

Eat better and get more exercise. That's what public health officials have said for years and yet, even in the face of heightened media and public awareness, California residents are growing increasingly overweight or obese.¹ *Where's the disconnect?*

The Santa Barbara County Public Health Department, working with the statewide Communities of Excellence in Nutrition, Physical Activity, and Obesity (CX³) program took a ground-level look at three low-income neighborhoods in Santa Barbara County to understand the dynamics shaping health behaviors. The findings are both provoking and instructional and could guide Santa Barbara County in making community-wide changes to significantly improve the health of Santa Barbara County.

Challenged Communities

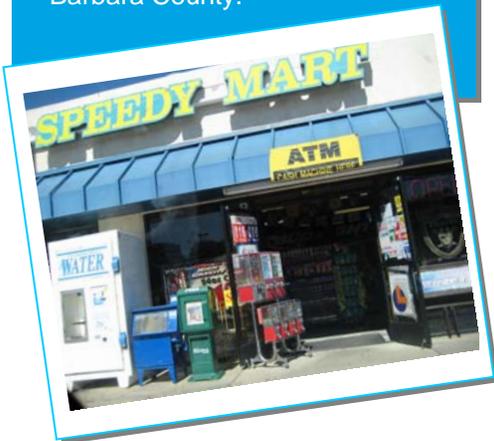
There is growing evidence that what people eat and the likelihood of being overweight is influenced by the environment where they live. More than half of all Santa Barbara County adults are overweight or obese.¹ As we struggle to reverse this alarming trend, access to healthy foods and physical activity is more important than ever.²

A recent statewide study showed that there are four times as many "unhealthy" food outlets (fast food restaurants and convenience stores) as "healthy" food outlets (supermarkets, produce vendors and farmers' markets) in California.³ Convenience stores, small corner markets and gas stations are often the only food retailers available in low-income neighborhoods.⁴ Neighborhoods without access to healthy food from supermarkets or large grocery stores are being coined "food deserts." Residents who can't drive are left to either take a bus or taxi to the nearest large grocery store, both time-consuming and costly. Consider these health facts:

- In low-income neighborhoods, each additional supermarket has been found to increase residents' likelihood of meeting nutritional guidelines by one-third.⁵
- Residents in communities with a more "imbalanced food environment" (where fast food and corner stores are more convenient and prevalent than large grocery stores) have more health problems and higher mortality than residents of areas with a higher proportion of large grocery stores, when other factors are held constant.⁶
- The presence of a supermarket in a neighborhood is linked to higher fruit and vegetable consumption and lower rates of overweight and obesity.^{7,8}
- Children and adults who report eating higher intakes of fruit on a daily basis have a lower body mass index (BMI) than those with lower intakes.⁹
- Research suggests that about one third of cancer deaths were related to nutrition, physical inactivity, obesity or overweight and could have been prevented.¹⁰

Obesity Costs

Overweight and obesity are serious health issues associated with increased risk of morbidity and mortality from chronic diseases.¹¹ These health issues are most pronounced among low-income communities.¹² In addition to the negative consequences these health problems have for individuals, it also take a toll on the economy through increases in health care costs, workers compensation and costs associated with loss of productivity.



Communities of Excellence

The Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX³) project takes an in-depth, on-the-ground look at three low-income neighborhoods in Santa Barbara County to measure the nutrition environment and identify opportunities for improvement. Because the community itself plays a critical role in preventing obesity, this project examines communities in relation to a variety of obesity prevention benchmarks. These benchmarks – or standards of excellence – define what a community should look like in order to help prevent the devastating chronic diseases related to overweight and obesity for its residents.

Through neighborhood audits, the CX³ project examined factors ranging from food quality, affordability and availability to healthy food alongside messaging and marketing practices. The local data and resulting performance measurements show how a community currently “measures” and where it needs to improve to become a “community of excellence.” The project’s goal is to gain a realistic picture of the health of the community/neighborhood and offer residents, merchants, decision makers and local neighborhood and health groups a focal point as they work to build a healthier community.

