

Pancreatin

Code: FE1698 – 120 enteric vegetable capsules



PANCREATIN is a food supplement based on digestive enzymes, providing 1 300 mg of lipase, protease and amylase activity to aid the pancreas with digestion and to control inflammation. These enzymes are normally produced by the pancreas and are important for digesting fat, protein and starch.

The capsules are covered with an enteric coating that protects them from stomach acids, so they reach the small intestine and can work in an optimal alkaline environment.

New Roots Europe's pancreatin is standardized to be four times stronger.

Ingredients: Pancreatin (pancreatic enzymes concentrate [porcine]), enteric vegetable capsules (glazing agent: hydroxypropylmethylcellulose; gelling agent: gellan gum; purified water).

Nutritional information	2 capsules (900 mg)
Pancreatin 4x	650 mg
Protease	65 000 USP
Amylase	65 000 USP
Lipase	13 000 USP

Recommended daily dose:

1 capsule two to four times daily with food. Swallow whole; do not crush or chew. Consult a health-care practitioner for use beyond 4 weeks.

Do not exceed the stated recommended daily dose.

Size and format:

120 enteric vegetable capsules

Indications and uses:

Helps with the digestive process and pancreatic insufficiency.

Cautions:

Consult a health-care practitioner before use if you are pregnant or breast-feeding, if you are treated with medication or have a special medical condition (pancreatitis, exocrine pancreatic insufficiency, cystic fibrosis or diabetes). Do not take in case of intestinal ulcer or inflammatory bowel disease.

PANCREATIN: This is a preparation of pancreatic enzymes that are isolated from fresh porcine pancreas. Pancreatin is used to replace digestive enzymes when the pancreas does not produce enough on its own. Certain medical conditions can cause this lack of enzymes, including cystic fibrosis, chronic inflammation of the pancreas, pancreatic cancer or pancreatic surgery. Pancreatin can also be used to treat a condition called steatorrhoea (loose, fatty stool) ^(1,2). Pancreatin provides amylase, protease and lipase:

Amylase: This intervenes in the breakdown of starch and carbohydrate molecules into smaller sugars. The different amylase types dissociate the molecules of the different types of sugar; lactase dissociates lactose (milk sugar), maltase dissociates maltose (malt sugar) and sucrase dissociates sucrose (cane and beet sugars) ⁽³⁻⁵⁾.

Protease: This intervenes in protein digestion and its breakdown into simple amino acids. Proteases, like other digestive secretions, are responsible for maintaining the small intestine free of parasites. A lack of protease increases the risk of intestinal infection. They include trypsin, chymotrypsin and carboxypeptidase ^(6,7).

Lipase: Together with bile, this intervenes in fat digestion. A deficiency of pancreatic lipase results in poor absorption of fat and liposoluble vitamins. The action of pancreatin is favoured by the presence of the enzymes betaine, pepsin A and papain ^(8,9).

Pancreatin

Code: FE1698 – 120 enteric vegetable capsules



Scientific evidence supports the use of proteolytic enzyme supplements for improving digestive function and accelerating recovery from injury/surgery and reducing swelling/bruising. The benefits for auto-immune diseases and allergies are less substantial, and more in-depth studies are needed. As such, proteolytic enzyme supplements seem to be of value for athletes seeking better recovery from exercise/injury, and for patients recovering from surgery^(1,5,7,8).

References:

- 1) Beck IT, et al. The role of pancreatic enzymes in digestion. *The American journal of clinical nutrition*. 1973; 26(3): 311-325.
- 2) Hernández-Ledesma B, et al. Identification of bioactive peptides after digestion of human milk and infant formula with pepsin and pancreatin. *International Dairy Journal*. 2007; 17(1): 42-49.
- 3) d'Eiril GM, et al. Pancreatic amylase in serum for differential diagnosis of acute pancreatitis and acute abdominal diseases. *Clinical Chemistry*. 1989; 35(10): 2142-2143.
- 4) Van Lente F and Kazmierczak SC. Immunologically-derived pancreatic amylase, pancreatic lipase, and total amylase compared as predictors of pancreatic inflammation. *Clinical Chemistry*. 1989; 35(7): 1542-1542.
- 5) Werner M, et al. Strategic use of individual and combined enzyme indicators for acute pancreatitis analyzed by receiver-operator characteristics. *Clinical Chemistry*. 1989; 35(6): 967-971.
- 6) Krogdahl A and Sell JL. Influence of Age on Lipase, Amylase, and Protease Activities in Pancreatic Tissue and Intestinal Contents of Young Turkeys. *Poultry Science*. 1989; 68(11): 1561-1568.
- 7) Slaff J, et al. Protease-specific suppression of pancreatic exocrine secretion. *Gastroenterology*. 1984; 87(1): 44-52.
- 8) Apple F, et al. Lipase and Pancreatic Amylase Activities in Tissues and in Patients with Hyperamylasemia. *American Journal of Clinical Pathology*. 1991; 96(5): 610-614.
- 9) Kolars JC, et al. Comparison of serum amylase pancreatic isoamylase and lipase in patients with hyperamylasemia. *Digestive Diseases and Sciences*. 1984; 29(4): 289-293.