Utilization of Egg-shell Powder as a Calcium Fortifier in Stirred Dibis Probiotic Yoghurt.

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Abstract:

Date syrup (Dibis) and egg-shell powder were prepared from Siwi date variety and white egg chicken, respectively. Stirred dibis probiotic yoghurt (SDPY) was prepared by adding different concentrations of egg-shell powder (0.5, 0.6, 0.9 and 1.1%) to milk and mixed with 1.5% skim milk powder, 0.4% gelatin and 10% dibis then inoculated with probiotic bacteria ABT-5 (Lactobacillus acidophilus, Bifidobacterium bifidum and Streptococcus thermophilus) and held at 6±2°C for 9 days. Our results showed that the date syrup was high in total solids & acidity; and rich in Ca, K, P, Mg and Fe. While, egg-shell powder was alkaline and rich in Ca, P, Mg and Fe. The presence of egg-shell powder in probiotic yoghurt may increase the TS, density, Ca, Mg, Fe and net utilization calcium (NU Ca). It is clear from our results that as the storage period progressed, the SN/TN of all treatments gradually increased for all treatments. There are significant differences among all the treatments and during storage periods for all chemical analyses (p

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