TITLE: ANALYSIS OF THE MICROBIOLOGICAL QUALITY OF WATER USED IN THE MANUFACTURE OF ICE COMMERCIALIZED IN THE MUNICIPALITY OF ABAETETUBA, PARÁ.

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ABSTRACT:

When the water used in the manufacture of ice is contaminated it presents risks to the consuming of the population through the transmission of pathogenic microorganisms that cause waterborne diseases. The population has a constant preoccupation with the quality of water for consumption, however, the ice consumed in bars, restaurants, events, among others, does not receive the maximum attention it should have. As a result, the objective of this study was to evaluate the quality of the water used in the production of industrialized ice as well as the homemade ice, using microbiological parameters; and evaluate the hygienic-sanitary conditions in which the ice packages were commercialized in the municipality of Abaetetuba. During the period of October of 2015 to August of 2016, sixty samples of ice sold in several establishments, were collected, of which, thirty were industrialists and the other thirty were homemade. In order to detect the presence or absence of total coliforms and Escherichia coli, the methodology used was the Colitest kit. In the microbiological analyzes it was observed that 58% (thirty-five) of the samples presented improper microbiological characteristics, thus the presence of bacteria of the group thermotolerant coliform total (*E.coli*) in them were positive, suggesting inefficient hygienic-sanitary conditions which determining them as inadequate for the human consumption. In equivalence, 42% (twenty-five) of the de-iced ice samples did not present contamination by total and thermotolerant coliforms. Concerning to the characterization of the conditions in which the ice packages were presented, a rate of 92% of the samples with damaged packages was observed small perforations that allowed the product were exposed to the external environment, so becoming it susceptible to contamination, and 8% of them were intact, without any perforation, however, these samples are commercialized in pet bottles. Although it is not common the practice to monitor the microbiological quality of ice for consumption, through the results obtained in this and other studies, it is necessary an intervention of the Public Health Services, because the ice can be a very consumed food product in any situation of daily life. In this way, it is proposed to the responsible of the establishments as much industrial as homemade the implementation of good practices of manufacture of this product.

KEYWORDS: Total coliforms; Colitest; *Escherichia coli*; potability; health.