

# Lipanase High Lipase Pancreatic Enzyme Supplement

## DESCRIPTION

Lipanase™, provided by Douglas Laboratories®, is a natural pancreatic enzyme supplement formula providing high strength pancreatin, which is equivalent to 2,400 mg of regular USP pancreatin for complete digestive support for fats, carbohydrates and proteins. †

## FUNCTIONS

The pancreas supplies the major digestive enzymes that catalyze the breakdown of starches (carbohydrates), proteins, and fats, so that the breakdown products can be absorbed in the upper small intestine. Some carbohydrate digestion takes place in the mouth by salivary amylase, but pancreatic amylase is the major carbohydrate-digesting enzyme. Amylases break down starches to maltose and maltotriose, which are further hydrolyzed into glucose by the disaccharidases of the mucosal cells, and then absorbed. Although cellulose is indigestible by pancreatic and intestinal enzymes, the microflora within the large intestine may degrade it and produce uncomfortable symptoms in the process. Although fat digestion starts in the mouth with the action of salivary lipase, the great majority of fat triglycerides are digested by pancreatic lipase secreted by the exocrine pancreas into the duodenum. Lipases break down triglycerides into monoglycerides and free fatty acids, which are efficiently absorbed in the upper small intestine. In the small intestine, proteases break down these polypeptides into free amino acids, and di- and tripeptides, which are directly absorbed by the intestinal mucosa. Lipanase provides high levels of catalytically active pancreatic enzymes which are specific for fats, carbohydrates and proteins.

## INDICATIONS

Lipanase tablets may be a useful nutritional adjunct for individuals who wish to supplement their diets with pancreatic lipase, protease and amylase.

## FORMULA (#LPN)

Each tablet contains:

300 mg 8X Pancreatin. Equivalent to 2,400 mg Pancreatin USP which provides the following minimum enzyme activity:

Lipase (fat-specific) .....	12,000 USPUnits
Protease (protein-specific) .....	60,000 USP Units
Amylase (starch-specific) .....	60,000 USP Units

## SUGGESTED USE

One or two tablets with each meal, and with food eaten between meals, not to exceed seven tablets daily, or as directed by a physician.

## SIDE EFFECTS

No adverse side effects have been reported.

## STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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### REFERENCES

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**For more information on Lipanase visit [douglaslabs.com](http://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.

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