



***Linking Education,
Activity and Food***

(LEAF)

Why LEAF?

- Established by CDE Nutrition Services Division in response to California's childhood obesity epidemic
- LEAF pilot tested California Senate Bills 19 and 56 *Pupil Nutrition, Health and Achievement Act of 2001*
- SB 19/56 established nutrition standards for competitive foods and beverages sold on school campuses
- Impacted diverse campus venues: à la carte, student store, vending machines, athletics or activities departments

Allowable foods

SB 19/56

- Not more than 35% of total calories from fat (except nuts/seeds)
- Not more than 10% of total calories from saturated fat
- Not more than 35% of total weight from sugar (except fruits/vegetables)



Allowable beverages

SB 19/56

- **Water**
- **Flavored and regular milk**
- **Fruit-based drinks with at least 50% juice, no added sweeteners**
- **Sports drinks with no more than 42 g sweetener per 20 OZ.**



Pilot testing SB 19/56

- Grants of ~ \$200,000 were awarded to 16 middle and high schools in 9 California school districts
- 21-month grant period (Jan. 2003 – Sept. 2004) to:
 - » Implement SB 19/56
 - » Implement policies promoting the consumption of California-grown fresh produce (*Buy California Initiative 2002*)
 - » Formulate and adopt district-level nutrition and fitness policies

Question:

Can nutrition standards be implemented in a fiscally sustainable fashion?

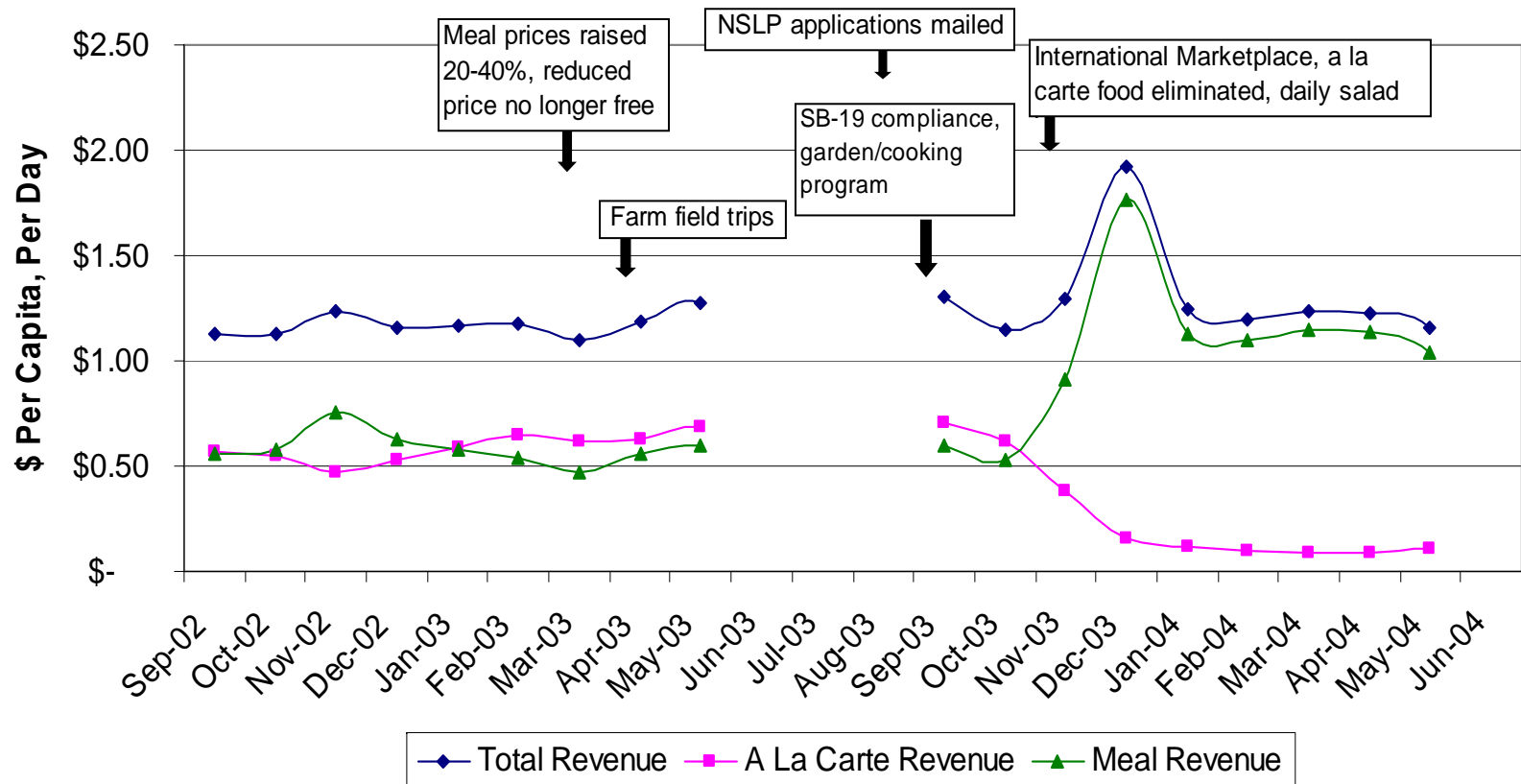
Fiscal data collection: SY 2002-03, SY 2003-04

