

PRESENCE OF *LISTERIA MONOCYTOGENES*, *ESCHERICHIA COLI* AND *SALMONELLA* SPP. IN PROCESSED MEAT IN KOSOVO

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Abstract

Meat and its products are one of the most consumed products in the Kosovo market. Contamination of carcasses with their waste, improper level of hygiene of personnel and equipment, cross-contamination, incomplete implementation of safety systems such as HACCP or good work practices are some of the factors of contamination of processed meat. The purpose of this research was to identify whether there are some pathogenic microorganisms in the processed products made from domestic and foreign meat.

In the processed meat of 10 local companies (containing 54% imported and 46% locally produced meat), we investigated following microorganisms: *Listeria monocytogenes*, *Escherichia coli* and *Salmonella* spp. In total, 120 samples were taken according Codex Alimentarius, and 40 samples were analyzed, for above mentioned groups of microorganisms according to the following methods: ISO 11290-1: 2017, ISO 16649-2: 2001 and ISO 6579-1: 2017 respectively. Analysis were performed in the Food and Veterinary Agency.

Out of 40 samples analyzed for the presence of *Listeria monocytogenes* 7 samples were positive, 10 samples were positive for the presence of *Escherichia coli*, while all samples analyzed for *Salmonella* spp. were negative. From the obtained results we conclude that the presence of *E. coli* and *L. monocytogenes* is high, this is attributed to the incomplete implementation of the HACCP system.

The conclusion is that presence of these microorganisms is a result of low level of HACCP and good manufacturing as well good hygienic practices implementation during processed meat production.

Key words: *Listeria monocytogenes*, *Escherichia coli*, *Salmonella* spp., meat, Kosovo.