THE NUTRITIONAL/FOOD ENVIRONMENT AND NUTRITIONAL PRACTICES OF STUDENTS ON THE NSH

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Introduction

- Access to food of adequate quantity and quality
  - For cognitive development
  - Emotional development
  - Physical functioning

- SA is food secure
  - There is adequate food supply in relation to its population

BUT

- Half of its population at individual and household level is food insecure
Introduction

- Drivers for food insecurity include:
  - Poverty
  - Unemployment
  - Urbanization

- Universities exist within – countries
- Therefore will be affected by food insecurity
Introduction

- Universities are required to improve access to higher education
- Students from disadvantaged backgrounds
- Tertiary education expensive → inaccessible
Introduction

Food insecurity + University fees = Food insecurities @ Universities
Introduction

• The topic is receiving increased attention
• In an effort to address it Universities have come up with food assistance programs
  o Food hampers
  o Cash transfers
THE NSH CAMPAIGN

- Provides students in need with food allowances and daily access to one balanced meal

- Students selected in terms of:
  - financial need
  - academic performance
  - participation in student life
  - a commitment to giving back to the community

- Students focus on their studies without worrying about their next meal
Main objective

To determine the nutritional environment and nutrition practices of the NSH campaign students at the UFS
Sub-objectives

**Students**
- Socio-cultural status
- Nutritional status
- Nutrition practices and dietary intake

**Food outlets**
- Nutrition quality of foods available at permitted food outlets
Methodology
PARTICIPANTS

NSH campaign

Informed consent

> 18 years

6 allocated stores
Measurements
Practices

- Number of meals
  - Eaten
  - Purchased
- Sharing of cooking duties
- Sharing of food costs

Dietary intake

- Dietary diversity
Nutrition environment

Food outlets where the students are allowed to spend the money allocated to them
Results
Demographics
Field of study

- Economic and management science: 17%
- Law: 19%
- Education: 13%
- Health Sciences: 0%
- Natural and agricultural science: 25%
- School of open learning: 25%
- The humanities: 25%
- Theology: 1%
- Business school: 0%

n=48
Payment of studies

- Merit bursary: 15%
- Parents/relatives: 17%
- Self: 4%
- Student loan: 14%
- Multiple ways: 15%

n=48
Place of residence

- University hostel on campus: 51%
- With parents: 23%
- Student house: 11%
- In a flat: 9%
- Other: 6%

n=48
Gender

- Male: 27%
- Female: 73%

n=48
Dietary practices
Additional money received

- Parents: 21%
- Uncle/Aunt: 8%
- Grandparents: 2%
- Friends: 2%
- Other: 8%
- None: 58%

n=48
Money available for food/month

- Less than R100: 35%
- R100 - R200: 30%
- R201 - R500: 23%
- R501 - R1000: 13%
- More than R1000: 0%

n=48
Meals purchased per day

- One: 44%
- Two: 35%
- Three: 17%
- Four: 4%

n=48
Sharing of food costs

- 25%: Yes, always
- 23%: Most of the times, but not always
- 6%: Regularly
- 4%: Seldom
- 4%: Never

n=48
Sharing of cooking duties

- Never: 52%
- Seldom: 25%
- Regularly: 19%
- Daily: 4%

n=48
Food choice influences

- 1. Eat what I'm use to: 25%
- 2. Friends: 10%
- 3. Cost: 44%
- 4. Health: 29%
- 5. Taste and presentation of the food: 17%
- 6. Cultural influences: 8%

n=48
Dietary intake
Usual daily food intake

- Dairy: 46%
- Fruit: 25%
- Fat: 60%
- Protein: 69%
- Veg: 48%
- Sugar: 58%
- Starch: 73%
- Alcohol: 0%
- Legumes: 0%

n=47
## Dietary diversity

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of students</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>Medium</td>
<td>18</td>
<td>51%</td>
</tr>
<tr>
<td>High</td>
<td>15</td>
<td>43%</td>
</tr>
</tbody>
</table>
Hunger satisfied

- Yes: 64%
- No: 25%
- Sometimes: 11%

n=48
Food parcel vs. money

- Food parcel: 19%
- Money: 81%

n=48
Is the money enough

- Yes: 49%
- No: 51%

n=48
Store audit forms
## Classification of food outlets

<table>
<thead>
<tr>
<th>Food Outlet</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery stores</td>
<td>0</td>
</tr>
<tr>
<td>Take away outlets</td>
<td>1</td>
</tr>
<tr>
<td>Restaurants</td>
<td>1</td>
</tr>
<tr>
<td>Tuck-shops</td>
<td>1</td>
</tr>
<tr>
<td>Cafeterias</td>
<td>3</td>
</tr>
</tbody>
</table>
Availability of food groups

- Free food: 4.99
- Dairy: 1
- Protein: 18.59
- Legumes: 0
- Fruit: 4.81
- Vegetables: 5.71
- Starch: 19.31
- Fat: 16.32
- Sugar: 29.19
- Alcohol: 0.09
Take aways
Tuck shop

Bar chart showing the percentage of total sales for different food categories:
- Dairy: 2.6%
- Protein: 6%
- Legumes: 0%
- Fruits: 2.6%
- Vegetables: 2.6%
- Starches: 17.2%
- Fats: 12.9%
- Sugar: 47.4%
- Alcohol: 0%
Discussion

- Most students only purchased one meal per day

- Cost was the most influential factor in food choices

- Even though most students only purchased up to 2 meals per day they indicated that their hunger was satisfied
Discussion

- The students daily intake tended to reflect the proportion of the food group available at the food stores
  - Starchy foods
  - Protein
  - Sugar
  - Dairy
  - Fruits
  - Vegetables
Discussion

- NSH campaign has a positive impact
  - Money given is enough
  - Hunger is satisfied
  - Medium to high diet diversity
Recommendations

- Allocate grocery store to the NSH campaign
  - Food diversity
  - Cooking facilities available

- Education of the student:
  - Healthy food options
  - South African food based dietary guidelines
Acknowledgements

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  - NSH directors
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References


THANK YOU!