

## ABSTRACT – P61

**Background:** COVID-19 rapidly spread throughout the United States (US) early in 2020. In March, the US federal government mandated that all residents and citizens remain in quarantine to reduce the spread and ease the burden on the healthcare system, which unwillingly impacted the rise in unemployment. Even though these preventative measures were necessary, it may have unwillingly shifted dietary habits based on food security status.

**Objective:** To identify adults' demographics, dietary habits, and its relationship with food security status amid COVID-19.

**Study Design, Setting, Participants:** An online cross-sectional study was conducted between April – June 2020 throughout the United States. Participants (n=3133) completed a demographic questionnaire, the modified Dana-Farber's Cancer Institute Eating Habits Questionnaire and USDA Food Security Module once during the study period.

**Measurable Outcome/Analysis:** Frequency counts and percentages were tabulated for demographics, dietary habits, and food security scores. One-way ANOVAs were conducted to evaluate relationships between dietary habits and food security status and correlations among demographics using STATA v14 at a statistical significance level of  $p < 0.05$ .

**Results:** Participants were white (84.5%), female (79.4%), and between the ages of 30 to 49 years old (30.2%). Participants increased their consumption of sweets (43.8%) and salty snacks (37.4%) and decreased their consumption of fruit (33.4%), poultry products (31%) and non-starchy vegetables (28.2%). Average scores for food security were  $0.69 \pm 1.77$ . Per each month, there was a relationship between dietary habits and food security status; April ( $p < 0.02$ ), May ( $p < 0.000$ ) and June ( $p < 0.03$ ). A significant negative correlation was found for female sex ( $p = 0.009$ ), race ( $p < 0.001$ ), and age range ( $p < 0.001$ ) with total dietary habits score.

**Conclusion:** COVID-19 continues to affect individuals, which possibly influences the relationship between dietary habits and food security status. Future population studies are recommended in the US to help public health authorities frame actions to alleviate the impact of COVID-19 has on dietary habits and food security to minimize the risk factors today and in future inevitable pandemics.

## METHODS

A cross-sectional study was conducted with Participants (n=3133) (Figure 1). They completed a 71-item online survey through Qualtrics™ (Figure 2). The survey consisted of questions pertaining to demographics (n=7), health information (n=5), lifestyle habits (n=8), dietary habits (n=37), food attitudes (n=8), and food security (n=6). This questionnaire was developed and adapted using modified validated instruments. All sections of the study were approved exempt by the Institutional Review Board at the University of Florida #202001147.

