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School: Koforidua Technical University

Report on Food Insecurity Among Students at Koforidua Technical University (KTU) and Ghanaian Tertiary Institutions

Executive Summary

Food insecurity is a critical issue affecting college students across Ghana. This report investigates its prevalence at Koforidua Technical University (KTU), identifies barriers to accessing nutritious food, and examines the impact on academic performance and mental health.

Defined as the limited or uncertain availability of adequate, affordable, and nutritious food, food insecurity is a significant concern in Ghana's tertiary sector. Recent studies indicate a prevalence as high as 61% among university students, with financial barriers consistently identified as the primary cause.

This challenge profoundly impacts students' academic performance, mental health, and overall well-being. Persistent financial constraints and high living costs exacerbate the issue, necessitating urgent policy and institutional interventions. Through a student survey, this study provides insights into the current state of food insecurity at KTU and offers recommendations to address this pressing issue.

Survey Questions

1. Do you consider yourself food insecure?
2. What are the main barriers to accessing healthy food?
3. How often do you skip meals due to financial constraints?
4. Have you noticed an impact on your academic performance due to food insecurity?

1. Prevalence of Food Insecurity

Survey results from KTU indicate that 60% (6 out of 10) of respondents identified as food insecure, highlighting a significant concern within the student population. This finding aligns with broader studies across Ghana's tertiary sector, which report alarmingly high rates.

- **Overall Prevalence:** A recent study in an Eastern Ghanaian city reported a food insecurity prevalence of 61.0% among tertiary students (Awuah et al., 2024). Of these, 40.4% experienced *very low food security* and 20.2% reported *low food security*.
- **Severity:** Other data suggests that among Ghanaian university students, food insecurity is severe for 42.4% and moderate for 28.5% (Coffie et al., 2024). This indicates that for the majority, the issue is a serious challenge to daily sustenance, not a minor concern.

- **At-Risk Groups:** Students who lack family financial support are significantly more likely to be food insecure, as are those whose parents work in informal or lower-income occupations, such as farming (Awuah et al., 2024).

2. Barriers to Accessing Fresh, Healthy Food

Students face multiple interconnected barriers that prevent consistent access to fresh, healthy, and safe food:

- **High Cost and Financial Demands (Affordability):** The lack of funds is the most significant barrier. Students juggle high expenses for tuition, hostel fees, utilities, and learning materials (Awuah et al., 2024), leaving minimal funds for food. Nutritious options like fresh fruits and vegetables are often more expensive than cheaper, energy-dense, or ultra-processed street foods, forcing students to prioritize cost over nutrition.
- **Time Constraints (Accommodation/Convenience):** Busy academic schedules, academic stress, and the need to travel or work part-time jobs limit the time available for shopping, cooking, and preparing healthy meals. This pushes students toward convenient, pre-prepared, and often less nutritious options (Herrera-Vázquez et al., 2025).
- **Campus Food Environment:** The on-campus and surrounding food environment often lacks affordable healthy foods compared to readily accessible and cheaper junk or ultra-processed options (Herrera-Vázquez et al., 2025).
- **Lack of Cooking Skills/Facilities:** For some students, particularly those new to independent living, a lack of cooking self-efficacy or inadequate cooking facilities in their accommodation presents a practical barrier to preparing nutritious meals (Herrera-Vázquez et al., 2025).
- **Lack of Family Support:** Not receiving financial support from family significantly increases a student's risk of experiencing food insecurity (Awuah et al., 2024).
- **Geographic Barriers:** Some students live in areas with limited access to grocery stores that offer healthy food.
- **Lack of Awareness:** A few students mentioned not knowing about available resources or assistance programs.

Meal-Skipping Behavior

When asked about meal-skipping due to financial constraints, respondents reported:

- Often: 40%
- Sometimes: 30%
- Rarely: 20%
- Never: 10%

3. Impact on Academic Performance and Well-being

Food insecurity creates a debilitating cycle that severely compromises student success and health. Students reported negative impacts on their academic performance, including difficulties with concentration and maintaining energy levels during classes.

- **Lower Grades:** Food-insecure students are consistently linked to significantly lower GPAs. Malnutrition impairs cognitive functions such as memory, attention, and critical thinking, making it harder to learn and perform in class (Coffie et al., 2024).
- **Absenteeism and Engagement:** Hunger and low energy levels lead to reduced class engagement, feelings of sluggishness, and increased absenteeism, sometimes to work longer hours to afford food.
- **Psychological Distress:** Food insecurity is strongly associated with heightened psychological distress, including depression, anxiety, and stress (Coffie et al., 2024). The emotional toll of financial struggle and hunger impacts self-esteem and social interactions.
- **Poor Physical Health:** When food insecure, students are more likely to make poor food choices, increasing the risk of poor dietary quality, anemia, and other health issues, including being overweight or obese, despite the lack of food (Coffie et al., 2024).

