The Worldwide Battle Against Soft Drinks in Schools

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Abstract: Sugar-sweetened beverages are widely believed to be contributing to the growing prevalence of overweight and obesity around the world. One of the channels used by industry to encourage greater consumption and preferences for soft drinks is schools. But governments around the world are taking action to limit the availability of soft drinks in schools. More than 30 national and subnational governmental bodies have made efforts to restrict availability, and the soft drinks industry has also taken some limited voluntary action. Most government-led efforts—with some exceptions—restrict the availability of any drink with added sugar, but the voluntary pledges take less-restrictive approaches. There is little consensus on artificially sweetened drinks. Policies vary in other ways, too, presenting an opportunity to study the effects of different policy approaches on short- and long-term consumption and attitudes. In the meantime, the widespread condemnation of soft drinks in schools suggests that it is within the industry’s interests to take more comprehensive action.

Introduction

It is commonly perceived that rising sugar intakes are contributing to the growing prevalence of obesity worldwide. According to data from the Food and Agriculture Organization of the UN (FAO), the global availability of sugar and sweeteners for consumption rose from 193 calories per person per day in 1961–1963 to 243 in 2001–2003. Consumption of sugar-sweetened beverages (SSBs) around the world is thought to be an important contributor to this increase. In the U.S., SSBs (including drinks sweetened with high-fructose corn syrup) are now the primary source of added dietary sugars and have been linked to excessive body weight and other chronic conditions.

Although the U.S. is the largest consumer of carbonated soft drinks in the world (54,981 million liters in 2007), consumption is increasing elsewhere. Industry data indicate that the total volume of carbonated soft drinks consumed in the U.S. fell by 0.6% between 2002 and 2007 but rose by 12.7% in western Europe, 28% in Eastern Europe, 23% in Latin America, 18.9% in the Asia Pacific region, 21.5% in the Middle East and Africa, and 2.7% in Australasia. These increases indicate that consumption growth of all soft drinks is higher outside the U.S., raising further concerns about the growth of obesity. As in the U.S., several countries are beginning to take action against SSBs.

Schools As a Target Market for Soft Drinks

In the U.S., the soft drinks industry has utilized schools to promote their products for decades. More than 85% of U.S. high school students now have soft drinks available to them in vending machines. Likewise, in the rest of the world, the soft drinks industry has targeted schools as a means of reaching young consumers. In the late 1990s, for example, the Latin American bottler Panamco (now owned by Coca-Cola Femsa) developed a specific program to target schools. In Costa Rica, the Schools Programme involved “creating new points of sale in strategic areas of each institution, installing the appropriate cold product equipment, and providing the appropriate products and packaging for the channel,” whereas in Colombia and Mexico, attractive “combo packages” were used to promote purchasing in schools. In many developing countries, soft drinks are available at school tuckshops, kiosks, snack bars, and canteens. SSBs may also be sold by shops and temporary vendors in the immediate vicinity of schools. In all markets, the percentage of soft drinks sold in schools is generally reported to be low relative to total sales, but the creation of brand awareness and changing social norms around con-
sumption are equally if not more important reasons that the industry targets schools.

Government-Led Efforts

National or subnational governmental bodies have acted, in most cases since 2004, to limit the availability of soft drinks in schools in at least 30 countries around the world. The policies take many different forms. Lithuania, Malaysia, and New Zealand have developed national regulations; Australia and Brazil have developed regulations at a state or municipal level; and Croatia and the U.S. have done both. Some countries have developed nonbinding guidelines, as in the Canadian provinces. In other countries, such as the Netherlands, the guidelines apply to only school meals; in some, such as France, the guidelines for school meals differ from those for other sales channels (in this case, vending). In Belgium and Thailand, some schools and school districts have taken voluntary action to restrict availability.

Policies differ among countries in other ways as well. Some (as in Hong Kong) cover primary schools only or differ for primary versus high schools (as in the U.S.); others apply to all grades (as in England and Scotland). In South Korea, regulations cover the immediate vicinity of schools. Policies in most countries do not cover private schools, which in developing nations are attended by large sections of the middle- and upper-income groups. Some policies simply dictate which drinks are permitted and which are not. Subtler regulation mechanisms include categorizing drinks according to how frequently they should be served (e.g., the “traffic light” system in Australia) and setting limits on portion size and/or times of day when drinks can be sold (e.g., state laws in the U.S.). The framework in which the policies are developed also varies. Some countries (e.g., Greece and Portugal) have restrictions that are part of standards set for all foods in schools, whereas others have policies specific to soft drinks (e.g., Latvia).

One of the key differences is the type of soft drinks covered by the policies (Figure 1). Government-led approaches tend to restrict full-calorie carbonated drinks and any other SSBs (e.g., sport drinks and sweetened fruit juices). Federal regulations in the U.S. and the Food and Beverage Classification System in New Zealand are exceptions. All policies permit milk and 100% fruit juice. Policies for lower-calorie drinks with artificial sweeteners are far less consistent. England and New Zealand both have comprehensive policies developed in consultation with nutrition professionals, yet they differ in approach. In Australia and Canada, where policies are set subnationally, some states/provinces permit artificially sweetened drinks whereas others do not.

Industry-Led Approaches

Through their trade associations, global soft drinks companies have developed voluntary pledges on soft drinks in schools in the U.S., Canada, Australia, the European Union, and reportedly in New Zealand. The International Council of Beverage Associations has developed guidelines on marketing to children, but as of February 2010 the guidelines did not include availability in schools.

