

NUTRITIONAL STATUS AND COGNITIVE CAPABILITY IN A COHORT OF ADOLESCENTS IN EPPAWALA, ANURADHAURA

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Few studies have been conducted to determine the association of nutritional profile with the cognitive capacity in Sri Lankan adolescents to establish proper intervention strategies. This study was aimed to identify the association of nutritional status and other factors such as gender, ethnicity, vegetarianism and food consumption behaviour with the cognitive capability of adolescents in Eppawala area. A representative sample of 371 students aged 11-17 years was selected randomly from three schools in the study area. Body weight and height were measured using standard methods. Age and gender specific Body Mass Index (BMI) criteria recommended by World Health Organization and Centers for Disease Control and Prevention were used to determine the nutritional status. Data on gender, ethnicity and vegetarianism together with consumption of specific foods such as milk, *gotukola*, and egg were collected using a self administered, validated questionnaire. Cognitive capacity was determined using the marks obtained by the students for mathematics. Results revealed that prevalence of overweight and obesity in the study group was 4.9% and 0.8%, respectively while only 4.3% was underweight. Among the variables studied, nutritional status, gender, ethnicity, consumption of milk and *gotukola* demonstrated a significant impact ($p < 0.1$) on the mathematics marks of the study group. However, vegetarianism and consumption of egg did not significantly affect ($p > 0.1$) on the mathematics marks. Further, among the students who got higher marks (> 65), 90.4% had healthy weights, while 74.9% and 93.4% of them were partial vegetarians and Sinhalese, respectively. Thus, in this study group, nutritional status of the individual plays a major role in determining the cognitive capability of the person.

Keywords: Adolescents, Cognitive capability, Nutritional status