



Digestion and Digestive Enzymes

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38 million Americans see a doctor annually for digestive disorders! Are you one of them? You can improve your digestion easily and naturally with enzymes. More than 150 disorders and diseases are caused by lack of enzymes in the body

Digestive Enzymes Can Be Effective For

- Improving digestion
- Reducing heartburn
- Reversing bloating
- Eliminating belching
- Improving energy
- Modulating pH balance
- Overcoming stress reactions
- Reversing fight or flight
- Preventing “sick” headache
- Improving diarrhea
- Overcoming constipation
- Increasing effectiveness of supplements
- Absorption of minerals

How Your Digestive System Works

When food is eaten and chewed fully the digestive system is started. Digestion of starches starts with the amylase or ptyalin in the saliva. So the more you chew, the better you will digest each mouthful. Under each tooth is an acupuncture point that stimulates digestion so the more you chew and stimulate these points; the more you will digest each mouthful. Once you swallow, the food enters the stomach and continues the process of digestion. The liver, spleen and pancreas get involved in secreting enzymes and bile that help digestion. As the food continues through to the intestines for reduction of the waste and absorption of the nutrients, it becomes more and more compact. The tonality of the intestines is essential here for moving the digesting food through the small intestines to the large intestines and out of the body taking with it toxin waste material and the end product of digestion. Fiber helps build the tonality of the intestines because it exercises the muscles to keep them in shape for proper digestion and movement of waste material out of your body.

Common Causes of Poor Digestion

- **Stress**
- **Moldy environments**
- **Over consumption of caffeine, nicotine, and alcohol**
- **Exhausted adrenal glands**
- **Consuming iced drinks with meals**
- **Cold weather**
- **Inhaling toxic fumes**
- **Poor eating habits**
- **Constant barrage of allergens**
- **Consuming sugar**
- **Blood sugar imbalances**
- **Prescription and/or street drugs**
- **Consuming nutrition-less foods**
- **Abuse**
- **Poor self-esteem**
- **Angry outbursts on a regular basis**
- **Toxic liver**
- **Consumption of antacids**
- **Poor chewing**
- **Eating too much at one sitting**
- **Going too long between meals**
- **Eating before going to bed**
- **Sleeping too little each night**

Digestion and Your Immune System

Proper digestion is important for proper functioning of your immune system. The immune system's job is to seek out and destroy or deactivate invaders in your body. These invaders can be germs, viruses, pollen, or anything foreign to your body. Poor digestion can allow partially digested food to enter the blood stream causing the immune system to spend its time seeking out misplaced food particles instead of germs and viruses and other invaders. This can cause your immune system to become less efficient and can even lead to allergies, colds, diabetes, and other symptoms of a poorly functioning immune system. This is now called leaky gut syndrome (it used to be known as floating immune complex) and is often caused by poor digestion, which leads to an overgrowth of so-called bad bacteria in the intestines that cause irritation and inflammation leading to the intestines becoming porous and leaking partially digested food. This can lead to many of the common auto-immune diseases such as rheumatoid arthritis, lupus, diabetes, chronic fatigue, fibromyalgia, and Crohn's disease.

Why Take Enzymes?

Enzymes are essential for every action and reaction in your body. Every time you blink, move your arm, or any of a thousand other actions in your body, enzymes are necessary. They are the spark or catalyst that allows things to happen in your body. We are born with a supply of enzymes and when they are used up we will become deficient. Many enzymes are supplied by fresh natural foods so they can be constantly replenished from food. If food is picked ripe and eaten immediately, most enzymes are present in the food. However, picking before foods are ripe, delays in eating foods due

to shipping, canning, processing, and overcooking can reduce the amount of available enzymes. Lack of enzymes in your food and a stressful lifestyle can lead to enzyme depletion. This is why it is important to take enzymes with every meal. Many enzymes can be replenished if an enzyme supplement is taken at night just before bed along with a probiotic/prebiotic.

Symptoms of Poor Digestive Functioning

- Coated tongue
- Loss of a taste for meats
- Gas shortly after eating
- Stomach bloating after eating
- Pass large amounts of foul smelling gas
- Lower bowel gas several hours after eating
- Indigestion from ½ hour to one hour after eating
- Indigestion from 3 to 4 hours after eating
- Burning stomach sensations that eating relieves
- Mucus colitis
- Irritable bowel (IBS)
- Sour stomach
- Heartburn, especially when lying down or bending forward
- Spoon shaped nails
- Burping up sour material
- Irregular bowel movements

If you have more than one or two of these symptoms then you will want to consider taking a comprehensive digestion formula.

