

HEALTHY EATING & PHYSICAL ACTIVITY:

Addressing Inequities in Urban Environments

This document was prepared by Prevention Institute.

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TABLE OF CONTENTS

INTRODUCTION	1
Methods	2
CHAPTER 1. The Intersection of Race, Class and Place: The Impact of Health.	4
The Influence of Neighborhood Environments on Physical Activity	6
The Influence of Neighborhood Environments on Nutrition	6
CHAPTER 2. Strategies and Priorities to Improve Access to Physical Activity Options and Healthy Food.	8
Priority Physical Activity Strategies & Policies	9
Promote an atmosphere of safety	9
Design streets to support pedestrians and bicyclists	10
Maintain and develop programming and facilities, particularly parks, for active play and recreation.	10
Priority Nutrition Strategies	11
Supermarkets and full service grocery stores	11
Enhancing small neighborhood stores	12
Farmer’s markets	13
Importance of Policy	14
CHAPTER 3: Achieving the Sustainability of Neighborhood Food and Physical Activity Initiatives	16
Advancing neighborhood physical activity and nutrition strategies through government and other partnerships.	18
CONCLUSION	19
ENDNOTES	21
APPENDIX A: From Pilots to Practice Participants.	24
APPENDIX B: 13 Community Health Factors	25
APPENDIX C: Neighborhood Change Partners	26
APPENDIX D: From Pilots to Practice Resources.	27

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Prevention Institute

is a nonprofit, national center dedicated to improving community health and well-being by building momentum for effective primary prevention. Primary prevention means taking action to build resilience and to prevent problems before they occur. The Institute's work is characterized by a strong commitment to community participation and promotion of equitable health outcomes among all social and economic groups. Since its founding in 1997, the organization has focused on injury and violence prevention, traffic safety, health disparities, nutrition and physical activity, and youth development.

INTRODUCTION

When a fire destroyed the only grocery store in the Upper Falls neighborhood of Rochester, New York, the predominantly African American and Puerto Rican residents were left without local access to affordable, fresh foods. Those who could, traveled miles to the nearest suburban supermarket, but the added time and travel costs strained many residents. Recognizing the injustice of living with such limited food options, a dynamic collaborative of neighborhood members and activists joined with local government officials to lobby for a new supermarket. After five years of tireless efforts and shifting strategies, Partners Through Food convinced TOPS, a major grocery chain, to open a shopping plaza and full-service supermarket. The new shopping plaza opened in 1997 and since then residents say the retail area has transformed the neighborhood. Now they have easy access to affordable, healthy foods which research suggests encourages more nutritious eating.¹

The effort in Rochester represents not only an important community organizing victory, but also a victory for good nutrition. Increasing access to healthy food, as was the case in Rochester, along with enhancing opportunities for physical activity are important approaches to improving overall health. Faced with the ever present threat of nutrition and activity-related chronic diseases—exemplified by the early appearance of Type 2 diabetes and risk factors for cardiovascular disease in children—individuals are urged to “eat better and move more.” However, the factors that influence eating and activity are increasingly shaped by factors that are beyond an individual’s control. According to the Institute of Medicine,

“To prevent disease, we increasingly ask people to do things that they have not done previously, to stop doing things they have been doing for years, and to do more of some things and less of other things...It is unreasonable to expect that people will change their behavior easily when so many forces in the *social, cultural, and physical environment* conspire against such change.”²² (*emphasis added*)

What should communities focus on to foster health and reduce nutrition and activity related chronic disease? What efforts will achieve the greatest results? What does it take to maintain effectiveness? What sounds good but isn’t necessarily effective? This document provides guidance for fostering the growing momentum around improving nutrition and physical activity environments in



Before and after photos of the Upper Falls neighborhood grocery store.

socially and economically disadvantaged urban communities, where residents are suffering from high incidence of chronic disease. This paper represents the *dialogue* of a working group trying to make important decisions about how to realize the greatest impact on nutrition and activity related diseases and how to create the community-wide changes needed to sustain this impact.

METHODS

The findings and conclusions are based on a convening funded primarily by the Robert Wood Johnson Foundation. The California Endowment joined as a co-sponsor to support the effort. *From Pilots to Practice: Maximizing the impact of efforts to improve access to healthy food and safe places for physical activity in low-income communities* brought together 19 community advocates and academics from across the country to discuss strategies for improving nutrition and activity environments on a neighborhood level and how to best achieve large scale sustainability of these improvements (See Appendix A for a full participant list). Prevention Institute organized and facilitated this gathering and the final document builds on research Prevention Institute conducted in preparation for the meeting. While it can not be overemphasized that every community is unique and that *no one recommendation is absolute* for every community, certain trends and conclusions can be helpful. Convening participants included community advocates with extensive on-the-ground experience in nutrition and physical activity, academics and researchers, and advocates working in related areas, such as community safety, urban youth communication and equitable development. Final responsibility for the recommendations presented here rests with Prevention Institute.

The document is divided into three sections. The first section describes the underlying context for improving opportunities for healthy eating and physical activity in socially and economically disadvantaged neighborhoods, noting in particular the need to change the environment to support better eating and physical activity in order to eliminate disparities in health related to nutrition and inactivity related chronic diseases. Next we present a range of strategies to improve access to physical activity options and healthy food and provide further detail for six priority strategies, describing the policies that support each strategy. Lastly, we describe the elements and the process required to make sustainable improvements to a neighborhood's food and physical activity environment, including community engagement and partnerships.

The authors want to acknowledge that this document builds on the experiences of community activists from around the country who have been organizing in their communities—stopping grocery store closures and recruiting new stores to underserved areas, establishing farmers' markets and community gardens, improving pedestrian safety, or protesting the red lining of businesses in their neighborhoods. The goal of environmental change and policy efforts is to create communities where healthy eating and regular physical activity are

This paper represents the dialogue of a working group trying to make important decisions about how to realize the greatest impact on nutrition and activity related diseases and how to create the community-wide changes needed to sustain this impact.

natural and convenient, where people can safely walk in their neighborhoods to access healthy and affordable food and walk to opportunities for play and recreation. This document identifies best practices and promising approaches for achieving lasting changes in nutrition and physical activity environments in order to support healthy behaviors. Around the nation, as the emphasis on sustainable change continues to grow, there is an ever-evolving base of community experience that will enhance the findings of this forum.

The Intersection of Race, Class and Place: The Impact of Health

Health and well-being are influenced by the neighborhoods where people live, work, play and learn—by the interplay of a community’s physical, social and cultural environment. Research has now shown that after adjusting for individual risk factors, there are neighborhood differences in health outcomes³ and it is the relationship of place, race and ethnicity, and poverty that can lead to the greatest disparities in health. Place-based strategies, with an emphasis on community participation are extremely promising for reducing current high rates of nutrition and physical-activity related chronic disease experienced by residents of poor urban neighborhoods.

Why are people getting ill and how can we reduce the prevalence of nutrition and physical-activity related diseases? An analysis of the underlying causes of health problems suggests why it is necessary to address community environments. Low-income individuals and people of color living in urban neighborhoods tend to get ill more frequently, more severely and at younger ages. Once

INEQUITIES IN FOOD ACCESS AND PHYSICAL ACTIVITY OPPORTUNITIES

- A 2001 study of 216 neighborhoods in Maryland, Minnesota, Mississippi, and North Carolina revealed an average of four times as many supermarkets in predominately white versus African-American neighborhoods.⁴
- A 2001 analysis by the Philadelphia Food Trust concluded that the highest-income neighborhoods had 156 percent more supermarkets than the lowest income neighborhoods.⁵
- A 2003 study in Los Angeles demonstrated that stores in lower-income, predominantly African American neighborhood were significantly less likely to carry healthy foods and the quality and variety of fresh fruits and vegetables in these stores was significantly lower.⁶
- Low income and people of color are less likely to have access to physical activity settings including parks, bike trails and public pools than whites and the more affluent.⁷
- Crime and fear of crime are associated with lower activity levels, particularly among women of color, young people and seniors.⁸
- An analysis of California Health Interview Survey (CHIS) data found that non-white youth and teens from low-income families in California report lower rates of physical activity than white youth and have worse access to parks, playgrounds and other physical activity settings.⁹
- Communities with lower incomes, higher poverty rates, and higher proportions of racial/ethnic minorities—those most at risk to be sedentary and overweight—also have the fewest community-level physical activity-related opportunities.¹⁰

health problems emerge, lack of access to quality health care exacerbates disparities in health outcomes. Typically the attention to disparities focuses on the inequities in the quality and availability of treatment. However it is important to step back and ask why there are inequities in chronic disease rates in the first place. Clearly it is critical that individuals adopt healthy eating and physical activity habits. To a large extent the community environment plays a powerful role in shaping these habits that can prevent or lead to chronic disease. At their root, disparities result from people being born into a society that discriminates against them on the basis of race or ethnicity or income, and are disproportionately subject to living in impoverished communities. These fundamental conditions are manifested in the social and physical environment which people encounter throughout their lives.

