

Original Paper

Effect of six weeks supplementation of L-Carnitine on body fat percentages and lipoprotein profile in non-athlete male students

Jalali J (M.Sc)^{*1}, Bolboli L (Ph.D)², Rajabi A (M.Sc)³, Siahkuhian M (Ph.D)⁴

¹M.Sc in Exercise Physiology, University of Mohaghegh Ardabili, Ardabil, Iran. ²Associate Professor, Department of Exercise Physiology, University of Mohaghegh Ardabili, Ardabil, Iran. ³Ph.D Candidate in Exercise Physiology, University of Mohaghegh Ardabili, Ardabil, Iran. ⁴Professor, Department of Exercise Physiology, University of Mohaghegh Ardabili, Ardabil, Iran.

Abstract

Background and Objective: Several studies reported the contraventional effects of L-Carnitine on body fat percentages and lipoprotein profile. This study was done to evaluate the effect of six weeks supplementation of L-Carnitine on body fat percentages and lipoprotein profile non-athlete male students.

Methods: This quasi-experimental study was conducted on 20 non-athlete male students whom were non-randomly assigned into experimental and control groups. Subjects in both groups performed aerobic exercises for six weeks based on the principle of overload. Over the course of this period, subjects in the experimental group were received 13 mg/kg/bw of complement g L-Carnitine, orally. Controls were received 3 mg/ke/g/bw of starch on daily bases. Blood samples were collected before and after the training period. HDL, LDL-c, VLDL, triglycerides, total cholesterol, body fat percentage and body mass index were recorded for each subject.

Results: Aerobic exercise with supplementation of L-Carnitine significantly increased HDL and reduced triglycerides, total cholesterol, body fat percentage and VLDL, but had no significant impact on LDL-c and body mass index.

Conclusion: Consumption of slight doses of L-Carnitine in combination with aerobic exercise reduces body fat percentage and lipoprotein profile of non-athlete male students

Keywords: Aerobic exercise, L-Carnitine, Triglycerides, Cholesterol, Body fat, Body mass index

* **Corresponding Author:** Jalali J (M.Sc), E-mail: javad_jalali68@yahoo.com

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