Let's Talk...

Getting to know your digestive system

We've all got guts. Around 25 feet of them, in fact. That's a lot to get your head around! If you've ever wondered exactly what your digestive system does but it seems too overwhelming to understand, we hear you. We're here to break down the digestive system and its vital role in the body into easy, digestible chunks.

What is the role of the digestive system?

The digestive system is made up of a series of organs, responsible for breaking down food and liquids into smaller molecules (the smallest particle of a substance) that the body can use for things such as energy, growth and repair.

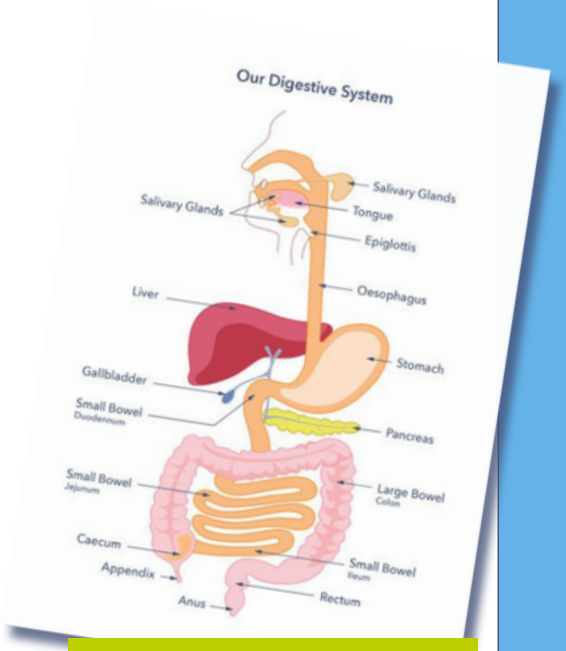
What organs make up the digestive system?

The digestive system includes the:

- Mouth
- Oesophagus (also known as the food pipe)
- Stomach
- Small bowel
- Large bowel (colon)
- Rectum
- Anus

It also includes accessory organs, which support the digestive system but are not part of the digestive tract (the long tube that starts at the mouth and ends at the anus) itself, alongside our teeth, tongue and salivary glands:

- Liver
- Gallbladder
- Pancreas



See the full digestive system poster at the end of this guide!

Digestion: The journey begins

It starts with the mouth, which acts as your body's high-end food processor. Chewing breaks down food into a "bolus", which is then swallowed into the oesophagus. Here, wave-like muscle contractions called peristalsis act like moving pipes, pushing the food down toward the stomach.

The power of the stomach

Your stomach is a powerhouse of chemical and mechanical digestion. It churns food and introduces acid, remarkably, as strong as battery acid! To protect itself from its own harsh fluids, the stomach produces a thick mucus lining. Between the oesophagus and stomach, and again between the stomach and small bowel, sit "valves" or sphincters. These rings of muscle regulate the flow of food, ensuring it's properly processed before moving on.

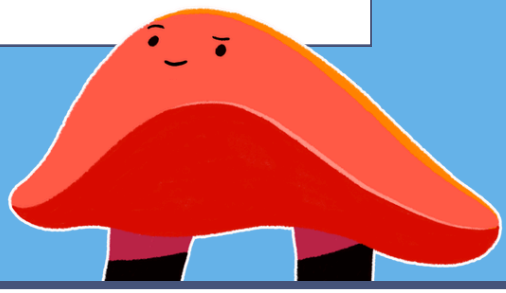
The duodenum and beyond

Once food is turned into a liquid-like mixture, it enters the duodenum, the first part of the small intestine. This clever section curves around the pancreas.

This is where our accessory organs act like chemical factories to cut through the heavy lifting:

- The pancreas: Provides bicarbonate to neutralise the harsh stomach acid, alongside a perfect blend of enzymes to dismantle proteins, carbs and fats.

- The liver and gallbladder: Fats are stubborn to dissolve, so the liver creates a specialised fluid called bile. This acts like washing-up liquid, cutting through grease. Bile is stored in the gallbladder and squeezed into the duodenum when you eat.



Find out more about the digestive system.
For information and guidance, go to gutscharity.org.uk/information or contact our Helpline on **0300 102 4887** or go to **gutscharity.org.uk/helpline.** We're here if you need us.

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The final absorption

The journey continues into the rest of the small bowel (the jejunum and ileum). Despite being called small because the pipe is narrower, it is actually the longest section of your gut, averaging over six metres!

Most nutrient absorption happens here. In the final stage (the ileum), the body performs its final nutrient extraction, absorbing vital bile salts and vitamin B12. By the time the mixture leaves the small bowel, it resembles a thin soup, ready for the next stage.

