

## ***Prevalence and Predictors of Food Insecurity among Undergraduate Students Residing on Campus: A Case Study at University of Peradeniya, Sri Lanka***

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The current study aimed to assess the prevalence and predictors of food insecurity and to determine the association between dietary and nutritional factors with food security among undergraduate students residing on campus at the University of Peradeniya. The study sample consists of 600 undergraduates representing the nine faculties of the University. Socio-demographic data, food security (8-item Food Insecurity Experience Scale Survey Module), and dietary diversity (developed by the FAO/Nutrition and Consumer Protection Division -May 2007 version) were assessed using an interviewer-guided questionnaire. Height and weight measurements were obtained through calibrated scales to calculate BMI, and body fat percentage was assessed using a bioelectrical impedance analyzer. Covariate-adjusted multivariate linear regression was employed to identify significant predictors of food security, while Pearson's correlation analyses explored the association of food security with dietary diversity and nutritional status. The overall prevalence of food insecurity was 44.1%, with 29.8% experiencing moderate food insecurity and 14.3% facing severe food insecurity. The mean food insecurity score, dietary diversity score, and fat% were  $3.23 \pm 2.58$ ,  $7.07 \pm 1.71$ , and  $23.43 \pm 7.99\%$ , respectively. The mean BMI of the sample was  $20.92 \pm 3.7$  with 27% underweight students. The faculty of study, ethnicity, frequency of home visits, and alcohol consumption were identified as significant ( $p < 0.05$ ) predictors of food insecurity. There is a significant negative correlation (coefficient =  $-0.212$ ,  $p < 0.05$ ) between the total food insecurity score and participants' dietary diversity. Further, a significant negative correlation (coefficient =  $-0.089$ ,  $p < 0.05$ ) was identified between food insecurity total score and participants' BMI. However, there was no significant association ( $p > 0.05$ ) between the total food insecurity score and the fat percentages of the undergraduates. This study underscores the vulnerability of university undergraduates as a group to food insecurity, emphasizing the need for corrective actions to enhance food security in this population.

**Keywords:** Food insecurity, Dietary diversity, Nutritional status, University of Peradeniya

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