

Association between behavioural factors and BMI-for-age among early adolescents in Hulu Langat district, Selangor, Malaysia

ABSTRACT

Objective: This paper investigates the association between behavioural factors and BMI-for-age among early adolescents (10-11 years old) in Hulu Langat district, Selangor. **Methods:** This cross-sectional study was conducted among 333 primary school students. Body weight and height of the students were measured and their BMI-for-age was calculated. Eating behaviours, energy intake, energy expenditure, physical activity, and screen time were assessed using the Eating Behaviours Questionnaire and a 2-day dietary and physical activity recall, respectively. Data were analysed using multiple linear regression analysis. **Results:** The prevalence of overweight and obesity (28.2%) was about twice the prevalence of thinness (11.1%). The mean energy intake and energy expenditure of the students was 1772 ± 441 kcal/day and 1705 ± 331 kcal/day, respectively. Three in five of the students (60.1%) skipped at least one meal and 98.2% snacked between meals daily. A majority of them (55.3%) were sedentary. Low energy intake ($p < 0.05$) and low energy expenditure ($p < 0.05$) were associated with high BMI-for-age. Energy expenditure ($\beta = 0.033$) and energy intake ($\beta = 0.090$) significantly explained 65.1% of the variances in BMI-for-age ($F = 119.170$, $p < 0.05$). **Conclusion:** These findings suggested that promoting healthy eating and active lifestyle should be targeted in the prevention and management of obesity among early adolescents.

Keyword: Early adolescents; Dietary practices; Physical activity; Screen time; BMI-for-age