## Proteolytic Enzymes Facts

dailly chores



Enzymes catalyze or drive nearly every biochemical reaction in our bodies. This means that enzymes are directly involved in every system in our bodies including the digestive, cardiovascular, immune and hormonal.

Enzymes have been researched and used to maintain and promote wellness for more than 40 years. One class of enzymes provides support to the digestive system. The other class of enzymes is absorbed intact into the bloodstream. These are referred to as "systemic" enzymes. Systemic enzymes work naturally and gradually within the body to support its efforts in processing food, vitamins, minerals and hormones efficiently.



**Enzymes play a vital role in supporting and maintaining optimal health.** These enzyme activities include the promotion and maintenance of microcirculation throughout the body as well as normal, healthy fluid levels within the joints.

**Proteins are broken down by enzymes called proteases.** Proteolytic enzymes are a special class of protease

enzymes. Protein fragments can be debris left over from the body's natural inflammatory response to infection, injury or allergy. Proteolytic enzymes can break down or neutralize these protein fragments.

We have an inherent ability to produce both digestive and metabolic enzymes. The expression of our individual potential to produce enzymes is determined by heredity and need.

**Enzymes catalyze reactions at spectacular speeds.** This is vital for a large number of crucial systems including the transmission of nerve signals, muscle contraction and digestion of food.

Enzymes are composed generally of two portions, a protein and a cofactor. The cofactors are most commonly

metal (mineral) ions including zinc, magnesium and chromium.

Without adequate enzyme levels, thousands of processes slow down or become inefficient.

Fundamentally, on a cellular level, enzymes support the body's natural ability to heal itself.

Proteolytic enzymes that have been "enteric-coated" are systemic enzymes. This coating allows the enzymes to

survive stomach acid for absorption into the bloodstream. Systemic indicates that the enzymes in question are present in the bloodstream in their biologically active form for use throughout the body.

The need for supplemental enzymes in the body can increase with age as both

intake and the body's ability to manufacture them may decrease. Specific health issues may also increase the need.

Recovery Zymes<sup>™</sup> is formulated to provide support for the physiological stress that may accompany strenuous or rigorous exercise. Skeletal muscle responds to exercise in relation to the type, intensity and duration of the particular exercise. This response is

seen in different rates of muscle synthesis and degradation. The breakdown of skeletal muscle after exercise is a normal, healthy bodily process.

Anise fruit and fennel seed are distinctive ingredients to our formula. Both of these herbs have been used for centuries in cultures throughout the world. They both act to calm the digestive tract and to prevent gas. This helps to make Recovery Zymes™ gentle on the system.



Proteolytic enzymes have been researched extensively for many years. Research supports the many healthsupporting applications for these enzymes, including exercise-related issues. Below are some examples of what research is indicating:

> In a double-blind, placebo-controlled study, researchers gave an enzyme mixture beginning 24 hours prior to and 48 hours following downhill running. The researchers reported that there was less muscle soreness in the group that was given proteolytic enzymes.1

> In a study on downhill running, researchers found positive results in the use of proteolytic enzymes to aid in recovery from intense exercise. They concluded that protease supplementation may facilitate muscle recovery as seen by faster restoration of contractile muscle function following exercise.2

<sup>1</sup>Bailey SP. Medicine and Science in Sports and Exercise. May 1999. 31(5):A214, S76. <sup>2</sup>Miller PC. Journal of Sports Science. April 2004. 22(4):365-72.

## Michael's Proteolytic Enzyme History: How they came to be



After four or five years in the supplement business, I had already introduced a good number of products in the marketplace. These had been received with strong enthusiasm. At that time I visited the area where I had started the business in McAllen, Texas. During that visit I was introduced to Dr. Peter Rothschild who was successfully using my products in his medical practice.

I was honored by the opportunity to meet Dr. Rothschild. This initial meeting lead to a personal friendship as well as a professional relationship. Over the next fifteen years, I was Dr. Rothschild's "pupil" learning about biology, physiology, chemistry and vital health information applicable to the ever growing natural food and supplement industry. During that period, he was the person I turned to for the many questions, as my learning and understanding of good health and health issues increased.

Dr. Rothschild later approached me to produce an entericcoated systemic enzyme formula for him. During the 1940s and 1950s, Dr. Rothschild had been associated with Dr. Ransberger, another physician, and together they had created a German enzyme formula.

Dr. Rothschild's area of specialization was immunology while Dr. Ransberger's was oncology. Their work was instrumental in introducing the therapeutic use of proteolytic enzymes to address pain and inflammation.

The only stipulation I made in order to make the formula was that I could add anise and fennel to it. This sequence of events lead to the creation of my formula, Recovery Zymes."

Be well,



Michael Schwartz



## Michael's® Naturopathic Programs

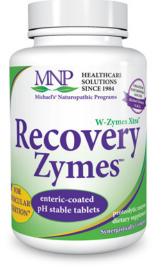
Amount Per Serving	% Daily Val
Pancreatin (10X USP**)	300 mg
Protease75,000 USP** units per serving	_
Amylase75,000 USP** units per serving	
Lipase6,000 USP** units per serving	
Papain (360,000 USP** units per serving)	180 mg
Anise Fruit (Pimpinella anisum)	150 mg
Fennel Seed (Foeniculum vulgare)	150 mg
Rutin	150 mg
Bromelain (from Pineapple) (2400 GDU***/gm)	) 135 mg
Trypsin (75 USP** units/mg)	75 mg
L-Chymotrypsin (75 USP** units/mg)	3 mg

OTHER INGREDIENTS: Dicalcium Phosphate, Stearic Acid, Modified Cellulose Gum, Vegetable Magnesium Stearate Clear Coating (Hydroxypropyl Methylcellulose) and Enteric Coating

<sup>\*\*\*</sup>Gelatin Decomposition Units



Available in a 30 Tablet Traveler Tube or in bottles of 90s, 180s, 270s &1000s







©2018 MICHAEL'S® NATUROPATHIC PROGRAMS A SUBSIDIARY OF INNER HEALTH GROUP HOLDINGS, LLC. 6003 RANDOLPH BLVD SAN ANTONIO, TEXAS 78233

Consumer Information Services Voice Mail: 800-845-2730 michaelshealth.com 070818

/michaelshealth

"Let's get social"

This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

<sup>\*\*</sup>United States Pharmacopeia units of enzyme activity