



Food Insecurity in Manhattan

By Neha Mathew



Personal Introduction

- From Stamford, CT but live in NYC on the Upper East Side
- Graduated from UConn in 2021 with an Honors BS in Biology
 - Was Pre-Med but decided against it towards the end of college
 - Worked at UConn's nutrition department in college
- Currently work at Memorial Sloan Kettering Cancer Center
 - Find grants and foundations for pts who can't afford their copays for cancer drugs and treatments
 - Have always been passionate about public health and social justice issues
- Want to transition into data analytics
 - Have not decided a path but would love to combine my passion for social issues and analytics



What zipcodes in NYC would be considered food deserts/swamps and is there a correlation with the income levels of those zipcodes?

- Food Swamp: Areas where unhealthy food options are more accessible than healthier alternatives. These areas often have a high density of fast food outlets compared to grocery stores, making it difficult for residents to access nutritious food
- This imbalance has been linked to higher rates of obesity, diabetes, and heart disease, especially in low-income neighborhoods where healthier options are limited or expensive
- Background in nutrition makes me passionate about this

Data Sourcing

- DOHMH New York City Restaurant Inspection
 - Gives me a list of all the restaurants in NYC with their names and zip codes
- Yahoo list of 15 top fast food chains in the US
 - Allows for me to filter the DOHMH list down to a manageable level
- Income By Zip Code
 - Found median income level and percentage of households within zip codes that are considered high income (>200k annually)
- Grocery Stores by County
 - Data from NY State gives me a list of all the grocery stores in NYC with their names and zip codes

