## The effect of 6 weeks of jumping rope on some factors of physical fitness and body composition in overweight students boys 15-16 years old

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Being more obese due toreduce in physical activity has made discussing effective ways to increase the daily children physical activity. The aim of this study was to investigate the effect of 6 weeks of rope program on some factors of physical fitness and body composition of overweight 16-15 year-old male students. Based on the estimates, since the approximate number of population in the two metropolitan areas of Rasht exceeded 248 in the present study, the sample size of 148 student students in this area was determined using the Morgan table. The cluster sampling method was used for ing the sample and the first and second regions of Rasht metropolitan area were ed as the main clusters according to the geographical distribution and finally, approximately 30 students each region that fulfilled the required conditions Overweight and obesity) were ed randomly. The students were randomly divided into two groups of 30 (age: 15.73  $\pm$  0.44, height: 173.6  $\pm$  6.96, weight: 90.53  $\pm$  9.49) and control (n = Age: 15.73  $\pm$  0.44, height 172.53  $\pm$  4.75, weight: 91/80  $\pm$  10/28). In the training group, a rope program was conducted for 6 weeks each week, 2 sessions and 20 minutes each session of the rope program. Before and after ed exercises, the subjects were: body composition factors and physical fitness factors, agility (4 x 9 meter test), cardio respiratory endurance (540 meters), speed (45 meter test), flexibility (stretching), Shoulder stubbornness (gravity) and elastic endurance (long standing). Descriptive and inferential statistics of paired t-test and independent ttest were used to analyze the data. The results of this study showed that the ed cranking exercises had a significant effect on the factors of body composition and physical fitness factors, agility (p = 0.111), cardio-respiratory endurance (p = 0.013, speed) (P = 0.002), flexibility (p = 0.000), muscle endurance (p = 0.009) and muscular endurance of the abdomen (p = 0.001). According to the results, six weeks of rooting

can decrease the body weight, fat percentage, BMI and significantly increase the physical fitness and physical fitness indices of overweight children aged 16 to 15 years old.

**Keywords: Rope skipping, obesity, overweight, body composition, physical fitness** 

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