The pledges, all made since 2006, are derivatives of each other. The wording of the Refreshments Canada pledge is the same as that of the school beverage guidelines of the American Beverage Association in the U.S. The commitment addressing obesity and other health and wellness issues of the Australian Beverage Council and the commitment made by the Union of European Beverage Associations (UNESDA) also share wording. The pledges also apply to political entities rather than company territories. For example, the bottler Coca-Cola Enterprises has adopted the school beverage guidelines in the U.S., but it does not apply them in its other territories in Europe.

Soft drink industry pledges likewise vary to the degree that they restrict availability (Figure 1). The U.S./Canadian pledge restrict the availability of full-calorie sweetened drinks in schools, whereas the Australian and European pledges simply require that a full range of drinks (including low- and no-calorie drinks) be made available in schools. The U.S./Canadian pledge, though far more restrictive than the Australian and European pledges, is less restrictive than the majority of government regulations, which do not allow any drinks with added sugar.
Implementation and Effectiveness

Little information is available on the implementation of government policies. Some jurisdictions report that policies have been implemented, but anecdotal evidence from other areas suggests that policies either are not yet in place or are not being enforced (e.g., Fiji, Greece, and Malaysia).

The industry has monitored three of the voluntary pledges. In the U.S., the American Beverage Association reported that 79% of school contracts are in compliance with the school beverage guidelines, that calories from all beverages shipped to schools nationwide declined by 58% between 2004 and 2007–2008, and that shipments of full-calorie soft drinks declined by 65%. A report on the UNESDA agreement showed that 93.9% of elementary schools and 66.9% of high schools from four European countries are in compliance. In Australia, monitoring between August 2006 and 2008 found that four of the six companies providing soft drinks to schools voluntarily altered their product ranges and pack sizes, and where requested by government or school authorities, took steps to withdraw sugar-sweetened carbonated soft drinks from secondary schools.

Evidence on the effects of policies on consumption and health is limited, both for government- and industry-led approaches. A study in the Netherlands found little association between the availability of soft drinks in schools and consumption, but another from Norway found that children in schools with rules on soft drinks tended to consume less. In the U.S., limiting soft drink availability in elementary schools was found to be associated with just a 4% decline in consumption of any soft drink. An intervention study in high schools found that reducing availability of SSBs did not result in a greater decrease in consumption by intervention relative to control subjects. A report from Australia suggests that soft drinks contribute very little to total energy intake in schools, and in the U.S. it has been found that 7%–15% of caloric intake from SSBs occurs in schools. But estimates from the third nationally representative school nutrition dietary survey in the U.S. showed that attending a school without stores or snack bars reduced SSB consumption by 22 kcal per school day in middle school children and by 28 kcal in high school children. None of these studies examined the effects of soft drinks policies on attitudes or longer-term consumption patterns.

There is also a debate in the scientific community about the drinks that should be covered by the policies. Although there is general consensus about the negative effects of drinks with added sugars, perspectives differ on artificially sweetened drinks and 100% fruit juices. The U.S. Food and Drug Administration has approved the use of artificial sweeteners, and the American Dietetic Association says they can be consumed in moderation. Some experts have proposed that drinks with artificial sweeteners are preferable to fruit juice since they contain no calories, and recommendations made to the Mexican government rank such drinks (and alcohol and tea) as preferable to fruit juices and full-fat milk because they contain fewer calories. But other experts remain concerned that drinks with artificial sweeteners uncouple the natural link between sweetness and energy, and some evidence points to a link between diet soda consumption and weight gain and diabetes.

Research Needs and Challenges

The international variation of policies on soft drink availability in schools presents an opportunity to examine the effects of various policy options, especially with regard to the effects of different levels of restrictions. Such research could help identify policies that are most likely to succeed, information that is currently lacking for obesity prevention in general. However, such studies need to be undertaken with care because policies may have intangible, and/or long-term effects that are difficult to measure. Moreover, most SSB consumption takes place outside of schools—at home, at special occasions/events, in eating outlets, and sometimes in the immediate vicinity of schools. Young people are also targeted with a significant amount of soft drink advertising and other promotional efforts in and outside of schools. The effects of policies in jurisdictions where soft drink consumption is a social norm may differ from those in other places where consumption is still growing, and there may be differences among age groups. Care must therefore be taken when attempting to measure the “success” of soft drinks policies: Is it best measured, for example, as the volume of drinks shipped to schools, expenditure or intake in schools, total intake in and out of the school setting, attitudes towards soft drinks, social norms around consumption, or longer-term consumption habits? These latter, potentially more profound effects need to be considered in light of the soft drinks industry’s objective of being in schools in the first place.

The Future

Governmental bodies around the world are taking increasing action to address the availability of soft drinks in schools. Since the evidence of the effects of restricting availability on consumption and health is still unclear and emerging, it is likely that these actions are being driven by the belief that high-calorie, nutrient-poor drinks no longer have a place in schools, and, moreover, that schools are an appropriate
starting point to reduce total consumption of SSBs among youth. Soft drinks, especially those with added sugar (with less agreement on artificially sweetened lower-calorie drinks), have become a clear target for obesity prevention efforts in many countries around the world. Although their volume sales are still growing, and the companies insist they will continue to manufacture drinks with added sugar, actions by governments indicate the beginning of a more comprehensive battle against them on a global scale, with schools as the starting point. The question now is if and how the soft drinks industry will respond. The widespread condemnation of soft drink availability in schools suggests that it is in their interests to do so, if only to offset their negative public health image.

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References


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