L-Carnitine Found to Help Exercise Recovery

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Link -
www.nowfoods.com/HealthLibrary/HealthArticles/HealthNotes/M095739.htm?cat=Sports%20Nutrition

L-carnitine (LC) is a compound formed from the combination of the amino acids methionine and lysine. It is essential for the production of energy by helping transport fatty acids into the mitochondria, the energy-producing compartment of every cell. But recent research has started to focus on LC’s potential help with exercise recovery, since it can help relax blood vessels, leading to increased nutrient delivery and waste removal from muscles.

Previous research has shown that 2 grams of LC per day is safe in humans, and results in less tissue damage, reduced muscle soreness, and quicker recovery from exercise. Now a new study has found more evidence of LC’s ability to help recover from exercise.

In the study, 8 healthy men between 19 and 25 years of age were given either 0 g, 1 g, or 2 g of LC for 3 weeks and then performed weight training exercise (5 sets of 15–20 repetition maximum with a 2-min rest between sets) and then had blood drawn immediately after exercise as well as 5, 10, 15, and 30 minutes after exercise.

The researchers found that the blood levels of LC increased following both 1 g and 2 g doses but had the greatest increase (nearly 10% increase) with the 2-g dose immediately after exercise. For both groups, however, similar reductions in muscle soreness and muscle damage were seen compared to the placebo group.

These results led the researchers to conclude that “LC supplementation is effective in mediating markers of metabolic and oxidative stress after [weight training]” and that “supplementing with 1 g of LC per day for 3 weeks afforded similar benefits as a 2-g daily dose.”

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Reference: