

## عنوان مقاله:

The Effect of Eight Weeks of Aerobic Exercise on Interleukin-  $\epsilon$ , Insulin Resistance and Blood Glucose of Overweight Female

## محل انتشار:

مجله گزارش بهداشت و درمان، دوره 2، شماره 3 (سال: 1395)

تعداد صفحات اصل مقاله: 9

## نویسندگان:

Masumeh Esmaili Alamdari - *Department of Sport Physiology, Ferdowsi University of Mashhad, Mashhad, Iran*

Mehrdad Fathi - *Department of Sport Physiology, Ferdowsi University of Mashhad, Mashhad, Iran*

Nahid Bijeh - *Department of Sport Physiology, Ferdowsi University of Mashhad, Mashhad, Iran*

Elham Pouryamehr - *Department of Sport Physiology, Bojnourd Branch, Islamic Azad University, Bojnourd, Iran*

## خلاصه مقاله:

**Introduction:** The important factors in the development of chronic diseases are obesity and overweight. The purpose of this study was to investigate the effect of eight weeks aerobic training on interleukin-  $\epsilon$ , insulin resistance and glucose in overweight young girls. **Methods:** Twenty-one girls with an age range of ۲۰-۳۰ years were selected voluntarily and randomly divided into experimental ( $n = ۱۱$ ) and control ( $n = ۱۰$ ) groups. The aerobic exercise program lasted for ۸ weeks, with a frequency of ۳ sessions per week, with training sessions starting from ۳۰ minutes in the first session and ۵۰ minutes in the final session, and the intensity of ۶۰-۷۰% of the heart rate reserve. The blood sample was taken before beginning the main study program. The independent sample t-test, paired sample t- test and the Kolmogorov-Smirnov test were used to compare the pre-test and post-test information between the groups. **Results:** Eight weeks of aerobic exercise had no significant effect on body mass index ( $p=۰.۴۳$ ), fat percent ( $p=۰.۷۲$ ), waist to hip rate ( $p=۰.۸۵$ ), interleukin-  $\epsilon$  ( $p=۰.۸۶$ ), insulin resistance ( $p=۰.۵۹$ ) and glucose ( $p=۰.۷۸$ ) nevertheless significantly reduced the weight ( $p=۰.۰۰۴$ ). **Conclusion:** It appears that eight-week aerobic exercise program could be beneficial for weight loss, but it did not affect glucose concentration, insulin resistance, interleukin-  $\epsilon$  serum, fat percentage, waist to hip ratio and BMI

## کلمات کلیدی:

Interleukin-  $\epsilon$ , Insulin Resistance, Glucose, overweight, Training

## لینک ثابت مقاله در پایگاه سیویلیکا:

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