

DIETARY INTAKE OF ADOLESCENTS IN BANGKOK ACCORDING TO STANDARD WEIGHT FOR HEIGHT

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Introduction: Rapid growth in adolescent years affects demand for energy and nutrients intake. Insufficient or over intake of energy and some nutrients may be responsible for weight related problems in adolescents.

Objective: To compare daily energy and nutrients intake among underweight, normal weight, overweight, and obese adolescents.

Method: The participants included 501 adolescents studying in grade 7-9 in 2 public schools in Bangkok Metropolis. All participants were asked to complete a 3-day food record which included 2 school-day and 1 weekend day. Their weight and height were also measured by the researcher. Percentage of standard weight for height (% wt/ht) was used to divide participants into 4 weight groups: underweight (%wt/ht <90.00), normal weight (90.00 – 110.00), overweight (110.01 – 120.00), and obese (>120.00) Data from food record were transformed to daily energy and nutrients intake using INMUCAL program. ANOVA was performed to compare daily energy and nutrients intake among weight groups.

Results: The participants were in normal weight for 38.9%, underweight for 27.5%, overweight for 12.0% and obese for 21.6%. According to 15 macro- and micro-nutrients chosen, the overweight and obese participants got less energy ($F = 3.067$, $p = .028$), carbohydrate ($F = 3.961$, $p = .008$), sugar ($F = 3.593$, $p = .014$), and calcium ($F = 3.523$, $p = .015$) than the underweight and normal weight participants. However, when ANOVA was performed for each gender, these differences were found in female participants only. In addition, participants in all 4 groups can reach 80% of the recommended level for only protein and Riboflavin intakes and none of the participants can reach 50% of the recommended level for calcium, iron, and vitamin C, when compared to Thai DRI.

Conclusion: Female adolescents who are overweight and obese might be at a higher risk for insufficient intake of energy and other nutrients than their counterparts. This might due to their dieting to control weight. Healthy eating

behavior should be promoted to overweight and obese female adolescents to help in controlling their weight successfully and growing up with optimum health.

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