**Nutrition, Physical Activity and Obesity Behavioural Risk Factor Surveillance System**

**Overview:**

This Power BI project explores and visualises public health data related to Nutrition, Physical Activity, and Obesity across U.S. states and territories. The data is sourced from the Canters for Disease Control and Prevention (CDC) and aims to support data-driven decisions for improving public health awareness and intervention strategies.

**Tools Used:**

* Microsoft Excel
* Microsoft Power BI

**Dataset**

* **Original dataset:** <https://docs.google.com/spreadsheets/d/1jU2l-OgjVgnwRWepEmS7aBO5F_7iYOLHEJCm8-CcHBs/edit?usp=sharing>
* **Data contains:** Nutrition, Physical Activity, and Obesity data
* **Fields**: Year, Location, Class, Topic, Question, Confidence level, etc

**Steps Followed:**

* Cleaned and transformed data in Excel using Power Query by removing special characters, eliminating unwanted and blank columns, and formatting rows.
* Applied advanced Excel formulas for data preprocessing.
* Imported the cleaned dataset into Power BI.
* Developed measures and calculated columns using DAX.
* Designed an interactive Power BI report featuring charts, graphs, and key performance indicators (KPIs).

**Key insights:**

1. **Topic Representation**

* Physical Activity – Behaviour is the largest data segment (53.43%), indicatinga strong focus and consistent tracking.
* Obesity / Weight Status follows at 37.85%, showing a high priority in public health surveillance.
* Fruits & Vegetables – Behavior makes up only 8.72%, suggesting potential under-measurement despite its critical role in nutrition and obesity prevention.

1. **Geographic Coverage**

* Data collection is evenly distributed across all U.S. states, D.C., and territories like Guam.
* Most states show similar stratification profiles, dominated by Age, Education, and Income categories.

1. **Stratification Insights**

* Income-based stratification is heavily used in earlier years (example: 2011 data concentrated on $15,000–$24,999 income range).
* Stratifications by Race/Ethnicity and Sex are smaller in share, possibly limiting certain types of disparity analysis.

1. **Trends Over Time**

* Physical activity and obesity metrics are consistently high year-to-year.
* Fruits & Vegetables intake data is low and inconsistent, potentially affecting dietary intervention planning.
* Confidence limits show a positive correlation—higher sample sizes yield higher but narrower confidence intervals, indicating improved data precision.

**Files Included:**   
<https://drive.google.com/drive/folders/1e_NCn118oXgRXZ12aaRPhNZfQoKWASqq?usp=drive_link>

**ScreenShots**



