Effects of 8 weeks aerobic and resistance concurrent training on body fat percent, lean body mass, resting energy expenditure, serum lipids, leptin and cortisol levels on over weight and obese anxious girls.

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The purpose of this study was to examine the effect of Effects of 8 weeks aerobic and resistance concurrent training on body fat percent, lean body mass, resting energy expenditure, serum lipids, leptin and cortisol levels on over weight and obse girls with anxiety. In this quasi- experimental study, 30 over weight and obese anxious teenager girls were randomly divided in to experimental (n = 15, age: 16.33 ± 0.97 years, BMI: 30.48 ± 3.26 kg/m2) and control (n = 15, age: 16.53 years, BMI: 30.32 ± 2.21 kg/m2) group. Experimental group underwent an 8 weeks of aerobic-resistance concurrent training consisting of three sessions per week, Each session included 10 min warm up and cools down. 30 min of progressive aerobic training (60-80% maximum heart rate) and 30 min of resistance training (50-70% one repetition maximum). Body mass index, body fat percent, lean body mass, xesting energy expenditure, serum lipids, leptin and cortisol levels were measured before and after 8 weeks of training period. Statistical data were assessed using one-way covariance test and repeat design variance analysis with spss soft ware version 22 and the significance level was considered at 0.05). It seems that 8 weeks aerobic- resistance concurrent training reduced body fat percent, lean body mass, resting energy expenditure, TG, TC and leptin.

Keywords : aerobic, resistance concurrent training, anxiety, body fat percent, lean body mass, resting energy expenditure, serum lipids, leptin, cortisol