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# Assessment of Food Health and Safety Management in Selected Restaurants in Kabarnet Town, Baringo County

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#### **Abstract**

The study focused on evaluating food health and safety management practices in urban restaurants, highlighting challenges in meeting public health requirements. The specific objectives were to examine implemented safety management strategies, assess the knowledge of employees (specifically waiters) regarding safety management, and recommend effective strategies for safety management in selected restaurants. Utilizing a mixed-methods approach involving both quantitative and qualitative methods, the study involved a population of 60, with a sample size of 52 chosen through purposive sampling. Closed-ended questionnaires were employed for data collection, and the analysis incorporated descriptive statistics, presenting findings through graphs and charts. Results indicated that 18.75% of respondents demonstrated "Very Good" knowledge of food health and safety management, with 9.38% rated as "Good," 34.38% as "Average," and 37.50% as "Below Average." The study emphasized the importance of proper communication and effective training in food health and safety management for restaurant management. The research provided a comprehensive exploration of food safety practices, encompassing educational backgrounds, workforce roles, safety management strategies, knowledge levels, and recommendations. The findings underscored the necessity for targeted training initiatives, robust induction processes, and effective communication strategies. Continuous monitoring and evaluation mechanisms were recommended to ensure the sustained success of food health and safety practices in urban restaurant.

Keywords: Food, safety, food health and safety, food safety management

#### Introduction

Food Health and safety is a nonnegotiable element and is very critical. Now a day's trend of eating out has increased so also the responsibility of catering establishment's food handlers to serve safe and wholesome food to its consumers (Kumari & Kapur, 2019).

It is a requirement that food industry should have food safety management system. These include strategies such as transportation strategies, environment management strategies and disaster strategies; strengthening national food control regulatory capacities and global trade facilitation by providing leadership in supporting countries in the assessment and progressive development of food control regulatory frameworks; Supporting development of institutional and individual capacities for food control and food safety management - including the management of food safety emergencies. It also includes evaluating new technologies to improve food technology and protect public health; and developing food safety intelligence and foresight by becoming a major actor in the collection, analysis and communication of food chain intelligence; also supporting science-based food safety governance and decisions by providing scientific advice to underpin food safety standard at national, regional and international levels; and enhancing food safety management along food chains prevent diseases and trade disruptions by supporting developing countries to apply risk-based food safety management along food chains, that are appropriate for national and local production system and in compliance with codex texts(Al-Ghazali et al., 2020); and finally providing food safety

platforms, databases and mechanisms which support networking, dialogue and global access to information and facilitating effective communication internationally on key food safety issues. Changes in our food production and supply, including more of the imported foods is one of the problems. Changes in the environment leading to food contamination may lead to diseases. Better detention of multistate outbreak if public health officials find something in common linking the illness to each other, such as eating the same contaminated food, attending the same event or shopping at the same grocery store or eating at the sane restaurant. New and emerging bacteria, toxins and antibiotic resistance. Changes in consumer preferences and habits due to health and safety issues. The gap in Hospitality industry in relationship to health and safety issues is paramount for limited study been done by researchers on the same.

The purpose of the study was to assess Determinants of Food Safety Management in Selected Restaurants in Kabarnet Town, Baringo County. The specific objectives are: To examine strategies put in place for food health and safety management; to determine knowledge of employees (waiters) on food health and safety management; to recommend the best strategies for food health and safety management for selected restaurants.

Ongoing food safety improvements, in addition to reducing foodborne illness, can yield economic and social benefits; reduced loss of income and health care costs for the affected individual; improved productivity; and reduced burden on the country's healthcare system through improved public policy makers for future researchers and for fulfillment of craft certificate in food and beverage production, service and sales.

### **Literature Review**

#### **Strategies for Health and Safety Managements**

The food operations are expected to develop precautions to avoid electrical hazards. Keep electrical appliances away from wet areas and check their cords for damage regularly if there are cracks. No running in the restaurants at any time because one might fall and injure. Using of any meat slicing equipment or other equipment is prohibited unless you have been trained to use it safely. Use safe work procedures which cooking and handling hot plates to avoid burns. Treat all other employees as you would like to be treated at all times (Kumari & Kapur, 2019).

Kumari and Kapur (2019) further argue that to ensure health and safety is a consideration in the restaurants, you should train your restaurant's employees on how to operate different types of machine and tap into technology to ensure that the work done in the premise is done efficiently. Technology will help in work done like it will help in speed, efficiency, instead of employing many employees the machines will do the work, and this will aid in high profit recorded. Maintaining restaurant's equipment also helps in safety managements. The equipment must be managed well so as no accident will occur while using the required equipment (Webb & Morancie, 2015).

