Food on the Run 1997-1998

Environment Evaluation Report

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Introduction

An environment survey is conducted as a part of the Food on the Run (FOR) evaluation process. The purpose of this evaluation is to determine the level at which FOR is addressing the adolescent nutrition and physical activity issues at high school campuses by assessing the eating and physical activity environment of the FOR sites. The environment survey also shows the impact that FOR Student Advocates have on their campus.

Conducting an environment survey is not only a valuable basic needs assessment tool, but it also creates the platform for policy and environmental changes that influence health behaviors. Merely communicating messages that encourage healthy eating and physical activity is not enough to reach the desired outcome of teens living healthfully. In order for teens to adopt and maintain healthy behaviors, the behavior changes must be fully supported by policies and the environments in which teens spend a significant amount of time (Center for Disease Control and Prevention, 1998).

FOR recognizes that it is time to move beyond one-to-one programs, annual health fairs, and monitoring individual behaviors, and begin to undertake the more effective and practical population-based approach. In order for teens to adopt healthy lifestyle behaviors, policies need to be created and/or modified through collective action. Lifelong physical activity should be taught in physical education (P.E.) classes. High school curriculum should include the modeling and teaching of health-related skills. A la carte selections at schools should always include fresh fruits/vegetables, whole grains, and a low-fat entrée. Gym facilities should be accessible for more hours in the day. These are all examples of policy and environmental changes.

Fortunately, there are guidelines and recommendations that support moving in this direction. The Center for Disease Control and Prevention's (CDC) <u>Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People</u> states the following:

Environment: Provide physical and social environments that encourage and enable safe and enjoyable physical activity (CDC, 1997).

The CDC's <u>Guidelines for School Health Programs to Promote Lifelong Healthy Eating</u> states the following:

Policy: Adopt a coordinated school nutrition policy that promotes healthy eating through classroom lessons and a supportive school environment (CDC, 1996).

These and other related recommendations expressed and recognized at the local level form some of the goals for FOR. They also move the program forward towards sustainable solutions.

Environment evaluations give programs a solid basis for the changes and actions that are necessary, and continue on to monitor the effect of a particular policy.

Evaluation of the campus environment for each of the FOR sites is ongoing. It is expected that results from each year reflect changes in a positive direction, i.e., creating a healthier eating environment and a campus that supports lifelong physical activity.

Results are based on observations made and recorded by the person conducting the Environment Survey.

Methods

Each FOR site is required to complete the Environment Survey as a part of the evaluation process. The Environment Survey is completed, annually, in May or June –

the end of the high school year. When a new school site is brought on to the FOR project, they are required to conduct one baseline assessment before implementing the program.

The Environment Survey consists of nine items. Four are healthy eating/nutrition related, three are physical activity related, and two are open-ended questions. The items on the survey are based on the environmental changes that California Project LEAN (CPL) expects and aims to see as a result of the implementation of FOR at the selected high school sites.

The survey is completed by the FOR site coordinator, or occasionally a school staff person who is familiar with the program. Each site coordinator received a training on conducting the evaluation process and received an accompanying manual with original copies of the surveys and protocols. Responses to the items are an assessment of the high school campus environment as they relate to nutrition and physical activity.

The survey responses were entered into an SPSS (Statistical Package for the Social Sciences) 8.0 version database in accordance with the data protocol. Open-ended responses were transcribed word for word and will be discussed later in this report (see Appendix B).

SPSS was also used to analyze the data. Frequency statistics are provided for the following variables: healthy food options; nutrition information; type of eating venues; healthy eating promotion; physical activity promotion; and physical activity options both during and after school. A Healthy Eating Score was computed by assigning one point for each positive response to the options for item #1 on the survey (see survey in Appendix C), and adding them together for a total sum for each site. The same procedure

was used to compute a Healthy Eating Promotion Score (item #4); School Physical Activity Score (item #6); After School Physical Activity Score (item #7); and a Physical Activity Promotion Score (item #7). Paired t-tests were performed for those sites with data from the previous project year (N=6) in order to determine any changes over time.

Results

Twelve FOR sites representing all ten CPL regions completed the Environment Survey for the 1997-1998 project year. All of the surveys were completed in May or June of 1998.

Healthy Eating

Table 1 - Low-fat, fat-free, healthy food options offered in cafeteria. (N=12)

| | YES | NO |
|------------------------|-----------|----------|
| | N (%) | N (%) |
| Salad/fresh vegetables | 8 (66.7) | 4 (33.3) |
| Low-fat dressing | 3 (25.0) | 9 (75.0) |
| Fresh fruit | 11 (91.7) | 1 (08.3) |
| Dried/canned fruit | 10 (83.3) | 2 (16.7) |
| Non-fat milk | 5 (41.7) | 7 (58.3) |
| 1% milk | 10 (83.3) | 2 (16.7) |
| Low-fat entrée | 8 (66.7) | 4 (33.3) |
| Vegetarian entrée | 6 (50.0) | 6 (50.0) |
| Other | 4 (33.3) | 8 (66.7) |

There was much variability in the low-fat, fat-free, and healthy food options offered among the FOR sites (see Table1; also see Appendix A for all tables by region and site.). Most of the sites offered salad or fresh vegetables (8; 66.7%); fresh fruit (11; 91.7%); 1% milk (10; 83.3%); and a low-fat entrée (8; 66.7%). Examples of items listed in the "other" category were bagels, low/non-fat yogurt, trail mix, and 100% fruit juice.

