

The background of the entire page is a vibrant advertisement for Nesquik Chocolate Milk. It features a large, tilted glass bottle of chocolate milk with a thick, yellowish-brown liquid inside. The word 'Nesquik' is written in large, blue, bubbly letters across the middle of the bottle. Above it, the word 'Chocolate' is written in a white, cursive font with a red outline. Below 'Nesquik', the words 'Chocolate MILKS' are written in a smaller, red, cursive font. The bottle is surrounded by dynamic splashes of milk and chocolate. At the top, a blue and white striped lid is shown pouring liquid into the bottle. On the right side, there is a vertical stack of ten Nesquik milk cartons, alternating between chocolate and strawberry flavors. The overall color palette is bright and saturated, with a light blue background.

Food and Beverage Marketing Survey:
Montgomery County Public Schools

Final Report
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Center for Science in the Public Interest

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Project Directors:

Ameena Batada, DrPH

Margo G. Wootan, DSc

Center for Science in the Public Interest

For more information about this report or the food and beverage marketing survey instrument used, please contact Ameena Batada at the Center for Science in the Public Interest at abatada@cspinet.org or 202-777-8342 or Judith Covich at the Montgomery County Department of Health and Human Service at Judith.Covich@montgomerycountymd.gov or 240-777-1626.

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EXECUTIVE SUMMARY

Obesity continues to pose a serious health challenge to Montgomery County, MD. While a number of factors influence obesity rates, nutritional intake is a key determinant of weight status, as well as other adverse health effects such as diabetes, heart disease, and dental cavities. Children's diets are too high in calories, saturated and trans fat, refined sugars, and salt, and too low in fruits, vegetables, whole grains, and calcium. Although children's food choices are affected by many factors, food marketing plays a key role. Studies show that food marketing attracts children's attention, influences their food choices, and affects their diets and health.

In light of the concern over children's diets and health and marketing's influence on young people, Montgomery County Council Member and Chair of the Health and Human Services Committee, George Leventhal, requested a study of the extent and nature of food and beverage marketing in Montgomery County Public Schools (MCPS). In April/May 2007, a representative sample of 24 elementary, 6 middle, and 6 high schools (18% of all schools) were assessed. Trained school nurses assessed food and beverage marketing on: posters and signs in the school building; vending machines, including marketing on machine exteriors; and school stores. Trained dietetic interns interviewed school administrators regarding: school sponsorships; curricula; school supplies; fundraising activities; and other marketing.

Highlights from the survey findings include:

- 83% of schools had posters and/or signs with food/beverage marketing. While 42% of posters and signs marketed healthier categories of foods and beverages, such as dairy and nutrition education, other posters marketed restaurants, prepared foods, and soft drinks.**
- **Product sales are an important form of food and beverage marketing in schools. All middle and high schools had vending machines.**
 - **High schools had an average of 21 vending machines.**
 - **Water was the most common beverage offered in school vending machines. However, many beverage machines also were stocked with soda, juice drinks, and iced tea. Candy, cookies, crackers, and regular chips were the most common foods found in snack vending machines.**
 - **Four in five vending machines had food and beverage marketing on the machine exterior. While water and milk were promoted on the front and sides of many vending machines, so were snack foods, soda, juice drinks, and sports drinks.**
- **All six of the high schools, three of the middle schools (50%) and six of the elementary schools (25%) had school stores. Of the schools with school stores, three**

schools (20%) did not sell any foods or beverages, two schools (13%) opened the store to students only after school during club activities, and one school (7%) opened the store to students only after school one day a week.

All high schools, half of the middle schools, and about 30% of the elementary schools had fundraisers with sales of candy, baked goods, soda, or fast food or other restaurant food.

- **The most common school fundraising activity involving food was fundraising nights at restaurants, most of which took place at fast-food and other chain restaurants.**

■ **Few schools marketed foods through curricula, school supplies, scholarships, or sponsorships.**

■ **Although MCPS has a district-wide policy that “marketing activities will promote healthful behaviors,” only half of schools (47%) reported that they had a verbal or written policy regarding food/beverage advertising.**

Food and beverage marketing is prevalent in Montgomery County Public Schools through posters and signs and school fundraisers. There is less food and beverage marketing through supplies and equipment, curricula, sponsorship of events, and scholarships. In addition, the amount of food and beverage marketing varies by school level for curricula, proof-of-purchase/label redemption programs,

school stores, vending machines, and communication channels. To support parental efforts to feed their children healthfully:

1. Montgomery County Board of Education should reconstitute its Wellness Committee and strengthen its policy on food and beverage marketing as part of the MCPS Wellness Policy, and MCPS should distribute information to schools about this study and the policy.
2. Montgomery County Public Schools should negotiate with vending machine suppliers to provide images of healthy foods or non-food images for vending machine exteriors.
3. Schools should ban fundraisers, both on-site and with restaurants, that provide and promote low-nutrition foods to children.
 - a. Schools should share information about healthy fundraisers with PTAs, school clubs, teachers, etc.
 - b. To help families make healthier choices at restaurant-based fundraisers, the Montgomery County Council should pass legislation requiring fast-food and other chain restaurants to provide calorie and other nutrition information on menus and calories on menu boards (Bill 19-07) and county restaurants should provide and promote healthier foods to children on children’s menus.

INTRODUCTION

Obesity and Diet-Related Diseases in Children

Obesity is one of the most pressing health problems facing the country, and is of particular concern for children. The proportion of obese children (six to 11 years old) more than doubled from 1980 to 2003, and the proportion of obese teenagers (11 years old to 18 years old) more than tripled during this time.¹ Today, one in three teenagers is overweight or obese. In Maryland, 30% of children 10-17 years old are overweight or obese.² Obese youth are more likely to suffer from high blood pressure, high blood cholesterol, precursors to or onset of Type 2 diabetes, social and emotional problems, and other health concerns. In addition, obese children are more likely than other children to become overweight adults,³ making them more likely to suffer from the health consequences associated with adult obesity, including diabetes, heart disease, cancer, stroke, and psychological disorders such as depression.

