



## EVALUATION OF FOOD INTAKE PATTERN AMIDST THE CURRENT HARDSHIP AMONG UNDERGRADUATE STUDENTS OF AHMADU BELLO UNIVERSITY, ZARIA, KADUNA STATE, NIGERIA

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### Abstract

The purpose of this study was to evaluate the food intake pattern amid the current hardship among undergraduate students of Ahmadu Bello University, Zaria. One research question was raised to guide the study. The research design adopted for this study was a descriptive survey. The population consist of about 19,764 undergraduate students living in the school hostels in both campuses; Samaru and Kongo. Five (5) out of sixteen (16) student hostels were randomly selected using simple random sampling technique. Respondents were selected from each of the five (5) hostels proportionately based on the total population of students in the hostels which gives the total sample size of three hundred and ninety-two (392) undergraduate students using proportionate sampling technique. Data was collected using a closed-ended questionnaire which was validated by three (3) experts. Percentage and frequency count were used as the statistical tools in analyzing the data presented in a pie chart. The results of the study revealed that the majority of undergraduate students in Ahmadu Bello University, Zaria, practised poor and irregular food intake habits, skipped meals by taking meals twice a day, skipped mostly launch, and breakfast and did not pay attention to the nutritional benefits of what they consume. Based on the findings of this study, it was concluded that the majority of undergraduate students in Ahmadu Bello University, Zaria, adopted a poor and irregular food intake pattern and do not pay attention to the nutritional benefits of what they consume. The researchers recommended that the university management should intervene in regulating food pricing within campus stores and eateries, and provide active and affordable cafeterias to help students access proper and adequate food.

**Keywords:** Evaluation, Food Intake Pattern, Current Hardship, Undergraduate Students, Ahmadu Bello University.

### Introduction

In recent years, economic hardship has increasingly affected university students across Nigeria, impacting their daily lives and well-being. At Ahmadu Bello University Zaria, this challenge is particularly pressing, with many undergraduates struggling to maintain a balanced diet due to financial constraints. This research aims to evaluate the food intake patterns of these students amidst the current economic difficulties. By assessing their dietary choices and nutritional adequacy, the study seeks to provide insights into how economic hardship influences food consumption and identify potential areas for intervention to support student well-being (Ochure, Edeth & Dan, 2023).

Food intake was defined as the ingestion of any natural or synthetic food products that can be eaten, drunk and digested within the human body (Dhanani, 2023). The actual food intake is the amount of food that you consume (Hight, 2008). Food intake refers to the daily eating patterns of an individual including specific foods and calories consumed and their relative qualities (WHO, 2017).

Patterns of nutritional behaviours adopted in early life and adolescent stages are mostly continued in adult life and can increase the risk of developing many chronic diseases (Kathpalia & Satish, 2018). Diets in student-hood have public health implications due to evidence relating poor nutrition in adolescence to subsequent obesity and elevated risks for type 2 diabetes, metabolic syndrome, and cardiovascular diseases which are increasing in prevalence (Akorede et al., 2022).

According to the World Bank Group (2022) assessment of Nigeria's Poverty. Despite Nigeria's vast resources, poverty rates are high, with a significant portion of the population living below the poverty line. This exacerbates social inequalities and limits access to basic necessities such as food, education, healthcare, and adequate housing. Inadequate infrastructure, including power supply, transportation networks, and healthcare facilities, hinders economic activities and reduces the quality of life for many Nigerians (Tochukwu & Fadeyi, 2024).

The current economic hardships imposed on people by many unfavourable factors and situations in Nigeria may have a significant impact on students' food intake in Nigerian universities. Food prices are just one of the many ways in which students suffer due to these undesirable situations. Increased inflation and economic instability have led to rising food prices across the country. This makes it more expensive for students, especially those from low-income backgrounds, to afford nutritious meals (Gustafson, 2013). Economic challenges, including currency depreciation and inflation, have reduced the purchasing power of students and their families. This means they may have to cut back on the quantity and quality of food they can afford (Hayes, 2024). Many families are experiencing financial strain due to job losses, reduced income, or increased costs of living. This affects their ability to provide adequate financial support to their children studying in universities, impacting the students'

ability to buy food (Adams, Myers & Beidas, 2016). When universities across the globe have feeding programs or subsidized meal options for students. This is unfortunate with Nigerian universities and ABU in particular (Cohen et al., 2021).