Webb and Morancie (2015) further posit that facilities in the restaurant should also be maintained to ensure resources are not be wasted at any cost. Adhering to health and safety codes is also very important as it will help in safety in the establishment. It is equally important to obtain appropriate licensing to ensure that any working staff must be familiar with any equipment in the catering premise and their work is done well. According to Motarjemi and Lelieveld, (2014), disclosure of allergens and dietary information should be made and any flammable objects must be kept away from flames to ensure enough safety in the establishment. These flammable objects are objects that easily catch fire. The authors further note that all staff need to know how to use a fire extinguisher. It is equally advised to know how to also put out grease fire and to have an evacuation plan and know how to switch off your power sources.

#### **Knowledge of Employees on Health and Safety Management**

Webb and Moricie, (2015) argue that work place safety and health matters should regularly be communicated to employees and all information relevant to the program accessed. The responsibilities of safety manager comprise preparation and growth of workers in safety practices, judgement of requirement of safety procedures, regular testing and monitoring of working environs, safety examinations, organizing special training case of new equipment and measures and enhancement of security (Webb & Morancie, 2015). Workers have much to gain from a successful program and the most to lose if the program fails. They also often know the most about potential hazards associated with their jobs.

The objective of this study was to evaluate the determinants for quality and customer perception of food safety. The study also focused on customers' confidence in the safety of food served by restaurants, their beliefs, readiness and frequency of visiting.

### **Research Methods**

The study adapted a descriptive survey research design, the study aimed to effectively summarize and organize data related to health and safety practices in the area's hotels and restaurants. This method, as elucidated by Nyakundi et al. (2014) and Aborisade (2013), is instrumental in revealing the "what, where, and how" of a phenomenon.

Kabarnet Town in Baringo County, with approximately 20 hotels and restaurants, served as the study area. The target population focused on approximately 60 waiters employed in these establishments.

For the determination of the sample size, Yamane's formula was employed. With a target population of 60 employees and a margin of error set at 0.05 for a 95% confidence level, the resulting sample size was calculated to be 52. The sampling technique employed was purposive, specifically targeting individuals with direct influence on management. This approach ensured that those with valuable insights into health and safety practices were included in the study.

Data collection primarily relied on questionnaires as the main instrument. Closed-ended questionnaires were administered through the hotels' departments to the targeted respondents. The drop and pick method, where questionnaires were collected after a 2-day period, facilitated efficient data collection. The questionnaire itself was structured into various sections to capture general information about food and beverage operation in Kabarnet Town, and its closed-ended nature allowed for specific answers.

## **Findings**

In study the researcher targeted 10 respondents. All of them were returned full filed. This represents that 98% of the targeted population.

The histogram below represents the gender after the research. Female were 40% while male was 60%.

**Figure 1** *Representation by Gender* 

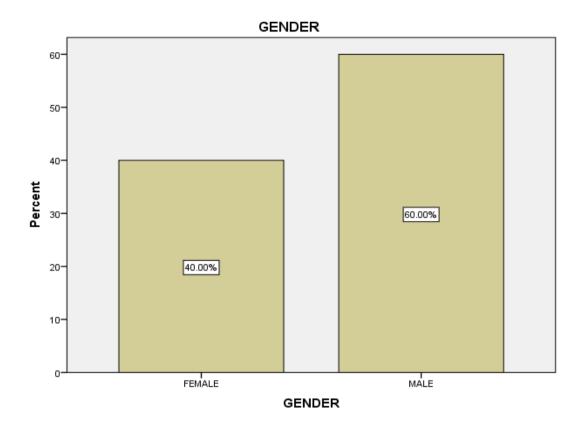
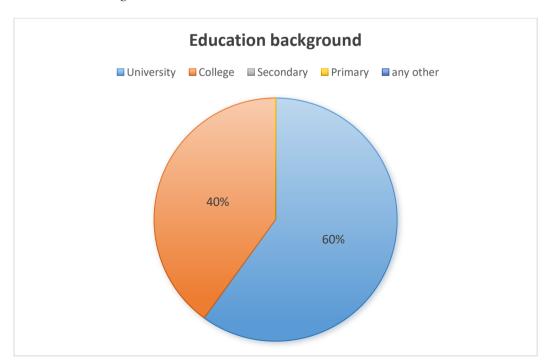


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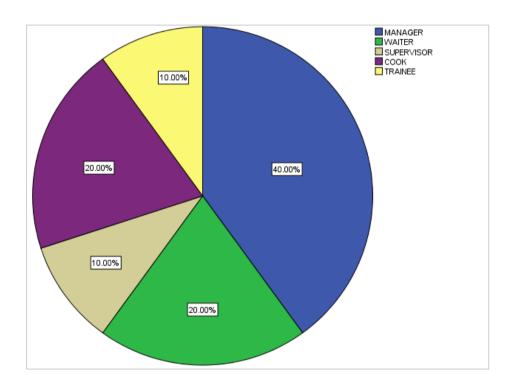
Figure 2

Educational Background



In the context of education background, Figure 2 indicates the distribution indicates that 60% of individuals had a university education, 40% had attended colleges, and none fell into the category of having both university and college education. This suggests a predominant presence of individuals with university-level education, followed by those with a background in colleges. The absence of respondents indicating both university and college education implies a distinct and non-overlapping distribution of educational backgrounds within the surveyed population. The information highlights the diverse educational qualifications of the participants, providing insights into the composition of the study sample in terms of their academic backgrounds.