A number of changes to children's diets have occurred in parallel with the increase in the prevalence of obesity in children. Children eat more calories from snacks⁴ and eat more calories overall today than children did 20 years ago.⁵ In 1996 children ate an average of 118 more calories than in 1977.⁶ In addition, today children drink twice as much carbonated soda as 30 years ago,⁷ and they eat out about twice as often.⁸ Consumption of unhealthy foods that are high in calories, fat, and sugar

often replaces consumption of healthier foods and beverages such as milk, juice, fruits, and vegetables. Only 2% of children eat a healthy diet consistent with the main dietary recommendations of the U.S. Department of Agriculture.⁹

Food Marketing to Children

Food and beverage marketing to children in the United States has contributed to changes in children's nutritional status over the years and to the rising problem of childhood obesity. Some common marketing venues and techniques include: television, radio, magazines, the Internet, movies, video games, product packages, premiums, toys, games, branded books, and schools. Numerous research studies show that food and beverage advertising influences children's food preferences, purchases, purchase requests, diets, and health.¹⁰

Food Marketing in Schools

Food and beverages are marketed in halls, cafeterias, classrooms and other locations in schools. In schools, commercial activities include: 1) product sales (which are a form of marketing) such as food sales out of vending machines, exclusive soft drink contracts, and fundraising activities; 2) direct advertising, such as ads on vending machines, scoreboards, posters, school publications, book covers, and Channel One; 3) free product samples; 4) indirect advertising, such as corporate-sponsored educational materials and teacher training, contests with product prizes, incentive programs and corporate gifts; and 5) market research, such as student surveys or panels and tracking of students' Internet activities.¹¹

Many states and school districts, including Montgomery County, have banned the sale of soda and foods of poor nutritional quality on school campuses. At the federal level, Senators Harkin and Murkowski introduced the Child Nutrition Promotion and School Lunch Protection Act (S.771). The bill calls on the US Department of Agriculture to update its school nutrition standards for foods sold in school stores, a la carte lines, and vending machines. Also in 2007, Senator Harkin introduced the HeLP America Act (S.1342), which includes a provision restoring authority to the Federal Trade Commission to regulate food marketing to children and to prohibit the advertising of low-nutrition foods in schools.

In 2000, the U.S. General Accounting Office (GAO) investigated state policies related to food marketing in schools and observed the nature of activities in 19 schools in 3 states. The GAO found that commercial activities varied widely, and that high schools had more commercial activities than middle or elementary schools. In addition, the GAO found that the most common form of product sales was soft drink sales and that the most visible examples of direct advertising appeared on soft drink vending machines and scoreboards. The GAO also found indirect advertising, such as corporate-sponsored curricula, in all schools.

In a 2006 study in California public high schools, researchers found that over 60% of posters and signs, vending machine advertisements, and school equipment with food or beverage logos or brand names were for foods or beverages high in fat, saturated fat, trans fat, sugar, or sodium, or low in

nutrients.¹² In addition, the study found that food sales as fundraisers were popular among schools and the most common fundraisers involved the sale of chips, cookies/pastries, and sweetened beverages. Over half of the schools in the study included food or beverage advertising in yearbooks and school newspapers. One quarter of schools participated in food company coupon distributions and one third participated in product giveaways.

Montgomery County Public Schools Food Marketing and Sales

Montgomery County Public Schools (MCPS) has in place policies that limit the marketing and sales of low-nutrition foods to students. In 2004-05, MCPS implemented nutrition standards for foods and beverages sold in vending machines, cafeteria a la carte, and school stores until the end of the school day. Beverages available for sale must meet the following criteria:

- Container size - 16 oz. or less
- Water - noncarbonated, with or without flavoring
- 100 percent juice
- Juice beverages containing at least 50 percent juice
- Isotonic beverages/sports drinks (machines to be located adjacent to physical education facilities)

Snack items available for sale must meet the following criteria (per single serving, as stated on the food label):

- Seven grams or less of fat (except for nut and seed mixes)
- Two grams or less of saturated fat (trans fat is included to the degree it can be determined)
- Fifteen grams or less of sugar (exceptions are fresh and dried fruits)

In 2006, MCPS issued a wellness policy (see Appendix A) that stated that the following items are also prohibited from sale to students regardless of their nutritional profile: carbonated beverages, candy of any type, donuts, and honey buns.¹³ In addition, the wellness policy extended the nutrition standards (above) to cover fund-raising activities and athletic departments.

Also, the wellness policy outlined that “Marketing activities will promote healthful behaviors. Vending machine fronts will promote activity or consumption of approved beverages.” In addition, nutrition information about meals is to be printed on the school menu that is sent home and on the MCPS web site.

MCPS Food and Beverage Marketing Survey

In July 2005, Montgomery County Council Member George Leventhal called for a study to assess the food and beverage marketing environment in Montgomery County Public Schools. This is the first such study in Montgomery County and one of only a few studies in the country to assess the food and beverage marketing environment in schools.

The purpose of this study was to assess the extent and nature of food and beverage marketing in a sample of Montgomery County Public Schools. The findings will shed light on whether and how to address marketing of foods and beverages of poor nutritional quality to youth. The current research could also provide a model approach and assessment tool for food and beverage marketing in schools, which may be adapted and

used by other schools, districts, or states throughout the country.

METHODS

Background

The survey instrument pilot-tested in Montgomery County schools was the Assessment Tool: Food and Beverage Marketing in Schools (see Appendix B). This instrument was adapted from a survey of California school nutrition and health policies and programs conducted for California Project Lean by Samuels & Associates, a public health consulting firm based in Berkeley, CA.¹⁴

The Assessment Tool was divided into two sections. The first section was an observational assessment completed by the school nurse. The second section assessed marketing policies and practices and was completed by dietetic interns from MCPS Department of Materials Management Division of Food and Nutrition Services. The dietetic interns completed that section by contacting each of the sampled schools’ administrative offices to ask questions about the school’s marketing policies.

Sample

The schools were selected using a stratified random sample without replacement. MCPS Department of Shared Accountability created the sampling frame and selected the representative number of schools at each school level needed to produce a sample that is representative of the entire MCPS school system, each school level (elementary, middle, and senior high) as well as demographically by race and ethnicity

and geographically by school cluster region. Specialized schools that do not serve the general student population were excluded from the sampling frame, reducing the number of eligible schools from 199 to 184. The sample was further assessed and was determined to be representative of the demographics of all schools in the district.

Each school was assigned a unique identifier to hide its identity in the study analysis and reporting. The completed assessment tools, data sets, and reports list only a school's unique ID and the grade level of the school (not its name or location).

The strata applied in the sampling frame were school level (elementary, middle, and high schools) and the six MCPS administrative cluster groups. Of a total of 184 schools, a representative sample of 36 schools was selected. There were 24 elementary schools, six middle schools, and six high schools. In each cluster group, four elementary schools, one middle school, and one high school were selected.

Observational Assessment

The observational component of the Assessment Tool consisted of the following sections: School Information, Posters and Signs, and Vending. To ensure consistent data collection, each nurse involved in the study participated in a one-hour training session to review the Assessment Tool and protocol. The data were collected by the school nurses during a four-week period from mid-April to mid-May, 2007. The observation took approximately two to three hours (depending on the number of vending machines on the school campus).

