

A16 An online survey of association of sociodemographic factors and nutritional status with type 2 diabetes risk among a sample of Malaysian adults

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The prevalence of undiagnosed diabetes in Malaysia had increased over the past decades. Therefore, it is important to evaluate T2DM risk for earlier prevention of T2DM. This cross-sectional study aimed to determine T2DM risk and its associated factors among a sample of Malaysian adults. This online survey used a self-administered questionnaire to assess sociodemographic factors and self-reported anthropometric measurements. The Singapore Short Diet Screener and Finnish Diabetes Risk Score questionnaire (FINDRISC) were used to assess dietary intake and T2DM risk score. A total of 191 respondents (49 males, 142 females) with a mean age of 30±9 years old participated in this study. About 39.2% of the respondents had elevated T2DM risk, with 4.7% had high risk. Also, 46.1% of the respondents had a family history of diabetes. Percentages of respondents with overweight, obesity and abdominal obesity were 20.4%, 13.6% and 30.4% respectively. The mean energy intake of respondents was 1384 kcal/day. The mean carbohydrate intake of respondents exceeded the recommended intake while the mean fat, total dietary fiber and food group intakes were lower than recommended. T2DM risk was significantly associated with increasing age ($r=0.325$, $p<0.001$), being female ($p=0.001$), of Malay ethnicity ($p<0.001$), being married ($p<0.001$), increasing household income level ($r=0.158$, $p=0.029$), having family history of diabetes ($p<0.001$), increasing weight ($r=0.526$, $p<0.001$), increasing BMI ($r=0.631$, $p<0.001$), abdominal obesity ($p<0.001$), decreasing bread, cereal and cereal products intake ($r=-0.177$, $p=0.019$), decreasing non-starchy vegetable intake ($r=-0.164$, $p=0.023$), increasing fats and oils intake ($r=0.156$, $p=0.031$), increasing tea and coffee intake ($r=0.307$, $p<0.001$), seldom/never eating at other restaurant ($p=0.030$) and used palm oil for home-cooked food ($p=0.011$). The risk factors identified in this study require attention from the healthcare professionals to prevent the high-risk population from developing T2DM in the next 10 years.