

Healthy Eating,
Active Communities
and
Central California Regional
Obesity Prevention Program

**Final Evaluation Synthesis
Report
Executive Summary**

Samuels & Associates

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This final evaluation report reflects the work of the entire HEAC and CCROPP evaluation team. The report was written and compiled by the staff at Samuels & Associates. The school financing, meal observations, and student survey sections were written by evaluation team members from UC Berkeley Dr. Robert C. and Veronica Atkins Center for Weight and Health. The PE SOFit analysis and incentive award sections were written by evaluation team members at UCLA Kaiser Permanente Center for Health Equity. The entire report was edited by Nancy Adess.

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EXECUTIVE SUMMARY

HEAC and CCROPP: Improving the Environment to Reduce Obesity

The California Endowment was the first foundation in the nation to pioneer a policy-driven and locally based approach to preventing obesity among children and adults. The program—Healthy Eating, Active Communities (HEAC)—recognized that public education programs alone that encourage individuals to eat better and exercise more cannot be effective in changing behaviors when healthy options are unavailable in their communities. The underlying theory driving The California Endowment’s approach was that as a result of creating healthier environments, improved nutrition and increased physical activity would become the accepted and expected cultural norm, thereby preventing childhood and adult obesity and related costly chronic diseases such as diabetes. HEAC, a multi-year, multi-million dollar investment, in preventing childhood obesity and diabetes in six low-income communities, increased access to healthful eating and physical activity in school, after school, neighborhood, health care/public health and workplace settings. In 2006, The Endowment launched a similar effort targeting California’s Central Valley—The Central California Regional Obesity Prevention Program (CCROPP)—supporting eight contiguous and primarily rural, agricultural Central Valley counties, including some of the lowest-income areas of the state. The overarching goal of CCROPP was to develop local and regional strategies to increase access to healthy foods and opportunities to engage in physical activity in low-income communities.

Both HEAC and CCROPP had two components:

- Local engagement of community members and pivotal institutions in changing their environments
- A statewide technical assistance, advocacy and policy component to build momentum for state-level policy aimed at improving children’s and community food and physical activity environments

The Evaluation

The Endowment engaged Samuels & Associates in partnership with UC Berkeley Dr. Robert C. and Veronica Atkins Center for Weight and Health, UCLA Kaiser Permanente Center for Health Equity, Field Research, Inc and Abundantia Consulting to conduct an independent evaluation of both programs and report on key lessons learned at the project's midpoint (March 2009) and endpoint (December 2010).

The evaluation sought to learn about changes in six key areas in the study communities and the extent to which those changes affected factors known to help prevent obesity, including access to healthful foods and physical activity. The key areas were food and beverage environments in schools, after school and neighborhood food outlets; physical activity environments during school PE, after school and in neighborhood settings; practice patterns and organizational culture among health care providers and public health partners; community engagement in improving community environments to prevent obesity; student attitudes and behaviors and community norms; and student-level indicators, including BMI and aerobic capacity.

In order to capture accomplishments, challenges, lessons learned and best practices from the HEAC and CCROPP work, the evaluation team created innovative tools to measure a range of outcomes, including changes in the built environment, organizational and legislative policy change, behavioral change in children's diet and physical activity, and changes in children's fitness levels. The evaluation data collection tools and techniques have offered significant progress in the field of public health and have been adopted by other funders, community advocates, and scientists working to replicate the HEAC environmental and policy change framework around the nation.

The full evaluation report provides an analysis of all the endpoint data collected, reports on change over time, answers the key evaluation questions across communities, and includes site-specific case studies reporting on outcomes in each of the funded communities.

Key Findings

Food and beverage environments in schools, after school and neighborhood food outlets improved during the program. HEAC sites were early adopters of state policies to improve the nutritional quality of foods sold to students during the school day, eliminate the sale of unhealthy foods and beverages on school campuses, and discontinue or greatly reduce the sale of snack foods and sweetened beverages to students. These changes were accomplished with no revenue loss to school food services, as dramatic increases in meal participation rates offset the revenue decline from lost sales of snack and beverages. CCROPP and HEAC communities also improved residents' access to fruits and vegetables by creating seventeen new farmers' markets and produce stands. The grantees also successfully mobilized community members and engaged store owners in reducing the advertising of unhealthy foods and beverages. Efforts to improve the healthfulness of foods offered in retail stores were less successful.