Policies and Practices Assessment

The administrative section of the Assessment Tool consisted of the following sections: School Information, Equipment and Supplies, School Communications, and School Policies. To ensure consistent data collection, each dietetic intern involved in the study participated in a one-hour training session to go over the protocol and survey instrument.

The administrative section was fielded over a six-week period by the dietetic interns. It took approximately 40 minutes for the dietetic interns to complete the administrative sections of the tool with each sampled school. Interns called the school and asked for the principal or another administrator qualified to answer questions about school-based marketing policies and practices. In some cases, the interns had to call back several times before they were able to speak with someone knowledgeable.

Data Coding and Analysis

Completed instruments from all 36 schools were submitted to HHS where they were tracked, batched, and sent to CSPI for data entry into an Excel workbook file for tabulations and descriptive analysis. Due to the diligence and work ethic of the school nurses and dietetic interns, all 36 schools completed both the observational section and the administrative section of the Assessment Tool for the selected schools.

Data were entered using the double entry method and were validated to ensure accuracy of the data set. Once data entry was completed, basic descriptive statistics were compiled.

Since this study is an assessment to characterize food and beverage marketing in schools and it is not hypothesis driven; the focus of the analysis in this report is descriptive. Mixed methods (quantitative and qualitative) were applied to characterize the extent of food and beverage marketing across school levels. Where appropriate, food and beverages were separated into categories to determine the proportion of healthier foods being marketed; however, nutritional analyses were not conducted because detailed information about products was not collected.

Limitations

Though a sampling frame was applied to ensure the data collected represented all schools in the County, in terms of demographics and region of the County, there are some limitations to the study. First, the data were collected in the 36 schools during one period in Spring 2007, therefore not all forms of marketing may have been captured. Second, while the administrative section data were collected by trained dietetic interns, responses were collected from staff with different positions/roles at different schools, which may result in some variation in reliability. Third, although the survey originally contained information about whether observed vending machines were on during the school day (which is prohibited for foods that do not meet the nutrition standards), this was removed from the Assessment Tool because of concerns about having the nurses complete this information. As a result, it is unclear what proportion of foods and beverages that do not meet the MCPS standards were

available for students to purchase during the school day.

FINDINGS

Demographic Profiles

The 36 schools selected to participate in the survey had an average enrollment of 814 students. Table 1 provides a comparison of the sample profile to that of the entire MCPS system.

Table 1. Demographic Information: Study Sample v. MCPS

	Study	MCPS
Overall Response Rate	100	--
Number of Schools	36	184*
Racial/Ethnic Composition of Enrollment (%)		
American Indian/Alaska Native	0.3	0.3
Asian/Pacific Islander	17	15
Black/African American	23	23
Hispanic	22	22
White	38	41
Students enrolled in free or reduced-price meals	38	38

** Schools that are specialized and don't serve the general population were excluded from the sampling frame, reducing the number of eligible schools from 199 to 184.*

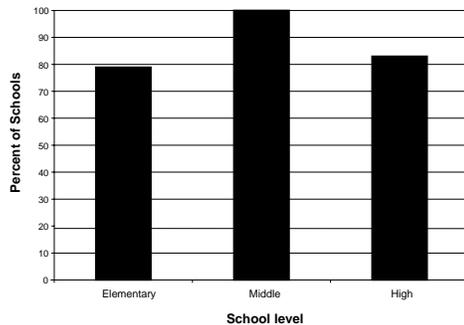
Food and Beverage Marketing in Schools

Posters and Signs

Overall, 83% of schools had posters or signs with food or beverage advertising/marketing. Seventy-nine percent of elementary schools, 100% of middle schools, and 83% of high schools had posters and signs marketing foods or beverages, as displayed in Figure 1. Posters and signs contained food/beverage marketing such as company or brand logos or names and/or depictions of

products. Posters and signs, including scoreboards, were visible on walls, bulletin boards, and as parts of displays throughout school buildings.

Figure 1. Schools with Posters or Signs Marketing Food or Beverages



Posters and signs with food/beverage marketing were most common in the school cafeteria and school entrance and hallways. The number of posters in an individual location ranged from zero to 11, and the average number of posters or signs ranged from less than one to nearly three (Table 2).

The types of foods marketed by posters or signs varied by location (Figure 2, next page). There was a mix of posters and signs for prepared foods (such as Rich’s ice cream or Little Debbie snacks), dairy products, and nutrition education in the cafeteria. Snack bars and classrooms had more posters or signs for prepared foods and soda and sports drinks, and the athletic areas had posters or signs for soda/sports drinks. Health clinic posters and signs were almost exclusively for dairy products and nutrition education. The proportion of posters/signs for healthier foods was highest in elementary schools (55%)

compared to middle schools (40%) and high schools (18%).

Table 2. Number of Posters and Signs with Food/Beverage Marketing by Location

Location	Range	Average Number Per School (n=36)
Cafeteria	0-11	2.8
School Entrance and Hallways	0-11	1.6
Snack Bars/School Store*	0-7	1.2
Athletic Area/Gym, Locker Room, Concession Stand, Stadium (including Score Boards & Banners)	0-7	0.6
Clinic or Nurse’s Suite	0-7	0.5
Classrooms	0-9	0.5
Quads or Courtyards	0-1	<0.1
Other Locations	none	none

*15 schools had snack bars or school stores

Vending Machines

Product sales are one key means by which companies market food in schools. Vending machines also market food and beverages through brand logos, names, and product depictions on vending machine exteriors. Overall, 15 of the schools (42%) had a combined total of 166 vending machines. Only 12% of elementary schools had vending machines, compared to 100% of middle and high schools (Figure 3). All 5 of the vending machines in elementary schools were beverage vending machines. Middle schools had an average of 6 vending machines each and high schools had on average 21 vending machines.

