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#### Winning the Hunger Game: Fighting Hunger with More than Food

Trang Pham

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### PATHWAYS TO FOOD SECURITY

FIGHTING HUNGER WITH MORE THAN FOOD

Trang Pham
Capstone Project, Coordinated Program in Dietetics
August 6, 2019

BACKGROUND
LITERATURE REVIEW
STUDENT NEED AT GEORGIA STATE

PATHWAYS TO FOOD SECURITY PROPOSAL
DANIEL P. AMOS FAMILY FOUNDATION
OTHER CAMPUS PANTRIES
DISCUSSION & QUESTIONS

**OVERVIEW** 





## Background HUNGER ACROSS THE UNITED STATES

- 3.5 billion pounds of food & grocery products distributed annually
- Through 61,000 agencies
  - Food pantries
  - Shelters
  - Community kitchens
  - Youth and senior programs
  - Rehabilitation centers

Source: Feeding America, Hunger in America (2011)



### Background DONORS & PARTNERS

National food & grocery manufacturers
Retailers
Distributors
Convenient stores
Wholesalers
Shippers
Packers and growers
Government agencies (USDA)
Food service operators
Food industry associations
Food drives

Source: Feeding America, Hunger in America (2011)

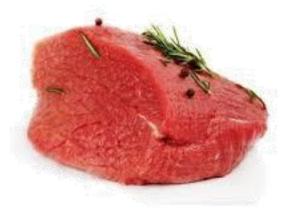


#### Background: TYPICAL PANTRY OFFERINGS

- Highly processed
- Unhealthy levels of calories, fat, sugar, and sodium <sup>1,2,3</sup>
- Trace amounts of fiber, vitamins, other essential micronutrients and minerals <sup>1,2,3</sup>

### Background: TYPICAL PANTRY OFFERINGS

- Limited fresh fruits and vegetables
- Lacking in dairy products
- Short on lean proteins
- "Three Items Most Requested at Food Banks"



Source: Feeding America, Hunger Blog (2018)





### Background WHAT DOES IT MEAN TO BE FOOD INSECURE?

High Food Security • No reported indications of food-access problems or limitations

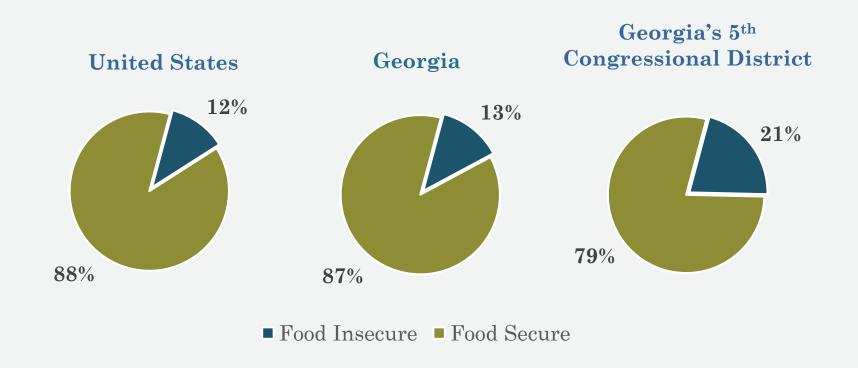
Marginal Food Security • One or two reported indications--typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake

Low Food Security • Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake

Very Low Food Security • Reports of multiple indications of disrupted eating patterns and reduced food intake

Source: USDA Ranges of Food Security Food Insecurity (2018)

#### Background 2017 FOOD INSECURITY STATISTICS



Sources: USDA (2017), Centers for American Progress (2018), Feeding America. Map the Meal Gap (2017)

### Background GEORGIA STATE STUDENT FOOD INSECURITY

Business plan
Food Pantry
Initiative
(2014)

The Panther's Pantry (2015)

Student survey conducted at Georgia State by the Nutrition Department (2013)

■ **68**% of the 634 students surveyed admitted to experiencing food insecurity sometime during the year



Source: Beardsley et al. Food Pantry Initiative Business Plan (2014)

- Contributing factors to food insecurity among college students
- Unhealthy coping strategies to extend or bridge the food gap
- Habitual consumption of pantry staples and diet-related diseases
- Breaking the Pantry Dependency

