Swarnalatha G, J Veterinar Sci Technolo 2014, 5:3
http://dx.doi.org/10.4172/2157-7579.S1.006

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Animal & Dairy Sciences
September 15-17, 2014 Hyderabad International Convention Centre, India

Quality characteristics of set yoghurt blended with tender coconut water-milk: Carrageenan

Swarnalatha G
Sri Venkateswara Veterinary University, India

New and innovative type of yoghurts and yoghurt products are being marketed resulting in a phenomenal increase in the per-capita consumption of this product. TCW is popular because of its healing property such as oral and intravenous rehydration during loss of body fluids due to acute gastrointestinal infections and in combating intestinal worms and relieving stomach problems. Therefore, an investigation was undertaken on the feasibility of use and comparative efficiency of carrageenan to enhance consumer acceptability of set yoghurt. Set yoghurt was prepared using carrageenan at 0.15-0.25%, tender coconut water(TCW) - milk blends at 10:90, 20:80, 30:70 using 1% Streptococcus *thermophilus*(ST)and *Lactobacillus bulgaricus*(LB) and control without carrageenan and TCW. carrageenan increased the wheying off in TCW- milk blended yoghurt considerably, especially at higher concentration (0.25%). However, the results showed the beneficial effect of carrageenan in improving the firmness of set yoghurt when it is used at an appropriate level (0.05-0.15%). Therefore, the lower levels (0.05%-0.15%) were used for further studies. The firmness improved at 0.05% of the carrageenan at 10:90 TCW – milk blends. Penetration value, setting time, syneresis was evaluated. Sensory attributes were evaluated by 5 judges on 100 points for firmness, syneresis, flavour, body & texture. Viability of cultures was studied in yoghurt by withdrawing samples at 0, 3 and 0, 5, 10, 15 days at room and refrigerated temperatures respectively. Sensory scores were maximum for 10:90 TCW-milk 0.05% carrageenan compared to control. As concentration of carrageenan increased setting time decreased (280 to 270 min.)While, increased with increase in concentration of TCW-milk blends. Syneresis decreased with increase in concentration of carrageenan (1.5 ml /35 ml of yoghurt). Quality characteristics were non-significant (P≥ 0.05%) between control and treated samples. Initial counts of ST and LB were ≥ 107cfu/g , after 3 & 15 days of storage at room (30±2°C) & refrigerated temperature (5±2°C) , these were 105cfu/gm respectively. It is concluded that carrageenan may be used at 0.05% in 10:90 TCW-milk blends to prepare nutritionally superior yoghurt.

Biography

Swarnalatha G is working as the Assistant Professor in the Department of Dairy Chemistry, Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh.

swarna2411@gmail.com