Relationship between Lifestyle Behaviors and Obesity in Children Ages 9–11: Results from a 12-Country Study


Abstract

Objective: The aim was to assess associations between lifestyle behaviors and obesity in a multinational study of children from 12 countries representing a wide range of human development.

Methods: The sample included 6,025 children 9–11 years of age. Behavioral risk factors included nocturnal sleep duration, moderate to vigorous physical activity (MVPA), television viewing (TV time), and healthy and unhealthy diet pattern scores. Multilevel analyses were used to obtain odds ratios for obesity expressed per standard deviation of each behavioral risk factor.

Results: The odds ratios (95% confidence intervals) for obesity from multilevel, multivariable models were 0.79 (0.71–0.90) for nocturnal sleep duration, 0.52 (0.45–0.60) for MVPA, 1.15 (1.05–1.27) for TV time, 1.08 (0.96–1.20) for healthy diet score, and 0.93 (0.83–1.04) for unhealthy diet score in boys and 0.71 (0.63–0.80) for nocturnal sleep duration, 0.43 (0.35–0.53) for MVPA, 1.07 (0.96–1.19) for TV time, 1.05 (0.93–1.19) for healthy diet score, and 0.96 (0.82–1.11) for unhealthy diet score in girls.

Conclusions: Behavioral risk factors are important correlates of obesity in children, particularly low MVPA, short sleep duration, and high TV viewing.