Figure 2. Types of Food and Beverage Depictions on Posters and Signs in Schools

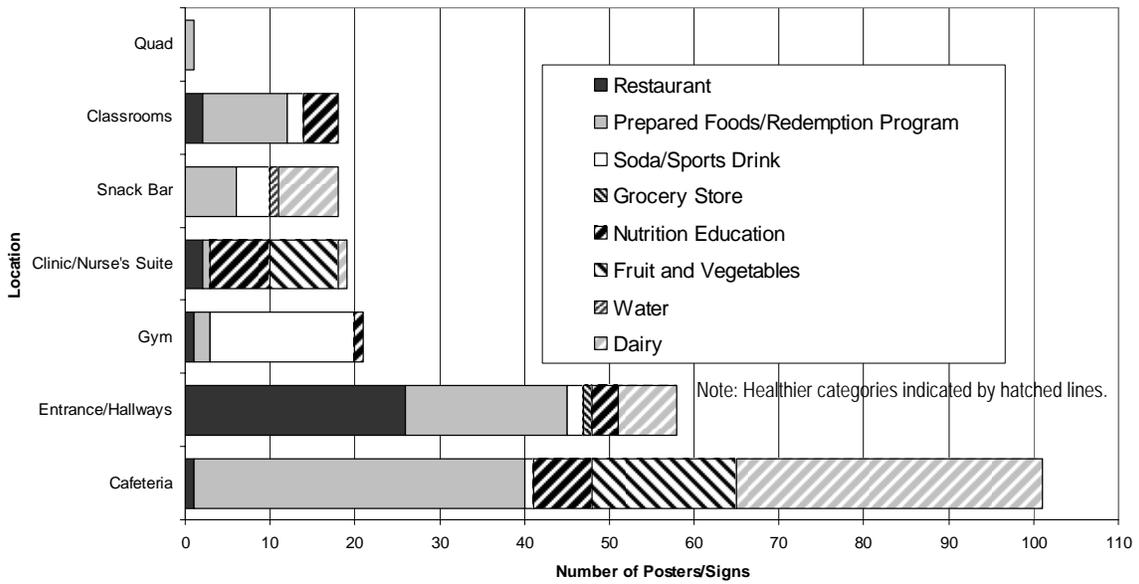


Figure 3. Schools with Vending Machines

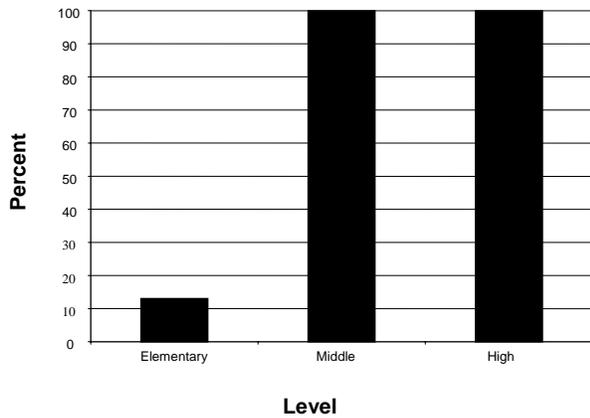
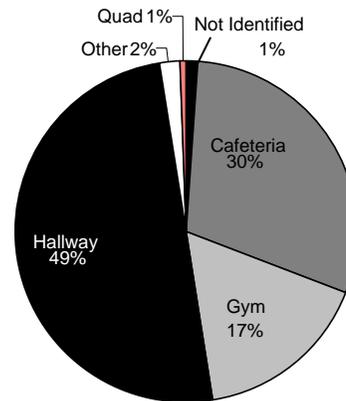


Figure 4. Location of Vending Machines (n=166)



Nearly half of all of the vending machines were located in school hallways, approximately a third were located in school cafeterias, and 17 percent were located in gyms (Figure 4).

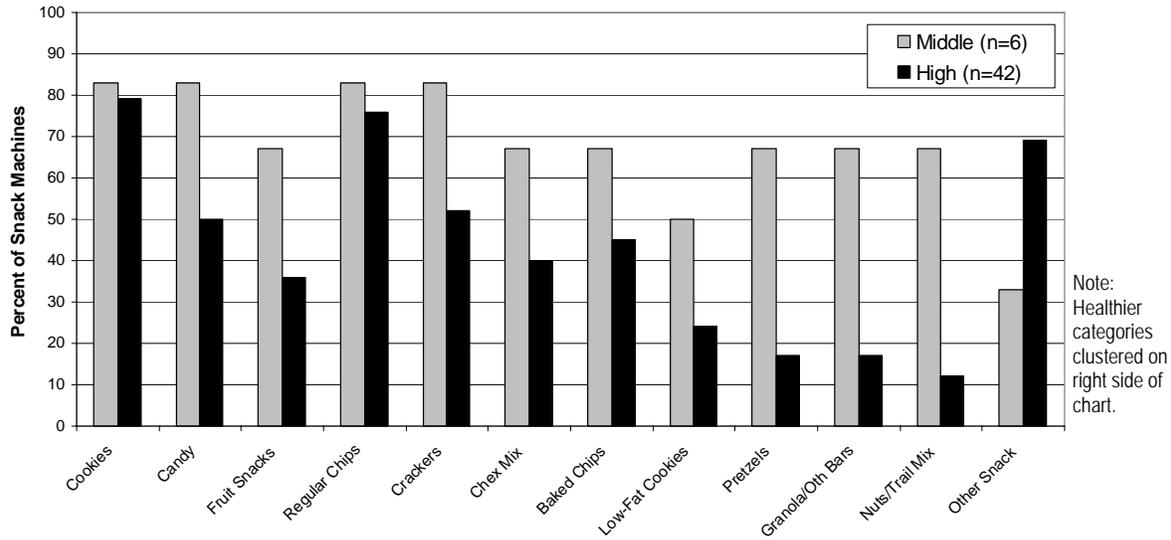
Content of Vending Machines

About 30% of all vending machines were snack machines. There were six snack vending machines in middle schools and 42 snack vending machines in high schools. Candy, cookies, crackers, and regular chips were the most common foods found in

those vending machines (Figure 5). Note that Figures 5 and 6 contain information about content of vending machines only in middle and high

schools due to the small number of vending machines in elementary schools.

Figure 5. Items in Middle and High School Snack Vending Machines (n=48)



About 70% of all vending machines were beverage machines; there were five beverage vending machines in elementary schools, 31 in middle schools, and 82 in high schools. Water was offered most frequently in both middle and high schools (in about 50% of beverage machines). Offerings of sugary drinks increased from middle to high school, as illustrated in Figure 6 (next page). In high schools, 84% of beverage machines contained sugary drinks (regular soda, iced teas or lemonade, or fruit drinks) or high-fat milk, compared with 59% of beverage machines in middle schools. The proportion of beverage machines with healthier drinks (waters, low-fat milk,

and 100% juice) was similar for middle schools (61%) and high schools (62%). It should be noted that the percent of vending machines containing a particular item does not necessarily reflect the sales of that item. Some items are re-stocked more frequently than others.

Vending Machine Marketing

Four out of five vending machines had some brand marketing and nearly half had company or brand logos, names, and/or product or other depictions on the entire length of the machine (Figure 7, next page).

