

Safety of students' meals served in a kitchen of Alexandria university hostels

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Abstract: A total of 69 food handlers were interviewed to assess their food safety knowledge where a pre-designed questionnaire was filled, among them fifty-five were observed for their food handling practices where a food sanitation checklist was filled. A total of 42 food samples were collected during serving for microbiological analysis. The majority of food handlers were males representing 89.9% compared to seven females [10.1%]. The mean age of the interviewed food handlers was 39.39 ± 10.94 years. Most of the interviewed food handlers showed satisfactory knowledge concerning personal hygiene, food equipment and utensils, food premises, insect control and waste disposal as well as total food safety parameters comprising 72.5%, 56.5%, 92.8%, 79.7% and 53.6%; respectively, while most of them were fair in their knowledge concerning food contamination, food-borne diseases and food handling parameters comprising 58.0%, 62.3% and 56.5%; respectively. Most of the observed food handlers were fair in their total food handling practices, personal hygiene, as well as their practices concerning cleaning of equipment and utensils and handling of cooked foods comprising 94.5%, 96.4%, 71.4% and 53.8% of the observed handlers; respectively, while most of them were classified as good for their cooking practice [88.2%] and bad for their practice concerning handling of raw materials [78.3%]. The highest mean aerobic mesophilic count [1.6×10^6 CFU/g], coliform count [1.2×10^4 m.o./g] and Staphylococcal count [1.2×10^4 CFU/g] were found among green salad samples, in the meantime the lowest mean coliform count was found among cooked rice, cooked vegetables, cooked macaroni and roasted kofta where a mean count of 2, 2, 4 and 5 m.o./g was found; respectively. On-job training programs should be launched to food handlers and food samples should be collected periodically from the served meals to assess their safety.

INTRODUCTION

A safe food supply of adequate quality is essential for proper nutrition. The food supply must have an appropriate nutrient content and it must be available in sufficient variety and quality. It must not endanger consumer's health through chemical, biological or other contaminants.¹

There are microbiological hazards and risks associated with preparation and storage of foods in foodservice establishments. Foodservice operations are frequently identified as places where mishandling of foods has led to outbreaks of foodborne diseases. Food handlers and consumers are important targets in the fight against

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