

A recent clinical trial of adult type 2 diabetics found improved glycemic control and lower cholesterol levels among diabetics given Coenzyme Q10.

CoQ10 supplementation may lower cholesterol and improve glycemic control in Type 2 Diabetics

Previous research has demonstrated that oxidative stress and impaired antioxidant defense contribute to pathogenesis and progression of type 2 diabetes. It has also been shown that diabetic patients typically have reduced coenzyme Q10 levels.

In a recent study published in the journal *Minerva Gastroenterologica e Dietologica*, researchers compared the effect of coenzyme Q10 versus placebo on glycemic control and lipid profile in type 2 diabetic patients.

The study included 64 adults between the ages of 20 and 60 who had been diagnosed with type 2 diabetes. Participants received either 200 mg of CoEnzyme Q10 or a placebo daily for 12 weeks. Blood samples were collected at the beginning and the end of the trial and were analyzed for fasting glucose, hemoglobin A1C, and lipids.

No significant changes in measurements were seen in the placebo group, but serum hemoglobin A1C (a measure of long-term glucose control), total cholesterol and LDL cholesterol were reduced in the group taking the CoEnzyme Q10. No significant difference in fasting glucose, triglycerides or HDL cholesterol were seen in either group.

The blood glucose fluctuations that occur in diabetics increase potential free radical damage, which in turn may worsen diabetic complications. Since diabetics are typically low in CoEnzyme Q10 levels, the research suggests that supplementation may help restore normal antioxidant defenses and protect pancreatic beta cells from excessive oxidative damage.

Although more research is needed to confirm these results, this study suggests that 12 weeks of CoEnzyme Q10 supplementation may improve glycemic control, total cholesterol and LDL cholesterol in adult type 2 diabetics.

Kolahdouz Mohammadi R et al. The effect of coenzyme Q10 supplementation on metabolic status of type 2 diabetic patients. *Minerva Gastroenterol Dietol*. 2013 Jun;59(2):231-6.