

Fast Food Sales on High School Campuses: Results from the 2000 California High School Fast Food Survey

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Concern about adolescent obesity has increased in the past two decades due to studies that indicate up to a twofold increase in the youth obesity rate.¹⁻³ According to the National Research Council,⁴ more than 80% of obese adolescents remain obese as adults. Obese teens face an increased risk for serious health problems that do not commonly occur during childhood, including high blood pressure, high blood cholesterol levels, and abnormal glucose tolerance.⁵ Adolescent health problems related to obesity can lead to chronic diseases in adulthood, such as heart disease, cancer, and Type 2 diabetes.⁶ Obese adolescents also suffer from psychological stress, discrimination, and low self-esteem.⁵

Genetics can play a role in obesity, but dietary factors also are essential to consider. Generally, teens in the United States follow eating patterns that do not meet national dietary recommendations. More than 84% consume more than the recommended 30% of daily calories from fat,⁷ and 90% exceed the recommendation for no more than 10% of daily calories from saturated fat.⁸ Fewer than five percent of teens eat the recommended five daily servings of fruits and vegetables.⁸ Some experts believe poor teen diets have been influenced by the easy availability of fast foods high in calories and fat.⁹

Over the past decade, fast foods have become increasingly common on high school campuses. These fast foods or *a la carte* food items offered at schools are not subject to nutrient standards like meals sold under the USDA National School Lunch Program (NSLP). Although NSLP meals are available to all students at a low cost, a variety of school environment factors prompt students to choose foods sold outside the NSLP.

The 2000 California High School Fast Food Survey sought to describe types of fast food being sold on

California high school campuses, factors that influence such sales, and the economic and policy issues associated with them. Findings from the survey will be used by public health intervention and advocacy programs in their work on adolescent nutrition and physical activity issues.

SURVEY METHODOLOGY

A self-administered survey instrument was created and pretested with a small sample of food service directors. The survey included 19 multiple-choice questions and one open-ended question, and it was designed to take no more than 15 minutes to complete. Survey topics included availability of fast food; specific locations and times for fast food sales; economic issues associated with fast food sales; policy issues associated with fast food sales; identification of decision makers involved with fast food sales; sales of branded versus nonbranded fast foods; and fast food advertising and promotion rights.

The survey was mailed to all public school district food service directors in California with at least one high school in their district ($n = 323$) in March 1999. To improve the survey response rate, a second mailing of the survey was sent to nonrespondents approximately three weeks after the initial mailing. As an incentive, food service directors were offered a free cookbook featuring recipes from premier California chefs and a summary of the survey results.

Follow-up telephone interviews also were conducted with 50 food service directors who responded to the self-administered survey. The interview sample included a geographic mix of districts, with representation from urban, rural, and suburban communities. Telephone interviews provided more detailed, qualitative data on the factors that influence fast food sales and experiences with promoting and limiting fast food sales.

Survey data were entered, cleaned, and frequencies calculated using the Statistical Analysis System. The survey was limited by use of self-reported data from voluntary participants so it cannot be assumed to represent all California public high schools. However, the findings have a high degree of face validity based on previous work in the field.

SURVEY FINDINGS

The survey findings demonstrate the prevalence of fast food sales and a framework within which the health, fiscal, social, and policy implications associated with fast foods on California's high school campuses can be examined. Table 1 contains the definitions of the terms used in the survey.

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Response Rate

One hundred seventy-one completed surveys were received, for a response rate of 53%. While the response rate represents 53% of California school districts containing a public high school, the responding districts represent 345 public high schools and 16% of California's 1,659,030 public high school students.