The power of the colon

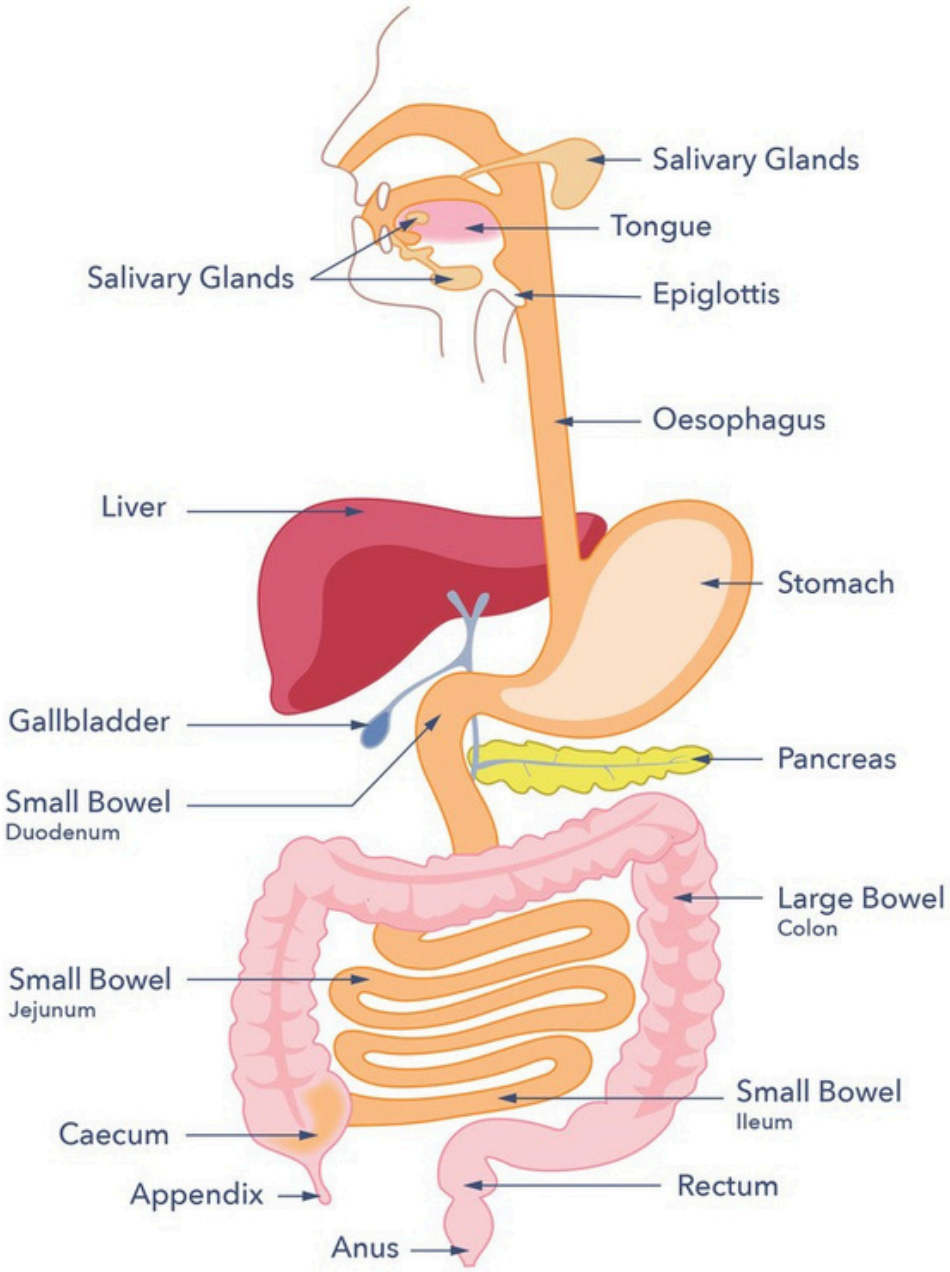
Next is the large bowel (colon), home to our incredible gut microbiome. Trillions of bacteria live here, fermenting fibre to produce short-chain fatty acids that keep the gut lining healthy. As the colon absorbs water and salts, that "soup" gradually thickens over a couple of days into its final form: our poo.

Precision control

Finally, we reach the rectum and anus. This area is controlled by two rings of muscle called sphincters. While the inner sphincter reacts automatically to fullness, the outer sphincter is under our conscious control, allowing us to wait until we reach a toilet.

From the first bite of food to the final flush, your digestive system is remarkable. By understanding how these organs collaborate to fuel and protect you, you can better support your gut health.

Our Digestive System



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