Decades of public and private disinvestment have influenced both the physical and social environment in economically disadvantaged urban communities. This disinvestment is manifested by inadequate municipal services, limited retail and service options, and a lack of investment in educational, recreational, and other opportunities that promote health. This has led to both a physical neighborhood environment that does not support good health and a widespread distrust of the public sector. America Bracho, Executive Director of Latino Health Access, described “[government] neglect as the most subtle form of discrimination,” that leads to neighborhoods that are “sick by design.” Henry Taylor, of the Department of Urban and Regional Planning at the University at Buffalo School of Architecture and Planning, remarked that “the built environment in distressed inner-city communities is the contemporary manifestation of structural racism.”

FIGURE 1. TRAJECTORY OF HEALTH DISPARITIES



Building on the **Trajectory of Health Disparities**, Prevention Institute has identified 13 Community Factors (Table 1; see Appendix B for a full description of each factor) in the social and physical environment that appear to have the strongest influence on health overall.^{11*} The factors are organized into three interrelated clusters: **Equitable Opportunity Factors, People Factors, and Place Factors.**

* Similar work by PolicyLink has resulted in very similar factors. See: PolicyLink. Reducing health disparities through a focus on communities. A PolicyLink Report. Oakland, CA: 2002.

TABLE 1.
13 Community Health Factors

Equitable Opportunity Factors

- Racial justice
- Jobs & local ownership
- Education

People Factors

- Social networks & trust
- Participation & willingness to act for the common good
- Acceptable behaviors & attitudes

Place Factors

- What’s sold & how it’s promoted
- Look, feel & safety
- Parks & open space
- Getting around
- Housing
- Air, water & soil
- Arts & Culture

The **Place Factors** play the most visible role in influencing behavior. People have, or do not have, access to a physical environment—including healthy food—that cues people to make healthy choices. The rest of this section will focus on describing what’s known about the **Place Factors** and their influence on physical activity and nutrition. **Equitable Opportunity Factors** and **People Factors** also play an important role in influencing behaviors and health outcomes and these are addressed in later sections of the paper.

THE INFLUENCE OF NEIGHBORHOOD ENVIRONMENTS ON PHYSICAL ACTIVITY

The physical space of neighborhoods influences patterns of life that in turn influence residents’ physical activity levels. The distances between home and work, the look and feel of a streetscape, the presence or lack of retail stores and parks influence whether people drive, walk, or bike and how they spend their leisure time. According to Jacky Grimshaw of the Center for Neighborhood Technology, “in order to create sustainable urban communities we need to look at people and their lives and what keeps them from having healthy environments.” In the case of many underserved urban neighborhoods, the physical environment is marked by inadequate sidewalks, inadequate access to public transportation, absence of bike lanes for cyclists, absence of walking and biking trails and absence or ill maintenance of parks,¹²⁻¹⁴ along with inaccessible recreational facilities¹⁵ and crime.¹⁶

Research substantiates the relationship between the physical environment and physical activity behaviors. A review of studies comparing highly walkable neighborhoods with poorly walkable neighborhoods found that residents reported approximately two times more walking trips per week in highly walkable neighborhoods.¹⁷ In several studies, the availability of and access to bike paths and footpaths were also associated with greater levels of physical activity.¹⁸ Creation of, or enhanced access to places for physical activity can result in a 25% increase in the percentage of people who exercise at least three times per week.¹⁹ Several studies have found that people get more physical activity if they have good access to specific places to exercise, such as parks, basketball courts, gyms and if their neighborhoods provide a high quality environment for outdoor activity.²⁰

THE INFLUENCE OF NEIGHBORHOOD ENVIRONMENTS ON NUTRITION

Residents of underserved urban neighborhoods also face particular dietary challenges including inadequate access to supermarkets,²¹⁻³⁴ limited transportation options to access supermarkets in other neighborhoods,³⁵⁻⁴¹ forced reliance on local corner liquor stores,⁴²⁻⁴⁴ and an overabundance of fast food restaurants.^{45,46} There are several aspects of the neighborhood food environment that can ultimately influence dietary behavior, including the types of retail outlets

Studies Linking Neighborhood Activity Environments and Physical Activity Behavior

- Communities that develop pedestrian and bicycle-friendly infrastructure with links to destinations of interest have more physically active residents.⁴⁷
- Communities that build bicycling and walking trails, support exercise programs, and provide public areas such as parks and sidewalks can boost the physical activity levels of residents.⁴⁸
- Creation of or enhanced access to places for physical activity can result in a 25% increase in the percentage of people who exercise at least three times per week.⁴⁹

Studies Linking Neighborhood Food Environments and Dietary Behavior

- African-American residents increased their fruit and vegetable intake by an average of 32% for each supermarket in their census tract.⁵⁰
- Low fruit and vegetable consumption are linked to the poor selection of these items in the nearest neighborhood supermarkets.^{51,52}
- The relative availability of produce is tied to consumption patterns—even when the taste preference for these items is low.⁵³
- Higher food prices, particularly higher fruit and vegetable prices, were significantly related to greater increases in BMI in elementary school children.⁵⁴

present, the product mix offered, the quality and cultural appropriateness of available foods, and whether foods are affordable.⁵⁵ Although a 2005 article⁵⁶ described a greater clustering of fast food establishments around schools in higher versus lower income areas, fast food restaurants may exert a greater influence on the diets of low-income residents because there are fewer healthy alternatives, such as full scale supermarkets, in their immediate neighborhoods. Lastly, the price of healthy foods may exert an additional barrier for low-income residents as there is emerging data indicating that healthy diets including lean meats, fish, and fresh produce may in fact be more expensive than high-fat, energy-dense diets.⁵⁷

Strategies and Priorities to Improve Access to Physical Activity Options and Healthy Food

Positively impacting eating and activity behaviors will most likely require a set of strategies that work in coordination with one another rather than a single strategy. Mark Winne, former Executive Director of the Hartford Food System, observed that “at a general level you need to have activities designed to promote healthy eating that are *coordinated* and *complementary*. In practice interventions are usually not big enough, too isolated or not to scale...This can’t be a project by project scenario.” While Winne was referring to nutrition strategies specifically, the need for a combination of strategies that are linked is equally true for physical activity.

Table 2 represents a list of strategies compiled by Prevention Institute based on community advocacy efforts from across the country, that are frequently utilized to improve the physical environment of neighborhoods to support physical activity and healthy eating. These strategies not only build on the developing understanding of nutrition and physical activity environments emerging from academia, but also the experiences of advocates working in related areas, such as community safety and equitable development. *From Pilots to Practice* participants endorsed the entire list of strategies presented in Table 2, noting that they are each an important component of improving nutrition and physical activity environments.

Deciding which strategies to prioritize proved difficult. Elizabeth Baker, Associate Professor of Community Health in Behavioral Science and Health Education at St. Louis University, explained that “perhaps it is what needs to happen first that must be considered, not one versus the other.” Anthony Iton, Public Health Officer for Alameda County, added that “the question should really be which strategies can you *not* do without?” while Elva Yañez, from Trust for Public Land and a longtime alcohol and tobacco policy advocate observed that “the strategies that are most effective should rise to the top over time in a movement.” In fact there are also integral connections between many of the strategies, such as the link between transportation (including public transit, walking and biking) and food access. Yañez, remarked that specific physical activity components such as safety, streetscape amenities, and public art should be built into *all* nutrition and physical activity endeavors.

TABLE 2.
Strategies to Improve Access to Physical Activity and Healthy Food

- Physical Activity**
- **Promote an atmosphere of safety**
 - **Design streets to support pedestrians and bicyclists**
 - **Maintain and develop programming and facilities, particularly parks, for active play and recreation**
 - Support a variety of retail stores, parks and open spaces
 - Support public transit and adopt transit-oriented design
 - Include public art and streetscape amenities
- Nutrition**
- **Supermarkets and full service grocery stores**
 - **Enhance small neighborhood stores**
 - **Farmers markets**
 - Increase healthy options at restaurants
 - Limit access to unhealthy food
 - Improve transportation access
 - Community gardens
 - Street vendor programs
 - Food cooperatives

Priority strategies are bolded

Given the pressing need to address chronic disease related to poor nutrition and physical inactivity and limited resources for funding neighborhood change efforts, it is important to select strategies that can serve as logical starting points for change—the *greatest immediate value* for improving neighborhood food and activity environments.

