# Fit and Food: Where to go when food is 80% of your progress?

#### Wouter de Bot

ABSTRACT. Abstract will be written after everything is done.

Keywords: Gym, Food, Fitness, Restaurant

#### 1. Introduction

During recent years it has become ever more clear that obesity is a public health issue. In the United States the age adjusted obesity rate for adults over the age of 20 is as high as 39.8 %. Shockingly over 71.6 % of the American adults are overweight. "FastStats - Overweight Prevalence", 2020What many people that try to get into shape don't know is that food consists of 80 % of the progress you make towards getting into shape. Because of this a GymCorp has come up with an idea to combine a Gym with a healthy restaurant where you can go for your pre- or post workout meal. In order to determine the optimal location for this gym-restaurant a data analysis will be done for New York city by using publicly available data as well as the FourSquare API.

### 2. Data

The data that is going to be used in order to determine the optimal location for a gym and restaurant combination will consist of several datasources. These datasources are either open source or obtained via a free account on FourSquare.

- FourSquare location Data
- 2014 New York City Neighborhood Names

From the FourSquare API the data that will be used are the locations of Gyms and Restaurants in the city of New York. This data will be combined with the New York City Neighborhood Names dataset. Combined this data will likely yield the optimal neighborhood for the Gym-Restaurant after thorough analysis.

A snapshot of the New York City neighborhoods used are shown in Figure 1.



Figure 1. Snapshot of neighborhoods in NYC

An example of the data that is obtained from FourSquare is shown in the table below.

	name	categories	$\operatorname{lat}$	$\mathbf{lng}$
0	The Class by Taryn Toomey	Gym / Fitness Center	40.712753	-74.008734
1	CrossFit 212 TriBeCa	Gym	40.714537	-74.005999
2	Exceed Physical Culture	Gym / Fitness Center	40.715629	-74.007992
3	Equinox Tribeca	Gym / Fitness Center	40.714099	-74.009686
4	The Helena Gym	$\operatorname{Gym}$	40.714276	-74.005967

REFERENCES 3

## References

 $Fast stats - overweight\ prevalence.\ (2020).\ https://www.cdc.gov/nchs/fastats/obesity-overweight.$