Table 2 - Type of nutrition info posted for foods. (N=12)

| | YES | NO |
|-----------------------|----------|-----------|
| Nutrition Information | N (%) | N (%) |
| Low-fat | 3 (25.0) | 9 (75.0) |
| Fat-free | 1 (8.3) | 11 (91.7) |
| Nutrition label | 1 (8.3) | 11 (91.7) |
| Other | 4 (33.3) | 8 (66.7) |
| None | 5 (41.7) | 7 (58.3) |

Overall, there was limited posting of nutrition information for foods in the cafeteria (see Table 2). Three sites (25%) have low-fat information; one site had a fat-free posting; one site had nutrition labeling; and four (33.3%) sites have other types of nutrition information posted which mainly consisted of nutritional analysis and food pyramid posters. Five (41.7%) of the sites have no nutritional information posted in the cafeteria. Out of the seven sites that have nutrition information posted, most of the types of information are posted by the food or in other locations such as on the cafeteria walls (see Table 3).

Table 3 - Where nutrition information is posted. (N=7; 5 sites have no posted information)

| | YES | NO |
|--------------|----------|----------|
| Where Posted | N (%) | N (%) |
| On menu | 2 (16.7) | 5 (41.7) |
| By food | 5 (41.7) | 2 (16.7) |
| Other | 5 (41.7) | 2 (16.7) |

Table 4 – Food options on campus besides tray meals. (N=12)

| | YES | NO |
|----------------------|------------|-----------|
| Type of Venue | N (%) | N (%) |
| Fast-food restaurant | 5 (41.7) | 7 (58.3) |
| Snack bar | 11 (91.7) | 1 (08.3) |
| Food cart | 7 (58.3) | 5 (41.7) |
| Vending machine | 12 (100.0) | 0 (00.0) |
| Other | 1 (08.3) | 11 (91.7) |

All of the FOR school sites offer food options on campus besides tray meals (see Table 4). Five (41.7%) have fast-food; 11 (91.7%) have snack bars; 7 (58.3%) have food carts; and all 12 have vending machines. Respondents were asked to list any healthy items available at the above mentioned venues. Very few sites listed any healthy items that were available for students to choose.

All of the high school sites had some type of promotion of healthy eating that could be seen or heard on campus (see Table 5). Most were in the form of posters or signs (11; 91.7%). Eight (66.7%) sites listed other types of promotions and events such as health fairs, taste tests, and contests.

Table 5 - Healthy eating promotions seen or heard on campus. (N=12)

| Type of Healthy Eating | YES | NO |
|------------------------|-----------|----------|
| Promotion | N (%) | N (%) |
| Posters/signs | 11 (91.7) | 1 (08.3) |
| Student newspaper | 5 (41.7) | 7 (58.3) |
| Over P.A. | 6 (50.0) | 6 (50.0) |
| Parent newsletter | 4 (33.3) | 8 (66.7) |
| Other | 8 (66.7) | 4 (33.3) |

Physical Activity

Table 6 - Physical activity options & facilities during school. (N=12)

| | YES | NO |
|---------------------|-----------|-----------|
| • | N (%) | N (%) |
| Sports club | 2 (16.7) | 10 (83.3) |
| Playing fields | 6 (50.0) | 6 (50.0) |
| Weight room | 7 (58.3) | 5 (41.7) |
| Basketball courts | 10 (83.3) | 2 (16.7) |
| Check-out equipment | 3 (25.0) | 9 (75.5) |
| Other | 7 (58.3) | 5 (41.7) |

Physical activity options available to students during school greatly varied between the sites (see Table 6). Most sites had a weight room available for use during school (7; 58.3%) and basketball courts (10; 83.3%). Other options listed were lunchtime student-organized activities like indoor soccer, walking, and hacky sack games.

Table 7 - Physical activity options & facilities after school. (N=12)

| | YES | NO |
|----------------------|-----------|----------|
| | N (%) | N (%) |
| School teams | 11 (91.7) | 1 (08.3) |
| Sports clubs | 5 (41.7) | 7 (58.3) |
| School fields/courts | 11 (91.7) | 1 (08.3) |
| Weight rooms | 8 (66.7) | 4 (33.3) |
| City rec. basketball | 5 (41.7) | 7 (58.3) |
| YMCA/YWCA | 4 (33.3) | 8 (66.7) |
| Boy's/Girl's Clubs | 5 (41.7) | 7 (58.3) |
| City leagues | 5 (41.7) | 7 (58.3) |
| Health club/gym | 5 (41.7) | 7 (58.3) |
| Other | 6 (50.0) | 6 (50.0) |

After-school physical activity options varied as well, but were limited (see Table 7). Eleven sites (91.7%) reported school teams as an after-school option, however it was not specified as to whether the teams were competitive or recreational. Eleven sites also reported the availability of weight rooms. Fifty percent or fewer of the sites reported availability of the other options and facilities listed on the survey, including the "other" category.