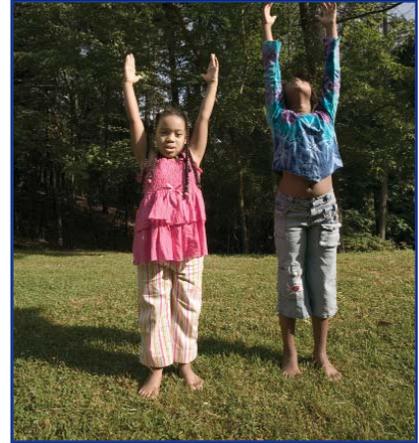
PRIORITY PHYSICAL ACTIVITY STRATEGIES & POLICIES

The three physical activity strategies that emerged as overarching priorities include promoting neighborhood safety, ensuring that streets are both bikeable and walkable and lastly, establishing accessible venues for recreation and activity, including parks and other programs and facilities. These three priorities ensure that neighborhood residents have access to the foundations they need to be more physically active: safe spaces, destinations and venues in which to bike and walk and enjoy other forms of physical activity. Safety is a fundamental as perceptions of safety (both from crime and traffic safety) guide the kinds of activities that residents will engage in and also the kinds of activities that they will let their children pursue. Thus in many cases, residents may not take advantage of opportunities for physical activity if they do not feel safe. Secondly, streets that are safe as well as walkable and bikeable, can help to encourage these forms of physical activity (and as mentioned below can also decrease crime by having more “eye on the street”) as well as play. Lastly, people need destinations and facilities in which to be active.

Promote an atmosphere of safety

Deborah Prothrow-Stith, of the Harvard School of Public Health and co-principle investigator of CDC’s UNITY project on urban violence, pointed out that “issues of safety impact food access, including the willingness of merchants to locate in specific neighborhoods, as well as physical activity.” Taylor raised the selection of the specific public spaces that will be made safe from crime in order to encourage outdoor physical activity as an important consideration without an easy answer. Several neighborhood design strategies are being employed to enhance a sense of safety from crime. Increasing foot traffic which is achieved by creating desirable neighborhood destinations is a first step. Designing buildings with “eyes on the street” (i.e., large windows at street level), installing outdoor lighting and improving stairway ambiance are other strategies.

The deeper issues of neighborhood violence prevention have by and large not been tackled by the physical activity/built environment world. Longer term strategies, focused on building community engagement are needed to prevent violence. Communities in cities like Boston that successfully reduced juvenile homicide in the mid-to late 90’s, have taught us that violence prevention requires multi-faceted strategies, mobilizing a broad section of community residents and institutions, and addressing a wide variety of the risk factors for violence.⁵⁸ Specific policies that can foster safe and vibrant neighborhoods



include: those reducing the availability of firearms; policies that decrease the density of alcohol outlets and advertising in neighborhoods; economic development and zoning policies that increase the presence of businesses thus increasing neighborhood foot traffic; and policies that address neighborhood beautification including graffiti removal and park maintenance.

Design streets to support pedestrians and bicyclists

Well designed and safe streets is an overarching issue in creating active neighborhoods. People are more likely to walk or bicycle down streets where sidewalks are in good repair, where traffic is moving at slow or moderate speeds and where people have a sense of separation from motor vehicles. Furthermore, walking or bicycling is a more viable form of transportation in “mixed-use” neighborhoods, where stores and services are close to where people live and work, thus fostering a variety of retail stores in neighborhoods is a related element. Simple street design modifications to slow traffic and reduce the motor vehicle-person distance include: extended curbs at crosswalks, median strips, adding a bicycle lane, narrowing traffic lanes, improving pedestrian signals and adjusting signal timing. Establishing separate walking and bicycle paths to connect different parts of the city also encourages “active” transportation. Other architectural elements of well designed streets include the presence of bus shelters, which add to a sense of safety and further encourages pedestrian and cycling activity.

These concepts have been embodied in transportation, planning, and urban design policies as a commitment to “complete streets”—ensuring that all community residents have access to complete streets that are safe for motorists, pedestrians, bicyclists, the disabled and public transit users. Pedestrian and bicycle master plans, adopted by cities such as Oakland and Portland, are one method used by localities to specify the details of complete streets policies. Changes can be made incrementally, during routine street maintenance and repair, as well as being incorporated as part of all major construction projects and new developments.

Maintain and develop programming and facilities, particularly parks, for active play and recreation

Access to sports fields and courts, playgrounds, swimming pools, and gyms appear to affect activity levels. Opening existing facilities such as schools and recreation centers for expanded drop-in hours can be achieved without extensive capital investment. Programming and facilities are essential in creating a strong sense of community engagement. One key policy area to promote the use of existing programming and facilities involves joint-use agreements that allow school grounds and facilities to be open during non-school hours for community use. Access to parks appears to affect activity levels and making existing parks safe and clean will encourage outdoor play. Parks and open space



are also desirable destinations that encourage people to walk and bike to access them if they are nearby. Although the exact relationship is not always clear, several studies have documented a relationship between access to facilities and increased activity levels.⁵⁹

Under-served communities typically do not have access to the safe parks that they need. Bracho explained that in Santa Ana, CA, a predominantly Latino community, there are no real parks to speak of. Instead there are small “technical parks” which bear signs declaring “Active sports are prohibited.” As a result, the residents in the area lack a place to gather and be active. Community residents and their associations need to be engaged as champions to support the establishment of recreational venues. Strong policies that support the creation and maintenance of parks and other open spaces are important. In particular, public finance measures should include funding for parks and open space. Furthermore, parks should be included in the general (or master) plans of all cities with a focus on creating and maintaining parks in under-served areas (not just wherever the city wants).

PRIORITY NUTRITION STRATEGIES

The three strategies that emerged as nutrition priorities are supermarket investment, enhancing small neighborhood stores and farmer’s markets. These three strategies build on each other and all serve to get healthy, affordable and culturally appropriate foods into neighborhoods. A combination of two or more of these strategies can ensure that neighborhood residents have access to grocery staples as well as fresh fruits and vegetables while also matching the immediacy of a neighborhood’s needs (e.g., supermarkets are typically a longterm investment strategy while it may be quicker to start a farmer’s market). Supermarkets, although the most complicated of the three, can also reach the most residents. To many, a neighborhood may not feel complete without a supermarket, which may also offer additional benefits such as in store banking, pharmacies and of course, employment. The strategy of enhancing small neighborhood stores (including corner liquor stores and mom and pop stores) builds on a neighborhood’s existing retail infrastructure and can serve as an important stop gap if larger supermarket investment is not a possibility. Lastly, although farmer’s markets do not always carry all the food staples needed, they do provide a more immediate way to bring local produce into a neighborhood.

Supermarkets and full service grocery stores

Returning supermarkets and mid sized stores to under-served neighborhoods is a strong area of current focus. A preliminary “before and after” comparison based in the UK indicated an improvement in dietary behavior following the introduction of a large chain supermarket.⁶⁰ The location of supermarkets needs to be framed not merely as an economic, market driven issue, but also as a health issue. Several studies⁶¹⁻⁶³ have identified the common elements pres-



ent in communities that have successfully attracted supermarket investment, including strong community advocacy and involvement and strong political leadership, public advocacy and informed action. Although supermarkets and mid sized stores usually provide quality and variety at affordable prices, they are extremely costly and time consuming investments, requiring strong government buy-in and support as well as a suitable building site which may not always be present. Nonetheless, supermarkets and other full service grocery stores represent what many neighborhood residents want.

Chicago-based community food security activist LaDonna Redmond, who is President and CEO of The Institute for Community Resource Development, observed that residents living in under-served, “low-income” neighborhoods want what everyone else wants when it comes to food: convenience and quality. “People are ‘social serviced’ to death. They want a grocery store, not a co-op, not social services,” she explained. While the presence of a grocery store or supermarket in a neighborhood may seem like a “got to be done” issue, Duane Perry, former Executive Director of the Food Trust, pointed out that policy-makers do not necessarily understand that there is a *need* for a supermarket in all neighborhoods and it is important for advocates to explain this need. Furthermore, Lisa Feldstein of the Public Health Institute clarified that “culturally appropriate, low priced food doesn’t have to be provided through a supermarket.” The example she gave was of San Francisco’s Chinatown neighborhood, which does not have a grocery store but still offers plenty of access to fresh and healthy foods through small fruit and vegetable markets. Policies that support supermarket access include financing measures that attract supermarkets to underserved neighborhoods, tax write-offs to encourage supermarkets to remain in specific neighborhoods, and policies at the state and local level that encourage food retail development in addition to housing development.

