Commentary

From the Network for a Healthy California

The Network for a Healthy California (Network) is led by the California Department of Public Health (CDPH) through an agreement with the California Department of Social Services for food stamp nutrition education (FSNE). The *Network* started through a one-year planning grant from the United States Department of Agriculture (USDA) in federal fiscal year 1996 (FFY 96). California was among 22 states that established a statewide social marketing nutrition network, a state plan, and funding mechanisms. The funding required that interventions be tailored to persons certified, likely or potentially-eligible for food stamps (re-named in 2008 as the Supplemental Nutrition Assistance Program, or SNAP) because their household income fell below 185% of the Federal Poverty Level. The USDA requires that interventions be conducted only in census tracts, community sites, schools, and to media audiences where over half the persons fall below this threshold. In California, over 11 million persons had incomes below 185% of the Federal Poverty Level. The Network chose the 7 million who were parents and children as its market segments.

The mission of the Network is to create innovative partnerships that empower low-income families to achieve targets set in the Dietary Guidelines for Americans (DGA). 1,2 in 1996 the Network built on the California 5 a Day Campaign³ and made fruit and vegetable consumption its first priority. The second priority was to increase physical activity. Food security, the third priority, was defined as participation in federal nutrition entitlement programs and having fruits and vegetables available, accessible and affordable. The Network viewed food stamps as a means for the very lowest-income families who were eligible for them to buy better foods, especially fruits and vegetables, for the family's health.

These priorities were selected strategically. Among all the behavioral aims of the DGA, the Network saw them as fundamentals of good nutrition and disease prevention. With adequate resources and sustained efforts over time, the Network expected that achieving these changes population-wide would help prevent or reduce obesity, a myriad of chronic diseases, and associated disparities experienced by low-income populations.

SOCIAL MARKETING NUTRITION CAN SUPPORT NUTRUTION **EDUCATION**

The Network has been privileged to apply social marketing techniques in statewide nutrition education with low-income families for nearly 15 years. As marketers, the Network aimed for large-scale behavior change, used consumer research and market segmentation, designed programs for vertical and horizontal integration, and tried to maximize resources with organizations that have similar missions. Since food is a tangible consumer good, social marketing to promote healthy eating is a good fit.

The Network defined social marketing as a combination of techniques used by commercial marketers-advertising, public relations, promotion and education⁴ with approaches used by public health and international development in low-resource settings- consumer empowerment, community development, public/private partnerships, and policy, systems and environmental change. 5 For some people, information and education alone would result in healthier behavior. A larger number might respond to marketing and promotion. For entire populations, new public and organizational policies, refocused systems of services, and supportive social and physical environments would be needed.⁶ Therefore, the *Network's* goal was to build and then integrate a mix of the 8 social marketing activities so that, over time, the healthy choice would become the easy and the expected choice for low income families in California.

The Network has watched the field of social marketing nutrition education grow more sophisticated in framdelivering, measuring and evaluating large-scale initiatives. This issue of *INEB* offers a snapshot of program evaluation in California. The papers report on traditional and novel methods.

BUILDING CAPACITY

Until FFY 11, FSNE (now Supplemental Nutrition Assistance Program Education [SNAP-Ed]) was funded through Federal Financial Participation (FFP) reimbursement. As marketers, the Network used the FFP mechanism as an incentive for local agencies to participate in the Network. This stimulated new resource allocation locally and qualified CDPH over time for enough federal funds to build a network of partner agencies and deliver diverse interventions in hundreds of low-income communities and thousands of sites.

