bridging the gap

Research Informing Policies & Practices
for Healthy Youth

Executive Summary

School Policies and Practices to Improve Health and Prevent Obesity: National Secondary School Survey Results

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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 national, 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 Michigan's Institute for Social Research and the University of Illinois at Chicago's Institute for Health Research and Policy. For more information, visit *www.bridgingthegapresearch.org*.

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Executive Summary

Background

Today, more than 23 million children and adolescents in the United States—nearly one in three young people—are either obese or overweight.[1] Obese children are at higher risk for serious health problems, have greater psychological stress and are absent from school more often than their healthy-weight peers.[2–5] Lower-income youths, in particular, are more likely to be overweight as adults, which puts them at higher risk for lower educational attainment, chronic health problems, and dependency on welfare or unemployment compensation.[6]

Preventing childhood obesity requires change on many levels. Because children spend a significant portion of their time in school, there is strong reason to focus on improving the school environment to support healthy eating and promote physical activity. The Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265, Section 204) required school districts participating in the National School Lunch Program, School Breakfast Program and other federal child nutrition programs to develop and implement a wellness policy by the first day of the 2006–07 school year. The current study finds that well over 90 percent of U.S. secondary schools participate in such programs and are responsible for implementing a wellness policy that includes the following:

- *goals for nutrition education and physical activity;*
- *an assurance that reimbursable school meals meet the minimum federal school meal standards;*
- *guidelines for foods and beverages sold or served outside of school meal programs (i.e., "competitive foods"); and*
- *implementation plans.*

Nationally representative analyses show that wellness policies have improved since the Act went into effect, but current policy provisions are weak and fragmented, and many do not align with recommendations for nutrition or physical activity.[7,8] Monitoring efforts by districts and schools to implement their wellness policies and make schools healthier for children helps identify areas where progress is being made and where improvement is still needed. Such research is critical for informing policies and practices as districts, localities, states and the federal government continue to develop and strengthen their efforts to improve children's health.

Report Overview

This report summarizes findings from one of the most comprehensive studies to date of health-related policies and practices in U.S. public middle and high schools. We examined issues addressed by the federal wellness policy mandate and many other factors relevant to childhood obesity, such as foods and beverages offered through the National School Lunch Program and in competitive venues, including vending machines, school stores and à la carte cafeteria lines. Our survey also examined physical education requirements and rates of participation; participation in varsity and intramural sports; and walking and bicycling to and from school.

This report offers timely insights for the U.S. Department of Agriculture (USDA) to consider as it begins to implement the Healthy, Hunger-Free Kids Act of 2010 and helps inform future policies that aim to prevent obesity and improve children's diets, physical activity levels and overall health. Data presented in this report:

- *help document how secondary schools implemented district wellness policies during the first two years following the implementation deadline of the wellness policy mandate;*
- *provide guidance for local, state and federal policymakers about successes and areas where new legislation is needed to strengthen the policies; and*
- *help school administrators, school board members and parents benchmark their own schools' progress and identify areas of greatest progress and weakness.*

Our findings are based on surveys of administrators (primarily school principals) at nationally representative samples of public middle and high schools.[a] Results describe policies and practices in place during the 2006–07 and 2007–08 school years, which are referred to throughout this report as 2007 and 2008, respectively. Data are weighted to reflect the percentages of students nationwide who attended a school with a policy or practice referenced in our survey. Weighting by the numbers of students affected, rather than simply giving the percentage of schools with a particular practice, ensures that larger schools (which affect more students) count more heavily than smaller schools.

This summary concludes with Table 1.2, which presents data for 2008 that are featured in the full report. More information, including additional survey topics and complete statistical findings for both 2007 and 2008, is available at *www.bridgingthegapresearch.org/research/secondary_school_survey.*

Major Findings

Many U.S. public secondary schools have been making an effort to offer students healthier foods and beverages for lunch and to provide healthier options in competitive venues, such as vending machines, school stores and à la carte cafeteria lines. Yet, most students still had easy access to pizza, french fries, sugary drinks and junk foods. Measures to help increase physical activity during and after the school day are sorely needed. Physical education requirements for high school students were especially lax.

The current study also found that 78 percent of U.S. middle school students and 84 percent of high school students were in a district or school that had adopted a wellness policy by 2008. Yet, as shown in Table 1.1, far fewer were in a district or school that had implemented the required provisions, such as setting goals for physical activity or nutrition guidelines for foods available on campus.

