

**DEVELOPMENT OF VALUE ADDED STIRRED  
YOGHURT RIPPLED WITH COOKING  
CHOCOLATE SYRUP**

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## ABSTRACT

Chocolate is one of the most popular confection with high nutritive value which majority not heard so far. Incorporation of chocolate in to conventional yoghurt increases the organoleptic profile of the product while conveying different experience to the consumer. The aim of the study was, to develop ripple stirred yoghurt using cooking chocolate syrup.

Stirred yoghurts were prepared according to the standard procedure with slight modifications to the gelatin percentage. There were three treatments with respect to gelatin percentage as 0.5% (w/v), 1.0% (w/v) and 1.5% (w/v). Best gelatin percentage was selected by sensory evaluation using 07 trained panelists at day 01. Stirred yoghurts prepared with selected gelatin percentage were rippled with 6.5 mL (based on preliminary trials) of chocolate syrup of three concentrations as 40% (w/v), 50% (w/v) and 60% (w/v). Chocolate incorporated stirred yoghurts prepared with 0.5% gelatin were evaluated by using 30 untrained panelists with 5 point hedonic scale to assess sensory attributes such as, colour, appearance, chocolate flavour, sweetness and overall acceptability. Sensory data were analyzed by friedman non-parametric statistical method while titratable acidity and pH were analyzed by one-sample t-test in MINITAB 14. Shelf life determination was done by analyzing titratable acidity, pH, yeasts and moulds, total colony count (TCC), coliforms and *Escherichia coli* at two days intervals for 15 days compared with plain stirred yoghurt (control sample).

Stirred yoghurt prepared with 50% chocolate syrup concentration showed higher ( $P < 0.05$ ) preference with all sensory attributes except appearance. The pH and titratable acidity of stirred yoghurt with 0.5% gelatin and 50% chocolate syrup showed higher significance ( $P < 0.05$ ) compared to the control at day 3. Coliforms and *Escherichia coli* were not detected with the storage duration. Yeast and mould counts were not exceed the specifications in Sri Lankan Standards for the set yoghurt during 10 days.

Based on results it can be concluded that stirred yoghurt rippled with chocolate syrup prepared with 0.5% gelatin and 50% chocolate syrup concentration has highest sensory attributes with 09 days of shelf life at 4 °C temperature.