# Introduction

The last decade witnessed a major shift in the food and beverage industry in terms of consumer demand for healthy food. Unlike earlier generations, who are most likely to be never found in the gym, this generation takes health and lifestyle to be their priority. People track down their daily steps and activity through their gadgets, and take deep notes on what they are eating. The recent shift towards healthy food trends made us curious enough to research on what the increase in consumer demand is and how restaurateurs are catering to the trend.

My business idea is to set up restaurants servings healthy food in the New York city to bank on this healthy food trend. Appropriate locations would be near a gym, yoga studio or any kind of health/ fitness related centers. People who go to gyms and engage in outdoor activities to stay fit follow a strict diet which consists of healthy foods like salads, protein shakes and similar low carbohydrate foods. Needless to say opening a restaurant serving such cuisine would be highly appreciated by the fitness community

## Data that will be used to solve the problem and the source of the data

Being the most populated city in the United States, New York city is one of the most developed cities in the world. The city consists of several boroughs. The city not only has historical tourist locations but also modern attractions and amenities.

I will be conducting my analysis on the locational data obtained from FourSquare. The data would help me identify the neighborhoods in the New York city where fitness centers are concentrated. This data would help me evaluate the appropriate location for setting up my restaurant/s.

This would also help me compare several locations and conduct various market and feasibility studies which can be then leveraged in helping the business gain a headstart.

The data about New York City will be gathered from *https://cocl.us/new_york_dataset* Foursquare API will be used to explore neighborhoods around New York City.

The data which I shall be using would include:

- Data related to Neighborhoods and Boroughs of New York City and their Latitudes and Longitudes
- Location data about venues around neighborhoods in New York City

## Methodology

- New York City Data is extracted from *https://cocl.us/new_york_dataset* as a json file. It includes boroughs and neighborhoods in New York City and their latitudes and longitudes
- This data is stored in a Pandas Dataframe

- These neighborhoods are then superimposed over a map of New York City



- Subsequently, using the Foursquare API locational data of the neighborhoods were extracted and stored into a dataframe
- The dataframe was then cleaned and sorted to obtain the list of top 10 neighborhoods in terms of number of Health/ Fitness related centers in them
- This list was then visualised using a Bar Chart

| | Neighborhood | Boxing Gym | Climbing Gym | Gym | Gym / Fitness Center | Gym Pool | Gymnastics Gym | Pilates Studio | Yoga Studio | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Vinegar Hill | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 8 |
| 1 | Sutton Place | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 2 | 8 |
| 2 | Brooklyn Heights | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 4 | 8 |
| 3 | Civic Center | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 2 | 7 |
| 4 | Dumbo | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 7 |
| 5 | Melrose | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 7 |
| 6 | Lenox Hill | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 6 |
| 7 | Carnegie Hill | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 6 |
| 8 | Mount Hope | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| 9 | Flatiron | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 2 | 6 |

## Result

Top 10 location for further analysis are Vinegar Hill, Sutton Place, Brooklyn Heights, Civic Center, Dumbo, Melrose, Lenox Hill, Carnegie Hill, Mount Hope and Flatiron.



Comparing top 10 neighborhoods in terms of the number of health or fitness related centres
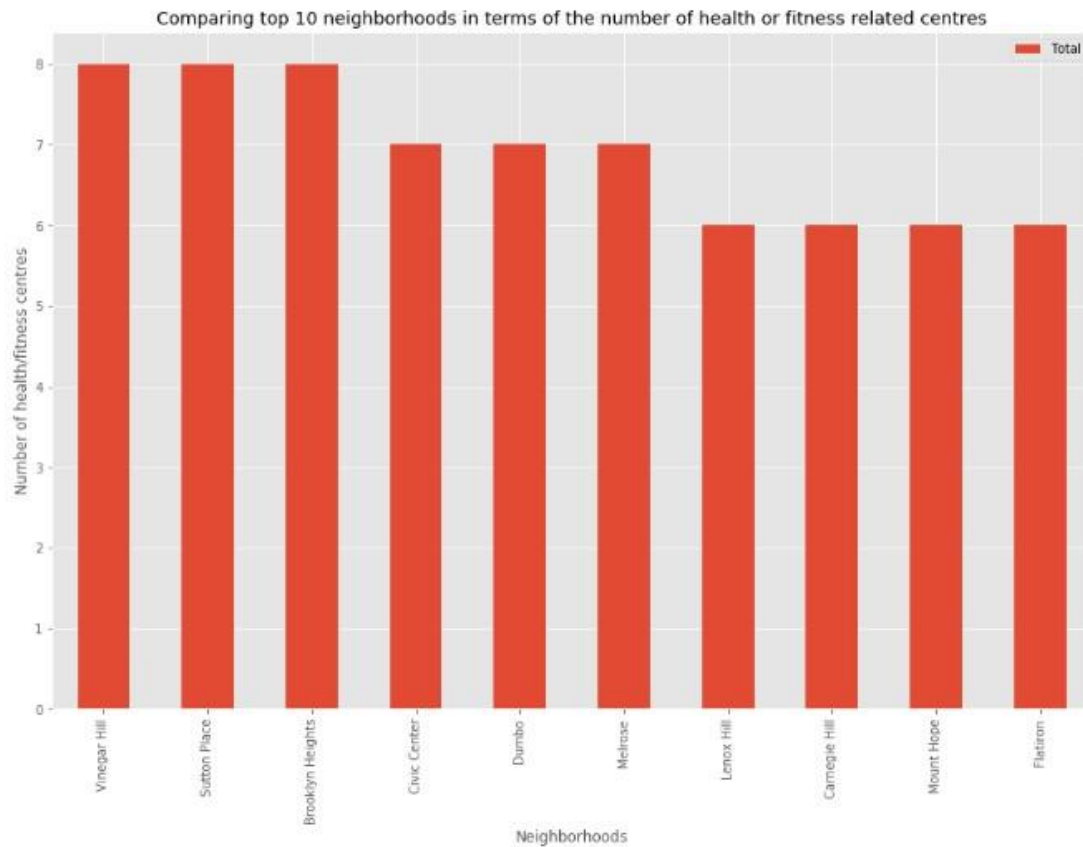
## Recommendations

It can be seen from the bar chart that Vinegar Hill, Sutton Place and Brooklyn Heights have the highest number of fitness/ health related centers each having 8 such places. It is recommended to place further efforts in evaluating these locations and conduct feasibility studies and market research for them.

## Conclusion

As recommended we will have to further conduct a feasibility study of each of these locations to understand other factors which needs to be considered before finalizing the business idea. Other factors could include popularity of these fitness centers, rental charges for setting up the restaurant, electricity and other connection charges if any, regulatory approvals required if any and local tax rates in those areas.