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Hygienic Quality of Traditional Moroccan Cheese from Raw Goat's Milk "Jben"

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Abstract

Background and Aim: This study was aimed to evaluate the hygienicquality of fresh raw goat's milk cheeses "Jben" from Southern Morocco.

Methods: A total of 14 samples were collected at different seasons and different regions of Morocco. The samples were analyzed for total counts of aerobic bacteria, Total coliform, Fecal coliform, *E. coli*, yeasts and molds, lactic acid bacteria, and the presence of coagulase-positive *Staphylococcus*, *Salmonella*, and *Listeria monocytogenes*.

Results: The obtained results showed that 5 out of 14 samples revealed nonconformity for staphylococci and *E. coli*, and 7 out of 14 samples revealed nonconformity for coliform. Lactic acid bacteria were the dominant microbiota (9.1–9.9 log cfu/g). Yeasts and total coliforms were also present in high numbers (7.6–5.5 log cfu/g). *Salmonella* spp and *L. monocytogenes* were not detected in any of the cheese samples.

Conclusion: However, the high contamination of this product reflects the non-respect of the hygiene practices throughout the manufacturing chain, storage, or distribution to the various outlets. Indeed, the hygienic quality of this product can be improved through awareness programs of hygiene rules and the implementation of strategies to enhance the microbiological quality of these traditional products using for instance bacteriocinogenic LAB.

Keywords: Traditional cheese, Hygienic quality, Jben, Morocco.