



Bag the Junk:

Improving competitive food policy to create healthier, smarter school environments



Key Facts

- *Competitive foods—snacks and beverages sold in schools outside of the school breakfast and lunch programs—are widely available in public schools.*
- *The U.S. Department of Agriculture (USDA) “Smart Snacks” nutrition standards for competitive foods took effect on July 1, 2014.*
- *State and local authorities can adopt nutrition standards that exceed USDA requirements to further improve the quality of snack foods and beverages sold in schools.*
- *The strongest competitive food policies include provisions to address caffeinated products, sports drink, school fundraisers, and non-school hours activities.*

Background

In nearly all schools in the United States, foods and beverages are available for purchase through the federal National School Lunch Program and School Breakfast Program and through “competitive” venues such as vending machines, food courts, à la carte lines, and school stores.¹ Many students rely on schools for their food intake; an estimated 35-50% of children’s total calories are consumed at school.² However, problems arise when the foods and beverages offered at school are not healthy choices.

Breakfasts and lunches served at school are required to meet federal nutrition standards that are in line with the U.S. Department of Agriculture’s Dietary Guidelines for Americans. However, competitive foods were often unhealthy snacks and beverages, readily available for student purchase.³ Recent research indicates that nearly half of U.S. elementary school students could buy unhealthy snacks—such as cookies, cakes and baked goods—at school.⁴

In response to rising rates of childhood obesity, and citing the connection between poor diet and overweight, many states and localities established their own nutrition standards to prohibit or limit unhealthy snack foods and beverages in schools. In practice though, many standards were not adequate enough to keep junk foods and beverages out of schools, so the Healthy, Hunger-Free Kids Act of 2010 required the U.S. Department of Agriculture (USDA) updated the national nutrition standards for competitive foods.⁵ The “Smart Snacks” standards took effect July 1, 2014.⁶

The “Smart Snacks” standards outline minimum nutritional requirements for all snack foods and beverages sold in schools; however, several important provisions—including sports drinks, caffeine, and school fundraisers—are partially exempt from the national standards. The exemption of these key provisions creates an opportunity for forward-thinking states and localities to develop model standards that exceed federal requirements and better ensure that students can learn in the healthiest environment possible. Schools may also extend the “Smart Snacks” standards to activities during non-school hours like sports and evening events to strengthen healthy habits promotion and remain consistent.

Recent research indicates that both schools and students benefit from strong state nutrition standards. A longitudinal analysis found that students gained less weight over three years if they lived in a state with strong policies for school snacks and drinks than if they lived in a state with no such standards.⁷

Why Care About Competitive Foods?

Connection between Student Health and Academic Success

- Obesity rates among children and adults have increased dramatically over the past forty years. Today, nearly one in three American children aged 2-19 —over 23 million— are overweight or obese and at greater risk for chronic diseases and psychosocial problems.⁸⁻⁹ The consumption of unhealthy foods and beverages is a major contributor to the development of overweight and obesity.
- Implementing school food policies that limit access to high-fat, high-sugar foods is proven to reduce the number of purchases of these types of foods by students, and may be protective against obesity.^{2,7,10,11,12}
- Numerous studies have shown that there is a strong association between the quality of a child's diet and their academic performance and achievement.^{13,14,15,16,17,18}

Competitive Foods are Widely Available in Schools

- Between 1991 and 2008, the percentage of middle schools with vending machines increased from 42% to 77% and the percentage of high schools from 76% to 96%.¹⁹⁻²⁰
- In 2008, 92% of high school students and 81% of middle school students could buy food or drinks from à la carte lines in school cafeterias.²⁰
- In 2010, 65% of elementary school students could buy food or drinks outside of school meals, through à la carte lines, vending machines, or school stores.⁴
- Middle and high schools tend to offer a greater quantity and variety of foods and beverages that are high in sugar, salt and fat than elementary schools.²¹ Many secondary schools maintain contracts with fast-food vendors such as Taco Bell, McDonald's and Domino's Pizza that allow the sale of branded fast-food products in school cafeterias²²⁻²³

School Environments are Often Contradictory to Nutrition Education Messages

- The sale of unhealthy snack foods and beverages at school is in direct opposition to the healthy nutrition messages promoted in school health curriculum and nutrition promotion in the cafeteria.²⁴

Availability of Competitive Food Can Worsen Student Stigma

- Competitive foods can be especially damaging for students from low-income families. The presence of popular junk snack foods and sugary beverages in schools can foster peer pressure and stigma for low-income students who cannot afford to purchase foods not part of the subsidized school meal program.²⁴

Parents Want Improved School Food

- Most parents feel the nutritional health of students should be a school priority.²⁵ A 2014 poll commissioned by the Pew Charitable Trusts found that 72% of American parents support standards on school snack foods.²⁶
- Attitudes about improved school food cross party lines. A 2012 poll found that 89% of Democrats, 78% of independents, and 71% of Republicans favor a rule that requires all schools to meet minimum nutrition standards for snack foods and beverages.²⁷

