

TITLE: MICROBIOLOGICAL ANALYSIS OF ORANGE JUICE IN NATURA STORED IN ELECTRICAL MACHINES.

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ABSTRACT:

Orange juice is among the most consumed in the world because of its pleasant taste and high nutritional value. The orange juice *in natura* is for the most part obtained manually with the aid of machines and utensils. The microorganisms present in the external part of the fruit, incorrect hygiene of the extractors, inadequate storage and the lack of training of the manipulators, besides the lack of hygiene of the same are the main causes of physical, chemical or microbiological contaminations in the product. In the present study, we evaluated the microbiological characteristics of orange juices marketed and stored or not in electric machines in the city of Uberlândia, Minas Gerais. The total counts of mesophilic bacteria (CFU/mL), total and thermotolerant coliforms (MPN/mL) and analysis of the presence of coagulase positive *Staphylococcus*, *Escherichia coli* and *Salmonella* spp were also performed and a comparison of the results found with the legislation current. Of the samples, 30% did not agree with the legislation for thermotolerant coliforms, which may indicate contamination also in the post-processing due to improper storage conditions that allow the proliferation of these microorganisms, which justifies the result found. No sample was contaminated with *Salmonella* and 40% presented coagulase positive *Staphylococcus*, in both types of stored product or not, thus posing a risk to the health of the final consumer, besides presenting other genres of opportunistic pathogenic hospital bacteria. With this, we concluded that the hygienic-sanitary condition of most premises and the personal hygiene of the manipulators were not adequate to allow contamination of the product, making it necessary to encourage the manipulators on Good Manufacturing Practice (GMP) and their training.

Keywords: Orange juice; storage; microbiological analysis; coagulase positive *Staphylococcus*; Thermotolerant coliforms.

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