SCHOOL FOOD SERVICE

(total and per capita)

- meal and à la carte gross revenues
- lunch, breakfast unit sales (free, reduced, full)
- operating expenditures
- net income

Middle School 2: Food Service Revenues Per Capita, Per Day¹



Fiscal data collection: SY 2002-03, SY 2003-04 ***NON-FOOD SERVICE*** *(total and per capita)*

- gross revenues by venue
- operating expenditures by venue
- net income by venue

Fiscal Results:

Food Service

Most sites (81%) increased their food service per capita gross revenues (1% to 38%):

↑ reimbursable meal sales
➤ (↑ appeal, availability)

↓ à la carte sales
➤ (↓ appeal, availability)

Improved meal sales at most sites was due to increased breakfast *and* lunch sales, especially in the “free” category.

This reflected:

A shift in FRP students *away* from à la carte purchases post-SB 19 compliance, and *toward* reimbursable meal purchases

Increased enrollment in FRP program

Revenue increases were greatest at sites that eliminated à la carte food sales entirely

- Only 1/3 of sites provided quantified food service expenditure data; all provided qualitative data
- Food service directors reported increases in ongoing expenditures related to fresh produce purchases, packaging and storage that generally did not exceed 6%
- Increased meal sale revenues generally OFFSET these ongoing costs

Fiscal Results:

Non-Food Service

- Most sites (70%) reported declines of 21% - 64% in per capita net income (\$1,274 – \$6,900 per school)
- These same sites reported concurrent increases in reimbursable meal sales, suggesting once again a shift in purchases toward the school meal program

These factors were key contributors to, and potential determinants of, increased food service gross revenues:

- Compliance with SB 19 nutrition standards
- Improved menu choices
- Elimination of à la carte food items
- Upgraded kitchen, serving and eating areas
- Increased efforts to promote FRP enrollment
- Mainstreamed, hands-on gardening and cooking courses
- Integral involvement by the Food Service Director

Conclusions

When reimbursable meals are the only foods available on campus, food service revenues can increase considerably provided that:

- » menu items meet a reasonable standard of quality and appeal**
- » facilities and time are adequate to meet student meal needs**

If meals must compete with non-food service sales, food service still can experience increased revenues provided that:

- » it minimizes its own à la carte food sales
- » menu offerings are appealing
- » facilities and time are adequate to meet student meal needs
- » all non-food service venues are SB 19 compliant

SB 19 compliance, in combination with improvements to the meal program, tends to reduce net income from competitive food and beverage sales by non-food service venues

- » **All students, and particularly low-income children, stand to benefit from this shift away from competitive foods and beverages to reimbursable meals**
- » **Student groups will need to explore alternate means of fundraising**

- Funding for one-time capital expenditures to upgrade food service kitchen, serving and eating areas, as well as accounting systems, likely will be required in order for schools to improve the quality and variety of menu offerings in conjunction with the implementation of nutrition standards.

- **School sites may require a substantive timeframe (1-2 years) to fully implement nutrition standards and adjust to the shifts in revenues and expenditures that will occur as a result of compliance**

Lessons Learned

*Analysis of LEAF Accomplishments
and Stakeholder Impacts*

(Food and Beverage Environment)

- **The development of district nutrition policy is a necessary first step to school nutrition reform, including the clear articulation and gradual phase-in of standardized regulations governing the sale of all campus competitive foods and beverages**

- **The implementation of nutrient standards for competitive foods needs to be complemented with increased availability and promotion of nutritious and appealing alternatives**

- **Innovative marketing of cafeteria food offerings can have a dramatic impact on sales, and should go hand-in-hand with menu improvements**
- **Cafeteria site staff are critical to the implementation of change within the food service department**

- **Increases in meal participation must be supported by expansion in food service capacity to efficiently serve increasing numbers of students**
- **Technology upgrades are necessary for school food service departments to improve their operations and conduct ongoing monitoring and evaluation of their programs**

Linking Education, Activity and Food (LEAF)

Fiscal Impact Evaluation

Annie Vargas
Gail Woodward-Lopez
Cheryl Proctor
Sarah Kim
Lisa Diemoz
Mary Lussier
Patricia Crawford

University of California, Berkeley

Center for Weight and Health

*Linking researchers and the community
to solve weight-related health problems*

Visit Our Website:

www.cnr.berkeley.edu

**Or
Contact:**

Gail Woodward-Lopez
gwlopez@nature.berkeley.edu
510-642-2915