

## عنوان مقاله:

The Effects of Aerobic Exercise during Ramadan on the Levels of Leptin and Adiponectin in Overweight Women

## محل انتشار:

فصلنامه تغذیه، روزه داری و سلامت، دوره 3، شماره 1 (سال: 1394)

تعداد صفحات اصل مقاله: 8

## نویسندگان:

Seyyed Reza Attarzade Hosseini - *Department of Sport Physiology, Faculty of Physical Education and Sports Sciences, Ferdowsi University of Mashhad, Mashhad, Iran*

Mohammad Ali Sardar - *Department of General Courses, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Mohsen Nematy - *Biochemistry and Nutrition Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Samaneh Farahati - *Department of Sport Physiology, Faculty of Physical Education and Sports Sciences, Ferdowsi University of Mashhad, Mashhad, Iran*

## خلاصه مقاله:

**Introduction:** Several epidemiological studies have indicated factors such as Leptin level, Adiponectin and plasma leptin –to-adiponectin index to be the predicting biomarkers for cardiovascular diseases. Given the importance of healthy nutrition and adequate exercise in reducing the risk of Atherosclerosis, this study aimed to investigate the effects of fasting and aerobic exercise on the level of leptin and adiponectin in overweight women. **Materials and Methods:** In this study, 27 overweight and obese women with the body mass index (BMI) of  $\geq 25$  kg/m<sup>2</sup> and the age range of 45-20 years were selected by targeted sampling and were divided into two groups of fasting accompanied with aerobic exercise (N=15), and fasting only (N=12). The active group had an exercise protocol including three 60-minute sessions of aerobic exercise per week, with a 50% to 65% of heart rate reserve. Anthropometric dimensions and blood levels of leptin and adiponectin were measured in all the subjects before, at the second week and the fourth week and one week after Ramadan. Data were analyzed using repeated measures and the significance level of  $P \leq 0.05$  was considered. **Results:** In this study, one month of fasting accompanied with aerobic exercise had a significant effect on the amount of leptin, adiponectin and leptin-to-adiponectin ratio ( $P < 0.05$ ). However, no significant differences were observed between the two study protocols in terms of changes in leptin, adiponectin and leptin-to-adiponectin ratio in the two study groups. **Conclusion:** According to the results of this study, aerobic exercise during Ramadan could not result in any significant changes in the level of leptin, adiponectin and leptin–to-adiponectin index in comparison to fasting alone. The insignificant differences in the changes of leptin and adiponectin indices between the two study protocols could be due to the insufficient number of aerobic exercise sessions, as well as the low intensity and duration of the exercises.

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

