

## Development of Cashew Nut Spread with Cocoa

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Cashew nuts are one of the most nutritious, healthy and tasty tree nuts. Nut spreads are popular and widely accepted by the consumers due to their flavour, nutritional values and convenience. The market leader of the nut spread industry in Sri Lanka is the product “Nutella”. However there are no locally manufactured nut spreads similar to the product “Nutella” in the local market. Therefore the prime objective of this study was to develop a nut spread with cocoa which is similar to the product “Nutella” using locally grown cashew nuts. Cashew nut spread with cocoa was developed using the ingredients of cashew butter, cocoa powder, sugar, water, vegetable oil, skimmed milk powder, whey powder, lecithin and carrageenan. Three developed spreads having different cashew butter to cocoa powder ratio were evaluated for sensory attributes of appearance, colour, odour, spreadability, taste, mouth feel and overall acceptability. Another sensory evaluation was conducted with two developed spreads and the product “Nutella” to evaluate the same sensory attributes. Shelf-life of the most sensory scored sample was tested for six weeks by evaluating microbial, physico-chemical and sensory properties. A cost analysis was done for the selected product and its crude protein, crude fat, moisture, total solids, ash and crude fiber content were determined. Data about the sales of the product “Nutella” were collected from all local Cargills super markets for the year 2014 and for first five months of the year 2015. This study reveals that the cashew nut spread with cocoa prepared with 8.5% cashew butter and 5% cocoa powder scored maximum for almost all sensorial quality attributes and the product “Nutella” was most preferred than those of developed products. The best sensory scored sample could be stored best at refrigeration condition. A reducing trend was observed in pH value, but the product remained unchanged with respect to brin value and oil separation. The selected product contains 0.91% crude protein, 14.66% crude fat, 28.51% moisture, 71.49% total solids, 4.16% ash on dry basis and 1.83% of crude fiber. The cost for 180 g bottle of the best scored spread was Rs.70.10. Cashew nuts can be effectively used for the production of a nut spread with cocoa and it will open a new avenue for the utilization of cashew nuts. The developed product could have a good potential in Sri Lankan market.

**Keywords:** Cashew nut, cocoa, Nutella, nut spread