

Associations between personality traits and body weight status with energy intake of adolescents in Hulu Langat District, Malaysia

ABSTRACT

Introduction: Personality traits are divided into five basic dimensions: extraversion, neuroticism, conscientiousness, agreeableness and openness. These influence our attitudes and behaviours. Studies show that differences in personality traits may influence the dietary intake. **Methods:** A cross-sectional study aimed at determining the association between personality traits and body weight status with energy intake was conducted among adolescents in Hulu Langat district of Selangor. Height, weight and waist circumference were measured and respondents completed a pre-tested self-administered questionnaire. Personality traits were assessed using the Malay version of USM Personality (USMaP-i). A single 24-h dietary recall was used to assess dietary intake. **Results:** A total of 430 adolescents aged 13-16 years (46% male and 54% female) was recruited. Female respondents tended to be more neurotic and agreeable compared to male respondents. A majority of the respondents (67%) were in the normal weight category, 26.7% were overweight and obese, while 19.0% had a high risk of developing abdominal obesity with a mean waist circumference of 72.65 ± 10.93 cm. Males significantly had a higher intake of energy (1425 ± 583 kcal), compared to females (1232 ± 462 kcal). Conscientiousness trait ($r = -0.158$, $p < 0.01$), BMI-for-age ($r = -0.147$, $p < 0.01$) and waist circumference ($r = -0.108$, $p < 0.05$) were inversely related to the energy intake of the respondents. **Conclusion:** Leaner adolescents and individuals with low conscientiousness were significantly consuming more energy than their counterparts. Understanding the personality traits that may regulate caloric intake is essential in order to develop effective interventions towards modifying obesity inducing eating patterns.

Keyword: Adolescent; Body weight status; Energy intake; Obesity; Personality traits