ESBL-producing bacteria and MRSA isolated from poultry and turkey products imported from Italy

C. Beninati, F. Reich, D. Muscolino, F. Giarratana, A. Panebianco, G. Klein, V. Atanassova

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ESBL and MRSA-producing bacteria in food-producing animals may contribute to increased incidences of infection in humans. This study was carried out on 38 samples obtained from 32 chickens and 6 turkey products purchased at retail outlets of Hannover (Germany) and imported from Italy. The samples included the thigh, breast fillet, gizzard, sausage, liver, heart, and roll, and were processed for the detection of ESBL producing E. coli and MRSA producing Staphylococcus aureus. Twenty-six chicken products (68.4%) of the total of poultry products analysed proved to be positive for E. coli and for phenotypical detection of ESBL. Six turkey products (100%) were positive for ESBL producing E. coli. Staphylococcus aureus was found in 4 chicken products (10.52%) that resulted positive in the detection of MRSA. Serratia spp. were reported in 4 samples that were also positive for ESBL. Thirty-three E. coli isolates from the poultry and turkey products were all resistant to at least one or more of the compounds tested. The highest resistance levels were observed, notably, against ampicillin and cefotaxim.

Keywords:

ESBL; MRSA; antibiotic resistance; chicken; turkey; retail products

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Ing. Kateřina Stárková
Executive Editor
phone: + 420 227 010 233
e-mail: cjfs@cazv.cz

Address

Czech Journal of Food Sc
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Slezská 7, 120 00 Praha 2,
Republic

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