# FOOD AND BEVERAGE MARKETING ON CALIFORNIA High school Campuses Survey: Findings And RECOMMENDATIONS 

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## ExECUTIVE Summary

## BACKground

Marketing and advertising play a significant role in setting norms and encouraging behaviors, especially for children. Since the 1980s, the food and beverage industry has made children and adolescents the targets of intense and specialized food marketing and advertising efforts. As a result, children are exposed to multiple food advertisements every day, and foods marketed to children-from highly sweetened cereals to cookies, candy, fast foods, and soda-are predominantly high in calories, sugar and fat.

With youth, marketers have tapped into an audience that is particularly vulnerable to the messages and tactics of the food and beverage industry (Strassburger, 2001; Kunkel, 1995; John, 1999). Marketers have capitalized on this situation by using numerous marketing channels to reach children and adolescents. Commercial activities in U.S. public elementary and secondary schools have expanded during the last decade as a result of marketers' taking advantage of schools' financial vulnerability due to chronic funding shortages, coupled with marketers' wish to increase sales and generate product loyalty (Levine, 1999; Consumers Union, 1995). In-school marketing activities related to food and beverages include:

- Product sales
- Direct advertising
- Indirect marketing
- Market research

Because of the important role schools play in feeding children and teaching them lifelong healthy habits and the increasing emphasis the food and beverage industry puts on school-based marketing strategies, California Project LEAN (CPL) and the Public Health Institute (PHI) thought it was important to identify the types of food and beverage marketing and advertising that exist on school campuses. In the fall of 2005, using funds from The California Endowment, PHI commissioned Samuels \& Associates to work with CPL to assess food and beverage marketing at 20 California public high schools.

## Key Findings

## Posters and signage:

- 245 instances of food and beverage related posters and signage found.
- $51 \%$ of posters and signage advertised food or beverage items or brand names.
- $60 \%$ of posters/signage for products were for foods or beverages that we discourage children from eating because they are high in fat, saturated fat, trans fat, sugar, and sodium and are low in nutrients.


## Vending machines:

- 276 vending machines found in 19 of the schools assessed.
- Vending machines were found in high traffic areas: cafeterias and quads/courtyards.
- $65 \%$ of vending advertisements were for sweetened beverages; such as, soda and sports drinks.
- Water accounted for only $21 \%$ of all vending advertisements.


## Equipment with logos or brand names:

- $60 \%$ of the schools used food or beverage coolers/display cases with corporate logos or brand names.
- $35 \%$ of the schools used cups, napkins and plates with food or beverage company logos or brand names.
- $71 \%$ of the logos displayed on equipment were for sweetened beverages such as soda and sports drinks.
- $8 \%$ of the logos displayed on equipment were for brand-name water.


## School media:

- About half of the year books (53\%) and school newspapers (53\%) included food or beverage advertising. These advertisements were primarily for local restaurants.


## School participation in food and beverage company marketing activities:

- Schools reported participating in food or beverage coupon distributions ( $25 \%$ of schools) or product giveaways ( $35 \%$ of schools) once or twice a year, or a few times a semester at most.
- $94 \%$ of these activities were conducted by companies selling unhealthy foods; such as, fast food, candy and soda.


## School events funded by food or beverage companies:

- Nine schools (45\%) had events (athletic events, social events, other extracurricular activities) supported at least in part by food or beverage companies.
- $93 \%$ of events were supported by companies selling unhealthy foods; such as, fast food and soda.


## Food sales as fundraisers:

- All 20 schools assessed used food and beverage sales as fundraisers.
- Most common food and beverage fundraising items included: chips, cookies/cakes/pastries, sweetened beverages, water, juice and candy.


## Corporate sponsored curricula and scholarships:

- $26 \%$ of schools reported using classroom materials or curricula created by food and beverage companies.
- $45 \%$ of schools reported participating in food and beverage company scholarship programs.


## Policies regulating food and beverage marketing:

- Nine schools reported a district policy that addressed marketing, but none of these policies explicitly limited or banned marketing of unhealthy foods and beverages.


## DISCUSSION

Given the growing body of evidence supporting the impact of food marketing on children's food preferences (Hastings, 2003; Committee on Food Marketing and the Diets of Children and Youth, 2006), schools must become aware of the types and intensity of food and beverage marketing on their campuses. This study found indications of food and beverage marketing in many locations throughout the high school campuses visited. Each of the campuses had multiple layers of marketing and advertising from visible signage and logos on vending machines and equipment to more subtle food and beverage industry presence in the form of donated products for fundraising or corporate sponsorships of activities or scholarships. This assessment found very little marketing for foods; such as, fruits and vegetables, whole grains, water and milk that are lacking in children's diets and that health professionals, parents and educators would like to encourage children to eat more of. Overwhelmingly, the food and beverage marketing found on the campuses came from companies and brands associated with foods that are discouraged in children's diets including soda, sports drinks and other sugary beverages, chips, candy and fast food. This finding is consistent with other reports that have found candy and snack food manufacturers, soft drink bottlers, and fast food restaurants, are among the companies that market most heavily in schools (Molnar, 2003).