For example, a study by MyProjec.ng (2024) on the assessment of food intake and consumption patterns of undergraduates of the University of Lagos, Akoka, Yaba Lagos revealed that the majority of the respondents eat twice every day, while only a few eat thrice and more than thrice in a day due to the overload economic challenges and syllables. Omege and Omuemu, (2018) conducted a study which assessed the dietary pattern and nutritional status of undergraduate students in a private university in southern Nigeria. The results show that over half of the respondents, 448 (56.0%) skipped breakfast and 608 (76.0%) ate in between meals with more females 280 (59.8%) compared to males 168 (50.6%) skipped breakfast.

The Ahmadu Bello University, Zaria (ABU), is a federal government research university located in Zaria, Kaduna State. Life in ABU campuses is becoming more expensive with each passing day and almost unbearable for student adoption. And this might contribute significantly to the unhealthy eating habits among undergraduate students of ABU Zaria. Also, the fast-growing of highly cost shopping malls, unaffordable stores, vending machines and expensive fast food outlets may create an alarming situation for young adults living in Ahmadu Bello University Zaria to practice poor or improper food intake. It's against this background that the researchers intend to evaluate the food intake pattern of undergraduate students of A.B.U, Zaria amid the current hardship. This led to finding the answer to the question: what is the food intake pattern of undergraduate students of Ahmadu Bello University, Zaria, amid current hardship in Nigeria?

### Methodology

A descriptive survey design was adopted for this study. Descriptive research is a type of research that is used to describe the characteristics of a population. It collects data that is used to answer a wide range of what, when, and how questions pertaining to a particular population or group (Librarianship Studies & Information, 2023).

The population for this study consist of 19,764 undergraduate students living in the school hostels in both campuses; Samaru and Kongo. Going by Yamane’s formula, the sample size for this population consists of 392 respondents.

**Table 1: Proportionate Sample:**

S/N	Hostels Selected	Population	Sample Size Selected
1	ICSA/Ramat Hostel	2,112	79
2	Suleiman Hostel	4,194	157
3	Tafawa Balewa Hostel	1,090	41
4	Dangote Hostel	2,880	108
5	Sardauna/Bedde	211	7
<b>Total</b>		<b>10,487</b>	<b>392</b>

Selection of the study cut across both sexes (male and female) from all hostels i.e. from 100 level–600 level.

The research instrument used for the collection of relevant data for this study was a researchers’ developed closed-ended questionnaire named the Food Intake Pattern Assessment Questionnaire (FIPAQ). The questionnaire was made up of eight (8) items which are divided into Sections A & B. Section ‘A’ consists of five (5) items which sought information on the demographic characteristics of the respondents while section “B” was made up of three (3) items which sought information on Food Intake Pattern Amid Current Hardship Among Undergraduate Students of Ahmadu Bello University, Zaria. The instrument was validated by three experts in the Department of Human Kinetics and Health Education, ABU, Zaria. The data collected was subjected to statistical analysis using a pie chart for presentation and interpretation of results. Three hundred and ninety-two (392) copies of the questionnaire were administered to undergraduate students in their respective hostels within ABU campuses, to evaluate their food intake pattern amid this current hardship.

**Results**

**Table 2: Demographic Information of the Respondents (n=384)**

VARIABLE	FREQUENCY	PERCENTAGE
<b>AGES</b>		
17 – 21 years	60	15.6%
22 – 26	280	72.9%
27 and above	44	11.5%
<b>SEX</b>		
Female	210	54.7%
Male	174	45.3%
<b>MARITAL STATUS</b>		
Single	368	95.8%
Married	16	4.2%
<b>ETHNICITY</b>		
Hausa	182	47.4%
Yoruba	32	8.3%
Others	170	44.3%
<b>ACADEMIC LEVEL</b>		
100l	21	5.5%
200l	45	11.7%
300l	26	6.8%
400l, 500l, 600l	292	76.0%

Table 2 shows the demographic characteristics of the respondents. Observed from the table was that 60 (15.6%) of the correspondents are within the age range of 17-21. 280 (72.9%) were between the ages of 22-26 years while 44 (11.5%) were between the ages of 27 and above years. Also, the table revealed the gender of the respondents. 174 (45.3%) of the correspondents are female while 210 (40%) are male. 182 (47.4%) of the respondents are Hausa, 32 (8.3%) Yoruba and 170 (44.3%) are Others. 368 (95.8%) of the respondents are single, and 16 (4.2%) are married. 21 (5.5%) of the respondents are in their 1<sup>st</sup> year in the university, 45 (11.7%) are in 2<sup>nd</sup> year, 26 (6.8%) are in their 3<sup>rd</sup> year and the remaining 292 (76.0%) are in 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> years.

