



# Successful Evaluation Strategies: California

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February 21, 2008

# Network for a Healthy California: A Powerful Infrastructure to Reduce Chronic Disease Risk

138 projects, 11 regions

The *Network* “pillars”

↑ Fruit and Vegetable Consumption

↑ Physical Activity

↓ Food Insecurity

↓ Chronic Disease

Employs a comprehensive social marketing approach, framed around the social-ecological model





# *Network for a Healthy California:* **Statewide Interventions**

- 3 targeted population campaigns:
  - Children's Power Play! Campaign – 11 Regions
  - Latino Campaign – 9 Regions
  - African-American Campaign – 6 Regions
- Retail and Worksite programs carry intervention further into the community
- 11 Regional Collaboratives –combine area resources to bring about positive change
- Providing FSNE in multiple channels, multiple methods
- ~10,000 eligible sites – low- resource schools and pre-schools, food closets/pantries/banks, community clinics, low-income housing sites, grocery stores, worksites, festivals, health fairs, etc.
- **Champions for Change** multi-media campaign



# Champion Moms TV, Radio, Outdoor, Direct Mail, Consumer Web



**My kitchen.  
My rules.**

**Rule #1:**  
Eat more fruits  
and vegetables.



**CHAMPIONS  
for CHANGE**  
Network for a Healthy California

For tips on obesity prevention or Food Stamp information, call 1-888-328-3483. A message from the California Department of Health Services.  
Funded by the U.S. Department of Agriculture's Food Stamp Program.

**My television.  
My rules.**

**Rule #2:**  
Turn it off and  
go out and play.



**CHAMPIONS  
for CHANGE**  
Network for a Healthy California

For tips on obesity prevention or Food Stamp information, call 1-888-328-3483. A message from the California Department of Health Services.  
Funded by the U.S. Department of Agriculture's Food Stamp Program.

## Empowering, Champions, Change Agents



**Our neighborhood.  
Our rules.**

**Rule #3:**  
We speak up for  
healthy changes.



**CHAMPIONS  
for CHANGE**  
Network for a Healthy California

For tips on obesity prevention or Food Stamp information, call 1-888-328-3483. A message from the California Department of Health Services.  
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# Fruits & Vegetable School-Based Education – Cafeteria and Classroom



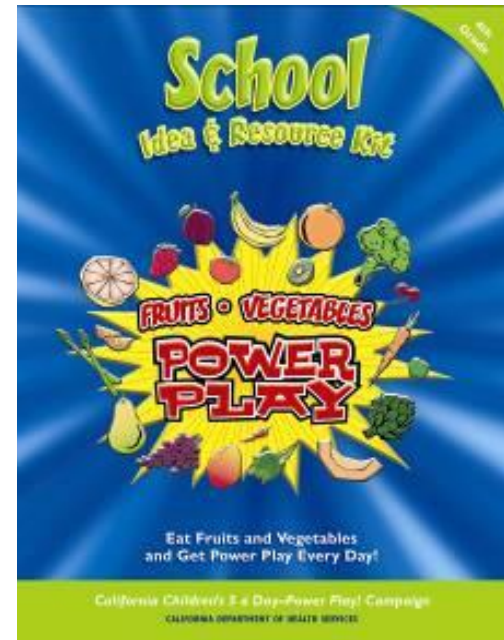
Harvest  
of the  
Month





# ***Power Play! School Idea & Resource Kits***

- 4th & 5th grade versions
- 10 F/V and PA activities
- Based on 2005 Dietary Guidelines for Americans
- Linked to California Content Standards
- Student handouts in both English and Spanish and student workbooks in English
- **Impact evaluation study conducted**





# Harvest of the Month

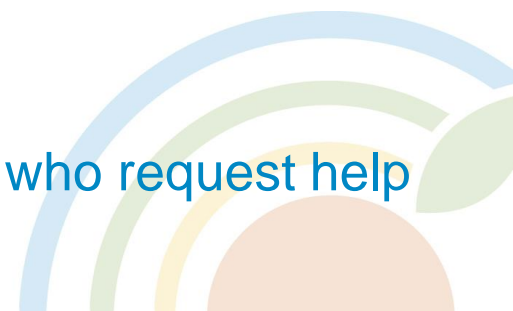
## Core Elements

- Educator newsletters
- Menu slicks
- Family newsletters
- Press release templates
- Poster *(must be ordered)*
- Strategies
- Resources
- **Major process evaluation and individual school impact evaluation projects conducted**



