

Effect of Crude Flowers Extract of Citrus reticulata Blanco Flowers on Physicochemical and Nutritional Properties of Cheddar Cheese

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Abstract : Citrus reticulata Blanco crude flowers extract (CFE) at four different concentration (1, 2, 3 and 4%, v/v) were used as natural milk coagulant instead of rennet to apply for Cheddar cheese making from buffalo milk. The physicochemical properties and nutrition composition of Cheddar cheeses were compared with cheese made with 0.002% (v/v) rennet (control cheese). Physico-chemical of Cheddar cheese showed that cheese made with 1% and 2% of CFE had a crumbly and slightly softer texture of cheese. While, cheeses containing 3 and 4% CFE had semi-hard textural properties of curd similar to rennet added cheese. The CFE made cheese had moisture 37 %, fat 45 % on dry basis similar to rennet made Cheddar cheese. Protein analysis shows that CFE made cheese had significant higher protein content than control. The Cheddar cheese with 3% and 1% CFE were preferred by consumers instead of 2% and 4% CFE for their taste, texture/appearance and overall acceptability. Conclusively, CFE coagulated Cheddar cheese fulfills the nutritional requirement with acceptable organoleptic characteristics and at the same time provides nutritional health benefits.

Keywords : cheddar cheese, Citrus reticulata Blanco, buffalo milk, milk coagulant

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