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# Center for Weight & Health

## Center Information Sheet

### Cafeteria Facilities, Often Overlooked, Yet Key to Student Nutrition and Health

Findings from three important state-wide studies conducted by the Center for Weight and Health in California suggest that school facilities are a critical element of any effort to improve student nutrition and health, yet these facilities are often inadequate to support student wellness. These studies include:

- The Linking Education, Activity and Food (LEAF) Program conducted in 15 secondary schools that received funding to pilot the development and implementation of nutrition and physical activity policies as outlined in SB 19, the Pupil Nutrition, Health Achievement Act of 2001.
- The California Fresh Start Program (CFSP) evaluation conducted in a random sample of 69 schools that received a legislatively-mandated 10 cents per meal additional reimbursement for breakfast in order to encourage schools to provide additional fruits and vegetables.
- The Evaluation of SB 12 and 965 (California's legislatively-mandated school nutrition standards) conducted in 50 randomly selected high schools to assess the impact of the nutrition standards on the school food environment, food sales and student intake.

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*The physical environment in which school foods are prepared and served is critical to the success of any program designed to improve student food consumption*

A comprehensive study in 2007 of the impact of California's legislatively-mandated Fresh Start program demonstrated that an investment in (1) facilities where fresh fruit can be adequately stored and prepared and (2) modernized attractive dining facilities with adequate space for students to eat indoors or out has the potential to attract significantly higher participation in school food programs and encourage higher intake of fresh fruits and vegetables and more satisfaction among students.

For more information on the  
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**Most LEAF schools needed to upgrade their facilities in order to improve their menu offerings**

*School kitchen and dining facilities influence food service revenues*

- Of all the changes made to LEAF school kitchen facilities, the addition of food preparation and serving equipment seemed to correlate with the greatest increases in food service per capita gross revenues.
- 58% of LEAF sites that increased the number of stations where students can purchase food (points of sale) improved their food service per capita gross revenues by 5% or more.
- Three of the four LEAF sites whose food service gross revenues increased by 20% or more, and all but one of the eight sites whose revenues increased by 5-19%, made improvements to their indoor eating areas.

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*Serving healthy options to students requires adequate kitchen and dining facilities*

- 81% of the 16 secondary schools that participated in the LEAF program reported that it was necessary to upgrade their food preparation procedures and serving equipment (e.g. carts, salad bars) in order to bring about improvements to the menu offerings.
- Many LEAF schools needed to increase their storage/shelving capacity to accommodate larger orders of fresh produce.
- Evaluation of the California Fresh Start program demonstrated that the quality of cafeteria facilities can influence food service ability to store, prepare, and serve fruits and vegetables as well as other breakfast food options. Inadequate facilities limit the amount, quality and appeal of the options that are provided to students. Among the schools surveyed, 33% felt that lack of storage space was a barrier and 25% thought that inadequate kitchen facilities were a barrier to providing an additional serving of fruits and vegetables.
- Despite salad bar popularity and potential to increase fruit and vegetable consumption, survey results suggest that only 28% of high schools have salad bars at lunch and only 4% of all schools that participated in the Fresh Start Program served fruit on a salad-type bar at breakfast.

•Because the Fresh Start program neither mandated nor provided funding specifically for facilities improvement, only about 9% of the schools made improvements to any of the following: kitchen, dining area, serving areas, or points of service. However, survey results suggested that many facilities are in need of improvement and inadequate facilities are probably impeding program success. Measures to improve the appeal of fruits and vegetables that involve materials and equipment such as salad bars would likely lead to higher student consumption of healthful choices, but could also financially strain school food service departments.

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*School kitchen and dining facilities influence student attitudes and food choices*

- Equipment upgrades such as computerized points of service that either scan lunch cards or use a keypad/PIN identification system can make it virtually impossible to distinguish which students are receiving subsidized lunches. Such systems reduce the stigma associated with the free and reduced meal program and may thereby increase student participation in the program. Several LEAF schools installed or upgraded their computer equipment for this purpose.
- According to LEAF stakeholders, an increase in the number of points of service (e.g. by adding new service windows, food carts, or 2-sided salad bars) increases the number of students that can be served and allows students more adequate time to consume their meal before class starts. A random survey of California high schools revealed that inadequate points of service forced one-third of students who sought school meals to wait on long slow-moving lines despite the brief time allocated for meal breaks.
- A random survey of 50 California high schools revealed that 25% did not have indoor dining facilities for students. During site visits for a similar project, the researchers observed schools where students had to stand in lines outside (rain or shine) to be served a meal. Some schools set up portable equipment to serve the meals outside because there were no indoor facilities for meal service. Outdoor eating areas were available at most schools, however, few of them had sufficient seating and tables to accommodate student demand. At some schools, students must crowd into hallways to eat when it is raining and must sit on benches or flower boxes in the quad because there are no seats or tables provided for dining.

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**Dining  
ambience and  
space were  
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of fruits and  
vegetables  
taken by  
students**

- Almost one-third of schools observed for the Fresh Start program evaluation did not have sufficient facilities to seat all students comfortably. Of the randomly selected high schools participating in the evaluation of SB 12 and 965 the majority did not have sufficient indoor or outdoor dining or seating for students. Of the schools that were observed by research staff, although most were rated as “adequate,” only 26% of indoor facilities and 19% of outdoor dining facilities were rated as “pleasant.”

- Both measures of dining ambience and adequate space were correlated with the number of servings of fresh and/or total fruits and vegetables taken by students attending the 16 schools that were visited as part of the Fresh Start program evaluation.

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*Nutrition services staff identify expanding and improving kitchen and dining facilities as critical elements of a successful school meal program*

- Staff at two-thirds of LEAF sites reported that the efficiency and visual appeal of the cafeteria (e.g. number of tables, “healthy” theme decorations, colorful signs, and newly painted walls) improved during the LEAF project.

- Nutrition services directors surveyed at 69 California schools participating in the Fresh Start program (23 elementary, 23 middle schools, and 23 high schools) that tried to increase the number of fresh fruits and vegetables taken by students said that their kitchen facilities were inadequate for fruit and vegetable preparation.

- Nutrition services directors surveyed for the California Fresh Start evaluation frequently mentioned facilities when asked to describe their needs. Most commonly they mentioned the need for more refrigerator and storage space. They also described the need for more and improved dining areas, serving areas, points of service, and attractive décor.

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