

In a new double-blind study, supplementation with CoQ10 was shown to significantly decrease mild-to-moderate muscle pain that is often associated with statin therapy.

CoQ10 supplementation reduces statin-related muscle pain in a randomized trial

Myalgia (or muscle pain) is one of the most common adverse effects associated with the use of statin medications. Coenzyme Q10 (CoQ10), also known as ubiquinone, is a fat-soluble compound primarily produced by the body but also consumed in the diet. CoQ10 plays a vital role in cellular energy production and muscle energy metabolism. Because statin therapy has been shown to reduce blood levels of coenzyme CoQ10 by as much as 50%, a number of studies have suggested that CoQ10 supplementation may reduce statin-associated myopathy. However, results have been inconsistent. A new study published in the *Medical Science Monitor* has found a reduction in mild to moderate statin-induced muscle symptoms in men and women who supplemented with CoQ10.

This double-blind, placebo controlled study included 50 statin users between the ages of 40 and 65 years of age who had reported mild to moderate muscle pain for at least six months. The subjects received either 50 mg of CoQ10 or a placebo twice per day for 30 days. Clinical evaluations were conducted on each subject at the beginning and end of the study (day 0 and again on day 30). The assessments included questionnaires concerning pain severity and interference with daily activities, and blood samples analyzed for lipid, liver enzyme and muscle enzyme levels.

After 30 days of intervention, the intensity of muscle pain was reduced by 33% and pain interference by 40% among those who received the CoQ10 treatment. There was no significant change in myalgia in the placebo group. Although there were no changes to lipids, liver enzymes, or muscle enzymes, 75% of the CoQ10 group reported a decrease in statin-related muscle symptoms.

The results of this study show that coenzyme Q10 supplementation may effectively reduce mild-to-moderate muscular symptoms and lessen interference with daily activity, leading to better compliance with statin treatment. For most people this could mean a better quality of life, aside from cardiovascular protection, which is the primary goal of statin treatment.

Skarlovnik A., et al. Coenzyme Q10 Supplementation Decreases Statin-Related Mild-to-Moderate Muscle Symptoms: A Randomized Clinical Study. *Med Sci Monit.* 2014; 20: 2183–2188.