Food Composition Analysis

Team 8: Dipak Bange(dibange@iu.edu)

Project Summary:

A database of food composition contains data on the nutrients found in various foods. It contains information on the amounts of various macronutrients, vitamins, minerals, and other ingredients present in each type of food. People can use this information to plan nutritious meals, keep track of their nutrient intake, and make wise dietary choices. Several people and organizations, including nutritionists, dietitians, academics, and governmental entities, can use our normalized Food composition database.

Project Description:

Team Details:

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Objective:

With this project, I'll be building a platform to view the various vitamins and minerals, and macronutrient percentages that may be found in food. Users will find this platform beneficial because they may filter using a variety of criteria and have access to a SQL playground to test their own queries. Users can easily monitor and compare their consumption. The database will be normalized as well so that users can access it with ease.

Usefulness:

Anybody interested in the nutritional value of various foods will find this project to be a useful resource. Users of the platform will be able to access and visualize the data with ease, making it simpler to plan nutritious meals and keep track of their nutritional intake. Also, the normalized database will be made available to the public, serving as a helpful tool for researchers, dietitians, and nutritionists.

Dataset:

I will be using a dataset from <u>Kaggle</u> and an original <u>USDA</u> source. It includes details on major food groups and subgroups, as well as information on important nutrients. The dataset has 48 columns and about 8000 rows. The emphasis will be on the nutrients so that consumers may quickly find items that have a certain nutrient.

Communication and Sharing: The project will be tracked on <u>GIT</u>. The project will be shared with the wider community through a public repository on GitHub, allowing anyone to access the code.

Milestones:

Week 8 - project description

Week 11 - database

Week 13 - web app mock

Week 14 - short video presentation

Week 15 - full demo

Conclusion:

The Food Composition Database project will provide a valuable resource for anyone interested in the nutritional content of different foods. The web-based platform will make it easy for users to access and visualize the data, and the normalized database will make it easier for end-users to access the data. With regular updates and community contributions, this project has the potential to become a go-to resource for anyone interested in nutrition and diet planning. In the future, I can expand and create a mobile app so that users can easily access the data.