PH16: Development of Healthy Soup as Preload for Primary School Children in Malaysia

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ABSTRACT
Introduction: Studies have shown that both food preferences and satiating effect of food are key determinants of energy intake for children. Previous evidence revealed that serving soup as preload can reduce food intake during subsequent meal. To enhance satiety, several characteristics of soup had been suggested, including the amount consumed, nutrient content, energy content, temperature and viscosity. However, Malaysia as a multi-ethnic society may have different soup preferences among the different ethnicities. Thus, the aim of this study is to develop a healthy soup that is acceptable by Malay, Chinese and Indian primary schoolchildren in Malaysia. Methods: Formulation of the healthy soup will be developed based on the preferences of children indicated through a food preference questionnaire. Nutrient composition such as total carbohydrate, protein, fat, water and ash contents will be determined using proximate analysis (AOAC methods), while sodium will be determined using Atomic Absorption Spectroscopy (AAS). Total energy content will be calculated by adding the energy provided by the protein, fat and total carbohydrate. Participants will evaluate overall acceptability of the soup using a five-point facial hedonic scale. Results: It is hypothesized that the newly developed healthy soup will be accepted by children from all three different ethnicities. It can be a choice of preload for children that may be able to reduce their food intake during a subsequent meal. Conclusion: The development of a healthy soup as preload for children may increase their satiety. Consuming this preload may avoid the overconsumption of high fat food and unhealthy snacks in subsequent meals.

KEY WORDS:
Preload, soup, sensory, hedonic, satiety