

Evaluating Media Advocacy Efforts Addressing Fast Food in California

Public High Schools: A Content Analysis

California Project LEAN
Food on the Run
Public Health Institute

Prepared by

Erika Takada, MPH
Evaluation Specialist

California Project LEAN, P.O. Box 942732, MS-675, Sacramento, CA 94234-7320
Ph: 323-4742; Fax: 445-7571; www.dhs.ca.gov/lean; Teen website: www.CaProjectLEAN.org

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INTRODUCTION AND BACKGROUND

In June 2000 a content analysis was conducted to evaluate the print media coverage of a statewide press conference addressing fast food sales in public high schools. Media advocacy was used to address the problem of fast food sales in California public high schools, which may be contributing to the rise in childhood obesity. Media advocacy has been defined as the strategic use of mass media to support community organizing to advance a social or public policy initiative. (Wallack, 1999) This effort was organized by California Project LEAN (see Figure 1) and involved many of their partners statewide. One of the main components of the media advocacy efforts was a press event which strategically used the media as a channel to 1) bring forth the issue of fast food's prevalence to policy makers, administrators and parents; 2) tell policy makers and parents why they should be concerned; and 3) create a movement that supports policy

Figure 1. California Project LEAN's Food on the Run Program

Food on the Run (FOR) is a multi-component high school-based intervention program to promote healthy eating and physical activity among adolescents organized by California Project LEAN (Leaders Encouraging Activity and Nutrition), a program of the California Department of Health Services and the Public Health Institute. Its mission is to increase healthy eating and physical activity among teens as a way to improve health and reduce risk of chronic disease. The goals of FOR are to conduct a high school-based program that:

- Prompts high school students to advocate for additional healthy food and physical activity options.
- Advances policy and environmental changes that promote healthy eating and physical activity options in the school and surrounding community.
- Motivates students to eat healthier and engage in more physical activity.

In carrying out its work, FOR's primary target audience is multiethnic underserved high school students.

Secondary target audiences include families, school staff, community leaders and policymakers.

FOR operates in 26 low-resource high schools across California. This school-based project:

- Trains high school students about healthy eating, physical activity, consumerism, advocacy, and the media.
- Conducts classroom, campus- and community-related activities to advocate for healthy eating and physical activity options.
- Integrates lessons into existing curriculum that encourages students to eat healthy, keep moving and become smart shoppers and involved citizens.

FOR is grounded in a student-driven philosophy. Each high school site designs and implements projects with input from Student Advocates with whom they work; therefore, each site's FOR project is unique and responsive to the needs and circumstances of the students in that particular high school.

and environmental changes that increase access to healthy foods.

The centerpiece of the press conference was the release of the 2000 California High School Fast Food Survey (Fast Food Survey). The main objectives of this statewide survey was to determine the extent of fast food sales on high school campuses; to describe and operationalize fast food items on high school campuses; to assess factors that influence fast food sales on high school campuses; and to identify economic and policy issues associated with fast food sales on high school campuses. Some of the main findings are as follows (Public Health Institute, 2000):

- 95 percent of responding districts reported selling fast foods as a la carte items.
- Such foods account for up to 70 percent of total food sales at a majority of the schools surveyed.
- The most common fast foods sold in districts are pizza (87%), cookies (86%), chips (84%) and burritos (83%).
- The two primary reasons that school district report selling fast foods are: 1) students like fast food (65%) and 2) fast foods keep food service out of the red.
- Fast food sales are used to support a variety of school operations including food service (88%), facilities improvement (24%), as well as extracurricular and athletic programs.
- An overwhelming majority of districts (72%) allow fast food and beverage advertising on campus.

In addition to the release of the Fast Food Survey, some of the other elements of the media advocacy campaign included media spokesperson training, copy point

development, a b-roll tape, press kits for the media (see Appendix A), regional press events through out the state, media tours of high school campuses, and the distribution of collateral materials for teens and parents. A public relations firm was hired to coordinate all of the elements, send a press release (see Appendix A) across the business wire, and mail 300 press kits to the national and state media to arrive the morning of the press event.