Enhancing small neighborhood stores

Improving the product quality, price and selection of healthy foods (and decreasing the availability of unhealthy foods) in small neighborhood stores emerged as another priority strategy. Improving small neighborhood stores is an important strategy because they are often part of people’s daily routines and enhancing their product availability and quality can have great impact from a food distribution perspective. Strategies for enhancing small neighborhood stores include training small store owners to purchase and handle produce, assisting store owners in increasing shelf space for healthier items, and expanding dairy sections to include low and nonfat milk. Training and grants for stores to upgrade storage equipment, enhance store layout and signage, and to market changes to neighborhood residents, enhance the success of these efforts.

The advantage of this approach is that it supports small business owners and builds on existing business infrastructure within a neighborhood. This is also less time intensive and costly than working on supermarket developments. At the

“People are ‘social serviced’ to death. They want a grocery store, not a co-op, not social services.”

LADONNA REDMOND
President and CEO, The Institute for
Community Resource Development

same time, it requires a real commitment from the store owners to make changes. As a recent report by Policy Link notes, there are several challenges to small store improvements.⁶⁴ It is difficult for small stores to match the low prices, quality, and selection of larger stores; changing product selection means risking losing profits; and finally smaller stores are not always valued by community residents. However, given their ubiquitous presence in underserved neighborhoods, small stores remain an important area of policy consideration. Specific policy initiatives that support small neighborhood and corner stores in providing foods that are healthy and affordable include tax incentives, streamlined permitting and zoning and financial assistance that allow small stores to develop the infrastructure needed to purchase and stock healthier foods.

Farmer's markets

Farmer's markets are a valuable source of fresh fruits and vegetables, and access to the markets increase fruit and vegetable consumption amongst low-income participants.⁶⁵ Although operating markets with primarily low-income customers can be difficult due to lack of an adequate consumer base, establishing farmers markets on the point between low-income and higher income communities, or in places with a mixed income consumer base, proves more successful.⁶⁶ Several elements emerge as key to the success of farmers' markets in reaching low-income consumers: price and availability of familiar products, community ownership, establishing transportation to markets, flexible market hours, hiring sales staff from the neighborhood, utilizing a community organizing approach for outreach and conducting promotions or sales that match the monthly cash flow of the community. Ensuring farmer's market customers



PENNSYLVANIA FRESH FOOD FINANCING INITIATIVE

Recognizing that residents of low-income communities in Philadelphia were experiencing high rates of diet-related chronic disease, the non-profit Food Trust (FT) launched an effort to bring supermarkets into low-income areas where access to fresh food and produce was poor. The FT documented the communities' health disparities in the report, *Food for Every Child*, and concluded that the number of supermarkets in the highest-income neighborhoods of Philadelphia was 156% greater than in the lowest-income neighborhoods, and that the greater Philadelphia region overall had 70 too few supermarkets in low-income areas. *Food for Every Child* galvanized political support and inspired the development of the Food Marketing Task Force.

The leadership taskforce released an additional report, *Stimulating Supermarket Development: A New Day for Philadelphia*, with ten recommendations to increase the number of supermarkets in Philadelphia's under-served communities by creating a more positive environment for supermarket development. Leaders of the task force, along with two state representatives, pushed for the development of the Pennsylvania Fresh Food Financing Initiative in the fall of 2004. The initiative serves the financing needs of supermarkets and other grocery stores that plan to operate in these under-served communities, where infrastructure costs and credit needs cannot be filled solely by conventional financial institutions.

The first supermarket to be funded under the initiative opened its doors in September 2004. To date, the Pennsylvania Fresh Food Financing Initiative has committed resources to 22 supermarket projects and has committed \$21.9 million in grants and loans to leverage this investment. These five projects will result in the creation of 2,552 new jobs and over 1,133,595 square feet of retail space. (www.thefoodtrust.org/ accessed Jan 8, 2007)

have access to electronic benefit transfer so they can use food stamps as a form of payment also helps ensure adequate sales for farmers. By providing money to small and mid range farmers, farmers markets preserve farm lands and support more sustainable production methods. On the other hand, they do not carry other staples and have limited hours and therefore need to be supplemented with other retail outlets. Farmers markets also require a strong customer base in order to last.

IMPORTANCE OF POLICY

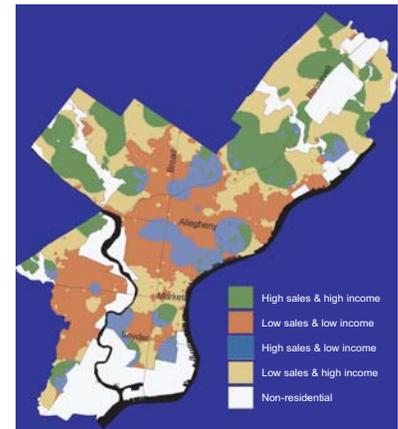
In addition to identifying priority strategies within communities, it is equally important to move from singular nutrition and physical activity projects to institutionalize effective approaches through policy. Public policies can help direct the priorities of public agencies, leverage funding streams, remove barriers and/or incentivize positive neighborhood changes. While imperfect, policy measures can help disseminate constructive changes to all underserved neighborhoods, rather than leaving each neighborhood to reinvent the wheel. The policy agenda for neighborhood change is in its early development and includes policies at the, state, federal and local level. *From Pilots to Practice* participants identified a range of policy approaches (Table 3) specific to either nutrition or physical activity. Although the following paragraphs will describe state and federal level policy, the bulk of our policy analysis centers on local policy. Local level policies, although typically overlooked, serve as important precursors to state and federal policies as localities are often able to engage in greater and earlier innovation in the policies that are proposed. Furthermore, local policies can serve to generate more concentrated community wide awareness and support of a particular issue, increasing the likelihood that a particular policy, once passed, will be successfully implemented.

Needless to say, in terms of healthy eating, state and federal nutrition policies are vital as well and can be leveraged to create a more sustainable food system in order to best support community initiatives designed to promote access to healthy, affordable foods. “We need to support the sustainability of a good food system: where the food comes from, how it is produced, how it is transported. Policies around increasing access to food also need to be concerned about clean water and air and healthy soil,” says Kami Pothukuchi. The 2007 Farm Bill, for example, provides a concrete opportunity to introduce health into the agricultural discussion by strengthening the link between health and the quality, availability and price of food. Additionally decisions about state or federal agriculture policies clearly have a direct impact on food access on a local level.

Physical activity policies on a state and federal level typically center around opportunities for transportation as well as the creation and maintenance of spaces in which to be physically active. Existing transportation policies such as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) that authorizes the federal surface transportation pro-

SUPERMARKET SALES BY RESIDENT INCOME IN PHILADELPHIA

Research conducted by the Food Trust supports that low income neighborhoods can generate high sales levels, as noted by the blue areas below.



Map courtesy of the Food Trust

grams for highways, highway safety, and transit could be better leveraged, for instance, to achieve improved neighborhood access to biking and walking. Federal and state policies can in turn be utilized to fund urban parks and safety, particularly in low income communities. According to advocates, there is an urban park funds category at the federal level that has not had money allocated to it in many years. Politicians must be re-engaged in a discussion about the importance of urban parks in order for communities to receive the monies that have been promised. Currently the gas tax in some states earmarks money for road improvements only and not for general transportation improvements including biking and walking. In some states, constitutional amendments are needed to change these provisions. Finally, although many policies are specific to nutrition or physical activity improvements, initiatives such as statewide gasoline, soda and junk food taxes can be used to support both healthy eating and physical activity efforts on a neighborhood level. Table 3 provides a preliminary brainstorm of various policies that could support the priority neighborhood strategies.

TABLE 3. POLICY BRAINSTORM

Promote an atmosphere of safety

- Support economic development and zoning policies that increase local employment and businesses
- Implement formula retail and zoning ordinances to decrease the density of alcohol outlets and advertising
- Restrict the availability of firearms
- Implement neighborhood beautification including graffiti removal and park maintenance.

Design streets to support pedestrians and bicyclists

- Direct existing transportation funds towards personal safety (in order to increase physical activity) as well as automobile safety
- Initiate all federal, state, and local transportation projects with a community walk audit
- Incorporate a commitment to “complete streets” into transportation, planning, and urban design to ensure that all community residents have access to streets that are safe for motorists, pedestrians, bicyclists, the disabled and public transit users.