[a] A companion report that focuses on health-related policies and practices in U.S. elementary schools is available at *www.bridgingthegapresearch.org/research/elementary_school_survey.*

TABLE 1.1 Percentage of Public Secondary School Students Exposed to Selected Policies and Practices, 2007 and 2008

	Middle School		High School	
	2007	2008	2007	2008
SCHOOL MEALS[b]				
Sugar-sweetened beverages[c] were available some days or most/every day	35%	26%*	46%	36%*
Pizza was available most or every day	37%	39%	48%	51%
French fries were available most or every day	10%	8%	27%	22%
Regular, non-fat-free snacks[d] were available some days or most/every day	61%	54%	65%	59%
FOODS AND BEVERAGES IN COMPETITIVE VENUES				
Sugar-sweetened beverages were available in vending machines, à la carte, in stores and/or in snack bars	78%	71%	95%	92%
Regular soft drinks were available in vending machines	24%	15%*	51%	43%*
Pizza was available in vending machines, à la carte, in stores and/or in snack bars	76%	73%	86%	88%
French fries were available in vending machines, à la carte, in stores and/or in snack bars	31%	26%	48%	45%
Regular, non-fat-free snacks were available in vending machines, à la carte, in stores and/or in snack bars	71%	61%*	83%	77%*
PHYSICAL ACTIVITY AND PHYSICAL EDUCATION				
Attended a school that gave physical fitness tests to all students	53%	54%	12%	16%
Attended a school that measured body mass index (BMI) for all students	24%	26%	6%	11%
Attended a school that required physical education in the target grade[e]	83%	83%	37%	35%
WELLNESS POLICIES				
Attended a district or school with an established wellness policy	73%	78%	80%	84%
Attended a district or school without an established wellness policy	10%	13%	12%	11%
Attended a district or school with an administrator who did not know if there was an established wellness policy	17%	9%*	8%	6%
Attended a district or school with nutrition guidelines for all foods	66%	67%	59%	68%*
Attended a district or school with explicit physical activity goals for student wellness	55%	58%	54%	53%
Attended a district or school with a plan for implementing the wellness policy	33%	33%	33%	36%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

b Data reported only for students whose schools participated in the National School Lunch Program.

c Any one or more of regular soft drinks; sports drinks; and fruit drinks that are not 100% fruit juice and that are high in calories.

d Any one or more of candy; salty snacks that are not low in fat, such as regular potato chips; cookies, crackers, cakes, or other baked goods that are not low in fat.

e The target grade for middle school was grade 8 and the target grades for high school were grades 10 and 12.

*Differences between 2007 and 2008 were significant at $p<.05$ or greater.

Nutrition-Related Findings

School Meals

Trends over the two-year study period show that schools were making an effort to offer healthier foods and beverages for lunch, but also that many students could still buy sugary drinks, junk foods and high-fat entrees, such as pizza and french fries, as part of National School Lunch Program meals. Decisions regarding menus were largely made at the district or school level.

Key Findings

- In 2008, principals reported one-quarter of middle school students ate breakfast at school and almost three-fourths ate lunch at school. Respective rates for high school students were lower, with 18 percent eating breakfast at school and 60 percent eating lunch at school.
- In schools with higher percentages of students eligible for free and reduced-price lunch, both breakfast and lunch consumption were significantly greater, indicating that school meals were an especially important source of nutrition for students in low-SES schools.
- There was a significant decline in the availability of sugar-sweetened beverages offered as part of National School Lunch Program meals. Yet in 2008, one-quarter of middle school students and more than one-third of high school students still had access to such beverages as part of these meals.
- By 2008 regular soft drinks were rarely available as part of the National School Lunch Program; instead, sports drinks and high-calorie fruit drinks made up the majority of the sugar-sweetened beverages available through the program.
- As part of the National School Lunch Program, one-half of high school students had access to pizza most days or every day, one-fifth had almost daily access to french fries, and nearly 60 percent had access to snacks, such as candy and non-fat-free chips, cookies and ice cream. The corresponding rates for middle school students were 39 percent, 8 percent and 54 percent.
- Virtually all schools offered vegetables and fresh fruits as part of the National School Lunch Program. There also was some evidence that, in both middle and high schools, more students were offered whole grains as part of the lunch program, and fewer were offered french fries—indicating some movement toward a healthier mix of items.
- While an increasing proportion of both middle and high schools provided menus with nutritional information to parents during the study interval, by 2008 more than one-third still did not.
- Decisions regarding menu options were made at the district or school level for 88 percent of middle school students and 90 percent of high school students in 2008.
- In 2008, the overwhelming majority of students attended a school where food service was provided by the school system, as opposed to an external food service management company or other entity.