A content analysis was conducted to evaluate these efforts. Content analysis is defined as a research technique for making replicable and valid inferences from data to their context (Krippendorf, 1980). In this case the data and context refer to the print media stemming from the Fast Food Survey press event.

METHODS

For this content analysis only print media was analyzed. All print media articles were gathered by local public health professionals, a clipping service, online searches and a public relations firm. All of the articles collected were based on the February 12, 2000 press event. Print media included newspapers, magazines and professional and consumer newsletters.

The design of the coding instrument (see Appendix B) was based on other content analyses that were previously conducted such as one by the Cardiovascular Disease Outreach Resource and Epidemiology (CORE) program (Hernandez & Cassady, 1997) and another conducted by the Berkeley Media Studies Group (Dorfman, Woodruff, Chavez, & Wallack, 1997) among others (Hackman & Moe, 1999). It was also based on the Krippendorf content analysis methodology. Most importantly the variables of the

coding instrument had to measure the objectives of the campaign. The specific objectives of the media advocacy campaign were:

- 1) Put the issue of fast food's prevalence on the radar screen of policy makers, administrators, and parents
- 2) Tell policy makers, administrators and parents why they should be concerned
- 3) Create a movement that supports policy and environmental changes that increase access to healthy foods.

Two trained independent readers each read and coded all the print media articles. Each entered their data into databases and verified each other's work to check for data entry errors. The two databases were each cleaned, then combined. When two different readers code the same articles independently, there will usually be some differences, or interrater variability. A goal of data collection and analysis is to reduce the amount of variability. Therefore a Kappa ratio¹ was calculated to measure the level of agreement between the two readers/coders. Finally frequencies were run on all the variables.

RESULTS

Forty-eight articles were analyzed (see Appendix C). Print coverage reached approximately 26,834,800 readers. Print coverage and reach was determined by readership circulation figures of each publication.

¹ A kappa test is performed to determine the extent to which the agreement between the two coders improves on chance agreement alone.

MEASURING AGREEMENT

An important question in research is the extent to which different observations of the same phenomenon (e.g., print media coverage) differ. If there is inter-rater agreement, the data in the study are considered highly reliable and will elicit more confidence. (Jekel, Katz, & Elmore, 1996) A common way to measure agreement is to perform a kappa test. A kappa (k) score of >0.75 is considered excellent agreement between the two readers; $k=0.40-0.75$ is considered fair to good agreement; and $k<0.40$ is considered poor agreement. Sixteen variables (46%) had a kappa score greater than 0.75. Twelve variables (34%) had a kappa score between 0.40 and 0.75; and only six variables were in poor agreement ($k<0.40$). One variable had a miscellaneous error. For those variables with poor agreement, a discussion was convened between the two readers and the evaluation specialist to come to an agreement on the coding.

Table 1 – Inter-rater Agreement

Kappa Score (k)	# variables (%)
>0.75 , Excellent agreement	16 (46%)
$0.40-0.75$, Fair to Good agreement	12 (34%)
<0.40 , Poor agreement	6 (17%)
Miscellaneous error	1 (3%)
Total variables	35 (100%)

ARTICLE CHARACTERISTICS

Eighty-eight percent of the articles were from a newspaper. Two percent were from a magazine. Ten percent of the articles came from another type of publication such as a trade or consumer newsletter.

Sixty-one percent of the articles were news stories, i.e., an article that reported directly on the press event and was primarily based on the press release. Twenty-three percent of the articles were special interest stories, i.e., in addition to reporting on what was released at the press event, there was a unique feature such as a local high school that was working to make the school a la carte menu healthier. Eight percent of the articles were editorials, and another eight percent were letters to the editor.

Table 2 – Article characteristics

Print Media Type	
Newspaper	88%
Magazine	2%
Other	10%
Article Type	
News	61%
Special Interest	23%
Editorial	8%
Letter to the Editor	8%

SPOKESPERSONS

Spokespersons were coded as anyone who was quoted in the articles whether they received media training or were just approached by the press for an interview. Forty-three percent of the articles quoted high school students. Twenty-nine percent of the articles featured spokespersons who were local/regional California Project LEAN staff persons, and 25% of the articles quoted Joe Hafey, CEO of the Public Health Institute, who was the primary speaker at the press event. Eleven articles (22.9%) did not quote anyone.