4. Impact of Funding Cuts and Institutional Response

Recent funding cuts to university meal programs and local food assistance services have significantly impacted students' access to nutritious meals at KTU. These cuts have reduced the availability of subsidized meal options, exacerbating the challenges faced by food-insecure students.

- **Diminished Meal Program Availability:** Funding reductions have led to the scaling back or elimination of meal programs that once provided affordable, healthy food. This has made it increasingly difficult for students relying on these services to obtain adequate nutrition.
- **Increased Reliance on Unhealthy Options:** As access to nutritious meals diminishes, students often resort to cheaper, processed foods that are high in calories but low in essential nutrients. This shift negatively affects their physical health, academic performance, and mental well-being.
- **Barriers to Food Assistance Resources:** Funding cuts can decrease the availability of food assistance programs, such as campus food pantries. Limited resources can increase stigma and barriers to accessing support, further isolating students in need.

Addressing Food Insecurity Among Students at Koforidua Technical University

1.0 Introduction and Current Context

A significant gap exists in our community regarding structured support for student food insecurity, particularly initiatives based on the FLOSN (Fresh, Local, Organic, Seasonal, and Nutrient-dense) principles. While various government programs, religious bodies, and individual efforts offer some assistance, these resources are often sporadic and inconsistent. This lack of a dedicated, reliable support system leaves many students at Koforidua Technical University (KTU) vulnerable to hunger and its adverse effects on academic performance and well-being.

2.0 Existing Support Frameworks in Ghana

Several national initiatives aim to combat hunger among students, providing a foundation upon which KTU can model its interventions.

- **Ghana School Feeding Program (GSFP):** Under the Ministry of Gender, Children, and Social Protection, the GSFP provides hot meals to over 3.6 million public primary school children. Its objectives are to enhance food security, reduce hunger, improve nutrition, and bolster local agriculture by sourcing food from local farmers.
- **Research and Pilot Interventions:** Organizations like the International Food Policy Research Institute (IFPRI) and the Noguchi Memorial Institute for Medical Research (NMIMR) collaborate on sustainable school meal interventions. These programs focus on improving nutrition and creating strong linkages between local agriculture and school feeding.
- **Local Non-Governmental Organizations:** Entities such as Hopespring Harvest work on food security, nutrition, and youth empowerment in underserved communities through initiatives like food parcel distribution and nutritional health centers.
- **Oversight and Governance:** The Ministry of Gender, Children, and Social Protection provides essential oversight for the GSFP, ensuring the program's efficient, fair, and accountable implementation.

2.1 Supplementary Efforts

- **Religious Bodies:** Churches and mosques occasionally distribute food and provide meals to individuals in need. While commendable, these efforts are typically irregular, dependent on donations, and lack the sustainability required for long-term impact.
- **Individual Efforts:** Community members and individuals sometimes offer informal support by sharing food or resources. However, these acts of kindness are unstructured and do not constitute a reliable safety net for students facing persistent food insecurity.

3.0 Proposed Initiatives for Koforidua Technical University

To effectively address student hunger, KTU should implement a multi-faceted strategy that provides immediate relief while building a sustainable, long-term framework for food security.

3.1 Establish a University School Garden

- **Description:** Dedicate a space on campus for students to cultivate fruits, vegetables, and herbs. This project could be integrated into academic programs or managed as a student-led community service initiative.
- **Benefits:**
 - **Educational Value:** Offers hands-on learning in sustainable agriculture, plant biology, and nutrition.
 - **Fresh Produce Supply:** Provides a direct source of fresh, organic produce for the university cafeteria, enhancing meal quality.
 - **Community Cohesion:** Fosters a sense of ownership, responsibility, and community among participating students and staff.

3.2 Implement a Farm-to-Cafeteria Program

- **Description:** Forge formal partnerships with local farmers to ensure a consistent supply of fresh, seasonal produce for the university cafeteria.
- **Benefits:**
 - **Local Economic Support:** Strengthens the regional agricultural economy by creating a stable market for local producers.
 - **Nutritional Enhancement:** Increases the availability of fresh, nutrient-rich foods in student meals, supporting better health and cognitive function.
 - **Environmental Sustainability:** Reduces the carbon footprint associated with long-distance food transport.

3.3 Enhance Cafeteria Menu Offerings

- **Description:** Collaborate with nutritionists to redesign the cafeteria menu, prioritizing fresh, local, and nutrient-dense ingredients to create balanced and diverse meal options.
- **Benefits:**
 - **Improved Dietary Choices:** Introduces a wider variety of healthy and appealing meals, encouraging better eating habits.
 - **Increased Student Satisfaction:** Higher-quality offerings can improve perceptions of cafeteria services and increase patronage.
 - **Passive Nutrition Education:** Menu labeling and informational signage can raise awareness about healthy eating.

