



# Perceived Threat and Knowledge of COVID-19 symptoms Among Older African Americans: Impact on Dietary Intake



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## Background

- Suboptimal diets are associated with chronic health conditions and excess mortality.
  - During aging, periods of poor dietary intake can have long-term detrimental health effects.
  - Many older African Americans do not meet dietary guidelines, and their diets may have worsened during the COVID-19 pandemic.
  - Grounded in the health belief model (HBM), individuals' perceptions of COVID-19 prompted people to adopt healthy or unhealthy dietary behaviors.
- The purpose of this study was to assess the impact of knowledge and the perceived threat of COVID-19 on diet quality among older African Americans.

## Methods

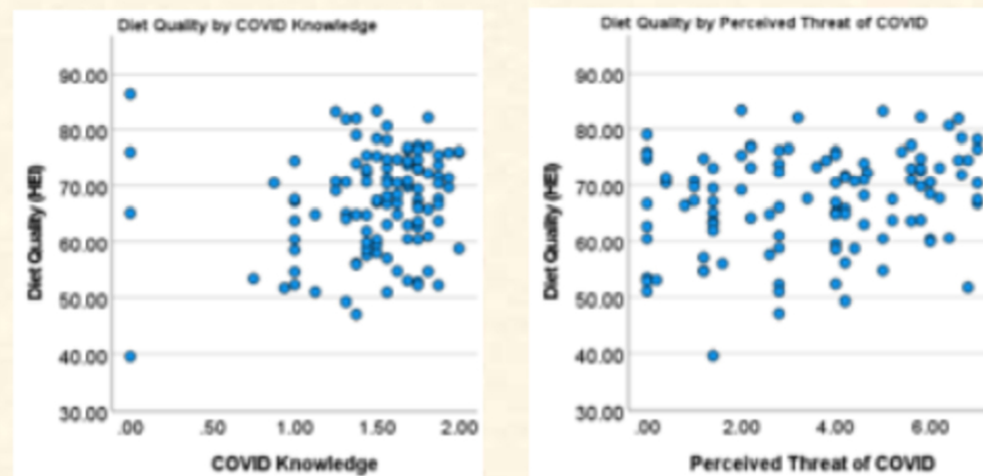
- Older African American parishioners living in an underserved area of South Los Angeles
- Aged 65 years or older or age 55-64 years with a chronic medical condition
- Survey includes Diet History Questionnaire (DHQ) III, socio-demographic and health information, COVID-19 perceptions and knowledge, food insecurity, and local food environment
- Healthy eating index 2015 (HEI-2015) was calculated based on DHQ III reporting
- Data analysis includes:
  - Descriptive statistics
  - Bivariable analysis between diet quality (HEI), COVID-19 knowledge and perceived threat, health status, and socio-demographic variables (using t-tests and Pearson correlations)
  - Multivariable linear regression to examine associations of dietary quality and knowledge and perceived threat of COVID-19

## Results

Table 1. Participant characteristics

Categorical Variables	N (%)
<b>Age</b>	
55 – 64	40 (33.9)
65 – 74	53 (44.9)
75 and older	25 (21.2)
<b>Gender</b>	
Male	36 (30.5)
Female	82 (69.5)
<b>Education</b>	
Less than high school degree	16 (13.6)
High school degree	28 (23.7)
Some college	48 (40.7)
Bachelor's degree	12 (10.2)
Master or doctorate degree	14 (11.9)
<b>Has Insurance</b>	
Yes	116 (98.3)
No	2 (1.7)
<b>Physical Health</b>	
Excellent/very good	33 (26.5)
Good	42 (36.2)
Fair/Poor	41 (35.4)
<b>Chronic conditions</b>	
Hypertension	69 (59.5)
COPD or Asthma	28 (24.1)
Diabetes	26 (22.4)
Heart disease	11 (9.5)

Figure 1. Bivariate relationships with diet quality



- Most participants were female and had at least a high school education
- 62.7% of participants reported good or better physical health
- The average number of chronic conditions was two. The most prevalent diseases were hypertension (59%), COPD or Asthma (24%), and diabetes (22%)
- The mean HEI was 67.41 (SD: 8.92), which would earn a "D" by USDA suggested scoring

## Results

Table 2. Results of multivariable linear regression

Variable/Index	Standardized Beta	SE	Sig.
Knowledge of COVID-19 (low to high)	0.26	2.30	0.010
Perceived Threat of COVID-19 (less to high)	0.31	0.41	0.004
Attitudes toward COVID-19 vaccination	-0.10	1.16	0.278
Food Environment	-0.05	0.86	0.639
Food Insecurity	-0.20	0.85	0.042

After controlling for age, gender, education, living arrangements, insurance status, # of chronic conditions, food environment, and food insecurity, increased knowledge and perceived threat of COVID-19 were positively and significantly associated with diet quality

## Discussion

- Diets of underserved African American older adults were far from optimal. Potential reasons include barriers to use online grocery delivery, food shortages, and financial constraints exacerbated by the pandemic.
  - Higher knowledge of COVID-19 and perception of the harm of COVID-19 may have prompted the adoption of healthy behaviors.
  - Food insecurity, but not the food environment, was associated with diet quality. Presence of quality foods in the neighborhood does not translate to healthy diets
- [See poster at this conference – Monday, May 22nd, 1-2pm, Stage A]

## Strengths and Limitations

Strengths: Comprehensive, rigorous survey methodology  
 Limitations: Natural bias from the convenience sampling; smaller sample size

## Conclusions

During the COVID-19 pandemic, older African Americans, especially those with chronic diseases had suboptimal diets. As a result, chronic diseases in this population may worsen. Interventions are needed to counteract the adverse effects of suboptimal diets induced by COVID-19 in this population.

## Reference

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