Table 3 - Spokespersons

Spokespersons	# of articles (%)
High school students	21 (43.8%)
Local CPL staff	14 (29.2%)
Joe Hafey, CEO, Public Health Institute	12 (25.0%)
Quote from Fast Food Survey/Press Release	6 (12.5%)
Peggy Agron, Chief, California Project LEAN	6 (12.5%)
Other CPL State staff	3 (6.3%)
Fast Food Survey researcher	3 (6.3%)
None	11 (22.9%)

FOOD ON THE RUN HIGH SCHOOLS

Throughout the 48 articles, there were 14 *Food on the Run* (FOR) (see Figure 1) high schools mentioned and twelve non-FOR high schools mentioned. Forty-eight percent of the articles mentioned/discussed the FOR program. Sixteen articles did not mention any high schools (Table 4).

Table 4 – High Schools

High School¹	# of articles (%)
None Mentioned	16
Other High Schools (non-FOR)	12
Gabrielino (San Gabriel, CA)	5
Righetti (Santa Maria, CA)	3
Westminster (Westminster, CA)	3
Anderson (Redding, CA)	2
Encina (Sacramento, CA)	2
Fontana (Fontana, CA)	2
Hoover (San Diego, CA)	2
Stagg (Stockton, CA)	2
Andrew Hill (San Jose, CA)	1
Firebaugh (Firebaugh, CA)	1
King City (King, City, CA)	1
Del Norte (Del Norte, CA)	1
Alps View (Weaverville, CA)	1
Southwest (San Diego, CA)	1

Other Totals:

Total number of articles w/ FOR high school mention	23
Total number of FOR High Schools mentioned	14
Total of all FOR High School mentions	27

¹All are *Food on the Run* high schools unless otherwise noted.

CAUSE OF THE PROBLEM

Almost 69 percent (68.7%) of the articles reported on the cause of the high prevalence of fast food on high school campuses in California. The number one reported cause (58.3%) was that fast food sales are used to support a variety of school operations such as facilities improvement and extracurricular and athletic programs. The second most reported cause of the problem (47.9%) was that fast food was what students wanted to eat. The third most reported cause (41.7%) was that selling fast foods keeps school food service out of the red. Other reported causes included outside advertising, parents, and school administration.

Table 5 – Reported causes of fast food prevalence

Cause of fast food prevalence	# of articles (%)
Profits/fundraising	28 (58.3%)
Students want	23 (47.9%)
Keeps food service out of red	20 (41.7%)
Outside advertising	7 (14.6%)
Parents	2 (4.2%)
School administration	1 (2.1%)
None identified	15 (31.3%)

DATA PRESENTED

Seventy-three percent of the articles reported data or results directly from the Fast Food Survey. Other reported data included rates of childhood obesity, calories and fat grams of specific foods, percent participation in USDA's National School Lunch Program, and rates of chronic disease (i.e., heart disease, hypertension, diabetes, etc.). Many of these data were presented in the forms of graphs, charts and tables.

LOCAL ACTIVITIES FEATURED

More than half of the articles (54.2%) featured specific examples of local activities that were being conducted to combat the prevalence of fast food on school campuses and other related problems. Forty-six percent of the articles featured a local school that offers healthy alternatives to students; 33.3 percent featured school-based student advocate/peer-to-peer health activities; and 22.9 percent featured a school-wide awareness event. Other local activities included modified lunch food recipes, policy/advocacy work, health education in the classroom, and the *Simple Solution to the Energy Problem* adolescent social marketing campaign created by the *Food on the Run* program.

