



Abstract

The Influence of a School Environment on Obesity in Children [†]

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Abstract: Background: Obesity is a complex, multifactorial and widespread condition that affects all age groups of children. The rising prevalence of childhood obesity has become an important public health challenge because it affects the physical and mental health of children and is becoming an economic burden on the health systems. North Macedonia, as part of WHO's Childhood Obesity Surveillance Initiative (COSI), is collecting data to show the importance of the surveillance of obesity in school-aged children and to provide evidence for informed policy making. Objectives: The aim of this cross-sectional study is to further investigate the influence of a school environment on obesity in 7-year-old schoolchildren and therefore improve children's nutrition by targeting the food environment in and around schools. Materials and methods: Anthropometric measurements of body height and body weight were performed, and data from a school environment were collected, following the COSI protocol and data-collecting procedures. Results: The results from the previous rounds show that the overweight (including obesity) prevalence in 7–9-year-old schoolchildren is 31%. While physical education lessons in schools consist of 120 minutes of physical activity per week, only one-third of the schools studied organize sport activities outside school hours, and 39% of schools do not have indoor gyms. Only 31.2% of the schools are free of sugary beverage and calorie-dense food advertisements, but there are nutritional education classes in the curriculum in almost every school. One-third of the schools provide fresh fruit and one-third have vending machines on their premises, enabling children to acquire unhealthy snacks and beverages other than water and fruit juice. Conclusion: By comparing the previous and latest anthropometric data, there is a rising trend of childhood obesity in the country. School environments should be improved towards providing healthier nutrition and physical activity practices for pupils.

Keywords: school food environment; children; nutrition; obesity; school environment



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