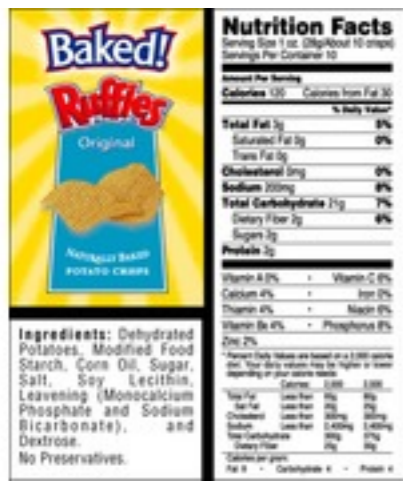


Open Ended Question



How many calories in 20 chips? What is the main ingredient in this product? How many calories from fat are in one serving?



nearpod
Authors program

Anthony Slusher

GRADES
6-8

THE DIGESTIVE SYSTEM

HEALTH



“ TAKE CARE OF
YOUR BODY,
it's the only place
YOU HAVE TO LIVE ”



Anthony James Slusher

Elementary and Middle School Health Educator

Hi there! I'm Anthony, an Elementary and Middle School Health Educator with a craze for motivating our youth on the importance of living a healthy and active lifestyle. In my highly enthusiastic classroom, we engage in the skills, knowledge and understanding it takes to create and sustain lifelong physical, mental and emotional health. I take pride in being a Healthy Role Model for my students and hope to inspire them to do the same :)

Healthy people = Happy people. Who doesn't want to be happy?

Hobbies: Yoga, Sports, Nature, Hiking, Camping, Biking, Reading, Being Grateful.

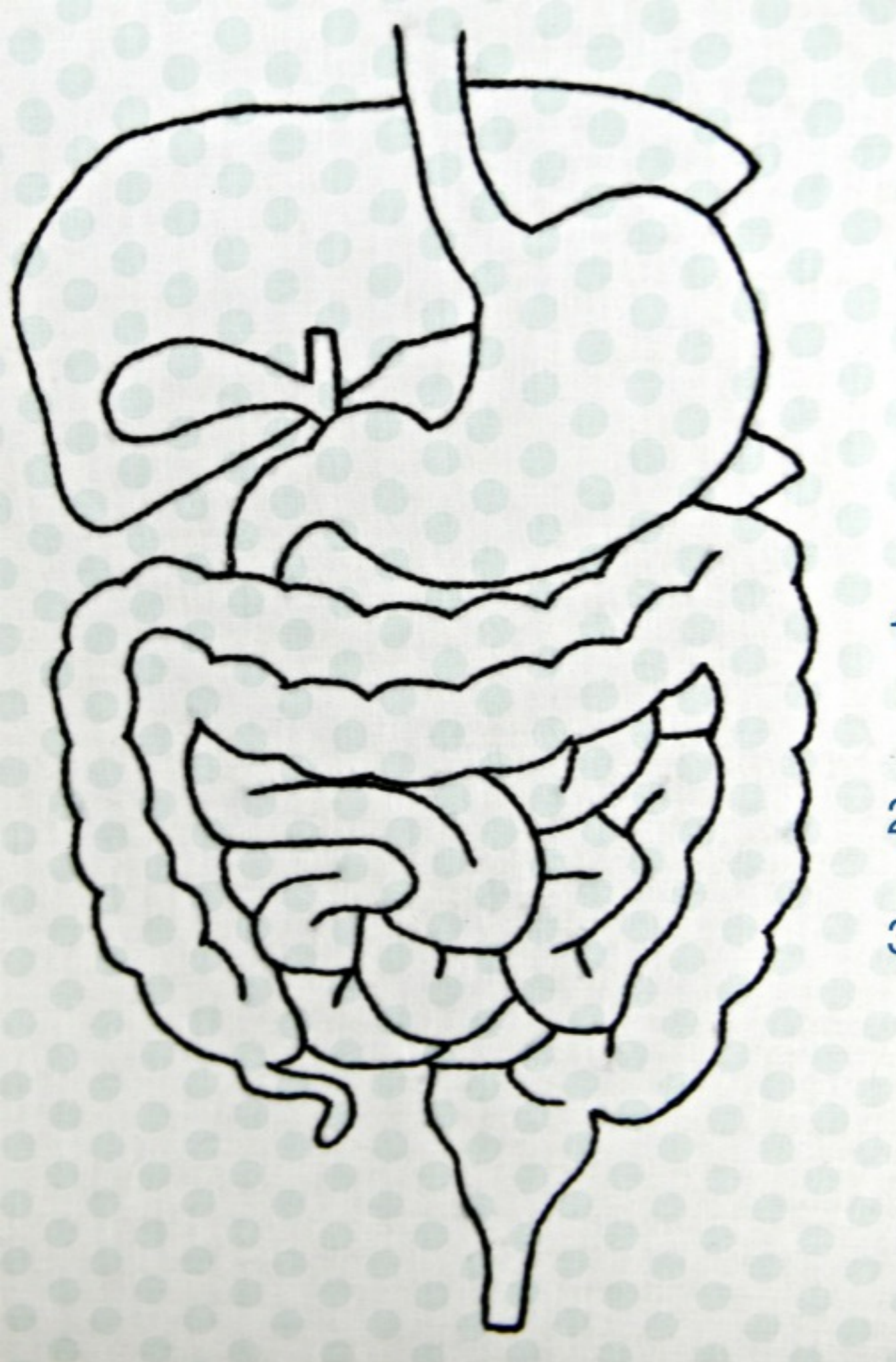
Qualities: Energetic, Motivated, Passionate.

