

## **Relation of dietary fat intake perception to nutritional status and psychosocial factors.**

### **ABSTRACT**

Excess dietary fat intake is associated with many chronic diseases. This cross-sectional study determines the differences in nutritional status and diet-related psychosocial factors by accuracy levels of dietary fat intake perceptions among adults. A total of 202 Universiti Putra Malaysia staff (20-55 years old) volunteered to participate in the study. Dietary fat accuracy levels (under-estimate, accurate and over-estimate) were determined by assessing actual fat intake through 24-hour diet recall and self-rated fat intake. Diet-related psychosocial factors assessed were perceived risks, intention to change, outcome expectancies and perceived barriers. About half (49.5%) of the respondents were classified as accurate estimators, while 35.6% and 14.9% were under-estimators and over-estimators, respectively. Dietary fat intake differed significantly between the dietary fat accuracy groups with under-estimators having the highest amount of dietary fat intake ( $F=17.10$ ;  $p<0.001$ ) and percentage of fat calories ( $F=103.99 \pm 0.533\%$ ,  $p<0.001$ ). Over-estimators had the highest mean BMI ( $F=3.11$ ,  $p<0.05$ ) compared to other groups. Among the fat accuracy groups, under-estimators reported the least barriers to eating low fat foods ( $F= 3.671$ ,  $p<0.05$ ). There were no significant differences in waist circumference, energy intake, perceived disease risks, intention to change and outcome expectancies among the dietary fat accuracy groups. These findings suggest that inaccurate perceptions of dietary fat intake should not be overlooked as one of the cognitive barriers to dietary change and factors that influence nutritional status among adults.

**Keyword:** Dietary fat intake perception; Nutritional status; Psychosocial factors.