# Network Approaches to Evaluation

- Surveillance – statewide population-based surveys, internal & external
- Process evaluation/activity tracking – Semi-Annual Activity Reporting (SAAR), Regional Network SAAR
- Formative – New project development & feedback
- Impact/outcome evaluation to evaluate and improve the operation of a given local project intervention
- Impact/outcome evaluation to rigorously test a social marketing campaign controlled intervention developed by the State
- Media/Communications strategy evaluation – Benchmark
- Case Studies – Non-profit LIAs, Regional Nutrition Networks
- Special Tools to enable evaluation – GIS and CX<sup>3</sup> (Communities of Excellence); Compendium of validated tools; Food Behavior Checklist; Fruit and Vegetable Checklist
- Support of external research projects
- Technical assistance to awardees and collaboratives who request help in evaluating their projects





# Evaluation of CPNS Projects: Key Behavioral Outcomes

- **Fruit and vegetable consumption and determinants in adults and children/youth, ages 9 and older, to recommended levels**
- Daily physical activity and determinants to at least 30 minutes in adults and 60 minutes in children and youth
- Access to and utilization of appropriate food assistance programs, especially Food Stamps



# Surveillance research data CPNS surveys are used to:

...biennially monitor the current dietary and physical activity practices, and related habits, attitudes, and beliefs of Californians

- *California Dietary Practices Survey*

- *CDPS*      Adults  $\geq 18$  years

- *California Teen Eating, Exercise, and Nutrition Survey*

- *CalTEENS*      Teens age 12 – 17 years

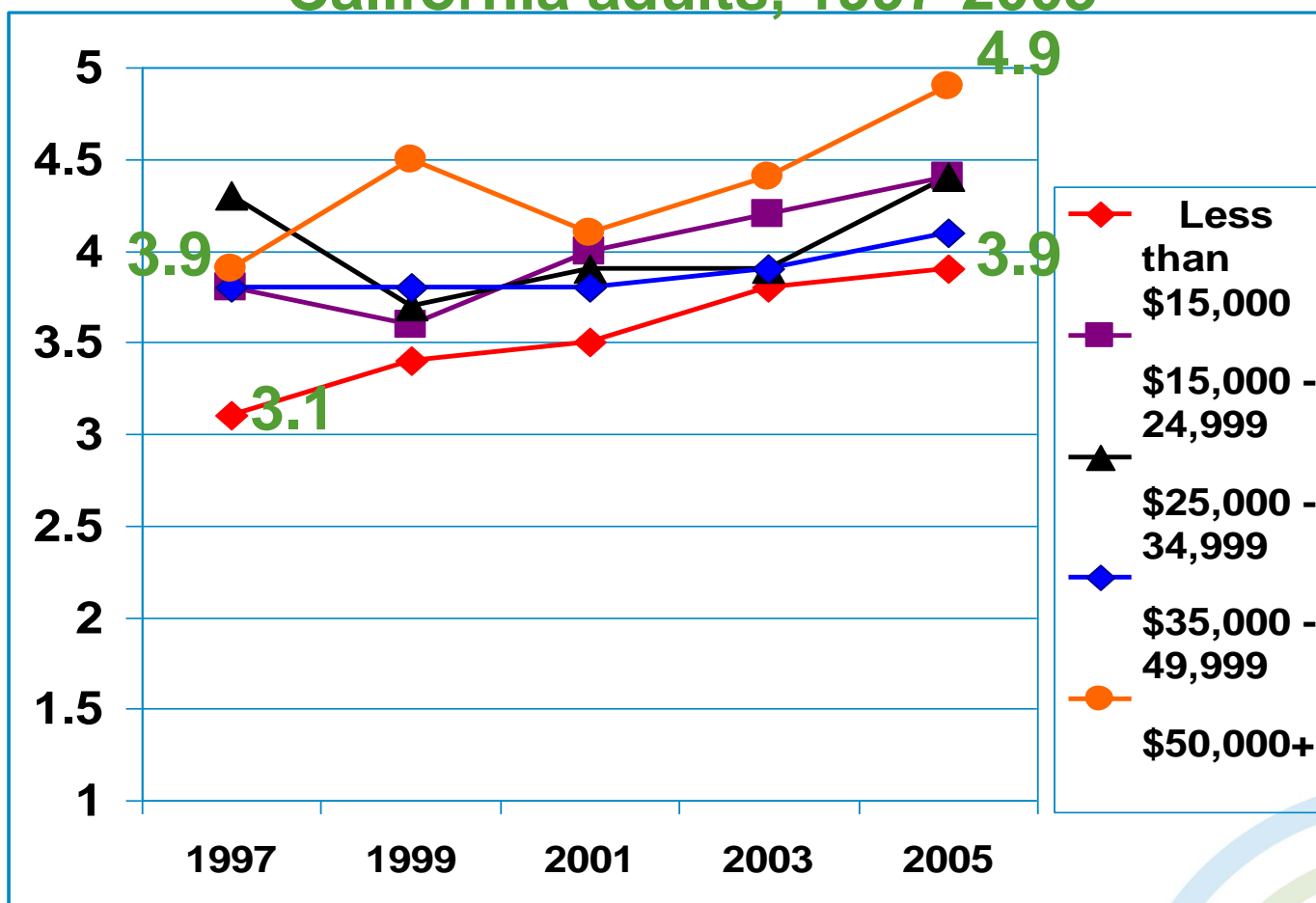
- *California Children's Healthy Eating and Exercise Practices Survey*