Figure 6. Items in Middle and High School Beverage Vending Machines (n=113)

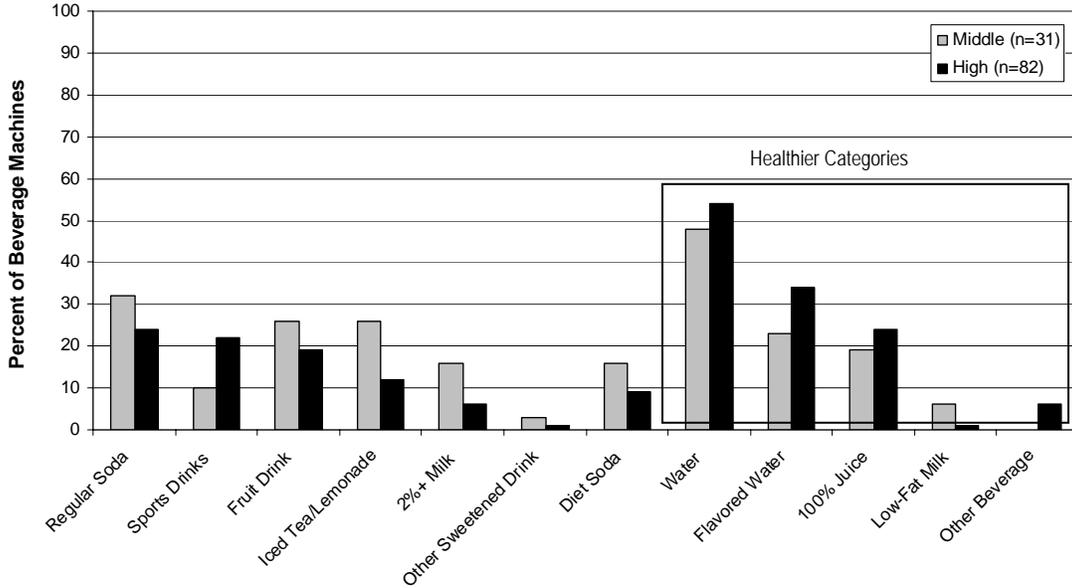
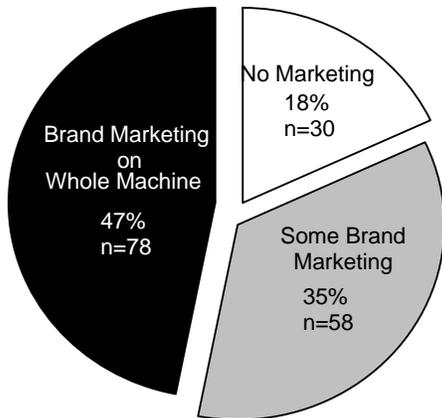
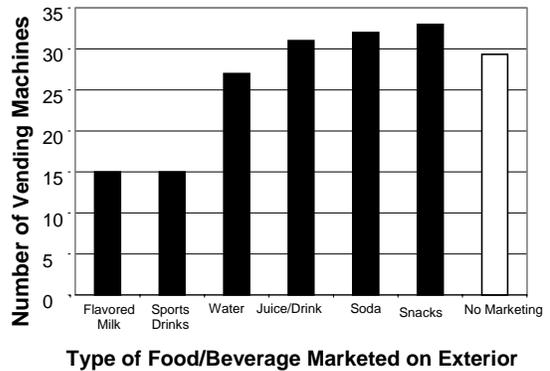


Figure 7. Brand Marketing on Vending Machine Exteriors (n=166)



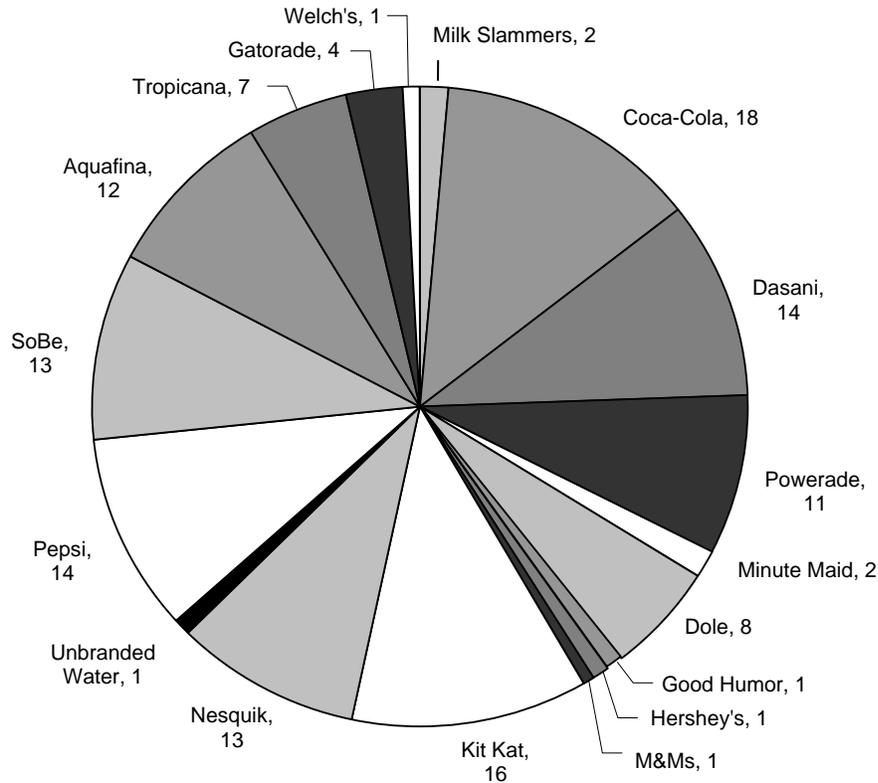
Among the vending machines with food/beverage marketing on the exterior, snacks, juice and juice drinks, and soda logos and depictions appeared most often (Figure 8). Forty-eight percent of vending machines depicted lower-nutrition products, such as soda, sports drinks, and candy.

Figure 8. Products Depicted on Vending Machine Exteriors



The most commonly-marketed brands on vending machine exteriors were PepsiCo (60 machines displayed PepsiCo products) and Coca-Cola (40 machines displayed Coca-Cola products) (Figure 9, next page).

Figure 9. Number of Times Brands Depicted on Vending Machine Exteriors (n=136)



Note: Pepsi products: Pepsi, SoBe, Aquafina, Tropicana, and Gatorade; Coca-Cola products: Coca-Cola, Dasani, Powerade, Minute Maid.

