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Organization: Economic Research Service (ERS), U.S. Department of Agriculture (USDA)

Dataset Name: FoodAPS

Project Focus: Data Analytics

School: Montgomery College

Student Level: Undergraduate

Presentation Type: Oral Presentation (with visuals included)

The National Household and Purchase survey (FoodAPS) is used to collect extensive data on household food expenditures. The survey catches information ranging from the types of foods being purchased, prices, quantity, and the location of purchase. The purpose of this project is to identify important patterns amongst specific populations, whilst using prescribed datasets to determine the household's target group, and relate that to particular food purchasing tendencies within each household surveyed.

The Supplemental Nutrition Assistance Program (SNAP) is the nation's largest nutrition assistance program. SNAP benefitted households tend to have greater consumption of caffeinated beverages, snacks, and pre-made meals, whilst also placing them at a higher risk of developing obesity (based on the average weight of each individual per household). First, we'll be breaking the dataset to properly distinguish the household numbers from the target group. Then, we'll gather all the data per target group, and compare the data between different target groups. This will be carried out in MATLAB, where the data will be analyzed, and placed into organized charts (Household's target group vs Calories Consumption, and Household's target group vs Weight).

Based on the research conducted by the CDC in 2018, 10.5% of the overall US population has diabetes. People with diabetes have a high risk of medical complications such as obesity, high A1C levels, high blood pressure, and high cholesterol. The investigation helps understand the cause of diabetes in vulnerable populations, and helps find solutions to decrease the rate of the disease in the United States.

Source: <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>