



Epi Data Brief

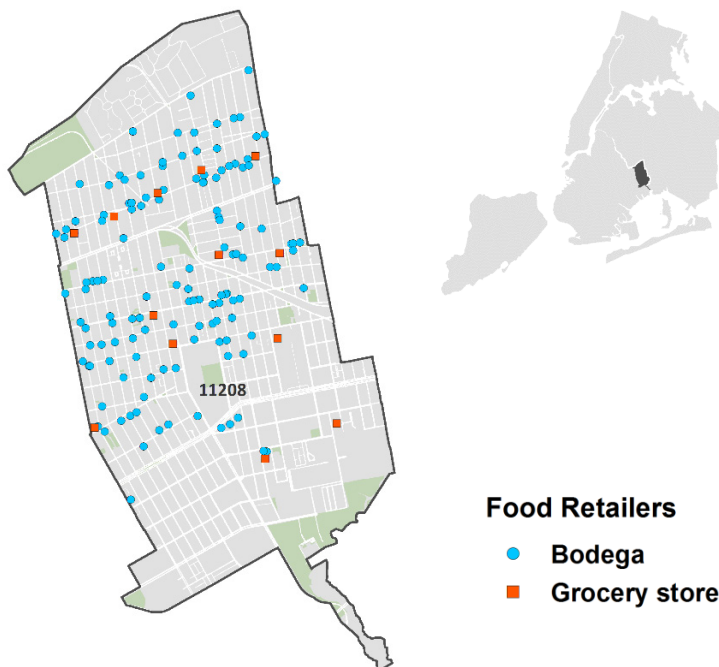
New York City Department of Health and Mental Hygiene

November 2016, No. 80

Access to Healthy and Affordable Food in East New York

- The types of places where food can be purchased in addition to access to healthy, high-quality, and affordable food can affect the health of a community's residents. Current and historic structural factors that lead to poor, racially segregated neighborhoods also create community risk for diet-related conditions.
- East New York and Starrett City have a high percentage of adults with diabetes (18%), and 31% of all adults are obese.^A Residents of these neighborhoods are more likely to consume sugary drinks and less likely to eat fruits and vegetables when compared with residents of Brooklyn or NYC overall.
- The goal of this analysis was to characterize the types of food establishments and the availability and promotion of selected foods and beverages in ZIP code 11208, part of the Brooklyn neighborhood of East New York.

Location of bodegas and grocery stores in East New York, Brooklyn, 2014



Source: East New York (ZIP code 11208) Food Environment Audit 2014

The Health Department's Center for Health Equity's Shop Healthy NYC program works to improve the food retail environment in neighborhoods throughout NYC. Please note that the data presented here were collected prior to implementing Shop Healthy programming in the neighborhoods included in this study. For more information on the Health Department's work with food retailers, visit nyc.gov/health and search *Shop Healthy*.

Food Establishments

This study included *food service establishments* and *food retailers*:

Types of Food Service Establishments

Fast food restaurants serve prepared foods and do not offer table service.

Food carts are mobile street carts selling prepared foods.

Full-service restaurants serve prepared foods and have table service with menus.

Types of Food Retailers

Bodegas (or corner stores) are small convenience stores that have no more than two cash registers and sell a variety of mostly non-perishable grocery items.

Green Carts are mobile produce carts that have Green Cart permits, can only sell fresh, unprocessed fruits and vegetables, and vend in designated areas of New York City. For more information visit:

www1.nyc.gov/site/doh/health/health-topics/green-carts.page

Fruit and vegetable carts are non-Green Cart mobile produce carts.

Fruit and vegetable stores sell primarily fresh produce.

Specialty groceries specialize in one product area, and include bakeries, butcher shops, etc.

Grocery stores are large chain or independent stores carrying a wide selection of fresh produce and other grocery items.

East New York

The Brooklyn neighborhood of East New York consists of two ZIP codes—11207 and 11208 with a total population of 185,727. This report focuses on ZIP code 11208. Most of the population in this ZIP code (92,262) identifies as Black/African-American (56.0%) and/or Latino (40.8%). A third of East New York residents (33.6%) have an income less than the federal poverty level (Source: American Community Survey 2010-2014).