Policy Opportunities

Expand Participation in the School Breakfast Program

Although eating breakfast is widely recommended, significant proportions of U.S. secondary school students, especially those from low-SES families, do not eat breakfast.[9] This study found that students in low-SES schools were much more likely to eat breakfast at school. As such, efforts to expand school participation in the School Breakfast Program may have a significant impact on student nutrition, especially in low-SES schools, and also may enhance student academic performance. The Healthy, Hunger-Free Kids Act of 2010 allows for grants to establish or expand school breakfast programs and gives priority to schools where 75 percent of students are eligible for free and reduced-price meals. It is important that this grant program be funded adequately by Congress.

Improve the Nutritional Quality of School Meals

There is significant room for improvement in the nutritional quality of foods served as part of National School Lunch Program meals. The Institute of Medicine (IOM) recommends that USDA school meal standards be updated regularly to reflect current nutrition science.[10] Among those recommendations are increasing the

availability of fruits, vegetables and whole grains, while at the same time reducing saturated fats, trans fats, added sugars and salt, and limiting milk fat to 1% or less. Reducing the availability of less healthy options, like french fries, pizza, commercial fast foods, high-fat milk and sugar-sweetened beverages would be consistent with the IOM recommendations.

As directed by the Healthy, Hunger-Free Kids Act of 2010, USDA is working to update nutrition standards for breakfast and lunch meals. It is critical that these efforts continue swiftly and are as rigorous as possible to ensure that students have more healthy options at school.

Promote Healthy Foods and Beverages

This study found that fruits and vegetables were widely available in schools, yet national surveys show that secondary students consume low levels of such foods, which suggests that many students are not availing themselves of the healthier choices being offered at school.[11] This indicates the need for school offerings to be more attractive to students, either in terms of the types of foods presented or the way in which they are presented.

Creative examples of the latter approach, which is generally less expensive, have been tried in a number of schools with considerable success,[12] including:

- placing vegetables at the beginning of the lunch line;
- encouraging the use of cafeteria trays (which increased choosing salads);
- having cafeteria staff routinely ask children if they want a salad;
- placing the salad bar in front of the checkout register;
- moving the chocolate milk behind the plain milk;
- keeping ice cream in a freezer with a closed opaque top; and
- giving healthy food choices more attractive names.

These approaches are parallel to the kind of thinking that goes into marketing efforts in supermarkets, where placement, sequencing, labeling and other methods are carefully designed to maximize sales.

Increase Federal Reimbursement Rates for School Meals

Providing healthier foods, such as fresh fruits, vegetables, whole grains and a salad bar, as part of school meals and relying less on pre-packaged entrees that are high in fat and sodium are two important strategies for improving the nutritional quality of school meals. Because such changes will increase food service costs to the schools, it is critical that Congress fully fund the increased federal reimbursement rate for school lunches included in the Healthy, Hunger-Free Kids Act of 2010. Funding should also be provided to enhance the quality of school breakfasts.

Increase Training for and Collaboration with Food Service Providers and Staff

Given that districts or schools were largely responsible for providing food service and making menu decisions, policy efforts for improving the nutritional quality of school meals will likely be most effective when they include policy advocates, school food service managers, researchers and students. The federal government and states should provide training and technical assistance to help food service staff prepare nutritious meals that are appealing to students. The authorization of the Healthy, Hunger-Free Kids Act of 2010 included some $50 million for such efforts.

Increase the Number of Schools Providing Menus with Caloric Information to Parents

Providing menus may help parents become involved in the nutritional decisions of students at school and perhaps in setting school practices. It also may help encourage parents to look for nutritional information when making food choices outside of school. Notably, the Healthy, Hunger-Free Kids Act of 2010 requires school districts, in their reports to USDA and the public in their state, to include information about the quality of school meals. Efforts by schools to increase parents' awareness of the childhood obesity problem, educate them about the issues and motivate them to help seek solutions are critical for reversing the epidemic.

Competitive Foods and Beverages

Competitive venues—vending machines, à la carte cafeteria lines, and school stores—were widely available to students in U.S. secondary schools during our two-year study period. Yet by 2008, a large percentage of schools still had no nutritional guidelines for the foods and beverages sold in such venues. We also found that the availability of sugary drinks, pizza and french fries did not decline over time and that exclusive contracts governing food and beverage sales were in place at many schools.

