عنوان مقاله:

Effect of Aerobic Training and C. vulgaris Intake on Lipid Profile and Leptin in ObeseWomen

محل انتشار:

دوماهنامه پزشکی هرمزگان, دوره 23, شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Afsaneh Karbalamahdi - *Department of Physical Education and Sport Sciences, Mahallat Branch, Islamic Azad University. Mahallat, Iran*

Behram Abedi - *Department of Physical Education and Sport Sciences, Mahallat Branch, Islamic Azad University. Mahallat, Iran*

Hoseyn Fatolahi - *Department of Physical Education, Pardis Branch, Islamic Azad University, Pardis, Iran*

Alireza Pazoki - *Department of Physical Education and Sport Sciences, Yadegar-e-Imam Khomaini (RAH), Shahre-rey Branch, Islamic Azad University, Tehran, Iran*

خلاصه مقاله:

Background: Regular physical activity can reduce the complications of obesity. Chlorella vulgaris (C. vulgaris) is recognized as a richsource of health promotion.Objectives: The aim of this study was to evaluate the effect of aerobic training and C. vulgaris intake on lipid profile and leptin inobese women.Methods: We randomly divided ۳۲ obese women into control (C), aerobic training (AT), C. vulgaris (CV), and aerobic training plus C.vulgaris (AT+CV) groups. Interventions were performed for eight weeks. C. vulgaris was used at the dose of ۱۲۰۰ mg/day. The aerobictraining included activities on a treadmill with ۶۵% - ۸۰% of maximum heart rate (MHR) (three sessions/week). Blood samples weretaken before and after the interventions.Results: The body weight, body mass index (BMI), leptin, triglyceride, cholesterol, HDL-C, and LDL-C significantly improved in the ATand AT+CV groups compared to the control group (P < ۰.۰۵). There was no significant difference between the AT and AT+CV groups(P > ۰.۰۵).Conclusions: Aerobic training can improve the lipid profile and leptin in obese women by reducing weight, increasing oxygenuptake, and improving lipid oxidation. Nevertheless, the effect of C. vulgaris was not detected individually. However, the effect oftrainingmaybe due to the modification of exercise-induced responses by C. vulgaris properties. Therefore, there is a need for furtherinvestigation of C. vulgaris physiological function in the field of sports medicine.

کلمات کلیدی:

Exercise, Herbal Supplements, Obesity, Adipokines