

# Eating Disorders in Marginalized Populations: What is the Impact of Food Insecurity?

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# *Food Insecurity and Hunger*

*Since the time of the Green Revolution, the world has known how to end famine and tame hunger. We have the information and tools. But we haven't done it. We explored the heavens. We wired the world for the internet. We embarked on quests to conquer AIDS and assail global warming... Yet somehow we haven't eliminated the most primitive scourge of all.*

*Thurow & Kilman, 2009*



Research can start from the most  
surprising places....

## ***Food Matters***

# Food Insecurity Defined

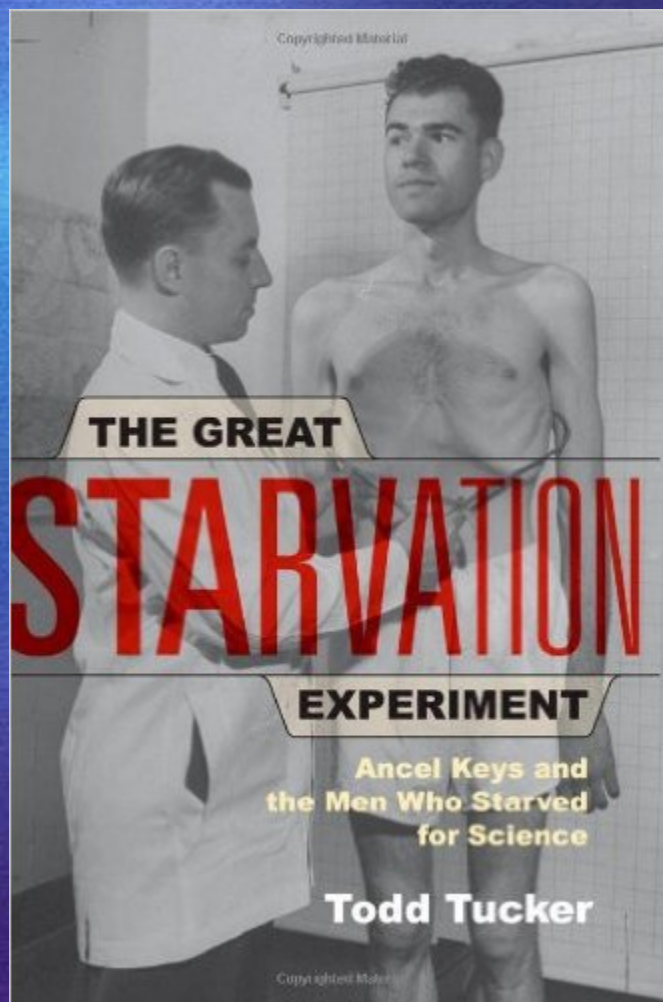
- When all people at all times in the home do not have physical and economic access to sufficient, safe and nutritious food for an active and healthy lifestyle.
- Limited food availability (access/food desert)
- Unable to secure nutritionally adequate and safe food (acquire/resources)
- Unable to obtain suitable food in socially accepted ways (uncertainty)
- A lack of nutritional food in diet (utilization)



**Urban Food Insecurity often**

**=**

**Decreased Food Consumption +  
Excessive Exposure to HPF**









# Hypotheses

- Hypothesis 1 – Increased levels of urban food insecurity should be associated with elevated ED pathology
- Hypothesis 2 – Increased levels of urban food insecurity should be associated with elevated dietary restraint, weight stigma and anxiety



# Also

- Hypothesis 3 – No one will have previously looked at this
- Sought to investigate the nature of dietary restraint in a food insecure population

# Hypothesis 3

*Supported  
By Literature Review*



# Food Matters Phase 1 - Method

- Collaborated with the San Antonio Food Bank for access to partner food pantries
  - Recruited participants to complete survey while they waited for food
  - Worked with pantry staff so as to not disrupt food distribution
  - Participants received \$5 gift card to HEB
- All questionnaires and recruitment materials
  - Available in English and Spanish
  - Spanish translated, back translated and dialect checked by local SA Spanish speaker



# San Antonio and the SAFB

## ● San Antonio

- Technically a top 10 largest city by population
  - Majority Latino
  - One of the most economically segregated cities in US
    - 78207 – 60% of adults not working; 42% poverty rate
    - 78258 – 66% of adults ARE working; 4% poverty rate

## ● SAFB

- 77,000,000 meals distributed annually via 500+ partner agencies in 16 counties
- 210,000 square foot facility
- Farm 75 acres to grow produce
- Culinary training program and Catalyst Catering