Profile of Responding School Districts

A number of data elements were collected to describe the responding districts and the high schools within them. Most responding school districts contain three or fewer high schools. Fifty-three percent (n = 182) of high schools represented by responding districts have closed campuses, and 46% (n = 157) have open campuses. Forty-four percent (n = 153) of schools reported that 40% or more of their student body are eligible for free or reduced-price meals, indicating these schools serve communities with a significant portion of children living in poverty (Table 2). Although many of these students are eligible for free or

Table 1
Survey Terminology

Terminology	Definition
Fast Foods	These include a wide variety of foods such as popular entrees like pizza and tacos, as well as items such as cookies, chips, and pastries. Fast foods are classified as branded and non-branded items.
Branded Foods	Items sold under a recognized retail brand name such as Domino's Pizza or Taco Bell.
National School Lunch Program (NSLP)	This program, administered by the United States Department of Agriculture (USDA) in cooperation with state and local education agencies, subsidizes the cost of preparing and serving meals at participating schools. The NSLP assures that lunch is available to all students at participating schools and that the meals meet specific nutritional requirements.
Free or Reduced-Price Lunch	Students are eligible for a free NSLP meal if their family income is 130 percent of the federal poverty level or below. Students are eligible for a reduced-price NSLP meal if their family income is between 130 percent and 185 percent of the federal poverty level. Students who do not meet the requirements for free or reduced-price lunches are allowed to purchase the NSLP meal at full price.
A La Carte	Foods sold individually and not as part of a complete NSLP meal. A la carte items are exempt from the dietary guidelines to which the NSLP meals must adhere. A la carte items may include fast foods.
Open Campus	On an open campus, students are allowed to leave during break periods and lunch.
Closed Campus	A closed campus does not allow students to leave during the school day.

reduced-price meals, they do not appear to be eating the NSLP meal. Table 2 also contains the student participation rate in the NSLP at high schools in the responding districts. Participation in the NSLP is higher at schools with a closed campus. Forty-seven percent of closed campuses versus 30% of open campuses reported NSLP participation greater than 40%. Participation in the school lunch program is highest at schools where more than 40% of students are eligible for free or reduced-price meals. Of these schools, 62% have student participation rates greater than 40%.

A La Carte and Fast Food Sales

A la carte items account for a substantial portion of food sales on high school campuses. Nearly 60% of respondents indicate a la carte sales account for more than 40% of total food sales. Ninety-five percent of responding districts reported selling fast foods as a la carte items. Seven (4%) of the responding districts do not sell a la carte items. These are primarily small districts located in rural communities.

Table 3 lists the most common a la carte fast food items. Three brands are most prevalent in California high school districts: Taco Bell, Subway, and Domino's. Other brands included Pizza Hut, McDonald's, KFC, and Arby's. Sixteen percent of districts sell nonbranded or generic fast foods. Fourteen percent of districts sell fast food items under the school district's own brand name. These districts create and copyright their own brand name, logo, and food product line.

Most school districts sell healthy a la carte items such as fruit, yogurt, and bagels. In addition, several districts reported reworking standard fast food recipes to improve the nutrient profile. More than one-half of districts that sell a la carte fast foods modified traditional fast food recipes to meet dietary guidelines that recommend no more than 30% of daily calories from fat, including no more than 10% of daily calories from saturated fat. Most districts that modify fast foods sell these modified foods as both NSLP and as a la carte items.

Factors Influencing Fast Food Sales

Several factors influence a district's decision to begin or

Table 2
NSLP Meal Numbers (N = 345 High Schools)

	Schools	Percent
Percent Free/Reduced Eligible Students		
0-39%	175	51
40-69%	119	34
70-100%	34	10
Missing Data	17	5
Total	345	100
Student Participation in NSLP		
0-39%	194	56
40-69%	118	34
70-100%	14	4
Missing Data	19	6
Total	345	100

expand fast food sales. Eighty-one percent of respondents identified the district food service director as the primary decision-maker for fast food issues. Other key personnel include the high school cafeteria manager and the district business manager. Respondents identified two primary reasons for selling *a la carte* fast food items: students like fast foods, and fast food sales help maintain the food service department's financial stability (Table 4). Eighty-eight percent (n = 144) of districts selling *a la carte* fast foods use profits from sales of fast foods to support food service operations. In the telephone interviews, several food service directors reported that profits from fast food and other *a la carte* sales often subsidize preparation of the reimbursable lunch. Others use the profit to support other aspects of school operations, including extracurricular activities, athletics, and educational programs.

