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Will the USDA's School Food Standards Make a Difference in Childhood Obesity?

Introduction

The U.S. Department of Agriculture (USDA) recently improved nutrition standards for federally-reimbursable school lunch and breakfast programs. Most lunch standards were implemented at the beginning of school year (SY) 2012-13 and changes in breakfast began with SY

2013-14. Beginning July 2014, schools participating in federally-reimbursable meal programs were also required to improve nutrition standards for foods and beverages sold in vending machines, stores, snack bars and carts, and à la carte cafeteria lines. The new standards limit fats, sodium, sugar, and calories. The revised standards will eventually remove candy, regular-fat salty snacks/sugary treats, higher-fat milks, high-fat/high-calorie savory foods, and sugar-sweetened beverages, like regular soda, fruit drinks and high calorie sports drinks. The standards were developed in response to rising overweight and obesity among U.S. children and adolescents.

This study uses five years of data from nationally-representative samples of middle and high school students—and their school administrators—to examine three research questions: What percentage of U.S. secondary students attended schools from SY 2007-08 to SY 2011-12 where foods and beverages met at least some of the USDA meal and snack standards that were to begin phased implementation starting in SY 2012-13? Is there evidence that those standards were associated with overweight or obesity among students? Is there evidence of the effect of those standards on Black or Hispanic students or students from lower-income families? Using data from schools even before the new USDA standards went into effect can indicate potential effect of the standards once they have been in place for several years.

Student data were obtained from the Monitoring the Future (MTF) study using annual nationally representative samples of 8th, 10th, and 12th grade students from SY 2007-08 to SY 2011-12 (hereafter referred to as 2008 to 2012). School data were obtained from MTF schools administrators through the Youth, Education, and Society (YES) study using mailed questionnaires. The data looked at schools that met five standards: (1) no sugar-sweetened beverages; (2) no whole or 2% milks; (3) no candy or regular fat snacks; (4) no french fries; and (5) offered fruits and vegetables wherever foods were sold. The study included data from 22,716 8th grade students in 313 schools and 30,596 10th and 12th grade students in 511 schools.

Key Findings

- On average from 2008 to 2012, 26 percent of middle and 27 percent of high school students in the sample were classified as overweight or obese based on self-reported data.
- More than half (58%) of middle and 45 percent of high school students attended schools that did not offer french fries; however, only 20 percent of middle and 17 percent of high school students attended

schools that did not offer candy or regular fat snacks. Only 25 percent of middle and 16 percent of high school students attended schools where fruits and vegetables were available wherever food was sold.

- Middle school students were more likely than high school students to attend schools where foods and beverages would have met the new USDA meal and snack standards, but both ranked low: 21 percent of middle and 30 percent of high school students attended schools that did not meet any of the five standards examined in this study. Only 2 percent of middle and less than 1 percent of high school students attended schools that met all five standards.
- Among high school students, having fruits and vegetables available wherever foods were sold in school, and also not having access to whole or 2% milks in school, lowered the odds of being overweight or obese. Attending a school that met at least three of the five USDA standards also lowered the odds of high school students being overweight or obesity by 3 percentage points.
- Among all non-White high school students, attending a school that did not offer sugar-sweetened beverages was associated with significantly lower odds of overweight and obesity.
- Among Hispanic middle school students, attending a school that did not offer sugar-sweetened beverages was associated with significantly lower odds of overweight and obesity.

Conclusion & Policy Implications

From 2008 to 2012, few middle or high school students attended schools where food and beverage standards would be judged to meet at least some of the USDA school meal and snack nutrition standards that began to be implemented in SY 2012-13. Significant increases in the number of standards over time were seen for middle but not high school students. This study suggests that—if implemented fully—USDA’s standards can make measurable differences in U.S. schools by increasing access to healthy school meals, snacks, and drinks and by removing unhealthy choices. Because so few students attended schools with all identified USDA meal and snack standards in place during the study period, full implementation of the standards has the potential to substantially improve the nutritional quality of the foods and drinks students consume in school, and may help reduce student overweight and obesity. The full implementation of USDA’s standards may be challenging as schools seek to provide foods and beverages that are both nutritious and satisfy student demand. Some schools will need additional training, support, and incentives from states and the federal government. USDA is offering training and technical assistance materials to help schools comply.

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