

B02 The relationship between taste perception and dietary intake among different ethnic subjects

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Taste is one of the key factors to food intake that can further influence an individual's food choices and ultimately their dietary intake. Perception of taste is also influenced by ethnic background. Therefore, this study was conducted to measure the relationship of taste sensitivity and sweet taste acceptance with the nutritional status and food intake of subjects among different ethnic subjects. A total of 86 subjects aged between 20 to 45 years were recruited for this study. Two types of samples namely basic taste solution (sucrose) and food samples (rose flavoured agar) were evaluated for sweetness intensity score and hedonic reaction using general Labelled Magnitude Scale (gLMS). Subjects completed the 3-days food diary to record their food intake. Overall, there was no significant difference between sweet taste sensitivity and sweet taste acceptance among different ethnic groups ($p>0.05$). However, Malays tend to have a low sweet sensitivity compared to the other ethnics group. Other than that, no relationship was observed between taste sensitivity and sweet taste acceptance except at low sucrose concentrations (120 g/L, $p>0.05$). Evaluation on dietary intake showed that there was no relationship between energy and fat intake with taste sensitivity and sweet taste acceptance except on carbohydrate and protein intake. In conclusion, individual sweet taste perceptions do not affect dietary intake. Further studies can be conducted in the future to identify the need for taste perception as an indicator of human food acceptance and intake.