- *CalCHEEPS*      Children age 9 – 11 years



# Surveillance – The challenge--and need--for funding the comparison group

## Change in mean fruit and vegetable consumption, California adults, 1997-2005



Source: California Dietary Practices Survey, CPNS, CDPH  
– Network-planned; full control of questions

## **Surveillance – Maximizing external resources - BRFSS**

**INCOM01 (CDC-CORE )**

**INCOME.C.**

**Which of the following categories best describes your annual household income from all sources? Less than \$10,000; \$10,000 to less than \$15,000; \$15,000 to less than \$20,000; \$20,000 to less than \$25,000; \$25,000 to less than \$35,000; \$35,000 to less than \$50,000; \$50,000 to less than \$75,000; \$75,000 to \$100,000 or over \$100,000?**

**Nationally, data is analyzed by these income groupings**



## Surveillance – Maximizing external resources - BRFSS

**THRESHO2 - Is your annual household income above \_\_\_\_\_ (table look up for income and household size)? (Income threshold is used for statistical purposes.) 2007 FPL HH1 = 9,800; 19,600; 29,400 for 100, 200, and 300% FPL**

**So, if someone from a one-person household answers “less than \$10,000,” to the prior question about your annual HH income, the next question, is it above \$9,800 lets them be categorized as above or below 100% FPL**

**We worked with our state BRFSS administrators to build the threshold cut-points for 130% and 185% FPL into this question and added “use of FSP past 12 months” question to BRFSS**



# Process Evaluation

*CNN* process evaluation:

- Includes activity tracking that encompasses the nine social marketing tools *Network* emphasizes
- Allows for the merging of similar information from a large variety of programs
- Helps programs and regions to measure their own progress





# Semi-Annual Activity Report (SAAR and RN SAAR)

- Program information
- Summary of program activities
- Materials distributed
- Partnership development
- Formative research and planning



# Social Marketing Activities as Reported by the Local and Regional Semi-Annual Activity Report

All Local Contractors California Statewide Reach of Sales Promotions Activities for Federal Fiscal Year 07 (Page 1 of 2)						
Reporting Period	October 1 - March 31		April 1 - September 30		Year Totals	
Activity	Number of Events / Activities	Number of Participants (Consumer Impressions)	Number of Events / Activities	Number of Participants (Consumer Impressions )	Total Number of Events / Activities	Total Consumer Impressions
<b>LOCAL CONTRACTS</b>	<b>124</b>		<b>133</b>			
<b>Grocery Stores</b>						
# taste tests at grocery stores	61	7,305	37	20,660	98	27,965
# grocery store tours	35	860	57	1,316	92	2,176
# other grocery promotions	86	17,819	75	24,290	161	42,109
<b>Total Grocery Store Events</b>	<b>182</b>	<b>25,984</b>	<b>169</b>	<b>46,266</b>	<b>351</b>	<b>72,250</b>
<b>Farmer's Markets</b>						
# farmer's market taste tests	67	45,991	108	13,339	175	59,330
# farmer's market tours	74	1,500	125	4,812	199	6,312
# other farmers market events	127	18,319	160	17,628	287	35,947
<b>Total Farmers Market Events</b>	<b>268</b>	<b>65,810</b>	<b>393</b>	<b>35,779</b>	<b>661</b>	<b>101,589</b>