# Measures

- Radimer Cornell Food Insecurity Measure (RCFIM: Kendell et al., 1995; Radimer et al., 1992)
  - Sample items
    - *I worry where my next day's food is going to come from*
    - *The food that I bought didn't last and I didn't have money to buy more*
    - *I am often hungry, but I don't eat because I can't afford enough food*
    - *My child(ren) are not eating enough because I can't afford enough food*
  - *Not True/Sometimes True/Always True over past year*
- Eating Disorder Diagnostic Scale – DSM 5 (EDDS-5, [www.ori.org/sticemeasures](http://www.ori.org/sticemeasures); EDDS-4 validation Stice et al., 2004)
  - Removed weight & height questions



# Measures

- Weight Self Stigma Questionnaire (WSSQ: Lillis et al., 2010)
  - Cut 2 items cut b/c too complex
- Penn State Worry Questionnaire (PSWQ: Myer et al., 1990)
  - Eight items; items cut b/c of complexity or reversescored
- EDE-Q Dietary Restraint Scale (Fairburn & Begline 1994)
  - Three items:
    - Restraint over eating (deliberately limit amount of food)
    - Food avoidance (tried to exclude liked foods)
    - Avoidance of eating (8 or more waking hours without eating)
  - Removed qualification for WS concerns
  - Open ended why?



# Participants

# Participants

- Total Survey Sample: 503 Adult Participants
- Gender: 76.5% Women / 22.6% Men
- Race/Ethnicity: 84.7% Racial or Ethnic Minority
  - 65% Latino
  - 16.5% African American
  - 11.3% White
  - 3.8% Other
  - 2.6% Native American, Aboriginal, or Pacific Islander
  - 0.6% Asian
- Primary Language
  - 62.2% English / 23.7% Spanish



# Participants

- Age: Most reported between 25-65 (72.8%)
  - Under 25 (2.2%)
  - 25-50 (39.4%)
  - 51-65 (33.4%)
  - 66-75 (18.7%)
  - 76 or older (6%)
- Education: 70.1% High School or Less
  - 25.4% Grade School or less
  - 16.3% Some High School
  - 28.4 Completed High School or GED
  - 23.5% Some college or university
  - 5.4% completed university



# Participants

- Marital Status: 60.8% unpartnered
  - 38.2% Married or Living with Partner
  - 31.8% Single
  - 29% Separated, Divorced, Widowed
- Family Size: 53.7% 5+ family members
  - 46.3% 4 or fewer members
  - 28.8% 5 to 7 members
  - 24.9% 8 or more members
- Children: Most families 1 or 2 children (32.4%)
  - 23.3% 3 or 4 children
  - 8% 5 or more children



# Participants

- Income: Annual Household Income
  - 59% under \$10,000
  - 34% between \$10-\$40,000
  - 2.6% between \$40-\$65,000
- Benefits:
  - Social Security: 35.4%
  - Social Security Insurance: 24.1%
  - Medicare: 23.5%
  - Medicaid: 29.4%
  - TANF: 2.8%
  - SNAP: 32.8%

# Composite Sketch of Sample

Predominantly poor minority women who may or may not be partnered, have small annual incomes and little government support, are between the ages of 25 and 65, have gained little formal education, and are responsible for minor children.



# Operationalization of Food Insecurity

- Participants grouped based on the 4 designated food groups (RCFIM):
  - Not Food Insecure (8.2%)
  - Household Food Insecurity (8.9%)
  - Individual Food Insecurity (37.8%)
  - Child Hunger (45.1%)