Lesson Objectives

Students will:

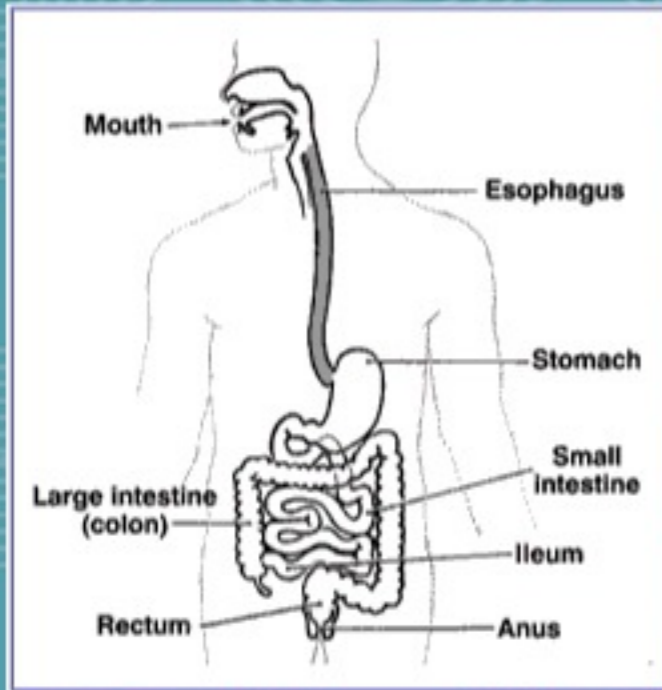
1. Discover the parts of the digestive system.
2. Explore where the food travels.
3. Understand how the body turns food into energy.

Classroom Time: 35 min



Weird Facts

Why do
we burp?



Weird Facts

When you eat and drink you can swallow a bit of air. The air we breathe contains gases, like nitrogen and oxygen. The extra gas is forced out of the **stomach**, up through the **esophagus** and out of the **mouth** as a burp.

