Introduction

The foods and beverages available in schools affect students’ diets and their weight.1 Outside of meals, schools sell many types of beverages, and sugar-sweetened beverages are among the most prevalent. Consumption of such beverages, which include sodas, fruit drinks, sports drinks and sweetened teas, has risen dramatically among U.S. youths and is a serious public health concern.2

According to leading health authorities, removing sugar-sweetened beverages from schools is an important strategy for improving children’s health and addressing the nation’s obesity epidemic.1-4 Specifically, guidelines from the Institute of Medicine (IOM)5 recommend removing sugary beverages and higher-fat (2% and whole) milks from schools. The guidelines also recommend that, if competitive beverages are sold, options should be limited to water, 100% juice and lower-fat (nonfat or 1%) milks.

This brief summarizes two recent reports by Bridging the Gap researchers in the Archives of Pediatrics & Adolescent Medicine6,7 that examined the availability of competitive beverages sold in U.S. public elementary, middle and high schools. Data are drawn from surveys of nationally representative samples for five school years, from 2006–07 to 2010–11. The findings identify areas of greatest progress and areas where additional efforts are needed.
FIGURE 1  Percentage of Students with Sugar-Sweetened Beverages Available for Purchase in School
By Grade Level and School Year

FIGURE 2  Percentage of Students with Higher-Fat Milks Available for Purchase in School
By Grade Level and School Year
Key Findings

The availability of sugar-sweetened beverages in competitive venues has significantly decreased over time, but these drinks remain widely available in middle and high schools. The availability of many other unhealthy beverages has decreased steadily, but many schools still sell such beverages to students. This is especially true in middle and high schools.

- In 2010–11, 88 percent of high school students, 63 percent of middle school students and 12 percent of elementary school students could buy sugar-sweetened beverages from at least one competitive venue (see Figure 1).
- Sports drinks were by far the most commonly offered type of sugar-sweetened beverage, available to more than 80 percent of high school students and more than half of middle school students in 2010–11.
- Since 2008–09, there has been a substantial decline in the availability of higher-fat milks, especially in middle and high schools. In 2010–11, 48 percent of high school students, 36 percent of middle school students and 25 percent of elementary school students could buy higher-fat milks from a competitive venue (see Figure 2).

What are competitive beverages, and where are they sold?
- All drinks offered in schools outside of federally reimbursable school meals program—those served or sold in vending machines, à la carte lines in the cafeteria, school stores and snack bars.

According to the IOM, what beverages are acceptable for students at all grade levels during the school day?
- Water, lower-fat (1% or nonfat) milks, 100% fruit juices or low-sodium 100% vegetable juices.

What beverages should not be offered in school, according to the IOM?
- Regular soft drinks, high-calorie fruit drinks that are not 100% juice and higher-fat (2% or whole) milks are not recommended for any grade level.

What else does the IOM recommend for high schools?
- Access to sugar-free (diet), caffeine-free beverages is acceptable but only after school hours.
- Access to sports drinks is acceptable, but only for student athletes who are engaged in school sport programs involving more than one hour of vigorous activity.

*Adapted from IOM 2007*
The exclusive availability of healthy beverages in competitive venues remains relatively low, although more elementary and middle schools are changing their beverage offerings to align with the IOM guidelines (see Figure 3).

- In elementary schools, the percentage of students who could buy only healthy competitive beverages doubled over the five-year period, from 10 percent to 21 percent of students. Yet in 2010–11, one-third of elementary schools could still buy unhealthy beverages, those not recommended by the IOM.

- In the 2010–11 school year, virtually all high school students and nearly all middle school students could buy beverages other than those recommended by the IOM. Middle and high schools have made less progress than elementary schools toward providing only healthy beverages.
Conclusions and Policy Implications

Although many schools are making an effort to remove some unhealthy beverages from their competitive venues, sugary drinks and high-fat milks remain widely available. Students can purchase such beverages throughout the school day from a variety of sources, including à la carte lines in the cafeteria, vending machines, school stores and snack bars. To date, elementary schools have made more progress than middle or high schools toward completely removing unhealthy beverages and offering only healthy options to students.

Despite recommendations from leading health authorities that suggest schools should offer only healthy beverages—such as water, 100% juice and lower-fat milks—sales of competitive beverages are largely unregulated in many school districts.9 Because of this, the updated regulations that USDA will issue for competitive foods and beverages have the potential to significantly improve the nutrition landscape in schools. The IOM standards for competitive foods and beverages and the 2010 Dietary Guidelines for Americans should serve as a guide for USDA’s updated regulations. It is crucial that the final regulations are specific, and comprehensive, and that they apply to all venues on campus — before, during and after the school day.

In addition to federal legislation, state- and district-level policies have strong potential to improve the school beverage environment. For example, a recent research review concludes that students purchase and consume fewer sugary drinks when state laws or school district wellness policies prohibit schools from selling them.20 However, many school districts have a wellness policy that does not include guidelines for competitive venues, and among those that do, the provisions regarding sugar-sweetened beverages are often lax.9 Ensuring that nutritional guidelines for competitive beverages in schools are updated to reflect the IOM standards and the 2010 Dietary Guidelines for Americans is an important strategy for improving students’ dietary behavior and reducing obesity. Such efforts are especially crucial in our nation’s middle and high schools, where many students have easy access to sugary drinks and high-fat milks throughout the school day.

Study Overview

These analyses are based on nationally representative data collected by Bridging the Gap from annual surveys of U.S. public schools for five school years, from 2006–07 to 2010–11. The elementary school surveys were conducted by the University of Illinois at Chicago, and the middle school and high school surveys were conducted by the University of Michigan. Surveys were sent in the spring of each school year, with a request that the items used here be completed by food service staff. Survey items asked respondents to describe whether beverages were available in each of the following competitive venues: vending machines, à la carte cafeteria lines and school stores/snack bars/carts. If beverages were sold, respondents were then asked about the availability of specific beverages in each venue.

Over the five years, responses were received from a total of 3,245 public elementary schools (62% response rate), 1,477 public middle schools and 1,575 public high schools (combined secondary school response rate of 83%).

About Bridging the Gap

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

Suggested Citation

Endnotes


