



Protease Plus

Stock #1841-7 (90 capsules)

Protease Plus provides protease enzyme, which has been shown to improve protein digestion, reduce inflammation, speed the healing of wounds, inhibit the formation of blood clots, and improve immune function. Protease Plus also provides beet root fiber and a trace mineral concentrate, since many vitamins, trace elements and minerals function as enzyme activators.

Enzymes are essential nutrients that initiate virtually all of the chemical reactions occurring within the body. Enzymes also aid in the elimination of toxins, including potentially harmful allergens and environmental pollutants. Unless obtained in the diet (from raw fruits and vegetables or dietary supplements), the constant demands on the body to manufacture enzymes can cause enzyme deficiency—a common problem that can lead to digestive dysfunction, cardiovascular disease, obesity, cancer and other illnesses. For example, enzyme deficiency is believed to be part of the mechanism that enables cholesterol deposits to accumulate along the inside of arterial walls, ultimately manifesting in heart

disease.¹⁻⁴

Incomplete digestion can be a major contributor to the development of numerous disease conditions. Approximately 58% of the population is believed to suffer from some type of digestive disorder. Not only can digestive dysfunction lead to nutritional deficiency and upset of healthy bowel flora, but in addition, incompletely digested macromolecules can be absorbed into the systemic circulation (the bloodstream). This can lead to a variety of immune complex diseases and is theorized to play an integral role in the etiology (origin) of food allergies. Antigenic (capable of producing an immune response) macromolecules can trigger the body's defenses against exposure to what is perceived as foreign protein, thus producing symptoms of allergy. Furthermore, incompletely digested protein creates a favorable environment for "unfriendly" colonic bacteria, many of which create toxic substances that are absorbed by the body.⁴⁻⁶

Protease enzymes—also referred to as proteolytic enzymes—break down proteins into single amino acids. Proteases are capable of breaking down 300 grams of protein per hour. However, protease supplementation is beneficial for more than just improving digestion. Numerous human studies show that supplemental proteases given orally are absorbed intact into the bloodstream where they are able to act systemically—a process known as resorption. In this way, protease enzymes are used to treat acute inflammatory conditions such as sports injuries, surgery and wounds; reduce and eliminate food allergies; fight cancer and infections, including viral infections such as shingles (*Herpes zoster*) and AIDS; and combat auto-immune diseases such as rheumatoid arthritis, multiple sclerosis and scleroderma. Research also shows that protease is largely responsible for keeping the small intestine free of parasites, including bacteria, intestinal worms, protozoa and yeast. Thus, a lack of protease can greatly increase the chances of intestinal infection, including the overgrowth of the yeast *Candida albicans*.^{1,7-10}

Protease is also an important component in preventing both tissue damage during inflammation, as well as the production of fibrin clots. Protease increases the breakdown of fibrin—a process known as fibrinolysis. Fibrin promotes inflammation by forming a wall around the area of inflammation, blocking blood and lymph vessels and causing swelling. Increased fibrin formation is also believed to be associated with production of cholesterol and fatty material, which inhibit circulation and contribute to heart disease. In addition, fibrin can cause blood clots to develop, which, if they become dislodged, can cause strokes or heart attack. Therefore, protease enzymes are often used therapeutically to treat thrombophlebitis—a disease where blood clots develop in veins, the veins become inflamed, and the clots dislodge, causing a stroke or heart attack.^{1,5,8,9}

Protease's ability to dissolve fibrin is also beneficial in the treatment of cancer. Cancer cells are covered with a thick "coat" of adhesive fibrin (referred to as "fibrin masking"), thus making the cancerous cells no longer recognizable by the body's immune cells. In response, protease effectively dissolves the fibrin coating of the cancer cells, exposing their antigens to destruction by macrophages and the entire immune system. European oncologists have, for many years, included enzyme supplements as a natural, non-toxic adjuvant therapy against cancer; while nearly all of the leading alternative cancer specialists treating Americans prescribe enzymes as either primary or adjuvant cancer therapies. Furthermore, the National Cancer Institute is reportedly funding a large-scale study on the value of oral enzyme supplementation for cancer treatment.^{1,4,5,10,11}

A 2-year pilot study of 11 patients with inoperable pancreatic adenocarcinoma (pancreatic cancer) led to significantly increased survival using large doses of proteolytic enzymes, combined with an aggressive nutritional therapy. The National Cancer Data Base reports that survival rates for all stages of pancreatic cancer are 25% survival at 1 year and only 10% survival at 2 years. However, 9 patients (81%) in the pilot study survived 1 year and 5 patients (45%) survived 2 years. Additionally, 4 patients were still living at 3 years.^{1,12}

Immune complexes are inflammatory byproducts of antibody attacks on antigens that are normally eliminated from the bloodstream by macrophages. Immune complexes that continue to circulate can be deposited in tissues where they can cause significant local tissue damage. Diseases such as AIDS, ankylosing spondylitis (arthritis of the spine), Crohn's disease, *lupus erythematosus*, multiple sclerosis, pulmonary fibrosis, rheumatoid arthritis, scleroderma, and ulcerative colitis are associated with high levels of circulating immune complexes. Fortunately, both experimental and clinical studies show that protease preparations are extremely effective in decreasing levels of circulating immune complexes and activating macrophages to break up and eliminate them. Clinical improvements have been shown to correspond with reductions in immune complex levels.^{1,5,9,13}

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