

STUDENT FOOD INSECURITY

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*Inspiring excellence, transforming lives
through quality, impact, and care.*



*A growing body
of evidence over
the last 15
years:*

FOOD INSECURITY

*has the potential to negatively impact students'
academic performance,
general health and wellbeing,
social relationships,
and
mental health*



Maslow's hierarchy of needs



Food insecurity is wider than just going to bed hungry

Food security:

*In the most general terms, food security is defined as when people (*students*) have reliable access to sufficient, safe, nutritious, and culturally preferred foods that meet their dietary needs to allow them to lead an active, productive and healthy life*

(FAO, 2008)

FOOD SECURE



HUNGRY

WORSENING FOOD INSECURITY

HFSSM

ITEMS

While studying at the UFS (before lockdown) evaluate the following three statements:

'I worried whether my food would run out before I got money to buy more.'

'The food that I bought just didn't last, and I didn't have money to get more.'

'I couldn't afford to eat balanced meals.'

During the first semester of 2020, I the academic term, while studying at the UFS:

"Did you ever have to cut down on the size of your meals or skip, because there was not enough money for food?"

If yes, how often did this happen?

Almost every month

Some months, but not every month

"Did you ever eat less than you should because there wasn't enough money for food?"

"Were you ever hungry, but didn't eat because there wasn't enough money for food?"

"Did you lose weight, because there wasn't enough money for food?"

"Did you ever not eat for a whole day, because there wasn't enough money for food?"

If yes, how often did this happen?

Almost every month

Some months, but not every month

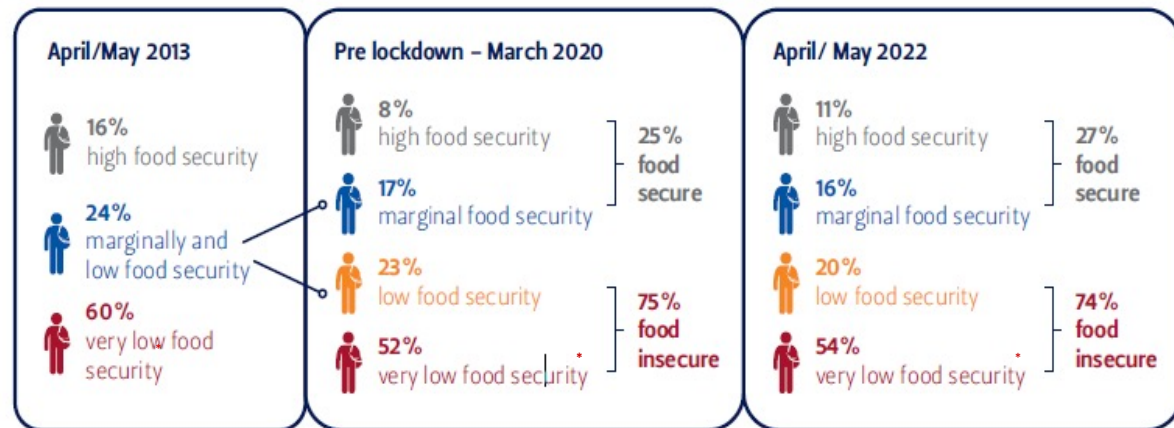
Food security

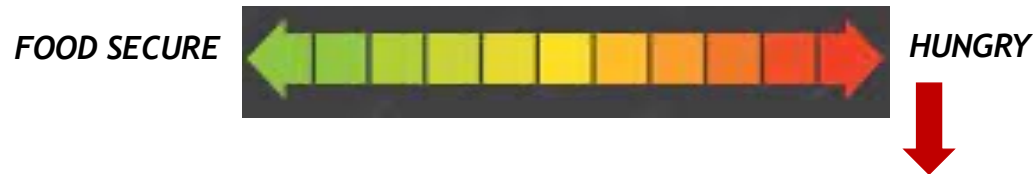
*Marginally food
security*

Low food security

*Very low food
security*

UFS RESEARCH: Prevalence of food insecurity among entire student body by DEPT OF NUTRITION AND DIETETICS





*The percentage of students who answered 'Yes' to the question,
"Did you ever during the academic term at the UFS not eat for a whole day because there wasn't enough money for food?"

2013: 24% answered yes - 7% indicated that it happens almost daily
2020: 24% answered yes - 6% indicated that it happens almost daily
2022: 39% answered yes - 13% indicated that it happens almost daily

Why should it matter to HEI?



