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DETERMINATION OF THE ENTEROTOXIGENICITY OF COAGULASE-POSITIVE STAPHYLOCOCCUS AND COAGULASE-NEGATIVE STAPHYLOCOCCUS ISOLATED FROM RAW AND FERMENTED MEAT

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In this study, a total of 51 chicken meat samples were obtained from different markets in Giresun and Trabzon, as a purpose for determination of coagulase-positive Staphylococcus (KPS) and coagulase-negative Staphylococcus (KNS) enterotoxigenicity. In 51 chicken samples (including 38 raw, 13 fermented), the numbers of total Micrococcus/Staphylococcus and KPS/KNS were counted. The presence of enterotoxin in samples, the identification of isolates and the enterotoxin producing ability of Staphylococcus species were studied by VIDAS 2, VITEK 2 and ELISA, respectively. Enterotoxin was determined 15 chicken livers, 2 chicken gizzard and 2 chicken breast out of 51 samples. Micrococcus/Staphylococcus and KPS/KNS were as mean of 8,37 log cfu/g, 7,66 log cfu/g in 15 chicken livers respectively. 47 Staphylococcus were isolated in 15 chicken livers. The distribution rate of Staphylococcus 21,2% S. equorum, 19,1% S. warneri, 17,02% S. vitulinus, 17,02% S. saprophyticus, 12,7% S. sciuri, 4,2% S. xylosus, 24,2% S. haemolyticus, 2,1% S. aureus, 2,1% S. cohnii spp. ürealyticus were identified. The one of S. saprophyticus and S. aureus isolates were found SEC and SEE type enterotoxin, respectively. The high rate of enterotoxigenic meat samples should be a risk for public health. It's very important that to protect from food intoxication caused of enterotoxigenic staphylococci.

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