

## Abstract:

The present study was conducted to evaluate the hygienic properties during manufacturing of fermented milk by isolation and identification of some potential pathogens and it also aimed for evaluation of some fermented dairy products (roub and mish in a modern dairy factory). It was based on collection of six batches of samples from the whole milk, skim milk, yoghurt and their mixture; which enter for the processing of roub and mish; roub and mish from a modern dairy factory in Khartoum State (Sudan). The 1st and 2nd batches were collected from the factory commercial production. The 3rd and 4th were done in the factory laboratory as an experiment following the same procedure, while in the 5th and 6th batches pasteurization of whole milk was done. Comparison and the counts of each of *E. coli*, *Staphylococcus aureus*, *Streptococcus* spp. and *Salmonella* spp. were estimated in those products. Higher counts were obtained for the factory commercial samples compared with those manufactured as experiment in the factory. Moreover pasteurization of the whole milk revealed lower counts, which could be attributed to elimination of contamination. When comparing roub and mish significant differences were obtained only for *E. coli* ( $p < 0.05$ ) and *S. aureus* counts ( $p < 0.05$ ). Similarly, between mixture and roub significance variations were reported for *E. coli* ( $p < 0.05$ ) and *S. aureus* counts ( $p < 0.001$ ). However, non-significance differences were found for the measurements between the different groups. This could be due to fermentation in roub and addition of spices (black cumin, fenugreek and garlic) and salt in mish. Hence the present study supported the previous reports, which stated the role of those spices as antimicrobial agents against some pathogenic bacteria.