

## Obesity-related behaviors of Malaysian adolescents: a sample from Kajang district of Selangor state

### ABSTRACT

This study aims to determine the association between obesity-related behaviors (dietary practices, physical activity and body image) and body weight status among adolescents. A total of 382 adolescents (187 males and 195 females) aged 13 to 15 years in Kajang, Selangor participated in this study. Majority of the respondents were Malays (56.0%), followed by Chinese (30.1%) and Indians (13.9%). Dietary practices, physical activity and body image of the adolescents were assessed through the eating behaviors questionnaire, two-day dietary record, two-day physical activity record and multi-dimensional body image scale (MBIS), respectively. Body weight and height were measured by trained researchers. The prevalence of overweight and obesity (19.5%) was about twice the prevalence of underweight (10.5%). About two-thirds of the respondents (72.3%) skipped at least one meal and half of them (56.2%) snacked between meals with a mean energy intake of  $1,641 \pm 452$  kcal/day. More than half of the respondents (56.8%) were practicing sedentary lifestyle with a mean energy expenditure of  $1,631 \pm 573$  kcal per day. Energy intake ( $r = 0.153$ ,  $P < 0.05$ ), physical activity ( $r = 0.463$ ,  $P < 0.01$ ) and body image ( $r = 0.424$ ,  $P < 0.01$ ) were correlated with BMI. However, meal skipping, snacking and energy expenditure per kg body weight were not associated with body weight status. Multiple linear regression analysis showed that body image, physical activity and energy intake contributed significantly in explaining body weight status of the adolescents. In short, overweight and obesity were likely to be associated not only with energy intake and physical activity, but also body image. Hence, promoting healthy eating, active lifestyle and positive body image should be incorporated in future obesity prevention programmes in adolescents.

**Keyword:** Adolescents; Body weight status; Dietary practices; Physical activity; Body image