



DIGESTIVE ENZYMES & HERBS

GLUTEN FREE

FOR PROTEINS, FATS & CARBOHYDRATES
Potent Pancreatic Enzymes • Herbal Bitters & Carminatives

PIONEER® Digestive Enzymes & Herbs combines potent, broad-spectrum digestive enzymes, from pancreatin, with concentrated, traditional digestive herbs. This two-in-one combination is clinician-designed to help provide nutritive support for assisting and strengthening the digestive process.

Raw food naturally contains the proper types and proportion of enzymes to assist in its own digestion. Food enzymes are released by the action of chewing, which ruptures the food's cell membranes. Like salivary enzymes, raw food enzymes play an important role in human digestion by predigesting food in the upper stomach, where contents may sit for as long as an hour before gastric secretions begin their action.

Since enzymes are essentially destroyed at 118°F, most forms of cooking and industrial food preparation render food devoid of enzyme activity. This places the full burden of digestion on body processes and reserves. In time, this burden can weaken or overwhelm an individual's ability to process and absorb vital food nutrients. Many health professionals believe that the prevalence of cooked and processed foods in modern society makes supplementation with digestive enzymes essential. Digestive enzymes also may be of benefit to those who experience poor digestion and absorption.

CONSIDER THESE PIONEER® ADVANTAGES:

1. Enzymes from Pancreatin: Targeting Macronutrients.

To facilitate the digestive process, the pancreas normally releases three types of enzymes into the duodenum (upper small intestine). These enzymes help break down food that has exited the stomach. Specific pancreatic enzymes target each of the three types of macronutrients—proteins, fats and carbohydrates—as follows:

- **Proteases** help to break long protein chains (*polypeptides*) into smaller amino acid chains and eventually into single amino acids.
- **Lipases** help to split fats (as *triglycerides*) into free fatty acids and glycerol.
- **Amylases** help to reduce large carbohydrates (starches and other polysaccharides) to disaccharides (*sucrose, maltose and lactose*) and monosaccharides (*glucose, fructose, galactose*).

Research suggests that taking supplemental pancreatin may help provide nutritive support for healthy digestion. PIONEER's quadruple strength enzyme blend (as *Pancreatin 4X*) contains natural digestive enzymes derived from pig pancreas.

2. Traditional Digestive Herbs. Meaningful levels of top quality traditional digestive herbs—as concentrated extracts and whole herb powders—truly distinguish PIONEER® *Digestive Enzymes & Herbs* from other digestive enzyme products. The unique blend of herbs in this formula may help benefit digestive health by serving as *digestive tonifiers* (to help strengthen and soothe digestive membranes), *bitters* (to help support digestive enzyme and bile secretions) and *carminatives*. *Digestive Enzymes & Herbs* provides the equivalent of 815 mg raw herb per capsule:

- **Organic Ginger** – a classic digestive tonifier and aromatic bitter that may help counteract nausea
- **Peppermint & Fennel** – used for centuries to help soothe digestion
- **Artichoke & Gentian** (perhaps the most bitter of the herbal gastric stimulants) – offer nutritive support for liver and gallbladder
- **Cayenne** – a tonifying digestive stimulant, traditionally used by herbalists to augment absorption of herbs and other nutrients

3. Enterically Coated Capsule: Helps Preserve Enzyme Activity & Integrity. Pancreatic enzymes require a high pH, alkaline environment to remain active. These enzymes may be damaged if exposed to low pH, acidic conditions such as found within the stomach where the first stage of digestion takes place. To help prevent such premature exposure and loss of bioactivity, *Digestive Enzymes & Herbs* is offered in an enterically-coated cellulose capsule. Enteric coating is designed to help the capsules travel intact through the stomach into the higher alkaline environment of the duodenum, where pancreatic enzyme digestion normally begins. Enteric coating also helps to preserve and protect the peppermint oil in the herbal portion of the formula. Research suggests that enterically coated peppermint oil may help provide nutritive support for digestive ease and comfort.

4. Verified Gluten-Free. As with all PIONEER® formulas, *Digestive Enzymes & Herbs* is verified gluten-free by ELISA method laboratory testing. Current, sophisticated gluten testing methods may not be able to confirm the gluten-free status of vegetarian (fungal) digestive enzymes, many of which are produced in a wheat-based fermentation medium. However, animal-sourced pancreatic enzymes can be verified gluten-free. PIONEER proudly provides this assurance.

Take With Meals			
Serving Size 1 veg. capsule	AMOUNT		AMOUNT
Bottles of 60 or 120 capsules	PER SERVING	%DV	PER SERVING %DV
Pancreatin 4X	350 mg	...*	
Protease	35,000 USP		Peppermint <i>Mentha piperata</i> Leaf Extract (stand. to 1 mg [2%] essential oil) 50 mg ...*
Amylase	35,000 USP		Gentian <i>Gentiana lutea</i> Root Extract (5:1 concentrate) 50 mg ...*
Lipase	2,800 USP		Artichoke <i>Cynara scolymus</i> Leaf Extract (stand. to 1 mg [2%] caffeic acids) 50 mg ...*
Organic Ginger			Cayenne <i>Capsicum annuum</i> Fruit 15 mg ...*
<i>Zingiber officinalis</i> Root	100 mg	...*	
Fennel <i>Foeniculum vulgare</i> Seed Extract (4:1 concentrate)	75 mg	...*	

*Daily Value (DV) not established
Other ingredients: vegetarian capsule (cellulose), maltodextrin (carrier), acacia (carrier), vegetable magnesium stearate, silica, cellulose.
NOTE: Some ingredient details may be abbreviated on actual product labels. 4.08

For more information or to request additional copies: **800.247.6505**
www.pioneer nutritional.com