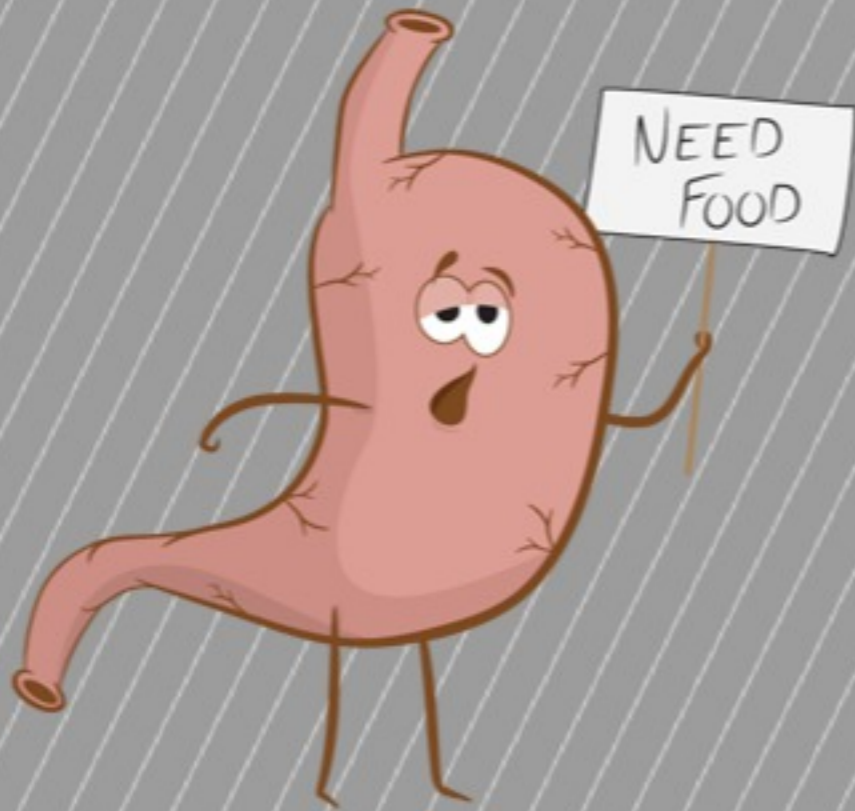
In your lifetime, the digestive system (mouth, esophagus, stomach, intestines, pancreas, liver) will handle over **50 tons** of food and liquid!



50 tons = 6 elephants

The Stomach

Think of the stomach as a bag of muscles that is shaped like a “J”.



Like a bag, only so much can fit inside of it (about 2.5 pints of food).

The Stomach

The stomach produces gastric juices that help to further breakdown foods.

Stomach acid is so strong that it can burn a hole in your carpet.

Muscles turn the food into a liquid called “**chyme**”.

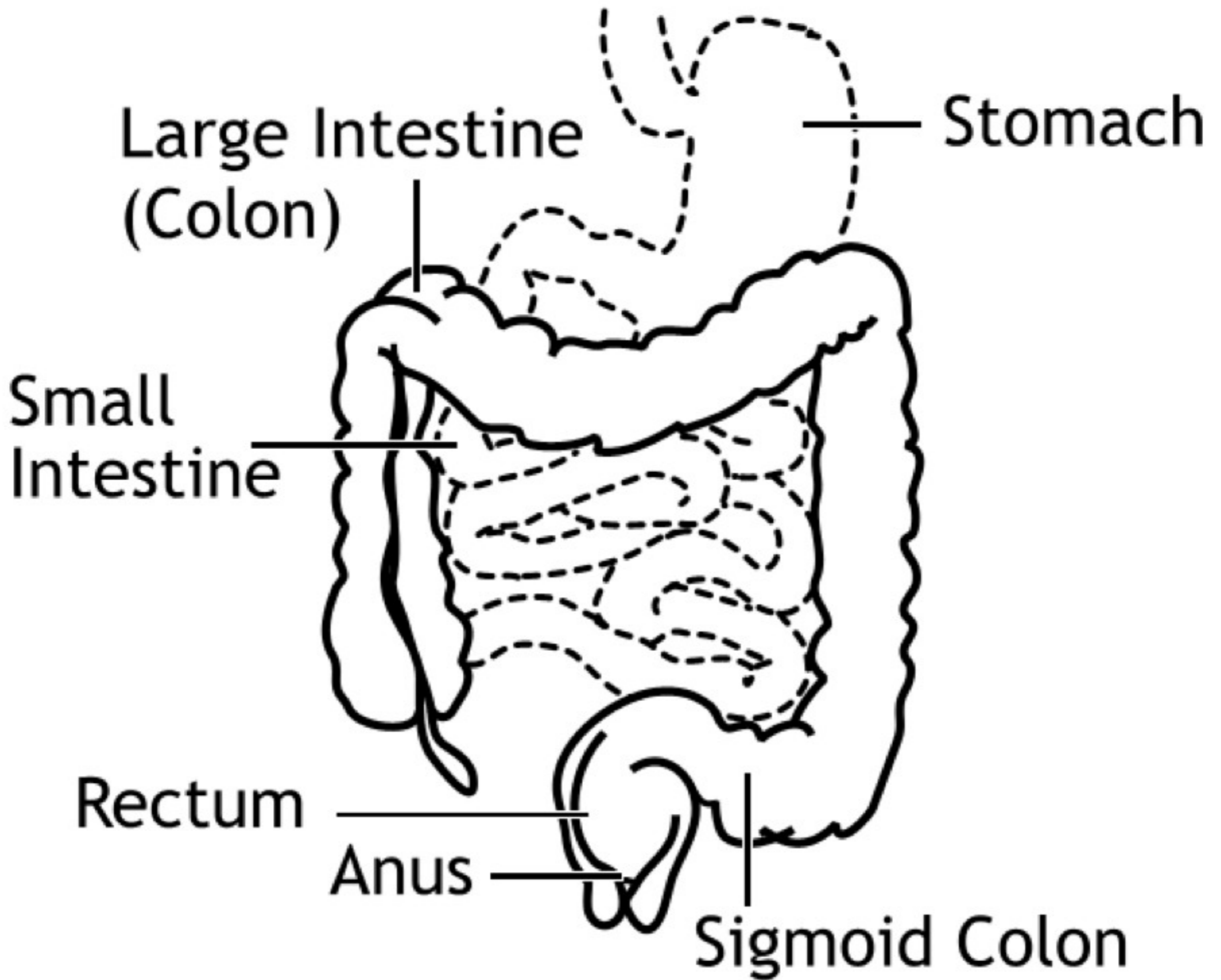
Food spends up to **4 hours** here.

