



# Epi Data Tables

New York City Department of Health and Mental Hygiene

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## Retail Audit of Sugary Drinks in Six New York City Neighborhoods

### Data Tables

- Table 1.** Retail store types within NYC neighborhoods by higher and lower neighborhood consumption of sugary drinks
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- Table 3.** Number of stores with any beverage advertising by neighborhood consumption level and store type

### Data Sources

**Sugary Drink Retail Audit 2011:** Data from the NYC Health Department's 2009 Community Health Survey (CHS: for survey details, visit [www.nyc.gov/health/survey](http://www.nyc.gov/health/survey)) were used to select neighborhoods based on sugary drink consumption. CHS respondents were asked how many 12-ounce sugary drinks (soda, iced tea, sports drinks, etc.) they drink per day on average. Neighborhood consumption levels were grouped into tertiles based on the percentage of adults reporting consumption of one or more sugary drinks per day. In "higher" consumption neighborhoods, the rate was 35-46% of adults, and in "lower" consumption neighborhoods, the rate was 11-27% of adults. Six NYC neighborhoods were purposefully selected for the retail audit, three each with higher and lower rates of sugary drink consumption. In the neighborhoods selected for the audit, 43-46% of residents in the higher consumption neighborhoods and 18-27% in the lower consumption neighborhoods reported drinking one or more sugary drinks per day. Two zip codes were randomly selected from each neighborhood after excluding atypical zip codes that had few retail outlets, along with Columbia University and the Bronx Zoo, for a total of 12 zip codes. Data collectors used a standardized assessment tool to survey all corner stores, chain pharmacies, and grocery stores in each zip code, capturing information on the availability and promotion of a variety of sugary drinks, low calorie drinks, water/seltzer, and 100% juice. A total of 911 stores were visited, and data were collected at 883 stores with 28 store refusals, for a 97% participation rate.

[To access the related Epi Data Brief, go to nyc.gov/html/doh/downloads/pdf/epi/databrief17.pdf](http://nyc.gov/html/doh/downloads/pdf/epi/databrief17.pdf)

**Table 1. Retail store types within NYC neighborhoods by higher and lower neighborhood consumption of sugary drinks**Source: *Sugary Drink Retail Audit 2011*

The New York City 2009 Community Health Survey asked respondents how many 12-ounce sugary drinks (soda, iced tea, sports drinks, etc.) they drink per day on average. Neighborhood consumption levels were grouped into tertiles based on the percentage of adults reporting consumption of one or more sugary drinks per day. In higher consumption neighborhoods, the rate was 35-46% of adults, and in lower consumption neighborhoods, the rate was 11-27% of adults.

Store Type*	Higher Consumption Neighborhoods				Lower Consumption Neighborhoods				P-value Higher vs. Lower Consumption Neighborhoods (All)
	South Bronx (N=189)	Central Harlem (N=63)	East New York (N=266)	All (N=518)	Greenpoint (N=174)	Astoria (N=84)	Upper West Side (N=107)	All (N=365)	
Corner Store N (%)	166 (88)	49 (78)	228 (86)	<b>443 (86)</b>	134 (77)	65 (77)	52 (49)	<b>251 (69)</b>	<.001
Chain Pharmacy N (%)	7 (4)	2 (3)	3 (1)	<b>12 (2)</b>	5 (3)	6 (7)	20 (19)	<b>31 (8)</b>	<.001
Grocery Store N (%)	16 (8)	12 (19)	35 (13)	<b>63 (12)</b>	35 (20)	13 (15)	35 (33)	<b>83 (23)</b>	<.001

\* Corner stores (commonly referred to as “bodegas”) are small convenience stores that have no more than 2 cash registers and sell a variety of mostly non-perishable grocery items. Chain pharmacies are larger than corner stores and carry basic grocery items in addition to doctor-prescribed and over-the-counter medications. Chain pharmacies visited included CVS/pharmacy®, DUANEreade™, Rite Aid®, and Walgreens®. Grocery stores are larger chain or independent stores carrying fresh produce and other grocery items.

Due to rounding, percentages may not always add to 100%.

