



## Survey the relationship between body mass index and aerobic power in young athletes

### Poster Presentation

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### Abstract

**Introduction:** The mechanism for the relationship between fitness and body composition indicators is not yet clear, but it seems that weight and fat affect physical and cardiovascular function through two mechanisms. More weight and fat are associated with lower maximal oxygen consumption. Being overweight also consumes more energy at a certain level of physical activity. The aim of this study was to investigate the relationship between body mass index and aerobic power in young athletes.

**Methods:** In the present study, the subjects were divided into a group of 36 people. The present study was applied in terms of purpose and causal-comparative in terms of method and strategy. Cooper test was used to assess aerobic power. All anthropometric variables were measured in a separate session. After examining the normality of data distribution through the Shapiro-Wilk test, the relationship between aerobic capacity and body composition indices was measured using the Pearson correlation test. Statistical analyzes were performed at the level of P 050.05 using Spss 23 software.

**Results:** The results of Pearson correlation coefficient analysis show that there is no significant relationship between aerobic power and body mass index of male athletes in Ardabil ( $P = 0.419$ ). The correlation coefficient between the two aerobic power indices and the negative body mass index was 0.181.

**Conclusion:** It can be suggested that people who participate in sports programs to improve cardio-respiratory fitness and improve their maximum oxygen consumption levels must also consider the factors of body composition and anthropometrics by reducing fat weight and increasing lean mass to Accelerate further recovery of your maximum oxygen consumption.

### Keywords

body mass index; Aerobic Power; Young athletes

### Reference:

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