

Project title: American Dietary Trends and Disease Prevalence



Project Description/Rationale

There are many factors that contribute to the incidence of obesity, diabetes, and metabolic disease. Although the occurrence of these health conditions is largely determined by a person's diet over a long period and during specific life stages, there are other social factors that may play a role in the development of disease or enhance its likelihood of occurring. For example, in addition to diet, the amount of regular exercise a person performs has a bearing on their overall wellbeing. On the other hand, access to healthy food options, exercise facilities, and household income might be indirect social determinants of risk. Thus, the objective of this project is to examine the dietary habits of people in the United States and analyze whether access to food, choice of diet, socioeconomic status, and other factors contribute to the development of the disease.

Project Scope

Produce and deploy a dashboard with interactive features to streamline access to data and readily available information:

1. **Dietary habits in the U.S.:** Explore the types of foods that Americans eat on a regular basis and the conditions (e.g., income, education) that determine those choices.
2. **Access to healthy foods:** Local/county, state and national availability of food choices (e.g., organic) and distribution of restaurants (e.g., fast food) and eating establishments.
3. **Prevalence of disease:** View rates of obesity, diabetes, and metabolic disease and determine whether their incidence is linked to food access and choices.

Datasets

1. [Food Environment Atlas](#)
2. [County Health Rankings & Roadmaps](#)

Breakdown of project tasks and team members responsibilities

1. Explore and clean, and narrow categories to isolate data of interest.
2. Prepare a draft of the dashboard and sketch the primary design.
3. Create a project repository in GitHub and invite team members.
4. Connect project Github Repository to remote Heroku dashboard.
5. Load data into a remote database using either SQLite or MongoDB.
6. Create a project plan and delegate modules to each team member.
7. Perform ETL process on the datasets.
8. Choose and create appropriate data visualization using Plotly/Leaflet.
9. Construct dashboard layout/design and determine webpage content.
10. Add project readme file with summary and develop powerpoint presentation.

GitHub Repository and Dashboard Draft

[Link to Project Repository](#) | [Project Dashboard Draft Link](#)

Group Members

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