Small Intestine

Most of digestion occurs here.

It is 15-20 feet long!

Muscles create waves called **peristalsis** to push chyme along the windy road.



Open Ended Question

Why are the peristalsis so important?

The helping organs

The **liver** produces **bile** that helps break down fats in the small intestines.

The **pancreas** produces enzymes to help break food down even further.

Bile and enzymes travel in **ducts** (tiny tubes) in order to make it to the small intestines.

The liver and pancreas
send more **gastric juices**
into the small intestines to
break down food.

Food is then broken into small
nutrients (carbohydrates, proteins,
fats, vitamins, minerals).

Absorption

The most important stage of digestion is **absorption**.

Villi are tiny finger-like structures that line the inner wall of small intestines. They absorb **nutrients** (good stuff our body needs).

Nutrients are then sent to the blood to give us **energy** and keep us alive!



Food enters through your **mouth**.

It passes through the **esophagus**,

then arrives at your **stomach**.

Muscles turn the food into a liquid.

In the **small intestine**, the pancreas and the liver help to break down food.

Nutrients are absorbed!

Open Ended Question

Summarize digestion in the small intestine using these words: Chyme, Liver (Bile), Pancreas (Enzymes), Absorption (Villi)

By now all proteins, carbohydrates, minerals and vitamins are gone, absorbed by the villi to help our body stay healthy and strong.

The **carbohydrates** give the body energy.



Vitamin A is headed to the eyes.
Calcium and **Vitamin D** go to the bones. Water leaves.

