

ACTIVE DESIGN

GUIDE FOR COMMUNITY GROUPS



Weekend Walks (page 12) provide diverse activities and support economic development, with 86% of merchants reporting an increase in sales during Montague Street Weekend Walks in Brooklyn Heights. Credit: NYC Department of Transportation

CONTENTS

Introduction	2
 Active Transportation	3
 Active Recreation	9
 Active Buildings	13
 Green Space and Nature	16
 Healthy Foods and Beverages	22
Make the Case: Building Community Support for Active Design	27
Additional Organizations That Can Help	30
References	31

Front cover: A young gardener cares for a plant outside his home in Crown Heights, Brooklyn. The block on which he lives was transformed by Roger That Garden Project, Crown Heights Youth Collective and local residents. The NYC Department of Sanitation cleared a vacant lot (page 6) and provided mulch (page 19), Build it Green NYC! (page 30) provided lumber for planter boxes and free compost for tree care and Citizens Committee (page 30) provided a Love Your Block Grant. Credit: NYC Health Department

This guide can be found online at [nyc.gov](https://nyc.gov/active-design)  “Active Design” and will evolve as new resources become available. If your organization would like to be included in this guide, please  activedesign@health.nyc.gov.

INTRODUCTION

Everyone wants to live in a healthy and vibrant community that encourages children and adults to be physically active. People are healthier when they live in communities where they feel comfortable interacting with neighbors, where they can walk or cycle to local destinations and where they have access to healthy foods and beverages. We — everyone from community members to architects — can design our communities to encourage physical activity as part of daily life to combat the epidemics of obesity and chronic diseases like diabetes, heart disease and some cancers. A comprehensive list of strategies to support active living can be found in the *Active Design Guidelines: Promoting Physical Activity and Health in Design*,¹ a guide for designers, architects, planners, developers and policy makers.

This publication, *Active Design: Guide for Community Groups*, describes how active design can promote routine physical activity, such as playing, walking and bicycling, and how active design can promote other areas of physical and mental health and contribute to social and economic vitality and environmental sustainability. In this guide, you'll find programs and resources for incorporating active design into neighborhoods, streets and buildings and detailed information about planning and implementing an active design project. Many suggestions for active design are simple and may involve picking up a paintbrush or a garden trowel. They may seem like matters of beautification — and they are — but they also have the immense potential to improve health.

There are five core sections of the guide:

 **Active Transportation**

 **Active Recreation**

 **Active Buildings**

 **Green Space and Nature**

 **Healthy Foods and Beverages**

In each of these sections, the evidence for the health, economic and social benefits of active design is described. You'll find ideas for increasing opportunities for active living in your neighborhoods, streets and buildings. Furthermore, practical resources for assisting New York City (NYC) community groups and residents in making changes are provided.

Also, be sure to look at the section entitled *Make the Case: Building Community Support for Active Design*, which provides additional tips on how to engage your community, build a strong case for your proposal and turn your ideas into a reality.



ACTIVE TRANSPORTATION

Benefits

Active Transportation means walking or bicycling, as well as other modes of transport that use human energy and effort (such as tricycling, blading, scootering) to get from one place to another. Taking public transit is also considered active transportation because it typically includes walking or biking to and from destinations. Here's how active transportation can benefit city residents:

- Active commuting that incorporates walking and bicycling can reduce the risk of cardiovascular disease by 11-31% and diabetes by 31%.²
- Obesity rates are lower in countries such as Germany, Denmark and the Netherlands, where biking infrastructure is better and where more people walk, bicycle and take mass transit.^{3,4}
- Medians, speed bumps and other traffic calming efforts can reduce the number of automobile crashes with pedestrian injuries by up to 15%.⁵
- Teenagers who bike or walk to school get more daily physical activity, watch less TV and are less likely to smoke than their peers who are driven to school.⁶
- Public transit users take 30% more steps per day than people who rely on cars.⁷
- As the number of stop signs, street lights and pedestrian amenities (e.g., benches, trash cans) in a neighborhood increases, women are more likely to engage in physical activity.⁸
- Every \$1 spent on biking and walking trails generates almost \$3 in savings in direct medical costs.⁹



In response to community requests for improved pedestrian safety and access, a pedestrian island was constructed on Avenue C, Manhattan (page 7, [traffic calming](#)). Credit: NYC Department of Transportation

Ideas

When thinking about whether your community provides a safe and attractive environment for pedestrians, bicyclists and transit riders, consider the following:

- pedestrian plazas and pedestrian focused streets
- clean and well-maintained sidewalks and crosswalks
- traffic calming features that slow driving speeds
- street trees and plantings
- lighting, benches, public art, public litter baskets and other sidewalk amenities
- availability of interconnected bikeways, bike lanes and ample bike parking
- comfortable bus stops with benches and protective shelters

This [bike lane](#) (page 8) on Prospect Park West in Brooklyn was created in response to community board requests to address vehicular speeding and improve bicycle access to Prospect Park. Since construction, crashes resulting in injuries have declined by 63%, while speeding among cars has decreased from 74% to 20%. Credit: NYC Department of Transportation



Resources

Supporting Pedestrians

Adopt-a-Basket is an NYC Department of Sanitation (DSNY) program in which individuals, organizations or businesses can volunteer to monitor an existing litter basket to help prevent trash overflow. Submit a request online or contact your district's city council member to sponsor public litter baskets for your neighborhood.

nyc.gov and [adopt basket](#)

Bus Shelters, all of which include benches, are installed by the NYC Department of Transportation (DOT). Review criteria online and submit your recommendation for a new bus shelter via email.

nyc.gov/dot and [bus shelter](#) or streetfurniture@dot.nyc.gov

CityBench is a DOT program that installs benches around the city, mainly at bus stops, retail corridors and in areas with many elderly people. To learn more about CityBench and to request a bench, apply online.

nyc.gov and [citybench](#)

CityBench makes streets more comfortable for pedestrians and transit riders.
Credit: NYC Department of Transportation



All new **bus shelters**, like this one at 34th Street and Park Avenue in Manhattan, offer seating, an important feature for the elderly and disabled.