County	License Number	Operation Type	Establishment Type	Entity Name	DBA Name	Street Number	Street Name	Address Line 2	Address Line 3	City	State	Zip Code
KINGS	619802	Store	AC	DUANE READE ET AL PTBS	DUANE READE 14432	5008	5TH AVE			BROOKLYN	NY	11220
KINGS	618360	Store	AC	AS FULTON FOOD CORP	BRAVO SUPERMARKET	1299	FULTON ST			BROOKLYN	NY	11216
KINGS	746937	Store	AC	BEYOND NATURAL MARKET INC	BEYOND NATURAL MARKET	195	MONTROSE AVE			BROOKLYN	NY	11206
KINGS	615921	Store	ABCK	COSTCO WHOLESALE CORP	COSTCO WHOLESALE 318	976	3RD AVE			BROOKLYN	NY	11232
KINGS	616443	Store	AC	CARIB FOOD MARKET INC	CARIB FOOD MARKET	1303	FULTON ST			BROOKLYN	NY	11216
KINGS	706966	Store	AC	NASEB FOODS INC	MET FRESH SUPERMARKET	9006	3RD AVE			BROOKLYN	NY	11209
KINGS	740242	Store	AC	BAKRI INC	LINCOLN MARKET	633	MARCY AVENUE			BROOKLYN	NY	11206
KINGS	670548	Store	AC	POLAM INTERNATIONAL MEAT MARKETS INC	POLAM INTL MKT MKT #	276	MCGLUNNESS BLVD.			BROOKLYN	NY	11222
KINGS	616352	Store	ABC	ALMONTIE HEIGHTS FOOD CORP	FOOD DYNASTY	1525	BETH ST			BROOKLYN	NY	11228
KINGS	741947	Store	AC	W FRESH LLC	W FRESH	184	WALLABOUT ST			BROOKLYN	NY	11226
KINGS	616529	Store	A	WALGREENS EASTERN CO INC	WALGREENS #01918	755	BROADWAY			BROOKLYN	NY	11206
KINGS	759096	Store	AC	AFS MARKET INC	FOOD BAZAAR	1102	MYRTLE AVE			BROOKLYN	NY	11206
KINGS	750265	Store	AC	MILELI MARKET INC	MILELI MARKET	501	BUSHWICK AVENUE			BROOKLYN	NY	11206
KINGS	711795	Store	AC	XITLALI DELI GROCERY CORP	XITLALI DELI GROCERY	105	GRAHAM AVE			BROOKLYN	NY	11206
KINGS	610829	Store	ABC	WAVERLY MEATS&GROCERY INC	WAVERLY FARM MARKET	367	WAVERLY AVE			BROOKLYN	NY	11238
KINGS	612607	Store	ABCK	FAY DA MANUFACTURING CORP	FAY DA BAKERY	259-267	MEEROLE ST			BROOKLYN	NY	11206
KINGS	755935	Store	AC	RBC 52 ARLINGTON MARKET PLACE INC	SHOP FAIR SUPERMARKET	52	ARLINGTON AVENUE			BROOKLYN	NY	11207
KINGS	670577	Store	AC	FAT MEAT & PRODUCE CORP	BRAVO SUPERMARKET	4808	4TH AVE			BROOKLYN	NY	11220
KINGS	615873	Store	ABC	PICK QUICK FOODS INC	KEY FOOD 15	7000	NEW ULTRECHT AVE			BROOKLYN	NY	11228
KINGS	729102	Store	A	DOLLAR TREE STORES INC	DOLLAR TREE #05848	817	VAN CLEEN AVE			BROOKLYN	NY	11207
KINGS	739653	Store	AC	GUMPTION COFFEE INC	GUMPTION COFFEE	168	39TH STREET			BROOKLYN	NY	11232
KINGS	739355	Store	AC	JOAN FOOD CORP	C TOWN	2115	PITKIN AVE			BROOKLYN	NY	11207
KINGS	742760	Store	ACCK	VITA COFFEE LLC	CAFFE VITA	576	JOHNSON AVE			BROOKLYN	NY	11237
KINGS	618274	Store	ABCK	J&R WYCKOFF CORP	KEYFOOD	72	WYCKOFF AVE			BROOKLYN	NY	11237
KINGS	738742	Store	AC	GOURMET FRESH 2 LLC	GOURMET FRESH 2	530	BETH STREET			BROOKLYN	NY	11209
KINGS	615228	Store	AC	CHIVO MEAT CORP	IDEAL FOOD BASKET	720	WASHINGTON AVE			BROOKLYN	NY	11238
KINGS	736861	Store	A	WALGREEN EASTERN CO INC	WALGREENS #18204	355	KNICKERBOCKER AVE			BROOKLYN	NY	11237
KINGS	712487	Store	AC	3 J S FOOD CORP	SHOP FAIR	2222	PITKIN AVE			BROOKLYN	NY	11207
KINGS	614216	Store	ABC	BILLY BOY FOOD CORP	C-TOWN	130	HAVEMEYER ST			BROOKLYN	NY	11211
KINGS	616997	Store	A	DUANE READE ETAL PTBS	DUANE READE 14464	436	BETH ST			BROOKLYN	NY	11209
KINGS	617891	Store	AC	DNY NATURAL LAND INC	DNY NATURAL LAND	322	FLATBUSH AVE			BROOKLYN	NY	11238
KINGS	736127	Store	AC	BUSHWICK MARKET INC	MET FRESH SUPERMARKET	1381	MYRTLE AVENUE			BROOKLYN	NY	11237
KINGS	713456	Store	ACH	CTAC HOLDINGS LLC	LI-LAC CHOCOLATES	68	35TH ST			BROOKLYN	NY	11232
KINGS	710973	Store	AC	DYKER HEIGHTS DELI INC	NEW DYKER MART HEALTHY & HEARTY	8623	5TH AVE			BROOKLYN	NY	11209
KINGS	717714	Store	AC	486 OCEAN KING SEAFOOD INC	486 OCEAN KING SEAFOOD	486	TOMPKINS AVE			BROOKLYN	NY	11216
KINGS	743520	Store	AC	GREENPOINT FISH WHOLESALE LLC	GREENPOINT FISH WHOLESALE	14	ASH ST			BROOKLYN	NY	11222



[Home](#) [Data](#) [About](#) [Learn](#) [Contact](#)

Introducing our new data shaping and exploration experience: Filter, group, aggregate, and more!