School Stores

All six of the high schools, three of the middle schools (50%) and six of the elementary schools (25%) had school stores. Of the schools with school stores, three schools (20%) did not sell any foods or beverages, two schools (13%) opened the store to students only after school during club activities, and one school (7%) opened the store to students only after school one day a week.

School Communication Channels

While school nurses conducted a visual inspection of schools for posters, signs, vending, and school stores, principals or other school administrators reported on whether they had each of four types of communication channels in their school, including Channel One television, a radio station or public announcement system, a school newspaper or newsletter, or a school yearbook. Schools also reported on

whether they had food or beverage advertising through each of these communication channels.

Channel One is a program that provides secondary schools with television equipment in exchange for showing about ten minutes daily of national programming plus two minutes of advertising to students. Half of middle schools and a third of high schools had Channel One. All

schools had a radio station or public announcement system. All but one school had a newspaper or newsletter. Thirty-two schools (88%) had a yearbook. Table 3 outlines the proportion of schools that had food or beverage marketing via each of these communication channels. Overall, 17% of schools advertised food or beverages via at least one of the school's communication channels.

Table 3. Schools with Food and Beverage Marketing via TV, Radio, Newsletters or Yearbooks

	Elementary		Middle		Senior High		TOTAL	
	n	%	n	%	n	%	n	%
Channel One/television programming								
Schools with Channel One/television programming	2	8	3	50	2	33	7	19
Plays food advertising	0	0	0	0	0	0	0	0
Radio station/PA announcements								
Schools with radio station/PA announcements	24	100	6	100	6	100	36	100
Plays food advertising	0	0	0	0	0	0	0	0
Newsletter/newspaper								
Schools with newsletter/newspaper	23	96	6	100	6	100	35	97
Includes food advertising	1	4	0	0	4	67	5	14
Yearbook								
Schools with yearbook	20	83	6	100	6	100	32	88
Includes food advertising	0	0	0	0	3	50	3	9
Any of the identified outlets								
Schools with at least one of the identified media outlets	24	100	6	100	6	100	36	100
Includes food advertising	1	4	0	0	5	83	6	17

School Marketing Activities

Companies market food and beverages to school children through scholarships, sponsorships, branded curricula, sample/product giveaways, fundraisers that sell branded products, label redemption programs, and discount nights at restaurants. Thirty-five of the 36 schools (97%) reported having one or more activities involving food/beverage marketing. The least common activities involving food/beverage marketing were scholarships (no schools), sponsorships (3% of schools), and use of branded curricula (11%).

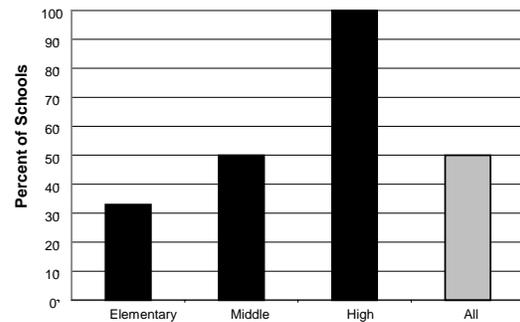
The curricula were exclusively used at the elementary level. The Pizza Hut Book It! Program was mentioned as an example for four out of the seven elementary schools using a branded education program. The Pizza Hut Book It! Program provides certificates to teachers to give to elementary school students when they reach reading goals. Students receive a free Personal Pan Pizza when they present the certificate in Pizza Hut restaurants. (Each Personal Pan Pizza (no toppings) has 620 calories, half a day's saturated fat (11g), and 1,370 mg of sodium.)

Overall, 25% of schools had free giveaways, including one quarter of the elementary schools and one half of the high schools. Giveaways included free pizza, soda, granola bars, and water, as well as distribution of restaurant coupons at school events.

Fundraisers

Half of all schools reported having fundraisers involving food/beverage marketing. The most common food/beverage fundraisers included PTA, school club, or school event sales of restaurant foods and branded candy, baked goods, and soda. The percent of schools with fundraisers involving food/beverage marketing increased from elementary to middle to high school, as shown in Figure 10.

Figure 10. Schools with Food/Beverage Fundraisers



Note: The posters shown in this report are for illustration purposes only.

Proof of Purchase Programs

Sixty percent of schools participated in proof-of-purchase or receipt redemption programs with a food company or local store (Figure 11). The most common proof-of-purchase programs were General Mills' *BoxTops for Education* and Campbell's *Labels for Education*. For label redemption programs, students' families are encouraged to purchase products from particular companies and then turn the labels (or other proof of purchase, such as box tops) into the school, which redeems them for school supplies or money.

Often, the reward for collecting thousands of labels is minimal. For example, to earn a digital camcorder, a school would have to collect 27,850 Campbell's product labels. At \$1.20 per can of soup, students' families would have to spend \$33,420 on Campbell's soups in order for the school to earn a \$300 camcorder. In a school of 500 students, each student's family would have to buy 56 cans of soup.¹⁵ The most common receipt redemption programs were with chain stores Giant, Safeway, and Target. No high schools participated in such programs.



School Fundraising Nights at Restaurants

Many restaurants offer schools a cut of the sales on a weeknight designated for a school fundraiser. This is a marketing opportunity for the restaurant to drum up business on a slower weeknight and associate its brand with the school. Four out of five MCPS schools participated in fundraising nights at restaurants. This activity was common in elementary, middle, and high schools (Figure 12, next page).

