Introduction

Consumption of foods that are high in calories and low in nutrients has been clearly linked to adverse health outcomes in childhood, including an increased risk of childhood obesity. For nine months of each year, most children spend the majority of their waking hours at school. As a result, schools are a crucial setting for teaching kids the importance of eating healthy foods and beverages, and providing access to them too. Between one-third and one-half of children’s and adolescents’ daily caloric intake occurs at school, and a growing body of literature shows that school practices are associated with students’ dietary behaviors and weight outcomes. School-wide nutrition practices such as engaging in food-related fundraising may also be associated with students’ obesity.

Fundraisers on campus can be problematic nutritionally because, historically, foods such as baked goods, candies, and sugary drinks have often been sold as a part of these fundraising events. Consumption of ‘empty calories’ from the solid fats and added sugars in such products are major contributors to childhood obesity. The top sources of calories for 2- to 18-year olds are sugar-sweetened beverages (SSBs) such as soda and fruit drinks, followed by grain-based desserts such as cakes, cookies, donuts, and pies.

A variety of activities can be used to generate financial revenue for schools and associated clubs and student groups; furthermore, the uses of such revenues can vary widely across schools and districts. At the secondary level, many schools have dozens of clubs, student activity groups, and sports teams, most of which seek to raise funds for supplies, travel, uniforms, and other expenses. Likewise, elementary schools often have parent-coordinated organizations that devote considerable effort to raising funds for similar purposes. Such fundraising activities can include appeals for direct (cash) donations, door-to-door sales in the community, and occasional activities such as bake sales and ice cream socials. They also include regular/frequent sales of beverages or food items such as pizza during lunchtime. In addition, revenue from vending machine sales, school stores, and à la carte sales in the cafeteria have been a source of funds for many schools and/or student groups.

Other school events, while not always considered fundraising, can also introduce unhealthy products into the diets of children and adolescents. Food and beverage marketing, exclusive contracts and sales incentives for beverages sold through vending machines and other venues, food coupons, and event sponsorships are...
several ways in which advertisers gain access to schools, often providing financial incentives to schools for such access.\textsuperscript{13,14} Some schools participate in sponsored fundraisers at restaurants, whereby a portion of the profits on a particular night are provided to the school. Repeated exposure to such marketing can impact children’s subsequent food choices and brand preferences, even outside of the school setting.\textsuperscript{14-17} In effect, schools are being used to market unhealthy foods to children and adolescents. The one-time revenue received by schools for such access is probably minimal, but the long-term consequences of children developing unhealthy dietary preferences are profound.

The primary focus of this issue brief is on the types of in-school fundraising activities that include the sale of unhealthy foods and beverages on campus during the school day. This brief also describes potential strategies that may offer opportunities for schools to successfully raise funds without adversely impacting student health.

The Evidence

This brief reviews previously reported research on this topic, and presents new data from the Bridging the Gap (BTG) research program. Information gathered during the 2013–14 school year from surveys of nationally representative samples of 640 public elementary schools\textsuperscript{18} as well as from 300 public middle schools and 312 public high schools\textsuperscript{19} are provided. In addition, nationally representative data from a corresponding sample of 748 U.S. public school districts collected as part of BTG’s National Wellness Policy Study\textsuperscript{20,21} during 2013–14 are provided.

Food-related fundraising is common and has been in existence for many years.

- In 2006, the Centers for Disease Control and Prevention’s nationally representative School Health Policies and Programs Study found that the sale of foods and beverages at school or in the community, for the purposes of raising money for a school-sponsored activity, occurred at 76 percent of elementary schools, 78 percent of middle schools, and 84 percent of high schools.\textsuperscript{10}

- Fundraising strategies such as pizza dinners or ice cream social nights at school, and sponsored fundraiser nights at local restaurants, are not required to comply with Smart Snacks nutrition guidelines. However, they are still common ways in which children and families are exposed to unhealthy foods and beverages for the purpose of generating financial support for schools. Nationwide survey data from the Centers for Disease Control and Prevention found that in 2006, such fundraisers were conducted by 25 percent of K-12 schools.\textsuperscript{10}

- BTG data from 2013–14 indicated that pizza dinners or ice cream socials were held at 62 percent of elementary schools. Sponsored fundraiser nights at local restaurants were held by 57 percent of elementary schools, and 23 percent of elementary schools held these events more than three times per year.

The past decade (2005-2015) has brought a variety of changes to the school food environment, including food sold at school fundraisers.