Credit: NYC Department of Transportation



Graffiti Removal is a citywide effort to remove graffiti in communities. The Mayor's Office works closely with a team of city agencies to allow New Yorkers to request a clean-up or to conduct their own clean-up projects with supplies and paint provided by the Mayor's Office.

nyc.gov and [graffiti free nyc](https://graffiti.free.nyc)

Lot Cleaning requests can be submitted to DSNY. Report dirty, vacant fenced or unfenced lots online.

nyc.gov and [lot cleaning request](https://lotcleaningrequest.com)

Public Litter Baskets can be requested from DSNY. Request a public litter basket to be placed on a street corner or report an overflowing litter basket online.

nyc.gov and [litter baskets](https://litterbaskets.com)

Sidewalk Cafés, when appropriate for the setting, allow restaurant owners to make streets more vibrant. Contact NYC Department of Consumer Affairs (DCA) to apply for a permanent sidewalk café.

nyc.gov/dca and [sidewalk café](https://sidewalkcafe.com)

Note: Requests for sidewalk cafes usually need community board approval before going to DCA.

Slow Zones are small, defined areas where the speed limit is reduced from 30 mph to 20 mph and safety measures, such as speed bumps, markings and other traffic calming measures, are put in place to change driver behavior. Work with your local community board to apply for a Slow Zone in your neighborhood.

nyc.gov and [slow zone](https://slowzone.com)



To rid sidewalks of trash and dog waste and promote walking, middle school students created signs to encourage residents to clean up after themselves and their dogs. Twenty unique signs featuring haikus and illustrations have been installed throughout Lehman Village and Clinton Houses in East Harlem, Manhattan. Credit: Nicole Haroutunian



The city's first **Slow Zone** was constructed in the Claremont section of the Bronx, a neighborhood with a high pedestrian crash rate and many schools.

Credit: NYC Department of Transportation

Street Seats temporarily replace parking spots, offering outdoor public seating during warmer weather.

[nyc.gov](https://www.nyc.gov) and [street seats](#) or streetseats@dot.nyc.gov

Traffic Calming and pedestrian improvement projects include buffers between pedestrians and vehicles, speed reducers, curb extensions, medians and raised crosswalks. These DOT initiatives are in response to community requests, high crash corridors and other conditions. Find information on traffic calming, DOT's Safe Routes to Schools, Safe Streets for Seniors and Safe Routes to Transit.

[nyc.gov/dot](https://www.nyc.gov/dot)

Urban Art Program is a DOT initiative to partner with community organizations and artists to showcase murals, sculptures, projections and performances on public property, such as plazas, fences, barriers, bridges and sidewalks. Submit an application online.

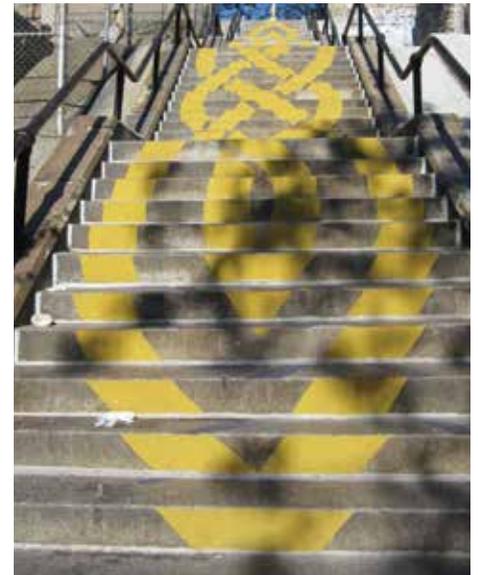
[nyc.gov/urbanart](https://www.nyc.gov/urbanart)

urbancanvas is an NYC Department of Buildings (DOB) program to beautify building renovations and construction sites. Property owners and developers can install artwork on temporary protective structures such as sidewalk sheds, construction fences and supported scaffolds. Community groups can sponsor an urbancanvas at a renovation or construction site in their neighborhood.

[nyc.gov/urbancanvas](https://www.nyc.gov/urbancanvas)

Volunteer Clean-Up, a DSNY program, provides equipment, trash bags and work gloves, and coordinates collection of bagged debris for volunteer clean-up events organized by neighborhood associations. Contact the Community Liaison Unit.

[646.885.DSNY](tel:646.885.DSNY)



DOT's **Urban Art Program** and Visual AIDS co-sponsored *The Bridge & The Devil*, an installation by Steed Taylor, on the public staircase of the Naples Terrace Steps in the Kingsbridge section of the Bronx.
Credit: NYC Department of Transportation

Corinne Ulmann's **urbancanvas** Green Screen on Second Avenue near 96th St, Manhattan. Credit: Samantha Modell



Supporting Bicyclists

Bike Lanes are available on many streets to enhance safety for riders. Work with your local community board or contact DOT to improve bicycling conditions in your community. For a free NYC Cycling Map, visit your local bike shop or visit nyc.gov/dot or 📞 311.

CitiBike is a network of thousands of bicycles available for sharing at self-service docking stations, providing a cheap, easy and efficient transportation option. There will be approximately 10,000 bikes at over 600 stations, available 24/7. citibikenyc.com

CityRacks is a DOT program that provides bicycle racks on sidewalks in all five boroughs. In addition to sidewalk bicycle racks, bike corrals allow racks to be installed in clusters in the parking lane of the roadway, keeping sidewalks clear in congested areas. Work with your community board to apply online or by mail to suggest CityRack locations in your neighborhood.

nyc.gov and 🔍 cityracks

Bicyclists on Allen Street in lower Manhattan enjoy a new public transit option from **CitiBike**.
Credit: NYC Department of Transportation





ACTIVE RECREATION

Benefits

Active Recreation during leisure time is important for both adults and children. Unstructured play among children in playgrounds, parks and other open space helps them develop motor and cognitive skills. For adults, creating spaces for walking, dance, calisthenics, tai chi, yoga and other exercise encourages physical activity while also fostering a sense of community. The many benefits of active recreation and creating conditions conducive to active recreation include:

- Physical activity helps children develop organization and social skills¹⁰ as well as promote self-esteem and higher grade achievement among adolescents.¹¹
- When playgrounds are painted with designs for games and imaginative play, children engage in moderate-to-vigorous activity for more than 50% of their recess period.¹²
- When there are more park areas in neighborhoods, physical activity increases among children and adolescents.^{13,14}
- Physical activity can improve the overall health and vitality of older adults while reducing their risk of falls and complications from certain chronic conditions.¹⁵
- When adults think their neighborhoods are safe, they are 25% more likely to be physically active during leisure time.¹⁶



Residents exercising at Intervale Green, an affordable housing building in the Crotona section of the Bronx.
Credit: WHEDCo

Ideas

When thinking about whether your neighborhood provides access to recreation spaces that accommodate different interests, ages and abilities, consider the following:

- parks, plazas, playgrounds and other spaces for children's play that pedestrians and bicyclists can easily access and use
- spaces and activities that respond to unique local and cultural preferences, for example, fields for sports traditionally played by certain ethnic groups
- amenities that allow people to enjoy spaces for longer periods of time, such as lighting, water fountains, restrooms and seating
- natural elements and landscapes such as bushes, trees, stones, grass, meadowland, forests, ponds, rocks for climbing and wooded slopes
- colorful ground markings such as hopscotch or footprints that encourage active and creative play
- spaces in and around housing sites for active play

The Van Duzer Days in the Stapleton section of Staten Island are part of the Department of Transportation's [Weekend Walks Program](#) (page 12). Credit: NYC Department of Transportation





Children playing at the Hester Street Playground in Chinatown, Manhattan. Through **People Make Parks**, a joint effort by the Hester Street Collaborative and **Partnerships for Parks**, community residents helped inform the re-design of this heavily-used playground. Credit: NYC Parks and Recreation

Resources

City Parks Foundation (CPF) offers park programs throughout the five boroughs. Working in more than 750 parks citywide, CPF presents a broad range of free arts, sports and education programs and empowers citizens to support their parks.
cityparksfoundation.org

KaBOOM! is a national organization that provides grants and other resources to communities interested in creating and enhancing play places.
kaboom.org

Partnerships for Parks (PfP) is a joint program of the City Parks Foundation and the NYC Department of Parks and Recreation that helps New Yorkers work together to make neighborhood parks thrive. PfP strengthens a diverse, growing network of dedicated park volunteers and groups by creating opportunities for them to celebrate their parks and accomplishments, access resources, become more effective leaders in their communities and work with government to affect decisions about their parks.
partnershipsforparks.org

People Make Parks (PMP) is a joint project of Hester Street Collaborative and Partnerships for Parks to help New Yorkers participate in the design of their parks. Find the toolkit online.
peoplemakeparks.org or 📞 212.360.1310

Play Streets offers permits to create car-free street blocks during specified hours so children and families can enjoy outdoor activities. Play Streets can be operated daily to weekly by schools or by community organizations. Work with your community board to obtain approval when organizing a Play Street. nyc.gov and [Play Streets](#) or playstreets@health.nyc.gov

Public Plazas transform underused streets and intersections into vibrant public spaces. To propose a new public plaza, community organizations can download an application via DOT's Public Plaza Program webpage. nyc.gov and [public plaza](#) or plazas@dot.nyc.gov

Weekend Walks are held in all five boroughs from May to October and offer activities on streets temporarily converted into pedestrian walkways. The varied activities provide opportunities for New Yorkers to socialize on summer weekends. Weekend Walks are organized by local groups, such as Business Improvement Districts, advocacy organizations or merchants' associations. nyc.gov and [weekend walks](#)



Public plazas are great venues for the arts, drawing people to observe and engage in physical activity. Local organizations partnered with community residents to transform Corona Plaza into a public space as part of DOT's **Public Plaza** Program. Credit: Neshi Galindo, Queens Museum of Art



ACTIVE BUILDINGS

Benefits

Active Buildings can promote physical activity. The buildings where we live, work, study, worship and play can encourage healthy living, by supporting active transportation, active recreation, exposure to green space and nature and access to healthy food and beverages. Occupants can encourage owners and managers to create healthier and more appealing environments. There are many low-cost ways to encourage active living in and around buildings:

- Bicycle parking and storage increases active commuting.¹⁸ In a survey of New Yorkers, commuters cited the lack of secure storage for bicycles at work as one of the main reasons for not cycling more.¹⁹
- Simple workplace measures, including paintings, maps and messages encouraging employees to take the stairs, more than doubled stair use over a six-week period.²⁰
- Signs encouraging people to take the stairs increased stair use in an academic building, a health clinic and an affordable housing site.²¹



Providing secure, accessible bicycle storage encourages bicycling (page 15, [Bikes in Buildings](#)).
Credit: NYC Department of Transportation



Ideas

When thinking about whether your building supports the health of building occupants by promoting stair use and/or other opportunities for physical activity, consider the following:

- Stairs that are accessible, visible, attractive and well-lit, with way-finding signage and prompts that encourage stair use. Consider unlocking all stair doors and if needed, implement a key card or security code system
- Outdoor bicycle parking and secure indoor bicycle storage
- Converting unused or under-used spaces into on-site exercise facilities and play spaces
- On-site gardening opportunities
- Sidewalk and façade elements that enhance the environment for pedestrians, such as street trees, benches, canopies and windows
- Including kitchens and casual eating spaces in commercial buildings to promote healthy eating

The backyard at The Melody, an affordable housing co-op in the Longwood section of the Bronx, is an exercise space with equipment for children and adults.
Credit: Reena Agarwal

Resources

Active Design Supplement: Affordable Designs for Affordable Housing provides ideas for low-cost and no-cost strategies for promoting active design in affordable housing. centerforactivedesign.org/affordablehousingcosts

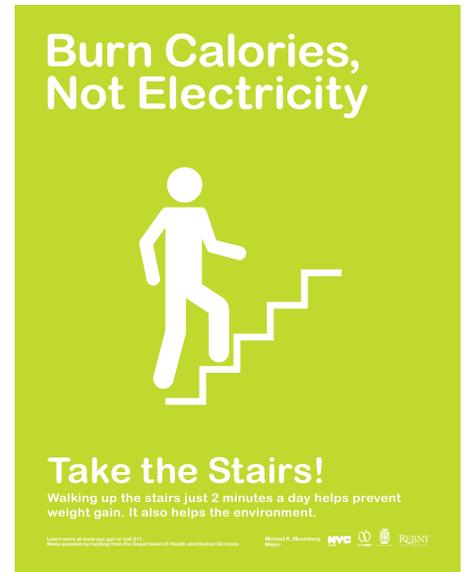
Bikes in Buildings was created to implement the Bicycle Access to Office Buildings Law. Tenants in commercial buildings with freight elevators can request permission to park bicycles indoors. In addition, a recent amendment to the zoning text requires indoor, secure, long-term bicycle parking/storage in new multi-family residences (10 units or more), community facilities and commercial buildings. nyc.gov and [bikes in buildings](#)

Habitat for Humanity NYC's Brush with Kindness (BWK) rehabilitates public schools, playgrounds, community centers and public parks, often in partnership with the New York City Housing Authority (NYCHA). Projects typically include painting of interiors, stair murals and landscape gardening. habitatnyc.org/volunteer_construction4.html

NYC Stair Prompts are signs to encourage stair use. Order free copies to post in your building.