Figure 11. Schools with Proof-of-Purchase or Receipt Redemption Programs

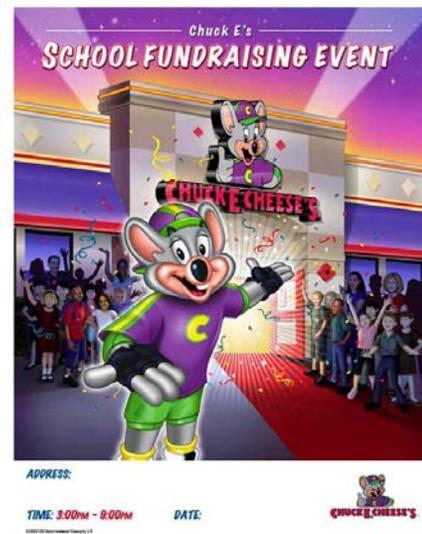
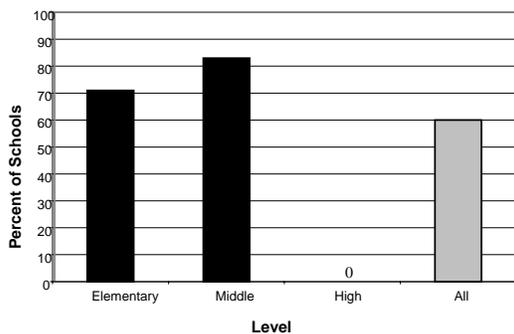
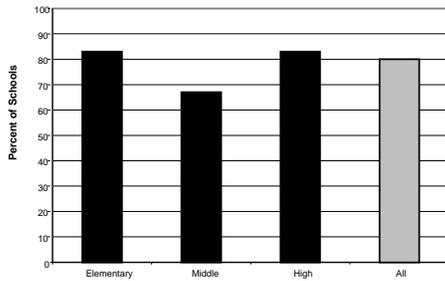
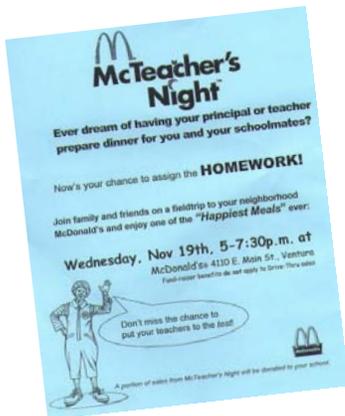
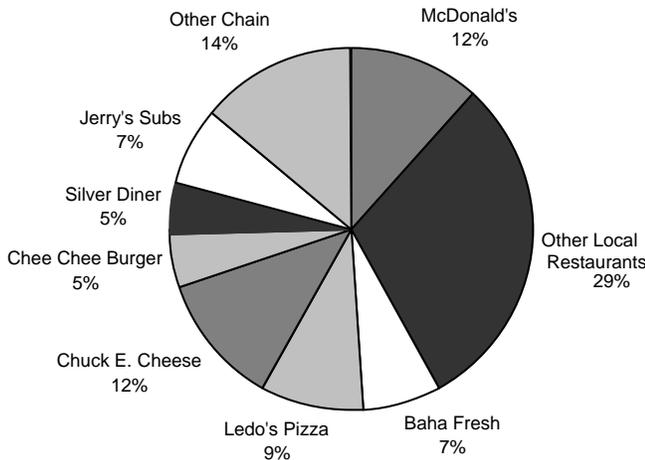


Figure 12. Schools Participating in Fundraising Nights at Restaurants



The most frequent restaurants for school fundraising nights were McDonald's, Chuck E. Cheese, and local restaurants (Figure 13).

Figure 13. Restaurants for School Fundraisers



School Supplies

One quarter of elementary schools, no middle schools, and one (of six) high school reported having supplies with food/beverage marketing. The types of supplies identified included book covers and bookmarks. Only two schools reported specific brands – Pepsi and Gatorade (which is owned by PepsiCo) – depicted on the supplies. Four schools (11%), two elementary, one middle, and one high school, had cooler cases with food/beverage marketing. The cases depicted mostly drink brands, including Coca-Cola, Pepsi, and Gatorade. One high school had cups or other paper goods with food/beverage marketing, which included Starbucks cups and Dunkin' Donuts napkins. None of the schools reported having equipment or other supplies with food/beverage marketing.

Policies

Seventeen (47%) of the schools reported that they have a policy regarding (any type of) advertising in their school (Table 4). Of the schools with policies, five (29%) reported written policies. Five schools (14%) reported that they follow the MCPS policy and four schools reported that their policy is that no advertising is allowed at the school.

Table 4. Reported School Policies on Advertising

	Elementary		Middle		Senior High		TOTAL	
	n	%	n	%	n	%	n	%
Schools with policies or practices	12	50	2	33	3	50	17	47
Written	3	25	0	0	2	67	5	29
Verbal	9	75	2	100	1	33	12	71

CONCLUSIONS

This study provides a snapshot of the food and beverage marketing in Montgomery County Public Schools. Overall, marketing of foods and beverages is common in MCPS; every school surveyed had some food or beverage marketing. Some of the most commonly marketed foods/beverages are healthy foods such as milk (on posters) and water (in and on vending machines). However, there is still a great deal of marketing of low-nutrition foods like soda, sports drinks, fast food, candy, juice drinks, and processed baked goods.

The most common ways foods and beverages are marketed in MCPS is with signs and posters (83% of schools), vending machines in middle and high schools (100%), discount nights at restaurants (80%), label redemption programs (60%), and school fundraisers (50%). Branded foods and beverages are given away in one-quarter of the schools. There is no food marketing in MCPS through Channel One, and little food marketing in MCPS through school supplies, scholarships and sponsorships, and branded curricula.

One concern raised by this survey is the amount of marketing through vending machines. Although MCPS has a strong vending policy, many vending machines contain soda, sweetened teas and drinks, sports drinks, candy, cookies, and chips. It is unclear to what extent these items were available to students during the instructional day;¹⁶ MCPS requires that machines be turned off during the instructional day. Additional marketing is common on the exteriors of vending machines. While some machines promote healthy options like

water and milk, many still market soda, juice drinks, sports drinks, and candy.

Overall, high schools have more food/beverage marketing than do elementary or middle schools. The amount of food and beverage marketing varies by school level for curricula, proof-of-purchase programs, school stores, vending machines, and communication channels. Elementary schools are more likely than upper levels to use branded curricula and participate in proof-of-purchase programs with food companies and retail stores.

However, food and beverages sold and marketed through vending machines are more prevalent in middle and high schools; four out of five vending machines have marketing on their exteriors. High schools have, on average, 21 vending machines, suggesting a high degree of student exposure to vending machine marketing. Although about 60% of middle and high school beverage vending machines contain healthier drinks (waters, low-fat milk, and 100% juice), sugary drinks (regular soda, iced teas, lemonade, fruit drinks) or high-fat milk, remain in between 59% (high schools) and 84% (middle schools) of beverage machines.

Finally, although MCPS does have a policy on food and beverage marketing as part of its wellness policy, only 11% of schools volunteered that they follow MCPS/County guidelines when asked about school policies on advertising. There were no questions, however, that asked specifically about the MCPS policy. About half of schools reported having policies on advertising for their schools and three quarters of

those policies were not written policies.

