

Pan-Ox-5™

Support for healthy digestion‡

DESCRIPTION

Pan-Ox-5™ is a comprehensive dietary enzyme supplement that is specially formulated for complete digestive support in the gastrointestinal tract, including both the stomach and small intestine.‡

INDICATIONS

- Supports proper digestive function‡

FUNCTIONS AND MECHANISM OF ACTION

The pancreas secretes digestive enzymes that catalyze the breakdown of starches (carbohydrates), fats, and proteins for absorption in the small intestine. These enzymes include amylase, lipase, and protease. Pancreatic amylase is responsible for the digestion of starch into maltose and maltotriose, which are further hydrolyzed into glucose by the disaccharidases of the mucosal cells. Dietary triglycerides are digested by action of lipases, which hydrolyze triglycerides into free fatty acids and monoglycerides. In addition, bile is secreted from the gallbladder to assist in emulsification and absorption of fats. Protein digestive enzymes, pancreatic proteases and pepsin from the stomach, break down peptides to form oligopeptides and free amino acids. Enzymatic breakdown of macromolecules is complemented with betaine. Betaine is a natural substance found in beets, spinach, and other food sources. Betaine HCl is a source of hydrochloric acid that may aid in digestion by lowering gastric pH and enhance intestinal function by increasing the activities of amylase, lipase, and protease. This combination of ingredients aids in proper digestive function and remains functional over a wide range of pH levels for optimal activity.‡

FORMULA (#202782)

Serving Size 1 Tablet:

Beet Root Powder.....	100 mg
Ox Bile Powder.....	65 mg
Betaine HCl.....	60 mg
Pancreatin (10X)	37.5 mg
(from porcine)	
Providing:	
Protease.....	7,500 USP
Amylase.....	7,500 USP
Lipase.....	600 USP
Lipase (from <i>Rhizopus oryzae</i>)	400 FIP
Pepsin (from porcine)	97,500 FCC
Papain (<i>Carica papaya</i> , papaya latex)	96,000 USP
Malt Diastase (from <i>Aspergillus oryzae</i>)	112.5 DP
Citrus Pectin.....	12.5 mg
Glutamic Acid.....	10 mg

Other ingredients: Microcrystalline cellulose, rice bran (gamma oryzanol), coating (hypromellose, glycerin), croscarmellose sodium, stearic acid, vegetable stearate and silica.

Gluten-free, Non-GMO

SUGGESTED USE

Adults take 1 tablet with a meal or as directed by a health professional.

WARNING: If you are pregnant, nursing, have any health condition or taking any medication, consult your health professional before using this product. Discontinue immediately if a burning sensation occurs. Not recommended for people with ulcers.

Keep out of the reach of children.

STORAGE

Store in a cool, dry place, away from direct light.

REFERENCES

- Pandol SJ. *The Exocrine Pancreas*. San Rafael, CA: Morgan & Claypool Life Sciences; 2010.
- Wright EM, Martin MG, Turk E. *Best Pract Res Clin Gastroenterol*. 2003;17(6):943–956.
- Keshavarzian A, Dutta SK. *J Clin Gastroenterol*. 1988 Oct;10(5):528-32.
- Bauer E, Jakob S, Mosenthin R. *AJAS*. 2005;18(2):282-295.
- Macierzanka A, Torcello-Gómez A, Jungnickel C, Maldonado-Valderrama J. *Adv Colloid Interface Sci*. 2019 Dec;274:102045.
- Hanafi NI, Mohamed AS, Kadir SHSA, Othman MHD. *Biomolecules*. 2018;8:1-19.
- Rao MB, Tanksale AM, Ghatge MS, et al. *Microbiol. Mol. Biol. Rev*. 1998;62(3):597-635.
- Wang H, Li S, Fang S, et al. *Nutrients*. 2018 Jul 16;10(7). pii: E907.
- Filipčev B, Kojić J, Krulj J, et al. *Foods*. 2018 Mar 29;7(4). pii: E49.
- Yago MR, Frymoyer AR, Smelick GS, et al. *Mol Pharm*. 2013 Nov 4;10(11):4032-7.
- Czakó L, Takács T, Hegyi P, et al. *Can J Gastroenterol*. 2003 Oct;17(10):597-603.
- Suarez F, Levitt MD, Adshead J, Barkin JS. *Dig Dis Sci*. 1999 Jul;44(7):1317-21.
- Domínguez-Muñoz JE, Iglesias-García J, Iglesias-Rey M, et al. *Aliment Pharmacol Ther*. 2005 Apr 15;21(8):993-1000.
- Kahl S, Schütte K, Glasbrenner B, et al. *JOP*. 2014 Mar 10;15(2):165-74.
- Rachman B. *Clin Nutr Insights*. 1997;5(10):1-4.
- de Castro RJS, Sato HH. *J Food Processing*. 2014:1-11.
- Skogen B, Amundsen E. *Scand J Immunol*. 1982 Dec;16(6):509-14.
- Okolo BN, Ezeogu LI, Mba CN, et al. *J Sci Food and Ag*. 1995;69(1); 109-115.
- Allen JD, Thoma JA. *Biochem*. 1978 Jun 13;17(12):2345-50.
- Mahadik ND, Puntambekar US, Bastawde KB, et al. *Process Biochemistry*. 2002;38(5):715-721.
- Salden B, Monserrat V, Troost F, et al. *Aliment Pharmacol Ther*. 2015 Aug;42(3):273-85.
- Toida J, Kondoh K, Fukuzawa M, et al. *Biosci Biotechnol Biochem*. 1995 Jul;59(7):1199-203.

For more information on Pan-Ox-5™, visit douglaslabs.com

‡These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by
Douglas Laboratories
600 Boyce Road
Pittsburgh, PA 15205
800-245-4440
douglaslabs.com



PUSH YOUR POTENTIAL.

©2022 Douglas Laboratories. All Rights Reserved.