



White Paper
Dr. Matthew I. Cooper, DC

Enzyme Therapy **HEARTBURN, INDIGESTION, AND IBS**

Heartburn and Indigestion are perhaps the most common ailments affecting Americans today. A multi-billion-dollar-a-year industry has emerged to provide over-the-counter remedies to sufferers. Why do so many people suffer from indigestion and why don't traditional remedies for indigestion correct the problem rather than merely provide temporary relief from its symptoms? The reason is that digestion is a very complex process.

Most "experts" claim an excess amount of acid in the stomach is the culprit. Heartburn and Indigestion have many causes, but I know this is not one of them. One of the most common causes is a deficiency in stomach acid (HCl). This inability to produce adequate stomach acid is common in people over 50 years of age who are free of gastric disease. Some studies even report as high as 25-35% of the elderly have this condition. HCl is critical for proper protein digestion in the stomach because it adjusts the pH of the stomach to allow protein digestion to occur. HCl changes pepsinogen to the active proteolytic enzyme, pepsin, and maintains the highly acidic pH needed for pepsin's activity. Stomach acid activates this enzyme, it does not destroy it.

Heartburn and Indigestion can also occur if the mucosal lining of the stomach is not able to protect the stomach wall from the acid. The stomach needs mucus to protect itself from the acid- and protein-digesting enzymes.

The major goal of both prescription drugs and over-the-counter remedies is to reduce or eliminate the production of hydrochloric acid and protein-digesting enzymes. These products relieve symptoms but severely compromise normal digestion and interfere with the delivery of nutrients to the body that is necessary to maintain health.

Irritable bowel syndrome (IBS) is a common and chronic disorder. The 27th edition of Dorland's Medical Dictionary defines it as a chronic non-inflammatory disorder characterized by abdominal pain and altered bowel habits ranging from diarrhea to constipation. There is no detectable pathological change with IBS. This condition is often referred to as Spastic Colon or Spastic Irritable Bowel. Painless diarrhea or constipation may also be referred to as Irritable Bowel.

It is estimated that 10 to 20 percent of the adult population is afflicted with IBS in some form and degree. The percentage is probably much higher because the symptoms are mild and often go untreated. Proper diagnosis and treatment are important because continued irritation of the bowel is a progressive condition that may lead to diverticulosis, ulceration of the bowel, and ultimately result in surgery. About 23,000 colostomies are inserted in this country annually.



Early recognition is important to relieve symptoms and to decrease the absorption of food that is associated with an irritable bowel, which may lead to weakness, anemia, skin conditions, and malnutrition (weight loss) as well as produce associated conditions such as gallstones, kidney stones and arthritis.

The cause of this insidious problem is the presence of inadequately digested sugars that remain in the bowel attracting water and resulting in diarrhea. Both lactose (dairy) and maltose (grains) are sugars that attract water, which results in severe distention and pain. One way to halt symptoms associated with IBS is to reduce the amount of sugar that is consumed in the diet. This includes dairy products and grains, as well as white sugar and flour. In order to get the best results, you should also supplement the appropriate food enzymes.

Normally, bacteria in the large intestine digests sugars that were not completely digested in the small intestine. This results in a large amount of gas formation. Gas and toxins are absorbed into the blood, detoxified in the liver and discarded in the urine. The gases are not readily absorbed into the blood and are expelled rectally. These irritants affect the bowel and produce an inflammatory response that can cause bleeding and excess mucous formation.

The consumer market has recently been flooded with lactose-digesting enzyme products. Manufacturers suggest that with their product, everyone can enjoy all of the ice cream and dairy products that they want. This is simply not true because of the complexity of the digestive system. They may help, but because they address only lactose, they do not solve the whole problem. In order to solve this problem, we must be conscious of our diet and use the appropriate enzyme supplements that focus on improving digestion rather than targeting one specific digestive problem.

Antacids prevent normal digestion in the stomach and transfer the entire stress of digestion to the pancreas. Plant enzymes, on the other hand, relieve the pancreas of some of its digestive burden by reducing the amount of pancreatic secretion required. The digestion accomplished by plant enzymes occurs early enough in the digestive process to trigger a reduction in this secretion. Thus, plant enzymes have the ability to lower stomach acid secretions without compromising the digestive system.

Stress affects the body's ability to produce enzymes vital to achieve healthy digestion. As stress continues, intestinal leakage increases, which can allow undigested food to enter the bloodstream. Under times of distress, symptoms from stomach disorders almost always increase.

So, what can be done to improve digestion and relieve the symptoms that result when the body cannot produce adequate amounts of stomach acid or struggles with stress? The answer is plant enzymes. Enhancing digestion and giving your body every advantage is necessary to help avoid symptoms. Protein digestion can be improved with food enzymes that "predigest" food in the stomach. Plant enzymes are capable of digesting food before your own digestive process begins. In other words, plant enzymes can enhance the digestion of food and the delivery of nutrients to the blood even when the patient has a compromised digestive system.