School-based nutritional programs reduce student obesity

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In-school nutrition policies and programs that promote healthier eating habits among middle school students limit increases in body mass index (BMI), a new study led by the Yale School of Public Health finds.

The five-year trial, conducted in conjunction with the Rudd Center for Food Policy and Obesity at the University of Connecticut, followed nearly 600 students from 12 schools in New Haven.

In schools with enhanced nutrition policies and programs, students had healthier body mass index trajectories (a measure of obesity) over time, and by the end of the study they reported healthier behaviors than their peers in schools without the nutrition policies and programs. Students in schools with enhanced support to implement nutrition policies had an increase in BMI percentile of less than 1%, compared with students in schools without enhanced support for these policies and programs who demonstrated increases of 3% to 4%. The study is published in the American Journal of Preventive Medicine.

"These findings can guide future school and community interventions. Childhood obesity is a serious health threat, and schools are a vital way to reach children and their families to reduce risks and promote health," said lead author Jeannette Ickovics, the Samuel and Liselotte Herman Professor of Social and Behavioral Sciences at the Yale School of Public Health. "These findings strongly support previous administration policies that provided healthier food for all children in public schools." These policies were rolled back last week by the U.S. Department of Agriculture.

The study is one of the first school-based policy intervention studies that followed students through middle school. The researchers analyzed both behavioral and biological indicators. Results are among the most compelling to date, said the researchers, perhaps because of the strong community-university partnership, and the recognition that health and academic achievement often go hand-in-hand.

"This is some of the strongest evidence we have to date that nutrition education and promoting healthy eating behaviors in the classroom and cafeteria can have a meaningful impact on children's health," said Marlene Schwartz, director of the Rudd Center and senior study author. "These findings can inform how we approach federal wellness policy requirements and implementation in schools to help mitigate childhood obesity."

The nutritional interventions in the schools studied included ensuring that all school-based meals met federal nutritional criteria; providing nutritional newsletters for students and their families; school-wide campaigns to limit sugary drinks and encourage the use of water; and limiting the use of food or beverages as rewards for academic performance or good behavior.

Researchers also tested whether a series of policies to promote physical activity would impact
adolescent body mass index. They determined that the physical activity policies alone had little or no impact on body mass index.

In the study authors said that more than one in five American teenagers are currently obese, and as many as one in two are overweight or obese. Being overweight or obese early in life affects health across the lifespan, contributing to a range of chronic diseases such as hypertension, diabetes, and depression that reduce productivity and shorten life expectancy.

Provided by Yale University

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