Efforts to improve physical activity environments during school PE, after school and in neighborhood settings met mixed results. Education budget cuts and an intense focus on classroom instruction and academic achievement played a role in reduced time for PE in schools. Nonetheless, HEAC schools trained teachers and adopted curriculum that encouraged greater activity during PE class time, with several schools achieving higher levels of physical activity. HEAC after school programs provided important additional minutes of daily active time. The four HEAC grantee communities that received supplemental grants to enhance PE at HEAC schools—funding that was used, among other things, for teacher training and mentoring, improved policy implementation and communication, and purchase of PE equipment—saw more skilled and consistent PE activities among nearly all elementary classroom teachers and most secondary school PE teachers. At the neighborhood level, HEAC and CCROPP sites were particularly active in and proud of improving safety and increasing or enhancing outdoor space for physical activity.

Practice patterns and organizational culture among health care providers and public health partners improved through partnerships with HEAC and CCROPP sites. Public health departments and providers were key in improving foods offered in schools in three HEAC sites and instituting menu labeling in local food outlets in one site. Health care providers became more engaged in advocacy activities in relation to preventing obesity and more than 300 were exposed to HEAC clinical practice trainings and community programs focused on childhood obesity prevention. As a result, by the end of the program, more

providers were monitoring weight and dispensing obesity prevention messages to patients and fewer felt that lack of training was an obstacle to preventing childhood obesity in their clinical practice. Public health departments and health care facilities at nearly all the HEAC and CCROPP sites adopted policies setting nutrition standards for foods and beverages sold in vending machines and other food service venues at their worksites, but implementation of these policies fell short. Local public health departments reported internal changes that have made them more competent to address obesity and chronic disease prevention, and many have worked within their communities to help improve their immediate environments, such as establishing onsite farmers' markets.

Community engagement was a key ingredient in changing nutrition and physical activity environments at HEAC and CCROPP sites. Residents prioritized strategies, documented problems, defined solutions and advocated for policy change to create neighborhoods and cities that supported obesity prevention. Some reclaimed parks, others engaged in land use planning. Attitudes were seen to shift as residents were more likely to view obesity as a community rather than an individual or family-level problem and to look to schools, healthcare providers, neighborhood safety and availability of healthy foods as important elements in preventing obesity. Of particular note was the success of youth engagement in helping to improve healthy food and physical activity in their communities, and the improved confidence and leadership skills youth expressed as a result. Policymakers, too, were widely supportive of many policy and environmental change strategies to address obesity in their communities, although they were also concerned about finding the resources to implement them.

Student attitudes and behaviors among 7th and 9th graders related to nutrition and physical activity improved over the course of the program. Among the most dramatic shifts over time was the change in reported beverage consumption. Students significantly reduced consumption of regular and diet soda as well as sports drinks, with the bulk of the change coming from lower consumption of these beverages at school. Reducing the availability of unhealthy items in the school environment seemed to translate into decreased overall daily consumption of these items by students, refuting the assumption that students will bring these items from elsewhere or compensate by consuming them later in the day. Student physical activity increased and attitudes about physical activity became more positive as students spent more time being active both in and out of school and less time watching TV and movies (although computer-related time increased).

Student-level indicators, including Body Mass Index (BMI) scores and aerobic capacity, did not change significantly over the course of the program. However, consistent with statewide and national trends, BMI scores in HEAC communities are leveling off. Some improvements in aerobic capacity were found since baseline, but nearly half the students in HEAC communities still do not meet the healthy standard for aerobic capacity. Changes in the food and physical activity environment will need to be maintained for a long enough period of time to have a sustained impact on student behavior to begin to detect a measurable decline in BMI and improvements in Fitnessgram scores.

