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*Chinese Consumer Preference for Certain Asian Native
Restaurants and the Role that Hygiene Plays in Their
Options*

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Chinese Consumer Preference for Certain Asian Native Restaurants and the Role that Hygiene Plays in Their Options

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Abstract

Purpose: The purpose of this study was to explore food handlers' hygiene practices as determinants of customers' preference for certain Asian native restaurants in China.

Methodology: The study used a desktop literature review methodology (desk study). This required a thorough analysis of research on the food handlers' hygiene practices as determinants of customers' preference for certain Asian native restaurants'. The subject of the study underwent three phases of sorting in order to assess its suitability for further study.

Findings: The results demonstrated that the two variables had no meaningful link with one another. The majority of customers were not concerned with hygiene standards, as was shown in numerous restaurants where high customer volumes persisted despite the presence of subpar hygiene measures.

Therefore, the study came to the conclusion that although hygienic procedures have an impact on customers' decisions about which restaurants to visit, the impact is not substantial.

Unique Contribution to Theory, Practice and Policy: According to the report, public health authorities in metropolitan areas should train all restaurant stakeholders in food hygiene standards and alert customers to the risks involved with inappropriate food handling. The study also advised restaurant owners to follow food safety laws, and it suggested conducting similar research in other cities, in rural restaurants, and with more eateries.

Keywords: *Customer, Asian, Native, Restaurants, Hygiene.*

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INTRODUCTION

Food safety is an essential public health problem that affects all countries. The problem of Food-borne diseases is widespread and represents a serious threat to good health in both developed and developing countries. Approximately two million children die annually from diarrheal diseases, while hundreds of millions suffer from frequent episodes of diarrhea and its debilitating consequences, mostly caused by food or waterborne pathogens (WHO, 2019). In the United States of America, Centre for Disease Control and Prevention (CDC) estimates that foodborne diseases cause approximately 76 million illnesses annually among the country's 290 million residents, as well as 325,000 hospitalizations, and 5,000 deaths of known pathogens account for about 18% of the illnesses and 36% of the deaths, while unknown agents account for the rest.

Food handlers play an important role in food safety and in the transmission of food poisoning, because they may introduce pathogens into foods during production, processing, distribution and even presentation (Ansari-Lari *et al.*, 2020). An understanding of food safety procedures and potential factors that cause food borne illness is very important for all food handlers. According to Magda *et al.* (2022), only knowledgeable and skilled employees, trained to follow the proper procedures together with management that effectively monitors employees' performance, can ensure food safety. Hands are one of the principal vehicles for the cross contamination of infectious agents onto ready to eat food.

A couple of studies have indicated that various bacteria, amongst others *Escherichia coli*, *Staphylococcus Aureus*, and *Salmonella sp.*, may survive on surfaces and hands for hours and even days after initial contact with the microorganisms (Jiang & Doyle, 2019; Kusumaningrum *et al.*, 2022; Scott & Bloom, 2020). The above microbiotas have been associated with many food-borne and food related illness for decades and there is no doubt that they, amongst others the genera *Listeria*, *Campylobacter*, *Bacillus* and *Clostridium* are the causes of illness and even death to many people each year, at immeasurable economic cost and human suffering (Wilfred & Fairuze, 2021).

Analysis of the reports on foodborne diseases outbreak throughout the world have confirmed the fact that, the majority of them result from improper food handling practices. Such practices include use of leftover chicken, improper food storage and unhygienic practices, among food handlers in food-businesses, canteens, residential homes and other places (FAO, 2015; Hejar *et al.*, 2021; Ryu *et al.*, 2021).

According to Seaman (2019), the poor knowledge and improper food handling of native food vendors in basic food safety measures and poor knowledge and awareness among consumers about the potential hazards associated with certain foods could explain the health and safety issues that native foods may pose. Moreover, it is important to state that the costs of food-borne illness include the cost of medical treatment, productivity loss, pain and suffering of affected individuals, industry losses, and losses within the public health sector.

A study by Osagbemi *et al.* (2020) in Owerri, Okene Metropolis, Nigeria on urban restaurants showed that there is inadequate current food hygiene knowledge among the staff. The study proposed the development of a proper food service personnel-training program in order to eliminate the potential danger of outbreaks of food related illnesses. The government involvement in promoting food hygiene through public announcements, offering incentives to motivate

restaurants staff trainings, especially fast-food establishments as well as itinerant food hawking outlets were proposed as positive intervention to preventing food related illnesses.