Policy Recommendations

Schools should strive to create learning environments that promote healthy food and beverage choices, thus fostering good health and greater academic success among students. The following recommendations for policy makers are based on a comprehensive review of published guidelines for snack foods and beverages sold in schools. In general, we recommend that states and localities strive to follow the Institute of Medicine guidelines for foods and beverages, paying particular attention to the following provisions:

- **Ban the sale of sports drinks in schools.** Major medical groups conclude that sports drinks are unnecessary for students engaged in routine physical activity; yet, sugary sports drinks make up the second largest beverage category in high schools and the third largest beverage category in middle and elementary schools.^{33,28,29} The American Heart Association recommends that most children and adolescent girls consume no more than 20 grams of added sugars per day, and adolescent boys consume no more than 33 grams of added sugars per day.³⁰ With 35 grams of added sugar, the average 20-ounce sports drink exceeds daily recommended amounts for all children.
- **Restrict the sale of caffeinated products in all schools.** The Institute of Medicine recommends that all school foods and beverages be caffeine-free, with the exception of trace amounts of naturally occurring caffeine. However, the USDA interim final standards allow caffeine in high schools. There is no scientific justification to consider caffeine as safe for high school-age children, and a growing body of evidence links caffeine and harmful health effects for children, adolescents, and young adults.³¹
- **Require that competitive food and beverage guidelines apply to all school fundraisers.** More than 75 percent of schools hold between one and five fundraisers per year, and 25 percent of schools hold between five and 10 fundraisers per year, making school fundraisers a common, and often constant, part of students', staff's, and parents' lives.³² School fundraisers are often exempt from nutrition guidelines, allowing the sale of junk foods like candy, donuts, and pizza. Requiring school fundraisers to follow competitive foods standards ensures that only healthy food is available to students during the school day. It also encourages the use of non-food fundraising strategies such as car washes, walk-a-thons, and gift card sales.
- **Extend “Smart Snacks” standards to non-school hours.** Schools can provide consistent healthy habits messaging by extending the competitive foods nutrition standard to non-school hours. Current USDA rules do not provide guidance regarding vending machines or concession stands before and after school, leading to options that are often high in calories, fat, sugar, and salt. Many beverages sold after-school, such as soda, fruit drinks, sports drinks, and flavored waters are high in sugar and contain little, if any, nutritional value.³³⁻³⁴ Applying the same in-school standards to all times on the school campus promotes coherent support for student and community wellness.

Support for this publication was provided by a grant from the Robert Wood Johnson Foundation.