Key Impacts

The most powerful HEAC and CCROPP impacts include the following:

- HEAC and CCROPP have created an innovative and cohesive framework for a policy and environmental change approach to childhood obesity prevention in diverse communities.
- The multi-sector model developed for HEAC and CCROPP has worked: synergy between sectors facilitates progress.
- Strong community and institutional leadership strengthened reach and sustainability.
- The HEAC and CCROPP sites have emerged as vanguards and role models for communities across the country seeking to change nutrition and physical activity environments.
- Youth, community residents, and health care professionals have been successfully engaged and mobilized around improving access to healthy food and physical activity.
- Statewide leadership and legislation have given legitimacy to local policy strategies, while simultaneously, local policy successes have given momentum to statewide efforts.
- HEAC and CCROPP communities have successfully engaged policy makers and adopted policies.
- HEAC and CCROPP communities have increased access to healthy food and physical activity.
- Evaluation findings have informed the evolution of the HEAC and CCROPP environmental change model and have helped grantees prioritize and refine strategies.

Conclusion: The Tipping Point

The HEAC and CCROPP experience shows that communities can become mobilized to address food and physical activity environmental disparities, and that effective strategies can be tailored to meet the specific needs of communities. Most important, the HEAC and CCROPP experience demonstrates that when environments improve, health behaviors improve. Based on the evaluation findings, we believe that school food and beverage environments have achieved a tipping point. Schools across the state and across the country are improving the healthfulness of competitive foods and the quality of school meal programs and adopting school gardens, produce stands and farmers' markets. The USDA is helping support innovation, and many advocates and technical assistance organizations are serving as facilitators of change. These changes are not isolated to better-resourced schools; they are occurring in all schools, particularly those in low-income communities. The success in schools is spilling over into after school programs, where we have observed significant improvements in foods available and opportunities for physical activity. These successes are resulting in healthier behaviors among students.

The HEAC program developed some successful models to increase physical education and physical activity during the school day. When these programs are in place, students are reporting more physical activity. These improvements need more time to become institutionalized and to have a more consistent impact on student behavior, and sustaining these models will require strong leadership on the part of school districts. The success of these models could help tip schools into environments that value and promote more physical activity.

Attitudes and perceptions across the community are changing and will ultimately begin to change community norms and practices. Public health departments and health care providers are approaching the problems of obesity and chronic disease in new ways, focusing their efforts on prevention and on changing nutrition and physical activity environments. However, changes to a community's food and built environments are slow to develop, occur in pockets of neighborhoods, and are difficult to sustain. We have not yet observed that successful changes to parks or improvements to corner stores have resulted in widespread improvements across a community. Nonetheless, when improvements are made both students and community residents report more usage. In CCROPP the development of farmers' markets has led to more people buying fresh produce at those locations. Park improvements and

addressing community safety have led to more park use and more walking and biking among residents, but has not resulted in changes in community-wide norms and practices.

The California Endowment's investment in a comprehensive approach that combined community innovation with support from technical assistance providers and a network of policy advocates has resulted in a strong and powerful statewide movement to promote healthy environments and public policy. Community grantees have benefited from being linked to the statewide advocates, and the statewide leadership has benefited from learning from the community experiences. The synergy across sectors and jurisdictions has helped to change public opinion, engage policymakers and public officials at all levels, engage the business community and build a strong base of support for an environmental, policy and social justice approach to addressing ways to prevent childhood obesity.

In a short period of time, the HEAC and CCROPP programs have made significant changes to their communities—both in the way community members and leaders think about food and physical activity and in expanding the availability of healthy food and physical activity opportunities. Many leaders have emerged from these community efforts. HEAC and CCROPP have created an innovative and cohesive framework for a policy and environmental change approach to childhood obesity prevention in diverse communities. The two programs have played a major role in accelerating the obesity prevention movement within California and at the national level. In California, HEAC and CCROPP have influenced the Governor's obesity prevention approach as well as the statewide nutrition and physical activity policy agenda. Outside of California, the HEAC and CCROPP experience has helped to shape and inform the federal Recovery Act's Communities Putting Prevention to Work obesity prevention program, the President's Task Force on Obesity, and the First Lady's Let's Move Campaign. As these national initiatives take shape, states, cities and communities will be looking to HEAC and CCROPP for direction on environmental and policy strategies aimed at addressing the obesity epidemic. The HEAC and CCROPP leaders are well positioned to disseminate and help replicate these models and to advocate for sustaining the changes that have been achieved.