TITLE: MICROBIOLOGICAL ANALYSIS OF FRUIT JUICES MARKETED IN RECIFE-PE.

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ABSTRACT

The increasing demand for ways to spread a healthy life has driven a searching for advantageous habits. With this in mind, juice is a great option for people who want a nutritious, refreshing and na easy way to prepare food, offering a large quantity of micronutrients that the body needs for a good functioning, which, therefore, provides a great commercialization in itinerant segments, enabling a broad global marketing spectrum for human consumption. Consequently, it is necessary to evaluate the quality of these foods, and microbiological analysis is a fundamental tool in ensuring the safety of the product. Thus, this work aims to analyze the microbiological quality of the juices marketed in the environments of an educational institution in the city of Recife-PE. Five juice samples were analyzed. Samples were diluted in 0.1% peptone water and serially serial dilutions were performed (10^{-1} to 10^{-4}). The identification of total coliforms was performed using the Most Probable Number Methods (NMP). In addition, the standard counting of heterotrophic mesophilic bacteria was performed using the Plate Conter Agar medium (PCA). All experiments were performed in triplicate. The NMP of total coliforms ranged from 9.2 to 150 NMP/ml, of the five samples studied, presence was detected in 60%, and sample D (acerola juice) presented the highest contamination rate), and quantification of aerobic mesophilic bacteria varied from 0 CFU to $1.29x10^5$ CFU. Considering the obtained results, it is possible to affirm that the analyzed samples of the juices were considered improper for human consumption in accordance with the microbiological standards established by the Brazilian legislation. Therefore, it is extremely important to implement preventive measures, highlighting the importance of good manipulation practices, as well as greater supervision and support through training in health education for the manipulators of this trade modality.

Keywords: Coliforms; Manipulators; Good practices; Hygiene