Reach of Sales Promotions Activities continued on the next page

# 2005 Regional Summary Report for the Behavioral Risk Factor Survey (BRFS) & Social Marketing Activities as Reported by the Local and Regional Semi-Annual Activity Report (SAAR)

## 2005 Regional Summary Report

### 2005 Regional Summary Report for the Behavioral Risk Factor Survey (BRFS) & Social Marketing Activities as Reported by the Local and Regional Semi-Annual Activity Report (SAAR)

This report is divided into two data collection parts: 2005 BRFS data and FFY 2005 SAAR Data. The report provides a picture of behaviors and nutrition education activities in each of the 11 *California Nutrition Network* regions, and for the State of California as a whole. The report begins with BRFS data that provides a profile of the population on behaviors/conditions that the *Network* and Collaborative interventions and activities address: fruit and vegetable consumption, physical activity, obesity, obesity + overweight, and food insecurity. The second portion presents each region's *California Nutrition Network for Healthy Active Families* activities for the Federal Fiscal Year 2005 (October 1, 2004 – September 30, 2005) as reported by the Local and Regional Nutrition Network (RNN) SAARs.

#### Section 1 - Introduction Information

#### Section 2 - A comparison of California Regional Nutrition Networks using the 2005 BRFS

#### Section 3 - Social Marketing Summary Report by Region - Federal Fiscal Year 2005

#### Section 4 - List of all Contractors

#### Section 5 - FFY 2005 All LIA Total Tables

#### Section 6 - FFY 2005 All RNN Total Tables

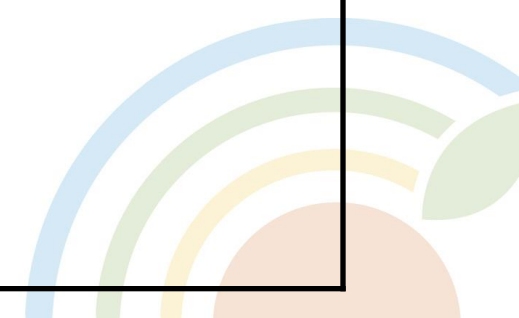
#### Section 7 - Bay Area LIAs

#### Section 8 - Bay Area RNN

#### Section 9 - Central Coast LIAs

#### Section 10 - Central Coast RNN

#### Section 11 - Central Valley LIAs



# Formative Evaluation

- Development of social marketing campaigns, materials, and interventions
- Exploration of new target population or health problem
- Data sources: focus groups, key informant interviews, pilot tests, satisfaction surveys

