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# Exploring Nutrient Intake Habits: A Survey on Food Consumed In the Past 24 Hours

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#### 1 Introduction

Nutrition have played a fundamental role in shaping our health and well-being. The foods we consume daily provide the essential nutrients our bodies need to function. Therefore, understanding nutrient intake is crucial because it helps us make informed, positive dietary choices.

The National Health and Nutrition Examination Survey (NHANES) has been pivotal in collecting health data of U.S. residents, including daily dietary intake, since the 1960s. Commencing in 2000, they have consistently published their annual data. However, due to the pandemic, they stopped the program. As of now, the most recent dataset, spanning from 2017 to 2020, was published in 2022. Thus, my research contributes to the ongoing exploration of nutrient intake trends.

## <sup>2</sup> Methodology

- Design a survey based on the dataset of NHANES and survey New Jersey residents to collect their personal information (e.g height, weight) and food intake in the past 24 hours.
- Analyze the data of survey to determine what sugestion could be made to New Jersey residents.

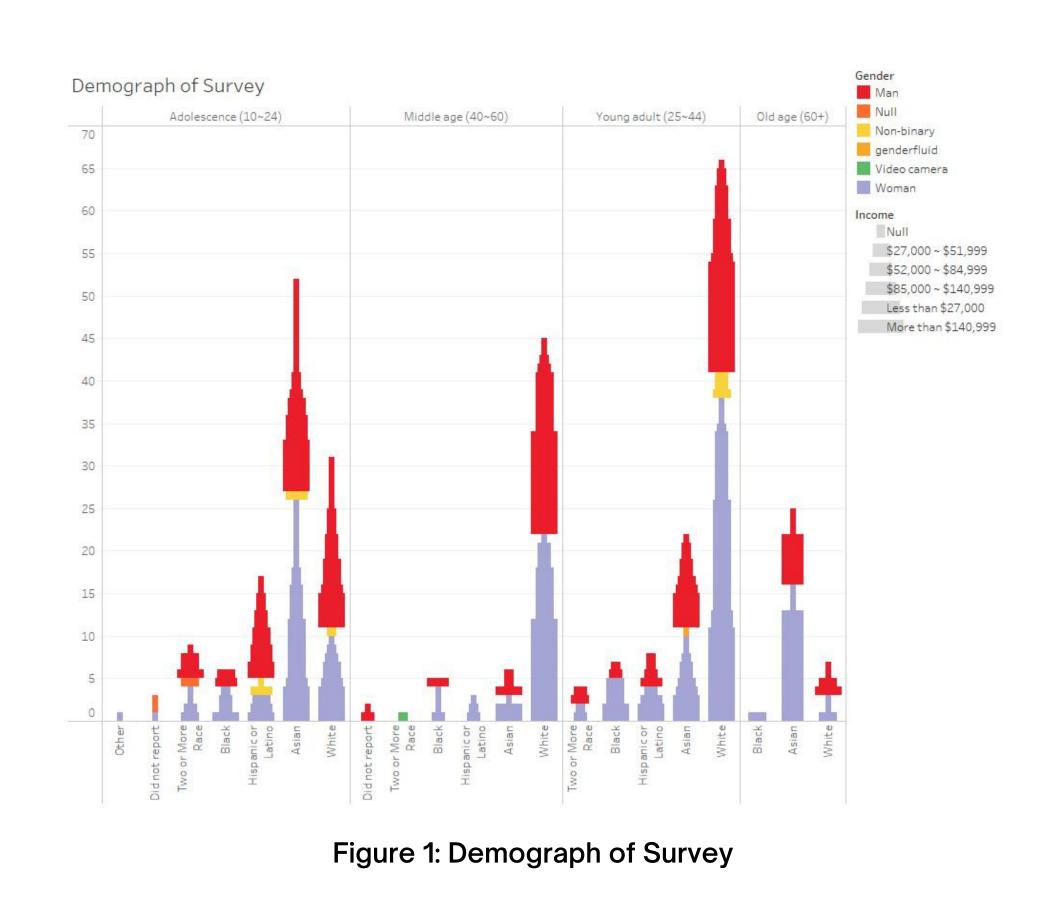


### 3 Results

#### Demography:

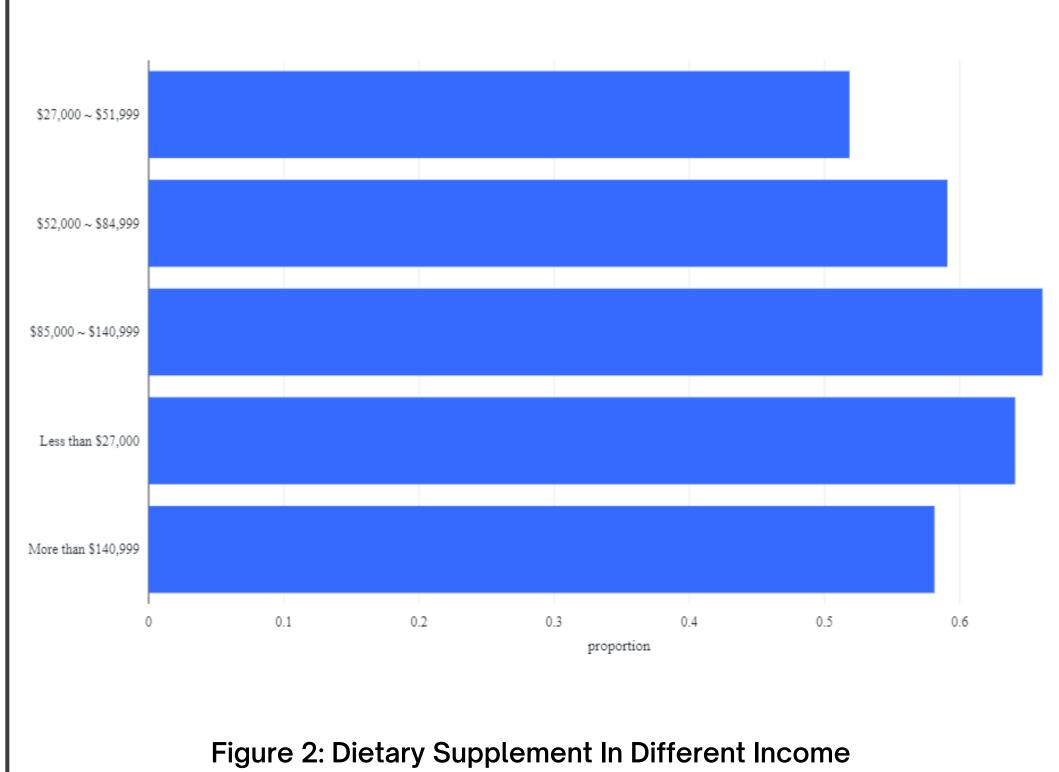
- 321 participants in total
- 149 males, 160 females, and 9 participants determine they are not either.
- 149 White, 105 Asian, 28 Hispanic, 19 Black
- Age: from 14 to 91, 119 adolesence, 131 young adult, 38 middle age, 33 old age.

(see figure 1)

