** by the walls of your large intestine. This process creates a fecal matter (poo) and once all liquid is absorbed, it is ready to leave your body.

The entire digestive process, from chewing to releasing fecal matter can take **24-72 hours** (1-3 days)! This depends on things like how much food you ate, what you ate, your age, etc.



Complete the following:

Fill in the blanks:

This organ is a strong _____ that actually uses _____ and _____ digestion. In your stomach, _____ and the _____ of the stomach help further _____ food that you consume.

Now that you've learnt about the epiglottis, explain what would happen if you didn't have an epiglottis. Would this be bad?

What does stomach acid do?

How does your stomach protect itself from this acid?

True or False: If the statement is false, change it so that it becomes true.

1. The small intestine is where the majority of digestion takes place:

2. Your small intestine creates and uses bile:

3. The small intestine is 1.5 m long:

4. The liver is the largest vital organ in your body:

How long (on average) does the entire digestive process take?

Label the parts of the digestive system (next page).

The Digestive System

- Word Bank**
- The liver
 - The small intestine
 - The mouth
 - The stomach
 - The large intestine
 - The esophagus