A group of trainees taking part in the Belgian VLIR UOS funded Intensive Training Program in Food Safety, Quality Assurance and Risk assessment at Ghent University opinion on food safety issues in their country further provided insights onto global concerns on hygiene and food safety. Over the years 2019–2015 a total of 79 participants from 29 countries worldwide including Belgium, Bangladesh, Brazil, Bolivia, Benin, Cameroon, Cuba, Colombia, Cuba, Ethiopia, Ghana, India, Indonesia, Italy, Jordan, China, Nepal, Nigeria, Palestine, Philippines, Rwanda, South-Asia, Sri Lanka, Sudan, Tanzania, Thailand, Togo, Uganda, Vietnam and Zimbabwe took part in this survey. The major concern in food hygiene and safety mentioned were bacterial pathogens, residues of pesticides and healthy diet. Furthermore, it was clear from the survey that the overall contextual factors mainly impacted on food hygiene were perceived to be lack of food safety knowledge and need of health (Grace, 2015). Rabbi and Dey (2015) observed a strong correlation between knowledge and positive food handling practices. This reinforced the importance of assessing training needs and evaluating the effectiveness of the training offered to food handlers. Besides, the correct environment ought to be created to ensure that the food handlers apply the relevant skills and knowledge gained from these trainings (Grace, 2015).

A study by Kim and Moon, (2019) and Howes (2016), found out that the factors that influence customer choice of a restaurant included prices of meal, past experience with similar types of restaurants, reputation of restaurant among people that respondent know, convenience, whether any memorable advertisement seen, appearance of other customers, whether employee appropriately dressed, manner of employees, and premise. Fatimah *et al.* (2021), also found that customers selected restaurants based on service, quality of food and ambience.

Statement of the Problem

Native restaurant customers are generally composed of individuals from different cultural, ethnic and economic backgrounds and most of whom have definite and conflicting restaurant preferences. As such, they have different characteristics; hence, they tend to use different criteria in selecting restaurants. A deeper understanding of consumers' selection criteria will provide restaurateurs with valuable information and insights, which enable them to attract and retain more consumers (Jang & Namkung, 2017). Thus, the central question for this study was is: what are the major attributes that influence their choice of Asian native restaurant? In the available and current literature, menu price is one of the major factors determining consumer decision-making and subsequent behaviors.

Kafel and Sikora (2015), assert that restaurant consumers use price as a measure for the quality of the restaurant, assuming that an expensive restaurant serves better food and offers better quality. Therefore, the relative importance of the restaurant choice factors differs considerably by restaurant price. Consequently, there is a need to understand the choice factors and their relative importance that influence restaurant patrons' decision so that restaurateurs can supply their offerings and develop strategies accordingly. While food hygiene is a key factor in deciding where a customer can dine, (Ungku Fatimah *et al.*, 2021), most of them do not think of hygiene aspect when choosing a place to eat. The few who consider hygiene normally use visible cues such as

restroom cleanliness and aesthetic to reflect the environment hygiene. A couple of scholars have indicated the major push factors for customers to visit native restaurants as curiosity, for health reasons as well as to sample the variety of dishes offered by these establishments (Campos *et al.*, 2019).

Objectives of the Study

The general objective of this study was to investigate and document food handlers' hygiene practices as determinants of customers' choice of Asian native restaurants in China.

Significance of the Study

The increasing number of native restaurants offering a variety of food and beverage is because of the ever-growing urban population. There is limited data on food handlers' safety and hygiene practices in local native restaurant. It was therefore important to research this topic as this would assist in improving food safety and hygiene standards of the food handlers. This would further aid in keeping in check food borne illnesses incidences in restaurants and other food service outlets. The result of the study would help policy makers to develop effective and supportive training programs that would eliminate food safety hazards and promote health. There was also the need to assess the present food safety situation in order to develop preventive and protective solutions such as good hygiene practices and application of HACCPs (Hazard Analysis Critical Control Point) system in native restaurants. The findings of the study would further increase awareness of food safety and hygiene standards, knowledge and attitudes of native restaurants' food handlers and encourage sustainable application of hygiene practices among the caterers. The findings would help the restaurants' proprietors to better understand workers towards food hygiene and highlights the importance of instituting and monitoring food handlers training programs and practices.

LITERATURE REVIEW

Food Handlers' Hygiene Practices

According to Isara and Isah (2019), food handlers are persons involved in either point of preparation, processing or production of food. Thus, food handlers' personal hygiene practices and cleanliness is essential in minimizing the risk of food contamination and hence food poisoning. Food handlers are required to minimize contact with raw and ready to eat food and, observe that health related issues such as illnesses are handled with utmost care. Food handlers are potential sources of microorganism that causes illnesses through transmission of bacteria and viruses onto food or food preparation surfaces. This results to food contamination and poisoning, that is eliminated through proper hygiene practices of handling raw and ready to eat food material for safe food provision (FDA, 2019).

FDA (2020), stated that poor personal hygiene was identified as one of the most risk factors in food borne illnesses occurrence. Customers are reluctant to patronize establishments that portray low level of cleanliness in fear of possible food borne illnesses. The research points out that food handlers' knowledge and awareness about personal hygiene requirement plays an important role in preventing food contamination. Various studies have investigated influences of food handlers safe handling practices, with barriers identified. Most of these influences and barriers are

behavioral such as regular hand washing, improper use of certain equipment and failure to utilize training manual provided by the employers (Roberts *et al.*, 2022).