Table 6 – Specific local activities featured

Local Activity	# of articles (%)
Offer healthy options	21 (45.8%)
Student advocate/peer-to-peer activities	16 (33.3%)
School-wide awareness event	11 (22.9%)
Modify recipes	9 (18.8%)
Policy/advocacy	5 (10.4%)
Health education in class	4 (8.3%)
<i>Simple Solution</i> campaign	1 (2.1%)
None featured	22 (45.8%)

SOLUTIONS AND RECOMMENDATIONS

One of the main objectives of the media advocacy campaign was to get the press to report recommendations and solutions to the fast food problem in their news and feature articles. Eighty-one percent of the articles reported one or more possible solutions to the prevalence of fast food on high school campuses. Almost 65 percent of the articles reported the recommendation of offering more healthy foods that are as convenient,

inexpensive and appealing as high-fat fast foods. About 42 percent of the articles discussed *Food on the Run* as a model program to implement in California high schools. And just under 20 percent of the articles discussed introducing legislation to control the situation of fast food in public high schools. Other recommendations and solutions included exploring new funding opportunities that are not based on the sale of unhealthy foods to high school students; and examining the use of schools as a channel for food and beverage company promotions.

Table 7 – Reported solutions and recommendations

Solutions/recommendations	# of articles (%)
More healthy options	31 (64.6%)
<i>Food on the Run</i> program	20 (41.7%)
Legislation	9 (18.8%)
Explore new funding opportunities	6 (12.5%)
Examine promotions in schools	3 (6.3%)
None given	9 (18.8%)

DISCUSSION

There were many interesting findings in this content analysis. Mainly, the results demonstrate that the media not only picked up the story but went beyond reporting only on the problem. They overwhelmingly included solutions and recommendations (81.2%) and thoroughly described the problem (68.7%). This successful communication of the problem of fast food sales in public high schools led to other desirable outcomes and especially had an impact locally. One interesting finding was the apparent desire of reporters to localize their story. Seventy-three percent of the articles quoted or interviewed local people, 43.8 percent of whom were high school students. Additionally more than half the articles featured specific local activities being conducted to combat the

fast food problem. This type of coverage and publicity has peaked the interest of local and state decision-makers as well as interest groups from industry and community.

Appropriate solutions along with controversy and debate have come into fruition since the press conference in February 2000.

The overall success of the media advocacy campaign was not luck or coincidence. This was a carefully and strategically coordinated effort from beginning to end. Deliberate efforts were made in planning and training; preparing copy points; developing press kits; and executing the press conference and interviews to communicate to the press and others that the high prevalence of fast food in public high schools was largely a population- and environment-based problem (versus an individual problem). And most importantly that there are possible solutions to the problem that involve large policy and environmental changes at the system, organization and legislative levels.

REFERENCES

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APPENDIX A

Press Kit

[Note: Please call or email CA Project LEAN staff to access these materials or check the CA Project LEAN Materials Order Form. Thank you.]

APPENDIX B
Coding Instrument

**Content Analysis Coding Form
Fast Food Survey Press Event**

CA01 Reader: 1 2

CA02 Article #: _____

CA03 Type of print media:
 a. newspaper
 b. magazine
 c. other

CA04 Date of article (MM/DD/YY): ___/___/___

CA05 Print circulation:
 a. daily
 b. weekly
 c. quarterly
 d. other

CA06 Type of article:
 a. news
 b. opinion (editorial)
 c. letter to the editor
 d. feature

CA07 Location of article:
 a. front page, front section (A1)
 b. inside front section (A)
 c. metro/local/city
 d. opinion/editorial
 e. other
 f. can't tell

CA08 Is there a photo: Yes No
 If "Yes," what does the picture contain:
 a. student(s)
 b. food (w/o brand)
 c. branded food
 d. student + food
 e. cafeteria scene
 f. spokesperson
 g. "event" photo

CA09 Is there a graphic (table, chart, etc.): Yes No
 If "Yes," what is the graphic of:
 a. Fast Food Survey related data
 b. School food comparison
 c. Local data
 d. Other data