- Following the requirement\textsuperscript{22} that school districts develop wellness policies, which took effect as of the start of the 2006–07 school year, districts have increasingly addressed fundraising practices in their local wellness policies.\textsuperscript{21}

- School nutrition has also been an increasing focus of national policy efforts in the past five years, following passage of the Healthy, Hunger-Free Kids Act of 2010 and the ensuing Smart Snacks school nutrition standards that went into effect in July 2014. The Smart Snacks standards define the portion sizes and types of beverages and foods that may be sold outside of school meals on school campuses during the school day, defined by the U.S. Department of Agriculture as 12:01 AM until 30 minutes after the final school bell.\textsuperscript{23} These standards primarily impact three venues: vending machines, school stores or snack bars, and à la carte lines in the cafeteria.

- The Smart Snacks standards allow for occasional special exemptions for fundraisers, whereby non-compliant items may be sold on campus during school hours.\textsuperscript{23} The number of allowable fundraiser exemptions is left up to the agency in each state that oversees child nutrition
programs, and currently there is much variability in the number of exempted school fundraisers that states permit.

Although many states have a zero-exemption policy—in other words, any products sold on campus as a fundraiser must comply with Smart Snacks standards—others have allowed exemptions, in some cases for many days per school year. Figure 1 shows which states have a zero-exemption policy and which allow exemptions, as of December 1, 2015. However, these state policies may have changed since publication of this brief.

The evidence indicating a need to serve only healthy foods at fundraisers was available even before Smart Snacks, but school practices and state- and district-level policies did not reflect that evidence.

School-wide food practices such as fundraising—in addition to other practices such as using food as a reward for good behavior or academic achievement, and allowing food in classroom parties—were shown in a 2005 study to be significantly associated with higher weight outcomes among teens in Minnesota middle schools. National research using data from 2003-2007 showed that weight outcomes among middle school students were healthier in states where laws restrict foods sold in schools, compared to states without such laws. This suggests that nutrition regulations may be a key strategy for improving student health. Typically, these laws restrict the food sold in vending machines and in cafeteria à la carte lines, as well as food given as rewards and made available at school fundraisers.

Prior to Smart Snacks, some schools were already subject to fundraising limits at the school site level, but these limits were fairly uneven. As shown in Figure 2, BTG data from 2013–14 indicate that across elementary, middle, and high school levels, about half of students attended schools that had nutrition-related limitations on foods and beverages sold at fundraisers. Fewer than 20 percent of all students attended schools where the school administrator indicated that the school either did not have fundraisers or only allowed healthy foods to be sold at fundraisers.

One possible explanation for the limited restrictions on fundraisers in schools is the fact that prior to Smart Snacks standards, state laws and district policies in this area were lacking (Figures 3 and 4).

Although many states have a zero-exemption policy—in other words, any products sold on campus as a fundraiser must comply with Smart Snacks standards—others have allowed exemptions, in some cases for many days per school year. Figure 1 shows which states have a zero-exemption policy and which allow exemptions, as of December 1, 2015. However, these state policies may have changed since publication of this brief.

The evidence indicating a need to serve only healthy foods at fundraisers was available even before Smart Snacks, but school practices and state- and district-level policies did not reflect that evidence.

School-wide food practices such as fundraising—in addition to other practices such as using food as a reward for good behavior or academic achievement, and allowing food in classroom parties—were shown in a 2005 study to be significantly associated with higher weight outcomes among teens in Minnesota middle schools. National research using data from 2003-2007 showed that weight outcomes among middle school students were healthier in states where laws restrict foods sold in schools, compared to states without such laws. This suggests that nutrition regulations may be a key strategy for improving student health. Typically, these laws restrict the food sold in vending machines and in cafeteria à la carte lines, as well as food given as rewards and made available at school fundraisers.

Prior to Smart Snacks, some schools were already subject to fundraising limits at the school site level, but these limits were fairly uneven. As shown in Figure 2, BTG data from 2013–14 indicate that across elementary, middle, and high school levels, about half of students attended schools that had nutrition-related limitations on foods and beverages sold at fundraisers. Fewer than 20 percent of all students attended schools where the school administrator indicated that the school either did not have fundraisers or only allowed healthy foods to be sold at fundraisers.

One possible explanation for the limited restrictions on fundraisers in schools is the fact that prior to Smart Snacks standards, state laws and district policies in this area were lacking (Figures 3 and 4).
Consistent with the school-level data shown in Figures 3 and 4, state laws and district policies typically covered elementary schools rather than middle or high schools.

Regardless of the grade level of applicability, both state laws and district policies were most likely to prohibit regular soda in fundraisers, compared to candy or other unhealthy foods and beverages. For example, in 2013–14, more than 40 percent of students attended schools that prohibited regular soda sales, compared to 20 percent that prohibited candy sales.

There is a need to gather evidence on the specific impact of Smart Snacks standards on both foods sold at school fundraisers and new fundraising methods. Such policies, if implemented consistently, have the potential to improve student diets and student health.

It is unclear how Smart Snacks limits on fundraisers held on campus during school hours will impact school-level fundraising practices, and—importantly—how such changes may impact students’ dietary intake and health outcomes. However, prior work has shown the importance of policies for improving school practices, and the new Smart Snacks standards have the potential to improve these key outcomes, if implemented consistently.

