



ACCESS TO HEALTHY FOODS

Research shows that programs that increase access to healthy food—including local grocery stores, corner markets, farmer's markets and food vendors—can help improve health.

Research suggests that communities with access to healthy foods, particularly to fresh fruits and vegetables, have better eating habits and better health outcomes than do communities with limited access to such foods, often referred to as "food deserts." Locally available healthy foods is one part of a strategy to improve community health and fight obesity.

Healthy eating and positive health outcomes—including lower rates of obesity and chronic diseases linked to obesity—are tied to higher quality of life,² lower medical expenditures,³ improved educational outcomes,⁴ and more productive workers.⁵

Supermarkets and grocery stores

Opening a new retail supermarket or grocery store in a food desert has the greatest potential impact, in terms of number of residents reached, of any intervention intended to increase access to healthy, affordable foods.

- Outcomes associated with the presence of a neighborhood grocery store include an increase in residents' fruit and vegetable consumption,⁶ suggesting healthier diets, and lower levels of obesity.⁷
- In a study of the relationship between food store access and dietary habits of recipients of food stamps, researchers found that individuals with easy access to a grocery store increased their consumption of fruit by 84 grams per day, or approximately one-fifth the recommended daily intake of fruits and vegetables.⁸

Technical assistance resources have been created to address challenges in developing new stores, which can include attracting retailers, site selection and high cost. At the same time, recognizing the potential market opportunities in urban communities, large retail stores are increasingly opening smaller-scale versions. 11

Creative financing mechanisms developed in recent years have spurred development of new stores in low-income communities. The Fresh Food Financing Initiative—developed

and first implemented in 2004 in Pennsylvania and replicated across the country and by the federal government—helped fund the development of 80 new grocery stores that reached more than 450,000 new residents by 2010. ¹²

Corner store improvement initiatives

Residents of low-income communities without a supermarket often rely on small-scale corner stores. ¹³ Such stores typically offer minimal fresh and low-fat products. ¹⁴ Children who purchase snacks at corner stores on their way to and from school typically select high-caloric, low-nutritive products, contributing to higher rates of obesity of children in low-income communities. ¹⁵

Corner store improvement initiatives that partner with owners to increase the availability of healthy options ¹⁶ have cropped up across the country in recent years, including in the San Francisco Bay Area, ¹⁷ Hartford, ¹⁸ New York City, ¹⁹ Philadelphia, ²⁰ Washington, DC, ²¹ Baltimore ²² and New Orleans. ²³ The 300-member Healthy Corner Store Network offers technical assistance and peer-to-peer learning opportunities for its members (www.healthycornerstores.org).

- Corner store improvement interventions are feasible to implement and have the potential to improve the quality of dietary intake for residents of poor and minority communities.²⁴
- In Baltimore, researchers at Johns Hopkins Bloomberg School of Public Health found that stocking and promoting healthy foods in corner stores in low-income communities resulted in increased sales of foods such as low-sugar cereals and low-fat salad dressing.²⁵
- Residents in New Orleans who lived within 100 meters of a corner store that sold fresh vegetables consumed nearly one additional serving per day as compared with residents who lived further from such stores.²⁶
- A study of New York City's Healthy Bodega's program found that 45 percent of the stores reported an increase in low-fat milk sales and 32 percent of stores reported more customers bought fruit. The study also reported that it helps to provide store owners with training and technical support, as well as marketing materials and other promotional support.²⁷

Farmers' markets

Although they occupy a relatively small market share of food sales, ²⁸ farmers' markets are widely recognized as an important venue that offers high-quality fresh fruits and vegetables directly from local farms. Many farmers' markets reach low-income families through their acceptance of public benefits, including Electronic Benefits Transfer (EBT) access cards and Farmers' Market Nutrition Program (FMNP) vouchers.