Key Findings

- Virtually all high school students and more than three-quarters of middle school students had vending machines on campus in 2008. Competitive products were sold à la carte in the cafeteria to 92 percent of high school students and 81 percent of middle school students that same year.
- Only a little more than one-half of U.S. secondary students attended schools where principals reported that competitive venue prices were set to encourage healthier consumption in 2008.
- In 2008 about one-half of middle and high school students were in a school that had not implemented the nutritional guidelines for competitive foods set by the Alliance for a Healthier Generation.[f] Even fewer attended a school that had implemented the Alliance school beverage guidelines.[g]
- More than one-half of middle school students and more than two-thirds of high school students attended a school that received some percentage of sales from an exclusive beverage contract in 2008. Comparable percentages for vending machine food sales were 19 percent for middle school students and 44 percent for high school students.
- As detailed in Table 1.1, access to sugar-sweetened beverages and less healthy foods, such as pizza, french fries and snacks (e.g., cookies, candy, ice cream), was very high among middle and high school students for both study years. However, the availability of soft drinks and some snacks significantly declined from 2007 to 2008.

Policy Opportunities

Ensure USDA Guidelines for Competitive Foods and Beverages are Consistent with the Current Dietary Guidelines for Americans

The Healthy, Hunger-Free Kids Act of 2010 gives USDA authority to update standards for all foods and beverages served and sold in schools going forward. Standards for competitive foods set by the IOM, which recommend limits on fat, sugar, calories and serving sizes,[13] should serve as a guide for USDA as it works to update national nutritional standards for these products. The final guidelines should be consistent with the most recent Dietary Guidelines for Americans.

Implement Nutritional Guidelines for Competitive Products

Districts and schools should update their policies to require implementation of nutritional guidelines for competitive products that are based on the current Dietary Guidelines for Americans. This will help ensure that all foods and beverages available to students contribute to a healthy diet.

[f] The voluntary nutritional guidelines for competitive foods spell out acceptable portion sizes and set limits on fat, sugar and sodium. They also define caloric limits for elementary, middle and high school students. The guidelines are available at www.healthiergeneration.org/companies.aspx?id=2540.

[g] The voluntary school beverage guidelines spell out acceptable portion sizes and caloric content for beverages offered to elementary, middle and high school students. The guidelines are available at www.healthiergeneration.org/companies.aspx?id=1376.

Physical Activity and Physical Education

Evidence suggests that schools have made very little progress toward better supporting physical activity among students. Physical education has been almost entirely squeezed out of the standard curriculum in many high schools, and in some middle schools, requirements for physical education were lax. Participation in interscholastic and intramural programs was low, especially among students at low-SES schools and schools that have a predominately Black or Latino student body.

Key Findings

- In 2008, 83 percent of middle school students and 35 percent of high school students were required to take physical education during the school year. While about 90 percent of middle school students and one-half of high school students actually took physical education classes in 2008, it is likely that many did so for only one semester or trimester.
- Among those secondary school students who took physical education, the time they spent in those classes was generally consistent with National Association for Sport and Physical Education standards, which recommend 225 minutes per week of physical education. However, it is very likely that many of the students who took physical education did *not* meet these standards for the entire school year. It also is not clear how much time was spent in moderate-to-vigorous physical activity, which is key to meeting recommendations by the U.S. Department of Health and Human Services (USDHHS) that specify students spend at least 50 percent of their physical education time in moderate-to-vigorous physical activity.[14] In future surveys, we intend to measure these factors.
- In 2008, nearly 30 percent of both boys and girls participated in interscholastic or varsity sports at middle and high schools. Students in low-SES schools and majority Black or Latino schools had significantly lower rates of participation in varsity sports programs than did students in higher-SES and predominantly White schools.
- Only 10 percent to 13 percent of high school students and 21 percent to 24 percent of middle school students participated in intramural sports and physical activity clubs in 2008. The rates were lower for girls than for boys, and lower among middle school students in low-SES schools compared with higher-SES schools.
- Only one-quarter of middle school students and 14 percent of high school students walked or bicycled to school in 2008. Active commuting was more common among students in low-SES schools and in majority Black or Latino schools.
- In 2008 only about one-half of middle school students and 16 percent of high school students attended a school in which all students were given physical fitness tests.
- About one-quarter of middle school students and 11 percent of high school students attended a school where body mass index (BMI) was assessed for all students in 2008.

Policy Opportunities

Improve Physical Education Requirements

Districts and schools should develop and enforce physical education policies that align with evidence-based guidelines, including those for time spent in moderate-to-vigorous physical activity, to help more students meet national recommendations and learn lifelong skills that contribute to healthy behavior. Additionally, as USDA develops model policies and technical assistance for local wellness policies in accordance with the Healthy, Hunger-Free Kids Act of 2010, it should consider requiring districts to set specific goals for physical education.

Regular fitness assessments can help monitor student progress and ensure that physical education programming is effective. Increasing awareness of the link between physical activity and improved academic performance[15,16] is one strategy for motivating key decision-makers to support such policy changes.