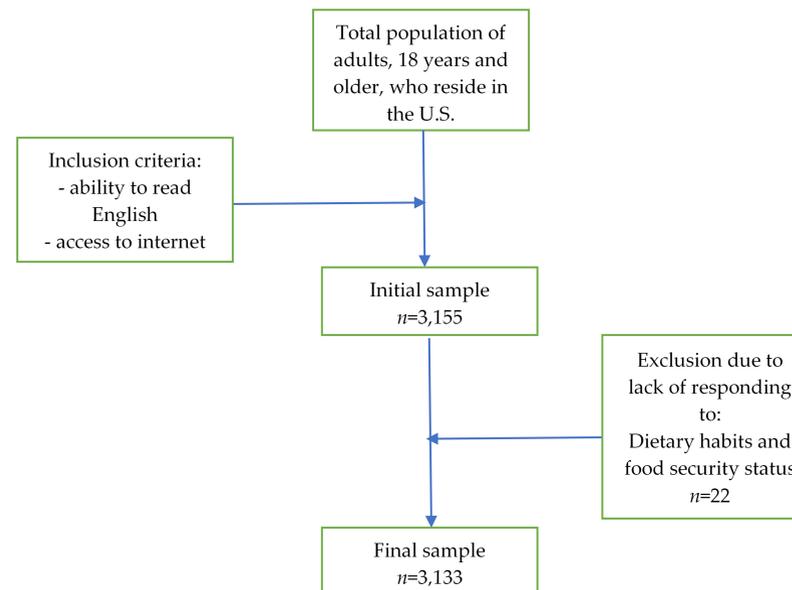


Figure 1. Sample collection chart

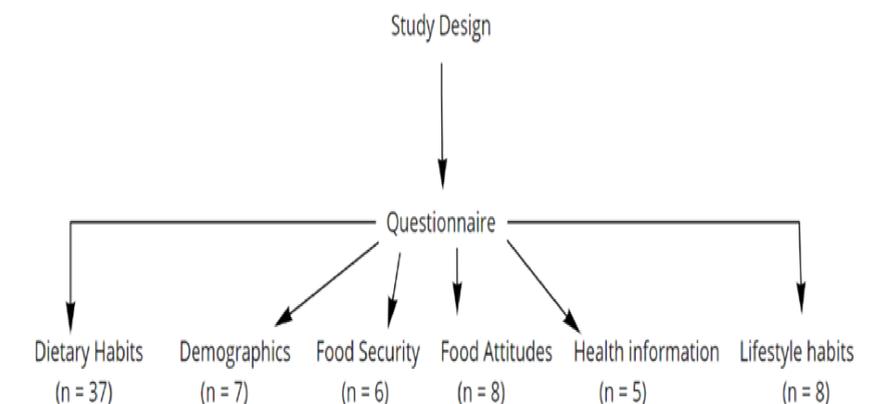
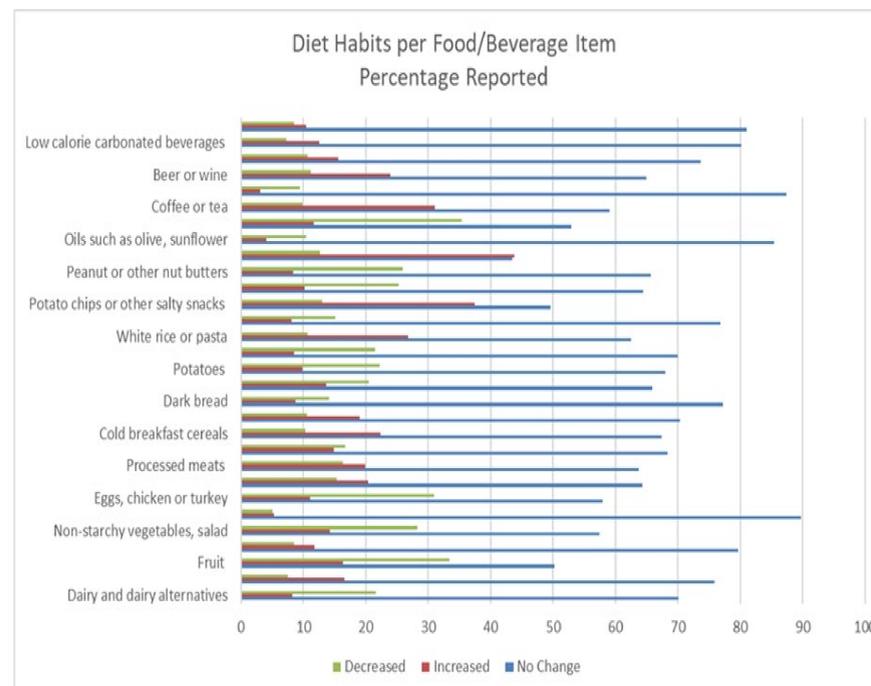


Figure 2. 71-item survey

## RESULTS



Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	10052.34	1.00	10052.34	219.43	0.02	3.89
Within Groups	9574.69	209.00	45.81			
Total	19627.03	210.00				

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	243543.59	1.00	243543.59	4899.52	0.00	3.84
Within Groups	255994.57	5150.00	49.71			
Total	499538.15	5151.00				

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	38099.91	1.00	38099.91	772.65	0.03	3.85
Within Groups	42308.50	858.00	49.31			
Total	80408.41	859.00				