

Title: OCCURRENCE OF INDICATOR MICROORGANISMS IN SAVORY SNACKS SOLD IN BAKERIES

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Abstract:

Currently, due to the lack of hygienic-sanitary conditions in the process, storage and distribution of food, occurrence of foodborne illness worldwide has increased. Food ready-to-eat and fast food snacks are a trend of consumption and can be the target of contamination by microorganisms such as thermotolerant coliforms, mesophilic aerobic bacteria, coagulase-positive *Staphylococcus*, *Salmonella* spp. and *Escherichia coli*. The aim of this study was to evaluate hygienic-sanitary conditions of savory snacks sold in bakeries in the central area of the city of Pelotas, RS. Samples were collected in bakeries located in the central area of the city, where 15 fried savory snacks were stuffed with beef and the other 15 were filled with chicken meat, totaling 30 samples. They were acquired simulating a real purchasing situation, and levels of coagulase-positive *Staphylococcus*, thermotolerant coliforms and *Escherichia coli* were collected. From 30 analyzed samples, seven (23.3%) showed coagulase-positive *Staphylococcus* levels above the standard allowed by the Brazilian legislation for this type of food, which is 10³ colony forming units per gram (CFU/g). To count thermotolerant coliforms, five samples (16.7%) showed levels above the standard allowed by the legislation, which is 10² most probable number by gram (MPN/g). *Escherichia coli* contamination was observed in five of the 30 samples analyzed in savory snacks, and one of these showed a value above 1.1 x 10³ MPN/g, what indicates poor sanitary conditions in production and/or commercialization of food. It can be concluded that the analyzed samples showed unsatisfactory hygienic-sanitary conditions because the levels of coagulase-positive *Staphylococcus* and thermotolerant coliforms were above the limit permitted by the Brazilian sanitary legislation.

Keywords: bakery food, coagulase-positive *Staphylococcus*, microbiological contamination, thermotolerant coliforms.