Group 2 Update 1: United States Obesity Risk Factor Exploration

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1. Introduction

Obesity is a major challenge facing the healthcare system in the United States. Obesity rates have risen significantly over the last thirty years and if this trend continues, the United States healthcare system is projected to pay \$150 billion annually (Hurt et al., 2010). In addition to genetic factors, this increase in obesity rates, inactivity, and malnutrition has been linked to the environment. Environmental changes; such as car transportation, inactive jobs, carry out food, food advertisements, and food portions; can be tied to specific regions and have a significant impact on health (National Heart, Lung, and Blood Institute, 2013; National Institute of Diabetes and Digestive and Kidney Diseases, 2012). The main goal of this project is to explore the distribution of these risk factors across the United States and visualize how these groupings correspond to obesity and health.

2. Dataset

For this project, we will analyze the Nutrition, Physical Activity, and Obesity dataset provided by the Centers for Disease Control and Prevention (CDC). This dataset provides information on the percentage of the population suffering from adult obesity, as well as associated behaviors, such as poor nutrition and physical inactivity, for the nation, states, and selected sub-state districts. These data also include potential risk factor features, such as age, education, sex, and income (Centers for Disease Control and Prevention). In addition, this dataset provides similar population information for child obesity, infant breastfeeding, active transportation, and community policy supports.

References

Centers for Disease Control and Prevention. Nutrition, physical activity, and obesity data. https://chronicdata.cdc.gov/health-area/nutrition-physicalactivity-obesity. Accessed: 2017-10-05.

Hurt, Ryan T, Kulisek, Christopher, Buchanan, Laura A, and McClave, Stephen A. The obesity epidemic: challenges, health initiatives, and implications for gastroenterologists. *Gastroenterology & hepatology*, 6(12):780, 2010.

National Heart, Lung, and Blood Institute. Why obesity is a health problem. https://www.nhlbi.nih.gov/health/educational/wecan/healthy-weight-basics/obesity.htm, 2013. Accessed: 2017-10-05.

National Institute of Diabetes and Digestive and Kidney Diseases. Understanding adult overweight and obesity. https://www.niddk.nih.gov/health-information/weight-management/adult-overweight-obesity, 2012. Accessed: 2017-10-05.