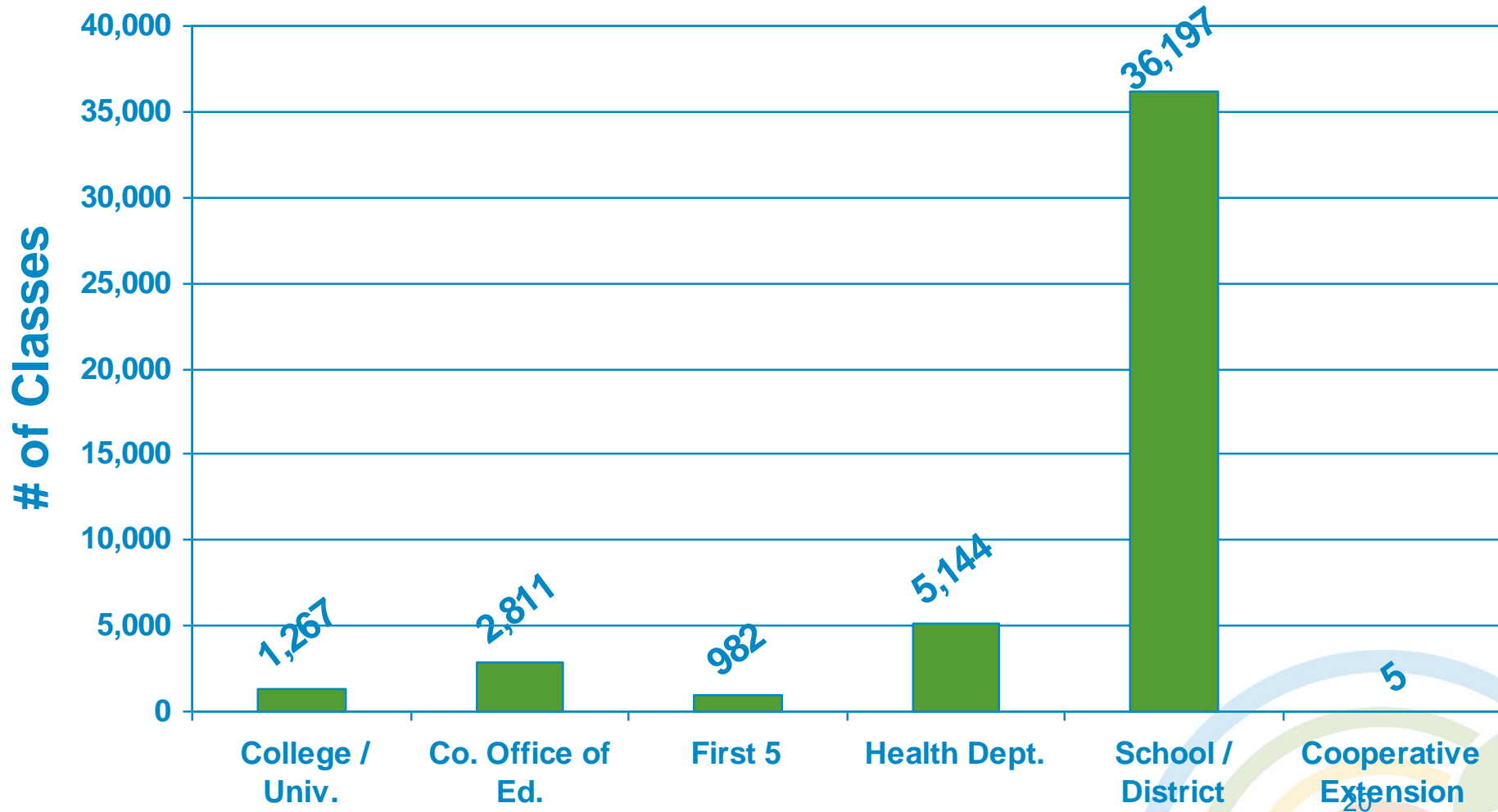


# Impact Evaluation Studies of Local Contractor Interventions

- Contractors receiving \$350,000+
- Measure behavior or behavioral determinant, generally relating to FV
- Not only knowledge – must include psychosocial variable, e.g. self-efficacy, preferences
- Most recently conducted by 48 contractors
- Many findings have been positive
- Standardized general methods, but, since interventions differ, it is difficult to summarize findings across contractors even with increased use of validated, standardized measures
- Need to combine with more scope-of-work-specific process measures to identify dosage, content



# Number of Classes









# Behavioral Outcomes Measured 2003-07

Behavior	Number of contractors that measured change in behavior			
	03-04 (n=12)	04-05 (n=24)	05-06 (n=47)	06-07 (n=48)
Fruit and vegetable consumption	1	7	22	35
Physical activity			5	2

# Cognitive Indicators of Success 2003-07

Factor	# that measured change in factor			
	03-04	04-05	05-06	06-07
Food preferences	10	13	22	30
Familiarity	1		2	3
Self-efficacy	3	4	18	27
Outcome expectations		2	2	5
PA preferences	0	1		0

