

Effects of Camel Casein Hydrolysate Addition on Rheological Properties of Yoghurt

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Abstract : Effects of camel and cow casein hydrolysates by trypsin enzyme on rheological and sensory properties and growth of starter culture of the yoghurts made from cow milk have been investigated. The hydrolysates strongly decreased the fermentation and coagulation time of the yoghurts. The rate of pH decrease was higher with camel casein hydrolysate in comparison with cow casein hydrolysate at all concentrations used (0.5; 1.0 and 1.5%). Viscosities of the yoghurt made with hydrolysates significantly ($p < 0.05$) decreased compared to control samples. The addition of the hydrolysates significantly ($p < 0.05$) increased the hardness and adhesiveness of the yoghurts. No significant differences in water holding capacity of control and treated samples were observed at 0.5 and 1.0% casein hydrolysate addition. However, increasing casein hydrolysate addition to 1.5% decreased water holding capacity of yoghurt samples. The sensory evaluation scores of the yoghurts were significantly ($p < 0.05$) improved with the addition of casein hydrolysates.

Keywords : yoghurt, camel casein hydrolysates, cow casein hydrolysate, sensory evaluation

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