Headcount enrolments at SA universities

(DHET 2023)

1994: 495 356

2023: 1 112 439



DHET cohort analyses report released in 2019:

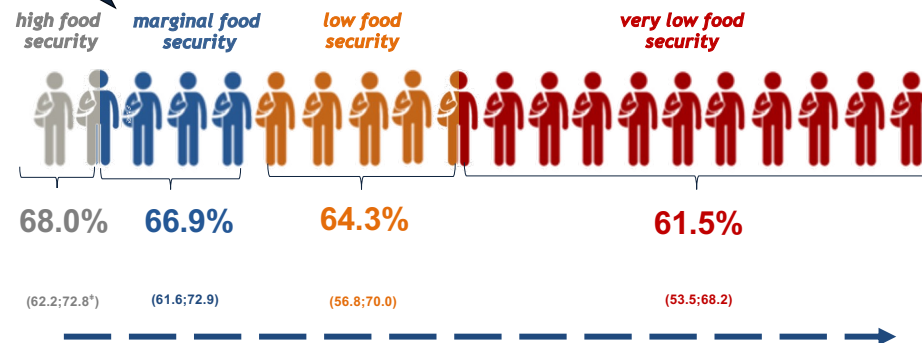
*71 % of the 2015 student cohort enrolled for degrees **failed to graduate in the minimum time***

DHET called for research to be conducted by HEIs to understand the possible contributors to the persisting low success rates

Food secure students were **4.3 times** more likely to successfully progress to the next academic year than food insecure students

Academic performance (2020 pre-Covid lockdown survey)

Average end-of-year UFS mark in 2019 (only senior students; n=949)
Institutional data (not self-reported)



($p < .0001$)* GPS scores were significantly associated with food security

* (P25; P75) = interquartile range



WHICH STUDENTS ARE THE MOST VULNERABLE?

Student with very low food security :

First generation students > Immediate family with degree

($p < .0001$)*

Black > Coloured > Asian > White ($p < .0001$)*

Rural Qwaqwa Campus > Urban South Campus > Urban Bloemfontein campus ($p < .0001$)*

Undergraduate > Postgraduate ($p < .0001$)*

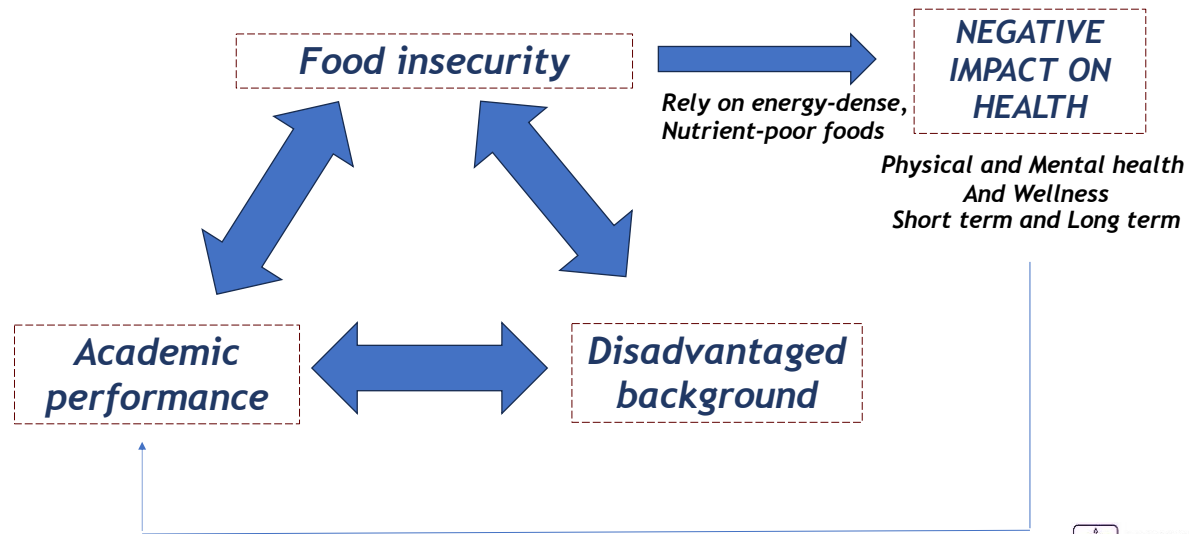
Male > Female ($p < .0001$)*

Single > In a steady relationship / Living together / Married

($p < .0001$)*

Homeless > Informal settlement > Communes/flats/townhouse > Residence ($p < .0001$)*

Travel to campus: Walk/Minibus/Cab/Bus > Dropped off by car > Drive self ($p < .0001$)*





How do HEI do to address the problem?