# Results

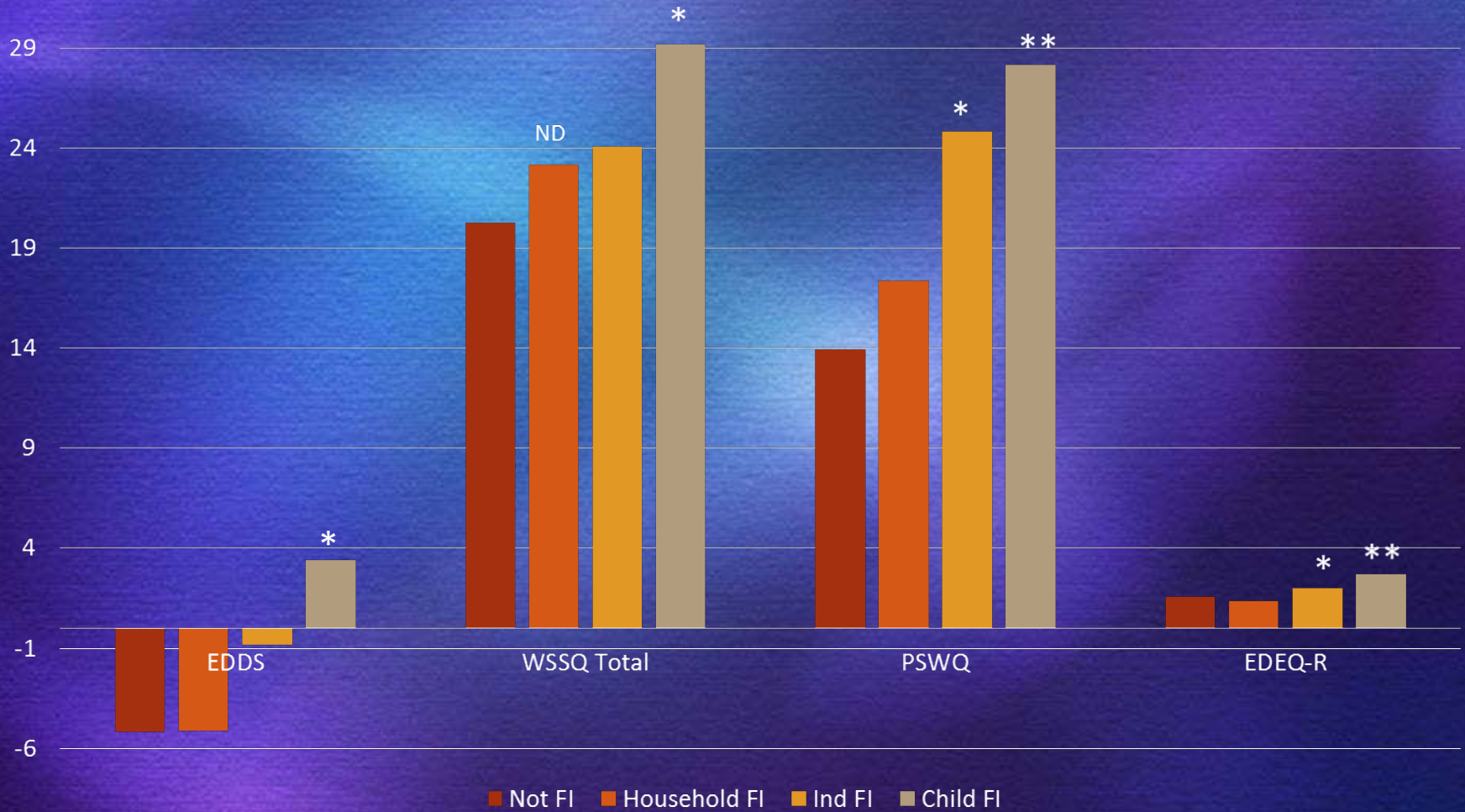
## Hypotheses 1 & 2

*Increased levels of urban food insecurity should be associated with elevated ED pathology*

