



# Implementing Strong Nutrition Standards for Schools: Financial Implications



## The Issue

- The percentage of children and adolescents who are obese has more than tripled in recent decades, and most young people do not meet recommendations for healthy eating.<sup>(1,2)</sup>
- Overweight and obesity are strongly associated with an increased risk of diabetes, high blood pressure, high cholesterol, asthma, joint problems, and poor health status.<sup>(3)</sup>
- Despite these facts, many schools still allow students to purchase competitive foods such as candy, chips, soda, and other unhealthy snack foods and beverages in vending machines, school stores, or as à la carte offerings in school cafeterias.<sup>(4,5)</sup>
- Research shows that students who attend schools that sell foods with low nutrient density (often referred to as junk foods\*) and sugar-sweetened beverages have lower intake of fruits, vegetables, and milk at lunch, lower daily intake of fruits and vegetables, and higher daily percentage of calories from total fat and saturated fat.<sup>(6-9)</sup>
- The majority of students attend schools in districts with written wellness policies that include nutrition standards for competitive foods and beverages, and more than half of states have policies that limit or restrict competitive foods in schools.<sup>(10,11)</sup> However, these policies vary in strength, and many do not ensure that only healthy foods and beverages are available on school campuses.

**A frequently expressed concern is that implementing strong nutrition standards will reduce revenue obtained from food and beverage sales.**<sup>(12-14)</sup>

\*Foods or beverages that have low nutrient density (i.e., they provide calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals).

## The Evidence

***While some schools report an initial decrease in revenue after implementing nutrition standards, a growing body of evidence suggests that schools can have strong nutrition standards and maintain financial stability.***



- Eighty percent of principals in one survey reported little or no change in revenue when they implemented a state policy restricting the sale of junk foods and soda in schools.<sup>(15)</sup>
- A pilot study in an urban middle school found that within 2 months of implementing nutrition standards, the school generated more revenue from food sales than a larger middle school in the same district that continued to sell soda and fast food. This increase in revenue resulted from increased participation in the school lunch program.<sup>(16)</sup>
- Data from a pilot study in five schools suggest that implementing nutrition standards that allow sales of only healthy snack choices increased the number of students participating in the National School Lunch Program and did not cause any significant changes to school finances.<sup>(17)</sup>
- Among 16 schools that received funding to pilot test the implementation of state nutrition standards, 13 schools reported an increase in gross revenue. Most of these schools reported increases in the sales of reimbursable school meals, with the greatest increases occurring in the schools that eliminated à la carte foods completely.<sup>(18)</sup> Two of the schools reporting an increase in gross revenue were able to increase both sales of school meals and competitive foods while complying with state nutrition standards. Of the remaining three schools, one had virtually no change in gross revenues; one lost 8% in gross revenue, and another lost 15%.
- In a report of school nutrition success stories published by the U.S. Department of Agriculture and the Centers for Disease Control and Prevention, four of the five schools and districts that implemented nutrition standards for competitive foods reported an increase or no change in revenue. (One district did not report any financial data.)<sup>(19)</sup>
- An evaluation of the impact of state legislation establishing nutrition standards for competitive foods found that of the 11 schools that reported financial data, 10 experienced increases of more than 5% in revenue from meal program participation, which offset decreases in revenue from à la carte food service.<sup>(20)</sup>

## **Financial risk often can be minimized by careful selection and clever marketing of the healthier food and beverage choices.**

- A randomized controlled trial of 20 secondary schools found that promoting the sale of low-fat food options and increasing the availability of these options resulted in a higher percentage of sales from these foods and no effect on overall food service revenue.<sup>(21)</sup>
- Two studies have found that lowering the price of fruits, vegetables, and low-fat snacks resulted in a significant increase in the sales of these foods without a decrease in total revenue.<sup>(22,23)</sup>



## **School beverage vending contracts are not a significant source of revenue for most schools.**

An analysis of 120 beverage contracts from 16 states found that, on average—

- Sales of beverages in schools generate only \$18 per student per year.<sup>(24)</sup>
- For every dollar that students spend on beverage vending machine purchases, only 33 cents goes to the school. The remaining 67 cents goes to the beverage companies.<sup>(24)</sup>

## **Resources**

- Institute of Medicine. *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth*. Available at [www.iom.edu/Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth](http://www.iom.edu/Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth).
- Centers for Disease Control and Prevention. Nutrition Standards for Foods in Schools. Available at [www.cdc.gov/Healthyyouth/nutrition/standards.htm](http://www.cdc.gov/Healthyyouth/nutrition/standards.htm).
- U.S. Department of Agriculture. Team Nutrition. Available at [www.teamnutrition.usda.gov](http://www.teamnutrition.usda.gov).
- U.S. Department of Agriculture. HealthierUS School Challenge. Available at [www.teamnutrition.usda.gov/healthierUS/index.html](http://www.teamnutrition.usda.gov/healthierUS/index.html).
- U.S. Department of Agriculture. Changing the Scene—Improving the School Nutrition Environment. Available at [www.fns.usda.gov/TN/Resources/changing.html](http://www.fns.usda.gov/TN/Resources/changing.html).
- Robert Wood Johnson Foundation. School Wellness Policy Evaluation Tool. Available at [www.yaleruddcenter.org/resources/upload/docs/what/communities/SchoolWellnessPolicyEvaluationTool.pdf](http://www.yaleruddcenter.org/resources/upload/docs/what/communities/SchoolWellnessPolicyEvaluationTool.pdf).
- Center for Science in the Public Interest. Sweet Deals: School Fundraising Can Be Healthy and Profitable. Available at [www.cspinet.org/new/pdf/schoolfundraising.pdf](http://www.cspinet.org/new/pdf/schoolfundraising.pdf).
- Connecticut State Department of Education. Action Guide for School Nutrition and Physical Activity Policies. Available at [www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/NutritionEd/Action\\_Guide.pdf](http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/NutritionEd/Action_Guide.pdf).



