Anthropometric Measurement, Dietary Habit and Economic Status of Undergraduate Students of Bingham University, Karu, Nasarawa State

Okereke Angel Nneoma*, Egbo Chiamaka Ebubechim, Eluma Roland Ebubechukw, Rindap Abigail Jembyen, Adeyele Dorcas Tolulope, John Bimba

Department of Community Medicine and Primary Health Care

*Corresponding Author

ABSTRACT

Introduction: Human body composition can be evaluated using anthropometric measurements, which are a set of quantitative measurements of the bone, muscle, and adipose components. This study is necessary because students may not receive broad, adequate and essential education on dietary habits due to economic issues, leading to unhealthy eating habits. These measurements are crucial because they serve as diagnostic tools for obesity which increases the risk of non-communicable disease such as diabetes mellitus, cardiovascular disease, hypertension etc. Studies has shown undergraduate university students are at risk of developing unhealthy lifestyle habits, including poor dietary habits and inadequate physical activity, which can negatively impact their anthropometric measurements and overall health. At Bingham University, Karu, there is a need to better understand how the three factors, body measurements, diet, and finances interact. This study explores the current status of undergraduate students to guide health promotion efforts and support better academic and life outcomes.

Methodology: A descriptive cross-sectional study design was employed to assess the anthropometric measurements, dietary habits, and economic status of undergraduate students at Bingham University, Karu. The study population consisted of full-time undergraduate students across seven randomly selected faculties. Using multistage sampling techniques, 402 participants were selected. Data collection involved the use of structured, self-administered questionnaires divided into sections on socio-demographics, dietary habits, and economic status, alongside direct measurements of height and weight using a stadiometer and weighing scale to compute Body Mass Index (BMI).

Results: The study analysed data from 402 undergraduate students of Bingham University. The majority of respondents were female (86.6%), aged between 20–29 years (71.9%), and primarily of Christian faith (97%). BMI assessment revealed that 48.3% had a normal weight, 24.8% were overweight, 24.4% were obese, and 2.5% were underweight. Dietary patterns indicated that 88.8% consumed only 1–2 servings of fruits and vegetables daily, while 95.3% frequently skipped meals, especially breakfast, primarily due to lack of time (64.2%). Fast food consumption was common, with 59.7% consuming it 1–2 times per week. Eggs (39.8%) and meat (39.3%) were the most preferred protein sources. Economically, 92.3% relied on parents or guardians for financial support, with most students receiving monthly stipends between ₦101,000–₦200,000. However, 62.7% felt their allowance was insufficient to meet basic needs. Only 24.4% engaged in income-generating activities. Chi-square analyses showed no statistically significant associations between BMI and variables such as age, gender, ethnicity, religion, height, or department ($p > 0.05$).

Conclusion: The study highlights a student population marked by financial dependency, irregular and nutrient-poor dietary habits, and early signs of overweight and obesity. These findings underscore the need for targeted public health interventions, including nutrition education, affordable healthy food options, and expanded financial support schemes to improve student well-being and academic outcomes.

DOI: 10.21467/abstracts.8.7 ISBN: 978-81-998984-4-8 (eBook)