

## **Evaluation of the effectiveness of a 3-year, teacher-led Healthy Lifestyle Program on eating behaviors among adolescents living in day school hostels in Malaysia**

### **ABSTRACT**

**Background:** Independence gained during adolescence may be associated with unhealthy eating behaviors. Although malnutrition among adolescents is evident, studies on eating behaviors among adolescents are scarce. **Objective:** To determine the effectiveness of a teacher-led Healthy Lifestyle Program on eating behaviors among adolescents in Malaysia. **Methods:** This was a cluster randomized controlled trial (conducted in 2012 to 2014), with 100 schools randomly selected from 721 schools, then assigned to 50 intervention schools and 50 control schools. A Healthy Eating and Be Active among Teens (HEBAT) module was developed for pretrained teachers to deliver a Healthy Lifestyle Program on eating behaviors among adolescents. Eating behaviors of the respondents was determined using Eating Behaviors Questionnaire. Linear Mixed Model analysis and  $\chi^2$  test were used to determine within- and between-group effects of studied variables. **Results:** A total of 4277 respondents participated in this study, with 2635 samples involved in the final analysis, comprised of 921 intervention and 1714 control respondents. There were 32.4% (36.4%) males and 67.6% (63.6%) females in the intervention (control) group. Mean age was comparable between the groups (intervention = 12.98 years; control = 12.97 years). Majority of the respondents skipped meals at baseline (intervention = 74.7%; control = 79.5%). After the program, intervention respondents had higher consumption frequency of lunch, dinner, and mid-morning snack but a lower consumption frequency of late-evening snack and meal skipping behaviors than their control counterparts. **Conclusion:** The teacher-led Healthy Lifestyle Program was effective in reducing meal-skipping behaviors among Malaysian adolescents.

**Keyword:** Adolescents; Eating behaviors; Meal skipping; Snacking; Teacher-led healthy lifestyle program