# Sample Food Preferences Question

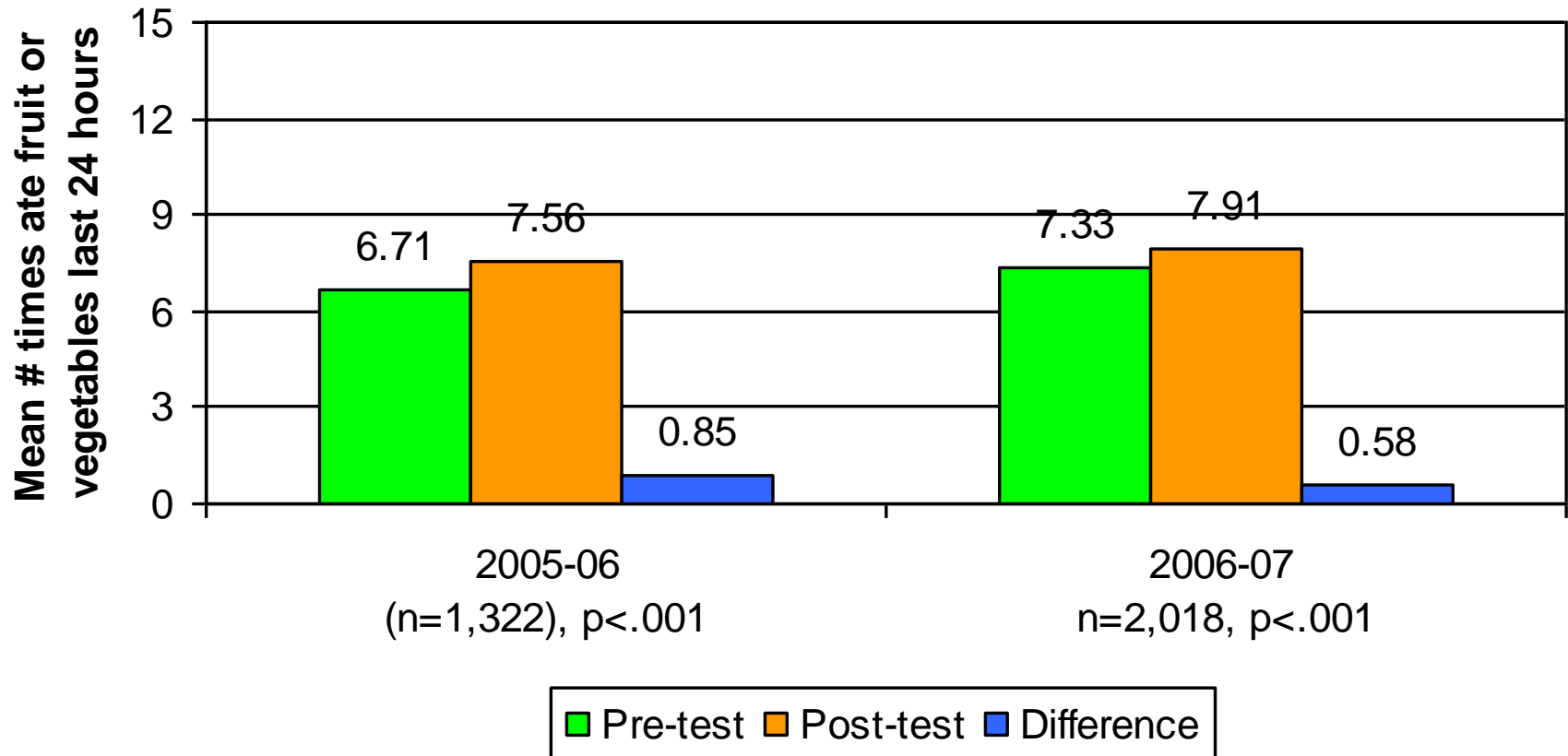
How much do you like these fruits? Please check <input checked="" type="checkbox"/> your answer.				
<u>Fruits</u>	I do not like this 	I like this a little 	I like this a lot 	I don't know what this is 
1. Apple	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	1 <input type="checkbox"/>

Response coding

Cullen K, Baranowski T, et al. Availability, accessibility, and preferences for fruit, 100% fruit juice, and vegetables influence children's dietary behavior. [Health Educ Behav](#) 2003, 30(5): 615-26.<sup>23</sup>

# Results 05-07 – Consumption

## Change in Consumption (range 0-15)



Biggest challenges for evaluating children – inadequate instruments

# Impact Evaluation: Adult Population

- Biggest challenges:
  - Matching for pre-post; inadequate numbers of repeated encounters by clients
  - “You don’t have a validated instrument for our intervention or for our target audience”
- More short, validated consumption measures exist for adults, but may not be appropriate; more “predictors” instruments are needed
- Network co-funded with California Extension turning an orally-administered Food Behavior Checklist developed and validated by Marilyn Townsend into cognitively tested, validated, low literacy, full-color illustrated instruments:
  - 16-item Food Behavior Checklist
  - 7-item FV-only Checklist
- <http://townsendlab.ucdavis.edu/>



Navigation icons: Lock, Document, Question mark, Paperclip, Speech bubbles.

Food Stamp Program

# Fruit and Vegetable Checklist


These questions are about the ways you plan and fix food.  
Think about how you usually do things.

Name \_\_\_\_\_ Date \_\_\_\_\_ ID# \_\_\_\_\_

☐ Entry  
☐ Exit

Choose one answer for each question.

