## Prevalence of metabolic syndrome and its associated factors among vegetarians in Malaysia

## ABSTRACT

The prevalence and factors associated with metabolic syndrome (MetS) remain unknown in Malaysian vegetarians. This cross-sectional study aimed to determine the prevalence of MetS among vegetarians in Kuala Lumpur and Selangor and its associated factors. The data on socio-demographic characteristics, vegetarianism practises, lifestyle behaviours, body weight, height, waist circumference (WC), systolic blood pressure (SBP), diastolic blood pressure (DBP), fasting blood glucose (FBG), and blood lipid profiles were collected from 273 vegetarians. A majority of the respondents were lacto-ovo vegetarians (44.0%), females (64.8%) and Chinese (54.9%). The prevalence of MetS was 24.2%. High BP (48.7%) and high WC (43.6%) were the most common MetS components. Females had lower WC, SBP, DBP, FBG, TG and higher HDL-c (p < 0.05) as compared to males. Multiple logistic regression analysis showed that being overweight and obese (Odds Ratio (OR) = 7.74, 95% Confidence Interval (CI): 4.04<sup>-1</sup>4.82) was the main risk factor of MetS after being adjusted for sex and age. This study found that one in four vegetarians had MetS. An intervention programme should be developed to reduce Body Mass Index (BMI) among vegetarians, especially among those who are found to be overweight and obese.

**Keyword:** Metabolic syndrome; Vegetarian; Vegetarianism practises; Overweight; Lifestyle behaviours