[311](#)

Smoke-free Buildings complement an active building. Smoke-free housing means that smoking is not allowed anywhere in the building, including apartments. Let your building owner or managing agent know that you support a smoke-free apartment building and that clean indoor air is important for controlling asthma. nyc.gov/health and [Smoke-Free Housing](#)



NYC Stair prompt

Credit: NYC Health Department



Bedford Stuyvesant Restoration partnered with True, a local artist, and [Habitat for Humanity NYC's Brush with Kindness](#) to install a mural in the stairwell of the Youth Arts Academy. The mural depicts cultural icons from Bedford Stuyvesant, Brooklyn. To further encourage stair climbing, music will be piped into the stairwell. Credit: Bedford Stuyvesant Restoration



GREEN SPACE AND NATURE

Benefits

Exposure to Green Space and Nature promotes physical and mental health. Trees provide shade, encouraging people to remain active in warmer weather, and improve air quality by absorbing carbon dioxide. Natural waterways and fountains may also foster a sense of well-being.

- Trees and greenery are associated with less obesity and more physical activity.²²
- The presence of trees encourages walking by making sidewalks and streets more attractive, providing shade and lowering temperatures in summer. Trees also help separate pedestrians from vehicular traffic.^{23,24,25,27} More children walk to school in areas where there are trees.²⁶
- Trees help reduce air pollutants that can trigger asthma and other respiratory illnesses. Areas with more street trees have less early childhood asthma.²⁷
- Residents living in “greener” surroundings or in areas with trees report less fear and violence.^{28,29}
- Every \$1 spent on tree care in NYC returns nearly \$6 in improved air quality, energy savings, less carbon dioxide and better absorption of storm water, besides making urban spaces more attractive.³⁰



Community residents and business owners plant flowers on Washington Avenue in Prospect Heights, Brooklyn in a project supported by the local community board, a local school and MillionTreesNYC (page 19).
Credit: Kenneth Hung

Ideas

When thinking about whether your community provides exposure to green space and nature, consider the following:

- availability and safety of parks
- play space that incorporates natural elements
- planter boxes, container gardens and raised beds in unused spaces
- shade trees along streets
- opportunities for planting flower, herb and other gardens
- vacant lots that can be converted into urban oases of gardens and other natural elements
- green roofs or rooftop farms
- indoor or outdoor potted plants or hydroponic plantings
- access to local bodies of water such as rivers, bays or ponds



A resident of the Clinton Houses in East Harlem plants bulbs provided by the [Daffodil Project](#) (page 18).
Credit: Emily Walker, New Yorkers for Parks



Resources

596 Acres identifies vacant public land that may be available for community use. Check out the program's online map of publicly owned vacant spaces.

596acres.org

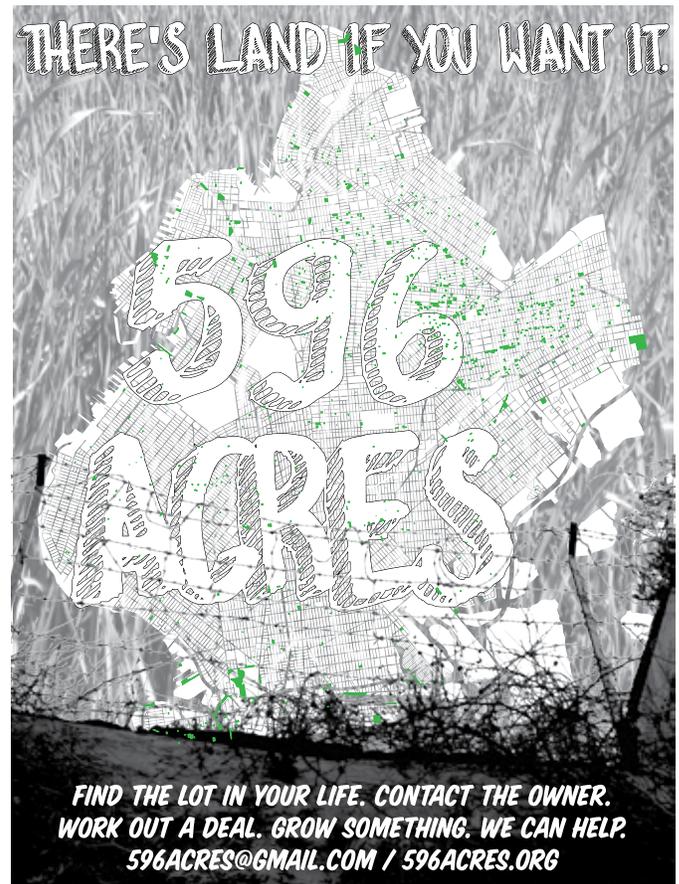
Daffodil Project provides free daffodil bulbs citywide to civic organizations, individuals, corporate volunteer groups, schools and community leaders who commit to planting them in a park or public space such as a schoolyard, street tree pit or community garden. Bulbs are available in the late summer to be planted in the fall, and bloom in the spring. Find more info and order bulbs through New Yorkers for Parks online.

ny4p.org/daffodil-project

Green Infrastructure Grant Program funds projects that manage storm water runoff in combined sewer areas of NYC. Through the NYC Department of Environmental Protection (DEP), green infrastructure projects that propose to manage at least 1" of storm water runoff are eligible. If the proposal is selected, DEP will provide funding for the design and construction of the green infrastructure installation. Eligible projects include green roofs, rooftop farms, rain gardens and permeable pavers.

nyc.gov/dep/greeninfrastructure or

✉ sustainability@dep.nyc.gov



596 Acres poster depicting available green space in Brooklyn.



The Brooklyn Grange rooftop farm, atop the Brooklyn Navy Yard in Greenpoint, Brooklyn, was constructed with support from the **Green Infrastructure Grant Program**. The farm helps manage storm water runoff and improve water quality and is expected to yield 20,000 pounds of produce each year, to be supplied to local restaurants, farm stands and community supported agriculture (CSA).

Credit: NYC Department of Environmental Protection



Clinton Community Garden
in Hell's Kitchen, Manhattan
Credit: Malcolm Pinckney/
NYC Parks and Recreation

Horticultural Society of New York (The Hort) brings the benefits of gardening activities and plant-rich environments to NYC residents. The Hort's staff design and build sustainable green spaces. The Hort also offers workshops that engage community members in plant-related activities, including seed starting, plant care, soil enhancement, composting and harvesting. Workshops can also include food preparation and canning, creating plant-based health and beauty products and setting up a food exchange program or a farmers' market. The Hort also provides on-site training for organizations to sustain their horticultural programs and vocational training in horticulture to under-employed individuals and residents of supportive housing.

thehort.org or ✉ hsny@hsny.org

MillionTreesNYC program aims to plant and care for one million new trees across the city's five boroughs in 10 years. To request a street tree or permission to plant your own street tree, 📞 311 or nycgovparks.org/trees. To request a tree for public or private property (not on street), including schoolyards, public housing campuses, new developments, business districts and vacant lots, visit milliontreesnyc.org.

