

Stages of change to increase fruit and vegetable intake and its relationships with fruit and vegetable intake and related psychosocial factors

ABSTRACT

BACKGROUND/OBJECTIVES: Understanding individual's intention, action and maintenance to increase fruit and vegetable intake is an initial step in designing nutrition or health promotion programs. This study aimed to determine stages of change to increase fruit and vegetable intake and its relationships with fruit and vegetable intake, self-efficacy, perceived benefits and perceived barriers.

SUBJECTS/METHODS: This cross-sectional study was conducted among 348 public university staff in Universiti Putra Malaysia. A pre-tested self-administered questionnaire and two days 24-hour diet recall were used.

RESULTS: Half of the respondents (50%) were in preparation stage, followed by 43% in action/maintenance, 7% in pre-contemplation/contemplation stages. Respondents in action/maintenance stages had significantly higher self-efficacy ($F = 9.17, P < 0.001$) and perceived benefits ($F = 5.07, P < 0.01$) while respondents in pre-contemplation/contemplation and preparation stages had significantly higher perceived barriers ($F = 4.83, P < 0.05$). Perceived benefits tend to outweigh perceived barriers pre-ceding to taking action. Self-efficacy is important in motivating individuals to increase fruit and vegetable intake as self-efficacy and perceived barriers crossed over between preparation and action/maintenance. Respondents in action/maintenance stages had the highest adjusted mean serving of fruit and vegetable intake ($F = 4.52, P < 0.05$) but the intake did not meet recommendation.

CONCLUSION: Intervention strategies should emphasize on increasing perceived benefits and building self-efficacy by providing knowledge and skills to consume a diet high in fruits and vegetables in order to promote healthy changes in having high fruit and vegetable intake.

Keyword: Stages of change; Self-efficacy; Perceived barriers; Perceived benefits