CA10 Was the *Fast Food Survey* mentioned? Yes No

CA11 Was California Project LEAN mentioned? Yes No

- CA12** Was the Public Health Institute mentioned? Yes No
- CA13** Was The *California* Endowment mentioned? Yes No
- CA14** Was the *Food on the Run* program mentioned? Yes No
- CA15** Was a CPL Region or High School mentioned? Yes No
If “Yes,” which one(s):

(CA15a) Regions

1. Bay Area
2. Central Valley
3. Gold Coast
4. Gold Country
5. Great South
6. Los Angeles
7. North Central Coast
8. North Coast
9. Sierra-Cascade
10. Southern Coast

(CA15b-d) High Schools

1. Andrew Hill
2. Balboa High
3. Mendota High
4. Firebaugh High
5. Farmersville
6. Parlier
7. Ernest Righetti
8. Encina
9. San Juan
10. Amos Alonzo Stagg
11. Fontana
12. Southwest High
13. Cajon High
14. Gabrielino High
15. Venice High
16. Roosevelt High
17. Francisco Bravo
18. King City
19. Del Norte High
20. Arcata High
21. Anderson High
22. Portola
23. Alps View
24. Hoover High
25. SELF High
26. Westminster
27. other high school

CA16 Who was quoted in the article? (Check spokesperson list)

- a. Joe Hafey: (1st 3 words)
- b. Peggy Agron
- c. Sarah Samuels
- d. High School Student
- e. Local CPL representative
- f. Other State CPL staff
- g. survey/press release quote: (1st 3 words)
- h. other: _____

CA17 In the article, what was identified as the cause of the high prevalence of fast foods in California high schools:

- a. Individual behavior (high school students)
- b. School food service
- c. School administration
- d. Parents

- e. Advertising by outside companies
- f. Making a profit/school fundraising
- g. None identified

CA18 Were data/results from the *Fast Food Survey* presented: Yes No
If “Yes,” What data was (were) presented:

- a. Percent of responding districts selling fast food items.
- b. Percent of total school food sales that are fast food/a la carte.
- c. The most common fast foods sold in school districts.
- d. Most common fast food brands sold in school districts.
- e. Percentage of schools creating their own fast food brand names.
- f. Healthy a la carte items available school districts (fruit, yogurt, bagels).
- g. Reasons that school districts report selling fast food:
 - students like it and/or (popularity)
 - keeps food service out of the red (economic)
- h. Uses of fast food profits.
- i. Percentage of schools that modify fast foods to make them healthier.
- j. Percentage of school districts that allow fast food and beverage advertising
- k. Percentage of schools with open campus.
- l. Other: _____

CA19 Was the data accurate: Yes No

CA20 Was there other data presented in the article: Yes No
If “Yes,” what other data were presented:

- a. Childhood obesity rates.
- b. Chronic disease rates.
- c. Percent participation in National School Lunch Program.
- d. Numbers related to calories and fat grams of school foods.
- e. Other: _____

CA21 Were recommendations/solutions to the problem discussed in the article: Yes No
If “Yes,” what recommendations were discussed:

- a. Offer students more healthy foods that are as convenient, inexpensive and appealing as high-fat fast foods. (more healthy options, recipe modification, etc.)
- b. Explore new opportunities to generate support and revenue that are not based on the sale of unhealthy foods. (Economic emphasis)
- c. Examine the use of schools as a channel for food and beverage company promotions.
- d. California Project LEAN/*Food on the Run* program and campaign components.
- e. Legislation on healthier food sales in public schools.
- f. Other recommendations or solutions: _____

CA22 Was local activity specifically discussed in the article: Yes No
If “Yes,” what local activities were discussed:

- a. Student advocate/peer-to-peer/student leadership program
- b. Offering, highlighting healthy foods
- c. Modifying recipes
- d. School-wide awareness events
- e. Health education in the classroom
- f. Policy/advocacy work
- g. *Simple Solution* campaign
- h. Other: _____

APPENDIX C

Print Media Articles

[Note: Please call or email CA Project LEAN staff at 916/552-9907 to access these materials]

APPENDIX D

Other Media Information

[Note: Please call or email CA Project LEAN staff at 916/552-9907 to access these materials.]