Table 8 - Physical activity promotions seen or heard on campus. (N=12)

| Type of Physical Activity | YES | NO |
|---------------------------|-----------|----------|
| Promotion | N (%) | N (%) |
| Posters/signs | 10 (83.3) | 2 (16.7) |
| Student paper | 8 (66.7) | 4 (33.3) |
| Over P.A. | 8 (66.7) | 4 (33.3) |
| Parent newsletter | 8 (66.7) | 4 (33.3) |
| Other | 9 (75.0) | 3 (25.0) |

All but one site reported the promotion of physical activity on campus (see Table 8). Ten (83.3%) of the sites reported using posters and signs to promote physical activity on campus. Each of the eight sites reported using the student newspaper, the public announcement (P.A.) system, and a parent newsletter. Nine (75%) sites listed other types of promotions or events similar to what was reported in the promotion of healthy eating.

Based on the responses to the survey, environmental assessment scores were computed (see Table 9). The scoring process was described in the Methods section of this report. Out of a possible 9.0 points, the mean Healthy Foods Score was 5.4. Out of a possible 5.0 points, the mean Healthy Eating Promotion Score was 2.8. Out of a possible 6.0 points, the mean School Physical Activity Score was 2.9. The mean After-school Physical Activity score was 5.4 out of a possible 10.0 points and the mean Physical Activity Promotion score was 3.6 out of a possible 5.0.

Comparison to 1996-1997 Project Year

Paired t-tests were conducted on the environmental assessment scores for six of the sites with Environment Survey data from the previous project year (see Table 10).

There was no significant mean difference in the Healthy Foods score, School Physical Activity score, and After School Physical Activity Score.

Significant mean differences were found in both the Healthy Eating Promotion score (x diff = 1.83; t = 3.84) and the Physical Activity Promotion score (x diff = 2.0; t = 3.16) at the p< .05 level of significance. The mean scores from the 1997-1998 project year were significantly higher than the previous year. The higher score represents more

promotion occurring and being conducted at the FOR sites in regards to healthy eating and physical activity.

Table 9 - Environmental assessment scores.

| CPL Region | FOR Site | Healthy foods score | Healthy Eating Promo Score | School Physical Activity Score | After-school Physical Activity Score | Physical Activity Promo Score |
|-----------------------|------------------------|---------------------|----------------------------------|--------------------------------------|--------------------------------------------|-------------------------------------|
| | Total Possible: | 9.0 | 5.0 | 6.0 | 10.0 | 5.0 |
| Bay Area | Andrew Hill | 8.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Central Valley | Mendota | 4.0 | 3.0 | 1.0 | 5.0 | 2.0 |
| Gold Coast | Ernest Righetti | 8.0 | 1.0 | 4.0 | 5.0 | 4.0 |
| Gold Country | Encina | 5.0 | 4.0 | 3.0 | 3.0 | 4.0 |
| Great South | Fontana | 5.0 | 1.0 | 4.0 | 9.0 | 4.0 |
| | Colton | 6.0 | 5.0 | 2.0 | 8.0 | 5.0 |
| Los Angeles | San Fernando | 8.0 | 3.0 | 4.0 | 6.0 | 4.0 |
| North Central | King City | 2.0 | 3.0 | 0 | 1.0 | 0 |
| North Coast | Del Norte | 5.0 | 1.0 | 2.0 | 8.0 | 2.0 |
| | Zoe Barnum | 5.0 | 3.0 | 1.0 | 2.0 | 3.0 |
| Sierra Cascade | Anderson | 2.0 | 2.0 | 3.0 | 7.0 | 5.0 |
| Southern Coast | Herbert Hoover | 7.0 | 3.0 | 6.0 | 7.0 | 5.0 |
| | Mean (sd) | 5.4 (2.1) | 2.8 (1.4) | 2.9 (1.8) | 5.4 (2.5) | 3.6 (1.6) |
| | Median | 5.0 | 3.0 | 3.0 | 5.5 | 4.0 |

Table 10 - Paired t-tests: Comparison of environmental assessment scores for '96-'97 and '97-'98. (N=6)

| | Mean '96-'97 (sd) | Mean '97-'98 (sd) | t | Significance |
|------------------------------------------|-------------------|-------------------|------|--------------|
| Healthy Foods Score | 4.5 (1.9) | 5.3 (1.8) | 1.17 | .289 |
| Healthy Eating Promotion Score* | 2.0 (.63) | 3.8 (.98) | 3.84 | *.012 |
| School Physical Activity Score | 2.3 (1.4) | 2.8 (2.3) | .50 | .636 |
| After-School Physical Activity Score* | 3.8 (.98) | 4.7 (2.6) | .62 | .565 |
| Physical Activity Promotion Score | 1.5 (.84) | 3.5 (2.1) | 3.16 | *.025 |

