

The Effect of Selected Socio-Economic Variables on the Calorie Intake of Adolescents in the Selected School in North Western Province

DMSPK Perera^{*1}, TP Liyanage¹, DK Sari², PGI Dias³, and S Diyapaththugama

¹*Department of Sports Sciences and Physical Education, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka*

[*piumisuresha01@gmail.com](mailto:piumisuresha01@gmail.com)

Food prices increased during the COVID-19 pandemic and the current economic crisis severely disrupted the social and economic situation in Sri Lanka. The objective of this study was to investigate the adequacy of the daily calorie intake of a selected adolescent sample and evaluate the associations between socioeconomic variables (Gender, Age, Grade, Monthly household income and Residential, BMI value, and daily calorie intake) of the sample. One hundred (n = 100) adolescents aged 14 to 16 years were recruited using the random sample method from selected schools in the North West Province. The nutrient intake was assessed using the 24-hour dietary recall method and average daily caloric intake from food and the composition was calculated. Correlation analysis was performed to assess the independence between daily caloric intake (high, normal, and low), socioeconomic variables, and BMI value. Majority of boys (90.32%) and girls (73.68%) did not meet the adequate level of daily caloric intake. Among them, 62.98% of boys and 41.11% of girls are underweight; 36.26% of boys and 2.63% of girls from rural areas, 19.35% of boys and 39.47% of girls have a monthly household income of Rs. 30,000. All socio-economic variables and BMI values were significantly associated with average daily caloric intake in the selected sample (P<0.05). The average caloric intake of adolescents on weekdays (2200 and 2800 kcal) was lower than on weekends (Kcal). Boys 87.10% and girls 71.05% consumed lower calories than required during the weekdays. According to the daily calorie requirement 85.48% of boys and 73.68% of girls consumed lower calories than required (2800Kcal, 2200Kcal, respectively) during the weekends. Their poor socioeconomic conditions were highly influential in this condition. It is vital to conduct an island-wide similar survey to get an idea to set solutions for this problem.

Keywords: Caloric Intake, Adolescents, 24-Hour Dietary Recalls, Socioeconomic Variables