**Figure 3**Distribution of Roles



The distribution of roles within the surveyed population indicates that 40% of individuals held managerial positions, suggesting a significant presence of individuals in leadership roles overseeing operations. Waiters constituted 20% of the population, highlighting the contribution of front-line service staff in the surveyed context. Supervisors and trainees each accounted for 10%, indicating a relatively equal representation of individuals in supervisory roles and those undergoing training within the workforce. Cooks comprised 20% of the population, reflecting the significance of kitchen staff in the overall workforce. This breakdown provides a glimpse into the hierarchical structure of the workforce, showcasing the varied roles and responsibilities held by individuals in different capacities within the surveyed setting

Figure 4
Strategies for Food Health and Safety Management

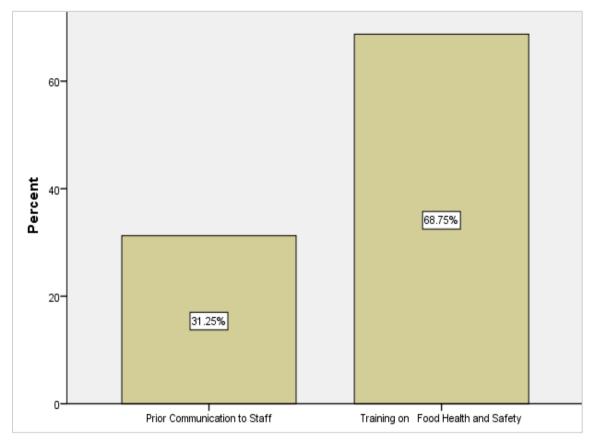


Figure 4 shows strategies for food health and safety management, illustrates the distribution of strategies employed, with 31.25% attributed to prior communication and the majority, 68.75%, associated with training on food health and safety management.

Research in the field of food safety management emphasizes the crucial role of communication and training in ensuring safe practices. Effective communication strategies before the implementation of safety measures are essential for creating awareness and understanding among staff. This aligns with findings by Jiang et al. (2017), who stressed the importance of communication in the implementation of food safety measures in restaurant settings. The study suggests that clear communication can enhance employees' knowledge and compliance with safety protocols.

The significant proportion of 68.75% dedicated to training aligns with established practices in the hospitality industry. Training programs have been recognized as a key component in promoting food safety and hygiene (Motarjemi & Lelieveld, 2014). Research by Kim et al. (2019) underscore the positive impact of training on improving food safety practices in restaurants. Training not only enhances employees' understanding of health and safety protocols but also contributes to a culture of continuous improvement and compliance.

Linking with other studies, a comprehensive approach that combines communication and training aligns with best practices outlined by Almanza et al. (2018). Their research emphasizes the need for multifaceted strategies that include effective communication and ongoing training to ensure the success of food safety management systems

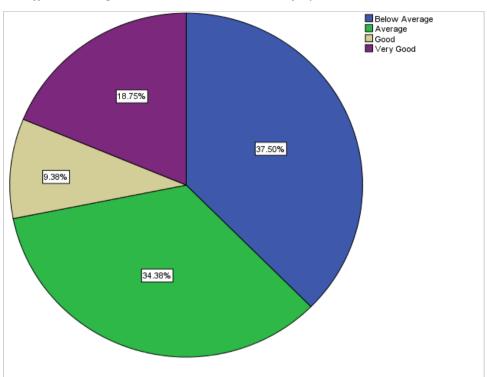


Figure 5
Staff Knowledge about Food Health and Safety

In knowledge about food health and safety, 18.75% have Very Good Knowledge of Food Health and safety management, while 9.38 Good, 34.38 average and finally 37.50 Below average

The distribution of knowledge levels about food health and safety management indicates that:

- 18.75% of the respondents possess "Very Good" knowledge
- 9.38% have "Good" knowledge
- 34.38% fall into the "Average" knowledge category, and
- The highest percentage, 37.50%, is classified as having "Below Average" knowledge.

This breakdown reflects the varying degrees of familiarity and understanding among the surveyed individuals regarding food health and safety management practices.

