Study of Aerobic Interval and Nonlinear Resistance and Concurrent training Effects on Serum Leptin level , Insulin Resistance and fat Percent of Overweight Adolescent Women

Mojgan Zaminafshan*,Amin Isanejad,

Introduction: at present study investigated aerobic interval and nonlinear resistance and concurrent training effects on serum Leptin level , insulin resistance and fat percent of overweight adolescent women. Research method: this research was semiexperimental that conducted in field. Statistical community included Lahijan city overweight non-athletes women (20 to 30 years).the subjects classified randomly into 4 experimental groups aerobic interval (n=9) and nonlinear resistant training (n=8) and concurrent training (n=9) and control group (n=8). Before and after the training period, measurements of body composition,Leptin, insulin resistance were collected. Practice protocols conducted 12 weeks, 3 once a week. Data analysed by spss 21 in meaningful levelof p≤0.05 . Results: using paired t-test results correlation indicated created a meaningful decrease between the overweight adolescent women fat percent of aerobic interval and concurrent training group , but did not observe meaningful statistical differences nonlinear resistance training activity (p>0.05) . Intergroup study showed did not observe meaningful difference between body fat percent after test among 4 groups (p>0.05) .Also inter- and intragroup study showed there was not changes of insulin resistance and Leptin level. (p>0.05). Conclusion: one period aerobic interval training , nonlinear resistance and concurrent training had not meaningful effect on Leptin and insulin resistance but aerobic interval training had meaningful effect on body fat percent. Meanwhile need more sudies and different timing to measure blood criteria.

Keywords : aerobic interval training, nonlinear resistance training and concurrent training, overweight , Leptin, insulin resistance, fat percent.