## References

1. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007-2008. *JAMA* 2010;303:242-9.
2. National Center for Health Statistics. Health, United States, 2004 with Chartbook on Trends in the Health of Americans. Hyattsville, MD: National Center for Health Statistics; 2004.
3. Mokdad AH, Ford ES, Bowman BA, Dietz WH, Vinicor F, Bales VS et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *JAMA* 2003;289:76-9.
4. Fox MK, Gordon A, Nogales R, Wilson A. Availability and consumption of competitive foods in US public schools. *J Am Diet Assoc* 2009;109:S57-S66.
5. O'Toole TP, Anderson S, Miller C, Guthrie J. Nutrition services and foods and beverages available at school: results from the School Health Policies and Programs Study 2006. *J Sch Health* 2007;77:500-21.
6. Gonzalez W, Jones SJ, Frongillo EA. Restricting snacks in U.S. elementary schools is associated with higher frequency of fruit and vegetable consumption. *J Nutr* 2009;139:142-4.
7. Cullen KW, Zakeri I. Fruits, vegetables, milk and sweetened beverages consumption and access to à la carte/snack bar meals at school. *Am J Public Health* 2004;94:463-7.
8. Cullen KW, Eagan J, Baranowski T, Owens E, de Moor C. Effect of a la carte and snack bar foods at school on children's lunchtime intake of fruits and vegetables. *J Am Diet Assoc* 2000;100:1482-6.
9. Kubik MY, Lytle LA, Hannan PJ, Perry CL, Story M. The association of the school food environment with dietary behaviors of young adolescents. *Am J Public Health* 2003;93:1168-73.
10. Trust for America's Health. *F as in fat: how obesity threatens America's future*. Washington, DC: Trust for America's Health; 2010.
11. Chriqui JF, Schneider L, Chaloupka FJ, Gourdet C, Bruursema A, Ide K et al. School district wellness policies: evaluating progress and potential for improving children's health three years after the federal mandate. School years 2006-07, 2007-08 and 2008-09. Vol 2. 2010. Chicago, IL: Institute for Health Research and Policy, University of Illinois at Chicago; 2010.
12. McDonnell E, Probart C, Weirich JE. School foodservice directors' perceptions and concerns about local wellness policy development, implementation, and enforcement. *J Child Nutr Manag* 2006;30.
13. Long MW, Henderson KE, Schwartz MB. Evaluating the impact of a Connecticut program to reduce availability of unhealthy competitive food in schools. *J Sch Health* 2010;80:478-86.
14. Wharton CM, Long M, Schwartz MB. Changing nutrition standards in schools: the emerging impact on school revenue. *J Sch Health* 2008;78:245-51.
15. West Virginia University, Robert C. Byrd Health Sciences Center, Health Research Center. *West Virginia Healthy Lifestyles Act: year one evaluation report*. Morgantown, WV: West Virginia University; 2009.
16. Wojcicki JM, Heyman MB. Healthier choices and increased participation in a middle school lunch program: effects of nutrition policy changes in San Francisco. *Am J Public Health* 2006;96:1542-7.
17. Connecticut State Department of Education. *Summary data report on Connecticut's Healthy Snack Pilot*. Hartford, CT: Connecticut State Department of Education; 2006.
18. Center for Weight and Health, University of California, Berkeley. *Pilot implementation of SB 19 in California middle and high schools: report on accomplishments, impact, and lessons learned*. Berkeley, CA: University of California, Berkeley; 2005.
19. U.S. Department of Agriculture, U.S. Department of Health and Human Services, U.S. Department of Education. *Making it happen: school nutrition success stories*. Alexandria, VA: U.S. Department of Agriculture; 2005.
20. Woodward-Lopez G, Gosliner W, Samuels SE, Craypo L, Kao J, Crawford PB. Lessons learned from evaluations of California's statewide school nutrition standards. *Am J Public Health* 2010;2137-45.
21. French SA, Story M, Fulkerson JA, Hannan P. An environmental intervention to promote lower-fat food choices in secondary schools: outcomes of the TACOS study. *Am J Public Health* 2004;94:1507-12.
22. French SA, Story M, Jeffrey RW, Snyder P, Eisenberg M, Sidebottom A, Murray D. Pricing strategy to promote fruit and vegetable purchase in high school cafeterias. *J Am Diet Assoc* 1997;97:1008-10.
23. French SA, Jeffrey RW, Story M, Breitlow KK, Baxter JS, Hannan P et al. Pricing and promotion effects on low-fat vending snack purchases: the CHIPS Study. *Am J Public Health* 2001;91:112-7.
24. Johanson J, Smith J, Wootan MG. *Raw deal: school beverage contracts less lucrative than they seem*. Washington, DC: Center for Science in the Public Interest; 2006.