Include Active Physical Education as a Core Requirement in the Elementary and Secondary Education Act

As Congress reauthorizes the Elementary and Secondary Education Act, it should consider making physical education a core and mandatory requirement to ensure that all students are getting adequate amounts of exercise and that physical education classes follow evidence-based guidelines and are taught by certified teachers.

Increase Participation in Physical Activity Outside of Physical Education

Policies that support opportunities for students to be active before, during and after the school day, including participation in intramural sports, physical activity clubs and/or varsity sports will likely help more children meet the USDHHS recommendation for at least 60 minutes of moderate-to-vigorous physical activity daily.

Increase Prevalence of Joint-Use Agreements

Local policy officials should facilitate joint-use agreements between municipalities and educational institutions to create more opportunities for community members, including schoolchildren in sports clubs and teams not run by the schools, to use available facilities for physical activity. They should adopt policies to address liability issues that might block implementation of joint-use agreements, when necessary.[17]

The National Policy and Legal Analysis Network to Prevent Childhood Obesity provides several resources that help guide the structure and implementation of joint use agreements, including model agreements, an overview of liability risks in all 50 states and a checklist for developing an agreement.[h]

Support Walking and Bicycling to School

Increasing participation in Safe Routes to School and walking school bus programs could help increase active commuting among students. Safe Routes to School programs also may help advance long-term changes in the community that support walking and bicycling more generally, such as new sidewalks, bike lanes and traffic calming devices. Collaboration among school administrators, planners and local officials is essential for building and maintaining such initiatives.

The federal government has the opportunity to increase its support for Safe Routes to School programs during the upcoming surface transportation reauthorization.

Implementation of Wellness Policies

In 2008, about one-quarter of middle school students and one-sixth of high school students attended a district or school with no wellness policy—or had a principal who did not know if such a policy was in place. Among districts or schools with a wellness policy, a substantial percentage did not meet mandatory provisions of the 2004 Child Nutrition Act, such as having nutritional guidelines for all foods, goals for physical activity or an implementation plan.

Key Findings

- Low- and medium-SES schools were lagging behind more affluent schools in having a wellness policy in place, and districts or schools attended by Black and Latino students were less likely on average to have a wellness policy established than were districts or schools attended by White students. In other words, the policy environment was lacking in districts or schools where the students were most likely to be at high risk for obesity.

[h] More information about NPLAN's joint-use agreement resources is available at www.nplanonline.org/nplan/joint-use.

- In 2008, only about one-third of secondary school students attended a district or school with a wellness policy and an implementation plan in place, and only about one-half (for middle schools) to two-thirds (for high schools) attended a school with a person who was responsible for ensuring that the wellness policy provisions were implemented.
- Explicit physical activity goals, which were required by the wellness policy mandate, were in place in districts or schools attended by only about one-half of secondary school students in 2007, with little indication of that proportion growing in 2008.
- Wellness policies also were required to include nutritional guidelines for all foods. In 2008, slightly more than two-thirds of secondary students attended a school that had developed such guidelines.

Policy Opportunities

Maximize Opportunities Included in the Healthy, Hunger-Free Kids Act of 2010

Model wellness policies and technical assistance developed for school districts by USDA should reflect the intent of the Healthy, Hunger-Free Kids Act of 2010, which calls for:

- making the content of wellness policies more transparent to help parents, students and others in the community better understand the provisions;
- requiring the measurement and evaluation of the wellness policies; and
- providing resources and training to help with designing, implementing, promoting, disseminating and evaluating wellness policies.

To ensure that wellness policies are implemented successfully at the local level, USDA should develop best practices and model policies, as well as regulations that allow districts and schools to tailor the provisions to meet their individual needs.

Schools should take the lead in implementing their district wellness policy, ensure timely review and provide feedback about their implementation efforts to the school community.

Ensure that Schools and Districts Have Adequate Resources to Implement Wellness Policies

Lack of funding, insufficient staff time and limited support from district and school administrators have been identified as barriers for implementing district wellness policies.[18] Governments at all levels will need to reallocate and maximize resources to help districts and schools implement wellness policy provisions.

Principals' Perceptions

In 2008, about one-half of secondary school students had a principal who expressed considerable concern about his or her students being overweight. Yet a substantial and gradually growing proportion of principals reported their district or school was making a significant effort to promote increased physical activity and healthy eating and drinking habits among students.