NYC Compost or Mulch can be requested from DSNY to improve the soil in street tree beds, community gardens and other sites.

nyc.gov and 🔍 [compost request](#)

Open Space Greening (OSG) works with schools, public housing associations and neighborhood groups to transform vacant land into vibrant gardens and open space as a part of GrowNYC.

grownyc.org/openspace

Rivers, Trails and Conservation Assistance (RTCA) Program

is the community assistance arm of the National Park Service. RTCA staff provides technical assistance to community groups and local, state and federal government agencies working to protect natural areas and water resources and enhance close-to-home outdoor recreation opportunities.

nps.gov/ncrc/programs/rtca

TreeLC: Caring for trees is a way to be physically active while promoting a healthy neighborhood. Help look after trees and become part of the community-based network of tree stewards across the city's five boroughs. Take a free tree care workshop and receive a tree care toolkit. For the community calendar and programs, visit milliontreesnyc.org/care. Or access the TreeLC guide to tree care basics at milliontreesnyc.org and [TreeLC Handbook](#).



New York City requires that street trees be planted at new building sites and at sites where major building alterations are undertaken. These trees were planted in Boerum Hill, Brooklyn. Credit: NYC Health Department

While, at present, resources are not available to support the ideas below, still consider them as “greening” options for your neighborhood. Some don’t require much money – just some sweat!

Green Walls are living plant installations for use indoors and outside, improve air quality, absorb rainwater and provide shade to help cool buildings in summer. Green walls can also deter graffiti.

insideurbangreen.org/green-wall

Planter Boxes are containers that hold plants, flowers and small trees, and can be placed on sidewalks to beautify a neighborhood. Planters can be made from wood, concrete or materials such as block bricks. Request permission to install planters on your sidewalk from your community board.

Tree Guards are fence-like structures placed around tree beds to protect trees and surrounding plants from damage. They can also function as benches, and provide a small protected planting bed for gardening and make attractive additions to a community. Learn more and request a permit for a tree guard online.

nycparks.org and [tree guard](#)

A green wall in the lobby of Arbor House, a low-income residential building in Morrisania, Bronx built with a focus on air quality, in an area with high asthma rates. Credit: Bernstein Associates





HEALTHY FOODS AND BEVERAGES

Benefits

Access to Healthy Foods and Beverages complements access to physical activity, encouraging healthy eating and drinking. There are many benefits of having access to affordable, healthy beverages and foods, including fruits and vegetables:

- Full-service food retail stores in neighborhoods are associated with healthier eating and lower body weights among residents.^{32,33}
- Having many fast food restaurants in a neighborhood leads to weight gain and increased risk of obesity among area residents.^{34,35,36}
- Elementary school children who live in communities where fresh produce costs less are less likely to gain weight than children living in areas with high produce costs.³⁷
- Farmers' markets are especially beneficial in densely populated areas that lack fresh produce or full service food retail stores.³⁸
- Some NYC neighborhoods have few supermarkets but many bodegas (corner stores) where unhealthy products such as energy drinks and sodas are often heavily advertised.^{39,40} Children frequently shop at bodegas near their schools, purchasing more than 350 calories per day of mostly junk foods.⁴¹
- Residents who volunteer at a community garden eat more fruits and vegetables than non-gardeners. Moreover, 56% of community gardeners eat at least five servings of fruits and vegetables per day, compared to 25% of non-gardeners.⁴²
- Increasing access to healthy food also benefits the economy by stimulating local business, creating jobs and generating tax revenue. It also helps strengthen social connections in neighborhoods.⁴³
- When schools have drinking water fountains, children drink more water and are less likely to be overweight.⁴⁴ Drinking adequate amounts of water is important for memory and overall cognitive function, especially among children^{45,46,47} and the elderly.⁴⁸



The produce section of Western Beef in East Tremont, Bronx, the first supermarket built using **FRESH** (page 24) incentives.
Credit: Randi Rosenblum

Ideas

When thinking about whether your community offers access to healthy foods and beverages, consider the following:

- a full-service grocery store
- farmers markets' or small fruit and vegetable stands
- green carts or other fruit and vegetable vendors
- community and school gardens
- rooftop gardens and greenhouses
- visible water fountains with faucets for refilling portable bottles

A bustling day at [GrowNYC's](#) flagship Brooklyn [Greenmarket](#) (page 25) at Grand Army Plaza. Credit: Grow NYC



Resources

Farmers' Markets offer seasonal fruits and vegetables grown by local farmers. All farmers' markets that accept EBT benefits (food stamps) offer a \$2 Health Buck for every \$5 spent in EBT. Find a farmers' market in your neighborhood and learn how your organization can apply to receive Health Bucks.

nyc.gov/health and [🔍 farmers' markets](#) or [✉ farmersmarkets@health.nyc.gov](mailto:farmersmarkets@health.nyc.gov)

Food Retail Expansion to Support Health (FRESH) Program offers zoning incentives and financial benefits to grocery store developers and owners in communities with a shortage of fresh food options. Does your community need more grocery stores? Do you have retail space in your building or is there a vacant lot in your neighborhood that would be a good place for a grocery store?

nyc.gov/FRESH or [✉ fresh@nycedc.com](mailto:fresh@nycedc.com)

Green Carts are mobile fruit and vegetable vendors located in neighborhoods where fresh produce can be hard to find.

nyc.gov/health and [🔍 Green Carts](#)

GreenThumb provides support for community and school gardens throughout NYC. Monthly workshops cover gardening basics and more advanced farming and community organizing topics.

greenthumbnyc.org or [✉ greenthumbinfo@parks.nyc.gov](mailto:greenthumbinfo@parks.nyc.gov)



A Green Cart vendor located just steps from Intervale Green, a residential building in the Bronx. Intervale Green offers the vendor storage space for his cart and supplies, making it convenient to sell produce at this location. Credit: WHEDCo

GrowNYC is committed to increasing food access and improving the health of New Yorkers. It offers several programs that support these goals:

Fresh Food Box Program brings seasonally available, fresh, healthy, locally-grown produce in pre-packed boxes to underserved communities. Customers can take advantage of the cost benefits of buying in a group, and enjoy the quality and variety of a community supported agriculture (CSA) share with the flexibility to buy by the week. Customers can pay in cash, credit/debit and EBT/SNAP benefits.
gownyc.org/foodbox

