

Large Intestine

by Sophia



WHAT'S COVERED

In this lesson, you will learn about the structure and the function of the large intestine and its role in digestion. Specifically, this lesson will cover:

1. Large Intestine Function

The **large intestine** is the part of the digestive system whose role is to absorb water, then eliminate solid waste.

Recall that food is converted into chyme in the stomach—going from solid to a soupy mix. As food moves from the small intestine into the large intestine, much of the water that was added to the solid food to make it more easily digested must be reabsorbed. Any undigested materials that remain within the large intestine will be removed as waste, i.e., fecal matter.



TERM TO KNOW

Large Intestine/Colon

The last major tubular organ of the alimentary canal, it forms a frame around the small intestine; the colon is responsible for absorbing water and minerals and converting the bolus into fecal matter.

2. Large Intestine Structure

The **ileum** of the small intestine is the part where the small intestine connects with the large intestine. Also, at the bottom of the large intestine near where it meets the small intestine, there is a little appendage protruding out known as the appendix.

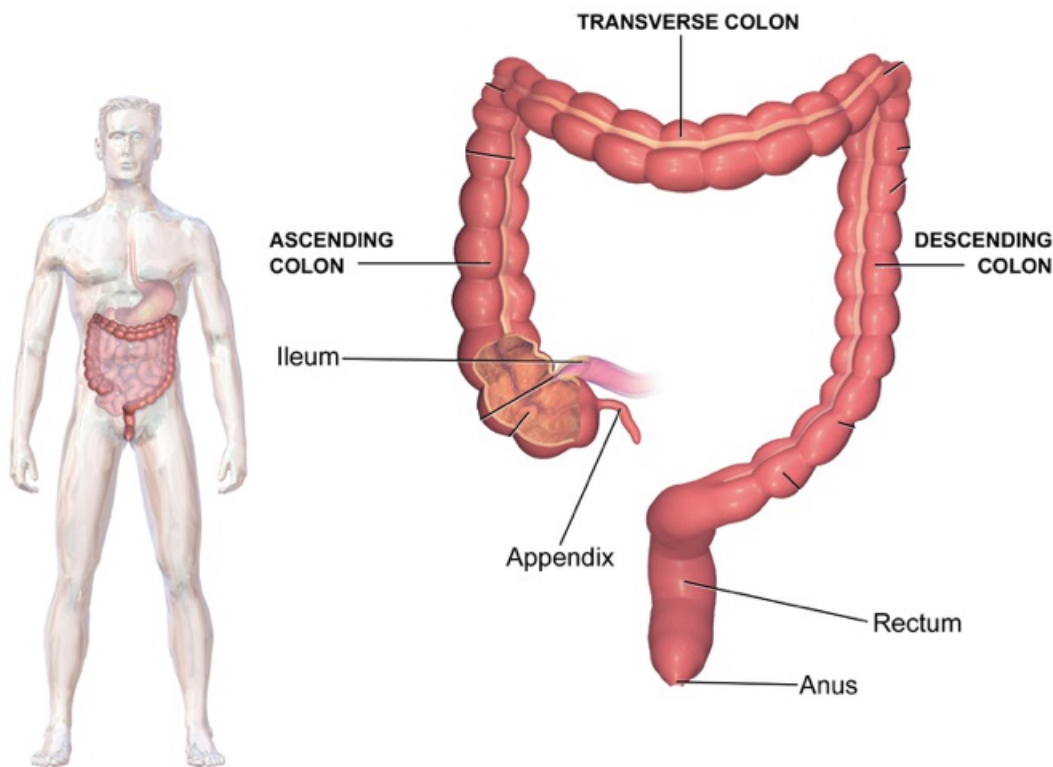
The **appendix** is a part of the large intestine that stores B and T cells within lymph nodules. Its purpose is to attack and kill any parasites that are in the food at this point as it reaches this part of the large intestine.



DID YOU KNOW

It's not absolutely necessary to have our appendix; you may have known somebody who's had their appendix removed before. You can survive without your appendix; it's just there to kill any parasites that are still in food as it passes through. Generally, at this point, most parasites have already been taken care

of by stomach acid.



The large intestine is broken down into two sections, the colon, and the rectum.

The colon is broken down into three subsections. The first subsection is called the ascending colon because it's going up or ascending upwards. The next part is called the transverse colon, because transverse means across. The third part is the descending colon, which is the part of the colon that is going down.

After these three structures, you'll find the **rectum** and the **anus**, where waste is stored and removed.

As food moves through the small intestine, it moves toward the ascending colon. Muscle contractions stimulated by hormones will help to move the material through the large intestine. Water and any remaining minerals will be absorbed until finally, you get down towards the rectum, where you have waste build up.

Waste is excreted through the anus and is nothing more than unabsorbed water, undigested matter, and bacteria that the body can't use.



TERMS TO KNOW

Ileum

The last section of the small intestine which connects to the large intestine, where most of the lipids are absorbed.

Appendix

An organ that used to have a much more important role in the ancestral human digestive system than it does in the modern human. Located on the lower right side of the colon, the appendix contains lymph nodules called Peyer's patches; sometimes the appendix becomes inflamed and ruptures during a condition called appendicitis.

Rectum

The digestive system analog to the urinary bladder, the rectum stores fecal matter until it's time to

excrete it from the body.

Anus

The opening of the rectum, the anus is the last part of the alimentary canal through which fecal matter escapes.



MAKE THE CONNECTION

If you're taking the Human Biology Lab course simultaneously with this lecture, it's a good time to try the Absorption in the Small and Large Intestines: Journey from the stomach to the bloodstream Activity in Unit 6 of the Lab course. Good luck!



SUMMARY

This lesson has been an overview of the **structure and function of the large intestine**.

Keep up the learning and have a great day!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR AMANDA SODERLIND



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