#### LITERATURE REVIEW

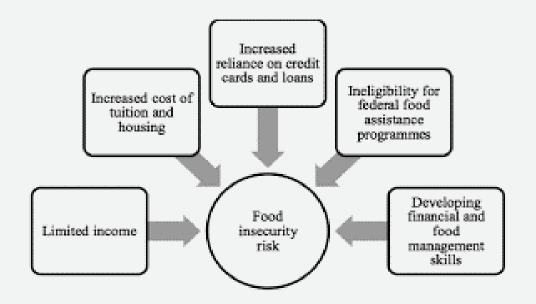
## Literature Review FACTORS CONTRIBUTING TO STUDENT FOOD INSECURITY

- Typical undergraduate: 18-25 years old
- Transitioning from late adolescence into early adulthood
- Period of great instability and vulnerability
  - Changes in physical activity level and eating behaviors
  - Heightened academic demands
  - Mounting financial responsibilities
  - Acclimating to life away from home and parental supervision





## Literature Review FACTORS CONTRIBUTING TO STUDENT FOOD INSECURITY



Source: Gaines, et al. (2014, p. 377)

## Literature Review FACTORS CONTRIBUTING TO STUDENT FOOD INSECURITY

- Student food insecurity especially troubling for school administration
- Studies link student food insecurity with higher rates of
  - Poor academic performance<sup>4,5</sup>
  - Anxiety and depression<sup>6,7</sup>
  - Suicidal thoughts<sup>7</sup>
  - Substance use<sup>7</sup>



## Literature Review UNHEALTHY COPING STRATEGIES TO BRIDGE THE FOOD GAP

Inexpensive foods

- Energy-dense, nutrient-poor
- Limited in nutrient-rich fruits & vegetables<sup>8</sup>

Eating less, skipping meals

- Attempt to preserve food
- Breakfast typically sacrificed<sup>8</sup>

## Literature Review UNHEALTHY COPING STRATEGIES TO BRIDGE THE FOOD GAP

Binge Eating

- Those who are food insecure at nearly twice the risk<sup>8</sup>
- Facilitates body fat storage<sup>8</sup>
- Dysfunctional relationship with food<sup>8</sup>

Food Pantries

- Widely used
- Intended as short-term, emergency solution to food shortages
- Becoming long-term solution to chronic hunger<sup>9</sup>

- Long-term reliance on pantry staples associated with greater risks of diet-related diseases
  - Obesity<sup>8,10,11</sup>
  - Diabetes<sup>11,12</sup>
  - Hypertension<sup>11,12</sup>
  - Cardiovascular disease<sup>11,12</sup>
- View food pantries only as short-term, emergency solutions

Literature Review
HABITUAL CONSUMPTION OF
PANTRY STAPLES &
DIET-RELATED
DISEASES

## Literature Review BREAKING THE PANTRY DEPENDENCY CYCLE

- Dispensing food without providing auxiliary services to address contributing factors to student food insecurity is an **ineffective response**
- May encourage greater pantry dependency
- Fighting hunger requires more than food alone



### Literature Review BREAKING THE PANTRY DEPENDENCY CYCLE

Promising interventions rooted in theory-based, person-centered approaches 13,14

#### Bandura's Social Cognitive Theory

- Emphasizes client-choice
- Preserves student dignity
- Enhances self-esteem

#### Stages of Change Model

- Identifies what stage of change a student is in
- Allows interviewer to determine best motivational strategy to facilitate behavioral changes

#### Motivational Interviewing

- Identifies & addresses obstacles that impede progress
- Sets tangible, attainable goals



### Literature Review BREAKING THE PANTRY DEPENDENCY CYCLE

Services to increase self-reliance and self-efficacy improved food security

#### 6-week Cooking Matters course

- Basic cooking skills, meal planning, and budgeting
- Higher cooking self-efficacy linked to greater food security<sup>15</sup> and better diet quality<sup>16,17</sup>

#### Nutrition education

- Nutrition-related topics (MyPlate, food groups, food safety, reading food labels)
- Favorable impact on food security levels<sup>14</sup>

#### Community gardening

- Satisfaction & personal connection to the food one eats
- Improves food security levels<sup>18</sup>

