



NUTRITIONAL AND ANTIOXIDANT POTENTIAL OF POPULAR SRI LANKAN TRADITIONAL SWEETMEATS

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Abstract

Sweetmeats have gained tremendous attention among the Sri Lankan traditional foods, especially during the traditional Sinhala and Tamil New Year or any occasion. This study investigated the macro-nutrients and antioxidant potential of fourteen traditional sweetmeats (*Konda kewum*, *Beraliya kewum*, *Naran kewum*, *Athirasa*, *Mung kewum*, *Aasmi*, *Kokis*, *Welithalapa*, *Dodol*, *Aluwa*, *Thalaguli*, *Habalapethi aggala*, *Kurahan helapa* and *Gotupittu*) popular in Southern province of Sri Lanka. Traditional sweetmeats recipes were standardized by using recipes collected from the household women in Southern province. Traditional sweetmeats formulated with standardized recipes were analyzed for major nutrients using standard analytical methods and 80% methanolic extract of defatted sweetmeats were evaluated for antioxidant potential (AP) by Ferric Reducing Antioxidant Potential (FRAP), ABTS radical scavenging activity and DPPH radical scavenging assays. The results indicated that, all deep-fried sweetmeats have higher fat contents ranged from 7.9% (*Aasmi*) to 16.3% (*Beraliya kewum*). The highest protein and carbohydrate contents were shown by *Thalaguli* (8.12%) and *Konda kewum* (64.3%) respectively. All the sweetmeats are energy-dense (249.48-406.05 kcal/100g) while deep-fried *Konda kewum* had the highest. Among the sweetmeats examined for antioxidant potential, *Naran Kewum* showed the significantly highest AP (51.04±0.0015 mM TE/1g Dry Mass) by FRAP assay. *Kurahan helapa* showed the significantly highest radical scavenging activity for DPPH (152.8 ±0.0245 (mM TE/1g DM) and ABTS (1.98±0.0015 mM TE/1g DM) assays. Further, *Naran Kewum* showed the significantly highest phenolic content (1462.67±0.005 µg GAE/1g DM) and flavonoid content (638.26±0.012 µg QE/1g). The findings of this study can be exploited to aware the general community about the basic nutritional and functional properties of Sri Lankan traditional sweetmeats.

Keywords: traditional sweetmeats, Sri Lanka, macronutrients, antioxidant activity, energy