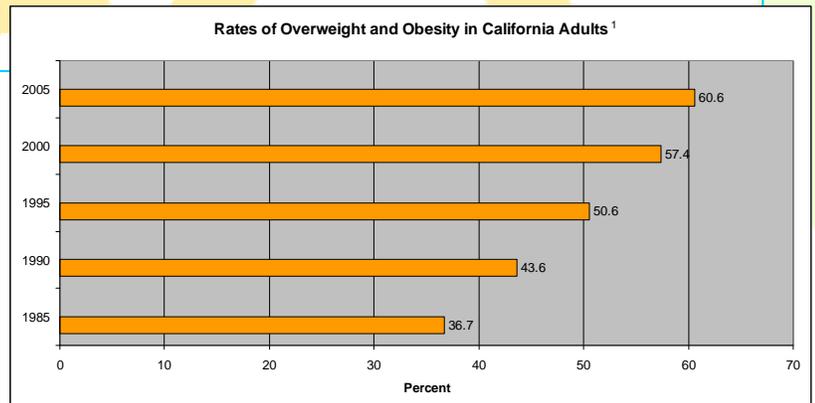
Mapping the Neighborhood

Santa Barbara County (SBC) Public Health Department, working in collaboration with local community organizations and the Network for a Healthy California (with the California Department of Public Health), collected and analyzed local data to gain a realistic picture of the overall quality of the nutrition environment in particular neighborhoods. SBC Public Health Department evaluated three low-income neighborhoods in the county. These are the Isla Vista neighborhood sandwiched between Goleta and the University of California at Santa Barbara (UCSB) and the two Santa Maria neighborhoods of Northwest Bunny Area and Newlove Area.

Initial information was gathered using the on-line Geographic Information System website to map the number of grocery stores, supermarkets, convenience stores, farmers’ markets and fast food outlets in the three neighborhoods, along with other factors such as the number of schools, parks and playgrounds.

With a map of the food environment in hand, data was collected by volunteers and county health employees from February- March 2008 in Santa Maria and in July 2008 in Isla Vista to learn what was going on in and around the stores where residents purchase food. They surveyed the neighborhood food sources to determine:

- What kinds of food retailers/stores are located in the neighborhood? Are local stores offering



healthy, affordable foods? Do they stock fresh fruits and vegetables?

- Are those stores easily and safely accessible?
- Are stores promoting nutrition information and healthier choices?
- What type of marketing and presence do fast food outlets have near local schools, parks and playgrounds, as well as the neighborhood?

Once collected, the data was entered into a standardized scoring system developed by CX³ to evaluate the quality of local stores. Stores earned points for factors contributing to a positive nutrition environment. The overall percent of stores in the neighborhood meeting “quality standards” become performance indicators for how well a neighborhood does in providing healthy nutrition for its residents.

Neighborhood Food Store Quality

Access, availability, quality and the promotion of nutritious foods, especially fruits and vegetables, are key measurements of a healthy environment. There was a potential of 100 points with stores scoring 75 or more points meeting “quality standards.” For example, points were awarded based on:

- WIC (Women, Infant and Children) vouchers and food stamps acceptance
- Availability of a range of high quality fruits, vegetables and other healthy foods
- Reasonable prices for fruits and vegetables
- Promotion of nutrition information and healthy marketing practices inside and outside stores
- Walkability and safety

Fast Food

The marketing of fast food, especially to children, takes a variety of forms and shapes the diet and expectations of a neighborhood. Fast food outlets within a half mile of neighborhood schools, parks and playgrounds were surveyed. There was a potential of 50 points possible, with fast food outlets scoring 37 or more points meeting “quality standards.” For example, points were awarded based on:

- Providing easy-to-find nutrition information
- Offering and promoting healthier menu options
- Limited exterior marketing practices along with an increase in marketing healthier food items
- Limited child-oriented marketing practices

This analysis of local neighborhood data and the resulting quality scores create a snapshot of what’s going on in a particular neighborhood. By understanding the physical factors that shape the nutrition and physical activity behaviors of a community, community leaders can work together to accentuate the positive and to improve negative conditions. The CX³ project provides insight and an opportunity to pursue the small changes that could lead to big health outcomes.