- In a survey of customers at farmers' markets in low-income communities in three different cities, more than 70 percent of respondents indicated that they shopped at the market because prices were better compared to alternative local retail food outlets.²⁹
- Due to competition, the introduction of a farmers' market in one former food desert decreased the price of groceries in the neighborhood by 12 percent over three years.³⁰

Coupon programs have been created to enhance the purchasing power of low-income families. An extensive network of farmers' markets in Philadelphia offers a \$2 coupon toward additional market purchases for every \$5 spent on an EBT card. 31 New York City offers a similar program, where a \$5 purchase leverages a "Health Buck" coupon. 32

Mobile vending

Mobile vendors, whether in vehicles or street carts, are a relatively new outlet for expanding healthy food options in low-income communities. Several jurisdictions, including Oakland, New York City, Kansas City, Los Angeles and Chicago, have amended their laws to create an incentive for mobile vending operators to sell healthy foods. ³³ New York City's Green Cart program, which allows vendors to sell only uncut fruits and vegetables, includes more than 500 carts located in food deserts throughout the city's five boroughs. ³⁴

 After the addition of a Green Cart to a New York City neighborhood classified as a food desert, the percentage of surveyed adults who consumed 5 or more servings of vegetables in the previous day increased by 3.3 percent.³⁵

This Research Overview is part of a series that summarizes academic studies on the relationship between community development and health, education, and other aspects of community well-being.

For more information on these health studies and others, visit www.instituteccd.org/health.



ENDNOTES

- California Center for Public Health Advocacy, PolicyLink, and the UCLA Center for Health Policy Research. (2008, April). Designed for disease: The link between local food environments and obesity and diabetes. Retrieved from PolicyLink website: http://www.policylink.org/atf/cf/%7B97c6d565bb43-406d-a6d5-eca3bbf35af0%7D/DESIGNEDFORDISEASE_FINAL.PDF: Larson, N., Story, M. T., & Nelson, M.C. (2008, July). Bringing healthy foods home: Examining inequalities in access to food stores (Research brief). Princeton, NJ: Author. Retrieved from Healthy Eating Research website: http://healthyeatingresearch.org/images/stories/her research briefs/ her%20bringing%20healthy%20foods%20home_7-2008.pdf; Larson, N. I., Story, M.T., & Nelson, M.C. (2009). Neighborhood environments: Disparities in access to healthy foods in the U.S. Am J Prev Med, 36(1), 74-81.; Michimi A, Wimberly M..C. (2010). Associations of supermarket accessibility with obesity and fruit and vegetable consumption in the conterminous United States. International Journal of Health Geographics, 9, 49-62.; Morland, K., Wing, S. & Diez Roux, A. (2002). The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. Am J Public Health, (92), 1761-1767.; Morland, K., Diez Roux, A.V., & Wing, S. (2006). Supermarkets, other food stores, and obesity: The artherosclerosis risk in communities study. Am J Prev Med. 30(4), 333-339.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2009). Recommended Community Strategies and Measurements to Prevent Obesity in the United States. MMWR;58(No. RR-7):[1-29]. Retrieved from http://www.cdc.gov/mmwr; Zenk, S., Lachance, L.L., Shulz, A.J., Mentz, G., Kannan, S., & Ridella, W. (2009). Neighborhood retail food environment and fruit and vegetable intake in a multiethnic urban population. Health Promotion, 23(4), 255-264.
- 2 Cash, S.W., Beresford, S.A.A., Henderson, J., McTiernan, A., Xiao, L., Wang, C.Y., Patrick, D.L. (2011). Dietary and physical activity behaviours related to obesity-specific quality of life and work productivity: baseline results from a worksite trial. British Journal of Nutrition, FirstView. Online publication. doi:10.1017/S0007114511006258; Williams, J., Wake, M., Hesketh, K., Maher, E., Waters E. (2005). Health-related quality of life of overweight and obese children. Journal of the American Medical Association, 293(1), 70-76.
- Finkelstein, E.A., Trogdon, J.G., Cohen, J.W., & Dietz, W. (2009). Annual medical spending attributable to obesity: Payer- and service-specific estimates. Health Affairs, 28(5), w822-w831. doi: 10.1377/ hlthaff.28.5.w822
- 4 Bloom, D. (2009). Education, health, and development. Retrieved from American Academy of Sciences website: http://www.amacad.org/ publications/ubase_edhealthdev.aspx
- 5 Cash, S.W., Beresford, S.A.A., Henderson, J., McTiernan, A., Xiao, L., Wang, C.Y., Patrick, D.L. (2011). Dietary and physical activity behaviours related to obesity-specific quality of life and work productivity: baseline results from a worksite trial. British Journal of Nutrition, FirstView. Online publication. doi:10.1017/S0007114511006258; Gates, D.M., Succop, P., Brehn, B.J., Gillespie, G.L., & Sommers, B.D. (2008). Obesity and presenteeism: The impact of body mass index on workplace productivity. Journal of Occupational and Environmental Medicine, 50(1), 39-45. doi: 10.1097/ J0M.0b013e31815d8db2; Bloom, D. (2009). Education, health, and development. Retrieved from American Academy of Sciences website: http://www.amacad.org/publications/ubase_edhealthdev.aspx
- Morland, K., Wing, S. & Diez Roux, A. (2002). The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. Am J Public Health, (92), 1761-1767.; Larson, N. I., Story, M.T., & Nelson, M.C. (2009). Neighborhood environments: Disparities in access to healthy foods in the U.S. Am J Prev Med, 36(1), 74-81.
- 7 Morland, K., Diez Roux, A.V., & Wing, S. (2006). Supermarkets, other food stores, and obesity: The artherosclerosis risk in communities study. Am J Prev Med, 30(4), 333-339.
- 8 Rose, D. & Richards, R. (2004). Food store access and household fruit and vegetable use among participants in the US food stamp program. Public Health Nutrition, 7(8), 1081-1088. DOI: 10.1079/PHN2004648
- 9 PolicyLink & Bay Area LISC. (2008). Grocery store attraction strategies: A resource guide for community activists and local governments. Retrieved