Key Findings

- In 2008, 65 percent of middle school students and 60 percent of high school students had a principal who expressed considerable concern about his or her students consuming more nutritious foods and beverages. A slightly higher percentage of middle school students (67%) and high school students (68%) had a principal who was concerned about students getting more exercise and physical activity.
- Middle school students who attended a low-SES school were more likely to have a principal who expressed concern about students being overweight than were those in high-SES schools. We found this to be appropriate given that an individual student's risk of being overweight is strongly and negatively correlated with school SES.[19]
- In 2008, a large proportion of middle school students (about 40%) and high school students (about 50%) attended a school that was *not* making a significant effort to support healthy eating and increased physical activity among students. However, the percentage of students who attended a school that was making such efforts did increase from 2007 to 2008.

Policy Opportunities

Support the Implementation of Successful, Low-Cost Interventions

Principals and other administrators need models of success both for improving student dietary and beverage choices during the school day, as well as for helping students be more active. Clearly more resources would help, and they may be most needed in schools serving low-SES populations and Black and Latino students. Because resources are likely to be in short supply for the foreseeable future, models that carry only modest costs would appear most promising.

Participate in National Initiatives that Support Healthy Schools

A number of national initiatives provide resources and technical assistance to help principals, teachers and administrators make the school environment healthier for students. For example, the Team Nutrition program and the HealthierUS School Challenge are supported by USDA, and the Alliance for a Healthier Generation offers the Healthy Schools Program. There is certainly room for increased participation in such programs. This study found 44 percent of middle school students and 45 percent of high school students attended a school that participated in Team Nutrition in 2008.

Next Steps

While many U.S. secondary schools have made an effort to create a healthier environment for their students, significant changes are still needed to provide more nutritious meals and snacks, remove junk foods and sugary drinks, and increase opportunities for physical activity. Annual surveys by Bridging the Gap will continue to track changes in district policies and school practices relevant to student health. We also will monitor the impact of these changes to identify areas where progress is being made, as well as areas where particular need remains. These findings will provide timely guidance for the implementation of the Healthy, Hunger-Free Kids Act of 2010.

In addition, ongoing tracking will help assess the impact of the Healthy, Hunger-Free Kids Act of 2010 and the pending reauthorization of the Elementary and Secondary Education Act. Future reports also will examine links between adopted wellness policies, their level of implementation, and students' self-reported physical activity levels, dietary patterns and body mass indices to identify policies with greatest potential to reverse the childhood obesity epidemic.

Summary of Health-Related Policies and Practices in Secondary Schools

Table 1.2 summarizes data included in our full report for 2008. All data are weighted to reflect the percentages of public secondary school students nationwide who were affected by these practices. Data for 2007, additional survey topics and demographic sub-sample comparisons are available in the full report and at *www.bridgingthegapresearch.org/research/secondary_school_survey.*

TABLE 1.2 Summary of Secondary School Policies and Practices, 2008

Principals' Perceptions	Responses	Middle School	High School
Extent of concern about student overweight	Great or very great	53%	47%
Extent of concern about student nutrition	Great or very great	65%	60%
Extent of concern about student physical activity levels	Great or very great	67%	68%
Extent of school effort to improve student nutrition	Great or very great	59%	49%
Extent of school district effort to improve student nutrition	Great or very great	62%	52%
Extent of school effort to improve student physical activity	Great or very great	59%	43%
Extent of school district effort to improve student physical activity	Great or very great	46%	38%

School Meals	Responses	Middle School	High School
Students ate breakfast offered by school	[Average %]	26%	18%
School offered breakfast to students			
...School Breakfast Program	Yes	82%	86%
...any breakfast	Yes	89%	94%
Average full price charged for School Breakfast Program meal	[Average price]	$1.11	$1.20
Students ate lunch offered by school	[Average %]	74%	60%
School offered National School Lunch Program	Yes	92%	96%
Average full price charged for National School Lunch Program meal	[Average price]	$1.93	$2.04
Average length of lunch period	[Time in minutes]	31	34
Beverages available in National School Lunch Program meals[i]:			
...Alliance beverages approved for middle and high school[j]	Some days or most/every day	98%	98%
...Alliance beverages approved for high school only[k]	Some days or most/every day	32%	39%
...sugar-sweetened beverages[l]	Some days or most/every day	26%	37%
...whole, 2% or flavored milk	Some days or most/every day	71%	74%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

[i] Data reported only for students whose schools participated in the National School Lunch Program. Availability defined as offered as part of the school lunch meal "some days" or "most or every day."

[j] Any one or more of beverages that meet Alliance guidelines for both middle and high school: bottled water; 100% fruit or vegetable juice with no added sweeteners; low-fat (1%) or non-fat (skim) milk.

[k] Any one or more of beverages that meet Alliance guidelines for high school only (diet soft drinks; other no-calorie or very low-calorie beverages; "light" juices).

