

Associations between home environment, dietary practice, and physical activity among primary school children in Selangor, Malaysia

Abstract

Introduction: The home environment plays an influential role in affecting dietary and physical activity practices of children. This study aimed to determine the association between the home environment, dietary practice and physical activity among primary school children in Selangor. **Methods:** This cross-sectional study was conducted in five primary schools selected using multistage stratified sampling. A total of 293 children (32.8% males and 67.2% females) (mean age of 11.0 ± 0.9 years) and their parents (10.7% fathers and 89.3% mothers) completed the study. Dietary practice of the children was assessed using a two-day dietary recall. Energy expenditure and physical activity of the children were assessed using a two-day physical activity recall. Parents of the children completed the Home Environment Survey (HES). **Results:** The mean energy intake of the children was 1765 ± 416 kcal/day with 75.0% not achieving the Malaysian Recommended Nutrient Intake (RNI) for energy. Almost all children (96.5%) were physically inactive, with a mean energy expenditure of 1269 ± 342 kcal/day. High availability of fruit/vegetable at home was associated with high vegetable intake ($r=0.128$, $p<0.05$) and low fat intake ($r=-0.115$, $p<0.05$). High availability of fats/sweets at home ($r=0.125$, $p<0.05$) and parental role modelling of healthy eating ($r=0.117$, $p<0.05$) were associated with high fruit intake. High availability of physical activity equipment at home was associated with high energy expenditure ($r=0.123$, $p<0.05$). Parental role modelling of physical activity was associated with high energy expenditure ($r=0.123$, $p<0.05$) and high physical activity ($r=0.123$, $p<0.05$). **Conclusion:** The results indicate the important roles of parents in promoting healthy eating and active lifestyles among children.

Keyword: Children; Dietary practice; Home environment; Physical activity