Promotion of unhealthy foods conflicts with the California statewide legislation regulating nutrient content of school foods and contradicts the healthy eating messages central to nutrition education and to schools' mission to prepare children for productive lives as adults. Schools, with support from parents, health authorities, and other community stakeholders, should educate children about healthful diets through creation of environments that support healthy eating in all aspects including the products sold, the foods and beverages promoted through marketing and advertising, and the corporate sponsorship of activities and events.

Addressing food and beverage marketing on school campuses is a key component to creating healthy school environments. California schools are working hard to assure that foods sold on campus are healthy and meet nutrient standards for calories, fat and sugar; now we should assure that the food and beverage messages seen and heard by California's students at school encourage health food choices rather than soda/sweetened beverages and junk food.

## RECOMMENDATIONS

To minimize the potential negative impact of food and beverage marketing on students, schools should undertake the following actions:

* Eliminate the marketing and advertising of unhealthy foods and beverages at school.
$>$ Assure that all school-based marketing is consistent with or more stringent than state and district level policies eliminating the sale of sweetened beverages and unhealthy foods on school campuses.
$>$ New local Wellness Policies should include promotional activities that encourage students to consume fruits and vegetables, low-fat and non-fat milk and water.
* Eliminate commercial influences that promote unhealthy foods and beverages in district curriculum, classroom materials and on campus.
$>$ Review resources provided by outside sources, including curriculum and Channel One broadcasts used in the classroom, to ensure they do not promote unhealthy foods and beverages.
$>$ Prohibit any district curriculum from including identifiable brand names in the content of the curriculum. Require sponsored programs and materials to undergo the same review procedures and meet the same standards as other curriculum materials.
$>$ Restrict teachers from using identifiable brand names in their instruction unless they are found to be necessary to the lesson being taught.
* Include consumer education as part of the curriculum.
$>$ Adopt school-based curricula that teach youth media literacy skills, which teach them to be informed consumers of the media.
* Set guidelines for business partnerships that restrict marketing and advertising of unhealthy foods and beverages.
$>$ Encourage partnerships with business that does not include product advertising to students.
$>$ For school staff with the responsibility of entering into business partnerships, conduct trainings on the perils of marketing unhealthy foods on campus.


## BACKGROUND

Marketing and advertising play a significant role in setting norms and encouraging behaviors, especially for children. Annually, children view tens of thousands of television commercials and see hundreds of billboard and poster advertisements; the majority of which promote food products. As a result, children are exposed to multiple food advertisements every day, and foods marketed to children-from highly sweetened cereals to cookies, candy, fast foods, and sodaare predominantly high in calories, sugar, and fat.

Since the 1980s, the food and beverage industry has made children and adolescents the targets of intense and specialized food marketing and advertising efforts. The proliferation of electronic media, the deregulation of and declining support for public service advertising and the booming economy of the 1990s all contributed to the transformation of children into a consumer group. The amount of money spent on marketing to children doubled during the 1990s- an estimated more than $\$ 10$ billion per year is spent for all types of food and beverage marketing to children and youth in America (Committee on Food Marketing and the Diets of Children and Youth, 2006) -as corporations compete for what marketers call "share of mind" (Pollack, 1999) and "cradle to grave" brand loyalty (Stabiner, 1993).

With youth, marketers have tapped into an audience that is particularly vulnerable to the messages and tactics of the food and beverage industry (Strassburger, 2001, Kunkel, 1995, John, 1999). Marketers have capitalized on this situation by using a number of marketing channels to reach children and adolescents. These span television advertising, in-school marketing, product placements in movies and television programs, kids' clubs, the Internet, toys and products with brand logos, and youth-targeted promotions such as cross-selling and tie-ins, and outdoor and instore marketing.