- *Should IHE be giving students food for free?*
- *Should Government increase the NSFAS allowance?*
 - *Or is there another way?*

SA Human Rights Commission
(Right to Food fact Sheet)

*The right to food is a human right recognised under national and international law, which protects the right of human beings to **access food and feed themselves**, either by producing their own food or by buying it.*

*The right to food is linked to one's **right to life and dignity**.*

The right to health: nutrition is a component of both the right to health and the right to food.

The right to education: hunger and malnutrition impairs learning abilities...limiting and undermining ... the right to education.

FOOD SECURE STUDENTS



*Attempts have focussed mainly on ad hoc interventions like food pantries and food bursaries, **falling short of uncovering and addressing the drivers of the problem.***

FOOD INSECURE STUDENT ??



Create a supportive food environment and teach students budgeting and food preparation skills to make it possible for them to eat a sufficient and healthy diet on the food allowances they get

HUNGRY STUDENTS with no other means



Humanitarian relief

STUDENT CHALLENGES

*"The food allowance I get from NSFAS I used to **pay rent** with ... So, I sacrificed my food allowance instead of buying enough food." (R436)*

*"I am currently using NSFAS, but it's a different story from person to person because some of us have to **pay rent**, buy food **and feed our families** back home, so we end up [experiencing] the allowances as being [too] little." (R329)*

*"[It helps me to receive] NSFAS money to buy food, but, [then] again, I am **helping my granny pay the debts** we made when I was coming to [the university]." (R593)*



STUDENT CHALLENGES

Grocery / food shopping

Food insecure students are more likely to:

Students mostly buy groceries once or twice per month

Students flag time as a major barrier

Walk, use minibus taxis and cabs in relation to food shopping ($p < .0001^$)*

Shop at Shoprite ($p < .0001^$) and street vendors ($p < .0001^*$)*

***Food secure students:** more likely to shop at Checkers ($p < .0001^*$), Pick-a-Pay ($p < .0001^*$) and Spar ($p = .001^*$)*

STUDENT CHALLENGES



Food storage

Food insecure students are more likely to:

Severely limits amounts of fresh dairy, fruits and vegetables that can be kept

Store their groceries / food in their bedroom (p<.0001)*

Not have access to fridge and/or freezer space (p<.0001)*

Have their groceries / food stolen from storage (p<.0001)*



STUDENT CHALLENGES

Food preparation equipment

Limits types and amounts of foods that can be prepared quickly

BUT many students also feared sharing resources

Food insecure students are more likely to:

Have access to a two-plate stove ($p < .0001^$)*

Not have access to a full electric/gas stove ($p < .0001^$)*

Not have access to a microwave ($p < .0001^$)*

Cook meals that are intended to last for several days ($p = .01^$)*

Share ingredients or money to preparing shared meals ($p = .02^$)*



STUDENT CHALLENGES

Cooking skills

Overall, most students did not score high on a construct to measure cooking skills

Food insecure students are more likely to:

Score low on confidence in their own cooking skills ($p < .0001^$)*

Many students did not have appropriate cooking utensils

Male student often indicates that it was not part of their culture to prepare meals

STUDENT CHALLENGES



Eating patterns

Food insecure students are more likely to:

Not eat breakfast (p<.0001)*

Bring food from home to eat on campus (p=.005)*

Eat meals alone in bedroom (p<.0001)*

Not eat at least one meal per day in the company of others (p<.0001)*

*Linked to
increase risk
of NCDs and
mental
health
issues in
literature*

*Students indicated lack of
cooling and heating
facilities as a barrier to
bringing their own food to
campus*



STUDENT CHALLENGES

Purchasing prepared meals / fast foods / ready-to-eat foods

Food insecure students are more likely to buy these from:

Small grocery store on the main campus (p=.0004)*

More expensive

Street vendors close to campus (p<.0001)*

Energy-dense, nutrient-poor

And less likely to buy these from:

Cafeterias and food halls (p=.04)*

Coffee shops and restaurants (p=.0009)*

Drivers of food purchasing behaviour



More likely to rate the
following as important drivers



Food insecure students

Price (p<.0001)*

Satisfying hunger (p<.0001)*

Convenience (p<.0001)*

Busy schedules (p=.0005)*

Religion (p<.0001)*

Culture (p=.004)*

Medical conditions (p=.0008)*

Food similar to home (p=.002)*

Food tried before (p<.0001)*

Fear of food poisoning (p<.0001)*

Food secure students

Making healthy choices (p<.0001)*

Lifestyle choices, e.g. vegan (p=.03)

Trying new things (p<.0001)*

***Why do we have to promote nutrition
among students?***



UFS Student Health Score Card

Almost 70% had a **family history** of NCDs (mostly hypertension)

Median overall **Dietary Quality score: 10/18,**

Median **Score for Healthy Food Intake: 2/9**

Most students felt that **healthy foods are more expensive** than unhealthy foods and that in **social settings, they cannot avoid unhealthy foods.**

Most students ate more **salt** and **slept** less than healthy recommendations to prevent NCDs.

