PROMOTING FOOD SAFETY AT SCHOOL BY MICROBIOLOGY PRACTICES TO SCHOOL LUNCH LADIES

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ABSTRACT

Bacteria and fungi are responsible for most of the foodborne diseases. Foodborne diseases are a major public health concern, with school meals being one important source. Food handler, in many cases, are not aware of the risks to the population when handling food improperly. Many foodborne diseases can be prevented if handlers are trained and made aware of the care required for good hygiene practices in food handling. Thus, the purpose of our extension project has been to provide basic and food microbiology classes to school lunch ladies in Londrina and region. The school lunch ladies had the opportunity to visualize bacteria in the optical microscope by means of Gram staining, they observed bacterial colonies grown in culture media, from normal microbiota of the skin, oral mucosa, nasal mucosa, inferior part of the nails, and adornments as earrings and rings. They understood the importance of microorganisms for food, pathogenic microorganisms, food disinfection and nutritional aspects of food. These classes were taught by students of the Graduate Program in Microbiology of the State University of Londrina. A total of 180 school lunch ladies from Londrina and region (Alvorada do Sul, Ibiporã, Jaguapitã, Rolândia, Tamarana, Florestópolis, Cambé, Guaraci, Primeiro de Maio) were attended. For all school lunch ladies (100%), this was the first time they saw the bacterial colonies grown from normal microbiota and adornments, as well as the first time they saw the microorganisms under the microscope, making easier to understand the importance of washing of hands, of care when coughing, sneezing or talking, as well as the non-use of adornments during the food preparation. We found that some recommended procedures, such as not washing chicken and eggs, were unknown to some participants. Reports, after the course, about changes in food preparation practices within schools and in their homes, were disseminated via radio and local newspapers. In addition to learning about food care and the disinfection of food, the school lunch ladies reported that they also felt valued and heard through this extension project. We conclude that this project promoted food safety through microbiological practices that provided training to food handlers regarding the microbiological aspects of food.

Keywords: Food, microbiology, foodborne diseases, food handler.