

Proteolitische enzymen en metabool syndroom

Proteolytic enzyme combination reduces inflammation and oxidative stress and improves insulin sensitivity in a model of metabolic syndrome

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Chronic, low-level inflammation may be an independent marker of Metabolic Syndrome (MetS). Systemic Enzyme Therapy (SET), the oral administration of proteolytic enzymes, is safe and effective in the management of inflammation. Therefore, the effects of SET, as Wobenzym[®], on the prevention and treatment of inflammation and other metabolic risk factors were assessed in a rabbit model of diet-induced MetS.

Animals were fed a lipid-enriched diet for 8 weeks during which they were administered a vehicle control (control group) or Wobenzym either throughout the study period (prevention group) or beginning at 5 weeks, after the development of biomarkers of MetS (treatment group).

At 8 weeks, both prevention and treatment groups demonstrated improved insulin sensitivity relative to the control group and reduced serum C-reactive protein (CRP) and glycosylated hemoglobin (HbA1c, $P < 0.001$). At 8 weeks, the prevention group, but not the treatment group, exhibited reduced total cholesterol and oxidative stress, measured as serum malondialdehyde ($P < 0.001$). Triglycerides and free fatty acids were reduced in both the treatment ($P < 0.01$) and prevention groups ($P < 0.001$) relative to the control group at week 8. Body weight and blood glucose were not affected.

Enzyme therapy may have a positive effect on inflammation, insulin sensitivity, and other metabolic risk factors of MetS.

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