CoQ10 Improves Endothelial Function in Statin-Treated Diabetics

Coenzyme Q10 (CoQ10) improves endothelial function in patients with type 2 diabetes, according to a new report. Coenzyme Q10 is an essential mitochondrial co-factor and natural antioxidant; its synthesis in the body is blocked by the statin drugs widely prescribed to reduce cholesterol levels.

Australian researchers wondered if administering supplemental CoQ10 to type 2 diabetic patients would improve indications of endothelial dysfunction. Characterized by inflammation of the blood vessel linings, endothelial dysfunction is believed to underlie atherosclerosis, which is the foundation of cardiovascular disease.

Twenty-three statin-treated diabetic subjects randomly received either 200 mg CoQ10 per day, or placebo, for three months. Analysis of arterial dilation and markers of oxidative stress revealed that patients receiving CoQ10 experienced a significant improvement in endothelial function, compared with the placebo subjects.

These findings support previous reports that CoQ10 reduces oxidative stress and improves endothelial function.

Lutein May Improve Vision

Lutein supplementation for 12 weeks improves vision in a group of people with chronic exposure to computer-display light. Lutein is a carotenoid found in high concentrations in the eye's macula (a region of the retina involved in detailed vision).

Thirty-seven healthy men and women aged 22 to 30 years were recruited. Each had used computers for an average of more than 10 hours per day over the past two years. Subjects were randomly assigned to take lutein 6 mg/day, lutein 12 mg/day, or placebo for 12 weeks. At study completion, a small improvement was found in visual acuity in the 12-mg lutein group, although the findings were not statistically meaningful. Contrast sensitivity, however, improved in both the 6-mg and especially the 12-mg lutein group, and many of these measurements were significant.

Previous research has proposed a promising role for lutein in age-related macular degeneration. Dietary or supplemental lutein intake is critical because the body cannot synthesize carotenoids.

Smoking Increases Risk of Pancreatitis

Scientists have long known that alcohol intake increases the risk of pancreatitis, an inflammation of the pancreas characterized by severe abdominal pain. Now, new research suggests that smoking is also an independent risk factor for pancreatitis.

Researchers in Denmark examined data from nearly 20,000 men and women. Two-hundred thirty-five participants developed pancreatitis during the follow-up period, which averaged 20 years. The researchers found that approximately 46% of these cases of pancreatitis were attributable to smoking.

"We found that smoking was associated with a higher risk of pancreatitis, and that this increase in risk was comparable in size with what we previously found for alcohol, meaning that smoking is actually as harmful for the pancreas as alcohol," lead research Dr. Janne Tolstrup of the University of Southern Denmark told Life Extension.

"Also, we observed that the risk among former smokers was increased, indicating that it may take several years before the risk among former smokers is back to normal."

The researchers are unsure of the exact biological mechanism that links smoking and pancreatitis, but they note that animal studies have demonstrated that smoking interferes with pancreatic function.

—Dale Kiefer


—Marc Ellman, MD

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