

# **Aging and Proteolytic Enzymes**

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As one ages, the body's enzymes supply decreases in amount and activity level. These decreases are at least partially responsible for the development of the characteristic symptoms of aging, or for premature aging. An example of this is the fact that the graying of hair has been attributed to a lack of tyrosinase, or a loss in activity of the enzyme, with advancing age.

Plasmin and the proteolytic enzyme plasminogen are important in maintaining the equilibrium between clotting and clot lysis. Researchers have found that the synthesis of plasminogen, and of plasminogen activators, is reduced during aging. This, of course, favors the formation of fibrin deposits in the blood vessels. Cholesterol and other fatty materials tend to become associated with the fibrin and this can lead to hardening of the arteries -- a condition which leads to heart attacks and decreases the function of the brain, kidneys, eyes, and ears.

Drs. Max Wolf and Karl Ransberger, pioneers in the therapeutic use of proteolytic enzymes, used a mixture of proteolytic enzymes in combination with vitamin E in the treatment of senior citizens. Many patients have been helped by this therapy. Among the benefits already observed are an increase in the clot lysing activity in the blood and a reduction of serum lipids (including cholesterol) to a normal range.

Dr. Ransberger continues to pioneer the use of proteolytic enzyme therapy, not only with aging, but also with such conditions as multiple sclerosis, rheumatoid arthritis, polyarthritis, AIDS, herpes zoster, cancer, sports medicine, and other conditions of acute and chronic inflammation.

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