Greenmarket Co. provides fresh, local food to grocery stores, bodegas, restaurants and other retail outlets throughout the city.
gownyc.org/greenmarketco

Greenmarket Farmers Markets operates 54 farmers' markets that sell healthy, fresh and local food in all five boroughs. Most Greenmarkets accept EBT/SNAP.
gownyc.org/greenmarket

Grow to Learn NYC promotes sustainable gardens in NYC public schools. Apply for a mini-grant to start a school garden or find resources such as how-to garden guides.
growtolearn.org or ✉ growtolearn@gownyc.org or ☎ 212.788.7923

Grow Truck is a mobile one-stop garden shop that lends garden tools, delivers plants and soil and provides plant advice to community greening efforts throughout the five boroughs. Schools, community gardens, block associations and others are eligible for program services.
gownyc.org/openspace/growtruck

Youthmarket are farm stands operated by teens in communities lacking healthy food access. Teens learn small business skills, the importance of healthy eating and self-confidence as they lead cooking demonstrations and engage with neighborhood residents.
gownyc.org/youthmarket



A sample **Fresh Food Box**
Credit: GrowNYC

Healthy Neighborhoods is a program of City Harvest that delivers free fresh food and other resources to low-income neighborhoods where affordable, healthy food is not readily available. The program works closely with local residents, organizations and community leaders to improve demand for and access to nutritious food.

cityharvest.org/programs

Shop Healthy NYC supports residents' and community organizations' efforts to make healthy foods more available at local retail food stores. Find more information, including how to encourage store owners to carry healthier products.

nyc.gov/health  Shop Healthy NYC or  shophealthynyc@health.nyc.gov

Seniors from Belmont Houses in the Bronx travel every week to the New York Botanical Garden **Greenmarket** to buy fresh fruits and vegetables.
Credit: NYC Health Department



MAKE THE CASE: BUILDING COMMUNITY SUPPORT FOR ACTIVE DESIGN

Making change in our communities isn't always easy. But a clear plan of action, the right people at the table and accurate data make success much more likely. This section outlines some key steps for taking action in your community. It also offers tips and resources for data that can help support your efforts.

Step 1: Engage your community

Identifying partners early in the planning process of an active design project will increase the likelihood of success. Neighbors, community groups, local businesses and faith-based organizations are potential partners. Bringing the community together to identify the needs and decide on priority projects contributes to community ownership and community buy-in, creating more high-impact solutions.

Some organizations have technical expertise and can assist with gardening or art projects, while others can help engage elected officials and City agencies. The project may fill a need; for example, many organizations offering school and youth programs, such as the YMCA or the NYC Department of Youth and Community Development, look for meaningful community projects in which their youth can participate. Finally, for local businesses, Business Improvement Districts and merchants' associations, a more attractive, pedestrian-friendly community is good for business.

Organizations that can help your efforts:

Partnership for a Healthier New York City is a coalition of community-based and citywide organizations committed to improving the health of all New Yorkers by making the healthy choice the easy choice. The Partnership is funded through a Community Transformation Grant received by the NYC Health Department from the Centers for Disease Control and Prevention.

healthiernyc.org or [✉ info@healthier.org](mailto:info@healthier.org)

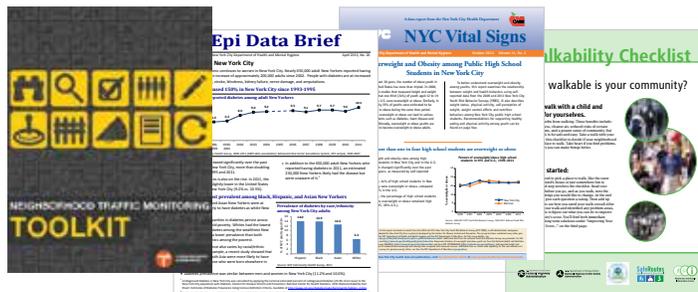
Transportation Alternatives (T.A.) promotes active transportation by working with citizens to ensure that every New Yorker has safe spaces to walk and bike and access to public transportation. T.A. works on local bicycle and pedestrian safety campaigns and can help local groups through the process of applying for infrastructure and enforcement resources such as Play Streets, Slow Zones, CityRacks and CityBenches.

transalt.org or [✉ info@transalt.org](mailto:info@transalt.org)

Step 2: Use data to identify community strengths and needs

You may need to gather data to help understand the strengths and needs of your community. This may be an important step for gaining support for your project from a community board or other decision-making body. You'll want to tell them what gap your project is filling and why it is important. The following online resources can help you collect data on neighborhood conditions for walking, cycling, recreation and safety:

- **Active Neighborhood Checklist** is an observational tool to assess key street-level features related to physical activity. activelivingresearch.org and [active neighborhood checklist](#)
- **Walkability Checklist** helps assess the “walkability” of your neighborhood. walkinginfo.org
- **Bikeability Checklist** helps assess the “bikeability” of your neighborhood. bicyclinginfo.org
- **T.A. Neighborhood Traffic Monitoring Kit** can help you document traffic conditions. transalt.org and [traffic monitoring kit](#)
- **T.A. CrashStories** supplements statistics of serious and fatal traffic crashes, by documenting “near misses” and crashes that are not included in official records. Document your own incident and view other documented incidents. crashstories.org



Supplement these observational data with other health and geographic data to bolster your efforts. For example, if you want to make the case for “greening” a neighborhood, provide data demonstrating the lack of green spaces and the high rates of asthma and/or obesity. Here are some additional data resources:

- **NYC Health Department:** nyc.gov/health and click [Data & Statistics](#)
 - **NYC Vital Signs** and **Epi Data Briefs & Tables:** Data tables and fact sheets are available for many health topics.
 - **Epiquery:** An interactive system to help you answer health-related questions about your neighborhood, like the rates of walking or cycling and fruit and vegetable consumption.
 - **NYC Environmental Public Health Tracking Portal:** Data about the environment and health throughout the city.
- **New Yorkers for Parks:** City Council District profiles on open space and parks, park report cards and more. ny4p.org
- **State of New York City’s Housing and Neighborhoods, NYU Furman Center:** Data and rankings on housing, demographics, health and quality of life in the city, covering the five boroughs and 59 community districts. furmancenter.org/research/sonychan
- **NYC Open Accessible Space Information System (OASISNYC):** Interactive maps of open spaces, property information, transportation networks and more. oasisnyc.net
- **CrashStat:** Provides information on locations of fatal and serious pedestrian and bicycle crashes with motor vehicles. crashstat.org

Step 3: Gain support from your community board, city agencies and elected officials

Community boards serve as local links to city agencies and should be among the first group of decision makers that community organizations approach to seek support for a project or issue. Many active design-related proposals, such as applications for Play Streets or sidewalk cafés, require community board review and approval. Community boards also can recommend that new development and zoning proposals include active design features, such as a green roof and children’s play space in a new housing development, or mix of land uses (commercial, residential and office) within a neighborhood.

