

About [Systemic Proteolytic Enzymes](#)

To help cleanse your kidneys is only one of many reasons to use systemic proteolytic enzymes. These medical wonders can be used as a safe alternative treatment or as an adjunct to standard medical treatment for many chronic illnesses and inflammatory conditions.

Different Kinds Of Enzymes

Systemic enzyme therapy with proteolytic enzymes is quite different from digestive enzymes (which are used to help digestion in the digestive tract). These systemic enzymes are proteases that you can take on an empty stomach so they can freely enter the bloodstream. Once there, they dismantle problem proteins that are involved in your immune system's inflammation process. In this way they have many medical uses, which I'll discuss in a moment.

Systemic proteolytic enzyme studies are found throughout the peer-reviewed scientific literature. They have also been quite extensively studied in Germany by the company that manufactures Wobenzym[®] N and Wobenzym[®] PS. There are many companies now manufacturing these substances from animals (trypsin, chymotrypsin), plants (bromelain, papain), bacteria (serrapeptidase) and fungi (Serrazimes[®]).

Enzymatic Action

In general, proteolytic enzymes have been found to clear the harmful immune complexes that form as a result of antibody reactions. Therefore, they are anti-inflammatory.

They are known to:

- Regulate cytokine activity and help clear inflammatory cytokines. ^[1] Cytokines are proteins made by a wide variety of cells whose signals set off inflammation, such as tumor necrosis factor-alpha (TNF- α) and the interleukins.
- Enhance the clearance of damaged proteins, remove fibrin and their fragments found in the blood during inflammation, improve blood circulation and decrease clots. ^[2]
- Reduce advanced glycation end-products (AGEs) ^[3] and their receptors on cells. These AGEs are a form of inflammation (intracellular damage and apoptosis, or programmed cell death) implicated in age-related diseases such as Alzheimer's disease, ^[4] cardiovascular disease, ^[5] stroke, ^[6] reduced muscle function and more.
- Down-regulate adhesion molecule activity of inflamed cells and cancer cells.
- Clean dead material from the blood ^[7] so it can be filtered through the liver and kidneys.
- Improve white blood cell availability and function to fight off infection. ^[8]

Improving Chronic Conditions

Systemic proteolytic enzymes have been shown to digest the protective protein coating of pathogens ^[9] (such as bacteria, viruses, parasites, fungi and candida) to make them inert, ^[10] ^[11] and they have a similar effect against cancer cells. ^[12] Because systemic enzymes safely and effectively clean the bloodstream, they reduce the toxic load to the kidneys. They should be used the week prior to and during a kidney cleanse as described in my [article that appeared last week](#).

Research demonstrates that there are other conditions for which systemic proteolytic enzymes are useful:

Alzheimer's disease: Reduces amyloid beta peptide in the brains of these patients. [\[13\]](#)

Arthritis: A safe and effective NSAIDs alternative for the pain of knee and hip osteoarthritis. [\[14\]](#) In rheumatoid arthritis proteolytic enzymes can protect and preserve joint cartilage even better than NSAIDs. [\[15\]](#) Systemic proteolytic enzymes improve every form of arthritis and can be safely added to standard medical therapy.

Asthma: Reduces dyspnea attacks (shortness of breath) and respiratory infections in children with asthma. [\[16\]](#)

Cardiovascular disease: Reduces angina attacks and improves tolerance of physical workload in patient with stable angina. [\[17\]](#) Proteolytic enzyme therapy also showed a reduction of repeated heart attack in patients with known heart disease. [\[18\]](#)

Infertility: Improves autoimmune and alloimmune (reaction to your partner) infertility.

Lymphedema: Can effectively resolve lymphedema in upper and lower extremities because it removes fibrin and improves lymphatic flow. [\[19\]](#)

Multiple sclerosis (MS): Decreases the frequency and length of attacks. [\[20\]](#)

Psoriasis and eczema: Recurrence was decreased and symptoms reduced. [\[21\]](#) When proteolytic enzyme therapy was added to standard psoriasis medical treatment, it rapidly improved eczema. [\[22\]](#)

Strains and sprains: Reduced duration of injury in top athletes and enhanced recovery from sprains. [\[23\]](#)

Thrombophlebitis: Acute thrombophlebitis as well as post-thrombophlebitic syndrome were greatly improved; subjects had decreased pain, reduced edema and fewer trophic ulcers. [\[24\]](#)

Thyroid disease: Autoimmune thyroiditis was significantly decreased; L-thyroxine dosages were able to be lowered. [\[25\]](#)

Urinary infections/stones: Recurring urinary tract infections [\[26\]](#) and kidney stones [\[27\]](#) were fewer. Also, systemic proteolytic enzymes improved the lab results in patients with pyelonephritis better than standard medical treatment. [\[28\]](#)

Some Things To Know About Proteolytic Enzymes

Proteolytic enzymes are measured in fibrinolytic units (how quickly they break down fibrin). They start working as soon as they are absorbed. Contraindications include any other special risk for bleeding (blood thinners, post-surgery, pregnancy complications); taking antibiotics (interferes with their mechanism of action); or allergy to papayas or pineapples (the enzymes may have been formulated from these sources).

If you take proteolytic enzymes, you may need to supplement with magnesium (500-1,000 mg) and zinc (30 mg) to help them activate optimally.

Next week, I'll discuss how these enzymes have been used in cancer treatments (Kelly-Gonzales protocol) and how they are used in cancer treatment currently.

To feeling good for life,

Michael Cutler, M.D.

Easy Health Options