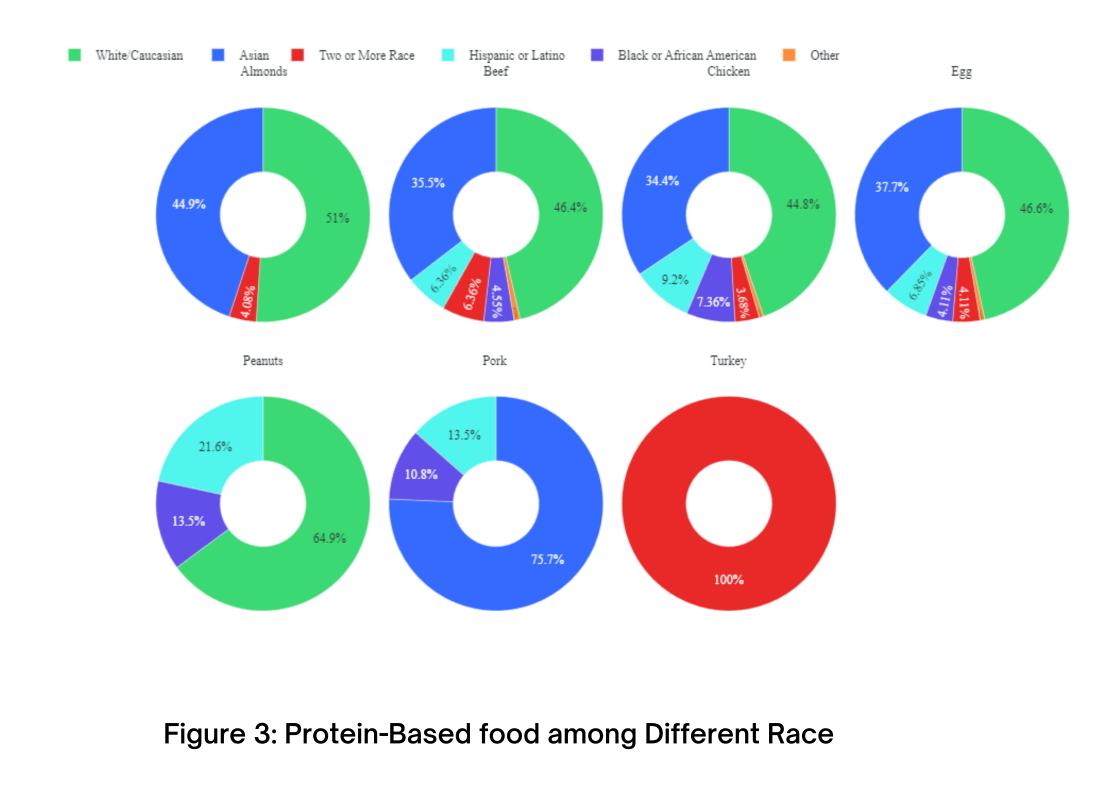


#### Intesting fact:

- Income has strong impact on nutrint intake
  - Vegans, vegetarians, and pescatarians tend to have higher income.
  - Higher income usually have dietary supplementary.
  - Food choice between different income are usually different. For instance, \$52,000 ~
    \$84,999 prefer avocado and the rest prefer blueberries as their second choice of fruit
- Old age cares their body. Even though a lot of them have low income, they still consider taking supplementary.



- Banana, tomato, onion, chicken, egg, rice, and bread are always welcomed in any group of NJ residents.
- Asian tend to have Tofu instead of nuts as their protein resources.
- For whom taken dietary supplement, no matter which group they are from, they usually prefer multivitamin instead of singular vitamin.
- Pork doesn't appear as a dish for White.
- NJ residents cares about organic food since a lot of them addressed that in the comment.



## 6 Conclusion

In this study, I emphasize the intricate interplay among dietary preferences, income levels, and economic dynamics. Higher-income individuals typically enjoy a wider range of health-conscious choices. For example, those with limited income may find adopting a pescatarian diet challenging since fish and seafood are much expensive than the meat. During the survey, many participants expressed regret for not consuming adequate fruits and vegetables, reflecting a positive realization.

Nonetheless, this research also highlights a significant concern: a lack of understanding regarding specific nutrients. Notably, vegetarian diets may not always be the optimal choice for overall health due to potential nutrient deficiencies in comparison to animal-based foods. This underscores a prevalent misconception among people regarding the nutritional benefits of vegetables.

Addressing these complexities, future research should focus on developing effective educational strategies. These strategies aim to empower individuals to make well-informed nutritional decisions within their economic limitations.