# Influence of Competitive Food and Beverage Policies on Children's Diets and Childhood Obesity

#### **Issue Brief, July 2012**

## Healthy Eating Research

**Bridging the Gap** 

#### Introduction

More than 23 million children and adolescents in the United States—nearly one in three young people—are obese or overweight, putting them at risk for serious health problems. The foods and beverages available in schools have an influence on children's diets and their weight. In fact, children and adolescents consume more than 35 percent of their daily calories at school.

Outside of meal programs, schools sell many foods and beverages to students through à la carte lines in the cafeteria, vending machines, school stores, snack bars, canteens, fundraisers and other venues. Such snack foods often are high in fat, calories, sugar and/or salt, and offer minimal nutritional value. Many schools also sell a variety of unhealthy drinks to students, including high-fat milks and sugar-sweetened beverages (SSBs) such as soda, sports drinks and high-calorie fruit drinks.

Collectively, the snacks and beverages sold or served outside of school meal programs are known as competitive foods because they compete with school meals for students' spending. Despite voluntary agreements by several snack and beverage manufacturers to remove unhealthy



competitive foods from schools, the majority of public school students, particularly middle and high school students, still have ready access to them (Figure 1).

This brief examines the emerging evidence about the influence of competitive food and beverage policies on children's diets and childhood obesity. The research clearly shows a need for comprehensive policies that govern the sale and consumption of these foods and beverages in the school environment.

This issue brief is based on a research review prepared by Jamie Chriqui, PhD, MHS, Health Policy Center in the Institute for Health Research and Policy at the University of Illinois at Chicago. The full research review, which includes citations, is available at www.healthyeatingresearch.org and www.bridgingthegapresearch.org.

Robert Wood Johnson Foundation

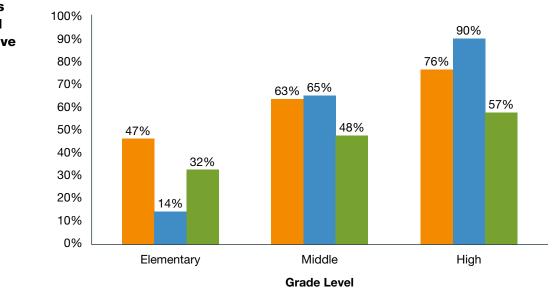
#### FIGURE 1

Percentage of U.S. Public School Students Nationwide with Access to Unhealthy Foods and Beverages in Competitive Venues by Grade Level, School Year 2009–10



2% or Whole Milk

% of Public School Students Nationwide



### **The Evidence**

#### Competitive Food and Beverage Policies Influence the School Environment and Student Purchases

- Students purchase and consume fewer unhealthy snack foods and beverages, such as soda and other sugary drinks, high-fat milks, candy and chips, when policies prohibit or restrict schools from offering them. Such policies also increase the availability of healthier options, such as fruits and vegetables.
- Policies that prohibit or restrict unhealthy snack foods and beverages at school quickly and effectively reduce the availability and/or consumption of such products. In some cases, these reductions occurred only a few months after policies were implemented.
- The limited published, peer-reviewed evidence shows that food service revenues increase when schools restrict students' access to unhealthy snack foods and beverages. This is primarily because revenue from increased participation in school meal programs offsets initial declines in sales of competitive products.

## Such Policies Influence Students' Diets and Possibly Even Their Weight

- Policies that restrict snack food and beverage offerings and limit portion sizes and the fat, sugar and calorie content of such products also are effective at reducing children's caloric intake.
- When policies allow schools to offer snack foods and beverages that are high in fat, sugar and calories, such items are more available and students consume more of them. Students also consume fewer healthier foods and beverages when schools offer unhealthy options.
- Limited evidence suggests that policies that allow unhealthy snack foods in schools are associated with increased body mass index (BMI) among students.
  Policies that restrict unhealthy snack foods are associated with lower proportions of overweight or obese students, or lower rates of increase in student BMI.

