

Effect of the Percentage Body Fat on Muscular Endurance of Junior Free Style Wrestlers

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Abstract

Aim: The aim of this study was to observe effect of the percentage body fat on muscular endurance of junior free style wrestlers according to their weight categories. **Method:** one hundred fifty (N=150) male junior free style wrestlers were participated as subjects and they were further divided into five groups according to their weight categories, each group was comprised of thirty wrestlers. Body fat percentage was estimated by using Durnin and Womersley equation, In Push up test, recorded the number of push-ups performed in 1 minute. **Results:** Percentage body fat was found negative relationship with muscular endurance. **Conclusion:** it is concluded that the free style wrestling is a weight classified sport; therefore the correlation of body composition of the wrestlers with muscular endurance is important. The results of the present study also demonstrated the effect of age, height, weight, BF % on the muscular endurance of junior free style wrestlers.

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Introduction

A sport of wrestling has a strong tradition that precedes the first Olympic festival in 776 B. C., when Zeus wrestled Kronas for the possession of the earth (Gallagher, 1951). In the ancient Olympic Games wrestling was an important part and is still one of the most popular events of the modern Olympic Games. Nowadays, in the Olympics, two wrestling styles, first is Greco-Roman, a classic style in which only upper body moves are allowed and the participants are not allowed to apply the leg techniques, and second is Freestyle, in which upper and lower body techniques are allowed. Both wrestling styles are based on a weight class system, so weight categories are defined in which the different participants participate. The aim of the weight categories is to protect the competitors' health, limiting as much as possible the risk of injuries, as well as balancing out the physical characteristics between wrestlers and therefore increasing the performance percentage that depends on technical, tactical and psychological skills (Hubner et. al., 2004). Since then the sport of wrestling continues to grow in popularity because of the discipline and mental toughness it requires to be successful in the sport. Unfortunately, the sport has also been associated with the stigma of "cutting weight" and the practices that accompany the process of competing at designated weight classes. Like the sports of judo, boxing, and competitive weight lifting, wrestling requires its athletes to compete at specific weights or weight classifications. Typically, these weight classifications differ by approximately 7-11 pounds depending on age and style of wrestling. It is common knowledge in present day of wrestling that wrestlers compete in weight classes below their "normal" weight. The purpose of this practice is to gain advantages in strength, speed, and leverage