^{*}p< .05

Discussion

The data analysis performed on the data from the Environment Survey was simple and straight forward, yet very telling. One of the most obvious conclusions that can be drawn from examining the results is that more work needs to be done in the area of physical activity, especially in increasing the options for adolescents. Most of the sites appear to have adequate resources to promote physical activity, however, there needs to be more options to promote. Also, both the physical activity options and the promotion of them should move in the direction of lifelong physical activity (rather than competitive sports), i.e., encourage physical activity among youth that can continue on into adulthood so that they may obtain the benefits throughout life (CDC, 1997; Pate, Small, Ross, et al., 1995). For example, most sites have reported having playing fields and/or courts, therefore, a variety of non-competitive activities should be promoted that can be done on those fields and courts: games, walking, recreational organized sports, equipment check-out.

It is important to keep in mind that the data that has been reported reflects an environmental assessment and **not** actual physical activity (or healthy eating) behavior. The level of use of the physical activity options at the FOR sites is not yet known. That information will be revealed after the analysis of the FOR Student Survey data. Results from the most recent Youth Risk Behavior Surveillance (YRBS), however, have clearly identified that "not participating in moderate [or vigorous] physical activity," and "not attending P.E. class daily" places teens at risk for serious health problems (CDC, 1998). Not surprisingly, this Environment Survey data does suggest that regular physical activity is not occurring since there is not a variety of physical activity options to promote that

encourages daily movement. This is an area in need of attention. This survey data also points to some policy issues that can be addressed: more access to space and equipment; extending hours of availability of facilities in the schools and around the community; making available supervision at facilities; making physical education mandatory; increasing instruction of lifelong physical activity; and safe transportation to and from home for after-school activities.

There has been some improvement in the area of increasing healthy eating options, however, survey results indicate that the next logical and appropriate step in order to make more sustainable changes is to take action in the area of policy.

Adolescents not only need nutrition education; they also need leadership training that prepares them to become policy change agents. Clearly there is room for improvement in this area, especially since every site has more than one alternative to eating a tray lunch at school. All of the FOR sites have vending machines. Getting healthy snacks in the vending machines is a policy that all the teens can work toward. Permanently including daily selections of low-fat, healthy foods such as fresh fruits and vegetables on a la carte and fast food menus can be another project. Expressing the need for such changes is more compelling when it comes from teens and there is hard evidence to support it.

As mentioned earlier, all survey respondents had the opportunity to respond to two open-ended questions (see Appendix B). Although the responses demonstrated concerted efforts towards promoting healthy eating and physical activity, and success in increasing the visibility of FOR on campuses, the majority of the events were in the form of "one-shot" awareness campaigns. In other words, many events were without

consistent follow-through to support the longevity of the healthy message(s), and did not clearly connect to a specific policy issue.

Recommendations

- Increase physical activity options to promote use before, during, and after school.
- Promote and increase lifelong physical activity options.
- > Begin to address physical activity policy issues specific to each FOR site.
- Focus efforts on policy changes to improve healthy eating.
- ➤ Educate and train teens on advocacy and policy change, and fully engage them throughout the entire process.
- ➤ Link promotions and events to selected healthy eating and physical activity policy issues throughout the project year.
- > Strategically use this Environment Survey data to support policy and environmental change efforts (all tables are in Appendix A).

References

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Appendix A

Tables

Table A2 - Low-fat, fat-free, healthy food options offered in cafeteria. (N=12)

| | YES | NO |
|------------------------|-----------|----------|
| | N (%) | N (%) |
| Salad/fresh vegetables | 8 (66.7) | 4 (33.3) |
| Low-fat dressing | 3 (25.0) | 9 (75.0) |
| Fresh fruit | 11 (91.7) | 1 (08.3) |
| Dried/canned fruit | 10 (83.3) | 2 (16.7) |
| Non-fat milk | 5 (41.7) | 7 (58.3) |
| 1% milk | 10 (83.3) | 2 (16.7) |
| Low-fat entrée | 8 (66.7) | 4 (33.3) |
| Vegetarian entrée | 6 (50.0) | 6 (50.0) |
| other | 4 (33.3) | 8 (66.7) |

Table A3 - Low-fat, fat-free, healthy food items offered in cafeteria by region and site.

| CPL Region | FOR Site | Salad/fr. | Lf- | Fr. fruit | Other | Nf-milk | 1% milk | Lf- | Veg. | other |
|---------------------|--------------------|-----------|--------|-----------|-------|---------|---------|--------|--------|-------|
| | | veg. | drsng. | | fruit | | | entree | entree | |
| Bay Area | Andrew Hill | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes |
| Central Valley | Mendota | No | No | Yes | No | Yes | Yes | Yes | No | No |
| Gold Coast | Ernest Righetti | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Gold Country | Encina | Yes | No | Yes | Yes | No | Yes | Yes | No | No |
| Great South | Fontana | Yes | No | Yes | Yes | Yes | No | No | No | Yes |
| | Colton | Yes | No | Yes | Yes | Yes | Yes | No | Yes | No |
| Los Angeles | San Fernando | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| North Central | King City | No | No | No | Yes | No | Yes | No | No | No |
| North Coast | Del Norte | Yes | Yes | Yes | Yes | No | No | Yes | No | No |
| | Zoe Barnum | No | No | Yes | Yes | No | Yes | Yes | Yes | No |
| Sierra Cascade | Anderson | No | No | Yes | No | No | Yes | No | No | No |
| Southern Coast | Herbert Hoover | Yes | No | Yes | Yes | No | Yes | Yes | Yes | Yes |

