The Covid-19 Pandemic Caused Reduces in Fruit and Vegetable Consumption among Various Demographic Categories

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Introduction

The Covid-19 pandemic has caused disruptions in social, economy, food security, and mental health of different individual groups. These changes can potentially impact the eating behavior of individuals with different demographic backgrounds. The aim of this study was to determine which demographic categories showed more significant changes in fruit and vegetable consumption since Covid-19 pandemic.

Methodology

The study design was cross-sectional and a total of 10,035 participants aged 40-100 years old. An online survey (Dietary Screening Tool) was employed through Qualtrics. To analyze the data, pre and post pandemic responses were compared by Wilcoxon signed-rank tests. Demographic groups were categorized into different groups. Fruits and Vegetables were questioned as follows:

- How often do you eat fruit (not including juice)?
  - Please include fresh, canned, and frozen.
  - Never or less than once a week
  - 1 or 2 times a week
  - 3 to 5 times a week
  - Every day or almost every day

- How often do you eat carrots, sweet potatoes, broccoli, or spinach?
  - Never
  - Less than once a week
  - 1 or 2 times a week
  - 3 or more times a week

Results

- Since Covid-19, fruit consumption significantly reduced among female (p < .001), male (p = .02), age groups of 40-61 (p < .001) and 61-80 years old (p < .001), and race categories of Hispanic (p = .008) and White (p < .001), and all education categories (p < .001).
- Vegetable consumption also reduced among different demographic categories since Covid-19, although it was not statistically significant except in age categories of 40-60 (p = .002), and 81-100 (p = .002) years old.
- Interestingly, vegetable consumption remained same since pandemic within college degreeed participants.

Conclusion

The decrease in reported fruit and vegetable consumption may be related to change in daily routine of people who must handle working from home, job layoffs, paying attention to their child virtual school, and eating at home. The study’s results can be used for developing guidelines for times of crisis by developing some nutrition strategies.