Commercial activities in U.S. public elementary and secondary schools have expanded during the last decade as a result of marketers' taking advantage of schools' financial vulnerability due to chronic funding shortages, coupled with their wish to increase sales and generate product loyalty (Levine, 1999, Consumers Union, 1995). In-school marketing activities related to food and beverages include:

- Product sales: This includes foods such as soft drinks, fast food and snack items sold out of vending machines, student stores, food carts, and snack bars, as well as exclusive soft drink and branded food contracts. This also includes fundraising activities conducted by student groups, parent-teacher organizations, and booster clubs. Many of these fundraisers involve the sale of unhealthy foods and beverages. Marketers offer fundraising ideas to schools in exchange for advertising their product to students.
- Direct advertising: This includes advertisements placed around campus on scoreboards, billboards, posters, banners, and on book covers. These advertisements can also be found in school hallways, the gymnasium, football field, cafeteria, food carts, quad, classroom, locker rooms, and on school buses. Also common are electronic advertisements on the public announcement system or on classroom television broadcasts. Corporations also give away free product samples to promote and encourage consumption of their products.
- Indirect marketing: This includes corporate-sponsored curricula and contests in which students and schools receive products. Corporations market their product to students by sponsoring contests and by giving away coupons in schools.
- Market research: This includes student surveys or panels, product pilot or taste tests that expose students to a company's product.

Schools, where children spend an average of 6 hours daily, 5 days a week, for the majority of the year, represent a critical location for interventions to prevent overweight. The majority of US children attend school, and most children eat one or two meals a day at school. Schools are uniquely positioned to reinforce the healthy eating and physical activity behaviors that children need throughout their lives.

Because of the important role schools play in feeding children and teaching them lifelong healthy habits and the increasing emphasis the food and beverage industry puts on school-based marketing strategies, California Project LEAN (CPL) and the Public Health Institute thought it was important to identify the types of food and beverage marketing and advertising that exist on school campuses. In the fall of 2005, using funds from the California Endowment, PHI commissioned Samuels \& Associates to work with CPL to assess food and beverage marketing at 20 California public high schools.

## Study Design

## Assessment Tool

This project utilized a tool created by Samuels \& Associates (Craypo, 2004) to inventory and assess food and beverage marketing and advertising saturation on high school campuses. The tool catalogs and describes the types of advertising and marketing present on school campuses and identifies the locations where advertising is found. The data collected by the tool is useful for describing and quantifying the amount of advertising present in the school environment in order to inform strategies to minimize exposure to marketing of unhealthy foods and beverages in schools.

Topics covered by the assessment tool include:

- Advertisements displayed on school facilities including walls, scoreboards, and sports arenas
- Advertising on vending machines
- Advertising or logos on equipment or accessories such as: physical education equipment (including beverage coolers), sports/band uniforms, cups, napkins, book covers and other school supplies
- Electronic advertising on Channel One, school public address systems, or school websites
- Print advertising in newsletters, school papers, yearbooks etc...
- Food and beverage marketing events such as product give-aways, coupons, taste-tests
- Market research activities such as surveys, focus groups or tasting panels
- Presence of corporate sponsored curriculum
- Corporate incentive programs
- Descriptions of types of food and beverages advertised in each location


## School Visits

CPL regional coordinators conducted advertising and marketing assessments at 20 high schools throughout California. Tables 1 and 2 describe the campuses visited. Twelve of the campuses visited were closed campuses. The study schools serve students from a variety of socioeconomic backgrounds. The percentage of students eligible for free or reduced price meals ranged from $6 \%$ to $96 \%$; these students come from homes with a family income at or below $185 \%$ of the federal poverty level. The schools assessed for this study served students from a variety of ethnic backgrounds, although at 16 of the schools either White or Latino students accounted for over half of the student population.

Table 1: School characteristics

| Project LEAN Region | School | County | Grades | Enrollment | Open/Closed Campus | \% students eligible for free/reduced price meals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Coast | 1 | Humboldt | 9-12 | 1,110 | open | 24\% |
|  | 2 | Humboldt | 9-12 | 978 | open | 10\% |
| Sierra <br> Cascade | 1 | Shasta | 9-12 | 836 | closed | 29\% |
|  | 2 | Shasta | 9-12 | 1,022 | open | 53\% |
| North Central Coast | 1 | Monterey | 9-12 | 1,575 | closed | 37\% |
|  | 2 | Monterey | 9-12 | 2,672 | open | 28\% |
| Bay Area | 1 | Santa Clara | 9-12 | 1,455 | closed | 6\% |
|  | 2 | Santa Clara | 9-12 | 1,050 | closed | 55\% |
| Central Valley | 1 | Fresno | 9-12 | 2,142 | open | 64\% |
|  | 2 | Mariposa | 9-12 | 711 | open | 23\% |
| Southern Coast | 1 | San Diego | 9-10 | 187 | closed | 23\% |
|  | 2 | San Diego | 9-12 | 2,867 | closed | 52\% |
| Great South | 1 | San Bernardino | 9-12 | 3,163 | closed | 81\% |
|  | 2 | San Bernardino | 9-12 | 4,346 | closed | 46\% |
| Gold Coast | 1 | Ventura | 9-12 | 2,099 | open | 33\% |
|  | 2 | Santa Barbara | 9-12 | 2,373 | open | 23\% |
| Gold Country | 1 | Yolo | 9-12 | 1,628 | closed | 40\% |
|  | 2 | Sacramento | 9-12 | 2,388 | closed | 39\% |
| Los Angeles | 1 | Los Angeles | 9-12 | 2,118 | closed | 40\% |
|  | 2 | Los Angeles | 9-12 | 2,556 | closed | 96\% |

