Long storable coconut paste as an alternative for highly perishable coconut milk in domestic use

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In the domestic consumption of coconut, it is included in our diet in several ways. Most commonly used is in the form of coconut milk. However in the preparation of *Mallum* and *Sambol* the grated kernel is used. Once the milk is extracted, the residue is discarded. The residue thus thrown away contains about 30% of the fat and protein present in coconut. It contains 3.6% moisture, 3.1% minerals, 10.9% fat, 12.1% protein, 60.9% dietary fibre and 9.4% other carbohydrates. The most important component of coconut residue is dietary fibre. It is a well-known fact that dietary fibre is essential for the maintenance of good health. It can thus be seen that a considerable amount of nutritive substance is lost with the discarded refuse. Therefore main objective of this study was to develop a method to utilize whole kernel with minimal wastage.

Scraped coconut was dried to a moisture content less than 2% in an oven at different temperatures, 60 ^{0}C, 70 ^{0}C and 80 ^{0}C exposed for 2 h, 1.5 h and 1 h respectively. Results indicated that drying at 80 ^{0}C for one hr was the most effective drying compared to the others. Dried coconut was ground into a paste with the use of an electric grinder. The paste was analyzed for its physico-chemical (moisture, fat, minerals, proteins, fiber and other carbohydrates) and microbiological parameters. The paste contained 2.5% moisture, 65.9% fat, 7.9% protein, 4.0% dietary fiber, 2.0% minerals and 17.7% other carbohydrates. The water activity and pH were 0.7 and 6.7 respectively. Coliform count was at zero level, and yeast & mold count was less than 10. The paste was evaluated for its shelf life (free fatty acid content and peroxide value) at ambient (30$\pm$2 ^{0}C) and refrigerated (5$\pm$2 ^{0}C) conditions for three months. No change was noticed in peroxide value within the storage period at both storage conditions. However, FFA levels increase from 0.02% to 0.06% at room temperature and 0.02% to 0.04% at refrigerated temperature. Sensory evaluation revealed that these levels of change did not affect the sensory properties. Various dishes were prepared using the coconut paste and they were compared with those dishes that were prepared with traditional coconut milk. No significant difference ($p>0.05$) was observed between foods prepared with coconut milk and the above coconut paste.

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