1.



Do you eat fruits or vegetables as snacks?


☐ no

☐ yes, sometimes

☐ yes, often

☐ yes, everyday

2.




Did you have citrus fruit or citrus juice during the past week?

☐ yes

☐ no

3. Fruit: How much do you eat each day?



☐ none

☐ 1/2 cup

☐ 1 cup

☐ 1 1/2 cups

☐ 2 cups

☐ 2 1/2 cups

☐ 3 cups or more





4.



Do you drink milk each day?

- ☐ no    ☐ yes, sometimes    ☐ yes, often    ☐ yes, always

5.



During the past week, did you drink milk or use milk on cereal?

- ☐ no    ☐ yes

6.



Do you eat more than one kind of fruit each day?

- ☐ no    ☐ yes, sometimes    ☐ yes, often    ☐ yes, always

7.

What is the total amount of fruit you eat each day?



- ☐    ☐ 1/2 cup    ☐ 1 cups    ☐ 1 1/2 cups    ☐ 2 cups or more

8.



Do you drink regular soda?

- ☐ no    ☐ yes, sometimes    ☐ yes, often    ☐ yes, always

# Evaluating Communications Strategy

- Benchmark Survey
  - Annual
  - RDD Food Stamp and (when non-USDA funding available), general population and mall-intercept low-income 130-185% FPL populations; mothers
  - Exposure to media messaging – TV, radio, and outdoor
  - Exposure to other CPNS programming
  - FV and PA behavior, attitudes, opinions, norms
- Grassroots Direct Mail Intervention
  - Quasi-experimental impact evaluation



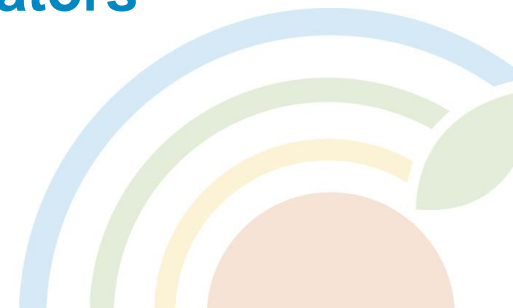
# Case Studies

- **When more qualitative, descriptive information will provide the most through picture:**
  - Reaching the Other Eligible Californians: California Association of Food Banks' (CAFB) Food Stamp Outreach Project
  - A Case Study of Eight Food Security Nutrition Education Projects
  - Central Valley Health Network's (CVHN) Nutrition Education Non-profit Demonstration Project: A Case Study Report
- **Currently in progress:**
  - Nutrition Education and Farm to School Programs: A Case Study Report



# Process and Impact Evaluation Studies of New CPNS Interventions and Resources

- Formal evaluations are conducted of specific interventions and curricula
- Formal evaluations are conducted to see if a program works in specific channels
  - Very important for channels that are new to public health
  - Also vital if there are plans to widely disseminate the curriculum
    - African American Fruit, Vegetable and Physical Activity Toolbox for Community Educators
    - School Idea and Resource Kit
    - Harvest of the Month Evaluation
    - Food Stamp Office Resource Kit



# Bringing together the FFY 2007 and the FFY 2007 Final Report - Components

- Local Project Data Summaries
- State Level Data Summaries
  - Unduplicated Counts and Impressions
- Section B. Final Report Summary for Evaluations

**Section B. Final Report Summary for Evaluations.**  
Provide the information requested below for any significant evaluation efforts (costing greater than \$400,000) that were completed during the previous year.

- No single State or Local project cost > \$400,000
  - All summaries completed by State staff
- 

# Bringing together the FFY 2007 and the FFY 2007 Final Report – Section B

## Section B: State Nutrition Education Final Report Summary FFY 07

### Section B. Final Report Summary for Evaluations.

Provide the information requested below for any significant evaluation efforts

Unduplicated Counts and Impressions

(costing greater than \$400,000) that were completed during the previous year.

