

Competitive Foods and Beverages in Elementary School Classrooms

School Policies and Practices Allow Access to Unhealthy Snacks and Drinks

Leading health authorities recommend that all foods and beverages offered to students at school contribute to a healthy diet.¹ As directed by the Healthy, Hunger-Free Kids Act of 2010, the U.S. Department of Agriculture (USDA) proposed new national nutrition standards for competitive foods and beverages—those sold in schools outside of the federally reimbursable school meal programs.² However, the proposed regulations do not address a variety of other school practices that expose students to high-calorie, low-nutrient foods and beverages.

This brief presents research on the prevalence of policies and practices that affect the availability of snacks and beverages at parties, for fundraisers, in the classroom, and other places outside of sales venues in U.S. public elementary schools during the 2009–10 to 2011–12 school years. Sales venues, such as vending machines, à la carte cafeteria lines, school stores, and snack bars are excluded from this study.

Introduction

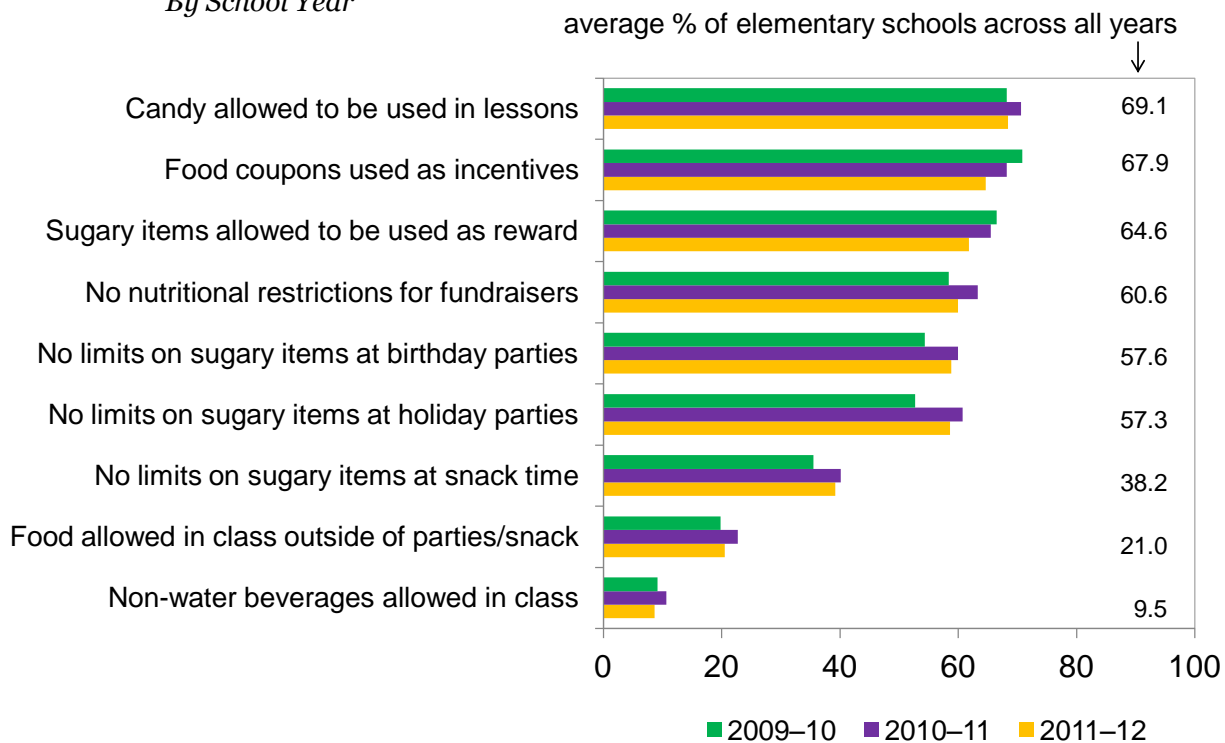
The foods and beverages available in schools affect students' diets and their weight.¹ Products offered outside of the USDA meal programs—often called “competitive foods and beverages”—include items sold in vending machines, school stores and snack bars, or à la carte in the cafeteria. They also include items offered through in-school fundraisers, during classroom parties, and as rewards in the classroom.³