Buying Fruits and veggies in I.V.? It’s expensive, number one. At the markets it seems old or not so good ...not a good selection.

Gabriel Ramirez-Ortiz,
Isla Vista Resident



Santa Barbara County's Nutrition Environment Findings

Santa Barbara County's low-income neighborhoods, based on the CX³ analysis, are out-of-balance from a nutrition and health perspective. These neighborhoods are characterized by limited access to affordable, healthy foods like fruits and vegetables. They are dominated by an abundance of stores where cheaper, packaged, and less healthy foods dominate – namely convenience stores, small corner markets, fast food outlets, etc. While each neighborhood is unique, the data shows common issues and discoveries that are noteworthy:

- Limited access to affordable, healthy foods.
 - Dominated by stores where packaged, less healthy foods dominate.
 - Only three food stores met quality standards (out of 24 stores).
 - Most food stores in these neighborhoods have large alcohol sections.
 - Difficulty in finding stores that offer a

What do we need to do –to get a much needed crosswalk?

Local Resident
Santa Maria
Regarding Newlove
Area Neighborhood

variety of affordable quality produce

- Children are able to access unhealthy foods through street vendors, 15 convenience and six small stores.
- Isla Vista has two convenience stores, while Santa Maria's Northwest Bunny Area has seven and Newlove Area has six.
- Fast Food is readily available in the three neighborhoods.
- In the Santa Maria neighborhoods, Northwest Bunny Area has nine fast food locations and Newlove Area has six locations. Isla Vista has 19.
- One fast food location met quality standards. It was in the Isla Vista neighborhood.

Tackling Challenges, Seizing Opportunities

Communities have little chance of success in improving diet and reversing the alarming levels of obesity without improvements in the physical environment. Having adequate access to affordable, healthy, quality foods like fruits and vegetables is a critical step in cultivating healthier communities.

This analysis points to clear opportunities for action at the local level. Two stores were near meeting "quality standards." With small improvements and the collaboration of key members of the community, these stores and neighborhoods can move toward improving the health of themselves and their neighbors.

On a larger level, discussions about zoning policies, support for retailers and limitations on certain marketing practices may need to be considered. Transportation, land use, and economic development decisions shape neighborhood food access and the food retail environment. Neighborhood, city and county government actions and policies can play a vital role in reshaping these neighborhoods and improving the overall health of some of Santa Barbara County's most challenged neighborhoods.

Important changes to the Women, Infants, and Children (WIC) food package represent a significant opportunity to improve the health of low-income families. In order to participate in the WIC program, stores now must stock at least two types of fresh fruits and vegetables and one whole grain cereal. This change has the potential to increase access to healthy foods in underserved areas and strengthen the viability of small grocers in those communities.

Small business owners located within low-income communities, however, may need assistance with infrastructure, such as refrigeration and scales, as well as technical expertise to properly stock fruits and vegetables and maintain quality.

<p>Santa Barbara County Public Health Department Communities of Excellence Neighborhood Analysis</p>	<p>Isla Vista</p>	<p>Santa Maria NW</p>	<p>Santa Maria Newlove</p>
Total population	18,344	12,445	11,117
Percent of population living in poverty ¹³	84.0%	61.0%	61.0%
Number of schools	1	4	3
Number of parks and playgrounds	24	3	2
Number of farmers markets	0	0	0
Number of supermarkets or large grocery stores	0	0	1
Percent of population living within a half mile of a supermarket or grocery store	0.0%	0.0%	50.0%
Proportion of supermarkets or large grocery stores with convenient public transit	0 of 0	0 of 0	1 of 1
Number of small markets and other food stores	3	3	2
Number of convenience stores	2	7	6
Number of fast-food outlets (all types)	19	9	6
Fast-food chain outlets within a half mile of schools, parks & playgrounds that offer promotional toy give-aways	No	Yes	Yes
Ratio of fast-food outlets to population	1:965	1:1383	1:1853
Fast Food (% meet standards)	1 of 19	0 of 9	0 of 6
Total Neighborhood Food Store Quality (Number that meets standards)	1 of 5	1 of 10	1 of 9