#### Case management services

- Community resources: SNAP, 14,19 WIC<sup>20</sup>
- Campus resources: Student Financial Management Center, Embark Network, Counseling and Testing Center, University Housing, Dean of Students

- Student financial aid statistics
- The Panther's Pantry

# STUDENT NEED AT GEORGIA STATE UNIVERSITY

### Student Need at Georgia State University STUDENT FINANCIAL AID STATISTICS

Roughly 77% receive some form of need-based financial aid

Even with aid, 70% of Georgia State students have unmet financial need

Average unmet financial need for undergraduate students is approximately \$7,000



Source: US News & World Report (2019)

### Student Need at Georgia State University THE PANTHER'S PANTRY

Not having enough to eat a pressing issue for many students

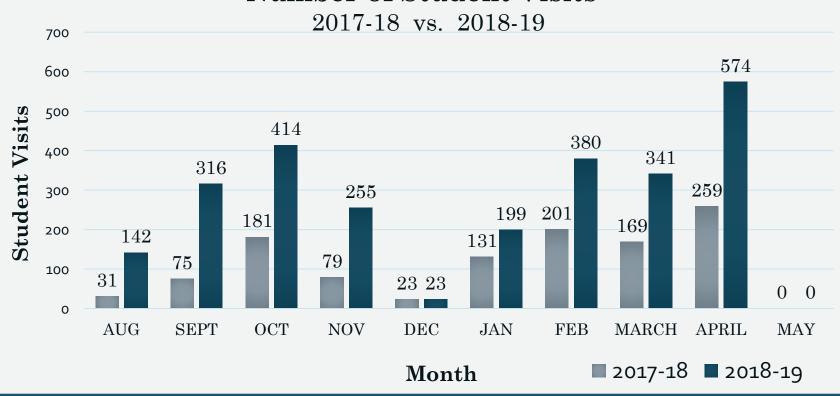
The Panther's Pantry alleviate the burden of food insecurity while students persist toward achieving a college degree



**Mission**: To mitigate the stress of short-term food shortages and financial constraints to eliminate student hunger and promote personal and academic success.

### Student Need at Georgia State University THE PANTHER'S PANTRY

#### Number of Student Visits\*





<sup>\*</sup> Include duplicates

- Project overview
- Anticipated project outcomes
- Implications for practice
- Project cost
- Daniel P. Amos Family Foundation
- Project timeline

PATHWAYS TO FOOD SECURITY PROJECT

### Pathways to Food Security PROJECT OVERVIEW



Ineffective Response

Encourages greater pantry dependency



### Pathways to Food Security PROJECT OVERVIEW



Differs from the traditional food pantry model in 3 critical ways:

- 1. Emphasizes client-choice format
  - -Preserves student dignity
  - -Enhances student self-esteem

### Pathways to Food Security PROJECT OVERVIEW



- 2. Meet with Registered Dietitian trained in motivational interviewing techniques
  - -Set and track goals towards becoming more *food secure* and *self-reliant*
  - -Identify and *address obstacles* that impede progress
  - -Set tangible goals to a healthier diet

### Pathways to Food Security PROJECT OVERVIEW

- 3. Provide cooking skills-building course, nutrition education & case management
  - -6-week Cooking Matters in Your Pantry course
  - -Nutrition education (healthy food selection, food groups, food labels, food safety)
  - -Joint community gardening program with NSN
  - -Case management services that include referrals to other basic needs resources



### Pathways to Food Security ANTICIPATED OUTCOMES

- Improved food security status, as determined by USDA Food Security Module
- Improvement to diet by one additional fruit and/or vegetable consumption per day, as measured by the Diet History Questionnaire
- Increase of 2-4 points in self-reliance, as measured by Missouri Community Action Family Self-Sufficiency Scale

### Pathways to Food Security IMPLICATIONS FOR PRACTICE

Improve student food management & cooking skills

Acquire greater connections to campus and community resources

Decrease reliance on the Panther's Pantry

Achieve greater food security while persisting towards a college degree



#### Pathways to Food Security: ANTICIPATED PROJECT COST

\$35,600



# Amos Family FOUNDATION

The chief purpose of The Daniel P. Amos Family Foundation is to glorify God and His Son, the Lord Jesus Christ, by supporting charitable and community organizations in their mission to improve the community.



