Analysis of the cardiovascular risk factors in military above 35 years old

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Introduction

The increasing prevalence of cardiovascular risk factors is mainly due to habits acquired during one's life. However, military training has physical aptitude as one of its main objectives. The objective of the data analysis was to analyze the practiced physical activity, which is the most active age group and if the intensity of the physical activity influences the various parameters being analyzed.

Methodology

This evaluation focuses on some cardiovascular parameters like the incidence of family history, medication, smoking habits and blood pressure/heart frequency measurements; data from blood tests to examine the biochemistry; body composition through weight, height, abdominal perimeter and, through DXA, body fat; and with accelerometry the physical activity level has been determined.

Results

Sedentary physical activity is significantly greater during weekends instead of moderate and intense levels, which occur mainly during work-days.

People who are between 45 and 54 years old are the ones who takes more anticholesterolemic medicine and also the one who show the best HDL values.

The sedentary level of physical activity is positively and directly related with weight, which presents an inverse correlation with moderate physical activity, and also body fat parameters and abdominal perimeter.

The highest prothrombin time levels and sedimentation speed are associated with sedentary physical activity. However, even though HDL levels are significantly greater when intense physical activity is practiced, this also creates higher values of INR. Intense physical activity is also responsible for some ischemic heart disease, reflecting an increase in CK-MB values.

Discussion

The abdominal perimeter proved to be a better predictor of intra-abdominal fat than the BMI. The youngest age group showed really high values of PCR, protein being a contributing factor for heart disease risk (Albert, Glynn & Ridker, 2003). The relation between physical activity and fat was inverse (Cederberg et al, 2011), while HDL results were better as physical activity increased (Gordon-Larsen et al, 2009).

Physical activity intensity above average show little to no benefits (AAdahl, KJæer & Jørgensen, 2007), just like the increase of circulation CK-MB however, sedentary ones showed more changes when it came to coagulation. Balanced physical activity was moderate when it came to benefits/disadvantages.

References

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