

TITLE: ANALYSIS OF MESOPHILIC BACTERIA IN FOOD HANDLERS BEFORE AND AFTER ASEPSIS OF THE HANDS

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ABSTRACT:

Proceeded by increased food consumption outside the residential setting, the quality standard required by consumers leads to increased concern about food and nutrition unit (UAN) sanitation. The manipulators play a fundamental role in the safety of food, since they act directly in the reception of the food until the final product can become a significant transmitter of food-borne diseases. For this reason, the objective of this study was to evaluate the contamination rate present in the hands of food handlers of a commercial restaurant in the city of Recife, Pernambuco. For the accomplishment of the work, samples of 7 manipulators were collected in two distinct moments (before and after the asepsis of the hands), using the Swabs surface swab technique. The collection was performed through sterile swabs, allowing the entire surface of the cotton present in the swab to contact the palm of the handlers. Subsequently the sample was transferred into tubes containing transport broth. The identification of heterotrophic mesophilic bacteria was performed by direct counting of colony forming units (CFU) in Plate Counter Agar (PCA) medium. Samples were diluted in 0.1% peptone water and serially serial dilutions were performed (10^{-1} to 10^{-3}). Plating and incubation at 37°C were performed and reading of the results was done after 24 hours. All experiments were achieved in triplicate. Among the 7 manipulators, 4 presented counts of <50 CFU and the others had a reduction in counts after asepsis. The highest count was 4.1×10^3 , and the lowest was 1.15×10^3 . The results obtained in the work demonstrate the importance of the correct practice of the hygienization of the hands of the manipulators, in view of the decrease after correct asepsis of the hands. It is important to highlight the role of training for food handlers, which aims to search for improvements in good manufacturing practices, as well as minimize contamination points that may be handled by manipulators. In addition, the data reinforce the importance of further research on the presence of microorganisms in feed units, as well as the elaboration of specific legislation that determine maximum limits of microorganisms present in these circumstances.

Keywords: Manipulation, microorganisms, good practices and sanitation.