

ASSESSMENT OF THE HYGIENIC CONDITION OF THE SLAUGHTERHOUSE BASED ON THE EVALUATION OF MICROBIOLOGICAL SWABS

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Slaughterhouse is an establishment used for slaughtering of animals, represent primary production site and their general hygiene requirements are set out in Regulation (EC) No 852/2004 and the commission regulation (EC) No 2023/2006. These regulations contain the minimum rules for cleaning and sanitation of the production sites and requirements for education and training of personnel. Sanitation at a slaughterhouse requires the necessary adaptation to individual production processes in order to ensure the health safety of food of animal origin and consequently to reduce the risk of production affected by insufficient hygiene of the plant. The objective of present study was to evaluate the hygienic condition of surfaces – cage, wall, floor and lift by microbiological swabs. Microbiological swabs were taken before process of slaughtering, during process and after disinfection from area of 10×10 cm. The swabs were placed in a sterile tube containing 10 ml of sterile saline solution. From this mixture 0.1 ml was applied to the different agar plates Meat peptone agar, Endo agar, Sabouraud agar. Disinfectant Virkon S was used in a 1% concentration during exposure time 30 minutes for disinfection of monitored surfaces in slaughterhouse. Disinfectant Virkon S was effective on monitored surfaces – cage, wall, floor ($P < 0.0001$) and lift ($P < 0.01$), where were determined significant decrease of microorganisms. Despite a significant decrease in the number of microorganisms, after disinfection we recorded 1×10^4 CFU $\times 10$ cm² of TCB and 2×10^3 CFU $\times 10$ cm² of CB, which indicates an insufficient level of disinfection. In conclusion, effective disinfection performed by suitable disinfectant during suitable exposure time in slaughterhouse is essential because it help to prevent the spread of many microorganisms; contamination of products and which could cause serious consequences on health status of human.