In a recent issue of the journal *Gastroenterology*, researchers at the University of Texas MD Anderson Cancer Center investigated the effect of antidiabetic therapies on the risk of pancreatic cancer.*

Over a four-year period, from 2004-2008, the hospital-based case-control study involved 973 patients with pancreatic adenocarcinoma (including 259 diabetic patients) and 863 controls (including 109 diabetic patients). Personal diabetes history and other information were collected by talking to each patient personally, and the information was compared between the cases and controls. The risk of pancreatic cancer was then estimated using unconditional logistic regression analysis.

The results of the study showed that diabetic patients who had taken metformin had a 62% lower risk of pancreatic cancer compared to those who didn’t take the drug.

—Jon Finkel

Reference


Vitamin C and E Supplementation Associated with Reduced Five-Year Mortality

An article published in the American Journal of Epidemiology reported the results of a study conducted by researchers at the Fred Hutchinson Cancer Research Center which found that vitamin C and vitamin E supplement users had a lower risk of dying over a five-year period than those who did not supplement.*

Gaia Pocobelli and colleagues evaluated data from participants in the Vitamins and Lifestyle Study. Participants who reported using vitamin C and vitamin E supplements were found to have a lower risk of dying from any cause than those who did not use the supplements. When mortality was examined by cause, multivitamin use on 6 to 7 days per week was associated with a 16% lower risk of cardiovascular disease death and vitamin E use was associated with a 28% lower risk.

—Dayna Dye

Reference


Carnosine Combats Cataracts

In a recent issue of the journal *Biochemistry*, researchers report that the dipeptide carnosine shows promise not only in preventing cataracts but also in helping to treat the condition.

Enrico Rizzarelli of the University of Catania and his colleagues tested the effects of D- and L-carnosine on bovine cultured alpha-crystallin, the major structural protein in the lens of the eye. The cultures were treated with guanidine, a compound that is known to cause cataracts via the formation of alpha-crystallin fibrils. Co-incubation of the cultures with carnosine helped inhibit fibrillation, and the addition of carnosine to pre-existing fibrils was found to almost completely dissolve them.*

In another experiment, cultured rat lenses were exposed to guanidine with or without L-carnosine. While guanidine alone caused significant lens opacification after 24 hours, pretreatment with L-carnosine prevented lens opacification by 50 to 60%. Subsequent treatment of opaque lenses with L-carnosine resulted in time-dependent recovery of transparency.

—Dayna Dye