[Try it now](#)

[Learn more](#)

DQHHM New York City Restaurant Inspection Results

The dataset contains every sustained or not yet adjudicated violation citation from every full or



[More Views](#) [Filter](#) [Visu](#)

CAMIS	DBA	BORO	BUILDING	STREET	ZIPCODE
50125236	THINK COFFEE	Manhattan	246	5 AVENUE	10001
50092806	Union St. Pizza	Brooklyn	226	4 AVENUE	11215
50131201	KAYLA RESTAURANT	Brooklyn	747	NEW LOTS AVENUE	11207
50101636	DUNKIN	Staten Island	1769	ARTHUR KILL ROAD	10312
50126379	SLAPSTICKS	Staten Island	3080	ARTHUR KILL ROAD	10309
50092026	FARIEDA'S DHAL P...	Queens	11210	101ST AVE	11419
40974392	BAYOU	Staten Island	1072	BAY STREET	10305

A	B	C
Zip Code	Median Household Income	High Income Households (Make over 200K)
10026	\$68,831	16.10%
10027	\$63,125	15.20%
10030	\$47,765	7.70%
10037	\$50,177	7.60%
10039	\$51,904	3.90%
10001	\$106,509	30.30%
10011	\$145,934	36.50%
10018	\$149,118	39.20%
10019	\$113,335	32.20%
10036	\$102,287	22.40%
10029	\$35,640	8.00%
10035	\$36,989	6.30%
10010	\$150,288	41.00%
10016	\$145,864	38.80%
10017	\$139,964	30.90%
10022	\$161,236	42.40%
10012	\$126,890	31.70%
10013	\$150,675	40.10%
10014	\$147,267	39.90%
10004	\$232,543	57.90%
10005	\$189,886	48.50%
10006	\$204,574	52.50%
10007	\$250,001	67.40%
10038	\$99,641	27.20%
10280	\$206,150	50.30%

Data Cleaning

- Cleaned the data during Python class
 - Removed all null values
 - Removed all duplicated
- Restaurants Table
 - Removed all restaurants that were not included on the list of top 15 fast food chains
 - Filtered so only restaurants in the Borough of Manhattan were included
 - Removed unnecessary columns, only kept ID number (CAMIS), name of restaurant (DBA), borough, and zip code
- Grocery Stores table
 - Filtered so only restaurants in the County of New York were included
 - Removed unnecessary columns, only kept county, license number, name of store (DBA), and zip code

SQL Queries

- Concentration of fast food restaurants in each zip code
- Identified top 5 highest and lowest earning zip codes
- Concentration of grocery stores in each zip code
- Compared concentration of grocery stores with income levels
- Compared concentration of fast food restaurants, concentration of grocery stores, and percentage of high income households

Findings

- There tends to be a high concentration of fast food restaurants in Midtown
 - Can be attributed to the high number of workplaces
 - Employees need somewhere quick and easy to eat during lunch breaks
- Could not find a definitive correlation between fast food restaurant concentration and income level
 - Further analysis may need to be done to see if any overt patterns exist
- Low income areas had a fairly high number of grocery stores
 - Good news as this means accessibility to healthy food options is high

Sources

- <https://data.cityofnewyork.us/Health/DOHMH-New-York-City-Restaurant-Inspection-Results/43nn-pn8j/data>
- https://www.yahoo.com/news/15-biggest-fast-food-chains-161948532.html?guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAADcN1MMRlXQObxq6ls_TychENeBisMkndQUd0MbljVkuCgWlKbjiQoTlwkEuv0g2h9wpLQe2YVv_9l-QSZz-Rh|NvaobElV4s-lKKhMkD5LI|cOl0dC7ed_gbXispwalRraxH8isx6ap7DdcEjad-7ZiTXaAZqmBdvSCVMw9AMAA&guccounter=2
- https://data.ny.gov/Economic-Development/Grocery-Stores-by-County-SQ-ZipCode/q3nk-da9c/about_data
- <https://www.incomebyzipcode.com/newyork>