Check Your Digestion

You can check your digestion by timing how long it takes for certain foods to pass from your mouth through your body to the toilet. This is actually called the transit time and it should take from four to six hours. Eat a meal with a large serving of fresh or canned beets. Beets contain a natural dye that will show up in your stool. Another way is to eat a serving of canned corn niblets. Since canned corn is nearly impossible to fully digest you can also see it in your stool and time how long it took. You can be sure if it takes ten or more hours to see either of these, you need to take digestive enzymes. Ideally, a healthy person with a fully functioning digestive system has a bowel movement after each meal. As food is added into the digestive system the previous meals is moved on.

Minerals Need Enzymes

In order to breakdown and absorb minerals digestive enzymes are required. Minerals such as iron, calcium, and magnesium play an important part in your health and energy levels. Recent research showed that regular use of a popular acid blocker for inhibiting the proton pump in the stomachs of 18 elderly women decreased their calcium absorption 41 percent. (O'Connell, et al 2005) Low calcium intake increases the risk of bone loss and osteoporosis.

Aging and Enzymes

As we age our bodies slow down, this is especially true of the entire digestive system. Stress slows or even stops digestion. Shock, depression, irregular meals, and tobacco and alcohol consumption can also decrease digestive enzyme production. This is why most people over the age of forty need digestive enzymes. Many children as young as ten years old exhibit signs of poor digestive enzyme

production which can lead to premature aging and, perhaps, a life time of diseases and illnesses that could be avoided by taking enzymes with every meal.

The Rôle of Enzymes

Digestive enzymes break down food particles for storage in the liver or muscles and other enzymes convert it back into energy when the body needs it later. Enzymes help the blood coagulate to stop bleeding. Enzymes trigger the conversion of uric acid into urea, thereby preventing gout. Enzymes assist the kidneys, liver, lungs, colon, and skin in removing toxic wastes and toxins from the body. Enzymes are necessary for the construction of new muscle tissue. Enzymes help the body eliminate dangerous waste materials by breaking them down into harmless substances that can be excreted. (Balch 1997)

A Really Good Digestive Enzyme Formula will Contain

Protease breaks down protein. Aids digestion. Fights inflammation & acute conditions such as sports injuries, surgery, & wounds.

Amylase breaks down carbohydrates & aids digestion.

Lipase breaks down lipids (fats). Improves fat utilization in the body, decreases fat level in stools, & aids digestion.

Lactase breaks down lactose (milk sugar), aids digestion, used to treat lactase insufficiency.

Cellulase breaks down cellulose (the indigestible fibers found in many fruits & vegetables. Aids digestion,

Sucrase breaks down carbohydrates, specifically sucrose (sugar cane & sugar beet) & maltose.

Maltase breaks down the carbohydrates maltose & starch. Aids digestion.

Alpha Galactosidase breaks down carbohydrates. Prevents gas & other intestinal disturbances that occur from eating beans, whole grains, & gas producing vegetables such as broccoli & cabbage

Bromelain breaks down protein. Aids in overall digestion & absorption of nutrients. Fights inflammation & inhibits swelling. Speeds recovery from injuries. Improves respiratory conditions. Fights arthritis & other degenerative bone & joint diseases. Fights cardiovascular problems such as blood platelet aggregation, phlebitis, varicose ulcers, peripheral venous disease, blood clots, & heart attacks. Bolsters the immune system, fights viruses & bacteria, Improves antibiotic absorption. Fights cancer & activates a tumor-fighting substance called tumor necrosis factor (TNF). Prevents intestinal bacteria infections. Helps extend life. (Cichoke 1999)

Other Suggested Ingredients:

Pancreatic enzymes or pancreatin

Papain

Pepsin

Betaine

Ionic Minerals

Nattokinase

Ox Bile

How To Take Enzymes

Enzymes can be taken with each meal to aid in digestion. Most people find that one to three capsules are sufficient with each meal. If you have any of the digestive problems mentioned above and two or three don't help, you can safely increase the amount to four or five, especially with a heavy meat meal if you are using a plant-based enzyme formula.

Enzymes: The Fountain of Youth

Replenish the youthfulness of your body by taking digestive enzymes daily. Enzymes can restore enzymes to your cells that have been depleted by pollution, poor diet, smoking, poor digestion, or stress. You can feel young again!

References

O'Connell MB, Madden DM, Murray AM, Heaney RP, Kerzner LJ. "Effects of proton pump inhibitors on calcium carbonate absorption in women: a randomized crossover trial." *American Journal of Medicine* 2005 July;118(7):778-81

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These statements have not been evaluated by the US Food and Drug Administration.
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