Maintain and develop programming and facilities, particularly parks, for active play and recreation

- Include funding for parks and open space in public finance measures
- Include parks in the general (or master) plans of all cities with a focus on creating and maintaining parks in under-served areas
- Develop liability and joint-use agreements to allow school grounds and facilities to be open during non-school hours for community use

Support supermarkets and full-service grocery stores

- Grant tax write-offs and other incentives to established supermarkets and grocery stores in otherwise under-served communities to encourage them to remain

Enhance small neighborhood stores

- Provide tax incentives, streamlined permitting and zoning variances, training and marketing and other forms of local government support to support small neighborhood and corner stores in providing foods that are healthy and affordable
- Utilize the incorporation of fruits and vegetables into the WIC food package as an opportunity to encourage small store owners to carry produce

Improve the availability of healthy food

- Encourage food retail development in addition to housing development through public policies at the state and local level
- Examine general (or master) plans to ensure that healthy food retail (such as supermarkets, farmer’s markets, etc.) are expressly allowed in a variety of neighborhoods

Achieving the Sustainability of Neighborhood Food and Physical Activity Initiatives

While improving access to healthy food and physical activity options is critical, these strategies grouped under Community Health **Place Factors** (Table 1) need to be supported by **Equitable Opportunity** and **People Factors** to ensure that access translates to improved eating and physical activity habits. *From Pilots to Practice* participants thought in general all the factors in these latter categories are important contributors to achieving lasting sustainability and leveraging behavior change. When asked to prioritize, **Racial justice**, **Social networks & trust**, and **Participation & willingness to act for the common good** were selected as interrelated factors that could provide a strong foundation for successful change.

An important starting point for improving community environments is to embrace a commitment to racial (and social) justice. Racial justice is key as historically a number of social and economic policies, including “urban renewal” efforts, lead to the displacement of neighborhood residents (most of whom were people of color) and destroyed the sense of community. Neighborhood residents were typically ignored and their engagement was not sought in the change process. The legacies of racism, bias, and neglect that accompanied the implementation of these policies resulted in distrust for neighborhood change efforts. Further, these policies have contributed to institutionalized racism that still impacts the practices of many public and private institutions. For example, through urban planning and zoning decisions, communities of color and poor communities are more likely to be the sites for toxics-emitting factories and diesel truck thoroughfares that pollute the air and make engaging in physical activity unpleasant and potentially dangerous. Racial justice means that communities of color would not disproportionately face these conditions.

A commitment to racial justice must be paired with equitable development to ensure that current residents reap the health benefits from implementing the neighborhood strategies outlined in this document. They should not be forced by gentrification and rising rents to leave their neighborhoods as conditions improve. Equitable development policies can be an important companion to specific food and active community environment strategies. These measures include preserving affordable housing for low and middle income residents and adopting measures to support local business ownership and job retention for residents.

A commitment to racial justice must be paired with equitable development to ensure that current residents reap the health benefits from implementing neighborhood strategies.

The **People Factors**, including **Social networks & trust** and **Participation & willingness to act for the common good**, are equally fundamental to the success of neighborhood change initiatives. Given the legacy of past efforts, public institutions, human service and community-based programs are often (rightly or wrongly) perceived as serving one group of residents to the detriment of the other, and are viewed with mistrust by one or more segments of the population in a community. Overcoming this initial distrust and fostering good relationships between groups creates a solid foundation for change. Social connections contribute to a community's willingness to take action for the common good which is associated with positive health and community outcomes, ranging from lower rates of violence to⁶⁷ increasing economic opportunity. Community residents provide invaluable insights on the precise needs of their neighborhood and initiatives are more likely to succeed and more likely to last when they are involved in the process.

The third of the **People Factors** relates to community norms. Along with improving a neighborhood's *physical* food and activity environment, changing the *social* environment and norms around eating and activity is a necessary component of changing behaviors. Strategies are more effective when residents are engaged and thus *want* to take advantage of improved nutrition and physical activity options. Taylor explained that “the only way you can transform people is by engaging them in the battle to transform their own neighborhoods.” Eating and activity norms can begin to shift through the process of community engagement which allows for ownership not only of a particular strategy, but also of the goal of healthier behavior.

Investing money to address a neighborhood's food and activity environment is not going to have a positive impact if nutrition and activity are not perceived as concerns. Prothrow-Stith noted that perspectives within a community are also not uniform and asks, “How do we start where the community is and get to the bigger picture?” One answer is that the roles of advocates is to help frame the links between common concerns such as safety or lack of jobs, and improving food and physical activity environments. “Community engagement is the process, the role of the professional advocate and activist is to help the community to articulate their biggest needs and to help them to achieve the goals that they have established,” explained Grimshaw. Thus a participatory community engagement process can serve as the bridge between where a community is and the specific nutrition and activity strategies.

Advocates also have the responsibility to share what is known about different nutrition and physical activity strategies through research and best practices to help communities decide which strategy/combination of strategies best suits their specific needs. Neighborhood strategies are not one-size-fits-all; care must be taken to provide a mix of options in order to suitably match neighborhood change efforts to the specific community. While it is important to not impose outside interventions on a neighborhood without a participatory community



engagement process, it is equally important to not let communities flounder by selecting strategies that may ultimately not be best suited for their needs.

Advancing neighborhood physical activity and nutrition strategies through government and other partnerships

The sustainability of neighborhood nutrition and physical activity strategies can be strengthened through the active involvement of local government as well as other public and private partnerships. Despite the reluctance some groups feel about government “interference,” government has a responsibility to contribute to the public good, and allowing all neighborhoods the opportunity to access healthy foods and physical activity options is part of the public good. Local government actions can take the form of ongoing funding support and advocacy to support neighborhood change. Efforts such as expedited permit processes, relaxation of parking requirements, and allowing expanded hours of operation are all successful incentives for food retailers to operate in low-income neighborhoods. Government investment in maintaining parks and adopting pedestrian and bike improvements have also significantly contributed to improved activity environments on a neighborhood level.

Thus far, actions by local government have been ad-hoc, and have not been generalized as a set of policies that could serve as models for different communities. Appendix C lists the government entities and other key sectors that are potential partners in improving neighborhood environments. The case example below highlights how a partnership between community residents, community-based organizations and various city departments led to the implementation of an innovative physical activity opportunity in one urban neighborhood.



EVERGREEN JOGGING CEMETERY

Boyle Heights, CA is a small, densely populated urban neighborhood of 91,000 residents east of downtown Los Angeles. The city map of Boyle Heights shows only two kinds of open spaces: freeway on- and off-ramps and a cemetery. With no nearby parks available, exercise-minded Boyle Heights residents looking to walk or jog in the neighborhood, did laps around the centrally located Evergreen Cemetery. Despite the convenient location, the poor conditions of the sidewalk and “few pedestrian crosswalks” or traffic stops on the perimeter, made the route increasingly more treacherous over time, creating a barrier to this otherwise health-promoting activity.

Along with the support of the Latino Urban Forum, community residents formed the Evergreen Jogging Path Coalition (EJPC) to advocate for a 1.5 mile rubberized path to transform the cracked sidewalk that ringed the cemetery. The EJPC worked intensively with city officials, emphasizing the need for capital improvements in the area, designing careful plans and securing \$800,000 from the County Department of Parks and Recreation. Six months later, in June 2003, the new path was in use, not only by Boyle Heights residents, but also by people from neighboring communities.

The Evergreen Cemetery Jogging Path became the first public sidewalk in the country to be designated a recreational public space. The EJPC’s collaborative efforts demonstrate that even where open space is limited, existing sidewalks can provide space for recreational physical activity. Since the path was built, daily use has increased from about 200 to more than 1,000 people who use the path for jogging, walking and socializing.

(From The Built Environment and Health: 11 Profiles of Neighborhood Transformation, Prevention Institute. 2004)

CONCLUSION

There is a tremendous opportunity to prevent nutrition and physical-activity related diseases by addressing the community factors that support positive health outcomes. Achieving and sustaining nutrition and physical activity improvements requires the political willingness to invest in underserved neighborhoods and their residents. “In order for children to be healthy and balanced, communities have to be whole,” explained Charles Jordan of The Conservation Fund. Part of achieving the vision of communities that are “whole” is creating a foundation that supports good health, including access to healthy food and opportunities for physical activity. With other public health achievements, such as tobacco control and traffic safety, specific inclusion of low-income communities and communities of color was frequently an add-on that occurred after initial success was achieved in white, higher income communities. Prevention Institute believes that it is critical to build the prevention of inequities into the nutrition and physical activity movement for environmental change *from the beginning*. This document shares specific strategies and policies that can contribute to this effort.

The ongoing implementation of nutrition and physical activity strategies requires a vision of the future while keeping the present in mind. Prothrow-Stith pointed out that when faced with problems that are so big, it can be hard to get a community’s momentum going, let alone sustain it for the time it will require to have a profound impact. The answer, according to Scott Gee, a clinician and Medical Director of Prevention and Health Information for Kaiser Permanente Northern California, is to build on early successes and short term outcomes in order to achieve long term impact; “what can we do right now that will succeed in the next year and what can we start now that will take longer? By focusing on what we can do now we can also create the momentum to build toward the future.” The balance between short and long term outcomes is particularly important when viewed in light of the fact that it can take up to 30 or 50 years for neighborhoods to truly change, which is a long time to sustain a movement. Sustainability can be achieved however by engineering a series of early successes, each of which builds towards subsequent, longer term outcomes.

