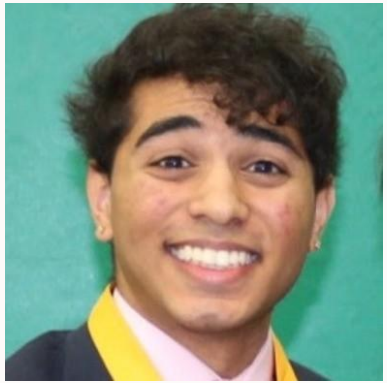
IC-Team 50 USDA FDC Challenge

Team 50



Sriket Komali

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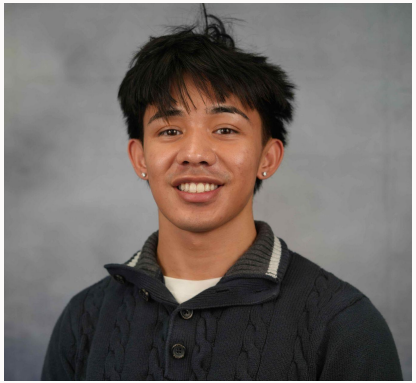


Trinity Kilip

Background Information

- USDA's Agricultural Research Service (ARS) has analyzed foods and determined nutrient/component values for foods consumed in the U.S.
- SR Legacy has been the primary food composition data type in the United States for decades. It is considered historic food composition data and will not be updated further.
- FoodData Central (FDC) was launched in 2019 to provide an expanded nutrient and food component data in one location.
    - Expensive and time consuming
    - Analysis of 1 food can exceed $50,000.

Research Question

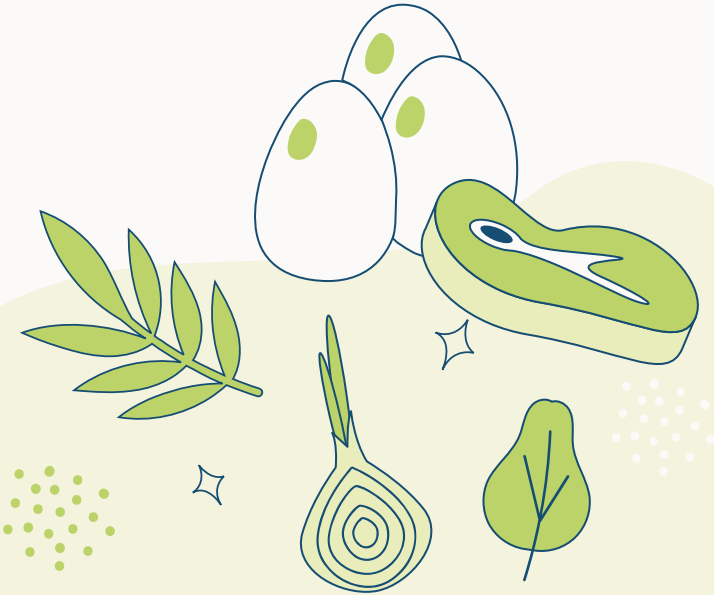
Can we use historical data and see how the data has changed and remained the same?

Can insight be derived to get a better understanding of which nutrients or components should be analyzed and which ones remain constant?

Website

https://sriketk.github.io/Info_challenge/

Remarks



Remarks

- SR and FF data have two different modes of collection
  - Our line graph shows that within 4 years of using FF data, nutrients do not change drastically
  - Hard to say if changes in nutrients are real or because of differing methods
  - Nutrient information should continue to be tracked in the same manner

Findings / Recommendations

Findings

- Across all food groups, Cereals Grains and Pasta, Legumes and Legume Products, and Vegetables and Vegetable Products had the greatest percent change in nutrients from SR to FF
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Findings

- Across Meats, Dairy, and Eggs the nutrients Potassium, Cholesterol, Sodium, and Total lipid fat had the greatest change from SR to FF
- Across Fruits and Vegetables the nutrients Potassium, Carotene, and Phosphorus had the greatest change from SR to FF

Recommendations

- Closely track the nutrient change in Cereals Grains and Pasta, Legumes and Legume Products, and Vegetables and Vegetable Products
- Different nutrients change over time depending on food group, but Potassium consistently changes throughout
    - Continue to track Potassium and research potential effects of low and high levels

Questions