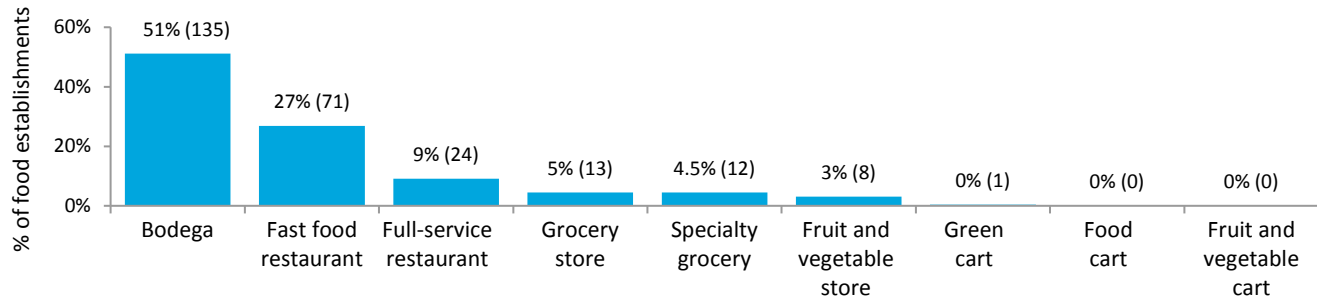
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Categorization of food establishments in East New York, Brooklyn, 2014



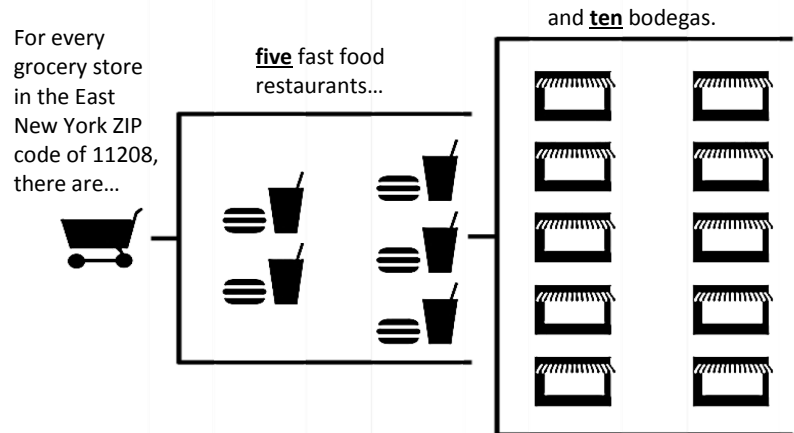
N=264 food establishments

Source: East New York (ZIP code 11208) Food Environment Audit 2014

Categorization of food establishments in East New York, Brooklyn

- Half of the 264 food establishments identified in the area were bodegas (51%).
- Fast food restaurants were the second most common type of food establishment, at 27%.
- Only 5% of the food establishments were grocery stores (13 out of 264).
- Just 3% of the food establishments were fruit and vegetable stores.
- Mobile produce carts were the least common. There was only one Green Cart and no other fruit and vegetable carts found in the entire ZIP code.

Ratio of grocery stores to fast food restaurants and bodegas in East New York, Brooklyn, 2014



Source: East New York (ZIP code 11208) Food Environment Audit 2014

Availability of healthy foods in bodegas

- Most (93%) of the 82 bodegas that were assessed sold some kind of fresh produce.¹ Among bodegas that sold produce, fresh fruit was slightly less available than fresh vegetables—17% (14) sold no fresh fruit and 11% (9) sold no fresh vegetables.
- Only 37% (30) of bodegas sold whole wheat bread,² which contains more fiber than white bread.
- Some healthier snacks³ were hard to find in the bodegas of East New York. Nearly all bodegas (98%) sold unsweetened nuts and/or dried fruit; however, only 27% (22) sold baked chips and only 13% (11) sold granola bars that met NYC Food Standards.
- About half (52%) of bodegas offered at least one type of low-sodium canned vegetables, beans, or soup.⁴
- At the 74 bodegas selling prepared foods, only 3% (2) offered healthier options on their menus, such as sandwiches on whole wheat bread or meal combos with fruit or water.

Definitions:

¹**Fresh produce** – only fresh fruits and vegetables were counted. Onions, potatoes, lemons, limes, and canned, frozen, or dried fruits and vegetables were excluded.

²**Whole wheat bread** – at least 2 grams of fiber per slice and whole grain listed as the first ingredient.

³**Healthier snacks** comply with the [NYC Food Standards](#) and are in a grab-and-go, snack-sized package; excludes items such as boxes containing multiple granola bars and large bags of chips.

⁴**Low-sodium canned goods** – 480 mg of sodium or less per serving for soup, 290 mg of sodium or less per serving for beans and vegetables, AND front label indicates that the product is low in sodium. Minimum stock had to be at least three cans.

⁵**Sugary drinks** have added caloric sweetener and more than 25 calories per 8-ounce serving.