Full board meetings occur monthly, are open to the public and include opportunities for public comments. Community boards also conduct public hearings on the city budget, land use matters and other important concerns. Find out more about your community board, including contact information and meeting schedules online. If you determine that your project needs community board approval, ask to be put on the agenda for an upcoming full board or committee meeting.

[nyc.gov](https://www.nyc.gov) and [community board](#)

City agencies including the NYC Departments of City Planning, Environmental Protection, Parks and Recreation, Sanitation and Transportation, design and maintain communities. Learn about the roles and responsibilities of these agencies and how they affect your neighborhood by visiting their websites and attending community board meetings and public hearings. Most agencies have borough-specific offices to which you can address an inquiry.

Other local officials, such as city council members, state senators and borough presidents, can support your project. Some city council members work with residents of their districts through a process called participatory budgeting to determine how to spend part of the City budget. At public meetings, community members discuss local needs and develop proposals to meet them. Find out if your district participates in this process online.

pbnyc.org

Determination and persistence are keys for success in New York City, where there are scores of competing priorities. Having a clear request, broad support and evidence that a project will benefit your community help ensure the success of an active design project.

ADDITIONAL ORGANIZATIONS THAT CAN HELP

The following organizations provide resources that can help groups and organizations developing active design projects.

Build It Green! NYC hosts do-it-yourself workshops and donates or sells surplus building materials at reduced cost that can be used for community improvement projects.
bignyc.org

Center for Active Design promotes physical activity and healthy eating through the design of buildings, streets and neighborhoods. The Center fosters active design strategies among public and private sector design, planning, policy and real estate professionals.
centerforactivedesign.org or
✉ info@centerforactivedesign.org

Change by Us is a website where New Yorkers can suggest ideas for improving their neighborhoods. It helps city residents locate the resources, manpower and support they need to get started. Site users also can browse volunteer efforts, join projects and provide feedback.
nyc.changeby.us

Citizens Committee for NYC offers grants, skills-building workshops and project planning assistance to help residents address important community issues. Groups that receive support work on issues as varied as community gardening, theater and fine arts, nutrition awareness, composting, beautification, tenant organizing, youth education, physical fitness and public safety.
citizensnyc.org or ✉ grants@citizensnyc.org
☎ 212.822.9568

Cornell University Cooperative Extension of New York City (CUCE– NYC) provides nutrition and fitness programs, including projects that involve making environmental changes to enhance health and fitness; promotes youth development through programs that support healthy lifestyles and the environment; and supports healthy housing and sustainable living, focusing on indoor environmental quality and safety, energy efficiency and conservation, as well as landscape design and management.
✉ cenyc@cornell.edu or nyc.cce.cornell.edu
☎ 212.340.2900.

Groundswell brings together artists, youth and community organizations to visually transform public spaces.
groundswellmural.org or ✉ info@groundswellmural.org

New York Cares is the City's largest volunteer organization, running volunteer programs for 1,300 nonprofits, City agencies and public schools. Staff work with partner organizations to identify their most pressing needs, create projects to bridge the gaps and recruit, train and deploy teams of volunteers.
newyorkcares.org or
✉ community.partners@newyorkcares.org

NYC Coalition for a Smoke-Free City works to increase awareness about tobacco control. By partnering with community members, legislators and health advocates, the Coalition supports local efforts to reduce youth exposure to tobacco marketing; increase the number of smoke-free outdoor spaces; increase the number of apartment buildings, co-ops and condos that are 100% smoke-free; and engage community partners to build support for policy campaigns.
nycsmokefree.org

Velo-City develops innovative cycling-based urban planning and design education programs for youth from diverse, underserved communities.
velocity-rides.org or ✉ info@velocity-rides.org

ACKNOWLEDGEMENTS

Thank you to the following partners for their review and valuable feedback:

- Bronx Health REACH
- Center for Active Design
- Mount Sinai School of Medicine
- NYC Department of Parks and Recreation
- NYC Department of Transportation
- Transportation Alternatives