**Feeding Pattern of the Students.**

**Chart 1**

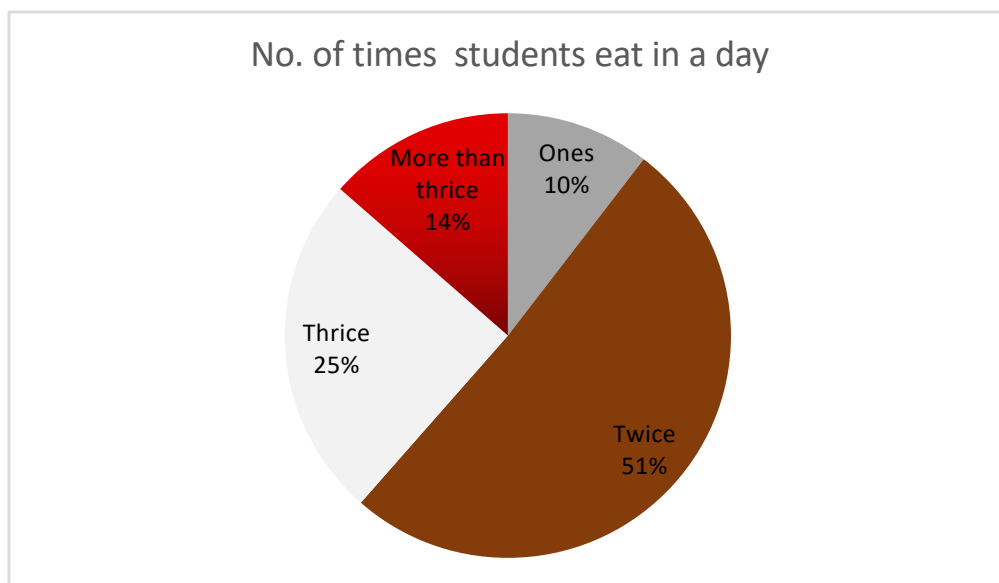


Chart 1 shows the number of times students eat in a day during this period of hardship in Ahmadu Bello University. Observed from the chart was that, 198 (51%) eat twice, 98 (25%) eat thrice, 54(14%) and 42(10%) eat once in a day. This implied that the majority of the undergraduate students in A.B.U Zaria eat just twice a day.

**Chart 2**

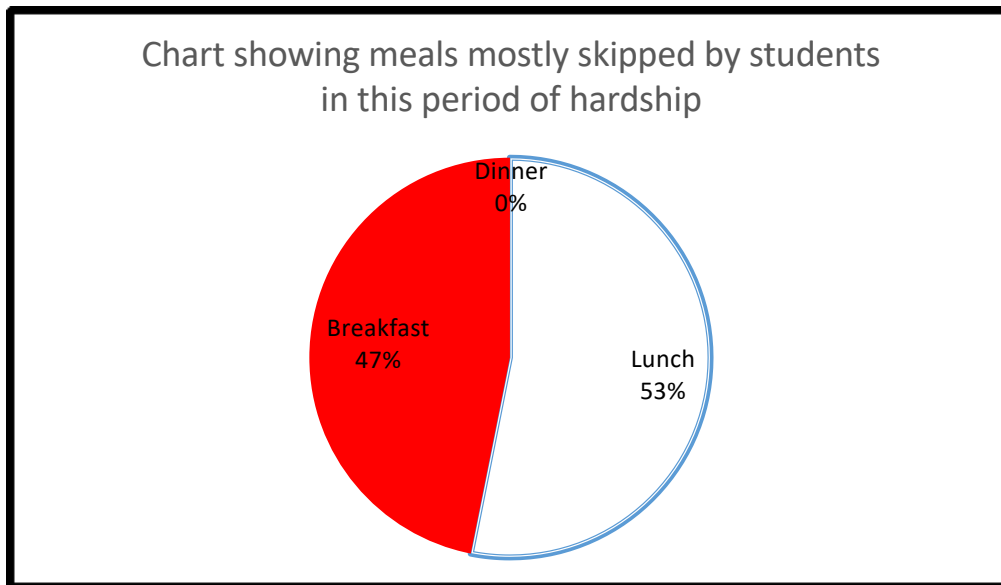


Chart 2 shows meals mostly skipped by students during this period of hardship in Ahmadu Bello University. Observed from the chart was that, no student skipped dinner (0%). Breakfast is skipped by 184(47%) of the respondents and 208 (53%) skip lunch. This implied that the majority of the undergraduate students in A.B.U Zaria skipped lunch.