Many studies show that schools offer a variety of unhealthy snacks and drinks in traditional sales venues.^{4–7} However, there has been less research about other competitive food and beverage practices, which also expose students to unhealthy fare at school. In 2004–05, 29 percent of U.S. elementary students consumed competitive items on a typical school day, and the most commonly-reported sources of competitive items in elementary schools were fundraisers, parties, and rewards or other classroom activities.⁸

Small-scale studies in elementary schools show that students consume unhealthy foods and drinks that are high in sugar and calories during parties.⁹ In addition, middle school practices such as fundraising, allowing foods and beverages in the classroom, and offering food-based rewards have been linked with higher student body mass index outcomes.¹⁰ National organizations recommend that schools avoid food-based fundraising,¹¹ promote healthier party fare or non-food celebrations,¹² and not use food as a reward.¹³

This brief describes elementary school practices and school-level policies that affect the availability of competitive foods and beverages in non-sales venues. Data are drawn from surveys of nationally representative samples of U.S. public elementary schools in 2009–10, 2010–11, and 2011–12.

FIGURE 1 Percentage of U.S. Public Elementary Schools Allowing Competitive Food and Beverage Practices
By School Year



Key Findings

In recent years, there has been virtually no change in elementary school-level policies and practices pertaining to foods and beverages offered in the classroom or otherwise made available outside of traditional sales venues in school (e.g., vending machines).

- The majority of survey respondents indicated that their school had no school-wide restrictions on teachers using candy in classroom lessons, offering sugary items (e.g., candy) as reward for good student behavior or academics, or offering coupons or incentive programs (e.g., pizza parties for reading).
- Few schools had school-level policies to limit students from bringing in sugary items to be served during holiday parties or birthday parties, or to be eaten during regular snack time.
- There were no statistically significant changes over time in any of the practices shown in Figure 1.

Conclusions and Policy Implications

Elementary schools are making an effort to remove some unhealthy items from competitive sales venues, such as vending machines, stores, snack bars, and à la carte lines,¹⁴ and the pending USDA competitive food regulations are very likely to restrict the availability of these items even further. Yet, many students are offered sugary, high-fat foods and drinks in their classrooms during the school day.

Although the USDA’s proposed standards do not address food and beverage practices in the classroom, other research shows that relevant district policies and state laws are associated with fewer schools allowing unhealthy products to be offered as rewards in the classroom,¹⁵ or through fundraisers.¹⁶ Furthermore, district policies appear to be effective for promoting healthier school environments,¹⁷ more nutritious diets,¹⁸ and improved weight outcomes for children.¹⁸ Thus, developing policies at the state and local (i.e., school district) levels may be an effective strategy for limiting students’ exposure to less-healthy foods and beverages at school.

Study Overview

These analyses are based on data collected by the Bridging the Gap research program at the University of Illinois at Chicago. We used nationally representative data from surveys of U.S. public elementary schools collected annually during the 2009–10 to 2011–12 school years to examine a variety of school-level policies and practices. In the spring of each school year, we sent a survey to the school administrator. Across the three years, responses were received from 1831 schools (58% response rate).

Additional information about this study, including copies of the survey instrument with exact wording of survey items, is available at www.bridgingthegapresearch.org/research/elementary_school_survey.

Suggested Citation

Turner L, Sandoval A, Chriqui JF, Chaloupka FJ. *Competitive Foods and Beverages in Elementary School Classrooms: School Policies and Practices Allow Access to Unhealthy Snacks and Drinks*— A BTG Research Brief. Chicago, IL: Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago; 2013.

