

TITLE: Microbiological evaluation of *Coalho* cheese commercialized in Vitória da Conquista, BA.

AUTHORS:BOMFIM, A.P.; REIS, J.N.; SANTOS, M.S.

INSTITUTION: Instituto Multidisciplinar em Saúde, Campus Anísio Teixeira, Universidade Federal da Bahia Rua Rio de Contas, 58, Quadra 17, Lote 58, Candeias, Vitória da Conquista, BA, Brazil, CEP 45.029-094; Faculdade de Farmácia, Universidade Federal da Bahia, Avenida Adhemar de Barros, s/n, Campus Ondina, Salvador- BA, Brazil, CEP:40170-970.

ABSTRACT:

Food-borne diseases are of major importance due to public health concerns and damages to consumers. The aim of this study was present the hygienic sanitary quality of the *coalho* cheese samples marketed in free fairs and to determine the frequency of *Escherichia coli*, *Staphylococcus aureus*, *Salmonella* sp and *Listeria monocytogenes* in a random sampling. Twenty-four cheese samples manufactured by artisan farm house producers were collected from open-air markets in Vitória da Conquista, Bahia between February to April 2017. Temperature of commercialization and determination of acidity (Dornic degrees) and percentage of lactic acid were established. The results of the physicochemical analyzes showed that 75% (n = 18/24) of the samples were been marketed at temperature outside the acceptable range (10° C to 12° C). The mean value of the percentage of lactic acid was 0.56% (0.20 - 0.99%). All samples present total coliforms, of which 54.2% (n=13/24) contained thermotolerant coliforms. *S. aureus* count was above 10³ CFU/g in 87.5% (n=21/24) of the samples. All samples were negative for the pathogens *L. monocytogenes* and *Salmonella* sp. Although these agents were not found in the analyzed samples, the hygienic sanitary conditions of *coalho* cheese marketed at the free fairs of Vitória da Conquista, Bahia does not provide the consumer with food safety once unsatisfactory hygiene conditions were identified. This study highlights the importance of quality control of raw foods, especially cheeses sold in open markets and the need to improve health surveillance actions in our country.

Keywords: food microbiology, cheese, coalho cheese.

Development Agency: Own resources.