REFERENCES

- 1 New York City Department of Health. *Active Design Guidelines: Promoting Physical Activity and Health in Design*. 2010; www.nyc.gov/adg.
- 2 Hamer M, Chida Y. Active commuting and cardiovascular risk: a meta-analytic review. *Preventive Medicine*. 2008;46(1):9-13.
- 3 Bassett DR, Pucher J, Buehler R, Thompson DL, Crouter SE. Walking, cycling, and obesity rates in Europe, North America, and Australia. *Journal of Physical Activity and Health*. 2008;5(6):795-814.
- 4 Pucher J, Buehler R. Making cycling irresistible: lessons from the Netherlands, Denmark, and Germany. *Transport Reviews*. 2008;28(4): 495-528.
- 5 Bunn F, Collier T, Frost C, Ker K, Roberts I, Wentz R. Area-wide traffic calming for preventing traffic related injuries. *Cochrane Database of Systematic Reviews*. 2003;(1):CD003110.
- 6 Landsberg B, Plachta-danielzik S, Much D, Johannsen M, Lange D, Müller MJ. Associations between active commuting to school, fat mass and lifestyle factors in adolescents: the Kiel Obesity Prevention Study (KOPS). *European Journal of Clinical Nutrition*. 2008;62(6):739-47.
- 7 Edwards RD. Public transit, obesity, and medical costs: assessing the magnitudes. *Preventive Medicine*. 2008;46(1):14-21.
- 8 Lee RE, Mama SK, Medina AV, Ho A, Adamus HJ. Neighborhood factors influence physical activity among African American and Hispanic or Latina women. *Health Place*. 2012;18(1):63-70.
- 9 Wang G, Macera CA, Scudder-soucie B, Schmid T, Pratt M, Buchner D. Cost effectiveness of a bicycle/pedestrian trail development in health promotion. *Preventive Medicine*. 2004;38(2):237-42.
- 10 Pellegrini AD, Smith PK. Physical activity play: the nature and function of a neglected aspect of playing. *Child Development*. 1998;69(3):577-98.
- 11 Nelson MC, Gordon-Larsen P. Physical activity and sedentary behavior patterns are associated with selected adolescent health risk behaviors. *Pediatrics*. 2006;117(4):1281-90.
- 12 Stratton G, Mullan E. The effect of multicolor playground markings on children's physical activity level during recess. *Preventive Medicine*. 2005;41(5-6):828-33.
- 13 Roemmich JN, Epstein LH, Raja S, Yin L, Robinson J, Winiewicz D. Association of access to parks and recreational facilities with the physical activity of young children. *Preventive Medicine*. 2006;43(6):437-441.
- 14 Sallis JF, Glanz K. Physical activity and food environments: solutions to the obesity epidemic. *Milbank Quarterly*. 2009;87(1):123-54.
- 15 *Active Living and Social Equity: Creating Healthy Communities for All Residents A Guide for Local Govern*. International City/County Management Association; 2005.
- 16 Corseuil MW, Hallal PC, Corseuil HX, Schneider JJC, D'orsi E. Safety from crime and physical activity among older adults: a population-based study in Brazil. *Journal of Environmental and Public Health*. 2012.
- 17 Kaczynski AT, Bopp MJ, Wittman P. Association of workplace supports with active commuting. *Preventing Chronic Disease*. 2010; 7(6):A127.
- 18 Department of City Planning. The New York City Bicycle Survey. 2007.
- 19 Swenson T, Siegel M. Increasing Stair Use in an Office Worksite Through an Interactive Environmental Intervention. *American Journal of Health Promotion*. 2013; Epub ahead of print.
- 20 Lee KK, Perry AS, Wolf SA, Agarwal R, Rosenblum R, Fischer S, Grimshaw VE, Wener RE, Silver LD. Promoting routine stair use: evaluating the impact of a stair prompt across buildings. *American Journal of Preventive Medicine*. 2012;42(2):136-41.
- 21 Ellaway A, Macintyre S, Bonnefoy X. Graffiti, greenery, and obesity in adults: secondary analysis of European cross sectional survey. *British Medical Journal*. 2005;331(7517):611-2.
- 22 Ewing R. *Pedestrian- and Transit-Friendly Design*. Washington, DC: Urban Land Institute/ American Planning Association; 2009.
- 23 NYC DOT. *Street Design Manual*: 2.4.
- 24 Arnold H. *Trees in Urban Design*. New York: Van Nostrand Reinhold; 1993.
- 25 Larsen K, Gilliland J, Hess P, Tucker P, Irwin J, He M. The influence of the physical environment and sociodemographic characteristics on children's mode of travel to and from school. *American Journal of Public Health*. 2009;99(3):520-6.
- 26 Lovasi GS, Quinn JW, Neckerman KM, Perzanowski MS, Rundle A. Children living in areas with more street trees have lower prevalence of asthma. *Journal of Epidemiology and Community Health*. 2008;62(7):647-9.
- 27 Sullivan WC, Kuo FE. Environment and Crime in the Inner City: Does Vegetation Reduce Crime? *Environment and Behavior*. 2001;33(3): 343-367.
- 28 Sullivan WC, Kuo F. Do trees strengthen urban communities, reduce domestic violence? *Arborist News*. 1996;5(2): 33-34.
- 29 Peper P, McPherson EG, Simpson JR, Gardner SL, Vargas KE, Xiao Q. City of New York, New York Municipal Forest Resource Analysis. Center for Urban Forest Research; 2007.
- 30 Sallis JF and Glanz K. Physical activity and food environments: solutions to the obesity epidemic. *Milbank Quarterly*. 2009;87(1):123-154.
- 31 Morland K, Wing S, and 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; 92:1761-1768.
- 32 McCormack G, Giles-Corti B, Bulsara M. The relationship between destination proximity, destination mix and physical activity behaviors. *Preventive Medicine*. 2008; 46:33-40.
- 33 Larson NI, Story MT, and Nelson MC. Neighborhood environments: disparities in access to healthy foods in the U.S. *American Journal of Preventive Medicine*. 2009;36(1):74-81.
- 34 Moudon AV, Lee C, Cheadle A, Garvin C, Johnson D, Schmid TL, Weathers RD, Lin L. Operational definitions of walkable neighborhood: theoretical and empirical insights. *Journal of Physical Activity and Health*. 2006;3(Suppl 1):S99-S117.
- 35 Sturm R, Datar A. Food prices and weight gain during elementary school: 5-year update. *Public Health*. 2008;122 (11):1140-3.
- 36 Alberti P, Hadi E, Cespedes A, Grimshaw V, Bedell J. *Farmers' Markets—Bringing Fresh, Nutritious Food to the South Bronx*. New York: New York City Department of Health and Mental Hygiene; 2008.
- 37 Gordon C, Ghai N, Purciel M, Talwalkar A, Goodman A. *Eating Well in Harlem: How Available Is Healthy Food?* New York, NY: New York City Department of Health and Mental Hygiene, 2007.
- 38 Graham R, Kaufman L, Novoa Z, Karpati A. *Eating in, eating out, eating well: Access to healthy food in North and Central Brooklyn*. New York, N.Y.: New York City Department of Health and Mental Hygiene; 2006.
- 39 Borradaile KE, Sherman S, Vander Veur SS, McCoy T, Sandoval B, Nachmani J, Karpyn A, Foster GD. Snacking in children: the role of urban corner stores. *Pediatrics*. 2009;124(5):1293-8.
- 40 Litt JS, Soobader MJ, Turbin MS, Hale JW, Buchenau M, Marshall JA. The influence of social involvement, neighborhood aesthetics, and community garden participation on fruit and vegetable consumption. *American Journal of Public Health*. 2011;101(8):1466-73.
- 41 Hagan E, Rubin V. Economic and Community Development Outcomes of Healthy Food Retail. 2013. <http://www.healthyeatingresearch.org>. Accessed March 5, 2013.
- 42 Muckelbauer R, Libuda L, Clausen K, Toschke AM, Reinehr T, Kersting M. Promotion and provision of drinking water in schools for overweight prevention: randomized, controlled cluster trial. *Pediatrics*. 2009;123(4):e661-7.
- 43 Benton D, Burgess N. The effect of the consumption of water on the memory and attention of children. *Appetite*. 2009;53(1):143-6.
- 44 Edmonds CJ, Jeffes B. Does having a drink help you think? 6-7-Year-old children show improvements in cognitive performance from baseline to test after having a drink of water. *Appetite*. 2009;53(3):469-72.
- 45 Edmonds CJ, Burford D. Should children drink more water?: the effects of drinking water on cognition in children. *Appetite*. 2009;52(3):776-9.
- 46 Adan A. Cognitive performance and dehydration. *Journal of the American College of Nutrition*. 2012;31(2):71-8.

