

Supreme Zyme-Aid Extra Fort

VA-021/VA-023

Supports healthy digestive function and helps with difficult-to-digest food that can cause gastrointestinal discomfort

Key Points:

- Focuses on different proteases that can work in different pH zones of the gastrointestinal tract.
- High dose lipase to reduce bloating, gas and diarrhea after a high-fat meal.
- Contains only the essential carbohydrate digesting enzymes, including lactase to help digest lactose from dairy products.

Indication:

For people with indigestion, such as bloating, gas and diarrhea.

For people who are convalescing, such as those recovering from illness, severe injuries, burns, or operations/surgeries.

For people with food allergy or intolerance, including lactose intolerance.

For people who are not absorbing adequate nutrients, who are tired and lack energy, or who are constantly stressed.

Description:

Enzymes contained in raw food are mostly destroyed by processing and cooking, and cannot be utilized by the body to help with digestion. Enzyme deficiency has been shown to cause gastrointestinal discomfort and pain due to inability to digest food properly,¹ and can cause malnutrition and chronic fatigue.

Supreme Zyme-Aid Extra Fort contains all the enzymes necessary for the complete digestion of proteins, fats and carbohydrates, which prevents gastrointestinal discomfort and also aids essential nutrient and mineral absorption by the body from every aspect of the diet. Increased nutrient absorption results in a higher metabolism and increased energy.

Supreme Zyme-Aid Extra Fort focuses on protein digestion to aid in reducing food allergy, decreasing toxin retention in the body, and supporting the immune system.

VA-021 Quantity: 90 | Dosage form: Vegetarian Capsules

VA-023 Quantity: 60 | Dosage form: Vegetarian Capsules

Ingredients (per capsule):

For Carbohydrate Digestion:

Amylase (from <i>Aspergillus oryzae</i>)	125 mg (5000 DU)
Alpha-Galactosidase (from <i>Aspergillus niger</i>)	12.5 mg (150 GalU)
Phytase (from <i>Aspergillus niger</i>).....	2.5 mg (5 FTU)
Glucoamylase (from <i>Aspergillus niger</i>)	7.36 mg (5 AGU)
Invertase (from <i>Saccharomyces cerevisiae</i>)	0.94 mg (75 SU)
Lactase (from <i>Aspergillus oryzae</i>)	3 mg (300 ALU)

For Fat Digestion:

Lipase (<i>Aspergillus niger</i>).....	4.54 mg (5000 LU)
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For Protein Digestion:

Protease I (pH 2.5-6.5) (from <i>Aspergillus oryzae</i>)	7.5 mg (15 SAPU)
Protease II (pH 7-10) (from <i>Aspergillus oryzae</i>)	30 mg (15000 HUT)
Bromelain (from pineapple (<i>Ananas comosus</i>) stem)	41.6 mg (100 GDU)
Papain (from papaya (<i>Carica papaya</i>) fruit/latex)	50 mg (100,000 PU)

Non-Medicinal Ingredients:

Microcrystalline cellulose, maltodextrin, pullulan/hypromellose (capsule)

Suggested Use:

Adults – Take 1 capsule with or after meals, or as directed by a health care practitioner.
Vegetarian formulation.

Protein Digestion

Proteases are very important in digestion as they breakdown protein to liberate the amino acids needed by the body for building cells, repairing tissue and forming antibodies. Increased protein absorption is important for people recovering from severe injuries, burns, operations/surgeries, or illness. Protein is also very important for athletes to build muscle mass.

Protease can digest unwanted debris in the blood as well, including oxidized or damaged proteins and certain bacteria and viruses; therefore, protease deficient people are often immune compromised. Likewise, proteases can help to rid the heavy metal deposit, such as lead (Pb) and mercury (Hg), in the body by digesting the heavy metal-bound proteins since they exert their poisoning effect by binding to ionizable or sulfhydryl groups of proteins or enzymes.

Food allergies are caused by the body's immune system reacting to certain proteins from food. By breaking down these allergens to amino acids, proteases can reduce the allergic effects of these foods.



Proteases also play a role as anti-inflammatory agents by digesting debris caused by infections in bruised tissues or wounds.

Protease I and II

Proteases I and II are active in different pH regions of the gastrointestinal tract, which means that these proteases can work in both the acidic environment of the stomach and the alkaline environment of the intestine to ensure complete protein digestion and increased amino acid availability.

