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Effect of Fat Content on the Properties of Colombian QuesoCosteño Made from Goat Milk

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Abstract: The processing of goat milk to obtain an autochthonous Colombian cheese, such as QuesoCosteño, was an alternative to solve the problems of conservation and deterioration of this milk.Therefore, the objective of this research was to study the effect of fat content on the physicochemical, textural, microbiological and sensory properties of QuesoCosteño made from goat milk, to accommodate a product similar to that commonly marketed.Nubianbreed goat milk(*Capra ibex nubiana*), was collected in the municipality of Magangué, southern of the Department of Bolívar (Colombia). Milk was standardized to 3.75 %,4.0 % and 4.25 % fat. The control samples was cow milk made fromQuesoCosteño. A unifactorial design with four levels was used.The increase in fat in cheeses decreased moisture and protein. The ash content, pH and acidity were not statistically different from those of the control. Goat's milk-madeQuesoCosteño with 3.75 %,4.0 % and 4.25 % fat were classified as soft-semifat, soft-fat and soft-extrafat, respectively.The control samples obtained the same classification as cheeses made from 3.75% fat. Hardness and chewiness decreased with increased fat content. The decreased in moisture content of QuesosCosteños made from goat milk affected their adhesiveness.Cohesiveness and springiness increased with higher fat content.Microbiological counts were at acceptable levels according to NTC 750. The acceptance of QuesoCosteño with 3.75 % fat was similar to the control, and was the most preferred of the three. The results of this study could support small and medium-sized cheese producers.
Keywords: QuesoCosteño, fat content, texture, sensory evaluation.

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