**Chart 3**

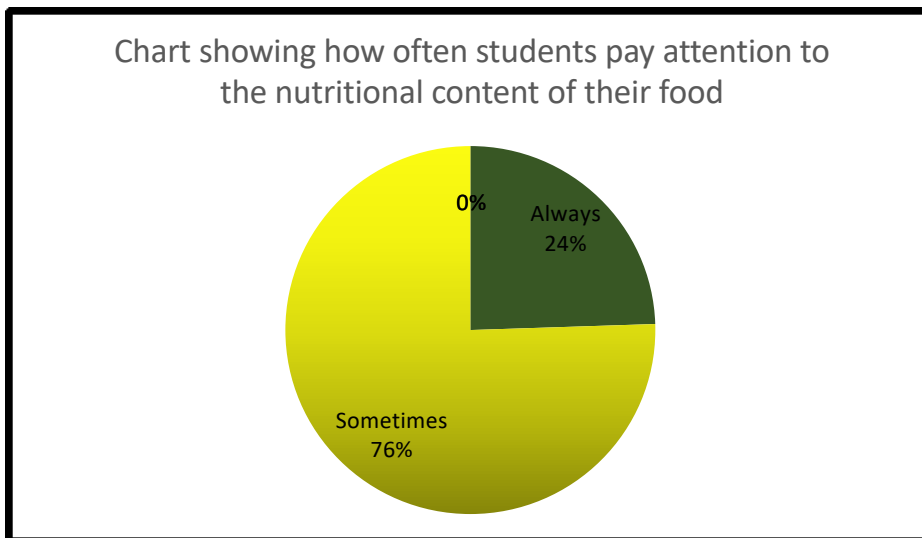


Chart 3 shows how often students pay attention to the nutritional content of their chosen foods during this period of hardship in Ahmadu Bello University. Observed from the chart was that, 294 (76%) sometimes pay attention while only 98 (24.5%) always pay attention. This implied that the majority of the undergraduate students in A.B.U Zaria do not pay attention to the nutritional content/composition of what they take as food in their meals.

**Discussion**

The study revealed that most undergraduate students at Ahmadu Bello University, Zaria, exhibited poor food intake behaviours, notably skipping lunch. This behaviour was attributed to the economic hardships currently facing Nigeria. This finding is consistent with research by MyProjec.ng (2024), which assessed food intake patterns among undergraduates at the University of Lagos, Akoka, Yaba Lagos. Their study found that most respondents ate only twice a day, with few eating three or more times due to economic pressures and academic workload. Research by Coffino and Hormes (2018) found that financial constraints significantly influence students' food choices, often leading to a reliance on cheaper, less nutritious food options. This supports the observation that economic hardship leads to poor food intake behaviours, such as meal skipping and choosing less balanced meals.

Similarly, Omage and Omuemu (2018) found in their study on dietary patterns and nutritional status of undergraduates in private universities in southern Nigeria that over half of the respondents (56.0%) skipped breakfast, with a higher proportion of females (59.8%) compared to males (50.6%) missing this meal. A study conducted by Otemuyiwa, Olusegun and Adewusi, Steve, (2012) examined food intake patterns among university students in various regions of Nigeria. The findings indicated that students in economically disadvantaged areas were more likely to skip meals and consume inadequate diets compared to their counterparts in more affluent regions. This underscores the broader impact of economic conditions on student nutrition. A research study by Almansour, Allafi & Al-Haifi (2020) highlighted that a lack of nutritional knowledge among students often leads to poor dietary choices. Students with a limited understanding of nutrition were more likely to skip meals or choose unhealthy foods, suggesting that educational interventions could help improve food intake patterns.

In contrast, Yun, Ahmad, and Quee (2018) reported different results in their study on dietary habits and lifestyle practices among university students at Universiti Brunei Darussalam. They observed that while most students maintained regular daily meals, more than half still skipped breakfast. However, another research finding by Maqsood et al. (2023) explored the relationship between academic stress and eating behaviours among university students. They found that high levels of stress were associated with irregular eating patterns and increased likelihood of skipping meals, which aligns with the observed trend of meal skipping among students facing economic challenges.

These comparisons highlight variations in food intake patterns across different regions and institutions, reflecting how economic and cultural contexts can influence student dietary habits.

### Conclusion

Based on the findings of this study, it was concluded that the majority of undergraduate students in Ahmadu Bello University, Zaria, adopted a poor and irregular food intake habit and skipping meals as eating meals only twice a day, skipping launch and most do not pay attention to the nutritional benefits of what they consume.

### Recommendation

Based on the findings of the study, the researchers recommended that the University management should intervene in regulating food pricing within campus stores, and provide affordable food for sale at cafeterias to help students access proper and adequate food to ease the living conditions of A.B.U students.

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