RVGarden Product Facts: Maximizer

Aids Digestion

What are Enzymes? Enzymes are complex molecules, vital catalysts that are needed for every chemical reaction in the body. There are two major types of enzymes – metabolic and digestive. Metabolic enzymes help build body structure. Digestive enzymes work to break down large food molecules into smaller, readily absorbable building blocks the body requires.

Naturally grown foods contain the enzymes necessary to break food down to the essential nutrients the body needs. Nature provides enzymes in food to aid in the digestion process so that the body doesn't have to use its enzyme reserves to do all the work. But when we process, refine, overcook, or microwave our food, most if not all enzymes are rendered useless. At a temperature above 118 degrees Fahrenheit, all enzyme activity is destroyed. When we consume cooked or highly processed foods, our digestive system has to produce the enzymes necessary to digest what was eaten.

The purpose of our digestive tract is to extract and absorb the essential nutrients contained in our food. Consuming cooked foods can cause our body to take enzymes from the liver, pancreas, and other organs to use in the digestion process. Over time, this can cause these organs to be stressed, which can weaken our immune system and slow down our metabolism.

Health Benefits

Digestive enzymes assist in the breakdown of proteins, fats, carbohydrates, and sugars. The body can't utilize the nutrients even in healthy foods unless digestive enzymes are present to aid in the delivery of the nutrients to the bloodstream, cells, and organs. And, these nutrients are what keep the immune system and the rest of the body strong and healthy.

If the body is forced to supply the digestive enzymes needed for digestion, then it has fewer enzymes for other essential body functions. Including supplemental plant enzymes at the time food is consumed provides two important benefits. First, the plant enzymes can go to work immediately to start the digestive process. Second, the body doesn't have to take enzymes from other organs. This means that more metabolic enzymes will be available to help organs and tissues function properly.

Including enzyme supplements in a daily diet may yield these important benefits:

- Restore the body's natural enzyme supply.
- Boost energy level.
- Strengthen the immune system.
- Improve overall well-being.

Research Summary

Many researchers support the idea that premature aging and many of the degenerative diseases people suffer from today are a result of a lack of enzymes in critical organs and tissues. Further, the level of enzymes in young adults is much greater than older adults. This may be due to a steady diet of enzyme-free foods depleting the body's enzyme supply over time.

Maximizer

Maximizer is a plant enzyme supplement that contains 17 different types of digestive enzymes to aid in the pre-digestion of all the foods. This allows your body to use metabolic enzymes to do their vital work, rather than use them for food digestion.

Each vegetarian capsule contains five different types of enzymes to digest proteins, two types for digesting fibers, one type for digesting fats and oils, two types that reduce starches, and seven types of enzymes for sugars and dairy products.

Maximizer can help you restore your body's natural enzyme levels and help you maximize your energy level, feel better and give you a much better chance of staying healthy and disease-free. *Maximizer* works in a wide range of pH environments. Below is a list of major enzymes and their function:

PROTEIN REDUCING ENZYMES:

Acid stable proteases - works in extreme acidic conditions in the digestive process after other proteases have stopped working.

Bromelain – a broad spectrum enzyme that hydrolyzes most soluble proteins.

Papain – a proteolytic enzyme characterized by its ability to hydrolyze large proteins into smaller peptides and amino acids.

Actinidin – an endo protease from the kiwi fruit that shows significant activity on proteins.

Protease – hydrolyzes protein to peptide and amino acids.

FIBER REDUCING ENZYMES:

Hemicellulase – breaks down the hemicellulose of plant walls.

Cellulase – hydrolyzes cellulose.

FAT AND OIL REDUCING ENZYMES:

Lipase – breaks down fats and oils.

Supplement Facts		
Serving size: 1 capsule		
Servings Per Container: 90		
Amount Per Serving		% DV
Proprietary Enzyme Blend	373 mg	*
Proprietary Blend Contains: Amylase, Cellulase, Protease, Hemi-Cellulase, Mannanase, Acid Stable Protease, Pectinase, Alpha-Galactosidase, Papain, Lipase, Gluco-Amylase, Bromelain, Actinidin, Xylanase, Lactase, Maltase, Invertase.		
Other: Rice Flour		
* Daily Value not established.		Capsule Size: #1

STARCH REDUCING ENZYMES:

Alpha Amylase – Frees glucose molecules from the ends of polymers.

Gluco Amylase – Breaks down sugars and starches.

SUGAR & DAIRY ENZYMES:

Lactase – Breaks down the lactose in dairy products into more soluable sugars.

Invertase – Breaks down cane and beet sugars.

Maltase – Breaks down maltose, malt, and grain sugars.

Xylanase – Breaks down the xylan sugars found in most plants. Works particularly well with grains.

Alpha Galactosidase – Breaks Melibose, Raffinose and Stachyose sugars that are responsible for excess gas in the digestive system.

Mannanase – Breaks down the mannan sugars.

Pectinase – breaks down the pectin in fruits.

Suggested dosage: Take two to four capsules with meals, depending on the size of the meal. Can be taken between meals to help build up enzyme reserves.

Caution: Do not take if ulcer or gastritis are present (try *Gamma-Zyme* as an alternative).

Scientific Studies

In a 2004 research project conducted by The Netherlands Organisation for Applied Scientific Research, the effect of supplemental digestive enzymes was studied. The purpose of the study was to measure how well digestive enzymes digest proteins and carbohydrates and how available nutrients are to the body. This study concluded that enzyme supplements can significantly increase the degree of digestion in the lumen of the small intestine and improve availability of proteins and carbohydrates to the cells.

In a 2001 study, 260 people used enzyme supplements over seven months. The majority of the people taking enzymes reported noticeable improvement. Specifically, 235 (90%) experienced positive results, 14 (6%) reported negative results, and 11 (4%) were uncertain if any change occurred. Subjects reported significant improvements in digestion, stools/bowels, energy level, sleep patterns, weight gain or loss, foods tolerated, overall appearance, and mental skills.

Research conducted by Dr. Edward Howell, over a 50-year timeframe, showed that many of the physical problems and diseases we experience can be linked to improper digestion of food. In his research, he discovered that the saliva of young adults contain 32 times more enzymes than adults over 69 years. Dr. Howell concluded that the gradual depletion of the body's enzyme supply over time was caused by a steady diet of cooked foods. As the enzyme supply diminishes, the body becomes more susceptible to degenerative diseases and premature aging. Further research on rats revealed that rats receiving enzyme supplements had a higher level of enzymes in their body and tended to live longer than rats on enzyme-free diets.

Two other research studies (*Journal of Nutrition* 12:59-83, 1936 and *Proceedings of the Society for Experimental Biology and Medicine* 37:613-615) found that younger adults tended to have much higher enzyme levels in the urine, pancreas, and cells when compared to older adults.

Research (*American Journal of Physiology* 141:38-41, 1944) done on both domestic and wild animals revealed that feeding these animals a diet of heat-processed, enzyme-free food caused their pancreas gland to enlarge up to three times the normal size to handle the extra burden of the enzyme-deficient food.

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