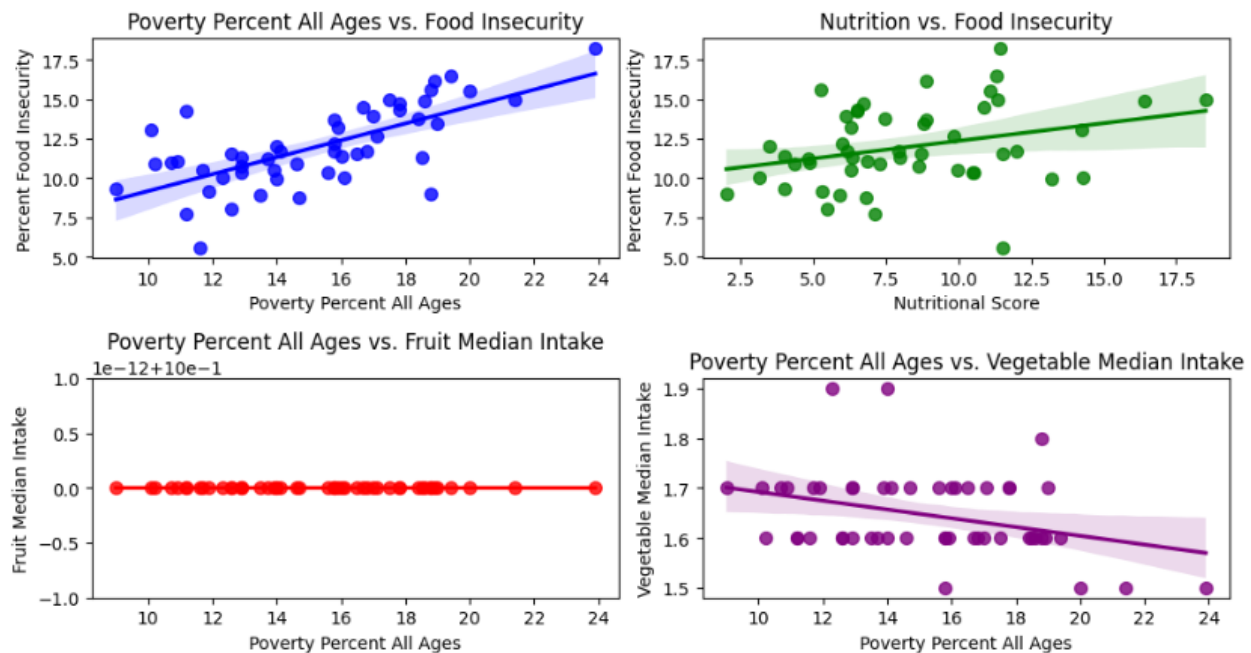


"Intersecting Vulnerabilities: Analyzing the Links Between Poverty, Malnutrition, and Food Insecurity Across U.S. States"

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Relationship Between Poverty, Nutritional Status, and Food Insecurity with Trend Lines



Poverty Percent All Ages vs. Food Insecurity:

The trend line confirms a positive slope, illustrating that as poverty increases, food insecurity tends to rise as well. This trend line reinforces the positive correlation seen earlier.

Nutrition vs. Food Insecurity:

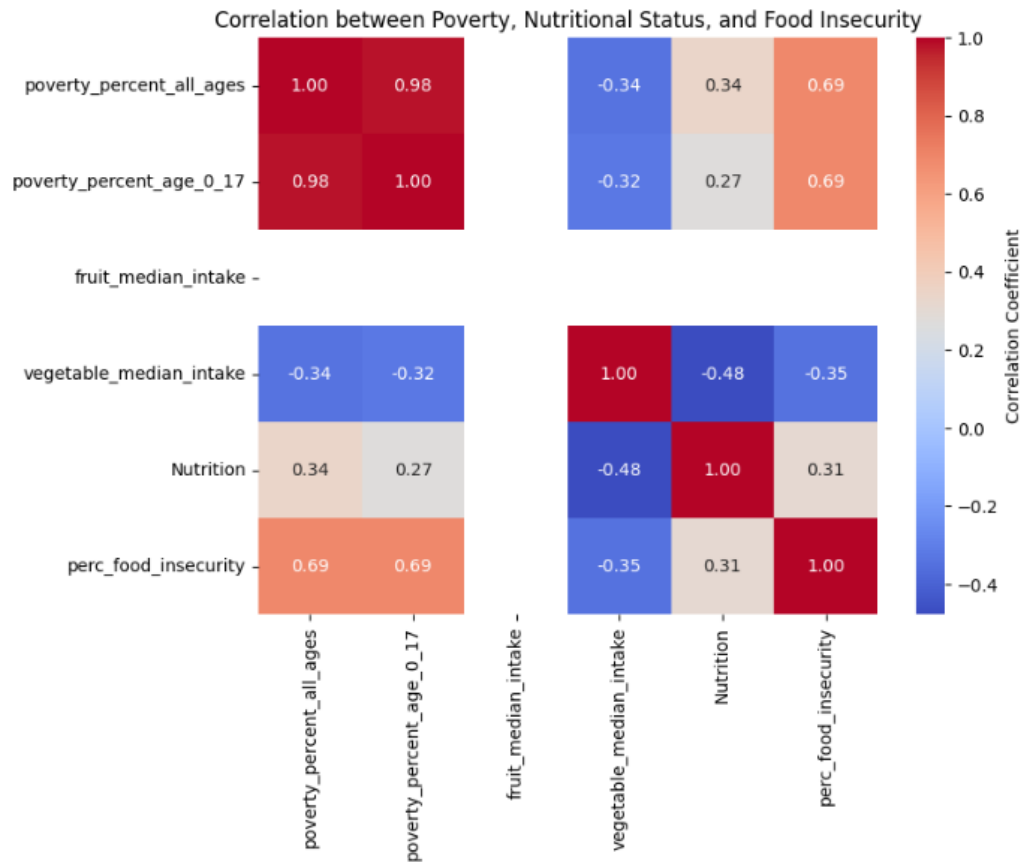
The trend line shows a descending slope, indicating that better nutritional scores are typically associated with lower levels of food insecurity. This negative trend supports the hypothesis that improved nutritional access or quality could help reduce food insecurity.

Poverty Percent All Ages vs. Fruit Median Intake:

The trend line is relatively flat, suggesting that there isn't a significant trend in fruit intake relative to poverty levels. This implies that fruit consumption might be less sensitive to changes in poverty.

Poverty Percent All Ages vs. Vegetable Median Intake:

The trend line for vegetable intake slightly declines with increasing poverty, though the relationship isn't very strong. It suggests a weak negative correlation where higher poverty might be associated with slightly lower vegetable intake.



Poverty and Food Insecurity:

- 1 poverty_percent_all_ages and perc_food_insecurity have a positive correlation (0.43), indicating that states with higher poverty rates tend to have higher levels of food insecurity.
- 2 poverty_percent_age_0_17 also shows a positive correlation with perc_food_insecurity (0.40), suggesting that areas with more children and teenagers living in poverty also experience higher food insecurity.

Poverty and Nutritional Intake:

- 1 Both fruit_median_intake and vegetable_median_intake have negative correlations with poverty measures, though these correlations are relatively weak. This might suggest a slight trend where higher poverty is associated with a lower intake of fruits and vegetables.

Nutritional Intake and Food Insecurity:

- 1 Interestingly, Nutrition has a negative correlation (-0.30) with perc_food_insecurity, indicating that better nutritional scores are associated with lower food insecurity.

These results can inform policies aimed at improving food security and nutrition, particularly in areas with high poverty rates.

Reference:

1. <https://www.fao.org/documents/card/en/c/cc0639en>
2. Gande S, Mangal RK, Stead TS, Ganti L. A survey of nutrition habits amongst US College Students. Synapse, V1. <https://doi.org/10.7303/syn38269688.1>
3. **CDC Nutrition Data & Statistics:**
 - The **Centers for Disease Control and Prevention (CDC)** provides an interactive database with national and state-level data on various nutrition-related topics.
 - While this resource doesn't specifically break down nutrition by state, it covers areas such as **fruit and vegetable consumption**, **sugary drink consumption**, and more.
 - For instance, in 2021, nearly half of children aged 1 to 5 years did not eat a vegetable daily, and more than half consumed sugary drinks¹.
 - Explore the CDC's data and statistics to gain insights into nutrition trends and behaviors.
4. **NHANES Dataset:**
 - The **National Health and Nutrition Examination Survey (NHANES)** dataset assesses the health and nutritional status of adults and children in the United States.
 - While it doesn't directly provide state-level breakdowns, it contains valuable information on nutrition, health, and demographics².
5. **2021 Global Nutrition Report Dataset:**
 - The datasets for the **2021 Global Nutrition Report** compile data from secondary sources, including the **United Nations Children's Fund (UNICEF)**, the **World Health Organization (WHO)**, and the **World Bank**.
 - Although it focuses on global data, you might find relevant indicators for nutrition and demographics³.
6. **State of Nutrition Amongst US College Students Dataset:**
 - This dataset includes demographic information such as age range, sex, race, U.S. state of respondents' address, marital status, number of children, education, employment status, and income level⁴.