



Evaluating the *California Nutrition Network* Social Marketing Campaign

Presented at:

California Nutrition Network for Healthy, Active Families
Social Marketing Conference 2005, Sacramento, CA
August 11-12, 2005

Presented by:

Susan O'Connor and Larry Bye,
Field Research Corporation



Session Objectives/Intended Outcomes

- Become familiar with the evaluation of a statewide social marketing campaign.
- Understand study implications as they relate to state and local programs.
- Be able to identify potential strategy changes to improve campaign effectiveness.



Session Overview

- Background
- Study Objectives
- Methodology
- Study Findings
- Conclusions and Implications



Background

- This research is part of a comprehensive evaluation of the California Nutrition Network's social marketing efforts among their target audience: Food Stamp program eligibles and recipients. This evaluation includes both formative and outcome evaluation studies.
- Formative research studies have included focus groups to explore the strategic direction of the campaign and advertising copy testing.
- This presentation will provide findings from a baseline survey conducted in the fall of 2004 as part of the outcome evaluation. A follow-up study to assess changes over time is to be conducted in the fall of 2005.



Study Objectives

- The specific objectives of the baseline survey were to:
 - Assess rate of recall of recent advertising messages.
 - Assess extent of target audience exposure to other Nutrition Network campaign materials and interventions.
 - Determine levels of basic knowledge about healthy eating and physical activity.
 - Explore social normative and other beliefs.
 - For the adult audiences, determine what proportions fall into the various stages of behavior-change, according to Prochaska's trans-theoretical model.
 - For adult audiences, assess attitudes and perceptions toward environmental reforms encouraging healthier eating and physical activity.



Methodology

- Separate samples of:
 - Current California Food Stamp program recipients (n = 1000).
 - California low-income* 9-11-year-olds (n = 400).
 - General adult population of the State (n = 1000).
- Computer-assisted telephone interviewing (CATI) techniques for the Food Stamp recipient and general adult population samples.
- For the general adult sample, we used standard random digit dialing (RDD) methods; data are weighted by race/ethnicity and gender.
- For the Food Stamp sample, we used a listed sample of current program recipients provided to us by CPNS; data are not weighted.

* *Low-income = 185% of the Federal Poverty Level (FPL)*



Methodology *(cont'd)*

- For the children sample, we collected data in shopping malls frequented by sizeable numbers of low-income people: San Diego, Los Angeles, Riverside, Bakersfield, Fresno, Sacramento, Hayward.
- Data were collected between late November 2004 and early January 2005.
- Adult interviews averaged approximately 24 minutes in length.
- Children's interviews averaged 15 minutes in length.



Study Findings

- Advertising Recall
- Exposure to Interventions
- Knowledge, Attitudes and Beliefs
- Fruit/Vegetable Consumption and Physical Activity Behaviors
- Parent Supportive Behaviors
- Support of Policy and Environmental Change



California Nutrition Network Advertising Recall

While unaided recall of ads promoting healthy eating and physical activity was high, recall of Nutrition Network ads was low.

- FSP recipients report directionally higher ad recall.

	FSP Recipient	General Population
N unweighted	1004	1004
Recall of Network ads	4.4%	3.8%
Recall of other ads promoting healthy eating and physical activity	60.5%	49.8%



Exposure to Non-Advertising Interventions

FSP recipients report broad exposure to healthy eating and physical activity interventions.

	FSP Recipient	General Population
N unweighted (all)	1004	1002
Exposed to at least one form of intervention	68.0%	53.2%
<i>Printed materials</i>	47.4%	38.8%
<i>Class/workshop</i>	19.8%	10.3%
<i>Food demonstration</i>	9.7%	10.9%
<i>Health fair/festival</i>	9.1%	8.1%
N unweighted (parents)	773	385
<i>Children brought home</i>	37.5%	32.0%

Low-income children report even broader exposure to interventions than adults.

Table 3. Types of non-advertising interventions exposed to in recent school year, children samples	
	9 – 11 year olds
N unweighted	398
Exposure to at least one form of intervention	95.6%
School	
<i>Printed material</i>	70.0%
<i>Classroom</i>	69.9%
<i>Garden</i>	57.3%
<i>Brought materials home</i>	57.1%
After school (42.1%)	56.9%
Other places (34.5%)	
<i>Parents</i>	41.0%
<i>Doctor's office</i>	17.8%



Knowledge, Attitudes and Beliefs



There is broad knowledge about the seriousness of the obesity epidemic among adults.

	FSP Recipient	General Population
Being overweight or obese is not a serious problem among adults in California (% Disagree)	80.8%	83.4%
Being overweight or obese is a serious problem among children in California	91.8%	92.3%
Being overweight or obese can cause serious health problems like diabetes, cancer or heart disease	96.3%	97.0%

Knowledge regarding fruit and vegetable consumption and physical activity appears not to be widespread among FSP recipients.

- FSP recipients were less likely than the general population to name “5 or more” as the daily servings an adult should eat for better health.
- Knowledge regarding physical activity was even lower.