Table A4 - Type of nutrition info posted for foods. (N=12)

| N | YES | NO |
|-----------------------|----------|-----------|
| Nutrition Information | N (%) | N (%) |
| Low-fat | 3 (25.0) | 9 (75.0) |
| Fat-free | 1 (8.3) | 11 (91.7) |
| Nutrition label | 1 (8.3) | 11 (91.7) |
| Other | 4 (33.3) | 8 (66.7) |
| None | 5 (41.7) | 7 (58.3) |

Table A5 - Type of nutrition info posted for foods by region and site.

| CPL Region | FOR Site | Low-fat | Fat-free | Nutr. | Other | None |
|---------------------|-----------------|---------|----------|-------|-------|------|
| | | | | label | | |
| Bay Area | Andrew Hill | Yes | No | No | Yes | No |
| Central Valley | Mendota | Yes | No | No | No | No |
| Gold Coast | Ernest Righetti | No | No | No | No | Yes |
| Gold Country | Encina | No | No | No | No | Yes |
| Great South | Fontana | No | No | No | Yes | No |
| | Colton | No | Yes | No | Yes | No |
| Los Angeles | San Fernando | Yes | No | No | No | No |
| North Central | King City | No | No | No | No | Yes |
| North Coast | Del Norte | No | No | No | Yes | No |
| | Zoe Barnum | No | No | No | No | Yes |
| Sierra Cascade | Anderson | No | No | Yes | No | No |
| Southern Coast | Herbert Hoover | No | No | No | No | Yes |

Table A6 - Where nutrition information is posted. (N=7; 5 sites have no posted information)

| | YES | NO |
|--------------|----------|----------|
| Where Posted | N (%) | N (%) |
| On menu | 2 (16.7) | 5 (41.7) |
| By food | 5 (41.7) | 2 (16.7) |
| Other | 5 (41.7) | 2 (16.7) |

Table A7 – Food options on campus besides tray meals. (N=12)

| | YES | NO |
|----------------------|------------|-----------|
| Type of Venue | N (%) | N (%) |
| Fast-food restaurant | 5 (41.7) | 7 (58.3) |
| Snack bar | 11 (91.7) | 1 (08.3) |
| Food cart | 7 (58.3) | 5 (41.7) |
| Vending machine | 12 (100.0) | 0 (00.0) |
| Other | 1 (08.3) | 11 (91.7) |

Table A8 - Food options on campus besides tray meals by region and site.

| CPL Region | FOR Site | Fast- | How | Snack | How | Food | How | Vend. | How | Other | How |
|-----------------------|-----------------|-------|------|-------|------|------|------|-------|------|-------|------|
| | | food | Many | Bar | Many | Cart | Many | Mach. | Many | | Many |
| Bay Area | Andrew Hill | No | 0 | Yes | 2 | Yes | 1 | Yes | 15 | Yes | 1 |
| Central Valley | Mendota | No | 0 | Yes | 1 | No | 0 | Yes | 2 | No | 0 |
| Gold Coast | Ernest Righetti | No | 0 | Yes | 1 | Yes | 2 | Yes | 8 | No | 0 |
| Gold Country | Encina | Yes | 3 | Yes | 1 | No | 0 | Yes | 2 | No | 0 |
| Great South | Fontana | Yes | 3 | Yes | 3 | Yes | 6 | Yes | 6 | No | 0 |
| | Colton | Yes | 2 | Yes | 1 | Yes | 8 | Yes | 10 | No | 0 |
| Los Angeles | San Fernando | Yes | 2 | Yes | 1 | Yes | 3 | Yes | 8 | No | 0 |
| North Central | King City | No | 0 | Yes | 1 | No | 0 | Yes | 1 | No | 0 |
| North Coast | Del Norte | No | 0 | Yes | 1 | No | 0 | Yes | 1 | No | 0 |
| | Zoe Barnum | No | 0 | No | 0 | No | 0 | Yes | 3 | No | 0 |
| Sierra Cascade | Anderson | No | 0 | Yes | 1 | Yes | 1 | Yes | 1 | No | 0 |
| Southern Coast | Herbert Hoover | Yes | 5 | Yes | 1 | Yes | 6 | Yes | 1 | No | 0 |
| | Mean | | 1.25 | | 1.17 | | 2.25 | | 4.83 | | n/a |
| | Median | | 0 | | 1.00 | | 1.00 | | 2.50 | | 0 |

