Physical fitness levels in relation to nutritional status in Chilean preschools

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Abstract

The aim of this study was to describe, analyze and compare the levels of physical fitness and nutritional status according to sex in preschool children in the city of Chillán (Chile). The study was a cross-sectional study with a sample of 134 preschool children in the Pre-Kindergarten and Kindergarten levels (4 and 5 years old, respectively). The PREFIT test battery was applied to evaluate the physical fitness of preschool children, specifically body composition, muscle-skeletal, motor and cardiorespiratory capacity. The results show a body mass index of 17.70±3.41 kg/m2, the prevalence of overweight and obesity were 32.1% and 28.4%, respectively. The boys obtained better results than the girls in the muscle-skeletal and cardiorespiratory capacity tests, on the contrary, in the motor capacity. The anthropometric characteristics of the preschoolers were correlated with the physical fitness tests. As a conclusion, it is established that there are differences between nutritional status and physical fitnees in preschool boys and girls; however, nutritional status does not have a significant influence on the different physical condition tests.

Author keywords Body composition Children Obesity Physical fitness