

## **Validation of the Malaysian coping strategy instrument to measure household food insecurity in Kelantan, Malaysia**

### **ABSTRACT**

Background: Food insecurity occurs whenever people are not able to access enough food at all times for an active and healthy life or when adequate and safe food acquired by socially acceptable ways is not available. Objective: To validate the Malaysian Coping Strategy Instrument (MCSI) to measure household food insecurity in Kelantan, Malaysia. Methods: A cross-sectional study was conducted on 301 nonpregnant, nonlactating Malay women, aged between 19 and 49 years, living in rural and urban areas. The respondents were interviewed with the use of a structured questionnaire to obtain information on their demographic and socioeconomic characteristics, household food security, and dietary intake. Results: Demographic and socioeconomic characteristics (household size, number of children, number of children attending school, household income, and per capita income) were significantly associated with household food-security status in rural and urban areas. Energy intake, fat intake, percentage of energy from fat, and number of servings of meat, fish, or poultry and legumes were significantly associated with household food-security status in rural areas. The dietary diversity score was significantly associated with household food-security status in rural and urban areas. Conclusions: Validating the MCSI in other areas of Malaysia as well as in similar settings elsewhere in the world before it is used to measure household food insecurity in the population is strongly recommended. In this study, the MCSI was found to be a reliable and valid measure of household food insecurity based on criterion-related validity, particularly in terms of demographic and socioeconomic characteristics and dietary diversity.

**Keyword:** Consequences; Determinants; Dietary intake; Food insecurity; Malaysian coping strategy instrument; Prevalence; Validation