Active Proteolytic and Antioxidant Enzymes Support a Healthy Youthful Body

Our bodies contain countless trillions of tiny molecules which continually renew and maintain our life energy. They are called enzymes. Not a single person, animal, or plant could exist without them. The vast majority of the genetic code carried in our DNA is devoted to the blueprint for these complex tiny protein molecules. They take molecules apart (lytic), put them together (synthases), transfer parts of molecules from one substance to another (transferases), stick phosphorus onto amino acids to send messages into cells (kinases), and perform many many other functions involved in the complex biochemistry of life—all at body temperature, and within tiny fractions of a second. All enzymes are catalysts—that is, they facilitate chemical reactions that otherwise would require much more energy (heat) to take place. The facilitated chemical reaction takes place without the enzyme molecule being changed or consumed in the process. The reason that vitamins and minerals are essential, is that they function as coenzymes—that is, the small molecules that are specific vitamins and minerals bind to the larger complex protein molecules that are enzymes, and help configure the enzyme molecule so that it can catalyze the chemical reactions it was designed to facilitate, in the most efficient way possible. When enzymes become contaminated with environmental pollutants, their configuration can be altered, so that they function less efficiently. Severe vitamin and mineral deficiencies cause disease because the enzymes that require them lose the ability to function well. Certain genetic variations can also lead to production of enzymes that are less efficient than normal. In all of these cases, larger amounts of coenzyme factors (vitamins and minerals) can lead to improved enzyme function, and improved enzyme function supports better health, energy, and well being. Our bodies make many enzymes, but we also receive some from uncooked foods in our diet. Previously, it was believed that large protein molecules such as enzymes and antibodies could not be absorbed intact from the intestinal tract, but more recently research has documented that intestinal absorption, both of large protein antibodies and enzymes does indeed occur. Unfortunately, because of improper diet and the fact that heat destroys many enzymes, you may not be receiving all you need to properly support your overall health.

Think about all the chemical reactions that occur in our bodies within the period of a minute. They are too numerous to mention. Our bodies use enzymes to support these chemical reactions. Unfortunately, because of improper diet and the fact that heat destroys many enzymes, you may not be receiving all you need to properly support your overall health.

Somazyme is an easy way to supplement your daily enzyme intake. Somazyme supports the body’s natural ability to break down many of the larger molecules, so that they can be metabolized in a healthy way. The enzymes in Somazyme naturally and nutritionally support a youthful body, provide antioxidant support, as well as support healthy pancreas and immune system function.

◊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.
What Is Somazyme?
Somazyme contains highly concentrated plant and animal protein digesting enzymes from porcine pancreas (pancreatin), egg white (lysozyme), papaya (papain), pineapple (bromelain), serrapeptase (from non-animal bacterial fermentation derived from original Chinese silkworm gut enzyme), as well as the important antioxidant bovine enzyme superoxide dismutase. It also contains the important enzyme co-factor minerals magnesium, manganese, and zinc, the peptide antioxidant glutathione, and the peptide antioxidant flavonoids rutin, hesperidin, and lemon bioflavonoids. Cold processing is used to maximize and preserve enzyme activity. Certain amino acids and buffering agents are used to make sure the enzymes will be available for your body to use at appropriate times. Supplementing with these enzymes supports the pancreas, which produces many of these enzymes. Specific amino acids are included (L-lysine, L-glutamine, L-leucine, and L-arginine), that can function as anti-inhibitors of enzymes, thus promoting unfettered enzyme activity.

Somazyme, like most Lifeplus products, is formulated in our proprietary PhytoZyme® base which contains a unique blend of over thirty natural ingredients including special herbs, synergistic phytounutrient cofactors from fruits and vegetables, plus plant enzymes for bioavailability. Somazyme provides an easy way to supplement your daily enzyme intake, and supports the body’s natural ability to break down many of the larger protein molecules, so that they can be metabolized in a healthy way.

Silkworm Enzyme Helps Humans
Enzymes speed up biochemical processes by acting as catalysts in living cells. Enzymes are very specific in controlling biochemical reactions of all organisms. Their reactants are called substrates, and the first step in enzymatic catalysis is formation of an enzyme-substrate complex. For example, sucrose (sugar), the substrate of the sucrase enzyme, catalyzes the hydrolysis of sucrose to glucose and fructose.

Serratiopeptidase (sometimes called serrapeptase) is an enzyme that can significantly promote joint comfort, yet is free of serious side effects.

The tiny Chinese silkworm is responsible for producing this unique enzyme. Serrapeptase is created by bacteria living in the gut of the silkworm and is secreted in its saliva. The enzyme dissolves the silkworm’s cocoon, allowing it to fly away as a moth. Because living tissue isn’t a substrate for serratiopeptidase, it does not harm healthy tissue and cells.

Serrapeptase is a proteolytic enzyme (also called proteinases or peptidases), meaning it takes apart large protein molecules. Proteolytic enzymes occur in nature and are found in animals, plants, bacteria and fungi. Humans produce the same sort of enzymes, including trypsin and chymotrypsin, to help digest proteins in food.