#### 1. Name of Project or Social Marketing Campaign

*If multiple projects or campaigns were part of a single impact evaluation, please list them all.*

#### 2. Key Evaluation 32)

*Identify each impact being assessed by the evaluations. For example are FSNE participants more likely than non-participants to report they intend to increase their fruit and vegetable intake? Or do a greater proportion of FSNE participants choose low-fat (1% or skim) milk in the school cafeteria compared to non-participants?*





# Bringing together the FFY 2007 and the FFY 2007 Final Report –Evaluation Projects & Stakeholders

- **Summary of Outcome/Impact Evaluations - FV** consumption; variety of psycho-social predictors of FV behaviors; conducted by 48 diverse Local Projects – USDA, Local Contractors, Community Development Unit
- **Benchmark Survey** – Media recall, psycho-social predictors of FV/PA behaviors, saliency - USDA, Communications Unit
- **School Idea and Resource Kit (SIRK)** Psycho-social predictors of FV/PA behaviors – USDA, Power Play! Campaign, educators
- **Worksite Fruit Snack Study** – FV consumption; psycho-social predictors – USDA, Worksite Campaign, CDPH worksite project
- **Food Stamp Office Resource Kit Evaluation** – Intercept interview – video recall and intention; Observation of behavior – USDA, DSS, local contractors, other interested states

# GIS - <http://www.cnngis.org/>

## A Research Tool

- Interactive, internet-based Geographic Information System (GIS) that allows users to view and query mapped nutrition data
- **Used for identifying FSNE-eligible populations of interest**
- Data layers include, among others:
  - Nutrition and school health programs
  - WIC grocery stores and other local nutrition resources
  - Demographics (race and spoken language) of general and at-risk populations
  - RNN regions
  - Political (senate and assembly) districts
  - Grocery stores, restaurants, and fast food places



http://www.cnnngis.org - Identify Results - Microsoft Internet Expl... Internet Explorer

Identify Results for **Proportion < 185% FPL - All Races**

>> Feature 1 of 4

2000 U.S. Census Tract	06037242000
Total Pop. (Estimate)	3071
All Races < 185% FPL	1891
All Races Prop. < 185% FPL	0.6158
Regional Nutrition Network	Los Angeles

[zoom to this feature](#)

>> Feature 2 of 4

2000 U.S. Census Tract	06037240800
Total Pop. (Estimate)	3793
All Races < 185% FPL	2538
All Races Prop. < 185% FPL	

Done Internet

Clear Theme ©

Query ?

Measure →

Save Map ↶

Load Map ↷

Current Map Tool:  
[Get Info](#)

Jump to a new location

Summarize Data

Pop-Up Box

Search Results

The following addresses match search criteria:

Address	Place
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles
11120 S Central Ave 90059	Los Angeles

The value in the **Score** column shows how closely the address matches the search criteria.

[Refresh the Map](#)

A pop-up box should appear.

# CX<sup>3</sup> – Communities of Excellence - Defined

- A planning model to assess communities in relation to a variety of obesity prevention benchmarks known as community indicators and assets.
- <sup>3</sup> = nutrition, physical activity and obesity prevention
- Standardized indicators & assets – big plus!
- Set standards of excellence.



# Creating CX<sup>3</sup>

- **151 Indicators**  
organized in 6 Community Environments:
  - Neighborhood
  - Preschool
  - School
  - After-school
  - Worksite
  - Government
- **44 Assets** organized into:
  - Health department infrastructure
  - Political will
  - Community infrastructure



# Contracted Research

- These are projects that address emerging issues, but require time or expertise beyond what is available in-house
- Examples:
  - The Economic Costs of Physical Inactivity, Obesity and Overweight in California Adults (April 2005)
  - Does 5 a Day Pay?
- Influencing the field without having to collect the data
- Used for overarching research and individual projects



# In-House Consultation: Facts and Figures

- Press releases
- LIA questions
- RN project evaluations – case study approach
- Grant applicant requests
- Information for the department and reporters
- Information for the Chief
- Training and meeting evaluations



# A Key Evaluation Question

*How to most effectively  
evaluate the combined efforts  
of local projects, targeted  
campaigns and media?*

*RWJF interviews held with  
“experts in the field” during  
2007 – report in progress*





# For More on Interventions and Evaluation, Please Visit Us—

For partners, professionals and links to campaigns, programs and resources —

[www.networkforahealthycalifornia.net](http://www.networkforahealthycalifornia.net)

In particular, the Research and Evaluation web pages

<http://www.dhs.ca.gov/ps/cdic/cpns/research/default.htm>

New and growing! Consumer educational material for parents and youth, in English and Spanish —

[www.cachampionsforchange.net](http://www.cachampionsforchange.net)

[Sharon.Sugerman@cdph.ca.gov](mailto:Sharon.Sugerman@cdph.ca.gov)

916-449-5406