Table 2: Student ethnicity by school

| Region | School | African American | Asian/Pacific Islander | Latino | White | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Coast | 1 | <1\% | 2\% | 11\% | 71\% | 15\% |
|  | 2 | 2\% | 3\% | 7\% | 76\% | 12\% |
| Sierra Cascade | 1 | 1\% | 2\% | 9\% | 77\% | 11\% |
|  | 2 | <1\% | 4\% | 6\% | 80\% | 8\% |
| North Central Coast | 1 | 2\% | 2\% | 55\% | 37\% | 4\% |
|  | 2 | 2\% | 4\% | 50\% | 40\% | 4\% |
| Bay Area | 1 | 2\% | 3\% | 13\% | 66\% | 16\% |
|  | 2 | 3\% | 12\% | 61\% | 17\% | 7\% |
| Central Valley | 1 | <1\% | 2\% | 75\% | 22\% | <1\% |
|  | 2 | 1\% | 1\% | 5\% | 82\% | 11\% |
| Southern Coast | 1 | 13\% | 4\% | 28\% | 49\% | 6\% |
|  | 2 | 6\% | 2\% | 81\% | 8\% | 3\% |
| Great South | 1 | 22\% | 3\% | 67\% | 8\% | 0\% |
|  | 2 | 7\% | 1\% | 80\% | 11\% | 1\% |
| Gold Coast | 1 | 2\% | 2\% | 40\% | 51\% | 5\% |
|  | 2 | 3\% | 2\% | 53\% | 42\% | 0\% |
| Gold Country | 1 | 4\% | 15\% | 35\% | 42\% | 4\% |
|  | 2 | 12\% | 30\% | 28\% | 28\% | 2\% |
| Los Angeles | 1 | <1\% | 48\% | 51\% | <1\% | <1\% |
|  | 2 | 1\% | 25\% | 74\% | <1\% | 0\% |

The schools assessed were selected by the CPL regional coordinators, who were instructed to select two demographically diverse high schools from different districts that illustrate the variety of food and beverage advertising/marketing found on high school campuses. CPL regional coordinators made an effort to assure that at least one of the schools was a low-income high school (at least $50 \%$ of the students are eligible for free or reduced price meals) and that neither school had aggressively addressed a la carte foods or advertising/marketing.

Each school was visited once by a team of assessors; the team included a CPL regional coordinator and one to two students from the high school. School visit activities included a walk around the campus to catalog visible marketing and advertising as well as a brief interview with a school administrator (usually a principal). The school administrator was asked to provide information on food and beverage marketing not obtained through the campus walk around. Topics covered in the interview included:

- Food or beverage advertising in school based media such as newspapers, yearbooks and Channel One
- Participation in food or beverage company marketing activities such as taste tests or product and coupon give-aways
- School activities sponsored/supported by food and beverage companies
- Food and beverage related fundraising activities
- Use of food or beverage company sponsored curriculum
- School participation in food or beverage company scholarship programs
- Policies addressing food and beverage marketing and advertising on campus

The school assessment was completed in approximately three hours, including the 10 to 15 minute interview with the school administrator.

## Data Analysis

Data were analyzed using SPSS 11.0 to produce numeric counts, proportions, and averages of the types and locations of advertising. Marketing and advertising data were examined both according to frequency of types of advertisements or marketing instances across all 20 schools, as well as, the number of schools that displayed instances of a certain advertising or marketing type such as posters or advertisements in school newspapers. Data were categorized according to the major categories present, based either on the encouragement of healthfulness, or on the major types of products observed (e.g. fast food, sodas, sports drinks, water, etc.). Data are reported for all schools combined, with specific examples from individual schools provided as needed.

