

Relationship between weight status and aerobic capacity in school children in Tijuana, Mexico.

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ABSTRACT

INTRODUCTION: Overweight and obesity in children can deteriorate physical and psychological health in the short, mid, and long term; alterations like dyslipidemia, hyperinsulinemia, glucose intolerance and other cardiovascular risk factors like prehypertension and hypertension occur more frequently in children and teens with obesity. **PURPOSE:** The aim of this study was to determine the relationship between the weight status and the aerobic capacity of schoolers in Tijuana, Mexico. **METHODS:** This study's samples were constituted by 275 children, 135 girls and 140 boys from 5th and 6th grade, between the ages of 10-12, currently enrolled in the morning and evening shifts. Weight, height, body-mass index and the maximum oxygen consumption (20 meter Shuttle Run Test) were evaluated. To identify relationship between the weight status with the aerobic capacity, the Pearson correlation coefficient was used. **RESULTS:** The overweight and obesity prevalence were 29% and 13% in boys and 33% and 12% in girls respectively. It was observed a moderate negative correlation but statistically significant between the weight status with the aerobic capacity ($r = -0.437$, $p = 0.001$). **CONCLUSION:** In this population, the greater the weight was associated with low aerobic capacity. In conclusion, the aerobic capacity could be affected due to overweight, obesity, and a superior corporal weight than the recommended one for a certain height.