Fibrin Protein
Perhaps the single most important activity of these “proteolytic” enzymes (enzymes which break down proteins) is the natural role they play in the blood clotting mechanism. The liver produces a protein called “fibrinogen” and secretes it into the bloodstream. When fibrinogen contacts damaged tissue, it is changed into a unique protein called “fibrin,” a large, sticky, insoluble protein molecule. When tissue is damaged, the fibrin molecules rush to the scene and begin the formation of a clot to prevent bleeding. Soon after fibrin clots are formed, fibrinolytic enzymes are produced in the bloodstream and begin to break them down. This is one process through which the blood maintains a healthy viscosity level to support healthy circulation and body tissues. Many of the enzymes in Somazyme, and in the diet as well, are also produced by the body and help to naturally break down fibrin protein.

By supporting this function, you ensure the proper viscosity of your blood and support overall cardiovascular and circulatory health.

The supportive nutrients, biocultures, stabilizers, activators and anti-inhibitors contained in this great formula make Somazyme an amazing product. The active enzymes in Somazyme naturally and nutritionally support a youthful body, fight free radicals, support the immune system and support natural, healthy pancreas function.

Directions: One tablet, three times per day, preferably on an empty stomach away from meals so the enzymes are not used on food digestion in the intestines. Somazyme is an enzyme supplement for the whole body and not for digestion. May take up to five tablets per serving.

◊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.
## References:

## Supplement Facts

<table>
<thead>
<tr>
<th>Serving Size</th>
<th>Servings Per Container</th>
<th>1 Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Per Serving</td>
<td>% Daily Value</td>
<td>Amount Per Serving</td>
</tr>
<tr>
<td>Magnesium (as Magnesium Citrate)</td>
<td>2 mg</td>
<td>L-Glutathione</td>
</tr>
<tr>
<td>Zinc (as Zinc Sulfate)</td>
<td>1 mg</td>
<td>Pancreatin</td>
</tr>
<tr>
<td>Papain</td>
<td>90 mg</td>
<td>Serrapeptase</td>
</tr>
<tr>
<td>Bromelain</td>
<td>130 mg</td>
<td>*</td>
</tr>
<tr>
<td>Lyszyme HCI</td>
<td>50 mg</td>
<td>*</td>
</tr>
<tr>
<td>Trypsin</td>
<td>50 mg</td>
<td>*</td>
</tr>
<tr>
<td>Superoxide Dismutase</td>
<td>15 mg</td>
<td>*</td>
</tr>
<tr>
<td>Somazyme™</td>
<td>8.5 mg</td>
<td>*</td>
</tr>
</tbody>
</table>

*Daily Value not established.

As with all supplements, please consult your physician prior to taking if you are pregnant or attempting to become pregnant, breast-feeding, under a doctor’s care or taking prescription medication.

Somazyme™ is formulated in the stabilized CytoVex™ base (Lysozyme HCl, Hesperidin Complex, Lemon Bioflavonoids, Rutin, Amino Acids (L-Lysine HCl, L-Glutamine, L-Arginine HCl, L-Leucine), and L-Glutathione), Papain (with Sulfite preservative), Trypsin, Dicalcium Phosphate, Stearic Acid, Magnesium Citrate, Superoxide Dismutase, Micrystaline Cellulose, Silica, PhytoZyme® proprietary blend (Bromelain, Papain, Alfalfa, Parsley, and vegetable and fruit concentrates from Blueberry, Carrots, Broccoli, Spinach, Cauliflower, Kale, Asparagus, Beet, Chili Pepper, Green Bean, Pea, Sweet Potato, Cucumber, Pumpkin, Snow Pea, Tomato, Watercress, Zucchini, Lima Beans, Mushroom, Banana, Cantaloupe, Cranberry, Guava, Lemon, Mango, Orange, Papaya, Peach, Pineapple and Grapefruit), Natural Peppermint Flavor, Serrapeptase, Magnesium Stearate, Zinc Sulfate, and Manganese Sulfate.

INGREDIENTS: Pancreatin, Bromelain, Cytovex™ proprietary stabilized and buffered enzyme base (Lysozyme HCl, Hesperidin Complex, Lemon Bioflavonoids, Rutin, Amino Acids (L-Lysine HCl, L-Glutamine, L-Arginine HCl, L-Leucine), and L-Glutathione), Papain (with Sulfite preservative), Trypsin, Dicalcium Phosphate, Stearic Acid, Magnesium Citrate, Superoxide Dismutase, Micrystaline Cellulose, Silica, PhytoZyme® proprietary blend (Bromelain, Papain, Alfalfa, Parsley, and vegetable and fruit concentrates from Blueberry, Carrots, Broccoli, Spinach, Cauliflower, Kale, Asparagus, Beet, Chili Pepper, Green Bean, Pea, Sweet Potato, Cucumber, Pumpkin, Snow Pea, Tomato, Watercress, Zucchini, Lima Beans, Mushroom, Banana, Cantaloupe, Cranberry, Guava, Lemon, Mango, Orange, Papaya, Peach, Pineapple and Grapefruit), Natural Peppermint Flavor, Serrapeptase, Magnesium Stearate, Zinc Sulfate, and Manganese Sulfate.

DIRECTIONS: 1–5 tablets two to three times daily preferably on an empty stomach away from meals.

◊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.