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SIRIKET SAELEE : COMPARATIVE STUDIES OF NUTRITIVE
 VALUE IN VARIETIES OF PUMPKIN AND ASSESSMENT OF PUMPKIN
 SEEDS CONSUMPTION DATA. THESIS ADVISORS : VORANUNT
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The role of pumpkin seeds in lowering the risk of urolithiasis is well known. But whether different varieties of pumpkin have the same nutritive values or have the same effect for the diseases needs to be elucidated. The objectives of this study are to determine the nutritive values of seed and flesh of three varieties of pumpkin commonly seen in Thai markets and to assess the consumption data of pumpkin seeds in Thais living in Bangkok metropolitan area. Raw, roasted and boiled pumpkin seeds of *Cucurbita moschata* Black variety, Stripe variety and *Cucurbita pepo* Japanese variety were assayed for macro and micronutrients, namely : protein, fat, carbohydrate, dietary fiber, ash, moisture, energy, calcium, phosphorus, magnesium, sodium, potassium, iron, zinc and copper. Raw flesh and boiled flesh with and without skin were assayed as well. Two way ANOVA was used to compare the results.

It was found that heat treatment had influence on the nutrients. Protein, fat, carbohydrate and energy of roasted seeds were more than those of boiled and raw seeds, but the dietary fiber of roasted seeds was less than that of raw seeds. Calcium, phosphorus, magnesium, iron of boiled > roasted > raw seeds. Whereas potassium, iron, zinc of roasted > boiled > raw. Japanese variety was better than Black and Stripe varieties. Nutritive value of flesh was less than that of pumpkin seeds. Raw flesh had higher nutritive value than boiled flesh. Without skin was better than with skin in boiled for all parameters except for fiber, moisture, ash, iron and zinc. Consumption data of pumpkin seeds was assayed by questionnaire. The response rate was 100 %. The ratio of consumption to non-consumption was 76 : 24. Commercial whole pumpkin seeds were preferred. Only 2 - 3 % of the survey subjects consumed every day whereas about 22 - 23 % consumed once every one to three months.

This study suggested that different varieties had different nutritive values. Pan Dum and Pan Yeepoon were the variety of choice. Pumpkin seeds were nutritious. It would be more fruitful to promote pumpkin seeds to the public.