Table A9 - Healthy eating promotions seen or heard on campus. (N=12)

| Type of Healthy Eating | YES | NO |
|------------------------|-----------|----------|
| Promotion | N (%) | N (%) |
| Posters/signs | 11 (91.7) | 1 (08.3) |
| Student newspaper | 5 (41.7) | 7 (58.3) |
| Over P.A. | 6 (50.0) | 6 (50.0) |
| Parent newsletter | 4 (33.3) | 8 (66.7) |
| other | 8 (66.7) | 4 (33.3) |

Table A10 - Healthy eating promotions seen or heard on campus by region and site.

| CPL Region | FOR Site | Posters/ | Student | Over | Parent | other |
|----------------------|-----------------|----------|-----------|------|------------|-------|
| | | signs | Newspaper | P.A. | Newsletter | |
| Bay Area | Andrew Hill | Yes | Yes | Yes | Yes | Yes |
| Central Valley | Mendota | Yes | No | No | Yes | Yes |
| Gold Coast | Ernest Righetti | Yes | No | No | No | No |
| Gold Country | Encina | Yes | Yes | Yes | No | Yes |
| Great South | Fontana | Yes | No | No | No | No |
| | Colton | Yes | Yes | Yes | Yes | Yes |
| Los Angeles | San Fernando | Yes | No | Yes | No | Yes |
| North Central | King City | Yes | Yes | Yes | No | No |
| North Coast | Del Norte | No | No | No | No | Yes |
| | Zoe Barnum | Yes | Yes | No | No | Yes |
| Sierra Cascade | Anderson | Yes | No | No | Yes | No |
| Southern Coast | Herbert Hoover | Yes | No | Yes | No | Yes |

Table A11 - Physical activity options & facilities during school. (N=12)

| | YES | NO |
|---------------------|-----------|-----------|
| | N (%) | N (%) |
| Sports club | 2 (16.7) | 10 (83.3) |
| Playing fields | 6 (50.0) | 6 (50.0) |
| Weight room | 7 (58.3) | 5 (41.7) |
| Basketball courts | 10 (83.3) | 2 (16.7) |
| Check-out equipment | 3 (25.0) | 9 (75.5) |
| other | 7 (58.3) | 5 (41.7) |

Table A12 - Physical activity options & facilities during school by region and site.

| CPL Region | FOR Site | Sports | Playing | Weight | B-ball | Check-out | Other |
|---------------------|-----------------|--------|---------|--------|--------|-----------|-------|
| | | Club | fields | Room | courts | equip | |
| Bay Area | Andrew Hill | No | Yes | Yes | Yes | Yes | Yes |
| Central Valley | Mendota | No | No | No | Yes | No | No |
| Gold Coast | Ernest Righetti | No | Yes | Yes | Yes | No | Yes |
| Gold Country | Encina | No | No | No | Yes | Yes | Yes |
| Great South | Fontana | No | Yes | Yes | Yes | No | Yes |
| | Colton | No | No | No | Yes | No | Yes |
| Los Angeles | San Fernando | Yes | Yes | Yes | Yes | No | No |
| North Central | King City | No | No | No | No | No | No |
| North Coast | Del Norte | No | No | Yes | Yes | No | No |
| | Zoe Barnum | No | No | Yes | No | No | No |
| Sierra Cascade | Anderson | No | Yes | No | Yes | No | Yes |
| Southern Coast | Herbert Hoover | No | Yes | Yes | Yes | Yes | Yes |

Table A13 - Physical activity options & facilities after school. (N=12)

| | YES | NO |
|----------------------|-----------|----------|
| | N (%) | N (%) |
| School teams | 11 (91.7) | 1 (08.3) |
| Sports clubs | 5 (41.7) | 7 (58.3) |
| School fields/courts | 11 (91.7) | 1 (08.3) |
| Weight rooms | 8 (66.7) | 4 (33.3) |
| City rec. basketball | 5 (41.7) | 7 (58.3) |
| YMCA/YWCA | 4 (33.3) | 8 (66.7) |
| Boy's/Girl's Clubs | 5 (41.7) | 7 (58.3) |
| City leagues | 5 (41.7) | 7 (58.3) |
| Health club/gym | 5 (41.7) | 7 (58.3) |
| Other | 6 (50.0) | 6 (50.0) |

Table A14 - Physical activity options & facilities after school by region and site.

| CPL Region | FOR Site | School | Sports | School | Weight | City | YMCA/ | Boys/Girls | City | Health | other |
|-----------------------|------------------|--------|--------|------------|--------|--------|-------------|------------|--------|--------|-------|
| | | teams | Clubs | flds./cts. | room | b-ball | YWCA | club | league | club | |
| Bay Area | Andrew Hill | Yes | No | Yes | Yes | No | No | No | No | No | Yes |
| Central Valley | Mendota | Yes | No | Yes | Yes | No | No | Yes | Yes | No | No |
| Gold Coast | Ernest Righetti | Yes | No | Yes | Yes | No | Yes | No | No | Yes | No |
| Gold Country | Encina | Yes | No | Yes | Yes | No | No | No | No | No | No |
| Great South | Fontana | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| | Colton | Yes | No | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Los Angeles | San Fernando | Yes | Yes | Yes | No | Yes | No | Yes | No | No | Yes |
| North Central | King City | Yes | No | No | No | No | No | No | No | No | No |
| North Coast | Del Norte | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes |
| | Zoe Barnum | No | No | Yes | No | No | No | Yes | No | No | No |
| Sierra Cascade | Anderson | Yes | Yes | Yes | Yes | No | No | No | Yes | Yes | Yes |
| Southern Coast | Herbert Hoover | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No |