RECOMMENDATIONS

Given the high rates of childhood obesity and poor nutrition habits of children, schools could take the following steps to protect children from the marketing of low-nutrition foods and beverages:

1. Montgomery County Board of Education should reconstitute its Wellness Committee and strengthen its policy to limit the marketing of low-nutrition foods and beverages in MCPS.
 - a. Update the section on food and beverage marketing in the MCPS Wellness Policy. Section D2c should be revised as follows to provide additional guidance to schools (**new text in bold**):
 - b. “Marketing activities will promote healthful behaviors. ~~Vending machine fronts will promote activity or consumption of approved beverages.~~ **All depicted foods and beverages and associated logos and brand names should meet the MCPS nutrition standards for the following school-sponsored or school-based activities:**
 - 1) Food and beverage sales to students through a la carte in cafeterias, vending, school stores, snack bars, fundraisers, and

- other venues or mechanisms outside the U.S. Department of Agriculture (USDA) reimbursable meal programs;**
- 2) Food and beverage advertising, such as the name of a food manufacturer or restaurant, or the depiction of product, brand names, logos, trade marks, or use of spokespersons, live or animated, on or in conjunction with:
 - (a) curricula, educational materials, textbook covers, computers;
 - (b) school property such as buildings, transportation vehicles, vending machine exteriors, scoreboards, signs, or posters;
 - (c) books, pencils, notebooks, sports equipment or uniforms, food or beverage cups or containers, and other school supplies or equipment;
 - 3) Advertisements in school publications, and/or on school radio stations, in-school television, computer screen savers and/or school-sponsored sites, or announcements on the public

- announcement (PA) system;
- 4) **Indirect promotion, public relations, and sponsorship activities such as:**
- (a) **educational incentive programs utilizing coupons, contests, and other means that provide food as a reward, and/or that provide schools with supplies and/or funds when families purchase specific food products;**
 - (b) **scholarships and sports teams sponsorships;**
 - (c) **school fundraising nights at restaurants;**
 - (d) **market research activities; and**
 - (e) **free samples, taste-tests, or coupons.**

For food marketing that promotes a line of products, one brand within a company, or a whole company, including restaurants, half of the products within the brand must meet the nutrition standards.

The promotion of healthy foods, including fruits, vegetables, whole grains, and low-fat dairy products is encouraged. When possible, pricing

structures of food and beverage products will promote healthy options.”

For additional information, see

<http://www.schoolwellnesspolicies.org/WellnessPolicies.html>.

- b. The updated food and beverage marketing policy should be shared with all MCPS school administrators, including principals, as well as teaching and food service staff and school nurses.
 - c. Ensure that monitoring of food and beverage marketing is included with monitoring for adherence to the district wellness policy.
2. Schools should prohibit fundraisers that sell foods of poor nutritional quality, such as candy and baked goods, label redemption programs, and fast-food restaurant nights to limit the promotion and consumption of low-nutrition foods to children.
- a. MCPS should provide information to principals, PTAs, teachers, and clubs about healthy fundraising alternatives. Numerous healthy fundraising options exist, such as bottled water or fruit sales, book fairs, auctions, and fun runs (see *Sweet Deals: School Fundraising Can Be*

Healthy and Profitable, available free of charge at:

<http://www.cspinet.org/new/pdf/schoolfundraising.pdf>).

- b. To support healthy choices at restaurant fundraising nights, the Montgomery County Council should pass legislation requiring fast-food and other chain restaurants to provide calorie and other nutrition information on menus and calories on menu boards (Bill 19-07).
3. Montgomery County Public Schools should negotiate with vending machine suppliers to provide healthy food or non-food images for vending machine exteriors. This agreement should apply to existing vending machine exteriors as well as new vending machines.
 4. MCPS should strengthen its policy on foods and beverages sold to students outside of the meals program by applying the nutrition standards to all foods and beverages available in areas accessed to students at all times, rather than the current policy of allowing vending machines to be turned on at the end of the instructional day.

References & Notes

- ¹ Ogden CL, Flegal KM, Carroll MD, Johnson CL. "Prevalence and Trends in Overweight Among US Children and Adolescents, 1999-2000." *Journal of the American Medical Association* 2002, vol. 288, pp. 1728-1732.
- ² Annie E. Casey Foundation. *2007 Kids Count Data Book*. Baltimore, MD: Annie E. Casey Foundation, 2007.
- ³ Serdurla M, Ivery D, Coates R, et al. "Do Obese Children Become Obese Adults? A Review of the Literature." *Preventive Medicine* 1993, vol. 22, pp. 167-177.
- ⁴ Jahns L, Siega Riz AM, Popkin BM. "The Increasing Prevalence of Snacking among US Children from 1977 to 1996." *Journal of Pediatrics* 2001, vol. 138, pp. 493-498.
- ⁵ U.S. Department of Agriculture, Office of Analysis, Nutrition and Evaluation. *Changes in Children's Diets: 1989-1991 to 1994-1996*. Washington, D.C., January 2001. Report No. CN-01-CD1.
- ⁶ Nielsen S, Seiga-Riz AM, and Popkin B. "Trends in Energy Intake in U.S. between 1977 and 1996: Similar Shifts Seen across Age Groups." *Obesity Research* 2002, vol. 10, pp. 370-378.
- ⁷ Putnam JJ, Allshouse JE. *Food Consumption, Prices and Expenditures, 1970-1997*. Washington, D.C.: US Department of Agriculture, Economic Research Service, 1999. Statistical Bulletin No. 965.
- ⁸ Lin BH, Guthrie J, Frazao E. "American Children's Diets Not Making the Grade." *Food Review* 2001, vol. 24, pp. 8-17.
- ⁹ Munoz K, Krebs-Smith S, Ballard-Barbash R, Cleveland L. "Food Intakes of U.S. Children and Adolescents Compared with Recommendations." *Pediatrics* 1997, vol. 100, pp. 323-329.
- ¹⁰ Institute of Medicine. *Food Marketing to Children: Threat or Opportunity?* Washington, D.C.: National Academies Press, 2006.
- ¹¹ General Accounting Office (GAO). *Public Education: Commercial Activities in Schools*. Washington, D.C.: GAO, 2000. Report No. GAO/HEHS-00-156.
- ¹² Craypo L., Francisco S., Boyle M., and Samuels. S. *Food and Beverage Marketing on California High School Campuses Survey: Findings and Recommendations*. Oakland, C.A.: Public Health Institute, 2006.
- ¹³ Appendix A contains a copy of the relevant section of the MCPS Wellness Policy, "Other [Non-Meals] Foods and Beverages Available at School."
- ¹⁴ School Food and Beverage Marketing Assessment Tool. California Project LEAN.

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(<http://www.californiaprojectlean.org/Assets/1019/files/School%20Food%20and%20Beverage%20Marketing%20Assessment%20Tool.pdf>)

¹⁵ Johanson J. and Wootan M.G. *Sweet Deals: School Fundraising Can Be Healthy and Profitable*. Washington, DC: Center for Science in the Public Interest, 2007.