Concessions, Advertising, and Promotional Contracts

Seven percent (n = 12) of responding food service departments contract with a vendor to operate a fast food concession. Of the 12 districts that operate vendor concessions, no one brand name vendor dominated the market. However, pizza vendors were the most common with nine (75%) concessions. In 16% (n = 27) of districts that sell *a la carte* items, an organization other than the food service department holds a contract with a fast food vendor: student clubs, booster clubs, PE department, and the PTA.

Types of fast food and beverage advertising most commonly found on high school campuses in responding districts are reported in Table 5. Thirteen percent of responding districts do not allow advertising on campus.

Table 3
Fast Foods Sold as *A La Carte* Items*
(N = 171 school districts)

Fast Foods Sold as <i>A La Carte</i> Items	Districts	Percent
Pizza	149	87
Cookies	147	86
Chips	144	84
Burritos	142	83
Hamburgers	120	70
Nachos	115	67
Donuts	103	60
Cinnamon roll	91	53
Pastries	91	53
Corn dogs	88	52
French fries	86	50
Hot dogs	72	42
Fried chicken	67	39
Tacos	50	29
Taquitos	32	19
Fried fish	22	13
Other fast food items	8	5
Soda	6	4
Ice cream	3	2
Don't sell a la carte items	7	4

* Respondents selected all that apply.

Twenty-four percent of districts with contracts give exclusive promotion rights to a fast food or beverage company. Districts that contract promotion rights receive money or equipment in exchange for the company's right to sell their products on campus and to place the company's name and logo on school equipment and facilities.

SURVEY IMPLICATIONS

Little has been published in the public health literature regarding fast food sales on high school campuses, underscoring this relatively new area of interest for public health professionals. However, a number of articles on fast food in schools have appeared in the lay literature and in food service publications. These publications corroborate the same top priority issues for high school food services that emerged from this analysis.

Food service directors surveyed in this study consistently referred to keeping students happy and maintaining a financially sound business as primary reasons for selling *a la carte* fast foods. An American School Food Service Association (ASFSFA) publication on branding illustrates the appeal of branded fast foods. When three high schools in San Juan Capistrano, Calif., began serving Taco Bell products, approximately 1,200 additional students patronized the cafeterias because the brand name gave the food service greater prestige and acceptability with students. The ASFSFA report maintains that food service is a business with a bottom line to meet, and an increasing number of food service operators see branding as the key to staying in the black rather than the red.¹⁰ Corporations agree. The *Los Angeles Times* reported that corporate executives believe there is no better place than the classroom to find new customers, and that the cafeteria has become a magnet for corporate promotions.^{11,12}

Findings from this survey support a 1996 US General Accounting Office (GAO) survey that found the most popular branded fast foods on school campuses were pizza (sold by 80% of schools), burritos (sold by 21% of schools), and subs and sandwiches (sold by 11% of schools).¹³ The most

Table 4
Primary Reasons for Selling Fast Foods
as *A La Carte* Items* (N = 164 school districts)

Reasons for Fast Food Sales	Districts	Percent
Students like fast food	106	65
Keep food service out of red	47	29
Fast foods add variety	46	28
Affordable, popular and can adhere to guidelines	43	26
Brief amount of time for meals	27	17
No adequate prep facilities	27	16
Food service is short staffed	19	12
Limited availability of commodities	4	2
Other reasons for fast food	3	2
Missing	2	1

*Note: Respondents were asked to select only one response to this item. However, 64 respondents chose more than one response.

common brands sold were Pizza Hut (36%), Domino's Pizza (27%), Taco Bell (22%), and Subway (6%).¹³