## Key Findings

## Locations with Food or Beverage Posters and Signage

Eighteen of the 20 schools visited had food and beverage posters or signage on school grounds. The most common areas for food and beverage posters and signage were the cafeteria, scoreboards, classrooms and clinic/nurse's area (Table 3). Of the 245 instances of

Table 3: Location of food and beverage posters and signage

| Location | \# of schools with <br> marketing in this location | \# of advertisements in <br> this location |
| :--- | :---: | :---: |
| Cafeteria | 13 | 81 |
| Scoreboards | 9 | 23 |
| Classrooms | 8 | 50 |
| Clinic/nurse's area | 8 | 30 |
| Hallways | 5 | 10 |
| Snack bars | 4 | 20 |
| Gym | 4 | 10 |
| Athletic area concession <br> stand | 4 | 5 |
| Teachers' Lounge | 2 | 5 |
| Locker rooms | 2 | 2 |
| Quads or courtyards | 2 | 3 |
| School store | 1 | 6 | pyramids or other healthy eating messages) and $51 \%$ advertised specific food and beverage products or brands.

Of the posters and signage advertising specific food and beverage products or brands, more than half $(60 \%)$ were for discouraged products ${ }^{1}$ - foods and beverages that children should eat less of. Less than thirty ( $28 \%$ ) percent of the posters and signage for products were for encouraged

[^0]products ${ }^{2}$ - foods and beverages that children should eat more of (Figure 1). Discouraged product advertisements included sweetened beverages such as soda and sports drinks, fast foods, high sugar foods (cookies, ice cream) and high fat foods (chips). We were unable to classify a number of non-specific posters/signs featuring advertisements for brands or restaurants that sell both healthy and unhealthy foods (i.e. Safeway).

Figure 1: Posters and signage - discouraged versus encouraged products ${ }^{3}$


## Vending Machines

All but one of the schools visited had vending machines. A total of 276 vending machines were found across 19 high school campuses, which is an average of 15 vending machines per school. Vending machines were most frequently found in high traffic areas such as quads or courtyards (15 schools) and cafeterias ( 15 schools). Hallways and student stores were the locations with the highest density of vending machines - an average of six per school (Table 4).

Table 4: Vending machine locations

| Location | \# of schools <br> with vending <br> machines in <br> this location | Average <br> number of <br> vending <br> machines in <br> the location <br> per school |
| :--- | :---: | :--- |
| Quad or courtyard area | 15 | 5 |
| Cafeteria | 15 | 3 |
| Hallway | 11 | 6 |
| Locker rooms | 9 | 3 |
| Gym/Athletic area | 9 | 3 |
| Teachers lounge | 9 | 1 |
| Student Store | 2 | 6 |
| Other | 2 | 4 |
| Total | 19 | 15 |

[^1]All but one of the vending machines displayed advertising on the front of the machine. Nearly two out of three ( $65 \%$ ) of the vending ads were for sweetened beverages such as soda and sports drinks. Water accounted for slightly more than one in five (21\%) vending ads (Figure 2).

Figure 2: Vending machine advertisements


## Equipment with Logos or Brand Names

During the school visit, the assessment team looked for equipment on the school campus that displayed a food or beverage company logo or name (Table 5). The most common type of equipment found displaying a food or beverage company name or logo were food and beverage coolers and display cases; these were found in 12 schools. Cups, napkins and plates were the second most common type of equipment displaying logos or advertising and these were found in 7 schools.

Table 5: Equipment with logos

| Type of equipment | \# of schools <br> using <br> equipment <br> with logos |
| :--- | :---: |
| Food or beverage coolers or display cases | 12 |
| Cups, napkins or plates used during meal <br> period, events, games, etc... | 7 |
| Book covers, pencils, notebooks or other <br> school supplies | 3 |
| Recycling bins or trash cans | 3 |
| PE or gym equipment such as balls, <br> basketball hoops, etc... | 3 |
| Sports bags or athletic uniforms | 3 |
| Other | 6 |

Figure 3 describes the types of companies providing schools with equipment displaying food and beverage logos or brand names. Nearly three quarters (71\%) of the logos displayed on equipment were for sweetened beverages such as soda and sports drinks; Pepsi and Gatorade were the most common names or logos displayed on equipment. Water associated-logos or brand names accounted for $8 \%$ of the instances of branded equipment. Logos displaying fast food or pizza accounted for nearly one in ten ( $9 \%$ ) of all equipment bearing logos.

Figure 3: Types of logos on equipment


## School Media

High schools generally have at least one form of printed or electronic media such as a school paper, yearbook, television programming or a public address (PA) system. School-based media can be used to communicate marketing messages to the school community. The school assessments found that most of the campuses visited had at least one form of school media. Table 6 shows that the most common types of media found on the campuses visited were school newspapers and yearbooks, and that about half of the newspapers and yearbooks included food or beverage-related advertising. The assessment teams reported that this advertising was mainly for locally owned restaurants and stores.

