

Name _____

What Happens to Matter When Food is Digested in Our Bodies?



When you eat your favorite meal, have you ever wondered what happens to the food once it's in your body? The process is called digestion, and it's how your body breaks down food into tiny pieces it can use.

Digestion starts in your mouth. As you chew, your teeth break food into smaller bits, and saliva helps soften it. Then, you swallow, and the food travels down your esophagus to your stomach.

In the stomach, powerful juices and muscles mash the food even more. These juices are acids that help break down the food's matter—its proteins, fats, and carbohydrates. From there, the food moves into the small intestine.

The small intestine is a long, twisty tube. Here, your body's enzymes and other juices continue to break the food into even smaller parts. These small pieces are called nutrients, like sugars, amino acids, and fats. These nutrients are absorbed through the walls of the small intestine and sent into the bloodstream, where they travel to every part of your body. Your body uses them for energy, growth, and repair.

But not all matter from food is useful. Some parts, like fiber, can't be digested. These parts move to the large intestine, where water is taken out. What's left becomes waste, which eventually leaves your body.

So, what happens to the matter in food? Some of it becomes part of your body. Some gives you energy. Some becomes waste. But no matter disappears—it just changes form. This follows the Law of Conservation of Matter, which says matter is never created or destroyed, just changed.

Digestion is an amazing system. It takes what you eat and turns it into the building blocks of your body, showing how even something simple—like lunch—can be a science story.