Table A15 - Physical activity promotions seen or heard on campus. (N=12)

| Type of Physical Activity | YES | NO |
|---------------------------|-----------|----------|
| Promotion | N (%) | N (%) |
| Posters/signs | 10 (83.3) | 2 (16.7) |
| Student paper | 8 (66.7) | 4 (33.3) |
| Over P.A. | 8 (66.7) | 4 (33.3) |
| Parent newsletter | 8 (66.7) | 4 (33.3) |
| other | 9 (75.0) | 3 (25.0) |

Table A16 - Physical activity promotions seen or heard on campus by region and site.

| CPL Region | FOR Site | Posters/ signs | Student newspapers | Over P.A. | Parent newsletter | Other |
|-----------------------|-----------------|-------------------|-----------------------|--------------|----------------------|-------|
| Bay Area | Andrew Hill | Yes | Yes | Yes | Yes | Yes |
| Central Valley | Mendota | Yes | No | No | No | Yes |
| Gold Coast | Ernest Righetti | Yes | Yes | Yes | No | Yes |
| Gold Country | Encina | Yes | Yes | Yes | No | Yes |
| Great South | Fontana | Yes | Yes | Yes | Yes | No |
| | Colton | Yes | Yes | Yes | Yes | Yes |
| Los Angeles | San Fernando | Yes | No | Yes | Yes | Yes |
| North Central | King City | No | No | No | No | No |
| North Coast | Del Norte | No | No | No | Yes | Yes |
| | Zoe Barnum | Yes | Yes | No | Yes | No |
| Sierra Cascade | Anderson | Yes | Yes | Yes | Yes | Yes |
| Southern Coast | Herbert Hoover | Yes | Yes | Yes | Yes | Yes |

Table A17 - Environmental assessment scores.

| CPL Region | FOR Site | Healthy foods score | Healthy Eating Promo Score | School Physical Activity Score | After-school Physical Activity Score | Physical Activity Promo Score |
|-----------------------|------------------------|---------------------|----------------------------------|--------------------------------------|--------------------------------------------|-------------------------------------|
| | Total Possible: | 9.0 | 5.0 | 6.0 | 10.0 | 5.0 |
| Bay Area | Andrew Hill | 8.0 | 5.0 | 5.0 | 4.0 | 5.0 |
| Central Valley | Mendota | 4.0 | 3.0 | 1.0 | 5.0 | 2.0 |
| Gold Coast | Ernest Righetti | 8.0 | 1.0 | 4.0 | 5.0 | 4.0 |
| Gold Country | Encina | 5.0 | 4.0 | 3.0 | 3.0 | 4.0 |
| Great South | Fontana | 5.0 | 1.0 | 4.0 | 9.0 | 4.0 |
| | Colton | 6.0 | 5.0 | 2.0 | 8.0 | 5.0 |
| Los Angeles | San Fernando | 8.0 | 3.0 | 4.0 | 6.0 | 4.0 |
| North Central | King City | 2.0 | 3.0 | 0 | 1.0 | 0 |
| North Coast | Del Norte | 5.0 | 1.0 | 2.0 | 8.0 | 2.0 |
| | Zoe Barnum | 5.0 | 3.0 | 1.0 | 2.0 | 3.0 |
| Sierra Cascade | Anderson | 2.0 | 2.0 | 3.0 | 7.0 | 5.0 |
| Southern Coast | Herbert Hoover | 7.0 | 3.0 | 6.0 | 7.0 | 5.0 |
| | Mean (sd) | 5.4 (2.1) | 2.8 (1.4) | 2.9 (1.8) | 5.4 (2.5) | 3.6 (1.6) |
| | Median | 5.0 | 3.0 | 3.0 | 5.5 | 4.0 |

Table A18 - Paired t-tests: Comparison of environmental assessment scores for '96-'97 and '97-'98. (N=6)

| | Mean '96-'97 (sd) | Mean '97-'98 (sd) | t | Significance |
|---------------------------------------|-------------------|-------------------|------|--------------|
| Healthy Foods Score | 4.5 (1.9) | 5.3 (1.8) | 1.17 | .289 |
| Healthy Eating Promotion Score | 2.0 (.63) | 3.8 (.98) | 3.84 | *.012 |
| School Physical Activity Score | 2.3 (1.4) | 2.8 (2.3) | .50 | .636 |
| After-School Physical Activity Score | 3.8 (.98) | 4.7 (2.6) | .62 | .565 |
| Physical Activity Promotion Score | 1.5 (.84) | 3.5 (2.1) | 3.16 | *.025 |

^{*}p<.05

Appendix B

Open-Ended Responses

This year, How Did Project LEAN Students and Their Activities CHANGE THE ENVIRONMENT?

