PanXyme pH™

Acid Resistant, Non-Animal Derived Digestive Enzymes

Available in 90 capsules & 180 capsules

Clinical Applications

- Supports Healthy Digestion of Proteins, Carbohydrates, Fats, and Vegetable Fiber*
- Supports Assimilation of Nutrients*
- Supports Normal Pancreatic Function*

PanXyme pH™ *is a blend of digestive enzymes derived from the fermentation action of fungi such as* Aspergillus niger *and* Rhizopus niveus*, microorganisms safely used in fermenting foods, including cheese, soy sauce, and yogurt. These non-animal derived enzymes support the assimilation of nutrients in foods and the digestion of proteins, carbohydrates, fats, and vegetable matter. Clinical trials suggest that PanXyme pH is effective across a broad spectrum of pH ranges.**

Discussion

Enzymes are functional proteins that participate in important metabolic processes throughout the body, such as the digestion of macronutrients (carbohydrates, proteins, and fats). During digestion, specific enzymes break down specific macronutrients: amylases convert carbohydrates to simple sugars (mono- and di-saccharides), proteases (also called proteolytic enzymes) convert proteins into peptides and free amino acids, and lipases break down fats into free fatty acids (monoglycerides) and glycerol. The pancreas produces these enzymes and releases them into the small intestine, where the majority of digestion takes place. Adequate production, release, and delivery of enzymes are necessary for optimal digestion.*

The use of supplemental digestive enzymes was employed in the 1940s by physician and researcher Edward Howell,[1] and today supplemental enzymes continue to be utilized clinically to support digestion, assimilation, and gastrointestinal health.[2] Digestive enzymes are recommended to select individuals to support normal pancreatic digestive function.*[3,4]

PanXyme pH contains a variety of digestive enzymes to provide broad spectrum support.[5] **Biodiastase** contains amylase for carbohydrate digestion, protease for protein digestion, and cellulase to support the breakdown of vegetable fiber. **Lipase** is present to facilitate the breakdown of fats. **Newlase** contains both protease and lipase to further support healthy and complete digestion.*

PanXyme pH maintains optimal activity throughout the digestive tract, an important factor in supporting healthy digestion and absorption. It is not denatured by gastric acid or negatively affected by the alkaline environment in the intestines. A pH range of 3.5 to 6.0 creates the optimal environment for the enzymes in PanXyme pH; however, the enzymes remain stable within a range of 3.0 to 9.0.*

In addition to improving the digestive process, the combination of biodiastase, lipase, and newlase—the enzymes found in PanXyme pH—was clinically tested in a 25-week intervention trial to see if it improved the nutritional status of elderly individuals. Although body weight did not change significantly, individuals receiving the digestive enzyme blend were found to have a significant increase in both serum albumin and high density lipoprotein (HDL) cholesterol levels, suggesting that pancreatic enzyme administration supported markers for health and longevity.*[6,7]

The enzymes in PanXyme pH are prepared by fermentation, extraction, purification, and standardization of enzymes produced by types of fungi such as *Aspergillus niger*, *Aspergillus* sp., and *Rhizopus niveus*. Microbes employed for the manufacture of enzymes are safe microorganisms that have been used for a long time in the manufacture of fermented foods, such as beer, cheese, soy sauce, and yogurt. XYMOGEN is proud to source this formula from Amano Enzyme Inc., a Japanese company that has been manufacturing enzymes since 1950 and is one of the top enzyme producers in the world.[8] The company performs intensive testing to confirm the safety of the enzymes and the specific strains used. Amano also assays the individual enzymes in PanXyme pH for heavy metals and overall purity.

PanXyme pH™ Supplement Facts

Serving Size: 1 Capsule

	Amount Per Serving	%Daily Value
Amylase (from Biodiastase 2000)	45 mg (292,500 MWU)	**
Lipase	10.2 mg (510 FIP)	**
Newlase	10 mg	**
Protease	550 JP	
Lipase	40 FIP	

** Daily Value not established.

Other Ingredients: Calcium carbonate, microcrystalline cellulose, HPMC (capsule), stearic acid, magnesium stearate, and silica.

DIRECTIONS: Take one capsule with or after each meal, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

DOES NOT CONTAIN: Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

STORAGE: Keep closed in a cool, dry place out of reach of children.

VEGETARIAN CAPS

References

1. Howell E, Murray M. *Enzyme nutrition: The food enzyme concept.* Wayne, NJ: Avery Publishing Group; 1985.
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3. Halgreen H, Pedersen NT, Worning H. Symptomatic effect of pancreatic enzyme therapy in patients with chronic pancreatitis. *Scand J Gastroenterol.* 1986 Jan;21(1):104-8. [PMID: 3633631]
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6. Shibata H. Nutritional factors on longevity and quality of life in Japan. J *Nutr Health Aging.* 2001;5(2):97-102. [PMID: 11426289]
7. Amano Enzyme Inc. Digestive enzymes improve nutritional status in the elderly. *Enzyme Wave.* Newsletter. June 2004; vol 7. http://www.amano-enzyme.co.jp/pdf/wave_e/vol7/vol7_topic.pdf. Accessed January 3, 2013.
8. Amano Enzyme Inc. https://www.amano-enzyme.co.jp/aeu/index.html. Accessed January 3, 2013.

Additional references available upon request

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