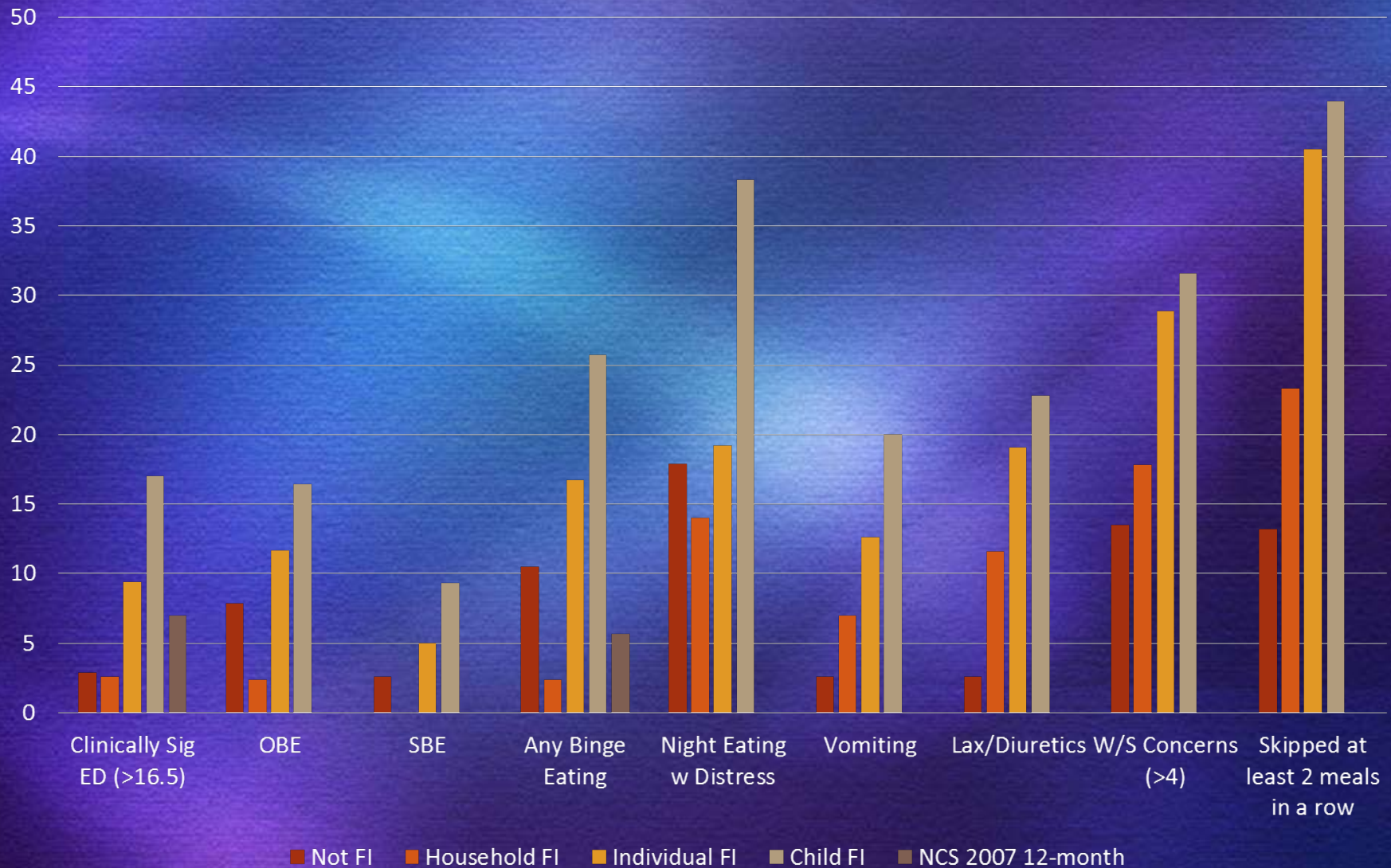
*Increased levels of urban food insecurity should be associated with elevated dietary restraint, weight stigma and anxiety*



## ED Pathology, Weight Stigma, Anxiety & Dietary Restraint



## Percentage of Participants Engaging in ED Pathology



Hay et al., (2015) 3-month prevalence of all threshold DSM 5 EDs in rep. cohort sample of Australian adults and older adolescents = 8.69%



# Dietary Restraint Methods

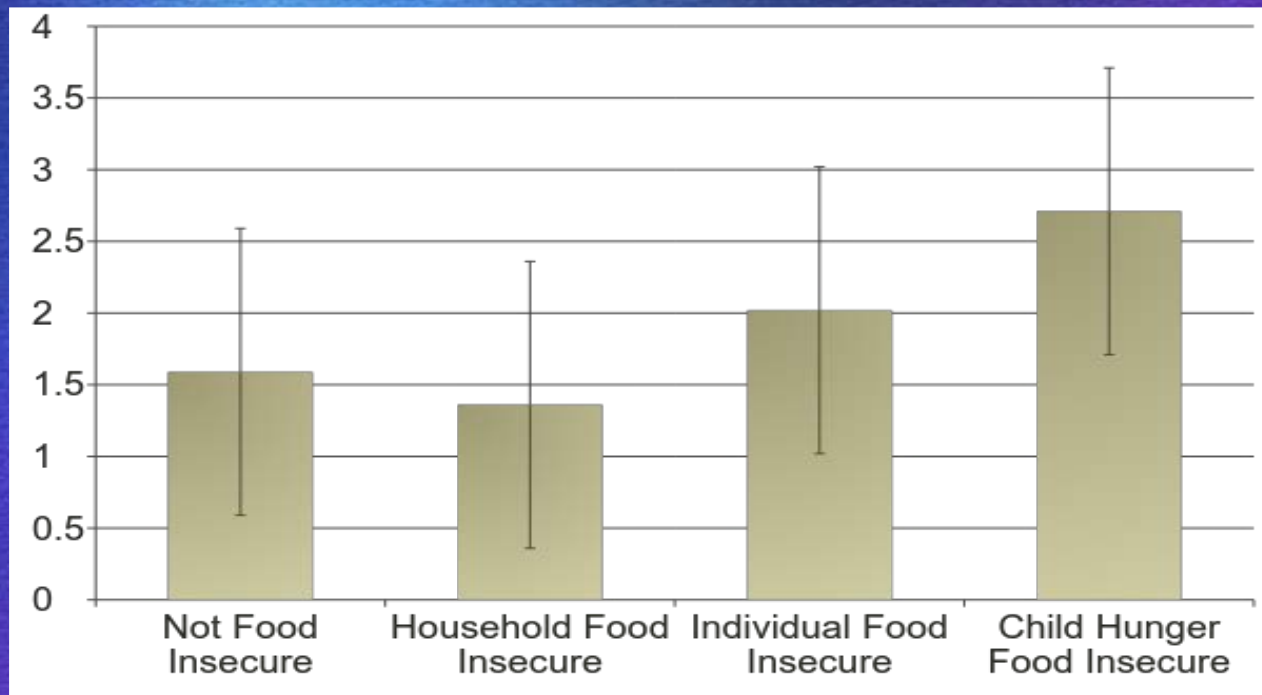
- Of 503 Participants, 269 responded to at least one of three open-ended questions about “why” they engaged in dietary restraint:
  1. Deliberately trying to limit the amount of food you eat for any reason?
  2. Have gone for long periods of time (8 waking hours or more) without eating anything at all?
  3. Have tried to exclude from your diet any foods that you like?
- Qualitative Content Analysis of Participants' Responses