**Table 2. Mean beverage availability by neighborhood consumption level and store type**Source: *Sugary Drink Retail Audit 2011*

The New York City 2009 Community Health Survey asked respondents how many 12-ounce sugary drinks (soda, iced tea, sports drinks, etc.) they drink per day on average. Neighborhood consumption levels were grouped into tertiles based on the percentage of adults reporting consumption of one or more sugary drinks per day. In higher consumption neighborhoods, the rate was 35-46% of adults, and in lower consumption neighborhoods, the rate was 11-27% of adults.

Beverage Category*	Overall			Corner Store			Chain Pharmacy			Grocery Store		
	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value†	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value
	Mean (N=518)	Mean (N=365)		Mean (N=443)	Mean (N=251)		Mean (N=12)	Mean (N=31)		Mean (N=63)	Mean (N=83)	
<b>Sugary Drinks</b>	11.4	10.4	<.001	11.9	11.4	0.001	11.0	11.5	--	8.0	7.0	0.106
<b>Low Calorie Drinks</b>	4.1	5.6	<.001	4.3	5.9	<.001	5.8	6.9	--	2.7	4.1	0.002
<b>Water/Seltzer</b>	2.3	2.5	<.001	2.4	2.7	<.001	2.1	2.2	--	1.5	2.0	0.003
<b>100% Juice</b>	1.0	1.0	0.219	1.0	1.0	0.269	1.0	0.9	--	0.9	0.9	0.265

\*Sugary drinks include soda, sports drinks, energy drinks, iced tea, and fruit drinks, and have more than 25 calories per 8-ounce serving. Low calorie drinks include the counterparts to each of the sugary drinks and have 25 calories or fewer per 8-ounce serving. Thirteen varieties of sugary drinks, 13 varieties of low calorie drinks, 3 varieties of water/seltzer (plain water and seltzer, and flavored seltzer), and yes/no availability of 100% juice were assessed.

Mean availability was calculated by finding the average number of these refrigerated beverage varieties per store.

†Multivariate significance test did not yield significant results, so univariate p-values were not calculated.

**Table 3. Number of stores with any beverage advertising by neighborhood consumption level and store type**

Source: Sugary Drink Retail Audit 2011

The New York City 2009 Community Health Survey asked respondents how many 12-ounce sugary drinks (soda, iced tea, sports drinks, etc.) they drink per day on average. Neighborhood consumption levels were grouped into tertiles based on the percentage of adults reporting consumption of one or more sugary drinks per day. In higher consumption neighborhoods, the rate was 35-46% of adults, and in lower consumption neighborhoods, the rate was 11-27% of adults.

Beverage Category*	Overall			Corner Store			Chain Pharmacy			Grocery Store		
	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value†	Higher Consumption Neighborhoods	Lower Consumption Neighborhoods	P-value†
	N (%) (N=518)	N (%) (N=365)		N (%) (N=443)	N (%) (N=251)		N (%) (N=12)	N (%) (N=31)		N (%) (N=63)	N (%) (N=83)	
<b>Sugary Drinks N (%)</b>	500 (97)	324 (89)	<.001	429 (97)	230 (92)	0.004	11 (92)	23 (74)	--	60 (95)	71 (86)	--
<b>Low Calorie Drinks N (%)</b>	167 (32)	119 (33)	0.942	135 (31)	81 (32)	0.670	6 (50)	10 (32)	--	26 (41)	28 (34)	--
<b>Water/Seltzer N (%)</b>	102 (20)	137 (38)	<.001	81 (18)	84 (33)	<.001	2 (17)	14 (45)	--	19 (30)	39 (47)	--
<b>100% Juice N (%)</b>	291 (56)	128 (35)	<.001	247 (56)	92 (37)	<.001	2 (17)	1 (3)	--	42 (67)	35 (42)	--

\*Sugary drinks include soda, sports drinks, energy drinks, iced tea, and fruit drinks, and have more than 25 calories per 8-ounce serving. Low calorie drinks include the counterparts to each of the sugary drinks and have 25 calories or fewer per 8-ounce serving. Water/Seltzer includes plain water and seltzer, and flavored seltzer.

†Omnibus significance test did not yield significant results, so individual chi square p-values were not calculated.