- 1 Policy on Beverage Vending Machines in Schools
- 2 Originating Council
- 3 Council on Clinical Affairs
- 4 Review Council
- 5 Council on Clinical Affairs
- 6 Adopted
- 7 2002
- 8 Revised
- 9 2005
- 10 Purpose
- 11 The American Academy of Pediatric Dentistry (AAPD) recognizes that targeted marketing to and easy
- 12 access to sweetened <u>foods and beverages</u> (acidulated carbonated and noncarbonated) beverages by
- children and adolescents may result in their increased consumption increase the amount and frequency
- 14 of their consumption which, in turn, may contribute to an increased in caries risk and a negatively
- influence to overall nutrition and health.
- 16 Methods
- 17 This policy is based on a MEDLINE search for the term "vending machines" and review of the American
- Academy of Pediatric's policy on soft drinks in schools"1 and the US Department of Agriculture's
- 19 (USDA) policy on school meals².
- 20 Background
- 21 There has been a reduction in untreated dental caries among certain demographic levels groups of
- 22 children and adolescents in recent years. ¹³ However, frequent consumption of <u>refined carbohydrates</u>
- 23 sugars in any beverage can be a significant factor in the child and adolescent diet that contributes to the
- 24 initiation and progression of dental caries. 4 Vending machines provide ready access to highly refined
- 25 <u>carbohydrates, especially soft drinks.* Additionally, the The acids present in these carbonated beverages</u>
- 26 can have a greater deleterious effect (erosion) on enamel than the acids generated by oral flora from the
- sugars present in the sweetened drinks. 35 Many soft drinks also contain significant amounts of caffeine
- which, if consumed regularly, may lead to increased, even habitual, usage.46
- There is growing concern that vending machine items with limited nutritional value are "competitive"
- 30 foods" with menu items approved by the USDA for National School Meal Programs. 7 In 2003, a study of
- 31 251 middle and high schools in 24 states found that 73% of the beverage and 83% of the snack options
- 32 <u>were considered to be of poor nutritional quality.</u>⁷ An effort is underway to increase the healthy choices
- 33 available in vending machines by replacing sugar-sweetened drinks with bottled water, candy bars with
- 34 <u>nutrition bars, and potato chips with dried fruit and nuts.8</u>

- 35 Increased consumption of soft drinks refined carbohydrates by children and adolescents may have a
- 36 negative impact on their children's and adolescents' overall nutrition by displacing foods with a higher
- 37 nutritional valuenutrient density⁵⁹. Nutrient density refers to the amount of nutrients in a food as
- 38 compared to the calories. Foods low in calories and high in nutrients are nutrient rich (dense). Foods high
- 39 *For the purposes of this statement, the term soft drink refers to such beverages as sodas, fruit juices and sports drinks.
- 40 <u>in calories and low in nutrients are of poor nutritional quality.</u> As teenages girls have increased their
- 41 consumption of soft drinks, their consumption of milk has decreased by 40%, which may contribute to a
- decrease in bone density, subsequent increase in fractures, and future risk of osteoporosis. 610,11 Increased
- 43 ingestion of sugar-sweetened drinks also has been linked to the increased incidence of childhood
- 44 obesity.⁷¹²
- 45 Many beverage and snack food products are targeted specifically and aggressively at the child and
- 46 adolescent market. Vending machines containing these <u>products</u> beverages are readily accessible to
- 47 children and adolescents in schools. In exchange for money to the individual school or districts, "pouring
- 48 rights contracts" give beverage companies exclusive rights to sell their products at school events and
- 49 place vending machines on school property, along with other measures that increase student exposure to
- 50 the beverages. 8-10¹³⁻¹⁵ Presently, several states have legislation and others are considering legislation to
- 51 <u>limit pouring rights contracts to healthier options.15</u>
- 52 Policy statement
- 53 The AAPD:
- 1. encourages collaboration with other dental and medical organizations, governmental agencies,
- education officials, parent and consumer groups, and corporations to increase public awareness of
- the <u>negative</u> effects of frequent and/or inappropriate intake of sweetened carbonated and
- 57 <u>noncarbonated</u> drinks <u>(carbonated and noncarbonated) and low nutrient dense snack foods</u> on
- infant, child, and adolescent oral health, nutrition, and general health;
- 59 2. opposes any arrangements that may decrease access to healthy beverage <u>nutritional</u> choices for
- 60 children and adolescents;
- 3. encourages school officials and parent groups to consider the importance of maintaining healthy
- 62 choices in vending machines in schools and encouragesing the promotion of <u>food and</u> beverages of
- high nutritional value; cans should be preferred over bottles of soft drinks since they cannot be
- 64 recapped for convenient later consumption throughout the day; bottled water always should be
- available at the same place that soft drinks are offered;
- 4. promotes educating and informing the public about the importance of good oral hygiene and
- 67 nutritional habits as they pertain to soft drink consumption of items available in vending machines.

68 References

69

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

- 1. American Academy of Pediatrics. Policy statement: Soft drinks in schools. *Pediatrics*. 2004;113:152-154.
- 70 <u>2. United States Department of Agriculture, Food, Nutrition and Consuimer Services,</u>
- 71 http://www.fns.usda.gov/fncs/ Accessed March 27, 2005.
- 72 <u>3.</u> Brown LJ, Wall TP, Lazar V. Trends in total caries experience: permanent and primary teeth. *J Am Dent Assoc.* 2000;131:223-231.
- 74 <u>42</u>. Ismail IA, Burt BA, Eklund SA. The cariogenicity of soft drinks in the United States. *J Am Dent Assoc.* 1984; 109:241-245.
 - <u>53</u>. Joint Report of the ADA Council on Access, Prevention and Interprofessional Relations and Council on Scientific Affairs to the House of Delegates: Response to Resolution 73H-2000. ADA; October 2001.
 - <u>64</u>. Majewski R. Dental caries in adolescents associated with caffeinated carbonated beverages. *Pediatr Dent.* 2001;23:198-203.
 - 7. Center for science in the public interest, School Vending Machines "Dispensing Junk", available at http://www.scpinet.org/new.200405111.html. Accessed June 13, 2004.
 - 8. National School Lunch Program Competitive Food Policies by State: USDA Food and Nutrition Service, Office of Analysis, Nutrition and Evaluation. Available at http://schoolmeals.nal.usda.gov/Recipes/menuplan/menuplan.html. Accessed on March 27, 2005.
 - <u>9-5</u>. Freeman R, Sheiham A. Understanding decision making processes for sugar consumption in adolescence. *Comm Dent Oral Epidemiol*. 1997;25:228-232.
 - <u>106</u>. Wyshak G. Teenaged girls, carbonated beverage consumption, and bone fractures. *Arch Pediatr Adolesc Med.* 2000;154:610-613.
 - 117.Ludwig DS, Peterson KE, Gormaker SL. Relation between consumption of sugar-sweetened drinks and childhood obesity: A prospective, observational analysis. *Lancet*. 2001;357:505-508.
- 91 <u>128.</u>Fox K. Soft drinks under scrutiny. *ADA News*. November 20, 2000:22.
- 92 <u>139</u>.Maihofer M. "Pouring Wrongs": MDA discourages pop deals. J Michigan Dent Assoc. 2000;82:10.
- 93 <u>1410</u>.Berthold M. Michigan opposes school-soda deals. *ADA News*. November 20, 2000:8.
- 94 15. National Counsel of State Legislatures, http://www.ncsl.org/programs/health/vending.htm. Accessed February 29, 2005.