



The Effect of Eight Weeks High Intensity Interval Training (HIT) on Irisin Levels in Obese Young Men

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Abstract

Introduction: Irisin is a myokine that its secretion elevates in response to exercise and is stimulator of white to brown adipose tissue transformation. The purpose of this study was to investigate the effects of eight weeks high intensity interval training (HIT) on irisin levels of in young obese men.

Methods: Subjects of study were divided into control and experimental groups (each group 10 men). Subjects of experimental group performed HIT trainings for eight weeks (three sessions per week, each session 45 to 60 minutes with intensity of 90% of heart rate reserve). Fasting blood sampling was done 24h before and 48h after trainings. Data were analyzed using Wilcoxon and U-Mann-Whitney tests.

Results: Data analysis showed that in experimental group levels of BMI decreased ($P=0.023$) and irisin increased significantly ($P=0.005$). Also mean differences of BMI ($P=0.049$) and irisin ($P=0.031$) were significant between control and experimental groups ($P\leq 0.05$).

Conclusion: Overall, findings showed that eight weeks HIT is effective in elevation of irisin and reduction of BMI in obese young males.

Keywords: Irisin, High Intensity Interval Training, Adipose Tissue, Obesity.