

Two Phase Digestive Enzyme Capsule Works in the Stomach and Intestine

Exclusive Enteric Matrix Formula Allows for pH Sensitive Release

Different enzymes are active at different pH levels. The exclusive enteric matrix formulation of **Digestin** allows for two phase, pH sensitive release of the contents of the capsule, with some of the enzymes being released in the stomach or gastric phase and others in the upper intestine or enteric phase.

Incomplete Digestion Can Cause Food Allergies and Many Diseases

Proper digestion is a requirement for optimum health, and incomplete or disordered digestion can be a major contributor to the development of many diseases. Not only are foods and nutritional substances of little benefit when breakdown and assimilation are inadequate, but also, incompletely digested food molecules can be inappropriately absorbed into the systemic circulation. This can lead to various diseases and the development of food allergies.⁽¹⁾

Enzymatic action originates in four areas: the salivary glands, the stomach, the pancreas and the wall of the small intestine. Each enzyme is capable of breaking down only a specific substance. For example, an enzyme capable of breaking down fats cannot break down proteins or carbohydrates or vice versa.⁽²⁾

Gastric Phase Releases Pepsin and HCl

The stomach is primarily responsible for digestion of proteins and ionization of minerals. The stomach secretes gastric acid (hydrochloric acid) and various hormones and enzymes.⁽¹⁾ In **Digestin** capsules, the gastric release phase provides the protein digestive enzyme, pepsin; betaine HCl as a source of hydrochloric acid; and stomach substance to provide growth and repair factors for the stomach.

Although much is said about hyperacidity (as often occurs with peptic ulcers), probably more significant health problems are caused by lack of gastric acid secretion. There are many symptoms and signs that suggest impaired gastric acid secretion, and a number of specific diseases have been

DIGESTIN™
Two Phase Digestive Enzyme Capsule

Product No. 987	Fill Size: 60 Capsules
Product No. 9872	Fill Size: 250 Capsules

Each two phase capsule contains:

GASTRIC PHASE:

Pepsin 1:10,000	30 mg.
Betaine HCl	115 mg.
Stomach Substance	5 mg.

ENTERIC PHASE:

Pancrelipase	100 mg.
Papain	100 mg.
Cellulase	2 mg.
Ox Bile Extract	50 mg.
Duodenal Substance	5 mg.

ENZYMATIC ACTIVITY PER TABLET:

Peptic	300,000 FCC Units
Papaic	600,000 USP Units
Proteolytic	10,000 USP Units
Diastatic	10,000 USP Units
Lypolytic	2,400 USP Units
Cellulytic	20,000 mC Units

Other Ingredients: cellulose, powdered stearic acid (vegetable), magnesium stearate (vegetable).

Recommended Use: One or two capsules with each meal, or more, depending on the size of the meal.

Contraindications: Individuals with peptic ulcer should not use a digestive aid containing HCl.

found to be associated with insufficient gastric acid output.^(1,3,4)

Several studies have shown that the ability to secrete gastric acid decreases with age. Low stomach acidity has been found in over half of those over age 60.^(1,5,6)

Common symptoms of low gastric acidity include:

- Bloating, belching, burning and flatulence immediately after meals.⁽¹⁾
- A sense of "fullness" after eating.⁽¹⁾
- Indigestion, diarrhea or constipation.⁽¹⁾
- Multiple food allergies.⁽¹⁾
- Nausea after taking supplements.⁽¹⁾
- Itching around the rectum.⁽¹⁾

(over)

Other signs of low gastric acidity include weak, peeling and cracked fingernails, dilated blood vessels in the cheeks and nose (in non-alcoholics), acne, iron deficiency, chronic intesti-

nal parasites or abnormal flora, undigested food in stool, chronic candida infections and gas in the upper digestive tract.⁽¹⁾

Enteric Phase Releases Digestive Enzymes and Bile

The small intestine participates in all aspects of digestion, absorption and transport of ingested materials. It secretes a variety of digestive and protective substances as well as receiving the secretions of the pancreas, liver and gallbladder.⁽¹⁾

Diseases involving the small intestine often result in malabsorption syndromes characterized by multiple nutrient deficiencies. Common causes of malabsorption include celiac disease (gluten intolerance), food allergy or intolerance, intestinal infections and Crohn's disease.⁽¹⁾

In Digestin, the enteric release phase supplies pancrelipase, cellulase, duodenal substance and ox bile extract to the small intestine.

- **Pancrelipase** is a standardized preparation of porcine pancreas which contains enzymes, principally lipase which digests fats, along with amylase which digests starch, and protease which digests protein. It's action is the same as that of pancreatic juices.
- **Pancreatic lipase**, along with **bile**, functions in the digestion of fats. Deficiency of lipase results in malabsorption of fats and the fat soluble vitamins.⁽¹⁾
- **Bile** aids in the production of an alkaline reaction in the intestines and is essential for absorption of fats.⁽¹²⁾ Bile emulsifies the fats, permitting intestinal and pancreatic lipases to split the triglycerides into diglycerides and monoglycerides, and finally into free fatty acids and glycerol.⁽⁷⁾
- **Papain** is a protein digesting enzyme isolated from the unripe papaya fruit. It has been shown to be able to digest wheat gluten (the protein portion of wheat) and render it harmless in celiac disease subjects. Taking a papain supplement with meals may allow some individuals to tolerate gluten.^(1,9,10)
- **Cellulase** hydrolyzes the plant fiber carbohydrate, cellulose. Although cellulose cannot be digested by humans, it is partially digested by the microflora of the intestine. This natural fermentation process is an important source of short chain fatty acids. Abnormal

intestinal flora is a common sign of digestive problems related to low gastric acidity.⁽¹⁾

The proteolytic (protein-digesting) enzymes and bile also serve to keep the small intestine free of parasites (including bacteria, yeast, protozoa and intestinal worms).^(1,11)

It is important to remember that digestive problems are caused by some glandular or organic dysfunction. While the digestive aid is being used, the glands or organs involved should also be treated.

In cases of pancreatic insufficiency, supplementation with pancreatic enzymes is also recommended.⁽¹⁾ **Pan 5X** and **Pan 10X** are excellent high potency pancreatic enzyme supplements.

WARNING: This information is provided for health care professionals only. **This publication and the product contained herein have not been approved or evaluated by the Food and Drug Administration. This publication, and the product contained herein are not intended to diagnose, treat, cure or prevent any disease.** The product relates to nutritional support only.

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