“In order for children to be healthy and balanced, communities have to be whole.”

CHARLES JORDAN,
The Conservation Fund

Building on the local efforts that have been bubbling up across the country requires shifting the status quo and addressing common misperceptions about under-served neighborhoods and their residents. For example, many under-served neighborhoods in fact represent a diversity of income levels and ethnic groups. In crafting market-based solutions to food access, Perry highlighted a misperception about under-served neighborhoods, “Under-served communities are very diverse economically and there is a diversity of market opportunities there despite the fact that they have largely been abandoned and red-lined by the supermarket industry.” Government funding on the local, state and national level needs to be rethought to include ongoing funding of efforts that will improve nutrition and physical activity—from opening up new groceries to improving the bikeability and walkability of neighborhoods to federal policies on nutrition and transportation. In addition there needs to be a shared awareness amongst decision makers and the public alike that the physical environment, as it currently is, is literally killing people. We hope that this document can serve as an inspiration for moving from singular projects to multi-faceted, institutionalized efforts that eliminate inequities in food and activity environments faced in communities of color and low-income communities.

ENDNOTES

- 1 From *The Built Environment and Health: 11 Profiles of Neighborhood Transformation*, Prevention Institute. 2004
- 2 A Social Environmental Approach To Health And Health Interventions. In: Smedley B.D., Syme S.L., eds. *Promoting Health: Intervention Strategies from Social and Behavioral Research*. Washington, D.C.: National Academy Press; 2000.
- 3 House JS, Williams DR. Understanding and reducing socioeconomic and racial/ethnic disparities in health. In: Smedley BD, Syme SL, eds. *Promoting Health: Intervention Strategies From Social and Behavioral Research*. Washington DC: National Academy Press; 2000: 81-124
- 4 Morland K., Wing S., Diez R.A., Poole C. Neighborhood Characteristics Associated With The Location of Food Stores And Food Service Places. *American Journal of Preventive Health*. 2001;22(1):23-9.
- 5 Food for Every Child: The Need For More Supermarkets In Philadelphia. Prepared by The Food Trust. Available at www.thefoodtrust.org/pdfs/supermar.pdf. Accessed November 24, 2006.
- 6 Lewis L.B., Sloane D.C., Nascimento L.M., Diamant A., Guinyard J.J., et al. African American's Access to Healthy Food Options in South Los Angeles Restaurants. *American Journal of Public Health*. 2005;95(4):668-673.
- 7 Active Living and Social Equity-Creating Healthy Communities for All Residents: A Guide for Local Governments. Washington, DC: Washington, DC: International City/County Management Association; 2005. <http://icma.org/upload/library/2005-02/{16565E96-721D-467D-9521-3694F918E5CE}.pdf>
- 8 Active Living and Social Equity-Creating Healthy Communities for All Residents: A Guide for Local Governments. Washington, DC: Washington, DC: International City/County Management Association; 2005. <http://icma.org/upload/library/2005-02/{16565E96-721D-467D-9521-3694F918E5CE}.pdf>
- 9 Babey, S., Diamant, A., Brown, R., and Hastert, T. *California Adolescents Increasingly Inactive*. Los Angeles: UCLA Center for Health Policy Research Health Policy, April 2005.
- 10 Powell, L.M., Slater, S., and Chaloupka, F.J. "The Relationship Between Community Physical Activities Settings and Race, Ethnicity and Socioeconomic Status," *Evidence-Based Preventive Medicine*, 2004: 1(2), 135-144.
- 11 Davis R., Cohen L. *Strengthening Communities: A Prevention Framework for Eliminating Health Disparities*. 2004 Available at www.preventioninstitute.org
- 12 Wolch J., Wilson J. P., and Fehrenbach J., *Parks and Park Funding in Los Angeles: An Equity Mapping Analysis*. Los Angeles: University of Southern California; 2002.
- 13 Garvin A., Leinberger C. B., Harnik P, Berens G., Fader S., Lassar T. J., Rosen M. J., Mulvihill, D. and The Urban Land Institute. *Urban Parks and Open Space*. San Francisco: The Urban Land Institute. 1997.
- 14 Harnik P, *Inside City Parks*. Washington, D.C.: Trust for Public Land. 2000.
- 15 Sallis J. F., Hovell M.F., Hofstetter C. R., Hackley M., Elder J. P., Caspersen C. J., and Powell K. E. Distance Between Homes and Exercise Facilities Related to Frequency of Exercise Among San Diego Residents. *Public Health Reports*. 1990; 105:,179-85.
- 16 Sallis J. F., McKenzie T. L., Elder J. P., Broyles S. L., and Nader P. R., Factors Parents Use in Selecting Play Spaces for Young Children. *Archives of Pediatrics and Adolescent Medicine*.1997;151(4): 414.
- 17 Saelens B., Sallis J., Frank L. Environmental Correlates of Walking and Cycling: Findings From the Transportation, Urban Design, and Planning Literatures. *Annals of Behavioral Medicine*. 2003;25(2):80-91.
- 18 Humpel N., Owen N., Leslie E. Environmental Factors Associated with Adults' Participation in Physical Activity. *American Journal of Preventative Medicine*. 2002;22(3):188-199.
- 19 Centers for Disease Control & Prevention, Guide to Community Preventative Services. 2002; Creating or Improving Access to Places for Physical Activity is Strongly Recommended to Increase Physical Activity.
- 20 Designing for Active Recreation. Active Living Research. 2002. www.activelivingresearch.org
- 21 Cotterill R. and Franklin A. The Urban Grocery Store Gap. Food Marketing Policy Center. University of Connecticut. April 1995.
- 22 Zenk S., Schulz A., Israel B., James S., Wilson M. Spatial Distribution of Food Stores Shapes Availability, Quality and Cost of Fresh Produce in Four Detroit Area Communities. Paper presented at 2003 American Public Health Association Meeting, San Francisco, CA.

- 23 Chung C., Myers S.L. Do The Poor Pay More For Food? An Analysis Of Grocery Store Availability And Food Price Disparities. *Journal of Consumer Affairs*. 1999;33: 276-296.
- 24 Shaffer A., The Persistence of Los Angeles' Grocery Store Gap. Urban and Environmental Policy Institute. May 31, 2002.
- 25 Morland K., Wing S., Diez R.A., Poole C. Neighborhood Characteristics Associated With The Location of Food Stores And Food Service Places. *American Journal of Preventive Health*. 2001;22(1):23-9.
- 26 Kantor L.S. Community Food Security Programs Improve Food Access. *Food Review*. 2001;24(1):20-26.
- 27 Alwitt L.F., Donley T.D. Retail Stores In Poor Urban Neighborhoods. *Journal of Consumer Affairs*. 1997;31:139-164.
- 28 Weinberg Z. No Place To Shop: Food Access Lacking In The Inner City. *Race, Poverty & The Environment*. 2000;7(2):22-24.
- 29 Cotterill R.W., Franklin A.W. The Urban Grocery Store Gap. Storrs: Food Marketing Policy Center, University of Connecticut. 1995. Food Marketing Policy Issue Paper No. 8.
- 30 Morland K., Wing S., Diez R.A., Poole C. Neighborhood Characteristics Associated With The Location Of Food Stores And Food Service Places. *American Journal of Preventive Medicine*. 2001;22(1):23-9.
- 31 Morland K., Wing S., Diez R.A. The Contextual Effect Of The Local Food Environment On Residents' Diets: The Atherosclerosis Risk In Communities Study. *American Journal of Public Health*. 2002;92(11):1761-7.
- 32 Zenk S., Schulz A., Israel B., James S. & Wilson M. Spatial Distribution Of Food Stores Shapes Availability, Quality And Cost Of Fresh Produce In Four Detroit Area Communities. Paper presented at 2003 American Public Health Association.
- 33 Food for Every Child: The Need For More Supermarkets In Philadelphia. Prepared by The Food Trust. Available at www.thefoodtrust.org/pdfs/supermar.pdf. Accessed November 24, 2003.
- 34 Access Denied. Sustainable Food Center/Austin Community Gardens. Available at: www.main.org/sfc/access_denied/index.html. Accessed December 5, 2003.
- 35 Crockett S.J., Sims L.S. Environmental Influences on Children's Eating. *Journal of Nutrition Education*. 1995;27(5):235-249.
- 36 Murakami E., Young J. Daily Travel by Persons with Low Income. Available at: <http://npts.ornl.gov/npts/1995/Doc/LowInc.pdf>. Accessed November 19, 2003.
- 37 Food Stamp Participants' Access to Food Retailers: Summary of Findings. USDA Food and Nutrition Services. July 1999. Available at: www.fns.usda.gov/oane/MENU/Published/nutritioneducation/Files/sumnfsps2.htm. Accessed November 24, 2003.
- 38 Food Stamp Participants' Access to Food Retailers: Summary of Findings. USDA Food and Nutrition Services. July 1999. Available at: www.fns.usda.gov/oane/MENU/Published/nutritioneducation/Files/sumnfsps2.htm. Accessed November 24, 2003.
- 39 Gottlieb R., Fisher A., Dohan M., O'Conner L., Parks V. Homeward Bound; Food-Related Transportation Strategies in Low Income and Transit-Dependent Communities. Venice, CA: Community Food Security Coalition, 1996.
- 40 Wilde P.E., Ranney C.K. The Monthly Food Stamp Cycle: Shopping Frequency And Food Intake Decisions In An Endogeneous Switching Regression Framework. *American Journal of Agricultural Economics*. 2000;82:200-13.
- 41 Supermarket Facts: Industry Overview 2002. Food Marketing Institute. Available at: www.fmi.org/facts_figs/superfact.htm. Accessed December 2, 2003.
- 42 Morland K., Wing S., Diez Roux A. The Contextual Effect Of Local Food Environment On Residents' Diets: The Atherosclerosis Risk For Communities Study. *American Journal of Public Health*. 2002; 92(11):1791-1767.
- 43 Weinberg Z. No Place To Shop: Food Access Lacking In The City. *Race, Poverty and the Environment*. 2000.
- 44 Prevention Institute. *Nutrition Policy Profiles: Supermarket Access in Low-Income Communities*. Oakland, CA; May 2001.
- 45 Lewis L.B., Sloane D.C., Nascimento L.M., Diamant A., Guinyard J.J., et al. African American's Access to Healthy Food Options in South Los Angeles Restaurants. *American Journal of Public Health*. 2005;95(4):668-673.
- 46 Atler D., Eny K. The Relationship Between The Supply Of Fast-Food Chains And Cardiovascular Outcomes. *Canadian Journal of Public Health*. May/ June 2005.
- 47 Active Living By Design. 2002. The New Public Health Paradigm: Promoting Health Through Community Design [Online]. Available at: www.activelivingbydesign.org/resources/New_Public_Health_Paradigm_Active_Living.pdf
- 48 Brownson, R.C. et al. 2001. Environmental and Policy Determinants of Physical Activity in the United States. *American Journal of Public Health*. Vol. 91, No. 12.