- from PolicyLink website: http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/groceryattraction_final.pdf; Public Health Law & Policy. (2009). Getting to grocery: Tools for attracting healthy food retail to underserved neighborhoods. Retrieved from Public Health Law & Policy website: http://www.phlpnet.org/healthy-planning/products/getting-to-grocery
- 10 Feldstein, L., Jacobus, R., & Laurison, H.B. (2007). Economic development and redevelopment: A toolkit on land use and health. Retrieved from Public Health Law & Policy website: http://www.phlpnet.org/sites/phlpnet.org/files/ EcDevToolkit.pdf
- Flournoy, R. (2011). Healthy Food, Healthy Communities: Promising strategies to improve access to fresh, healthy food and transform communities. Retrieved from PolicyLink website: http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC_FINAL. PDF; PolicyLink & Bay Area LISC. (2008). Grocery store attraction strategies: A resource guide for community activists and local governments. Retrieved from PolicyLink website: http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/groceryattraction_final.pdf
- 12 Giang, T., Karpyn, A., Laurison, H. Hillier, A. Burton, M. & Perry D. (2008). Closing the grocery gap in underserved communities: The creation of the Pennsylvania Fresh Food Financing Initiative. Journal of Public Health Management and Practice, 14(3), 272-279.; Reinvestment Fund, The. (2010). Estimating supermarket access: Summary of TRF's research and analysis (Reinvestment brief). Retrieved from the Reinvestment Fund website: http://www.trfund.com/financing/realestate/EstimatingSupermarketAccess-1pg.pdf
- 13 Burtness, D. (2009). Healthy food for all: Healthy corner store strategies from across the United States. Retrieved from Institute for Agriculture and Trade Policy website: http://www.iatp.org/files/258_2_106578.pdf
- Bodor, J.N., Ulmer, V.M., Dunaway, L.F., Farley, T.A., & Rose, D. (2010). The rationale behind small food store interventions in low-income urban neighborhoods: Insights from New Orleans. J. Nutr., 140, 1185-1188. doi:10.3945/jn.109.113266.; Laska, M.N., Borradaile, K.E., Tester, J., Foster, G.D., & Gittelsohn, J. (2010). Health food availability in small urban food stores: A comparison on four U.S. cities. Public Health Nutr, 13(7), 1031–1035. doi:10.1017/S1368980009992771.
- 15 Borradaile, K.E., Sherman, S., Vander Veur, S.S., McCoy, T., Sandoval, B., Nachmani, J., . . . Foster, G.D. (2009). Snacking in children: The role of urban corner stores. Pediatrics, 124(5), 1292-1297. doi: 10.1542/peds.2009-0964
- 16 Public Health Law & Policy. (2009). Healthy corner stores: The states of the movement. Retrieved from Public Health Law & Policy website: http://www. phlpnet.org/sites/phlpnet.org/files/HCSReport.pdf
- Bolen, E. & Hecht, K. (2003). Neighborhood Groceries: New Access to Healthy Food in Low-Income Communities. Retrieved from California Food Policy Advocates website: http://cfpa.net/GeneralNutrition/CFPAPublications/NeighborhoodGroceris-FullReport-2003.PDF; Feldstein, L., Jacobus, R., & Laurison, H.B. (2007). Economic development and redevelopment: A toolkit on land use and health. Retrieved from Public Health Law & Policy website: http://www.phlpnet.org/sites/phlpnet.org/files/EcDevToolkit.pdf
- 18 Ferris, A.M., Martin, K. (2010). Healthy food in Hartford: Evaluating changes to the local food environment. Retrieved from University of Connecticut Center for Public Health and Health Policy website: http://publichealth.uconn. edu/images/reports/HealthyMarket_FinalRpt_Oct2010.pdf; Hartfood Food System. (2007). Strategies that work: Real solutions to community food problems. Retrieved from Healthy Corner Stores website: http://healthy-cornerstores.org/wp-content/uploads/resources/Hartford-HealthyRetailersReport.pdf; Havens, E., Martin, K., & Perham, K. (2009). Availability of healthy food in corner stores in Hartford, CT (Research brief). Retrieved from University of Connecticut Center for Public Health and Health Policy website: http://publichealth.uconn.edu/images/reports/FoodAvailabilityBrief.pdf
- 19 Leadership for Healthy Communities. (2011). Action strategies toolkit: A guide for local and state leaders working to create healthy communities and prevent childhood obesity. Retrieved from Leadership for Healthy Communities

