

# Diet behavior during COVID: A qualitative study of former participants of a food security intervention

Miranda Cook, MPH<sup>1</sup>, David Denton, MPH<sup>2</sup>, Mary Beth Weber, PhD MPH<sup>3</sup>, Amy Webb Girard, PhD<sup>3</sup>

1: Laney Graduate School, Emory University, 2: Rollins School of Public Health, Emory University, 3: Hubert Department of Global Health, Emory University

Corresponding author: Miranda Cook - macook2@emory.edu



## Introduction

Poor diet quality is a leading risk factor for the development and progression of chronic disease.<sup>1</sup> While diets high in fruits and vegetables are recommended to prevent these negative health outcomes, only 1 in 10 U.S. adults meet recommendations.<sup>2</sup> Individuals facing food insecurity are even less likely to consume the recommended amounts of fruits and vegetables.<sup>2</sup>

The Georgia Food for Health (GF4H) program seeks to address food insecurity and poor diet quality by providing cooking and nutrition education and free produce for 6-months. Participants are recruited by health care providers and receive vouchers redeemable for produce worth \$1 per family member per day. For the 2019 program year, we observed a 39% reduction in food insecurity, increases in fruit & vegetable consumption and cooking at home as well as reductions in consumption of fried food. However, less than three months after graduating from the program, COVID-19 infections had reached a concerning level in the U.S. and guidance encouraged everyone to stay at home and restrict travel, including shopping trips, in order to reduce exposure risks. This sudden disruption to normal life, potential loss of income, and reductions in grocery store trips may have important implications for diet quality, especially for individuals who were already grappling with food insecurity prior to the pandemic.<sup>3</sup> Therefore, it is important to understand potential dietary changes that occurred during COVID-related stay-at-home periods in order to identify opportunities for further intervention efforts.

**Objective:** Characterize diet behavior changes experienced by former participants of a food security intervention during COVID-related stay-at-home periods.

## Methods

We conducted semi-structured interviews by phone in May - June 2020 with 17 participants who had completed the program within the past 6 months. Participants were mainly middle-aged (mean age 59 years), African American (100%), and women (59%). Participants were asked questions about the program, diet and stress-related behaviors, and changes in these behaviors within the COVID stay-at-home period. Participants were mailed gift cards worth \$20.

Transcripts of interviews were analyzed for both a priori and emergent themes using thematic analysis. MAXQDA 2020 was used for data management and analysis.

## Results

We identified three core themes. First, participants discussed changes in shopping behaviors to minimize time spent in stores using approaches like shopping lists to plan routes within the store or sending younger relatives to shop for them. Due to supply issues at stores, participants discussed adapting recipes to include available options. Second, participants discussed disinterest in cooking, a lack of motivation to engage in healthy eating strategies they had previously adopted, and anticipation of regretting these behaviors. Third, participants were largely uncomfortable at the prospect of resuming in-person programming and preferred virtual options due to safety concerns.

### Changes in Shopping Behaviors

- Minimizing time spent in stores
- Supply issues at stores

I limit my trips to the store, but when I go out I would have a mask. I have on my gloves, and I just go in and get what I need and come back out.

There was no meat hardly at Costco. ... So I just didn't buy meat. ... It comes down to having a vegetable plate and maybe some cornbread

when I go to the grocery store, I make sure I get the fruits and vegetables that will last me

### Difficulties with Healthy Eating

- Disinterest in cooking
- Anticipation of regretting behaviors

You know, during the shelter at home, I really didn't shelter at home, because I had to get out there and, you know, (laughs) make that money. ... and then by the time you get off it's like I'm so hungry ... There's a hot wing place there. Let's just get some hot wings and call it a day.

I find that when I get really stressed I don't want to cook because for me cooking – it's not that enjoy cooking, I cook because I like to eat. And in order to be able to enjoy what I eat you have to be able to put some passion in it. So when I'm stressed like this, it takes away my passion

I have to catch myself and say okay, this is not going to work. Once this is over that I'm going to regret the decisions that I've made

### Preference for Virtual Engagement

- Discomfort with in-person programming
- Prefer virtual options to re-engage

Even at six feet apart and social distancing, I wouldn't feel comfortable with having the meeting in person.

Some people may not be as computer literate or computer savvy. So they may not be able to do it. But then majority of people, if they have grandchildren, their grandchildren can help them do it because my great grandchildren help me with the computer a lot.

I'm on the computer anyway, so it's like, yeah, I'd participate

## Conclusions

Among former participants of the GF4H program, shopping and cooking behaviors shifted during the COVID-19 stay-at-home period to adapt to safety guidelines and to overcome supply issues. Motivation to engage in healthy cooking and eating behaviors was diminished due to stress and competing responsibilities. Ongoing program efforts should focus on virtual options to engage and re-engage participants.

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## References

1. Dietary Guidelines Advisory Committee.(2020). Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC.
2. Centers for Disease Control and Prevention.(2018). State indicator report on fruits and vegetables. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.
3. Jayawardena, R., & Misra, A. (2020). Balanced diet is a major casualty in COVID-19. Diabetes & Metabolic Syndrome.