

DIFFERENT DIETARY PATTERNS ARE ASSOCIATED WITH THE DISPARITY IN OVERWEIGHT OF BOYS BETWEEN RURAL AND URBAN CHINA

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Abstract. This study aimed to compare the dietary pattern and BMI of Chinese children between rural and urban areas and to investigate the association between these two variables. Children aged 7-18 years (urban: 870; rural: 1,692) from the 2004, 2006, 2009, and 2011 China Health and Nutrition Surveys were recruited. The criteria of the Working Group on Obesity in China were used to define overweight and obesity and determine differences in body mass index (BMI) between urban and rural children. A consumption recall module for all foods over three days were used to describe dietary patterns. Subgroup differences in dietary pattern were identified using analysis of covariance. The relationship between children's BMI and calorie structure was identified using nonparametric estimation and multiple variables linear regression models. Results show significant differences both in the overweight rate and dietary pattern between boys from urban and rural areas. Heterogeneity of calorie composition was positively associated with standardized BMI for boys. A higher proportion of calories from protein contributed to boys' BMI. However, no significant association was detected for girls.

Keywords: BMI, children, dietary pattern, overweight

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