Those with "Very Good" knowledge are likely well-versed in the principles, protocols, and best practices associated with food safety. They may have a comprehensive understanding of regulations, hygiene standards, and risk mitigation strategies.

Respondents with "Good" knowledge may exhibit a solid grasp of food health and safety concepts, but there may be room for improvement or further refinement in certain aspects.

The "Average" knowledge category suggests a moderate understanding of food health and safety management. Individuals falling into this group may have a basic understanding of key principles but may benefit from additional training or awareness programs to enhance their knowledge.

The largest percentage, categorized as having "Below Average" knowledge, indicates a substantial portion of respondents who may have limited familiarity with food health and safety practices. This group may require targeted training and education initiatives to improve their awareness and adherence to established safety standards.

Figure 6

Recommendations for Effective Food Health and Safety Management

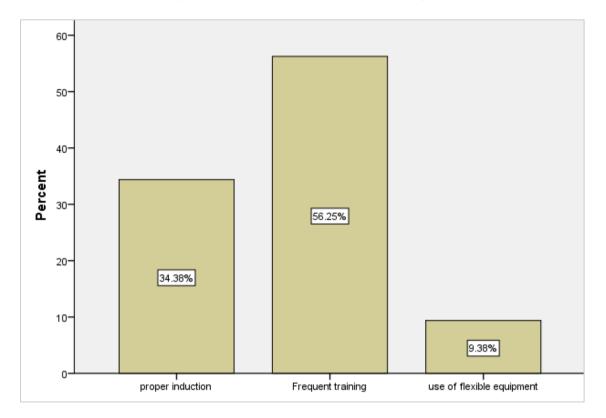


Figure 6 shows that the distribution of recommendations indicates that a majority of respondents advocate for frequent training on food health and safety for staff, with 56.25% supporting this approach. Additionally, 34.38% agree that providing proper induction on food health and safety to new employees is crucial, while 9.38% suggest that the use of flexible equipment can contribute to effective food health and safety management.

These recommendations align with established practices and findings in the literature, reinforcing the significance of comprehensive strategies for enhancing food health and safety in various settings.

Motarjemi and Lelieveld (2014) agree with the findings that frequent training on food health and safety is recognized as a crucial component, with regular sessions helping to reinforce knowledge, update staff on new regulations, and instill a culture of continuous improvement. The importance of ongoing training in maintaining and enhancing food safety standards is highlighted in Motarjemi and Lelieveld's practical guide for the food industry.

Proper induction for new employees is emphasized as crucial to ensure that staff members are well-informed and compliant with food health and safety protocols from the outset (Committee on Review of the Food and Drug Administration's Role in Ensuring Safe Food, 2010). The report underscores the significance of comprehensive training for all personnel involved in food production and handling, emphasizing the need for effective onboarding processes.

Regarding the use of flexible equipment, although specific citations may be limited, the concept aligns with broader principles highlighted in the World Health Organization's Five Keys to Safer Food Manual (WHO, 2009). This manual emphasizes the importance of using appropriate equipment and tools in food handling to prevent contamination and ensure safety

#### **Conclusion**

The findings from the analysis of roles, strategies for food health and safety management, knowledge levels, and recommendations provide valuable insights into the dynamics of food safety practices within the surveyed population. The distribution of roles indicates a diverse workforce with individuals occupying various positions, highlighting the importance of collaborative efforts for effective management. The emphasis on training in food health and safety management strategies aligns with established practices in the hospitality industry, emphasizing the critical role of ongoing education and communication.

The assessment of knowledge levels reveals variations among respondents, emphasizing the need for targeted training initiatives to address gaps and enhance overall awareness. Recommendations provided by the surveyed individuals further underscore the importance of continuous training, proper induction for new employees, and the potential benefits of flexible equipment in ensuring food health and safety.

### **Recommendations**

The following recommendations were made for the restaurants:

Implement regular and targeted training programs for staff at all levels to enhance their knowledge and understanding of food health and safety practices. These programs should cover regulatory requirements, best practices, and emerging trends in the field.

Strengthen onboarding processes to ensure that new employees receive comprehensive induction training on food health and safety protocols. This will contribute to a more informed and compliant workforce from the beginning of their tenure.

Enhance communication strategies, especially prior communication, to create awareness and understanding among staff regarding upcoming safety measures. Clear communication has been shown to positively impact employees' knowledge and compliance with safety protocal.

Explore and adopt flexible equipment solutions where applicable, considering the suggestions provided by respondents. While specific citations may be limited, aligning equipment use with broader principles outlined in manuals such as the WHO's Five Keys to Safer Food can contribute to improved safety practices.

Establish mechanisms for continuous monitoring and evaluation of food health and safety practices within the organization. This includes regular assessments of knowledge levels, the effectiveness of training programs, and the implementation of recommended strategies

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