Table 6: Food and beverage advertising in school-based media

| School-based media | \# of schools with <br> this type of media | \# of schools with media that <br> includes food and beverage <br> advertising |
| :--- | :---: | :--- |
| Yearbook | 19 | 10 |
| Radio station or PA system | 14 | 2 |
| Newspaper/newsletter | 15 | 8 |
| School based TV programming | 1 | 0 |

## Participation in Marketing Activities

Food and beverage marketers have used schools for a variety of marketing activities including taste tests, product and coupon giveaways, and product event days in which students are asked to wear clothing displaying a product logo. In the schools assessed for this study, the most common activities were product giveaways ( 7 schools, $35 \%$ ) and coupon distributions ( 5 schools, 25\%) (Table 7). These marketing activities were not a daily occurrence, taking place once or twice a year

| Table 7: Participation in school marketing activities |  |  |
| :--- | :---: | :---: |
| Marketing Activity | \# of schools <br> participating | \# of <br> activities |
| Product giveaways (includes <br> foods, beverages, and logo <br> items) | 7 | 10 |
| Coupon giveaways | 5 |  |
| Product taste-tests | 4 | 7 |
| Product event days | 1 | 4 | or a few times a semester at most.

Ninety-four percent of the marketing activities reported were conducted by companies that are associated with unhealthy high fat, high sugar foods. Figure 4 shows that fast food (41\%), soft drink ( $35 \%$ ), and candy ( $18 \%$ ) companies actively marketed their products through campus activities.

Figure 4: Types of companies conducting marketing activities on school campuses


## Events Funded by Food or Beverage Companies

School principals were asked if the school had any events or activities supported by food or beverage companies. Nine of the schools assessed reported receiving food and beverage company support for activities such as athletics (events, teams, or equipment), classes, clubs or extracurricular activities, and social events. Overall, $93 \%$ of the events supported by food and beverage companies were supported by companies selling unhealthy items; soda and sweetened beverages ( $64 \%$ ) and fast food ( $29 \%$ ) companies were most likely to provide support for school activities (Figure 5), and the types of support received most often included donated product (most often beverages) or cash.

Figure 5: Types of food and beverage companies supporting school activities or events


## Food Sales as Fundraisers

All 20 schools visited reported that student groups and clubs sell food on campus for fundraisers, and the majority of these ( $90 \%$ ) have school groups operating permanent food sales venues such as vending machines, school stores or snack bars. A variety of campus groups sell food on campus through vending machines, snack bars, and school stores (Figure 6), including student groups, parent groups, and athletic departments and teams. Over one third (36\%) of the school groups selling foods or beverages were athletics-related.

Figure 6: School groups selling foods and beverages through vending machines, snack bars, and schools stores for fundraising ${ }^{4}$


[^2]Figure 7 describes the types of foods and beverages sold on school campuses through permanent food sales venues for fundraisers. Chips, the most common fundraising food item, were sold at $85 \%$ (17) of the schools assessed, cookies/cakes/pastries and sweetened beverages were sold at $80 \%$ (16) of the schools, and candy was sold as a fundraiser at $65 \%$ (13) of the schools visited. These common fundraising items can be categorized as discouraged foods because they are high in fat or sugar and low in nutrients. However, water and juice, the fourth most popular fundraising item, was sold as a fundraiser at $75 \%$ (15) of the schools visited.

Figure 7: Types of foods sold as fundraisers


## Corporate Sponsored Curricula

In 1999, the California state legislature passed a bill stating that instructional materials should not provide unnecessary exposure to brand names and logos. Despite this legislation, $26 \%$ of the schools assessed reported using curriculum, materials, or classroom activities created by food and beverage companies or food industry-related organizations. High schools reported using videos, DVDs, and worksheets created by Kraft, Dairy Council and the egg, pork and beef councils.

## Corporate Scholarships

Forty-five percent (9) of the 20 high schools assessed participate in food and beverage company sponsored scholarship programs. Corporate scholarship programs do not market or advertise specific products, but they are public relations efforts designed to promote good will toward the corporate entity providing the scholarships. Eighty-eight percent of the scholarship programs cited were provided by soda and fast food companies (Figure 8); the size of scholarships ranged from $\$ 200$ to $\$ 18,000$.