The Network chose the social ecological framework as its theoretical base.⁵ The comprehensive, multilevel systems approach aimed to deliver interventions and surround as many low-income families as possible with as many positive cues to action, giving as many reasons, in as many community channels, in as many locations, and in as many ways as possible. The Network collaborated with other USDA-funded statewide programs and leveraged its resources by working in partnership with organizations that have similar missions. From the 15 individual leaders who founded the Network in 1997, today about 3,600 individuals and organizations work together on SNAP-Ed at the local, regional and statewide levels as part of a movement for positive

The growth of the Network has been driven by a Local Incentive Award mechanism through which CDPH shares FFP equally with public and non-profit agencies that commit to making in-kind contributions from non-federal sources each year. This sharing of FFP resources enables contributors to offer more local services in the Network's priority topics, while CDPH can provide complementary statewide support with its 50 percent share. State-level CDPH functions include: mass communications; leadership for the 11 regional networks; multi-component campaigns for children aged 9-11 years, Latinos and African Americans; programs for qualifying retail food stores and low-wage worksites; Networkbranded interventions in an assortment of community channels; competitive grants to fill gaps; strategic projects with statewide leadership organizations; formative, outcome and impact evaluation; administration; and oversight.

The *Network* works with partners to identify qualifying in-kind contributions and then contracts with them with a work scope and budget for the FFP they commit to expend, allowing them to increase their work by 50 percent. Starting with 4 local agency contractors, by the *Network's* peak in 2004, it had contracts with 117 Local Incentive Awardees and Non-profit Incentive Awardees (Figure 1). These included 42 low-resource school districts; 30 (of 61) local health departments; 11 county offices of education; and 34 other

entities including public colleges and universities, non-profit organizations, Indian tribal organizations, city governments, First Five Commissions for young children's school readiness, cooperative extension agencies, and park and recreation departments. In an average year, competitive grants were provided to an additional 3 dozen entities. By 2010, the *Network* operated in 6,500 different sites including low-resource schools, pre-school, day care or Head Start centers, grocery stores, community youth organizations, direct healthcare providers, food banks/pantries, and worksites generated over 15.7 million consumer impressions from direct education activities.7

The local assistance projects are supported by a statewide infrastructure of 11 Regional Networks with 3 core functions (Figure 2). They deliver targeted campaigns and programs including the Children's Power Play! Campaign, 8,9 campaigns for Latinos and African Americans, the Retail Program, Be Active! for worksites, and *Harvest of the Month*TM. ¹⁰ They provide technical assistance to other Network projects in their Region, and they sponsor a public/private Regional Collaborative. The Collaboratives are composed about equally of Networkfunded and non-funded leaders who work together to complete 2 to 3 Region-specific Nutrition Education

Initiatives over a 3-year funding period.

MEASURING SUCCESS

Evaluation of large-scale, action-oriented campaigns requires tracking a continuum of measures and component interventions that lead logically to the end-results in entire populations. The *Network* built partnerships, generated resources, supported new programs, tallied the activities, estimated the reach to our intended audiences, retrieved success stories and lessons learned, fostered critical analysis, conducted formal evaluations of campaign components, and fielded biennial population surveys.

As described in this issue, Network efforts seem to be working. Most significant is that, in marked contrast to national trends, fruit and vegetable consumption in low-income adults has risen significantly. As shown by Sugerman et al., between 1997 and 2007 California's two lowest-income adult segments reported increased consumption of 1.5 servings or more, with nearly half reaching the then-national minimum for fruit and vegetables of 5 or more servings per day, a 92 percent increase.12 Other evaluation articles in this issue reflect the period when the Network infrastructure solidified, expertise deepened, and resources developed. 13-15

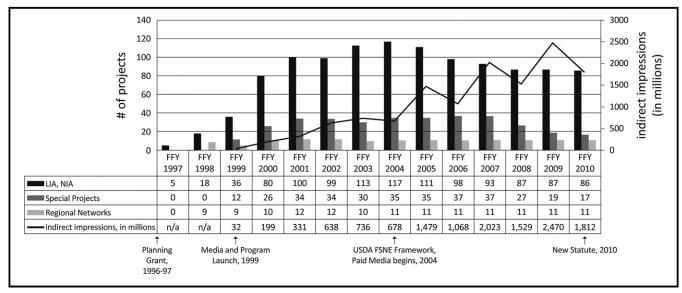


Figure 1. Network for a Healthy California projects and impressions grow over time. FSNE indicates Food Stamp Nutrition Education; LIA, Local Incentive Awardee; NIA: Non-profit Incentive Awardee; USDA: United States Department of Agriculture.