Large Intestine

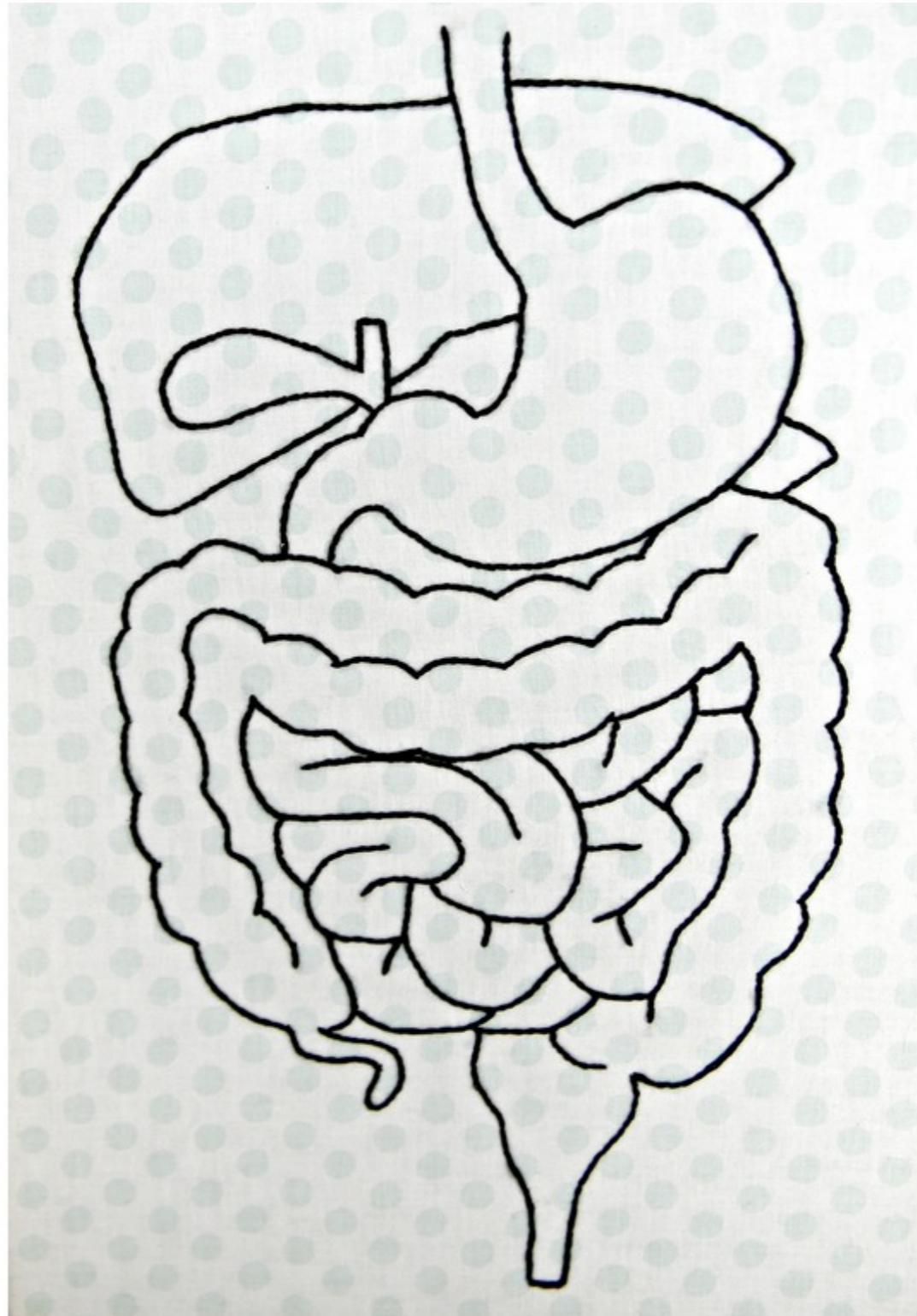
Some water and parts of the food that can't be used come to the large intestine.

Water is absorbed and the waste becomes more solid (feces, or poop).

Feces stays here until we go to the bathroom!

Draw It

Label the following terms: Large Intestine (colon), small intestine, stomach, anus



What is feces made of?

It is made of mostly water that wasn't absorbed, dead intestinal cells, and fiber from food that wasn't digested, along with bacteria (that's why it smells).

Open Ended Question

Summarize digestion in the large intestine (colon).

How to keep the Digestive System healthy

- Drink 8-10 glasses of water per day.
- Physical Activity speeds up digestion.
- Limit fats. They are harder to digest.
- Eat more fiber! (fruits, veggies, whole grains)
- Take your time chewing.

Quiz

In which part of your body does most of digestion occur and where food is broken into small nutrients?

- Mouth
- Esophagus
- Stomach
- Small Intestine
- Large Intestine

Villi are tiny finger-like structures that line the inner wall of small intestines.

True

False

In which part of the digestive system do muscles turn food into a liquid called "chyme"?

- stomach
- small intestine
- large intestine

In which part of the digestive system is feces formed?

- stomach
- small intestine
- large intestine

Open Ended Question

List at least three tips for keeping your digestive system healthy.

**THANK
YOU!**

Credits

“Elephants” by YoTut- <https://www.flickr.com/photos/yotut/303094778/>

Hey Paul Studios - “Large Digestive System Diagram. Framed Wall Hanging. Hand Embroidery.” https://www.flickr.com/photos/hey__paul/8356043668

Alexis Danielle Williams- “Are you Hungry”- http://www.personal.psu.edu/afr3/blogs/sio/hungry_stomach.png

Mubarak Fahad- “Swim Time”- <https://www.flickr.com/photos/mfahad/>

clipartpanda.com

<http://upload.wikimedia.org/wikipedia/commons/d/d8/Intestine.png>

<http://upload.wikimedia.org/wikipedia/commons/7/7d/Digestivetract.gif>