LISC Institute for Comprehensive Community Development RESEARCH OVERVIEW: HEALTH – ACCESS TO HEALTHY FOODS

- website: http://www.leadershipforhealthycommunities.org/content/view/352/154/; New York City Center for Economic Opportunity. (2007). Healthy Bodegas: A Program of the New York City Department of Health & Mental Hygiene (Internal Program Review Report). Retrieved from the New York City Center for Economic Opportunity website: http://home2.nyc.gov/html/ceo/downloads/pdf/hb_prr.pdf; New York City Department of Health & Mental Hygiene. (2010). New York City Healthy Bodegas Initiative (Report). Retrieved from New York City Center for Economic Opportunity website: http://www.nyc.gov/html/doh/downloads/pdf/cdp/healthy-bodegas-rpt2010. pdf
- 20 Flournoy, R. (2011). Healthy Food, Healthy Communities: Promising strategies to improve access to fresh, healthy food and transform communities. Retrieved from PolicyLink website: http://www.policylink.org/ att/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC_FINAL. PDF
- 21 Ashbrook, A., Roberts, K., Karpyn, A., & Piett, J.J. (2008). Creating healthy corner stores in the District of Columbia. Retrieved from D.C. Hunger Solutions website: http://www.dchunger.org/pdf/cornerstores08_phaseone_report.pdf; Roberts, K. (2009). Successfully selling fresh produce in Washington, DC corner stores. Retrieved from D.C. Hunger Solutions website: http://www.dchunger.org/pdf/2009_produce_corner_store_report.pdf
- 22 Gittelsohn, J., Song, H.J., Suratkar, S., Kumar, M., Henry, E.G., Sharma, S....Anliker, J., (2010) An urban food store intervention positively impacts food-related psychosocial variables and food behaviors. Health Education and Behavior, 37(3), 390-402.; Song, H.J., Gittelsohn, J., Kim, M., Suratkar, S., Sharma, S. and Anliker, J.A.. (2009). A corner store intervention in a low-income urban community is associated with increased availability and sales of some healthy foods. Public Health Nutr, 12(11), 2060–2067. doi:10.1017/S1368980009005242.
- 23 Leadership for Healthy Communities. (2011). Action strategies toolkit: A guide for local and state leaders working to create healthy communities and prevent childhood obesity. Retrieved from Leadership for Healthy Communities website: http://www.leadershipforhealthycommunities.org/content/view/352/154/
- 24 Gittlesohn, J., Suratkar, S., Song, H., Sacher, S., Rajan, R., Rasooly, I.R., . . . Anliker, J.A. (2010). Process evaluation of Baltimore Healthy Stores: A pilot health intervention program with supermarkets and corner stores in Baltimore City. Health Promo Pract., 11(5), 723–732. doi:10.1177/1524839908329118.
- 25 Song, H.J., Gittelsohn, J., Kim, M., Suratkar, S., Sharma, S. and Anliker, J.A.. (2009). A corner store intervention in a low-income urban community is associated with increased availability and sales of some healthy foods. Public Health Nutr, 12(11), 2060–2067. doi:10.1017/S1368980009005242.