The Daniel P. Amos Family Foundation will consider requests from organizations that are in the following categories. However, the board is not limited by these criteria.

Organizations that serve the homeless and underserved in the Columbus, GA area

Organizations that improve the Columbus, GA community

Organizations that are in other areas that are of special interest to the board

#### Organizational Grants & Contributions

**UNIVERSITY OF GEORGIA (2013)**: \$250,000

Purpose-Financial Assistance

**EMORY UNIVERSITY (2015)**: \$250,000

Purpose-Financial Assistance

**EMORY UNIVERSITY (2016)**: \$500,000

Purpose-Financial Assistance

SOUTHERN UNIVERSITY SYSTEM (2015, Baton Rouge, LA): \$50,000

Purpose-Financial Assistance

**MEALS ON WHEELS (2016**, Atlanta): \$85,000

Purpose-Financial Assistance

### Pathways to Food Security: PROJECT TIMELINE



Month	Activities Planned
January 2020	<ol> <li>Staff meeting and training</li> <li>Procurement of project material</li> <li>Finalize pre-intervention evaluation tools: USDA Food Security Module         (establish student's food security status); Missouri Community Action Family         Self-Sufficiency Scale (measure student's self-sufficiency level); and Diet History         Questionnaire (DHQ) III (assess students' fruit and vegetable consumption)</li> <li>Recruit 25 student volunteers to receive intervention</li> <li>Conduct pre-intervention evaluations with participants</li> </ol>
February-April 2020	<ol> <li>Deliver nutrition education modules and skills-building cooking classes</li> <li>Deliver counseling sessions with Project Manager to set goals toward better dietary habits, improving food security and self-reliance, identifying barriers strategies to overcome obstacles</li> <li>Provide ongoing case management and referrals to connect students to wraparound services</li> <li>Conduct post-intervention evaluations with participants: USDA Food Security Module; Missouri Community Action Family Self-Sufficiency Scale; and Diet History Questionnaire (DHQ) III</li> </ol>
March 2020- ongoing	<ol> <li>Collaborate with Georgia State's undergraduate Nutrition Student Network to co-manage a community garden using raised garden beds located at Georgia State University</li> </ol>
May 2020	1. Analyze program evaluation data from Spring 2020 semester
August 2020	<ol> <li>Recruit 25 student volunteers to receive intervention</li> <li>Conduct pre-intervention evaluations with participants: USDA Food Security Module; Missouri Community Action Family Self-Sufficiency Scale; and Diet History Questionnaire (DHQ) III</li> </ol>
September 2020 - November 2020	<ol> <li>Deliver nutrition education modules, skill-building cooking classes</li> <li>Deliver counseling sessions with Project Manager to set goals toward better dietary habits, improving food security and self-reliance, identifying barriers strategies to overcome obstacles</li> <li>Provide ongoing case management and referrals to connect students to wraparound services</li> <li>Conduct post-intervention evaluation: USDA Food Security Module; Missouri Community Action Family Self-Sufficiency Scale; and Diet History Questionnaire (DHQ) III</li> </ol>
December 2020	<ol> <li>Analyze program evaluation data from Fall 2020 semester</li> <li>Submit final reports to stakeholders</li> </ol>

#### TACKLING FOOD INSECURITY ON OTHER CAMPUSES

#### **UNIVERSITY OF GEORGIA (2011)**

- UGA Student Food Pantry
- No referral needed (Panhellenic Council)
- Nutrition Teaching Kitchen

#### **KENNESAW STATE UNIV. (2013)**

- CARE Services
- Access to other items & more pantry visits after initial CARE assessment

#### GEORGIA TECH (2015)

- Klemis Kitchen
- Referred by Dean of Students
- Secret location

#### **GEORGIA SOUTHERN (2018)**

- Captain's Cupboard Food Pantry (Armstrong & Liberty campuses only)
- Referred by Dean of Students

#### MICHIGAN STATE UNIV. (1993)

- MSU Student Food Bank
- No referral needed, no dining plan
- 1st in nation with pantry run by students for students: 6,000 students/year
- Founding member of CUFBA











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