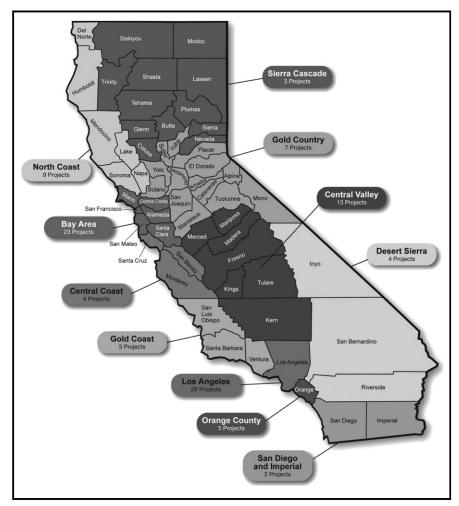


Figure 2. Regions in the *Network for a Healthy California* and Local Incentive Projects, 2006.

A more complete listing of evaluation projects, program reports, and survey information is available on the CDPH's website. 16

IMPLICATIONS FOR THE FUTURE

Nutrition education is in transition. SNAP-Ed, the second largest funder for nutrition education, ¹⁷ was changed significantly by Congress in 2010. ¹⁸ Re-named as Nutrition Education and Obesity Prevention (SNAP/NEOP), Congress called for comprehensive, multi-level interventions using evidence-based education, health promotion, organizational, community, and public health approaches. It capped and reallocated funding through 2018, and it created formula grants to be administered by state SNAP agencies. Through the Afford-

able Care Act, calorie labeling for chain restaurants and vending machines and Community Transforma-Grants will create opportunities for nutrition education and obesity prevention.¹⁹ The USDA has goals to end hunger by 2015²⁰ and reverse childhood obesity in a generation.²¹ The Federal Task Force on Preventing Childhood Obesity generated cross-cutting initiatives among departments and with the private sector.²² In this vibrant policy environment, the Network's experience with SNAP-Ed can contribute to these goals.

The *Network* has asked families with the very lowest incomes to make dietary and physical activity changes that cost money, take sustained effort, and in some community environments may be nearly impossible. California's economic recession has been deep, food insecu-

rity rates have risen, rates of SNAP participation remain low, and economic statistics in parts of our state rival those of the poorest regions in America. Yet, new data from our 2009 survey show a continued upward trend in reported fruit and vegetable consumption by SNAP adults. While the Network's efforts have shown strong results, it is clear to us that a more powerful set of interventions is needed to accelerate and then sustain large-scale change. In 2004, the USDA rules changed and fiscal support ended for policy, systems and environmental change, physical activity, and food security that were critical to achieving the Network's original 3 targets.²³ As of 2011 therefore, these areas of concentration remain largely unaddressed by the Network. Future work should maintain a foundation of sound programs while adding new approaches.

We believe that comprehensive approaches to target behavior, environments, and policy, together with collaboration among stakeholders to garner needed resources, will yield even stronger results, quicker. Similarly, the Dietary Guidelines for Americans 2010 recommend using a social ecological framework and issue a call to action with 3 guiding principles: ensure access to healthy choices, facilitate healthy choices through environmental strategies, and set the stage for lifelong healthy behavior.² We have also learned that evaluation of a large-scale marketing campaign requires skills from multiple disciplines. More public health professionals have learned diverse methodological approaches in the field. Similarly, professionals from other fields have brought their perspectives to public health nutrition; some of this is exemplified in this issue, but in practice many more applications are possible.

What are we already doing that supports future work in obesity prevention? The obesity/hunger paradox exists because obesogenic factors that contribute to obesity in the general population are aggravated by poverty, e.g., the generally-higher cost of eating healthy, the often-lower access to fresh foods, fewer opportunities for safe, pleasant physical activity, higher levels and more sustained social stress, and disordered

eating caused by recurrent food shortages.²⁴ To successfully counter obesity, programs must be able to address these causes directly. Programs must be able to work in all spheres of influence, support strong efforts for community food security, and foster physical activity. They must be able to deliver a full continuum of approaches: education, social marketing, and policy, systems and environmental change. Expanding the Network's current experience with social marketing to broader levels of influence, and maintaining focus on fruits and vegetables, physical activity and food security, together with a new emphasis on reducing consumption of sugary beverages, will contribute to a foundation for obesity prevention. This is consistent with 3 of the 6 evidencebased obesity prevention strategies identified by the United States Centers for Disease Control and Prevention¹⁶ and USDA's corporate objectives. 11,12

