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**A study on consumer preference for instant food products and the development of a pumpkin- and canistel-based instant pudding powder mix**

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Consumer preferences are changing from time to time. Therefore, this study was conducted among working and non-working women in the Ratnapura district to identify current consumer preferences for instant food products and pumpkin-based food products. The results of this study revealed that convenience in preparation is the main reason for purchasing instant foods. However, many consumers believe that instant foods are not healthy. According to this survey, occupation, working hours per day, and the average income of the family influence consumer preference towards instant food products. There were significant differences among occupation ( $X^2 = 47.5$ ,  $P = 0.011$ ), working hours per day ( $X^2 = 3.74$ ,  $P = 0.019$ ) and average income of the family ( $X^2 = 24.52$ ,  $P = 0.001$ ). The majority of the respondents (202) preferred to see plant-based instant foods in the local market. Additionally, many respondents (80.6%) stated that the available pudding/pudding mixes at the local market are not good for health, mainly due to less nutrients, high sugar content and too much added artificial ingredients. Therefore, this study will be useful to the manufacturers of instant foods to understand the preferences of modern consumers to enhance sales. Furthermore, this study revealed that the consumption of pumpkin and availability of pumpkin-based products in the local market are low although the post-harvest loss of pumpkin is high in Sri Lanka. Many respondents (64.5%) stated that they do not like much for the taste of pumpkin although, majority of the respondents (64.2%) were aware of the nutritional value of pumpkin. However, many respondents (83.9%) preferred to purchase new pumpkin-based food products. Therefore, pumpkin (*Cucurbita maxima*)- and canistel (*Pouteria campechiana*)-based instant pudding mix fortified with pumpkin and chia seeds was also developed in this study. This novel, cost effective, and convenient pudding mix was found to be a good source of  $\beta$ -carotene (7.34 mg/100 g) and fibre (4.89%). Four pudding formulae were prepared with different proportions of ingredients. A sensory evaluation was conducted to evaluate consumer acceptance for colour, texture, taste, aroma, appearance, overall acceptability and purchasing intention using a nine-point hedonic scale. The sensory attributes of the best treatment were compared with a local commercial pudding mix. The formula with 37% pumpkin powder and 25% canistel powder was significantly different from other treatments and showed the highest mean scores for all sensory attributes. Additionally, the sensory attributes of the new pudding mix were similar to the compared locally available pudding mix except for colour and aroma. Therefore, this study revealed that there is a potential to develop a tasty, nutritionally rich, and microbiologically safe pudding mix from pumpkin and canistel.

**Keywords:** Beta carotene ( $\beta$ -carotene), *Cucurbita maxima*, Instant foods, *Pouteria campechiana*, Sensory attributes