

School nutritionist is an important protective factor in preventing student obesity: A 2-year national-wide prospective study

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Obesity in children is a serious public health concern and that the obesity rate among children is steadily increasing. Food intake of students during lunch at school accounts for more than one-fourth of an entire day's intake. Their effect on obesity, however, is not yet known. We performed a 2-year national-wide prospective research to study school lunches and other predictive factors in 2007 and their effects on student obesity rates in 2007 and 2008. We applied hierarchical multiple regression analysis to explore effects of composition, policy of school lunch and school community environment on obesity rates in 2208 schools in Taiwan. There was a negative correlation between lunch price and school obesity rate. The obesity rate in schools that employed a nutritionist was lower. The environment had more far-reaching influences on students' obesity than other variables; the student obesity rate was higher in schools in remote areas. The effects of school lunches were greater in male than in female students. The impacts of school lunches on obesity rates only occurred one year after school enrollment, which is in accordance with the principle of cause and effect. This study found that the availability of a school nutritionist was an important protective factor in preventing student obesity. When the community environment of schools with a relatively high obesity rate cannot be changed, hiring a nutritionist to design lunch menu and content, promote healthy food and establish a nutrition policy may help prevent obesity among students in poor country site.

Biography

Yiing Mei Liou has completed her Ph.D. from National Taiwan University and as a fellow at University of San Diego. She is the director of School Health Research Center, funded by the Ministry of Education and National Yang-Ming University. She lead national-wide program and wrote the white book of obesity prevention and management on students for more than ten years. She has conducted research on obesity prevention in the global aspect, determinants of the active lifestyle, and the health effects of diet and physical activities. She has published more than 48 papers in reputed journals.

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