[l] Any one or more of regular soft drinks; sports drinks; and fruit drinks that are not 100% fruit juice and that are high in calories.

TABLE 1.2, CONTINUED

School Meals (CONTINUED)	Responses	Middle School	High School
Healthier foods available in National School Lunch Program meals:			
...fruits and vegetables	Some days or most/every day	100%	100%
...fresh fruits	Some days or most/every day	100%	99%
...other fruits (e.g., dried or canned fruits)	Some days or most/every day	91%	95%
...vegetables (e.g., carrot sticks or celery sticks)	Some days or most/every day	99%	100%
...salads	Some days or most/every day	92%	94%
...pre-made, main course salads	Some days or most/every day	83%	87%
...salad bar	Some days or most/every day	41%	43%
...whole grains	Some days or most/every day	87%	92%
Less healthy foods available in National School Lunch Program meals:			
...commercial fast foods	Some days or most/every day	13%	18%
...french fries	Some days or most/every day	40%	52%
...pizza	Some days or most/every day	98%	98%
...regular fat and sugary snacks[m]	Some days or most/every day	54%	59%
School participated in Team Nutrition	Yes	44%	45%
	No	24%	28%
	Don't know	32%	27%
School food service was provided by:			
...school system	Yes	79%	81%
...food service management	Yes	20%	16%
...other	Yes	3%	5%
Decisions about menus and food service issues were made by:			
...district	Yes	82%	79%
...school	Yes	20%	31%
...contractor	Yes	14%	10%
...other	Yes	6%	3%
School provided menus to:			
...students	Yes	92%	87%
...parents	Yes	88%	81%
School provided nutrition information to:			
...students	Yes	64%	64%
...parents	Yes	60%	57%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

[m] Any one or more of candy; salty snacks that are not low in fat, such as regular potato chips; cookies, crackers, cakes or other baked goods that are not low in fat; ice cream or frozen yogurt that is not low in fat.

TABLE 1.2, CONTINUED

Competitive Foods and Beverages	Responses	Middle School	High School
School offered foods or beverages in the following competitive venues:			
...à la carte sales in the cafeteria	Yes	81%	92%
...stores or snack bars/carts	Yes	48%	62%
...vending machines	Yes	77%	96%
School offered foods or beverages in the following competitive venues but the Alliance school beverage guidelines *had not* been implemented:			
...à la carte sales in the cafeteria	Yes	43%	31%
...stores or snack bars/carts	Yes	40%	26%
...vending machines	Yes	38%	33%
School administrator was aware of Alliance school beverage guidelines	No	28%	14%
	Yes, some	56%	66%
	Yes, quite a bit	17%	21%
School offered foods or beverages in the following competitive venues but the Alliance nutritional guidelines for competitive foods *had not* been implemented:			
...à la carte sales in the cafeteria	Yes	50%	52%
...stores or snack bars/carts	Yes	48%	46%
...vending machines	Yes	52%	49%
School administrator was aware of Alliance nutritional guidelines for competitive foods	No	46%	31%
	Yes, some	38%	56%
	Yes, quite a bit	16%	13%
Competitive venue prices were set to encourage consumption of healthier:			
...beverages	Some or a lot	55%	57%
...foods	Some or a lot	51%	58%
District or school had existing exclusive beverage contract in place	Yes	65%	79%
School received specified percentage of sales from exclusive beverage contract	Yes	55%	68%
School received specified percentage of sales from food vending machines	Yes	19%	44%
Beverages available in competitive venues:			
...Alliance beverages approved for middle and high school[n]	Yes	96%	99%
...Alliance beverages approved for high school only[o]	Yes	69%	88%
...sugar-sweetened beverages[p] (including regular soft drinks)	Yes	71%	92%
...regular soft drinks	Yes	17%	45%
...whole or 2% milk, or flavored milk	Yes	61%	72%
Regular soft drinks available in:			
...à la carte sales in the cafeteria	Yes	1%	5%
...stores or snack bars/carts	Yes	4%	12%
...vending machines	Yes	15%	43%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

n Any one or more of beverages that meet Alliance guidelines for both middle and high school: bottled water; 100% fruit or vegetable juice with no added sweeteners; low-fat (1%) or non-fat (skim) milk.

o Any one or more of beverages that meet Alliance guidelines for high school only (diet soft drinks; other no-calorie or very low-calorie beverages; "light" juices).

p Any one or more of regular soft drinks; sports drinks; and fruit drinks that are not 100% fruit juice and that are high in calories.

