MICROBIAL RISK ASSESSMENT IN THE MAIN STEPS OF POULTRY SLAUGHTER

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ABSTRACT
The microbial contamination can determine on one hand the start of spoilage processes in meat, the lowering of its shelf life, and even more serious a hazard for the public health through the breakouts of some food poisoning episodes at the consumers. In the bird slaughtering units, the carcasses’ contamination with pathogens can occur mainly in the scalding, defeathering and evisceration, respectively in the steps of meat cooling and deliver which imply manipulation by the operators. This occurs mainly because the good hygiene practices (GHP) and good manufacturing practices (GMP) are not respected. Taking into account the above mentioned we tried to assess a microbiological risk evaluation represented by the aerobic plate count (APC), number of *E. coli*, as well as *Salmonella* spp. and *Campylobacter* spp. identification. The study material was represented by 54 poultry carcasses collected in the following slaughtering steps: reception of live birds, scalding, evisceration, refrigeration, depositing. From the statistical evaluation of the obtained results it was noticed that the aerobic plate count decreased from 6.18±0.46log cfu/g (bird reception), at 5.43±1.07 log cfu/g (scalding). Following the carcasses’ manipulation stages during the evisceration steps, an increase in values was noticed at 5.79±1.28 log cfu/g (evisceration), respectively a slight reduction of the aerobic plate count in the cooling step (5.25±0.99 log cfu/g). During the entire period of broiler carcasses’ depositing a uniform increase until the value of 6.02±0.51 log cfu/g was noticed. The *Salmonella* germs were identified in 33% of the total collected samples without identifying the pathogen strains. We mention that there were no germs belonging to *Campylobacter* identified.

KEYWORDS
Microflora, risk assessment, poultry, slaughter

REFERENCES