P3-190 Hygienic-Sanitary Condition of Tomatoes Marketed in the City of Rio de Janeiro Brazil

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Introduction: Consumer demand for healthy, fresh like and easy to prepare products is continuously increasing nowadays. So it is important to verify the microbiology of the tomato to determine the shelf life and/or temperature abuse that may influence its quality.

Purpose: To verify the microbiological hygienic-sanitary conditions on the surface of tomatoes collected at the final point of consumption in the city of Rio de Janeiro- Brazil

Methods: Two hundred fifty-one tomato samples were collected from supermarkets and open markets located in the city of Rio de Janeiro. Aerobic plate count, yeast/molds, total coliforms and *Escherichia coli* counts were performed, using the Food and Drug Administration's Bacteriological Analytical Manual (FDA- BAM) procedures.

Results: In relation to the hygienic-sanitary condition, 3 samples (1.2%) were confirmed as *Escherichia coli*. The total counting of mesophilic aerobic microorganisms was above 6 log CFU/g in 28% of the analyzed samples, as well the counting of total coliforms in 7.6% of tomatoes. The mold and yeast counts present values greater than 4 log CFU/g in 66% of the samples.

Significance: The data presented showed a high count of yeast and mold on the surface of tomatoes analyzed which can lead to a more rapid deterioration of the product. Only three samples showed the presence of *E. coli*, indicating possible fecal contamination.