Policy on Snacks and Sugar-Sweetened Beverages Sold in Schools

Latest Revision

2022

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Purpose

The American Academy of Pediatric Dentistry (**AAPD**) recognizes that targeted marketing and easy access to foods and beverages by children and adolescents may increase the amount and frequency of their consumption which, in turn, may contribute to an increase in caries risk and a negative influence on overall nutrition and health.

Methods

This document was developed by the Council on Clinical Affairs, adopted in 2002[1], and last revised in 2017[2]. This revision is based upon a review of current dental and medical literature, including a search of the PubMed/MEDLINE database using the terms: *schools*, *vending machines*, AND *caries*; fields: all; limits: within the last 10 years, humans, English, clinical trials, and ages birth through 18. The update also included a review of the American Academy of Pediatrics' (**AAP**) policy statement: *Soft Drinks in Schools*[3], the AAP's policy statement: *Snacks, Sweetened Beverages, Added Sugars and Schools*[4], and the US Department of Agriculture (**USDA**) standards on school foods[5]. Papers for review were chosen from the resultant lists and from hand searches. Expert and/or consensus opinion by experienced researchers and clinicians also was considered.

Background

Contemporary changes in beverage consumption patterns have the potential to increase dental caries rates in children. Vending machines provide ready access to excess calories from added sugars, especially sugar-sweetened beverages (**SSB**). Consumption of SSB in the form of sodas or sport, energy, and fruit-flavored drinks and, to a lesser extent, 100% juice has been associated with an increased risk for developing dental caries.[6-9] The acids present in carbonated beverages can have a greater deleterious effect (ie, erosion) on enamel than the acids generated by oral flora from the sugars present in sweetened drinks.[10] Analysis of the National Health and Nutrition Examination Survey (NHANES) 2011-2014 indicated that two-thirds of children aged 2 through 19 years consumed at least 1 SSB on a given day[7], and children who consumed SSB had significantly higher dental caries experience and untreated dental caries than did children who consumed other beverage types[9]. A significant increase in caries scores has been reported for children who attended schools that had vending machines.[11]

That vending machine items which provide little to no nutritional value are competitive foods and result in snack options of poor nutritional quality is a significant concern.[12-14] As teenage girls' consumption of SSB increases, their consumption of milk decreases, which may contribute to a decrease in bone density, subsequent increase in fractures, and future risk of osteoporosis.[15,16] Increased ingestion of SSB also has been linked to the increased incidence of childhood obesity.[17,18] Of all beverages, increasing soda consumption predicted the greatest increase of body mass index (BMI) and the lowest increase in calcium intake.[19] Carbonated soda consumption was negatively associated with vitamin A intake in all age strata, calcium intake in children younger than 12 years, and magnesium intake in children aged 6 years and older.[20] Many soft drinks also contain significant amounts of caffeine which, if consumed regularly, may lead to increased, even habitual, usage.[21]

In 2013, the USDA initiated Smart Snacks in Schools nutrition standards prompting school districts to offer healthier food and beverages in vending machines, school stores, and à la carte cafeteria lines.[22] The final rules released by the USDA in July, 2016 state that schools must continue to meet strong nutritional guidelines for snacks/drinks sold to children, and they prevent marketing of foods and drinks inconsistent with those standards.[5] The USDA's rules establish a national baseline of these standards with the overall goal of improving health and nutrition of our children.

Policy statement

The AAPD

- encourages collaboration with other dental and medical organizations, governmental agencies, education officials, parent and consumer groups, and corporations to increase public awareness of the adverse effects of frequent and/or inappropriate intake of sugar-sweetened

ABBREVIATIONS

AAP: American Academy of Pediatrics. **AAPD:** American Academy of Pediatric Dentistry. **SSB:** Sugar-sweetened beverages. **USDA:** US Department of Agriculture.

beverages and low nutrient-dense snack foods on children's oral health and general health.
- promotes educating and informing the public regarding the importance of good nutritional habits as they pertain to consumption of items available in vending machines.
- encourages school officials and parent groups to consider the importance of maintaining healthy choices in vending machines in schools and encourages the promotion of food and beverages of high nutritional value; bottled water and other more healthy choices should be available instead of soft drinks.
- opposes any arrangements that may decrease access to healthy nutritional choices for children and adolescents in schools.

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