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LETTERS TO THE EDITOR
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CONSIDERATIONS ON MICROBIAL CONTAMINATION OF CHICKEN MEAT COMMERCIALIZED IN PERU

CONSIDERACIONES SOBRE LA CONTAMINACIÓN MICROBIOLÓGICA EN LA CARNE DE POLLO EN EL PERÚ

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Dear Editor:

While reviewing studies of interest that assess hygiene in the processing and distribution of chicken meat in our country, a widely consumed animal product, we have found concerning data that are also found in countries with similar socioeconomic conditions.

Similar hygiene levels and sanitary controls are observed in supply markets in both Peru and other Latin American countries, such as El Salvador. In El Salvador, the presence of contaminants such as Salmonella spp., Escherichia coli (E. coli), and Staphylococcus aureus was identified in 33 municipal markets. In Peru, the National Agrarian Health Service (SENASA, by its Spanish acronym) conducted an analysis in 2021 based on food samples collected from agricultural fields and various supply markets in 24 regions. The results showed a higher isolation of mesophilic aerobes and E. coli in chicken meat, while Staphylococcus aureus, Salmonella spp., and Campylobacter spp. were found in smaller amounts[2].

On the other hand, a retrospective study by Ho-Palma et al., in 2022, which covered 11 years of epidemiological surveillance in supply markets from three Peruvian cities (Huancayo, Huaral, and Tumbes), revealed that more than 75% of the analyzed samples contained Salmonella spp. in raw chicken cuts, both fresh and refrigerated or frozen[3]. Additionally, Inchuña N, in 2023, highlighted that in a wholesale market in the district of Tacna, 30.67% of the 75 chicken meat samples analyzed did not meet the quality standards established by Peruvian regulations[4].

Furthermore, in 2019, the hygienic condition of 50 raw chicken meat outlets in major markets in Huánuco was evaluated. Alarmingly, nearly all collected samples were found to be contaminated with E. coli and Salmonella spp., and the hygienic and infrastructure conditions were inadequate. For example, only 16% of meat handlers had received proper training, and 50% of establishments lacked potable water. Additionally, only 2% and 4% had refrigerators or freezers, respectively [5].

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The study by López A et al. in El Salvador detailed additional factors influencing poultry product contamination and indicated that Salmonella spp. is associated with the lack of hand disinfectant and clean towels; E. coli is linked to the use of accessories by handlers and inadequate storage temperatures, and Staphylococcus aureus is related to the lack of aprons, non-compliance with handwashing, and the failure to use clean towels [1]. Similarly, Fernández N et al., in 2017, found in Lima markets that 75% of food handlers do not follow proper handling practices, and more than 40% lack a health card [6].

The aforementioned pathogens pose a serious public health problem, as they are associated with diarrheal infections resulting from the consumption of contaminated food. It is important to note that chicken is the most widely consumed meat in Peru, with an average consumption of 49 kg per person per year[7]. To address this situation, SENASA provides training manuals for vendors of primary agricultural food products and feeds to ensure a minimum technical level for proper handling and infrastructure implementation. It is urgent to improve personnel training and the quality of handling and infrastructure for the processing and sale of poultry products.

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