Diet acculturation and anthropometric measurements among Orang Asli in Gombak, Selangor, Malaysia

ABSTRACT

Background: This study was carried out to determine the relationship between dietary acculturation and anthropometric measurements among Orang Asli adults in Gombak, Selangor, Malaysia.

Materials and Methods: This cross-sectional study involved 85 Orang Asli adults aged 18 to 59 years old living in Gombak settlement. The information on socio-demographic characteristics, general acculturation and dietary acculturation were collected via interview-administered questionnaire. Anthropometric measurements on weight, height, waist circumference and body fat percentage were carried out.

Result: The mean general acculturation score was $61.7\pm9.7\%$ and 67% respondents were bicultural. Other than that, based on the total dietary acculturation score, 47.1% practiced bicultural diet. In fact, around half of the respondents were overweight (30.6%) or obese (25.9%). Besides, significant linear relationships were discovered between Western dietary acculturation with waist circumference (*B*=1.72, p<0.05) and body fat percentage (*B*=1.21, p<0.05). Furthermore, Indian dietary acculturation was significantly related with increased BMI (*B*=0.77, p<0.05), waist circumference (*B*=2.07, p<0.05) and body fat percentage (*B*=1.55, p<0.01).

Conclusion: The majority of the respondents lived as bicultural and practiced bicultural diet. The acculturation of Western and Indian diets had been related to the increased risk overweight or obesity. Thus, more nutrition education and nutrition promotion programs pertaining to healthy food choices need to be organized in order to improve nutritional status among Orang Asli in Malaysia.

Keyword: Orang Asli; Dietary acculturation; Anthropometric measurements