⁶**Low-calorie drinks** have 25 calories or fewer per 8-ounce serving.

⁷**Unhealthy snacks** do not comply with the [NYC Food Standards](#).

⁸**Advertisements** that were incorporated into the product display (e.g. branded refrigerators, advertisements on awnings, etc.) and advertisements for multiple products (e.g. advertisements for sugary and low-calorie drinks together) were excluded.

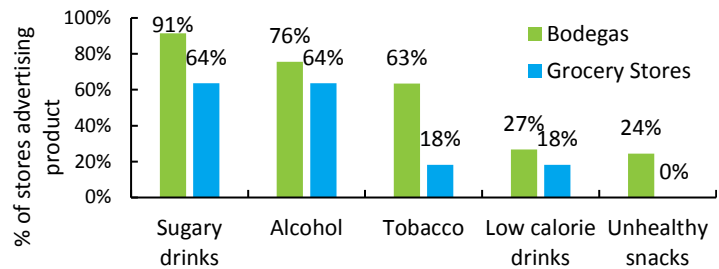
Quality and access to healthy food

- All 11 grocery stores and nearly two-thirds of bodegas (51) stored some of their produce in cardboard boxes, which encourages the growth of mold and can have negative effects on the quality of produce. Among the 76 bodegas which sold produce, over one-third (26) sold produce that was either moldy, rotten, or shriveled.
- The Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Woman, Infants, and Children (WIC) are two federal programs that provide food-purchasing assistance. Of the 76 bodegas assessed, 69 (87%) accepted SNAP, but only 22 (27%) accepted WIC. Of the grocery stores assessed, all 11 (100%) accepted SNAP and nine (82%) accepted WIC.

Advertising for unhealthy products is widespread in grocery stores and bodegas

- We assessed the presence of alcohol and tobacco advertising and separately tallied the number of advertisements for several categories of food and non-alcoholic beverages including sugary⁵ and low-calorie drinks,⁶ water, regular and low-fat milk, unhealthy snacks,⁷ healthier snacks, canned goods, bread, and produce.⁸
- The top three products advertised at the stores we assessed were sugary drinks (88%, 75 bodegas, seven grocery stores), alcohol (74%, 62 bodegas, seven grocery stores), and tobacco (58%, 52 bodegas, two grocery stores).

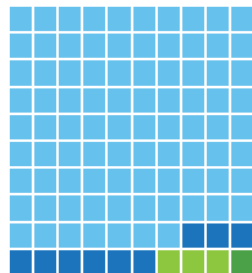
Top five products advertised by bodegas and grocery stores in East New York, Brooklyn, 2014



N=2,317 advertisements
Source: Shop Healthy Food Retail Assessments, 2014

Distribution of food and non-alcoholic beverage advertisements in bodegas and grocery stores in East New York, Brooklyn, 2014

87% Sugary drinks
9% Unhealthy snacks
3% Low-calorie drinks
1% Water



N=2,317 advertisements
Source: Shop Healthy Food Retail Assessments, 2014

- Few stores advertised healthier foods or beverages. Only 10% advertised water (eight bodegas, one grocery store) and 26% (22 bodegas, two grocery stores) advertised low-calorie or diet drinks. No stores advertised healthy snacks or produce.
- There were approximately 22 advertisements for unhealthy foods (sugary drinks, white bread, and snacks that do not comply with NYC Food Standards) for every one advertisement for healthy foods (low-calorie drinks, water, low-fat milk, healthy canned goods, whole wheat bread, healthy snacks, and fresh produce).

Data Sources:

East New York Food Environment Audit 2014: The Center for Health Equity’s Brooklyn Neighborhood Health Action Center canvassed the 11208 ZIP code and recorded the name, address and type of all 264 food service and food retail establishments, including bodegas, grocery stores, fast food restaurants, full-service restaurants, Green Carts, fruit and vegetable carts and stores, food carts, and specialty groceries.

Shop Healthy Food Retail Assessments, 2014: The Center for Health Equity’s Brooklyn Neighborhood Health Action Center conducted assessment of food establishments as a part of the Shop Healthy NYC program. After visiting all of the bodegas and grocery stores in ZIP code 11208, those that agreed to participate were assessed.

