Removing Soda Machines from Schools

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School districts removal of soft drink machines makes news headlines. In addition, soft drink manufacturers have developed policy limiting the sale of soft drinks to schools. A recent edition of the *Journal of Nutrition Education and Behavior* features an article studying the changes in consumption patterns of students after soda machines were removed from high schools. Researchers found limited impact in student consumption with soda machines removal from campus (Blum et al., 2008). How does this fit with what else is known about soft drink consumption and schools?

Soft drinks are widely available in schools (Story, Hayes, & Kalina, 1996). The national SHPSS found vending machines, many offering soft drinks, located in almost 50% of elementary schools, 75% of middle schools, and 96% of high schools studied (Wechsler et al., 2001). Researchers have suggested that soft drinks have displaced milk and fruit juice in the diets of children and adolescents, particularly when there is a high level of soft drink consumption (Harnack, Stang, & Story, 1999). Grimm, Harnack, and Story (2004) found the availability of soft drinks both at home and in school vending machines strongly associated with soft drink consumption.

Potential benefits of reduced soft drink consumption were shown in one study in which lower intake over 12 months was associated with lower overweight and obesity prevalence (James, Thomas, Cavan, & Kerr, 2004). Wiecha, Finkelstein, Troped, Fragula, and Peterson (2006) looked at where youth obtained sugar-sweetened beverages and found that the frequency or number of items students purchased from school vending machines was directly associated with sugar-sweetened beverage purchase and intake. Sugar-sweetened beverages were purchased more often than any other type of item. These findings suggest that school vending machines contributed to overall sugar-sweetened beverage intake.

The SHPSS report found that schools allowed food promotion or advertising to students (Wechsler et al., 2001). Of schools surveyed, 37% allowed advertising by the soft drink company in the building, 28% allowed advertising on school grounds, and 23% allowed promotion of products through coupons (Wechsler et al., 2001). A British study looked at the influence of advertising of soft drinks on children’s consumption patterns and found a strong relationship between soft drinks consumed and advertisements the children could recall (Hitchings & Moynihan, 1998). Probart, McDonnell, Bailey-Davis, and Weirich (2006) found a negative association between number of soft drink advertisement locations in the district and participation in school lunch. The study further found widespread existence of advertisements for soft drinks on high school campuses. Because young children are unduly influenced, the American Psychological Association Task Force on Advertising and Children recommended that advertising in all forms be restricted in school environments serving children eight years old and under (American Psychological Association, 2004).

After seeing limited impact on soft drink consumption when soft drinks were removed from high schools, Blum (2008) too concluded beverage consumption patterns of obese students is poorly understood and requires further study.
Take home message: The solution to our epidemic of childhood obesity is not simple nor does it involve just one food and one service location of the food.


