

Food Environment Effects on Diabetes and Obesity

Analyzing food environments and give a policy recommendation.

Project Overview

This project investigates the complex relationship between the food environments and health outcomes (Adult Diabetes and Adult Obesity) in the United States.

Utilizing multi-linear regression and Principal Component Analysis (PCA) on data sourced from the U.S. government, our goal is to identify influential factors and ultimately propose actionable policy recommendations for the benefit of society.

Content

- Selected and filtered relevant features from 300+ variables for analysis.
- Data Wrangle and Standardization
- **Analyzed the relevance of food environment variables on health status** using multi regression
- **Reduced the dimensionality of the data by reweighting the importance of variables** using PCA
- **Developed new multi regression** for the final model based on the PC score
- Gave the recommendation

Tools & Languages

- R – Data analysis
- Excel – Data preprocessing and cleaning

Models & Methods

- Multi-linear regression
- Principal Component Analysis (PCA)