

## Enzyme Series 11: Amylase Enzyme

**Michael:**

Amylase, and I can gather that it's specific to break down something that the medical terminology would be A, M, Y, L, but I-

**Kiran:**

Yep.

**Michael:**

Don't know what that refers to.

**Kiran:**

Yeah, so amylase breaks down amylose, which you were right. So amylose is a type of carbohydrate, a type of sugar that you'll find in rice and other grains and in many vegetables and potatoes and things like that. Amylose and amylopectin are the two types of sugars or carbohydrates that, polysaccharide carbohydrates, that make up a lot of the vegetable parts and grains; so amylase is very important to break down any kind of grain or vegetable.

In fact, your body produces amylase in your saliva. Amylase is the only enzyme in the saliva, and part of the chewing action is what will break down the fibers in the foods, and then it gets exposed to the amylase in the saliva itself, so it starts the breakdown process right in the mouth. As it passes through the gastric system, most amylases will tend to be somewhat stable but will die off to some degree through the gastric system. Then you have amylase again being produced in the small bowel to break down food. Amylase is very important for carbohydrate digestion.

**Michael:**

So, it would be found in both systemic and digestive enzymes.

**Kiran:**

Yeah, amylase is interesting because there's not a lot of studies to show its effect systemically, but certainly, if you're not breaking down your foods well, and you're not getting all the nutrients out of it, you're certainly going to have systemic issues, especially foods like vegetables, which are very important for you, so it'll be found in a systemic enzyme. It could be, but that may be one that's important to take with food as well.

**Michael:**

Okay. Great. That's interesting it's in the saliva. I thought there was more enzymes in saliva, I guess.

**Kiran:**

Yeah. There's many different types of enzymes, but amylase is a general-

**Michael:**

You mean a general term.

**Kiran:**

Yeah.