Data collected prior to Smart Snacks shows that a combination of state- and district-level fundraising restrictions together are associated with healthier school practices. As shown in Figure 5, schools are far more likely to report that they follow nutritional limits regarding fundraising practices when state- and district-level policies exist. However, additional information is needed about which schools comply with district- and state-level policies, and which do not.

Many school districts and state agencies have been providing support to schools to implement healthier fundraising practices. Between 2010 and 2012, 70 percent of states provided guidance or policy-related assistance to schools and districts regarding ways to discourage the sale of unhealthy foods or beverages in school fundraisers, and 78 percent of states provided technical assistance to schools on this topic. Identifying effective means of providing such guidance or assistance would be beneficial.
Conclusions

School fundraisers involving nutrient-poor, high-calorie foods increase children’s and adolescents’ exposure to unhealthy options. When such food-based fundraisers are held frequently, they are likely to adversely impact longer-term health outcomes and have been associated with adolescent obesity. Reducing the frequency of unhealthy school fundraisers has promise for improving the health of children. Many other options exist for schools to generate revenue in ways that promote—rather than diminish—children’s health, and many schools appear to be engaging in such practices. Nevertheless, much room remains for broader implementation of healthier fundraising practices across the nation.

Approximately half of elementary schools now hold physical activity fundraisers. Such strategies have the potential to convey positive messages about health while also meeting schools’ financial needs. Physical activity fundraisers also complement health messaging about the importance of physical activity, rather than conveying the contradictory messages that occur when foods lacking in nutritional value are sold at athletic events or to raise funds for sports teams.

Additional work is needed to understand the impact of changes in fundraising strategies in terms of the amount of revenue generated and the impact on school finances. Because many schools rely on supplemental sources of revenue to conduct educational programs, it is crucial that schools remain able to raise funds for these important activities and programs; however, finding solutions that do not contribute to unhealthy behaviors is essential.

Policy Implications

Smart Snacks allows states to exempt some fundraisers at which unhealthy foods and beverages may be sold. This has resulted in a patchwork of fundraiser policies and practices nationwide. As such, opportunities exist for decision-makers at the state, district, and school levels to strengthen their policies as well as to provide clear and definitive guidance regarding fundraisers. Examples of strategies that may be taken include:

- **Technical Assistance**: State- and district-level policies play an important role in setting the stage for school-level practices. Technical assistance efforts at the state and local level—from state departments of education, agriculture, and state or regional health departments—are important for helping local education agencies to develop prudent policies, and for schools to implement healthier practices.

- **Fundraiser Exemption Decision-Making**: As state policymakers continue to assess how many—if any—fundraiser exemptions to allow, it is important to balance the need for schools to generate revenue with the equally important goal of promoting student health. Providing clear guidance on allowable fundraisers is critical, as is routinely re-evaluating the exemption policy to determine the extent to which such exemptions may be undermining school health and student wellness efforts.

- **Non-Food Fundraisers**: Physical activity-based fundraisers may be a viable and profitable alternative to food-based fundraisers such as ice cream socials and family pizza nights. State and district policies could require or recommend that schools engage in and/or give preference to non-food fundraisers.

- **Fundraisers not Covered by Smart Snacks**: Although the Smart Snacks standards only apply to foods and beverages sold on campus during the school day, schools and districts should consider applying similar standards to fundraisers occurring on school grounds during non-school hours or off campus. This would include: ice cream socials or family pizza nights; common aspects of commercialism occurring off campus, such as food coupons, event sponsorships, or sponsored nights at local restaurants; and other events on campus during the school day such as sales of fast food and the use of exclusive beverage contracts with quota-related incentives. Such strategies may also help to limit students’ exposure to unhealthy foods.
Suggested Citation


References

About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University and the University of Minnesota School of Public Health under the direction of Mary Story, PhD, RD, program director, and Laura Klein, MPH, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially in lower-income and racial and ethnic populations at highest risk for obesity. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at @HEResearch.

About Bridging the Gap

Bridging the Gap (BTG) is a nationally recognized research program of the Robert Wood Johnson Foundation dedicated to improving the understanding of how policies and environmental factors influence diet, physical activity and obesity among youth, as well as youth tobacco use. BTG is a joint project of the Institute for Health Research and Policy at the University of Illinois at Chicago and the Institute for Social Research at the University of Michigan. For more information, visit www.bridgingthegapresearch.org or follow BTG on Twitter at @BTGresearch.

About the Robert Wood Johnson Foundation

For more than 40 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are working with others to build a national Culture of Health enabling everyone in America to live longer, healthier lives. For more information, visit www.rwjf.org. Follow the Foundation on Twitter at www.rwjf.org/twitter or on Facebook at www.rwjf.org/facebook.