EFFECT OF DRIED CURRY LEAVES (*Murraya koenigii* L.) POWDER ON QUALITY ATTRIBUTES OF CREAM CHEESE

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As global demand for functional foods increases, the potential for new combinations of foods are favoured for maintaining healthy lifestyles. This study was aimed to examine the effects of dried curry leaves (*Murraya koenigii* (L.) Spreng.) powder (CLP) on physicochemical, microbiological, antioxidant and sensory quality of fresh cream cheese. Three treatments of cream cheese infused with 0.15% (T_2), 0.2% (T_3) and 0.25% (T_4) of CLP were compared with a control sample (0% CLP, (T_1) for its quality for 10 days of storage at 4 °C. Variations of pH, titratable acidity, syneresis, moisture percentage, total solids and fat content were tested using standard procedures. Viable counts of yeast and mould, coliform and total aerobic microbes were evaluated throughout the storage period. Antioxidant properties of four treatments were evaluated using Total Phenolic Content (TPC), 1,1-diphenyl-2-dicryl-hydrazyl (DPPH) radical scavenging and Ferric Reducing Antioxidant Power (FRAP) *in vitro* assays. Extractions were prepared using 80% methanol. The study revealed that addition of CLP influenced significantly ($p<0.05$) to reduce the fat content and to enhance the total antioxidant capacity via TPC and FRAP assays. The IC_{50} (mg/ml) values from DPPH assay deviated in a linear manner ($T_4<T_3<T_2<T_1$) among the samples, indicating that there is a positive influence on the total antioxidant capacity due to addition of CLP. The pH, titratable acidity, syneresis, moisture percentage, total solid content and microbiological qualities were not ($p>0.05$) affected by addition of CLP. The sensory evaluation revealed that 0.2% CLP containing sample (T3) had the highest scores for colour, aroma, flavour and texture among the four treatments. Therefore, the study has revealed that a novel dairy product can be produced by infusing dried curry leaves powder to fresh cream cheese for improving its physicochemical, antioxidant and sensory properties.

Keywords: Antioxidants, Fermented dairy food, Functional food, Total phenolic content