

Energy and nutrient intakes: findings from the Malaysian Adult Nutrition Survey (MANS)

ABSTRACT

Nutrition surveys based on a representative sample of the Malaysian adult population have hitherto not been reported. In 2003, the Ministry of Health, Malaysia, conducted the Malaysian Adult Nutrition Survey (MANS), the first and largest nutrition survey in the country which aimed to provide detailed quantitative information on nutritional status, food and nutrient intakes, and physical activity pattern on a nationwide representative sample of adult subjects between the ages of 18 and 59 years. The survey covered four zones in Peninsular Malaysia (Central, Southern, Northern and East Coast), Sabah and Sarawak. This paper presents the mean and selected percentiles of energy and nutrient intake of 6886 subjects by selected demographic and socioeconomic characteristics. Energy contributions by macronutrients and dietary adequacy in relation to the Recommended Nutrient Intake for Malaysians are also described. Information on dietary intake was collected by trained nutritionists using a one day 24-hour diet recall. Dietary data were analysed using Nutritionist Pro, a diet analysis software and statistical analysis was carried out using the SPSS ver. 13.0. In most of the demographic and socioeconomic groups, males had higher mean energy (1776 kcal) and nutrient intake and percent achievement of RNI than females (1447 kcal). The proportions of calories derived from macronutrients were within the recommendations for a healthy diet. Intake of micronutrients such as iron, calcium and vitamin A was about 50% of RNI particularly in women. Sodium intake of Malaysians, not reported in earlier studies, is also made available. Under-reporting using the EI/BMR ratio was found in half of the population studied. The present study provides the first national estimates of energy and nutrient intake of the Malaysian adult population. Regular nutrition surveys are needed at the national level to provide valuable information on trends in food and nutrient intake, particularly among age and ethnically diverse subgroups of the population.

Keyword: Malaysian adult; Nutrition surveys; Energy; Nutrient intake