Figure 8: Types of food and beverage companies providing scholarships


## Policies Related to Food and Beverage Advertising

Nine of the schools reported having district policies that regulate marketing and advertising on campus. One school reported having a school-level policy that addressed marketing. Nine of these policies were written and one was a verbal or informal policy. The content of the policies varied greatly, and none explicitly limited or banned marketing of unhealthy foods. Examples of policy components included:

- Permits advertising on campus by companies with whom the district has entered into a contract or partnership.
- Restricts marketing of foods that will compete with food service.
- Allows advertising that has been approved by the district's educational services department.
- Restricts advertising for offensive items.
- Allows food and beverage advertising that promotes healthy food choices.


## DISCUSSION

A comprehensive review of the literature examining the effect of food and beverage marketing targeted at children (Hastings, 2003) found strong evidence that food marketing is impacting children's knowledge and food preferences and corroborated other research that has shown that:

- There is a large amount of food marketing targeted to children
- The foods advertised do not meet healthy diet recommendations
- Children enjoy food marketing

The Hastings review found literature to support food marketing's effect on children's food preferences including studies that have found that food advertising influences children's food selection at school.

The Committee on Food Marketing and the Diets of Children and Youth (IOM Committee), established in 2004 by the Institutes of Medicine, also explored food and beverage marketing and its impact on children, and the committee's conclusions align closely with Hastings et al. The broad ranging recommendations that emerged from the IOM committee's review state that effective efforts to address food and beverage marketing aimed at children must be multisectoral, and they specifically direct state and local educational authorities to assure that all aspects of the school environment promote health, including commercial sponsorships (Committee on Food Marketing and the Diets of Children and Youth, 2006).

Given the growing body of evidence supporting the impact of food marketing on children's food preferences, schools must become aware of the types and intensity of food and beverage marketing on their campuses. This study found indications of food and beverage marketing in many locations throughout the high school campuses visited. Each of the campuses had multiple layers of marketing and advertising from visible signage and logos on vending machines and equipment to more subtle food and beverage industry presence in the form of donated products for fundraising or corporate sponsorships of activities or scholarships. This assessment found very little marketing for foods such as fruits and vegetables, whole grains, water and milk that are lacking in children's diets and that health professionals, parents and educators would like to encourage children to eat more of. Overwhelmingly, the food and beverage marketing found on the campuses came from companies and brands associated with foods that children are discouraged from eating including soda, sports drinks and other sweetened beverages, chips, candy and fast food. This finding is consistent with other reports that have found candy and snack food manufacturers, soft drink bottlers, and fast food restaurants, are among the companies that market most heavily in schools (Molnar, 2003). Promotion of these unhealthy foods undermines the California state-wide legislation regulating the nutrient content of school foods and beverages and contradicts the healthy eating messages central to nutrition education and to schools' mission to prepare children for productive lives as adults. Food marketing in schools helps solidify community norms that position unhealthy foods as desirable, and encourages children to consume unhealthy foods and beverages both in and outside of school.

Strategies for addressing food and beverage marketing on school campuses are beginning to emerge and gain support. The majority ( $80 \%$ ) of California school board members responding to a survey support limiting and monitoring food and soda advertisements in schools, and $57 \%$ of school board members support an outright ban of such advertisements (McCormack Brown, 2004).

In 2003, the American Public Health Association (APHA) issued a policy statement on food marketing and advertising directed at children (APHA, 2003). Among the recommended actions were a number that addressed school based marketing; specifically the APHA encouraged the following:

- The federal government, states and school districts designate schools as food advertisingfree zones, where children and adolescents can pursue learning free of commercial influences and pressures.
- Collaboration among nonprofit and governmental organizations to develop guidelines for responsible food advertising and marketing aimed at children and adolescents, and urges food companies, advertising agencies and broadcasters to follow these guidelines, once they are developed.
- The development and dissemination of school-based initiatives to teach children, adolescents and parents consumer media literacy.

Schools, with support from parents, health authorities, and other community stakeholders, should educate children about healthful diets through creation of environments that support healthy eating in all aspects including the products sold, the foods and beverages promoted through marketing and advertising, and the corporate sponsorship of activities and events.

