Effect of 8 weeks of aerobic training on serum level of visfatin and TNF-α in non-athletic young women

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Abstract

Background and Objective: There are controversial reports about the effect of training on serum level of visfatin and TNF-α Cytokine. This study was done to evaluate the effect of 8 weeks of aerobic training on serum level of visfatin and TNF-α in non-athletic young women.

Methods: In this quasi-experimental study, thirty non-athletic healthy women were non-randomly based on the weight, height, BMI index and body fat percentage divided into two control and training groups. In the training group 8 weeks of aerobic exercise on a stationary bicycle 3 times a week was performed. Serum level of visfatin and TNF-α was measured using ELISA method, prior and at the end of 8th week of training while the subjects were fasted for 12-14 hours.

Results: At the end of 8 weeks of aerobic exercise, serum level of visfatin and TNF-α significantly reduced in the training group in comparison with controls (P<0.05).

Conclusion: Eight weeks of aerobic training reduces visfatin and TNF-α serum level in non-athletic healthy women.

Keywords: Non-athletic young women, Aerobic training, Visfatin, TNF-α