

# US Overweight and Obesity (BMI) Analysis (From 2011 to Present)

ChenXin Zhang (cz2634), JingYao Geng (jg4294), Liner Ge (lg3156), YiFan Su (ys3394)

2020-11-06

## The Motivation for this project:

According to the World Health Organization (WHO), more than two-thirds of adults are obese or overweight and one-sixth of children are obese in the US. Obesity is the fifth leading risk for global death. People overweight have a higher risk of getting more than 60 chronic diseases like type 2 diabetes, heart disease, which also increases the medical cost. The association between obesity and education level, income is intricate and differs by gender, age, and race.

## The Intended Final Products:

A website about this project, a report about the process of this project, some interactivity plots to visualize results, and a screencast illustrating this project.

## The Anticipated Data Sources

Data collected from Behavioral Risk Factor Surveillance System (BRFSS), Centers for Diseases Control and Prevention (CDC)

## The Planned Analyses / Visualizations / Coding challenges

- Planned Analyses:
  - Overview of US obesity and overweight.
  - Focus on the state with the highest obesity and overweight rate
  - Investigate the obesity and overweight based on **Education level**, **Gender**, **Race**, **Age**, **Income** etc.
  - Apply Time Series Analysis to examine the time trend from 2011 to present.
- Visualizations:
  - Visualizing the US obesity and overweight rates geographically
  - Visualizing the changes in obesity and overweight rates over time
  - Visualizing the state with highest obesity and overweight
  - Visualizing the difference of obesity rate group by 'Educational Level', 'Gender', 'Race', 'Age', or 'Income'
- Coding Challenge: Since the data is huge, it might be a trouble to run or knit.

## The planned timeline

Date...1	Objectives	Date...3	Objective
11/06	set goals and have a proposal	11/25	started to write the final report
11/07	hand in the proposal	11/29	meeting, complete report and website
11/10	tidy the data, preliminary work	12/04	polise final report, screencast, webpages
11/12	meet with TA, make correction	12/08	do peer assessment
11/20	tidy data, basic frames of the website	12/10	in-class discussion of projects