

## DETERMINATION OF NUTRIENT LEVELS AND ANTIOXIDANT CONTENT OF *THRIPOSHA* AND A SIMILAR MARKET PRODUCT

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*Thripasha* is given for nutritionally vulnerable preschool children, pregnant and lactating women, for free of charge by the government of Sri Lanka. It is a cereal and legume based product, pre-cooked and ready to eat, known to provide energy, protein and micro nutrients in adequate levels for vulnerable groups. There are several similar products with different food compositions in the market, and it would be beneficial to compare the nutritional levels of these products. Present study was conducted to determine the nutrient levels and antioxidant content of two types of *Thripasha* (adult and infant) and one of the leading commercially available market products. Raw *Thripasha* or the market product flour (25 g), 5.9 g of coconut scrapings, 7.5 g of sugar, 0.67 g of salt and 10 mL of distilled water were mixed to prepare test foods. The nutrient levels and physico-chemical properties of prepared food samples were determined by standard procedures and antioxidant content was determined by ABTS cation free radical decolourations assay. According to the results, no significant difference ( $p>0.05$ ) was observed in protein content among three test samples. However, there was a significant difference ( $p<0.05$ ) in fiber content. The crude protein content and fiber levels were higher in the market product ( $31.6\pm 2.94\%$  and  $18.4\pm 0.13\%$ , respectively) compared to *Thripasha* (infant) ( $28.8\pm 1.31\%$  and  $6.4\pm 2.31\%$ , respectively) and *Thripasha* (adult) ( $25.8\pm 0.53\%$  and  $5.1\pm 0.89$ , respectively). There was a significant difference ( $p<0.05$ ) in fat content among the test samples while there was no significant difference ( $p>0.05$ ) in antioxidant content. Fat ( $8.5\pm 0.82\%$ ) and antioxidant ( $497.7\pm 120.84$   $\mu\text{g}/100$  g fresh weight, per trolox equivalents) content were high in *Thripasha* (infant). In conclusion, major nutrient content and antioxidant content of *Thripasha* (infant) and the market product were found to be higher compared to *Thripasha* (adult).

**Keywords:** Antioxidant, Nutrient levels, *Thripasha*