- 49 Promoting Physical Activity. Guide to Community Preventive Services Website accessed April 13, 2005: www.thecommunityguide.org/pa/default.htm.
- 50 Morland K, Wing S, Diez Roux A. The contextual effect of the local food environment on residents' diets: the atherosclerosis risk in communities study. *American Journal of Public Health*. 2002;92(11):1761-7.
- 51 Baker EA, Williams D, Kelly C, Nanney MS, Vo H, Barnidge E, Schootman E, Struthers J, Haire-Joshu D. Access, income and racial composition: Dietary patterns aren't just a personal choice. Paper presented at 2003 American Public Health Association Meeting, San Francisco, CA.
- 52 Zenk S, Hollis-Neel T, Nwankwo R, Hill G, Watkins G, Holmes N, Schulz A. Physical and social environment and fruit and vegetable consumption among women living on the east side of Detroit: A formative evaluation of the Healthy Eating and Exercise to reduce Diabetes (HEED) project. Paper presented at 2002 American Public Health Association Meeting, Philadelphia, PA.
- 53 Neumark-Sztainer D, Wall M, Perry C, Story M. Correlates of fruit and vegetable intake among adolescents. Findings from Project EAT. *Preventive Medicine*. 2003 Sep;37(3):198-208.
- 54 Sturm R, Datar A. Body mass index in elementary school children, metropolitan area food prices and food outlet density. *Public Health*. 2005;119(12):1059-1068.
- 55 Sloane D.C., Diamant A.L., Lewis L.B., et al. Improving The Nutritional Resource Environment For Healthy Living Through Community-Based Participatory Research. *Journal of General Internal Medicine*. 2003;18: 568-575.
- 56 Austin S.B., Melly S.J., Sanchez B.N., Patel A., Buke S., Gortmaker S.L. Clustering Of Fast-Food Restaurants Around Schools: A Novel Application Of Spatial Statistics To The Study Of Food Environments. *American Journal of Public Health*. 2005(95)5:1575-1580
- 57 Drewnowski A., Specter S.E. Poverty And Obesity: The Role Of Energy Density And Energy Costs. *American Journal of Clinical Nutrition*. 2004;79:6-16.
- 58 Prothrow-Stith D., Spivak H.R. *Murder Is No Accident: Understanding and Preventing Youth Violence in America*. Jossey-Bass, San Francisco. 2004.
- 59 Humpel N., Owen N., Leslie E. Environmental Factors Associated with Adults' Participation in Physical Activity. *American Journal of Preventative Medicine*. 2002;22(3):188-199.
- 60 Wrigley N., Warm D., Margetts B., Whelan A. *Assessing The Impact Of Improved Retail Access On Diet In A 'Food Desert': A Preliminary Report*. Urban Studies. 2002;39:2061-82.
- 61 Pothukuchi K. *Attracting Grocery Retail Investment to Inner-City Neighborhoods: Planning Outside the Box*. Detroit, Mich: Wayne State University; 2000.
- 62 The Changing Models of Inner City Grocery Retailing. Initiative for a Competitive Inner City. Available at: www.icic.org/Documents/changing_models.pdf. Accessed November 26, 2003.
- 63 National Council for Urban Economic Development. Food for thought: Rochester Invests In Inner City Grocery Stores Development. *Economic Developments*. February 1, 1997;XXII:1-2,6-7
- 64 Policy Link. *Healthy Food, Healthy Communities: Improving Access And Opportunities Through Food Retailing*. Fall 2005.
- 65 Conrey E.J., Frongillo E.A., Dollahite J.S., Griffin M.R. Integrated Program Enhancements Increased Utilization Of Farmers' Market Nutrition Program. *Journal of Nutrition*. 2003;133:1841-44.
- 66 Fisher, A. The Community Food Security Coalition Hot Peppers and Parking Lot Peaches: Evaluating Farmers' Markets in Low-Income Communities. 1999.
- 67 Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: a multilevel study of collective efficacy. *The Am Assoc for the Advancement of Science*. 1997;277(5328:15)918-924.

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13 Community Health Factors

EQUITABLE OPPORTUNITY FACTORS

1. Racial justice, characterized by policies and organizational practices that foster equitable opportunities and services for all; positive relations between people of different races and ethnic backgrounds
2. Jobs & local ownership, characterized by local ownership of assets, including homes and businesses; access to investment opportunities, the ability to make a living wage
3. Education, characterized by high quality and available education and literacy development across the lifespan

PEOPLE FACTORS

4. Social networks & trust, characterized by strong social ties among persons and positions, built upon mutual obligations; opportunities to exchange information; the ability to enforce standards and administer sanctions
5. Participation & willingness to act for the common good, characterized by local/indigenous leadership; involvement in community or social organizations; participation in the political process; willingness to intervene on behalf of the common good
6. Acceptable behaviors & attitudes, characterized by regularities in behavior with which people generally conform; standards of behavior that foster disapproval of deviance; the way in which the environment tells people what is okay and not okay

PLACE FACTORS

7. What's sold & how it's promoted, characterized by the availability and promotion of safe, healthy, affordable, culturally appropriate products and services (e.g. food, books and school supplies, sports equipment, arts and crafts supplies, and other recreational items); limited promotion and availability, or lack, of potentially harmful products and services (e.g. tobacco, firearms, alcohol, and other drugs)
8. Look, feel & safety, characterized by a well-maintained, appealing, clean, and culturally relevant visual and auditory environment; actual and perceived safety
9. Parks & open space, characterized by safe, clean, accessible parks; parks that appeal to interests and activities across the lifespan; green space; outdoor space that is accessible to the community; natural/open space that is preserved through the planning process
10. Getting around, characterized by availability of safe, reliable, accessible and affordable methods for moving people around, including public transit, walking, biking
11. Housing, characterized by availability of safe, affordable, available housing
12. Air, water & soil, characterized by safe and non-toxic water, soil, indoor and outdoor air, and building materials
13. Arts & Culture, characterized by abundant opportunities within the community for cultural and artistic expression and participation and for cultural values to be expressed

Neighborhood Change Partners

The following are some of the government departments, agencies and/or representatives* that need to be involved in promoting healthy eating and physical activity environments on a neighborhood level:

- City councils
- County Board of Supervisors
- City/county engineering/construction department
- City/county department of public health
- Municipal/county transportation department
- City Parks Department and Regional park districts
- Community and Economic Development Agencies
(Community Development and Redevelopment, Planning and Zoning)
- Department of Education (School Board)

In addition to the active involvement of government, there are a number of other key sectors and institutions who have a role to play in improving neighborhood nutrition and activity environments. The cohesive scope of supporters needs to be broadened beyond the usual players in order to create a comprehensive and cross cutting strategy. Additional supporters that need to be brought in include:

- **LOCAL/STATE FOOD POLICY COUNCILS:** Expanding the agenda of these groups to a broader health message can be extremely powerful in bringing together multisectoral initiatives
- **ANTI-HUNGER/EMERGENCY FOOD GROUPS:** These groups are dominant forces at the political and community level and they need to be engaged in a broader, health based message; from calories to quality
- **ENVIRONMENTAL HEALTH:** There is great potential in connecting these groups to those engaged in environmental physical activity improvements
- **PLANNING:** Although public health and planning started the same way, these two groups have not worked together. Public health people need to invest time in learning the language of planning because ultimately the health message is what is more compelling. Learning the language of planners can help public health to engage them in planning decisions that will impact a community's nutrition and physical activity access before these decisions are made
- **BUSINESS:** From banks to restaurants and other food retailers, the involvement of the private sector cannot be neglected. Private sector involvement provides an invaluable source of funding (through grants and loans) and training assistance for small businesses. The involvement of business also helps to start the conversation about the organizational practice changes needed by the businesses themselves to support neighborhood nutrition and activity environments.
- **MEDIA:** Media coverage shapes not only the public's opinion but also that of policy makers. By partnering with various media outlets, advocates can insert the environmental and policy perspective on nutrition and physical activity promotion into the public discourse.
- **SCHOOLS:** Schools are important not only due to their ability to instill a lifetime of healthy practices for their students through their own practices around nutrition and physical activity, but can also serve as important partners in establishing neighborhood changes to improve access to healthy eating and physical activity opportunities.

*The exact names of these various departments and agencies may vary somewhat by location

From Pilots to Practice Resources

PUBLICATIONS

- *Active Living and Social Equity—Creating Healthy Communities for All Residents: A Guide for Local Governments*. International City/County Management Association, Washington, DC, 2005. Go to: <http://icma.org/upload/library/2005-02/{16565E96-721D-467D-9521-3694F918E5CE}.pdf>
- *The Built Environment and Health: 11 Profiles of Neighborhood Transformation*. Prepared by Prevention Institute. Principal author: Manal J. Aboelata, MPH; other contributors: Leslie Mikkelsen, MPH, RD, Larry Cohen, MSW, Sabrina Fernandes, Michele Silver, Lisa Fujie Parks, Jessica DuLong. Contracted by the Centers for Disease Control and Prevention, Division of Emergency and Environmental Health Services (EEHS), National Center for Environmental Health (NCEH), editor, July 2004.
- *The Challenge to an Apple a Day: The Availability of Fresh Produce in Chicago Communities. Grocery Shopping in Chicago: A Survey of Five Communities*, Chicago Department of Public Health, Chicago Food Systems Collaborative, Northeastern Illinois Community Food Security Assessment. Copies of this report can be obtained from the Chicago Department of Public Health's website at www.cityofchicago.org/Health.
- A Community Resilience Approach to Reducing Ethnic and Racial Disparities in Health, by Rachel Davis, MSW, Danice Cook, BA, and Larry Cohen, MSW; *American Journal of Public Health*, December 2005; 95:2109–2284, pg. 2168–2173.
- *Food for Every Child and Stimulating Supermarket Development: A New Day for Philadelphia*. Highlights the correlation between lack of supermarkets and diet-related diseases and lays out a plan for how to stimulate supermarket development in Philadelphia. Go to: www.thefoodtrust.org/php/programs/super.market.campaign.php
- *The Health Status of the Near East Side Black Community: A Study of the Wellness and Neighborhood Conditions*. UB Center for Urban Studies; School of Architecture and Planning and the UB Center for Research in Primary Care; The Black Leadership Forum; Buffalo, New York, September 2000.
- *Healthy Parks, Healthy Communities: Addressing Health Disparities and Park Inequities through Public Financing of Parks, Playgrounds, and Other Physical Activity Settings*. Policy Brief, August 2005. Go to: [www.tpl.org/content documents/HPHC_Policy%20Brief.pdf](http://www.tpl.org/content/documents/HPHC_Policy%20Brief.pdf)
- *The Links between the Neighborhood Food Environment and Childhood Nutrition*. A paper prepared by Leslie Mikkelsen, MPH, RD, and Sana Chehimi, MPH, for Robert Wood Johnson Foundation, 2005.
- *Murder is No Accident: Understanding and Preventing Youth Violence in America*. By Deborah Prothrow-Stith and Howard R. Spivak, Jossey-Bass, San Francisco, CA 2004.
- *Preserving and Promoting Diverse Transit-Oriented Neighborhoods*. By Center for Transit-Oriented Development, CNT, November 6, 2006. Explores trends in public transit and transit users in the urban setting and examines the connections between transit, economic and racial diversity and quality neighborhoods. Go to: www.cnt.org/repository/diverseTOD_FullReport.pdf

- *Regulatory Fee Assessment: Nutrition-Related Municipal Services*. Nexus Study, Prepared for Shute, Mihaly & Weinberger LLP; Prepared by Economic & Planning Systems, Inc., Public Health Institute, April 2005.
- *Structural Racism, the Inner City Built Environment, and the Health Status of African Americans*. A paper presented at the 46th Annual Conference, October 27–30 [JA1], Kansas City, MO, by Henry Louis Taylor, Jr. Center for Urban Studies; Department of Urban and Regional Planning; School of Architecture and Planning; University at Buffalo, October 14, 2005.

GENERAL WEBSITES

- **Active Living by Design:** www.activelivingbydesign.org
Robert Wood Johnson Foundation. Active Living by Design. Chapel Hill, NC: UNC School of Public Health. Web site provides numerous resources and links to establish and evaluate innovative approaches to increase physical activity through community design, public policies and communications strategies.
- **Active Living Research:** www.activelivingresearch.org
Recent research on environmental factors and policies that influence physical activity.
- **Community Food Security Coalition (CFSC):** www.foodsecurity.org
CFSC addresses issues at the intersection of social and economic justice, the environment, nutrition, sustainable agriculture, community development, labor, anti-poverty and anti-hunger. Website includes reports on urban agriculture, farm-to-institution programs and community food projects.
- **Project for Public Spaces (PPS):** www.pps.org/markets/info/markets_program
PPS provides resources on public markets with a specific emphasis on the role that markets can play in stimulating community development.

ONLINE TOOLS AND TOOLKITS

- **Equitable Development Toolkit:** www.policylink.org/EDTK
Successful strategies developed in culturally diverse communities around the country.
- **ENACT (Environmental Nutrition and Activity Community Tool):** www.eatbettermovemore.org
ENACT offers a concrete menu of strategies and resources to improve nutrition and activity environments on a local level.
- **The ENACT Local Policy Database:** www.preventioninstitute.org/sa/policies/index.php
This is a searchable database designed to provide community advocates, health professionals, policymakers, and those working in related fields with concrete examples of local-level policies that have been adopted and/or implemented to improve nutrition and physical activity environments.
- **General Plan & Zoning Toolkit:** www.healthyplanning.org/
The Public Health Law Program's Land Use and Health project works to engage public health advocates in the land-use decision-making process throughout California. The Toolkit provides case studies.
- **Neighborhood Assessment Tools:** www.chc-inc.org/REACH2010/AABLH.cfm
The African Americans Building a Legacy of Health, REACH2010 Project developed survey tools to assess the quality and availability of healthy foods in local markets, restaurants and schools.

- **THRIVE Tool: <http://preventioninstitute.org/thrive/index.php>**

The Tool for Health and Resilience in Vulnerable Environments (THRIVE) is designed to assist community groups to identify neighborhood-level factors that influence health and safety and prioritize strategies for overcoming barriers.

- **Walkability Checklist. How Walkable is your community?:**

www.walkinginfo.org/pdf/walkingchecklist.pdf

The Pedestrian and Bicycle Information Center (PBIC) is the online clearinghouse for pedestrian and bicycling information. This checklist provides a simple tool for assessing barriers to walking.

- **What's Cooking in Your Food System? A Guide to Community Food Assessment:**

www.foodsecurity.org/CFAguide-whatscookin.pdf

Published by the Community Food Security Coalition, this document provides case studies and step by step guidance on preparing, conducting and analyzing a community food assessment.