

Abstract

A nutraceutical is a product isolated or purified from foods that is generally sold in medicinal forms not usually associated with foods. The nutraceuticals are biological therapies used to promote wellness. In recent years the increase of life style related diseases such as diabetes mellitus and obesity have been referred as social issues which leads to the loss of quality of life and increases in medical care expenses. As a solution to this issue, there has been an attempt to create a society for healthy aging, by shifting the way of thinking away from lifestyle related diseases and treatment by drugs to positive prevention of disease by food containing bioactive compounds extracted from different herbs. The aim of this study was to incorporate *Caesalpinia bonducella* seed extract and *Centella asiatica* leaves extract in to a artificial sugar formulated dairy products. The locally available *Caesalpinia bonducella* seed and *Centella asiatica* were procured and their aqueous and organic solvent extracts were characterized for the anti-oxidative properties. The total phenolic contents and flavonoid content present in *Caesalpinia bonducella* seed extract were found to be 681.33 mg/ 100 g gallic acid equivalent of phenol and 128.5±8.23 mg/100g gallic acid equivalent, while in *Centella asiatica* leaves extract it was 497 mg/100 g gallic acid equivalent of phenol and 122.67±9.17 mg/100g gallic acid equivalent respectively. The percentage inhibition of DPPH radical 71.57±4.98 and 55.65±1.4% were observed for *Caesalpinia bonducella* seed extract and *Centella asiatica* leaves. The encapsulated beads of *Caesalpinia bonducella* seed extract, *Centella asiatica* leaves extract and the mixed of both extract were incorporated in kalakand formulated with artificial sweetener (Saccharin). The texture profile analysis, proximate analysis and the sensory attributes of artificial saccharin kalakand formulated with different encapsulated beads of *Caesalpinia bonducella* seed extract, *Centella asiatica* leaves extract and the mixed of both extracts does not showed any significant difference the controlled product. Thus, the formulated encapsulated products (alternative to delivery system as most of the compounds responsible for health benefits are lost during processing and also effects various sensory attributes) showed good antioxidative properties.