

# Food Insecurity Among Health Professional Students in the University of South Carolina (UofSC) School System

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## Introduction

Food insecurity is generally defined as a lack of consistent access to nutritionally adequate foods critical for maintaining a healthy, active lifestyle. The impacts of food insecurity have been shown to include higher rates of mental health issues and lower levels of academic performance. However, there is minimal data on how food insecurity may extend past the university level and into professional studies such as medical schools.

One of the first studies of its kind, evaluating food insecurity among medical professional students at the Oregon Health and Sciences University (OHSU), found that 1 in 4 students at OHSU suffer from food insecurity.

At present, the University of South Carolina has not evaluated the prevalence of food insecurity across its medical, pharmacy, and public health programs.

The overarching goal for this study is to evaluate the prevalence of food insecurity amongst medical, public health, and pharmacy students at the University of South Carolina in order to inform future interventions aimed at supporting and improving health professional student wellness.

**Specific Aim 1:** To determine the prevalence of food insecurity as defined by the USDA among UofSC health professional students across the schools of public health, medicine, and pharmacy.

**Specific Aim 2:** To assess the impact of food insecurity on UofSC health professional students' performance and academic experience.

**Exploratory Aim 1.** To evaluate the need for programs at the UofSC school(s) of public health, medicine, and pharmacy to address food insecurity and support food-insecure students throughout their medical education.

## Methods

The proposed study will adapt the 39-item survey created by OHSU, including questions on demographics, food shopping behaviors, and other factors which may affect eating patterns in school of medicine, public health, and school of pharmacy students at the University of South Carolina. Surveys will be anonymous, data collected in aggregate, and de-identified. The survey will include information on basic demographics, food shopping behaviors, perceptions of academic performance, and other factors which may affect eating patterns.

Year 3 - Year 4 health professional students who experienced health professional school both before and during the COVID-19 pandemic will receive supplemental questions evaluating perceived differences in food insecurity pre- and mid-pandemic.

### Recruitment of participants:

Year 2 -Year 4 students at the Arnold School of Public Health, University of South Carolina School of Medicine Greenville (USCSOMG) and University of South Carolina School of Pharmacy (USCSOP) will receive an email inviting them to the study from their respective campus' dean of the school.

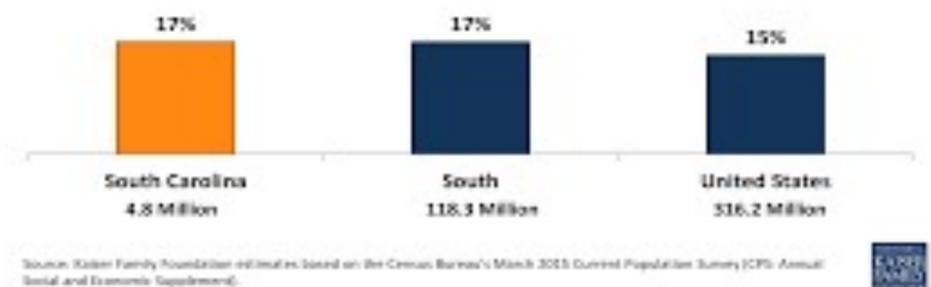
**Inclusion Criteria:** subject is a second, third- or fourth-year public health, medical or pharmacy student at UofSC.

**Exclusion Criteria:** first year public health, medical/pharmacy students will not be included based on the timing of the study. First year students will not have had sufficient experiences in medical school to comment holistically on food insecurity throughout the year.

## Expected Results

At present, no data on health professional food insecurities exists for this geographical area, which has been shown by the US Census Bureau to have a lower socioeconomic status than Oregon, where the original study was performed. Data from 2015-2019 show South Carolina with a 13.8% poverty rate, as compared to 11.4% in Oregon. The median household income in SC was found to be \$53,199, as compared to \$62,818 in Oregon.

Figure 2  
Percent of Population Below Poverty, 2014



## Discussion

The knowledge obtained in this study will pave the way for future interventions aimed at University of South Carolina health professional students in order to support food insecure students and mitigate the effects of food insecurity on student health and wellness and academic performance.