

# FOOD INSECURITY AND THE EFFECTS ON HEALTH OUTCOMES IN ADULTS AND PEDIATRICS WITH CYSTIC FIBROSIS IN SOUTH CAROLINA

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**Objective:** The purpose of this study was to assess the prevalence of food insecurity (FI) in adults and peditrics with cystic fibrosis (CF). Many patients with CF have increased energy needs due to losses through malabsorption and increased energy expenditure. Thus, they require access to plentiful, nutritious, high calorie foods as key therapy to their disease.

**Design:** Observational Study

**Methods and Instruments:** Patients seen in the CF clinic at the Medical University of South Carolina by a registered dietitian and a social worker between August 2020 and January 2021 were surveyed. Patients or patients' legal guardians answered two validated FI screening questions Hager, 2010) as part of their pre-clinic check-in. Based on answers, FI was determined. Other data collected for stratification included patient's forced expiratory volume (FEV<sub>1</sub>) and body mass index (BMI) for additional indicators for health outcomes.

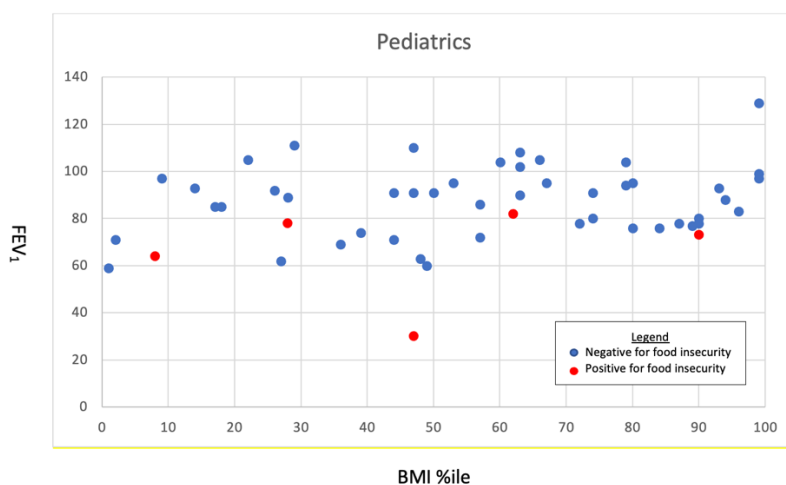
**Results:** Of the 81 pediatric patients screened, 60 responded and 8 screened positive for FI. Of the 180 adult patients screened, 81 responded and 5 screened positive for FI. Table 1 and table 2 indicate the relationship between FEV<sub>1</sub> and BMI of pediatric and adult patients respectively.

**Conclusion:** Our small sample size drew no correlation between FEV<sub>1</sub> and BMI according to food insecurity. This study lacks power, thus further research is needed with a large population to determine the relations of FI in this at-risk population.

**Conflicts of Interest:** none

**Funding Disclosure Statement:** none

Table 1



Unable to determine FEV<sub>1</sub> values in patients under 7 years of age. 3 patients that are younger than 3 years of age screened positive for food insecurity. Therefore, they are not included in this graph.

Table 2