- 26 Bodor, J.N., Rose, D., Farley, T.A., Swalm, C. & Scott, S.K. (2007). Neighbourhood fruit and vegetable availability and consumption: The role of small food stores in an urban environment. Public Health Nutr, 11(4), 413-420. doi: 10.1017/S1368980007000493.
- 27 "New York City Healthy Bodega Initiative: 2010 Report," New York City Department of Health & Mental Hygiene and the Center for Economic Activity. Retrieved from www.nyc.gov/html/doh/downloads/pdf/cdp/ healthy-bodegas-rpt2010.pdf
- 28 Whitacre, P.T., Tsai, O., & Mulligan, J., Rapporteurs; Institute of Medicine and National Research Council. (2009). The public health effects of food deserts: Workshop summary. The National Academies Press: Washington, DC.
- 29 Project for Public Spaces, Inc. (2003). Public markets and community-based food systems: Making them work in lower-income neighborhoods. Retrieved from Project for Public Spaces website: http://www.pps.org/pdf/kellogg_ report.pdf
- 30 Larsen, K. & Gilliand, J. (2009). A farmers' market in a food desert: Evaluating impacts on the price and availability of healthy food. Health Place, 15(4), 1158-62.
- 31 The Food Trust. (2011). Save on fruits and vegetables at your farmers' market: 2011 Philly food bucks. Retrieved from The Food Trust website: http://www.thefoodtrust.org/pdf/Philly%20Food%20Bucks%20Brochure.pdf
- 32 Whitacre, P.T., Tsai, O., & Mulligan, J., Rapporteurs; Institute of Medicine and National Research Council. (2009). The public health effects of food deserts: Workshop summary. The National Academies Press: Washington, DC.
- 33 Tester, J.M., Stevens, S.A., Yen, I.H., & Laraia, B.A. (2010). An analysis of public health policy and legal issues relevant to mobile food vending. American Journal of Public Health. Advance online publication. doi:10.2105/ AJPH.2009.185892
- 34 Leadership for Healthy Communities. (2011). Action strategies toolkit: A guide for local and state leaders working to create healthy communities and prevent childhood obesity. Retrieved from Leadership for Healthy Communities website: http://www.leadershipforhealthycommunities.org/content/ view/352/154/
- 35 New York City Department of Health & Mental Hygiene. (2009). Report to the New York City Council on Green Carts FY2008-2009 (Report). Retrieved from New York City Department of Health and Mental Hygiene website: http://www.nyc.gov/html/doh/downloads/pdf/cdp/GreenCartReport_FY08. pdf; New York City Department of Health & Mental Hygiene. (2011). Report to the New York City Council on Green Carts FY2011 (Report). Retrieved from New York City Department of Health and Mental Hygiene website: http://www.nyc.gov/html/doh/downloads/pdf/cdp/greencart-report-fy2011.pdf