Abstract

Hamburger meats are susceptible to the microbial attack due to diverse factors (potential oxidation-reduction, pH, aw, readiness of nutrients, processing), being necessary considering storage conditions. This research had for objective to evaluate the effect of three times and storage temperatures on the microbiological quality of three commercial brands of hamburger meat. 81 samples were analyzed (27 of each mark) stored to temperatures of -15.5 and 15°C during 0. 48 and 96 hours. Mesophilic aerobic count was determined according to ICMSF, Staphylococcus aureus, total coliforms, fecal coliforms and Escherichia coli by COVENIN, presence of Salmonella by COVENIN and RAMBACH. Significant differences were observed ($P < 0.05$) in the microbiological parameters by effect of the commercial brand. Storage temperatures didn’t affect the microbiological parameters significantly, however was found that fast food restaurants temperature (15°C) may increase Salmonella’s growth. All commercial brands were insideCOVENIN limits, but compared with International Organisms, the brands B and C exceeded this limits. In conclusion it was detected variability due to sampling, evidencing a lack of control in the product processing.

Keywords

Microbiological quality, hamburger meat, Salmonella, coliforms.