References:

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B. Wong BC, Dannefer R. Describing the Food Environment in the South Bronx Neighborhood of Crotona-Tremont. New York City Department of Health and Mental Hygiene: Epi Data Brief (44); April 2014.

www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief44.pdf

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Epi Data Tables

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Data Tables

- Table 1.** Food environment of East New York ZIP Code 11208: Number and percent of store types
- Table 2.** Availability of healthy foods in grocery stores and bodegas in East New York, Brooklyn 11208
- Table 3.** Distribution of food and non-alcoholic beverage advertisements in bodegas and grocery stores in East New York, Brooklyn 11208
- Table 4.** Products advertised by bodegas and grocery stores in East New York, Brooklyn 11208

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Table 1. Food environment of East New York ZIP code 11208: Number and percent of store types*Source: East New York 11208 Food Environment Audit 2014*

East New York Brooklyn 11208	
Food Establishment Type	N= 264
	N (%)
Bodega	135 (51%)
Fast Food Restaurant	71 (27%)
Full Service Restaurant	24 (9%)
Grocery Store	13 (5%)
Specialty Grocery	12 (5%)
Fruit and Vegetable Store	8 (3%)
Green Cart	1 (0%)
Food Cart	0 (0%)
Fruit and Vegetable Cart	0 (0%)

Table 2. Availability of healthy foods in grocery stores and bodegas in East New York, Brooklyn 11208

Source: Shop Healthy Food Retail Assessments, 2014

Available Foods and Beverages	Grocery Stores	Bodegas	TOTAL
	(N=11)	(N=82)	(N=93)
	%(N)	%(N)	%(N)
Produce	100% (11)	93% (76)	94% (87)
Fruits	100% (11)	83% (68)	85% (79)
Vegetables	100% (11)	89% (73)	90% (84)
Packaged ready-to-eat fruits or vegetables, such as fruit salad	46% (5)	0	5% (5)
Any rotten, moldy, or shriveled produce	0	34% (26)	28% (26)
At least some produce displayed in cardboard boxes	100% (11)	62% (51)	71% (62)
Low-sodium canned goods			
<i>480 mg of sodium or less/ serving for soup, 290 mg of sodium or less/ serving for beans and vegetables; front label indicates that the product is low in sodium</i>	91% (10)	52% (43)	57% (53)
Low-sodium canned vegetables	91% (10)	35% (29)	42% (39)
Low-sodium canned beans	91% (10)	8.5% (7)	18% (17)
Low-sodium canned soup	82% (9)	34% (28)	40% (37)
Canned fruit in 100% juice	100% (11)	65% (53)	69% (64)
Whole wheat bread	100% (11)	37% (30)	44% (41)
Low-fat milk	100% (11)	54% (44)	59% (55)
Healthy deli options posted as menu items			
<i>Note: calculated out of 83 stores with delis (9 supermarkets, 74 bodegas)</i>	0	2% (2)	2% (2)
Sandwich on whole wheat bread	0	1% (1)	1% (1)
Meal combination with fruit and/or water	0	1% (1)	1% (1)
Healthier grab-and-go snacks			
Required to comply with NYC Food Standards* and be in a snack-sized package; for example, boxes containing multiple granola bars or large bags of chips were excluded	100% (11)	98% (80)	98% (91)
Unsweetened nuts and/or dried fruit	100% (11)	98% (80)	98% (91)
Baked chips	36% (4)	27% (22)	28% (26)
Granola bars	36% (4)	13% (11)	16% (15)

*NYC Food Standards: <http://www1.nyc.gov/assets/doh/downloads/pdf/cardio/cardio-meals-snacks-standards.pdf>

Table 3. Distribution of food and non-alcoholic beverage advertisements in bodegas and grocery stores in East New York, Brooklyn 11208

Source: Shop Healthy Food Retail Assessments, 2014

Advertisement	Indoor N	Outdoor N	Total N (%)
Unhealthy			
Sugary drinks	553	579	1132 (86.5%)
White bread	3	0	3 (0.2%)
Junk food	94	20	114 (8.7%)
Healthy			
Low-calorie drinks	27	18	45 (3.4%)
Water	8	6	14 (1.1%)
Total	685	623	1308 (100%)

Table 4. Products advertised by bodegas and grocery stores in East New York, Brooklyn 11208

Source: *Shop Healthy Food Retail Assessments, 2014*

	Bodegas % (N)	Grocery Stores % (N)	Total % (N)
Sugary drinks	91.5% (75)	63.6% (7)	88.2% (82)
Alcohol	75.6% (62)	63.6% (7)	74.2% (69)
Tobacco	63.4% (52)	18.2% (2)	58.1% (54)
Low calorie drinks	26.8% (22)	18.2% (2)	25.8% (24)
Unhealthy snacks	24.4% (20)	0% (0)	21.5% (20)
Water	9.8% (8)	9.1% (1)	9.7% (9)
Healthy snacks/Produce	0% (0)	0% (0)	0 (0%)