ENDNOTES

- ¹ Ralston K, Newman C, Clauson A, Guthrie J, Buzby J. *The National School Lunch Program: Background, Trends, and Issues*. Washington, DC: US Dept of Agriculture, Economic Research Service; 2008.
- ² Neumark-Sztainer D, French S, Hanna P, Story M, Fulkerson J. School Lunch and Snacking Patterns among High School Students: Associations with School Food Environment and Policies. *International Journal of Behavioral Nutrition and Physical Activity*. 2005; 2(14).
- ³ Fox MK, Gordon A, Nogales R, Wilson A. (2009a). Availability and consumption of competitive foods in US public schools. *Journal of the American Dietetic Association*. 2009;109(2 Supplement 1): S57-S66.
- ⁴ Turner LR; Chaloupka FJ. Student Access to Competitive Foods in Elementary Schools: Trends Over Time and Regional Differences. *Arch Pediatr Adolesc Med*. 2012;166(2):164-169.
- ⁵ Healthy, Hunger-Free Kids Act. 42 USC §1751 (2010).
- ⁶ U.S Department of Agriculture Food and Nutrition Service. Interim Final Rule: *National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010*; Federal Register Volume 78, Number 125, Pages 39068-39120 (June 28, 2013).
- ⁷ Taber DR, Chiqui JF, Perna FM, Powell LM, Chaloupka FJ. Weight Status Among Adolescents in States That Govern Competitive Food Nutrition Content. *Pediatrics*. 2012;130(3): 437-444.
- ⁸ Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007-2008. *Journal of the American Medical Association*. 2010; 91(3): 519-527.
- ⁹ Centers for Disease Control and Prevention. *Basics About Childhood Obesity*. <http://www.cdc.gov/obesity/childhood/basics.html>. Accessed April 4, 2012.
- ¹⁰ Briefel R, Crepinsek M, Cabili C, Wilson A, Gleason P. School Food Environments and Practices Affect Dietary Behaviors of US Public School Children. *J Am Diet Assoc*. 2009; 109 (1):S91-S107.
- ¹¹ Wordell D, Daratha K, Mandal B, Bindler R, Butkus S. Changes in a Middle School Food Environment Affect Food Behavior and Food Choices. *J Acad Nutr Diet*. 2012; 112 (1): 137-141.
- ¹² Sanchez-Vaznaugh E, Sanchez BN, Baek J, Crawford PB. Competitive Food and Beverage Policies: Are They Influencing Childhood Overweight Trends? *Health Affairs*. 2010; 29(3): 436-446.
- ¹³ Florence MD, Asbridge M, Veugelers PJ. Diet quality and academic performance. *J Sch Health*. 2008; 78: 209-215.
- ¹⁴ Center on Hunger, Poverty, and Nutrition Policy at Tufts University. Statement on the Link between Nutrition and Cognitive Development in Children. http://www.ecom.net/mfsp/projects_school_links.pdf. Accessed April 4, 2012.
- ¹⁵ Rampersaud GC, Pereira MA, Girard BL, Adams J, Metz JD, Breakfast Habits, Nutritional Status, Body Weight, and Academic Performance in Children and Adolescents. *Journal of the American Dietetic Association*. 2005;105:743-760.
- ¹⁶ American School Food Services Association. Impact of Hunger and Malnutrition on Student Achievement. *School Board Service Research Review*. 1989;1:17-21.
- ¹⁷ Parker L. *The Relationship Between Nutrition and Learning: A School Employee's Guide to Information and Action*. Washington, DC. National Education Association;1989.
- ¹⁸ Brown L, Pollitt E. Malnutrition, Poverty and Intellectual Development. *Scientific American*. 1996;274(2):38-43.
- ¹⁹ U.S. Department of Agriculture. School Nutrition Dietary Assessment Study-III: Summary of Findings. <http://www.fns.usda.gov/ora/menu/Published/CNP/FILES/SNDIAIII-SummaryofFindings.pdf> Published November 2007. Accessed April 4, 2012.
- ²⁰ Bridging the Gap. School Policies and Practices to Improve Health and Prevent Obesity: National Secondary School Survey Results, School Years 2006-07 and 2007-08. http://www.bridgingthegapresearch.org/asset/984r22/SS_2011_monograph.pdf. Published August 2011. Accessed April 4, 2012
- ²¹ U.S. General Accountability Office. School meal programs: Competitive foods are widely available and generate substantial revenues for schools. <http://www.gao.gov/new.items/d05563.pdf>. Published August 2005. Accessed April 4, 2012.
- ²² Greves HM, Rivara FP. Report card on school snack food policies among the United States' largest school districts in 2004-2005: room for improvement. *Int J Behav Nutr Phys Act*.2006; 3(1).
- ²³ Craypo L, Purcell A, Samuels SE, Agron P, Bell E, Takada E. Fast food sales on high school campuses: results from the 2000 California high school fast food survey. *J Sch Health*. 2002;72(2):78-82.
- ²⁴ Food Research and Action Center. How Competitive Foods in Schools Impact Student Health, School Meal Programs, and Students from Low-Income Families. http://frac.org/pdf/CNR05_competitivefoods.pdf. Published June 2010. Accessed April 4, 2012.
- ²⁵ Kubik M, Lytle L, Story M. Soft Drinks, Candy, and Fast Food: What Parents and Teachers Think about the Middle School Food Environment. *J Amer Diet Assoc*. 2005;105: 233-239.
- ²⁶ Pew Charitable Trusts. Voters' Attitudes on School Nutrition. <http://www.pewhealth.org/news-room/press-releases/voters-attitudes-on-school-nutrition-85899367378>. In press. Accessed April 4, 2012.
- ²⁷ Pew Charitable Trusts. Public Support for Competitive Food Standards. http://www.healthyschoolfoodsnow.org/wp-content/uploads/2012/04/Analysis%20Memo_KSHF%20Survey%20on%20Snacks%20and%20Beverages%20April%202012.pdf. March 2012. Accessed April 24, 2012.
- ²⁸ American Beverage Association. Alliance School Beverage Guidelines Final Progress Report. http://www.ameribev.org/files/240_School%20Beverage%20Guidelines%20Final%20Progress%20Report.pdf . Published March 2010. Accessed April 4, 2012.
- ²⁹ Committee on Nutrition and The Council on Sports Medicine and Fitness. Clinical Report: Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate? *Pediatrics*. 2011; 127(6): 1182-1189.
- ³⁰ Johnson R, Appel LJ, Brands M, et al; for the American Heart Association Nutrition Committee of the Council on Nutrition, Physical Activity, and Metabolism and the Council on Epidemiology and Prevention. Dietary Sugars Intake and Cardiovascular Health: A Scientific Statement from the American Heart Association. *Circulation*. 2009; 120: 1011-1020.
- ³¹ Seifert SM, et al. "Health Effects of Energy Drinks on Children, Adolescents, and Young Adults." *Pediatrics* 2011, vol. 127(3), pp. 511-528.
- ³² Krueger J. Controlling Your School's "Fundraising Noise." *Principal*. 2007; September/October: 46-50.
- ³³ Briefel R, Wilson A, Gleason P. Consumption of Low-Nutrient, Energy-Dense Foods and Beverages at School, Home, and Other Locations among School Lunch Participants and Nonparticipants. *Journal of the American Dietetic Association*. 2009;109: S79-S90.
- ³⁴ Centers for Disease Control and Prevention. Does Drinking Beverages with Added Sugars Increase the Risk of Overweight? http://www.cdc.gov/nccdphp/dnpa/nutrition/pdf/r2p_sweetend_beverages.pdf. Published September 2006. Accessed April 4, 2012.