	FSP Recipient	General Population
N unweighted	1004	1004
Should eat 5 or more servings	52.7%	61.7%
Should be physically active 5 days/ week for 30 minutes/day	28.9%	26.9%

Knowledge among children is even worse than among adults.

- Less than half of children named “5 or more” as the daily servings children should eat.
- Less than one-third indicated “60 minutes” as the amount of daily physical activity required for children.

Table 6. Knowledge of behavioral recommendations, children’s sample	
	9 – 11 year olds
N unweighted	398
Should eat 5 or more servings of fruits and vegetables	41.2%
Should be physically active 60 minutes or more	31.9%

Cost is an important barrier to fruit and vegetable consumption among FSP recipients.

Table 7.
Perceived costs and benefits of eating fruits and vegetables
(% somewhat/strongly agree), adult samples

	FSP Recipient	General Population
N unweighted	1004	1004
Fruits and vegetables are too expensive	39.4%	28.2%
I can't find good, fresh fruits and vegetables when I shop	24.4%	15.1%
Fruits and vegetables take too much time to prepare	8.9%	11.1%
Eating fruits and vegetables helps me look and feel better	94.9%	94.8%
Eating fruits and vegetables helps me control my weight	90.4%	92.2%
Eating fruits and vegetables sets a good example for my family	97.8%	94.2%

Cost is also more of a concern for FSP recipients when it comes to being physically active.

- Other important concerns involved access to safe places to be physically active and lack of time.

	FSP Recipient	General Population
N unweighted	1004	1004
I can't find safe places to be physically active where I live	28.0%	16.6%
I am too busy or can't find the time to be physically active	27.2%	29.6%
It's too expensive to buy exercise clothes, equipment or gym memberships	73.9%	58.0%
Being physically active helps me look and feel better	97.4%	97.3%
Being physically active improves my mood	91.6%	95.3%
Being physically active helps me control my weight	95.5%	95.7%

Nearly all 9 – 11 year-olds agree that eating five servings of fruits and vegetables will make them stronger.

Table 9. Perceived costs and benefits of eating fruits and vegetables, children’s sample “If I eat 5 servings of fruits and vegetables every day...” (% agree very much/a little)	
	9 – 11 year olds
N unweighted	398
“...I will become stronger”	93.4%
“...I will think better in class”	79.8%
“...It will keep me from getting fat”	78.2%
“...my friends will make fun of me” (disagree)	78.3%

9 – 11 year-olds also agree on a number of benefits of being physically active.

Table 10. Perceived costs and benefits of being physically active, children’s sample “If I were physically active most days...” (% agree very much/a little)	
	9 – 11 year olds
N unweighted	398
“...It would help me be healthy”	90.3%
“...It would help me control my weight”	88.0%
“...It would give me energy”	89.9%
“...it would make me more attractive”	60.9%
“...It would make me get hurt” (disagree)	63.6%



Healthy Eating and Physical Activity Behaviors

Fruit and vegetable consumption is low among FSP recipients, albeit no more than among the general population.

- Only about four in ten FSP recipients report daily fruit and vegetable consumption of at least five servings.

	FSP Recipient	General Population
N unweighted	1004	1004
At least 5 or more servings	39.6%	36.5%
Less than 5 servings	60.4%	63.5%

Fewer FSP recipients were in the earliest stages of change compared to the general population.

**Table 12.
Stages of change for daily fruit and vegetable consumption,
adult samples**

	FSP Recipient	General Population
N unweighted	975	990
Pre-contemplative	28.3%	42.3%
Contemplative	10.1%	7.2%
Preparation	44.3%	29.5%
Action	3.8%	2.7%
Maintenance	13.5%	18.3%

Like fruit and vegetable consumption, levels of physical activity are also low.

- Only two-fifths of FSP recipients reported being physically active (at least moderately) for five days a week for at least 30 minutes a day.

	FSP Recipient	General Population
N unweighted	1004	1004
At least 5 days/wk for at least 30 min/day	39.9%	41.8%
Less than 5 days/wk for 30 min/day	42.6%	47.2%
Not physically active	15.0%	9.5%



Many adults appear to be in the process of changing their physical activity practices.

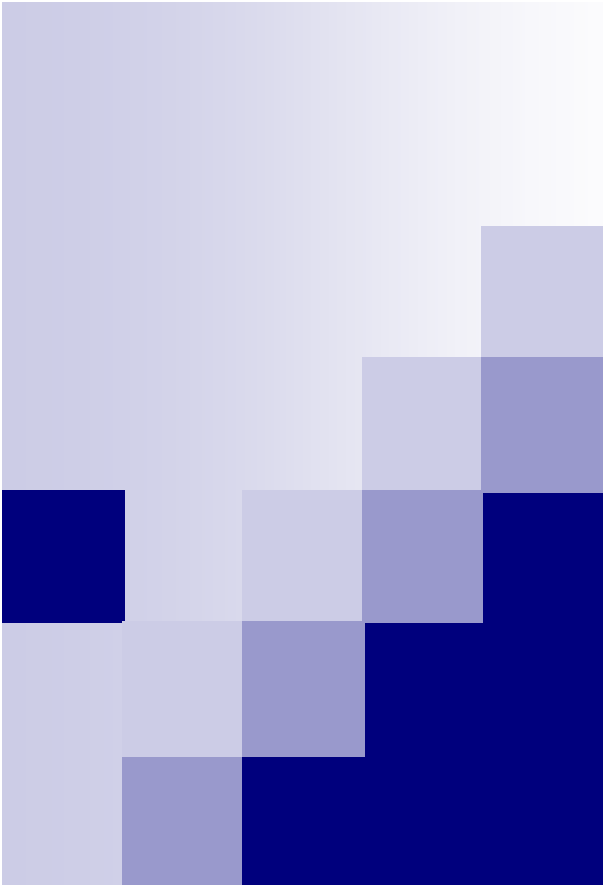
**Table 14.
Stages of change for physical activity,
adult samples**