8. What changes did Project LEAN students make this year in the availability of healthy food for teens?

BAY AREA

- Surveys, contests, taste-testing
- Improved choices in cafeteria by being NAC and working with school food services department.

CENTRAL VALLEY

Promoted 1% or less milk to students and cafeteria staff (who then eliminated 2% milk)

GOLD COAST

• Poster placement of "Squeeze the Fat" in cafeteria prep area and health education classrooms only – not in "point-of-sale" locations to date.

GOLD COUNTRY

Several student advocates met with Dana Malone, San Juan School District Dietician, to discuss and give input for the 1998-1999 menu after the CFSA (California Food Service Association) meeting. Next year the menu will include new breakfast and snack bar items

GREAT SOUTH

- Project LEAN students conducted a survey on campus to determine students' perception of healthy eating and food offered on campus.
- The survey results were presented to the food service manager.
- Of the students surveyed, 84% would buy healthy food on campus if more options were available.
- The food Service Director for Fontana Unified School District has agreed to have a "healthy cart" on campus.
- The "healthy cart" will be promoted on the commercial that the peer advocates have developed to promote healthy eating and physical activity.
- The commercial will be shown in every class reaching approximately 4,000 students.
- Project LEAN students incorporated healthy snacks (fruit, pretzels, H20) at their UNITY* forums.
- They conducted a 1% milk Taste Test to encourage other students and their families to switch to Low-fat milk.
- Project LEAN also went to a local church and expressed the importance of making healthy food choices and drinking low-fat milk for the "Topic Night."
- They also sold a low-fat strawberry shortcake for a school fundraiser.

LOS ANGELES

• The students encouraged the cafeteria and now they are providing more healthy choice entrees and promoting them to students much more than before, also more display cases promote messages about good nutrition, fruits and vegetables, and cafeteria wears "Food on the Run" shirts a few times per month.

NORTH CENTRAL COAST

- More low-fat snack choices in school's vending machine.
- Awareness of fat content in fast foods/snacks sold at school.
- Backpack snack idea.

NORTH COAST

- We made the first contact with the vending machine companies about interest in having healthier options in machines.
- Had cooking classes and tasting and gave out the recipes.
- Just getting advocates together.

SIERRA-CASCADE

- Began marketing the available healthy foods to the students via signs and nutrition information.
- Helped identify healthier choices to popular high fat foods.

SOUTHERN COAST

• Provided students with low-fat Project LEAN cart during lunch hours.

9. What changes did Project LEAN students make this year in the availability of physical activity for teens?

BAY AREA

- Students focus was on increasing awareness and educating others re: the importance of physical activity.
- Project LEAN purchased six soccer balls and basketball jerseys for use during after-school activity sessions. (in mentored b-ball games, HS students teach MS students)

CENTRAL VALLEY

Sponsored a Dance

GOLD COAST

• Awareness level of heart rate and aerobic exercise definition in health education classes provided by Project LEAN every nine weeks to 3 classes each quarter.

GOLD COUNTRY

• The LEAN advocates successfully communicated the need for more physical activity on campus by staffing a physical activity table near the cafeteria. Students will continue the activity table monthly next year.

GREAT SOUTH

- Project LEAN students have worked hard this year developing and planning a commercial to promote both healthy eating and physical activity.
- The commercial is to be aired in every classroom over the school broadcast system, Steeler News Network (a student-run news broadcast).
- The commercial is planned to be completed by the end of this school year.
- Project LEAN students incorporated physical activity into their UNITY* forums as an "ice-breaker."
- Project LEAN also incorporated a physical activity component at "Topic Night" for youth (teens) at a local church.

*There are 4 UNITY forums at Colton and 1 reunion forum. About 50-80 students attend each UNITY forum and representatives form the local Police Department attend.

LOS ANGELES

- The school has added some new physical activity classes that included treadmill, ping-pong and other things students considered "fun" activities, while LEAN was not <u>solely</u> responsible but have been advocating for more option for 2 years.
- Peers have been added to Recreation Advisory Task Force and provide input for more options as Director for the Center plans to use opportunity created by year round track more students off 2 months.
- Students are writing up suggestions for Director of Ritchie V. Recreation who has taken our results and comments from LEAN peer developed survey of the 96-97 year looking at

- physical activity options and trying to plan his new budget and working with the year round track ideas to promote more phys.Ed Options.
- Those students off track are not really able to come on campus during regular school so we need more for them during that time.

NORTH CENTRAL COAST

- We are providing a P.E. class
- We introduced teens to a nearby park with walking trails during our community walking even in March.
- We've worked on cleaning up the weight room and making it more accessible to students
- Just getting advocates together.

SIERRA-CASCADE

- Students began to educate each other on the variety of physical activity options available other than traditional sports such as football and basketball.
- Promoted idea of physical activity to community through dance and presentations.

SOUTHERN COAST

• Provided "Hoops for Heart" program (3-on-3 b-ball tournament) to students.