Nutritive value of traditional foods used for breakfast

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Introduction: The nutritive value of traditional breakfast foods or foods prepared with indigenous raw materials available in Sri Lanka are a neglected area of research. These foods have been consumed by Sri Lankans for centuries but have been slowly replaced with wheat based food products.

Objective: To study a few such foods/foods made with indigenous raw materials for their nutritional properties.

Methodology: The foods studied included four traditional tubers and foods made with *Cycas circinalis* (madu) seeds (roti *and pittu*) and *Vateria copallifera* (hal) fruit (pittu) and *Caryota urens* (kithul) pith (roti, *thalapa and* muffin). The proximate compositions (ash, moisture, digestible carbohydrate, crude protein, soluble and insoluble dietary fibre and total fat contents) of these foods made according to standard recipes were determined by the AOAC methods. Antioxidant capacity was determined as Trolox Equivalents (TEAC) and phenolic/polyphenol content as Gallic Acid Equivalence (GAE/100g fresh weight). The glycaemic indices were determined with healthy volunteers according to WHO criteria.

Results: *Kithul thalapa* and *buthsarana* were categorized as high GI foods with $(\pm SEM)$ 128 \pm 11 and 110 \pm 8 respectively. Muffin prepared from *kithul* flour and *hulankeeriya* had medium GI values of 92 \pm 9 and 82 \pm 8 respectively. The *madu roti* and *pittu*, *kithul roti*, *hal pittu* and two *raja ala* varieties (raja *ala* violet and white) had low GI (66 \pm 6, 72 \pm 4, 57 \pm 4, 67 \pm 7, and 64 \pm 9 and 69 \pm 4 respectively) Phenolic/polyphenolic contents of the raw flour ranged from 79-1162 (GAE/100 g FW) with the antioxidant capacity ranging from 3-225 TEAC.

Discussion: Traditional breakfast foods could be recommended for both healthy and people with impaired glucose tolerance.

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