TABLE 1.2, CONTINUED

Competitive Foods and Beverages (CONTINUED)	Responses	Middle School	High School
Healthier foods available in competitive venues:			
...fruits and vegetables	Yes	70%	86%
...fresh fruits	Yes	67%	84%
...other fruits (e.g., dried or canned fruits)	Yes	60%	79%
...vegetables (e.g., carrot sticks or celery sticks)	Yes	62%	78%
...salads	Yes	62%	78%
...pre-made, main course salads	Yes	59%	75%
...salad bar	Yes	30%	38%
...whole grains	Yes	61%	79%
Less healthy foods available in competitive venues:			
...commercial fast foods	Yes	15%	23%
...french fries	Yes	26%	45%
...pizza	Yes	73%	88%
...regular fat and sugared snacks[q]	Yes	61%	77%
Soft drinks and/or fast-food restaurants were promoted by:			
...sponsorships	Yes	13%	21%
...coupons	Yes	11%	6%
...textbook covers or menus	Yes	3%	2%
...exclusive beverage contract ads (excluding those on vending machines)	Yes	9%	19%
...posters	Yes	3%	4%

Physical Activity and Physical Education	Responses	Middle School	High School
School required physical education	Yes	83%	35%
Students took physical education	[Average %]	91%	49%
Students participated in interscholastic or varsity sports:			
...boys	[Average %]	30%	31%
...girls	[Average %]	27%	27%
Students participated in intramural sports or physical activity clubs:			
...boys	[Average %]	24%	13%
...girls	[Average %]	21%	10%
Students walked or bicycled from home to school	[Average %]	25%	14%
School gave students physical fitness tests:			
...had any testing	Yes	76%	41%
...all students were tested	Yes	54%	16%
...only students taking physical education were tested	Yes	20%	23%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

q Any one or more of candy; salty snacks that are not low in fat, such as regular potato chips; cookies, crackers, cakes or other baked goods that are not low in fat; ice cream or frozen yogurt that is not low in fat.

TABLE 1.2, CONTINUED

Physical Activity and Physical Education (CONTINUED)	Responses	Middle School	High School
School measured students' body mass index (BMI):			
...had any assessments	Yes	37%	32%
...all students were assessed	Yes	26%	11%
...only students taking physical education were assessed	Yes	8%	15%
School had activities in place to promote physical activity	Yes	65%	51%

Wellness Policies	Responses	Middle School	High School
District or school had established a wellness policy	Yes	78%	84%
Implementation plan for wellness policy:			
...district or school had developed plan	Yes	33%	36%
...district or school was currently developing plan	Yes	20%	26%
...district or school had not developed plan	Yes	23%	22%
...district or school had no wellness policy	Yes	7%	4%
...administrator did not know if plan existed	Yes	17%	12%
Designated individual was responsible for implementing school wellness policy	Yes	54%	66%
Explicit student wellness goals had been developed for:			
...physical activity	Yes	58%	53%
...nutrition education	Yes	50%	60%
...promoting healthier eating and drinking practices[r]	Yes	63%	55%
District or school had nutrition guidelines for all foods	Yes	67%	68%
Had advisory body for nutrition and/or exercise recommendations:			
...at district level only	Yes	44%	44%
...at school level only	Yes	7%	6%
...at both district and school level	Yes	17%	14%
Stakeholders involved in wellness policy development included:			
...school food personnel	Yes	72%	83%
...school administrators	Yes	68%	78%
...teachers	Yes	67%	71%
...parents	Yes	61%	61%
...students	Yes	45%	60%
...school board members	Yes	42%	51%
District offered formal classroom instruction on:			
...physical activity, exercise and fitness	Yes	94%	97%
...nutrition and dietary behavior	Yes	83%	95%

Source: Bridging the Gap, Institute for Social Research, University of Michigan, 2011.

[r] The federal wellness policy mandate did not require districts to develop goals for promoting healthier eating and drinking practices.

Overview of Study Methods

This study is based on mail-back survey data gathered in 2007, and again in 2008, from principals, food service managers and other staff in nationally representative samples of public schools in the coterminous U.S. that had students in target grades 8, 10 or 12. A separate sample of schools was drawn for each target grade. For 2007, responses were received from 222 middle schools and 224 high schools. For 2008, responses were received from 265 middle schools and 262 high schools. The overall response rate was 76 percent of originally sampled schools for 2007. For 2008, the overall response rate was 77 percent of the original sample; a system of matched replacement for non-responding schools was introduced, resulting in an adjusted response rate of 89 percent. For this report, each respondent's answer has been weighted by the number of students served by that school in the target grade (8, 10 or 12), and thus results reflect the *proportion of students served* (and not the proportion of all schools).

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