3.4 Create a Campus Food Bank

- **Description:** Establish an on-campus food pantry to provide discreet and immediate food assistance to students in need. The pantry can be stocked with non-perishable

items, fresh produce from the school garden or local partners, and essential personal care items.

- **Benefits:**

- **Immediate Food Access:** Serves as a critical resource for students experiencing acute food insecurity.
- **Confidential and Dignified Access:** Ensures students can seek support without stigma.
- **Community Partnership:** Engages local businesses and organizations in donations, fostering broader community involvement.

3.5 Launch Nutritional Literacy and Cooking Workshops

- **Description:** Organize regular workshops and seminars on nutrition, budget-friendly meal planning, and practical cooking skills, led by health professionals or certified chefs.

- **Benefits:**

- **Empowerment:** Equips students with the knowledge to make informed, healthy food choices independently.
- **Practical Skill Development:** Teaches students how to prepare nutritious meals on a limited budget.
- **Community Building:** Creates a forum for students to connect over health and wellness topics.

4.0 Conclusion

By adopting these proposed initiatives, Koforidua Technical University can make substantial progress in eradicating student hunger. This comprehensive approach moves beyond temporary solutions to establish a resilient, healthy, and sustainable food culture on campus. The implementation of these programs will not only address immediate nutritional needs but also empower students with knowledge and skills for lifelong well-being, thereby fostering a more supportive and productive academic environment.

References

1. Awuah, D. T., Owiredu, W. K. B., Akuffo, O. A., & Agbleze, G. A. (2024). Food insecurity prevalence among tertiary students in Ghana. *medRxiv* [Preprint]. doi:10.1101/2024.02.27.24303448
2. Coffie, G., Tandoh, M. A., Baah, A., & Adjei, H. (2024). Association Between Food Insecurity, Body Composition, Anemia and Cognitive Performance Among Students of a Ghanaian University. *Journal of Hunger & Environmental Nutrition*, *20*(4), 516-534.
3. Herrera-Vázquez, M., Monge-Rojas, R., & Monge-Rojas, M. (2025). Barriers and Enablers of Healthy Eating Among University Students in Oaxaca de Juarez: A Mixed-Methods Study. *Nutrients*, *17*(7), 1263. doi:10.3390/nu17071263

Learn more

[Food insecurity prevalence among tertiary students in Ghana - medRxiv](#)

[Food insecurity prevalence among tertiary students in Ghana - ResearchGate](#)

[Food insecurity prevalence among tertiary students in Ghana - CoLab](#)

<https://foodforallafrika.com/feeding-programs/>

<https://newsroom.churchofjesuschrist.org/article/church-and-the-hunger-project-work-to-end-hunger-in-ghana>

<https://foodforallafrika.com/>

Infographic



Caption

FUEL OUR FUTURE 🚀 60% of KTU students are facing food insecurity, turning the fight for a degree into a fight for a meal.

This crisis doesn't just empty wallets; it drags down academic performance and mental health, fueling anxiety and stress.

Swipe to see the solution: The [#FLOSN](#) Advantage!

We're proposing a sustainable system built on Fresh, Local, Organic, Seasonal, and Nutrient-dense food. This isn't just a food plan it's an economic, health, and justice initiative for our entire community.

WHY FLOSN MATTERS:

Health: Better grades, better focus, and long-term wellness.

Justice: Fair access to quality food for every student, regardless of financial background.

Sustainability: Supports our local Ghanaian farmers and shrinks our carbon footprint.

[@turninggreenorg](#) [@environmentalworkinggroup](#) [@conscious](#)
[#pgc2025](#) [#flosn](#)

Instagram post

FOOD INSECURITY AT KTU

Hunger Affects More Than Just Grades

60% of KTU Students are Food Insecure

The Crisis is Real

Leads to poor concentration, lower energy and increased absenteeism. Linked to depression, anxiety, and stress, depression, anxiety crisis—a lot to handle—a mental health crisis. Financial pressure forces reliance on cheap, processed foods over nutrition.

Bodies & Minds Thrive:

Boosts cognitive function and energy quality and fortifies wellness.

WHY FLOSN? IT'S A WIN-WIN-WIN.

The FLOSN Solution

A vision for campus where every is nourished by food that is:

Fresh Local Organic Seasonal
Seasonal Nutrient-dense

ROOTED IN ACTION: Our 3-Point Plan to Build A Nourished KTU:

- Establish Campus Food Fund
- Launch a Student Run Garden
- Launch a Farm-to-Classroom Program

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big_footgh FUEL OUR FUTURE 60% of KTU students are facing food insecurity, turning the fight for a degree into a fight for a meal.

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