Isla Vista

Santa Maria Northwest

Santa Maria Newlove

Everyone plays a role in supporting changes within the environment. By working together to understand the challenges, opportunities and prioritizing action steps, communities can improve the nutrition and physical activity environments in their neighborhoods and start erasing the devastating health outcomes related to poor nutrition and physical inactivity. This study points to some key opportunities for local and county governments in Santa Barbara County to begin building healthier neighborhoods. Some immediate steps include:

- Increase promotion of fruits and veggies in the neighborhoods
- Increase walkability for safe access to grocery stores
- Increase availability of healthy cultural foods
- Require nutrition labeling for fast food menus
- Increase education on healthy choices



This material was funded by USDA's Food Stamp Program through the California Department of Public Health's Network for a Healthy California. These institutions are equal opportunity providers and employers. The Food Stamp Program provides nutrition assistance to people with low income. It can help buy nutritious foods for a better diet. For information on the Food Stamp Program, call 1-888-328-3483.

FOOTNOTES

- 1 California Dept. of Public Health, Cancer Surveillance and Research Branch, Survey Research Group; 1984-1989 data weighted to the 2000 California population; CDC Behavioral Risk Factor Surveillance System Trends Data, 1990-2006; <http://apps.nccd.cdc.gov/brfss/Trends/TrendData.asp>; County-specific overweight and obesity data obtained from the 2005 California Health Interview Survey, see <http://www.chis.ucla.edu>.
- 2 Centers for Disease Control and Prevention. "Overweight: By Body Mass Index, Trends Data: California." 2006.
- 3 California Center for Public Health Advocacy, Searching for Healthy Food: The Food Landscape in California Cities and Counties (January 2007), available at www.publichealthadvocacy.org/RFEI/expanded%20methods.pdf (last accessed 9/24/07).
- 4 A. Shaffer, The Persistence of L.A.'s Grocery Gap: The Need for a New Food Policy and Approach to Market Development (May 2002), Center for Food and Justice, available at <http://departments.oxy.edu/uepi/cf/publications/Supermarket%20Report%20November%202002.pdf> (last accessed 9/24/07).
- 5 K. Morland et al., *The Contextual Effect of the Local Food Environment on Residents' Diet*, Vol. 92, Issue 11, American Journal of Public Health, at 1761-1768 (November 2002).
- 6 Mari Gallagher Research and Consulting Group, Examining the Impact of Food Deserts on Public Health in Chicago (July 2006), available at www.marigallagher.com/site_media/dynamic/project_files/Chicago_Food_Desert_Report.pdf (last accessed 9/24/07).
- 7 S. Inagami et al., *You Are Where You Shop: Grocery Store Locations, Weight, and Neighborhoods*, Vol. 31, Issue 1, American Journal of Preventative Medicine, at 10-17 (2006). See also K. Morland et al., *Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study*, Vol. 30, Issue 4, American Journal of Preventative Medicine, at 333-339 (2006).
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- 11 Visscher T.L. and Seidell, J.C. "The Public Health Impact of Obesity." *Annu Rv Public Health*, 2002, 22:355-375; and U.S. Department of Health and Human Services. "Overweight and Obesity: Health Consequences."
- 12 Bootsma-van der Wiel, Annetje, et al. "Association between chronic diseases and disability in elderly subjects with low and high income: the Leiden 85-plus Study." *The European Journal of Public Health Advance*. 494-497. 2005.
- 13 Living in poverty described as at or below 185% Federal Poverty Level in each neighborhood.
- 14 Index of unhealthy to healthy food sources (convenience stores and fast food outlets vs. farmers' markets, supermarkets and large grocery stores), low score = better index