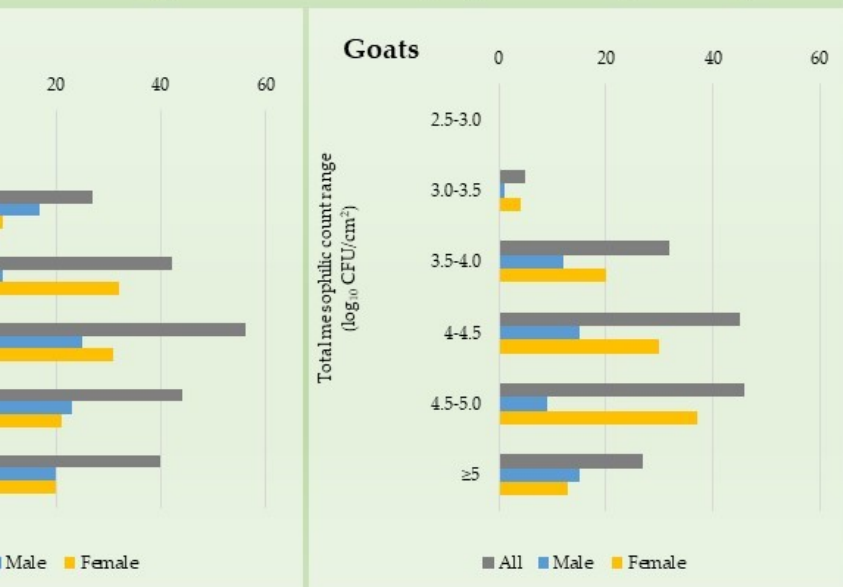
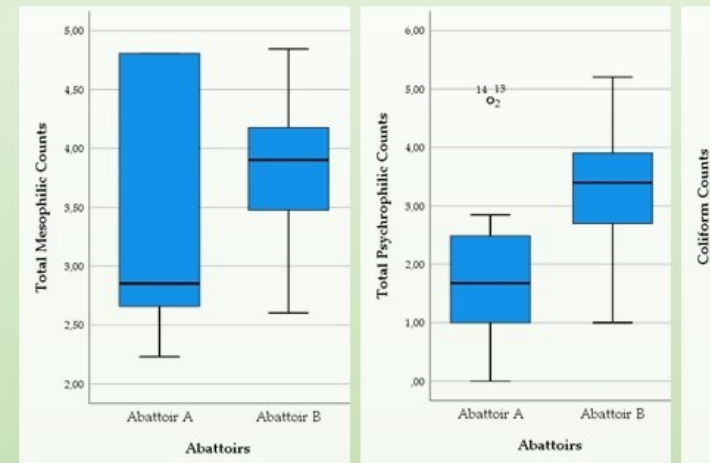


Microbial counts and detection of *Salmonella* spp., *Listeria monocytogenes* and ESBL *Escherichia coli* in small ruminants carcasses from two Greek abattoirs.

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Contamination during slaughter is one of the most important factors influencing meat quality and pathogen transmission. The scope of this study was to examine the microbial contamination of sheep and goat carcasses in Greek slaughterhouses.

The study was performed in two slaughterhouses where a total of 370 carcasses were examined; 215 samples of sheep and 155 samples of goat carcasses were collected. The samples were examined for microbial contamination: total mesophilic viable count, total psychrophilic viable count and coliform count and for the detection of *Salmonella* spp., *Listeria monocytogenes* and presumptive ESBL *Escherichia coli*.



Results

In sheep and goat carcasses, TMVC was 3.76 log₁₀CFU/cm² and 3.92 log₁₀CFU/cm² respectively. Coliform count was 1.8 log₁₀CFU/cm² and 2.2 log₁₀CFU/cm² respectively. Goat carcasses had significantly higher counts compared to sheep. One strain of *Listeria monocytogenes* typed as serovar 1/2a(3a) was isolated from an adult sheep carcass. No strains of *Salmonella* spp. and *Escherichia coli* were isolated from 25% of examined carcasses.

Conclusion

Sheep and goat carcasses harbor foodborne pathogens that could be transmitted after consumption of undercooked meat. The slaughter hygiene was rated as insufficient because in some cases microbial counts exceeded the limits set by EU legislation. Therefore, specific measures should be implemented to alleviate spread of possible foodborne hazards.

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