

World Congress on

Advanced Food Science and Technology

October 15-16, 2018 Paris, France

Processes of production of curdled milk and evaluation of the physicochemical and microbiological quality of fresh milk and curd milk: Case of the city of Ouagadougou, Burkina Faso

Ouedraogo Arouna and Aly Savadogo

Université Ouaga 1 Pr Joseph KI-ZERBO, Burkina Faso

The artisanal character of the processing techniques and precarious conditions of preparation and storage do not guarantee a finished product a good hygienic quality. Our objective was to contribute to the improvement of the quality of curdled milk. An investigation has been achieved simultaneously with a sampling of raw milk and curdled milk from the local producers in order to have the diagrams of curdled milk manufacture. 60 samples of raw milk and curdled milk have been collected in six districts and markets of Ouagadougou and analyzed according to the standards methods of physicochemical and microbiological analyses. The results of the investigation revealed that the women are the most implied in the manufacture of curdled milk. Mainly, the raw milk and power milk are used like raw material and the techniques are varied with an absence of mastery of the processes. The raw milks and curdled milk analyzed were of unsatisfactory physicochemical and nutritional quality. The energy values were low: 322.06 Kcal/L (raw milk) and 438.68 Kcal/L (curdled milk). Microbiological analyzes showed that 80% of raw milk samples were inadequate to the AFNOR (Association of French national organization) standard for total mesophilic aerobic flora (FAMT), 83.33% for total coliform (CT) and 56.67% for fecal coliform (CF). However, these samples were less contaminated with staphylococci. For the curdled milk, the percentage of unsatisfactory samples was 100% for the FAMT, 60% and 26.67%, respectively for the CT and the CF. Particularly, samples of curdled milk showed strong fermentations with *Lactobacillus* concentrations between (1.35 ± 0.05) . 108 and (7.93 ± 5.62) . 109 CFU /ml. In addition, these samples were contaminated by iron, copper and manganese. In conclusion, the study revealed that the raw milk and curdled milk analyzed constitute a danger to the consumer. Measures must be taken to improve the quality of these products.

aaroncheickouedraogo@gmail.com