The GAO reported that brand name fast foods were found in 13% of schools nationwide in 1996, an increase from just two percent of schools in 1990-1991. This sharp rise signifies the market power of nationally recognized brand name fast food and the growing number of food service departments hoping to profit from fast food's popularity.¹⁴ Similar to the California food service directors surveyed for this study, food service operators across the country in the GAO report stated the following reasons for selling branded fast foods: increase in school lunch and a la carte sales, student demand, potential decrease in plate waste, potential cost reductions, strong vendor sales pitch, lack of onsite cooking facilities, and parental suggestions.¹⁴ The California food service directors surveyed for this report also listed the brief amount of time allotted to lunch service as a motivation for fast food sales.

Clearly, student desires exert a strong influence on items sold by the school food service. Food service departments will make efforts to meet student demands, many with expanded use of branded and generic fast foods, and some with other alternatives.

AN AGENDA FOR ACTION

One in four California adolescents is now considered "at risk" of becoming overweight.¹⁵ The poor quality of teen diets represent a major factor contributing to obesity, with its connected risks and problems. Fast foods, with their high fat, salt, and sugar contents, play a part in poor adolescent diets.

Food service directors are challenged to find a balance between the conflicting pressures of providing adolescents with healthy food choices that meet their nutritional needs, satisfying their student customers, and operating a financially stable business. Solutions do not necessarily create healthy food choices at school. Many *a la carte* foods are sold at snack bars and food carts, and thus, many students never enter the cafeteria where they might be encouraged to experience a wider choice of food items.

Table 5
Fast Food and Beverage Advertising
on High School Campuses* (N = 171 school districts)

Types of Advertising	Districts	Percent
Posters	66	39
Ads on scoreboards or signs	48	28
Ads in school paper	9	5
Ads over PA system	6	4
Ads on vending machine	5	3
Ads on menu	3	2
Ads on school radio	2	1
Ads on the school TV	1	1
Other types of advertising	1	1
Advertising not allowed	22	13
Missing	26	15

* Respondents selected all that apply.

For many school districts, feeding the student body nutritious meals and maintaining enough money to do so have become contradictory pursuits. Some try to turn the tide by creating their own school-branded versions of students' favorite foods, so they can control the fat, sodium, and sugar content. Others offer expanded choices, including fruit, yogurt, bagels, and packaged salads.

Findings from the 2000 California High School Fast Food Survey reflect the situation across the country, as the US General Accounting Office and ASFSA reported. These findings raise several important questions about the place of fast foods in high schools.

How do fast foods affect the nutritional quality of the students' diets?

How does the food available at school influence students' food choices outside of school?

Should school food services consistently model positive dietary practices for students?

How do fast food sales influence students' perceptions of nutrition education messages?

Are fast food sales to students the best way to generate additional resources for schools?

Are there other ways to raise additional funds?

Are fast food sales and promotions contributing to the increased commercialization of high school campuses?

This survey could not answer these questions, but it does raise significant concerns about the role of commercial fast food sales on high school campuses. More research is needed to fully understand the impact of fast food sales at school on adolescent dietary behavior and quality. Steps need to be taken that support food service in its mission to serve healthy, affordable foods and that enable schools to respond to the findings from this study. The following recommendations require consideration by district and school administrators when making decisions about food sales on high school campuses.

- Promote the link between a nutritious diet and learning.
- Investigate reasons that students do not participate in the National School Lunch Program (NSLP), then develop strategies to increase participation.
- Offer students more healthy foods that are just as convenient, inexpensive, and appealing as fast foods.
- Involve students in choosing the healthy foods available in their school through taste tests, surveys, and classroom activities.
- Hold forums that inform students, parents, decision-makers, and the community about the nutritional quality of foods sold at school.
- Examine the use of schools as a channel for food and beverage company promotions.
- Explore new opportunities to generate support and revenue not based on sale of unhealthy foods. ■

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