

## Effect of Aerobic Training on Visfatin Levels and Lipid Profile in Obese Women

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**Abstract :** Obesity is an increase in body fat , in addition it has been introduced as a risk factor for the progress of lipid disorders, hypertension, cardiovascular disease and type 2 diabetes (1,2). In recent years, Adipose tissue is now recognized as an endocrine organ that secretes many cytokines such as: interleukin 6, leptin, and visfatin (3). Visfatin is an adipocytokine that release from adiposities. It is unidentified whether training also influences concentrations of visfatin. Purpose: The purpose of this study was to examine the effects of 12 weeks of aerobic training on visfatin levels and lipid profile in obese women. Method: Thirty two obese women (age =  $37.8 \pm 13.2$  years, body mass index = of  $39.4 \pm 6.4$  kg/m<sup>2</sup> .) volunteered to participate in a 12-wk exercise program. They were randomly assigned to either a training (n = 16) or control (n = 14) group. The training group exercised for 70 minutes per session, 3 days per week during the 12 week training program. The control group was asked to maintain their normal daily activities. Samples were obtained before and at the end of training program. We use t.paire and independent, test for data analyzes. Results: Exercise training resulted in a decrease in body weight ( $p < 0.05$ ), percent body fat (% fat) and BMI ( $p < 0.05$ ), fasting glucose level and visfatin concentration decreased but wasn't significant ( $p > 0.05$ ). Also the levels of triglyceride, total cholesterol and low-density lipoprotein cholesterol did not change significantly. Conclusion: In conclusion, three month aerobic training program used in this study was very effective for producing significant benefits to body composition and HDL.c but didn't significant chenging visfatin levels and lipid profile in these obese women.

**Keywords :** aerobic training, visfatin, lipid profile, women

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