Over 90% of students had **low activity levels**, putting them at high risk for NCDs.



UFS Student Health Score Card

Most students **never ate even one meal a day in the company of others** (considered an independent risk for NCDs)

1/6 students felt that they were in poor physical health, but **most had not had a checkup in the last year**

Stating that it is too expensive / that they did not think they needed it as reasons

Just over 40% of students indicated that a medical practitioner has at some point diagnosed them with **anxiety or depression** (almost **6% on chronic Rx for anxiety/depression**)

Metabolic risk for NCDs was determined among a representative subgroup of students from the 2022 UFS survey (median age 21.1 years)

- high levels of **overweight and obesity**, and
- **high** levels of **body fat**, specifically **visceral body fat** combined with **low muscle mass** and very low levels of activity.
- more than a third had **elevated blood pressure**
- almost half have **increased triglyceride levels** (possibly indicative of high alcohol use and/or high intake of refined carbohydrates),

Overall, their diet and lifestyle habits put students at **very high risk for NCDs later in life, and an alarming proportion might already be manifesting the metabolic risks for NCDs associated with these habits.**

FOOD SECURE STUDENTS



FOOD INSECURE STUDENT ??

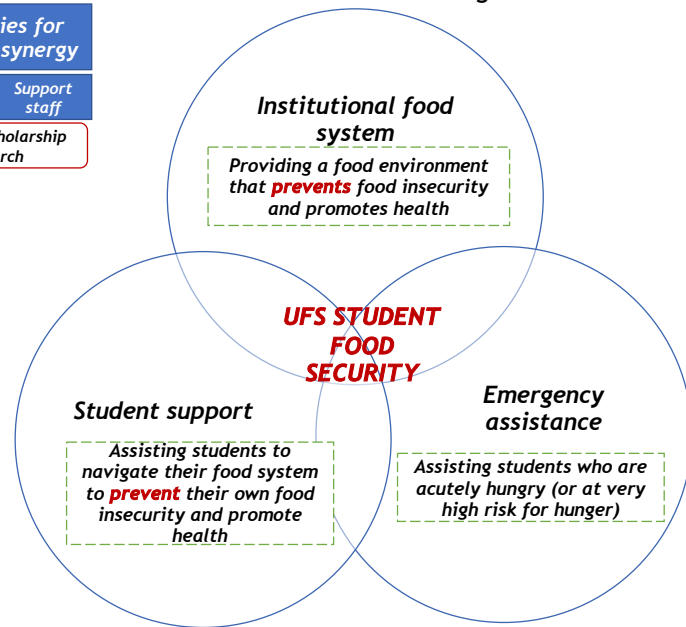
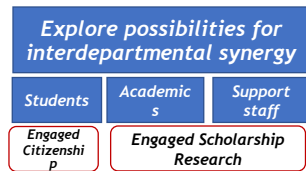
HUNGRY STUDENTS with no other means

Humanitarian relief

This is why at the UFS we believe that the mandate of the institution is to:

Create **a supportive food environment** and teach students **budgeting and food preparation skills** to make it possible for them to **eat a sufficient and healthy diet** on the food allowances they get

UFS Food Environment Programme



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UFS Food Environment Programme

Food Environment Task Committee (FETC)

READ

the
NO STUDENT HUNGRY
story



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for
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and
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Vegetable curry recipe

Recipe

Leonie Bolleurs - 29 July 2024



Pasta based salad

Recipe

Leonie Bolleurs - 10 June 2024

Recipes and Tips [View all](#)

[5 August 2024: Say goodbye to overly salty meals](#)

[12 August 2024: Opting for non-branded labels](#)

[19 August 2024: Cooking with frozen and canned foods](#)

[1 July 2024: Superfoods on a shoestring](#)

[8 July 2024: Healthy french fry options](#)

[15 July 2024: Quote from Velelambeu Nevhutalu](#)

RECOMMENDATIONS



Attempts to address student food insecurity in South Africa, as well as internationally, have focussed mainly on **ad hoc interventions like food pantries, meal plans and food bursaries, falling short of uncovering and addressing the drivers of the problem**



Recommend a national surveillance system:

A systems approach in which government and HEI combine forces to systematically study and track student food insecurity



Thank You
QUESTIONS?

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