### To Be Effective, Policies Must Be Comprehensive

- Policies that only apply to some venues but not all (e.g., to à la carte lines or vending machines, but not school stores) are not as effective as comprehensive policies that apply to all venues.
- Comprehensive policies are key to reducing students' access to and consumption of SSBs in schools. Policies

that restrict only soda, but allow sports drinks and other SSBs, do not reduce the overall availability or consumption of SSBs.

While one study found that school-based policies can affect children's total consumption of SSBs, both in and out of school, most studies show that school-based policies are not associated with students' dietary changes outside of school.

# **Conclusions and Policy Implications**

The best evidence available indicates that policies on snack foods and beverages sold in school impact children's diets and their risk for obesity. Strong policies that prohibit or restrict the sale of unhealthy competitive foods and drinks in schools are associated with lower proportions of overweight or obese students, or lower rates of increase in student BMI. Such policies also may boost participation in school meal programs and increase food service revenues.

Research also suggests that when schools provide easy access to unhealthy snack foods and beverages, students consume more of them. Overall, student BMI tends to be higher in schools that sell unhealthy items in competitive venues. Because the school food environment affects the dietary behaviors and weight outcomes of millions of students across the country, implementing strong policies that support healthy eating could lead to sustained changes that would help reverse the childhood obesity epidemic, particularly if those changes were reinforced in environments outside of the school setting.

The federal government and many states, school districts and schools across the country have begun changing policies to create a healthier school environment. The following is a short summary of those efforts, including policy implications based on the findings reported in this brief.

#### At the Federal Level

As required by the Healthy, Hunger-Free Kids Act of 2010, the U.S. Department of Agriculture (USDA) is working to update national nutrition standards for competitive foods and beverages for the first time since 1979. The findings documented in this brief can help inform USDA in its efforts to develop strong, comprehensive competitive food and beverage standards for all schools across the country.

#### At the State Level

In the mid- to late-2000s, a number of states enacted or strengthened their competitive food and beverage laws to provide guidance and promote uniformity across districts working to implement their wellness policies. Findings from this brief can help inform policy-makers about effective strategies for restricting or removing unhealthy foods from schools. These results also show that such policies have an almost immediate effect on improving students' diets. Increasing awareness of the link between strong policies and healthier behaviors is one strategy for motivating key decision-makers to support policy changes.

#### At the District and School Level

The federal government required all school districts participating in federal child nutrition programs to implement a wellness policy by the 2006–07 school year. Because it was required to be a part of the wellness policies, most districts do have a policy that addresses foods sold outside of school meals. However, many wellness policies do not set guidelines for all competitive venues, nor do they align with current nutritional recommendations. Further, many districts that have established a wellness policy have not yet implemented its provisions, especially those related to competitive foods and beverages. The findings presented in this brief suggest that districts and schools should continue to strengthen their own nutritional guidelines for competitive products, in order to help students consume a healthier diet. Implementing strong policies for competitive foods also may help districts and schools build revenue, through increased participation in school meal programs.

This issue brief is based on a research review prepared by Jamie Chriqui, PhD, MHS, Health Policy Center in the Institute for Health Research and Policy at the University of Illinois at Chicago. The full research review, which includes citations, is available at www.healthyeatingresearch.org and www.bridgingthegapresearch.org.



Scan to view the full research review.

#### **About Healthy Eating Research**

Healthy Eating Research is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by the University of Minnesota School of Public Health under the direction of Mary Story, PhD, RD, program director, and Karen M. Kaphingst, MPH, deputy director. The Healthy Eating Research program 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 ages 3 to 18 and their families, especially in lower-income and racial and ethnic populations at highest risk for obesity.

University of Minnesota School of Public Health 1300 South 2nd St., Suite 300 Minneapolis, MN 55454 www.healthyeatingresearch.org

#### 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 influence 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.

# About the Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to health and health care, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, measurable, and timely change.

For 40 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime. For more information, visit *www.rwjf.org*. Follow the Foundation on Twitter *www.rwjf.org/twitter* or Facebook *www.rwjf.org/facebook*.

Route 1 and College Road East P.O. Box 2316 Princeton, NJ 08543–2316 www.rwjf.org