# Dietary Restraint Themes

- Participants were grouped based on the same 4 designated food insecurity groups (RCFIM)
- 3 dominant themes across all 4 food groups:
  - Family
  - Lack of resources
  - Scarcity of food
- Variability between each food group



# Dietary Restraint



# Dietary Restraint Findings

- Family

- “to make sure my children eat”
- “I prefer my kids eat than me”
- “not enough food in the house to feed me and children”
- “too many people in the house”
- “not enough food for everyone”



# Dietary Restraint Findings

## ● Lack of Resources

- “No money [to buy food] by the time I pay bills”
- “[I] have to pay rent, electric bill, doctors copays, medicine, prescription gone up [instead of buying food]”
- “not working as much”
- “because my check runs out”
- “run out of food stamps with 7 kids it hard”

# Dietary Restraint Findings

- Scarcity of Food

- “have to stretch the food”
- “[ration] so the food will last”
- “food is scarce”
- “not enough food” or “low on food”
- “no food”
- “some days things get a little rough”
- “food gets short at the end of the month”



# Future Directions

- Currently: Phase 2 Data Collection
  - Mixed methods - deductive and inductive methods
  - Study designed over spring and early summer, 2017
    - 5 research students
    - Extensive interview training
    - Continued partnership with SAFB and HEB
  - Goal – 1000 Surveys and 150 interviews
    - Collected to date – 574 surveys and 100 interviews



# Discussion

- Results strongly suggest - unstudied marginalized population is at increased risk for EDs
  - Particularly those with the most severe FI
- Results falsify the common narrative about who gets an ED
  - We need to attend to neglected marginalized populations
  - Expanding our discussion of EDs to marginalized populations also helps those who are middle class – lift all boats
- The focus on dietary restraint for weight and shape
  - Is biased towards those with economic resources
  - Limits our understanding of dietary restraint as a risk factor for EDs
  - Misses other issues we can learn
- Present study highlights reasons why lower SES, racial and ethnic minorities may engage in dietary restraint



# Discussion

- We must resist the temptation to just start intervening
  - We do not yet know enough about the lived experiences of these people
    - Lessons from food justice are relevant here
  - This study is a call to action to researchers
- Need to both learn more and help in the interim
  - We need to ally with the Hunger Community (e.g., SAFB) to fight for food justice
  - We must become broadly literate on food justice including the ways in which industrialized food targets this population in predatory ways
- Assuming that weight and height data should always be collected highlight issues of weight stigma in the ED field
  - This information is not always needed to answer some questions
  - There are times when it is not appropriate to collect weight and height data
  - Pushback from reviewers
  - An “outsiders’” perspective is useful here

# *A Huge Thank You*

*Our Participants: Who often said that no one has ever cared about their food experiences before. Many thanked us for asking about their experiences.*





# Interdisciplinary Food Matters Research Team #EDShiftCampaign





# *Questions*