## RECOMMENDATIONS

In order to minimize the potential negative impact of food and beverage marketing on students, schools should undertake the following actions:

* Eliminate the marketing and advertising of unhealthy foods and beverages at school.
$>$ Assure that all school-based marketing is consistent with or more stringent than state and district level policies eliminating the sale of sweetened beverages and unhealthy foods on school campuses.
$>$ New local wellness policies should include promotional activities that encourage students to consume fruits and vegetables, low-fat and non-fat milk, and water.
* Eliminate commercial influences that promote unhealthy foods and beverages in district curriculum, classroom materials and on campus.
$>$ Review resources provided by outside sources, including curriculum and Channel One broadcasts used in the classroom, to ensure they do not promote unhealthy foods and beverages.
$>$ Prohibit any district curriculum from including identifiable brand names in the content of the curriculum. Require sponsored programs and materials to undergo the same review procedures and meet the same standards as other curriculum materials.
$>$ Restrict teachers from using identifiable brand names in their instruction unless they are found to be necessary to the lesson being taught.
* Include consumer education as part of the curriculum.
$>$ Adopt school-based curricula that teach youth media literacy skills which teach them to be informed consumers of the media. Some resources and presentations can be found in the Resource Section of this tool kit.
* Set guidelines for business partnerships that restrict marketing and advertising of unhealthy foods and beverages.
$>$ Encourage partnerships with business that does not include product advertising to students. For example, the Milwaukee Conference of Corporate Involvement in Schools developed ethical guidelines on school/business relationships. Corporate involvement should not require students to observe, listen to, or read advertising. See Policies and Tools: Milwaukee Conference on Corporate Involvement Guidelines.
$>$ For school staff with the responsibility of entering into business partnerships, conduct trainings on the perils of marketing unhealthy foods on campus.

Addressing food and beverage marketing on school campuses is a key component to creating healthy school environments. California schools are working hard to assure that foods sold on campus are healthy and meet nutrient standards for calories, fat and sugar; now we should assure that the food and beverage messages seen and heard by California's students at school encourage healthy food choices rather than soda/sweetened beverages and junk food.

## References

American Public Health Association 2003 Policy Statements: 2003-17 Food Marketing and Advertising Directed at Children and Adolescents: Implications for Overweight. www.apha.org/legislative

Committee on Food Marketing and the Diets of Children and Youth, Food and Nutrition Board, Board on Children, Youth, and Families. Food Marketing to Children and Youth: Threat or Opportunity? Institute of Medicine, National Academies Press. Washington, DC, 2006.

Consumers Union Education Services. Captive Kids: Commercial Pressures on Kids at School. Yonkers, NY: Consumers Union of United States, 1995.

Craypo, L., Boyle, M., Samuels, SE. Assessing Food and Beverage Marketing on School Campuses: A Pilot Study at Four High Schools. Prepared for California Project LEAN. December 2004.

Hastings, G., Stead, M., McDermott, L., Forsyth, A., Macintosh, AM., Rayner, M., Godfrey, C., Caraher, M., Angus, K. Review of research on the effects of food promotion to children. Prepared for the Food Standards Agency. Center for Social Marketing, University of Strathclyde, Glasgow, Scotland UK. 2003.

John DR. Consumer socialization of children: A retrospective look at twenty-five years of research. J Consum Res 1999;26:183-213.

Kunkel D, Gantz W. Assessing compliance with industry self-regulation of television advertising to children. Applied Communication Research 1993;148:151+.

Levine J. Food industry marketing in elementary schools: implications for school health professionals. J Sch Health 1999;69:290-291.

McCormack Brown, K., Akintobi, T.H., and Pitt, S., "School Board member and Superintendent Survey Results: Nutrition and Physical Activity for the Examination of Communication Factors Affecting Policymakers, "California Project LEN, August 2004.

Molnar, Alex. (2003, June). School Commercialism, Student Health, and the Pressure To Do More With Less. Commercialism in Education Research Unit (CERU). Education Policy Studies Laboratory. College of Education. Division of Educational Leadership and Policy Studies. Arizona State University.

Pollack, J. (1999). Foods targeting children aren't just child's play: Shape-shifting foods, 'interactive' products chase young consumers. Advertising Age, March 1.

Stabiner, K. (1993). Get 'em while their young; With kid flavors, bright colors and commercials that make children masters of their universe, advertisers build brand loyalty that will last a lifetime. Los Angeles Times Magazine, August 15: Page 12.

Strasburger VC. Children and TV advertising: nowhere to run, nowhere to hide. J Dev Behav Pediatr 2001;22:185-187.


[^0]:    ${ }^{1}$ Discouraged products include foods that children should eat less of, are high in fat, saturated fat, trans fat, sugar and sodium, and are low in nutrients. Examples include: chips, candy, cookies, soda, sports drinks and other sweetened beverages.

[^1]:    ${ }^{2}$ Encouraged products include foods that children should eat more of, are low in fat, saturated fat, trans fat, sugar and sodium, and are high in nutrients. Examples include; fruits, vegetables, whole grains, low-fat dairy, and water. ${ }^{3}$ Numbers in this chart do not add up to $100 \%$ due to rounding.

[^2]:    ${ }^{4}$ Numbers in this chart do not add up to $100 \%$ due to rounding.