About Bridging the Gap

Bridging the Gap is a nationally recognized research program of the Robert Wood Johnson Foundation dedicated to improving the understanding of how policies and environmental factors affect diet, physical activity and obesity among youth, as well as youth tobacco use. The program identifies and tracks information at the state, community and school levels; measures change over time; and shares findings that will help advance effective solutions for reversing the childhood obesity epidemic and preventing young people from smoking. Bridging the Gap is a joint project of the University of Illinois at Chicago's Institute for Health Research and Policy and the University of Michigan's Institute for Social Research. For more information, visit www.bridgingthegapresearch.org.

Endnotes

1. Institute of Medicine. *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation*. Washington, DC: National Academies Press; 2012.
2. United States Department of Agriculture. *Competitive Foods*. 2013. <http://www.fns.usda.gov/tags/competitive-foods>. Accessed 3/7/13.
3. United States Department of Agriculture. *Foods sold in competition with USDA school meal programs*. 2001. http://www.cspinet.org/nutritionpolicy/Foods_Sold_in_Competition_with_USDA_School_Meal_Programs.pdf. Accessed 3/3/13.
4. Gordon A, Fox MK. *School Nutrition Dietary Assessment Study-III: Summary of Findings*. Alexandria, Virginia: United States Department of Agriculture; 2007.
5. Turner L, Chaloupka FJ, Sandoval A. *School Policies and Practices for Improving Children's Health: National Elementary School Survey Results: School Years 2006-07 through 2009-10. Vol 2*. Chicago, IL: Bridging the Gap; 2012.
6. 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;77:500-521.
7. Fox MK, Condon E. *School Nutrition Dietary Assessment Study IV: Summary of Findings*. 2012. http://www.mathematica-mpr.com/publications/PDFs/nutrition/snda-iv_findings.pdf. Accessed 3/5/13.
8. 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.
9. Isoldi KK, Dalton S, Rodriguez DP, Nestle M. Classroom "cupcake" celebrations: observations of foods offered and consumed. *J Nutr Educ Behav*. 2012;44(1):71-75.
10. Kubik MY, Lytle LA, Story M. Schoolwide food practices are associated with body mass index in middle school students. *Arch Pediatr Adolesc Med*. 2005;159: 1111-1114.
11. Center for Science in the Public Interest. *Sweet Deals: School Fundraising can be Healthy and Profitable*. 2007. <http://www.cspinet.org/schoolfundraising.pdf>. Accessed 4/14/12.
12. Center for Science in the Public Interest. *Healthy School Celebrations*. 2007. http://cspinet.org/new/pdf/healthy_school_celebrations.pdf. Accessed 9/1/12.
13. Taras H, Duncan P, Luckenbill D, et al. *Health, Mental Health and Safety Guidelines for Schools*. 2004. <http://www.nationalguidelines.org>. Accessed 6/20/11.
14. Turner L, Chaloupka FJ. Encouraging trends in student access to competitive beverages in US public elementary schools, 2006-2007 to 2010-2011. *Arch Pediatr Adolesc Med*. 2012;166(7):673-675.
15. Turner L, Chriqui JF, Chaloupka FJ. Food as a reward in the classroom: school district policies influence elementary school practices. *J Acad Nutr Diet*. 2012;112(9):1436-1442.
16. Turner L, Chriqui JF, Chaloupka FJ. Healthier fundraising in U.S. elementary schools: associations between policies at the state, district, and school levels. *PLoS ONE*. 2012;7(11): e49890. doi:10.1371/journal.pone.0049890
17. Chriqui JF, Turner L, Taber D, Chaloupka F. District and state policies are contributing to improved US public elementary school competitive food and beverage environments. In press, *JAMA Pediatr*.
18. Healthy Eating Research and Bridging the Gap. *Influence of Competitive Food and Beverage Policies on Children's Diets and Childhood Obesity*. 2012. Available at: http://www.healthyeatingresearch.org/images/stories/her_research_briefs/RRCompFoods7-2012.pdf. Accessed 7/21/12.