	FSP Recipient	General Population
N unweighted	926	966
Pre-contemplative	9.7%	11.1%
Contemplative	4.9%	5.9%
Preparation	17.7%	22.0%
Action	10.0%	5.3%
Maintenance	57.7%	55.7%

Among parents, many are engaging in behaviors that support family behavior change.

Table 15.
Parent-child advocacy behaviors among parents/guardians,
adult samples

	FSP Recipient	General Population
N unweighted	715	357
Discussed the benefits of eating fruits and vegetables	77.8%	75.6%
Discussed the benefits of being physically active	73.7%	75.6%
Make it easy for child(ren) to eat fruits and vegetables		
Often (net)	87.9%	87.6%
Very often	48.6%	48.4%
Often	39.2%	39.1%
Make it easy for child(ren) to be physically active		
Often (net)	86.5%	84.9%
Very often	51.0%	53.3%
Often	35.5%	31.5%



Support for Policy and Environmental Change



Support for increased access to safe outdoor venues is high, especially among FSP recipients.

Table 16.
**In favor of more or safer playgrounds, walkways and bikeways,
even if it means higher taxes,
adult samples**

	FSP Recipient	General Population
N unweighted	1004	1004
Yes, in favor	82.5%	74.0%
No/don't know if in favor (net)	17.5%	26.0%

There is broad support for teaching children about the benefits of healthy eating and physical activity, but not to restrict food advertising.

Table 17.		
Agreement that “The government should pass laws that...”, adult samples		
	FSP Recipient	General Population
“...Make sure schools teach children about the benefits of healthy eating and physical activity”		
N unweighted	1004	1004
Agree (net)	92.1%	80.3%
Strongly agree	79.4%	63.4%
Somewhat agree	12.7%	16.8%
Disagree (net)	7.9%	19.7%
“...Make it harder for food companies to advertise to children”		
N unweighted	1004	1004
Agree (net)	50.8%	52.0%
Strongly agree	37.4%	35.7%
Somewhat agree	13.4%	16.4%
Disagree (net)	49.2%	48.0%

Large majorities are concerned about the fast food industry.

Table 18.
Fast food restaurants, adult samples

	FSP Recipient	General Population
Agreement that “Fast food restaurants encourage you to buy food that saves you money but is bad for your health”		
N unweighted	1004	1004
Agree (net)	78.7%	78.5%
Strongly agree	63.9%	60.9%
Somewhat agree	14.7%	17.6%
Disagree (net)	21.3%	21.5%
For those who agree that fast food restaurants encourage you to buy their food, level of concern about this issue		
N unweighted	789	793
Concerned (net)	73.5%	69.1%
Very concerned	39.2%	33.2%
Concerned	34.3%	35.9%
Not concerned (net)	26.5%	30.9%



Conclusions and Implications



Conclusions and Implications

- Large numbers of FSP recipients and low-income 9-11 year-olds are being exposed to numerous local interventions. WIC sites appear to be particularly good venues.
- Advertising messages promoting healthy eating and physical activity seem to be reaching the majority of the target audiences.
- Low recall scores of Nutrition Network ads suggest that previous advertising executions have not been memorable.



Conclusions and Implications *(cont'd)*

- California adults seem to be knowledgeable about the obesity epidemic and its consequences for chronic disease.
- Yet knowledge regarding behavioral recommendations is low among low-income adult and child audiences.
- This suggests that it continues to be important for the campaign to promote and reinforce basic behavioral knowledge.
- The study also confirms that the majority of FSP recipients are not yet following public health behavioral recommendations.
- While lack of knowledge is a barrier to behavioral change, another important barrier to both fruit and vegetable consumption and physical activity is cost, which is more important than access problems.



Conclusions and Implications *(cont'd)*

- Compared to the general population, more FSP recipients have moved beyond the pre-contemplation stage for fruit and vegetable consumption.
- Data also suggest that it may be easier to show improvement in physical activity levels than fruit and vegetable intake.
- Stages of change data may be useful in tailoring messages, strategies and interventions to different audience segments.
- Findings point to interest in policy and environmental change related to healthy eating and physical activity among low-income audiences.
- They also validate the recently developed campaign strategies focusing on the promotion of parental support for family behavior change.