Bromelain

Bromelain is a protease derived from pineapple stem. Bromelain is active at a wide pH range of 4 to 8, which means it can act in both the stomach and the intestine. Additionally, bromelain is an anti-inflammatory agent and is helpful in healing minor injuries, swelling, and burns. It can also relieve symptoms such as stomach upset and heartburn.²

Papain

Papain is a protease present in papaya and is capable of hydrolyzing consumed proteins as well as helping with bloating and chronic indigestion. It also helps to reduce wound pain and inflammation, and allow granulation tissue to develop.

Fat Digestion

Fats contain twice as much energy as carbohydrates or proteins; hence, the body utilizes it as its energy reserve.

Lipase is necessary for the absorption and digestion of fats and fat-soluble vitamins keeping nutrients at appropriate, healthy levels throughout the body. Lipase supplements can help the body to reduce bloating, gas, diarrhea, and over-satiety following a high-fat meal.

A study reported that lipolysis catalyzed by gastric lipase only degrades 10 – 30% of triglycerides in the stomach. This is insufficient and problematic for people who consume high amount of fats daily.

Lipase supplementation may help to aid fat digestion and thus facilitate further absorption of fat-soluble nutrients.³

Supreme Zyme-Aid Extra Fort contains a high dose of 5000 LU lipase, which can help with digestion problems following a high-fat meal, and is especially beneficial for people with gallbladder problems.

Carbohydrate Digestion

Carbohydrates are a major source of energy for the body. The carbohydrate digesting enzymes work together to help break down complex carbohydrates so that they can be absorbed and used by the body, which is especially beneficial for people who are not acquiring enough nutrients from foods, who do not have much appetite, or who are constantly stressed and/or fatigued.

Often, high-carbohydrate foods sit uncomfortably in the digestive system. The carbohydrate digesting enzymes, especially alpha-galactosidase, help to digest starchy foods, beans, lentils, and yams to relieve indigestion symptoms such as gas, bloating, and pain.

Amylase

Amylases catalyze the hydrolysis of alpha-1, 4-glycosidic linkages of polysaccharides to yield dextrans, oligosaccharides, maltose and D-glucose; as a result, complex carbohydrates are converted into simple carbohydrates to ease absorption and utilization in the body.

A human clinical study⁴ indicates that supplementing foods with α -amylase increases energy intake by 23.8% in children, revealing the effectiveness of α -amylase in hydrolyzing complex carbohydrates. Furthermore, it helps to alleviate malnutrition in undernourished children/infants and nutritionally compromised elderly.

Lactase

Lactose intolerance causes gastrointestinal discomforts, such as diarrhea,⁵ bloat-

ing and gas production, in a great number people. While babies obtain their dietary requirements from milk, most people lose their ability to digest lactose as they grow into adults. More than half of the world's adult population is lactase deficient,⁶ causing malabsorption of certain nutrients, such as calcium and vitamin D which are mostly available in milk.

Supplementary lactase can help the body to digest lactose properly, reducing the symptoms of lactose intolerance, so that more dairy products can be consumed, leading to better bone health. This is especially beneficial for pregnant women and the elderly.

Cautions:

Consult a health care practitioner in cases of diabetes, or if pregnant or breastfeeding. Discontinue use if allergic reaction occurs.

References:

1. Layer P and Keller J. Lipase supplementation therapy: standards, alternatives, and perspectives. *Pancreas*. 2003; 26 (1): 1-7.
2. Orsini RA. Bromelain: safety & efficacy report. *Plast Reconstr Surg*. 2006; 118: 1640-1644.
3. Armand M, Pasquier B, Andre M, Borel P, Senft M, Peyrot J, Salducci J, Portugal H, Jaussan V, and Lairon D. Digestion and absorption of 2 fat emulsions with different droplet sizes in the human digest tract. *Am J Clin Nutr*. 1999; 70: 1096-106.
4. Besten LD, Glatthaar II, Ijsselmuiden CB. Adding α -amylase to weaning food to increase dietary intake in children. A randomized controlled trial. *Journal of Tropical Pediatrics*. 1998; 44: 4-9.
5. Debongnie JC, Newcomer AD, McGill DB, and Phillips SF. Absorption of nutrients in lactase deficiency. *Digestive Diseases and Sciences*. 1979; 24 (3): 225-231.
6. Scrimshaw NS and Murray EB. Prevalence of lactose maldigestion. *Am J Clin Nutr*. 1988; 48 (suppl): 1086-1098.

The information in this guide is for use by health care practitioners as a reference only.