The Network acknowledges with appreciation the early vision of the USDA, and especially the sustained support of its Western Region Office, the California Department of Social Services as our partner, the Network state staff, and the hundreds of colleagues who have made this work possible. We would also like to thank our former colleague Dr. Dileep Bal for his steadfast support of the Network in its early years, for his vision of public health nutrition and confidence in the staff which made this first-of-its kind opportunity a reality. This production of this supplement was inspired by findings from the evaluation project "Convening Evaluation Experts to Review California's Large-Scale, Social Marketing Approach to Nutrition Education" funded by the Robert Wood Johnson Foundation, grant #052053.

The *Network* looks forward with excitement to the next phase of this work in which we aspire to help realize the potential of California's low-income residents for healthier lives and communities.

Susan B. Foerster, MPH, RD, Chief Policy, Planning and Evaluation Section, Network for a Healthy California California Department of Public Health Jennifer Gregson, PhD, MPH Research Scientist Network for a Healthy California California Department of Public Health

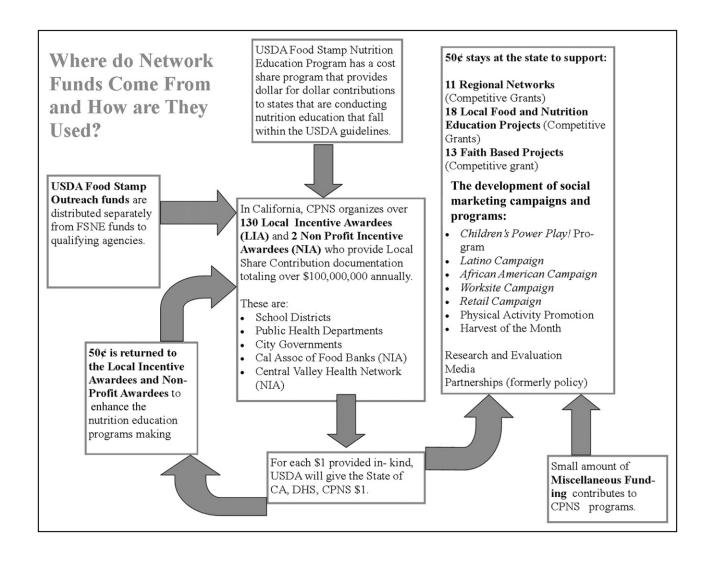
The opinions in this commentary are those of the authors and do not necessarily reflect the views or recommendations of the funding agencies.

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Update

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Errata

The July/August supplemental issue of *The Journal of Nutrition Education and Behavior* included a commentary entitled From the *Network for a Healthy California* (JNEB 2011; 43: S48-S52). The authors would like to acknowledge an error in

their language reported on page S48, the last sentence of the second paragraph in the Building Capacity section. The *Network* partners were incorrectly stated as founders. The sentence should read as follows: "From the 15 indi-

vidual leaders who initiated the *Network* in 1997, today about 3,600 individuals and organizations work together on SNAP-Ed at the local, regional and statewide levels as part of a movement for positive change."

The July/August supplemental issue of *The Journal of Nutrition Education and Behavior* included a research article entitled California Adults Increase Fruit and Vegetable Consumption from 1997-2007 (JNEB 2011; 43: S96-S103). The authors would like

to acknowledge errors and omissions in Tables 1 and 2 regarding values for n. The correct n value for 1997-2007 columns is 3,171. In addition, the sample size for the Poverty Index columns of Tables 1 and 2 were omitted and are 2,940. The first column

titled 1997-2007 should have been labeled as percentage points; the second column as percent change in both tables. Reference to percent increase on page S99, columns 1 and 2 should be percentage points rather than %.