According to Chung and Kim (2021), food handler ought to dress in clean and proper attire, wash hands thoroughly with soap and clean water before and after handling food, after visiting the toilet, after handling unsanitary articles, touching animals, touching raw food, after handling toxic and dangerous materials as and when necessary. Fingernails ought to be short, hair tidy, covered, clean, and Non-infected cuts completely protected by a waterproof dressing. Smoking chew gum while preparing or serving food as well as unhygienic practices such as spitting and cleaning nose, ears or any other body orifice. On environmental hygiene, clean compounds proper liquid and solid waste disposal, clean utensils and food stores guarantee hygiene.

Customers' Choice of Native Restaurants

According to Barber and Scarcelli (2019), customers usually select restaurants and other food outlets that meet their approved standards for value and quality, where any restaurateurs who ignore this aspect suffer low volume of business and income as well. Liu *et al.* (2019), observed that indicators of safe food play an important role in customers' loyalty and retentions in hotel industry. These indicators include restroom cleanliness and ambience, which often influence customers' attitude towards a restaurant and its' staff hygiene practices. Namkung and Jang (2019), further observed that service quality, product quality and the atmosphere are attributes affecting perceived quality of the restaurants and meals experience. These were tied to the personal hygiene of the food outlets workers, who have a direct contact with the patrons of the establishment.

According to Kim and Moon (2019), customers follow different criteria when deciding on where to dine out. Restaurant environment is considered a major concern for the customers who wish to dine out. Usman (2022), indicated that customer consider price, variety of food, promotional deals and timely service as important factors in selecting a restaurant and this vary from one group of customers to another. Even though income levels, health and curiosity are push for customers visiting native restaurant, hygiene factors were presumed to be vital in decision-making. According to Odeyemi (2022), customer attitudes of hygiene have various determinants which include cultural diversity, type of food offered in restaurants, safety of prepared and sold food in addition to personal hygiene of the food handlers. The researcher observed that these were the main determinant of food safety and hygiene in catering establishment.

These individuals play an important role in customers' attitude and choice of eating points among other factors. The researchers further observed that hygienic state of restaurants environment affect the attitude of customers toward the whole meal experience. Presence of rodents, cats and insects around restaurants affect the meal experience. Customers' choice of restaurants is based on many varied factors. Several published studies, have investigated key criteria consumers use in choosing a restaurant resulting to a number of varied choice factors. The factors that have been found to influence restaurant decisions are Food Quality, Unique Tastes and Ingredients, Menu Variety Appearance and Presentation as well as healthy food options (Namkung & Jang, 2019). The physical environment of the restaurant such as restaurant's atmosphere, ambience, décor, furniture and other facilities can have a great impact on consumer selection behavior (Kubde *et al.*, 2016).

Customers generally feel superior in restaurants with elegant ambience, décor and furniture and they claim that the ambience and style suit their esteem need (Akbar & Alaudeen, 2022).

Empirical Review

Nizame *et al.* (2019), conducted a study on hygiene in restaurants and among street food vendors in Bangladesh. Poor hand hygiene and food handling put consumers of restaurant and street food at risk of enteric disease, especially in low-income countries. This study aimed to collect hygiene indicators from a nationally representative sample of restaurants and street food vendors. The field team collected data from 50 rural villages and 50 urban administrative units (*mahallas*). The study explored restaurant service staff, cook, and food vendor hygiene practices ($N = 300$ restaurants and 600 street food vendors), by observing hygiene facilities, food handling, and utensil cleaning. A qualitative assessment explored perceptions of hygiene related to food handling. During restaurant spot checks, 91% (273/300) had soap and water at handwashing location for customers but in only 33% (100) at locations convenient for restaurant staff. Among street food-vending stalls, 11% (68/600) had soap and water when observed. During 90-minute structured observations, cooks used soap to wash hands on 14/514 (3%) of occasions before food preparation, 6/82 (8%) occasions after cutting fish/meat/vegetables, 3/71 (4%) occasions before serving food, and 0/49 (0%) occasions before hand-mashing food/salad preparation; no street food vendors washed hands with soap during these food-handling events. Most of the qualitative study participants perceived that customers select a vendor based on tastiness of the food, whereas no one mentioned the importance of food hygiene. The study demonstrates widespread poor hygiene and food-handling practices in restaurants and among food vendors. Based on our study findings, we proposed a food premises Hygiene Investigation Model to create action plans to improve food safety.

Clark *et al.* (2019), explored the influence of food safety climate indicators on handwashing practices of restaurant food handlers. Recent models have conceptualized food safety climate as a subcomponent of food safety culture that consists of the shared values and perceptions of employees. The present study sought to understand how food safety climate indicators including commitment, role overload, and contingent rewards affect handwashing frequency of restaurant food handlers ($n = 124$). Managerial commitment was the only variable significantly correlated with handwashing frequency $r(120) = .313, p < .001$. A multiple regression model showed managerial commitment was a significant predictor of handwashing frequency, $F(1,117) = 12.70, p < .001, R^2 = .098$. Role overload moderated the relationship between goal level and handwashing frequency, but only when role overload was low, $b = .530, (115) t = 2.02, p = .046$, suggesting the presence of competing subcultures. Managers should prioritize a food safety culture and structure jobs in such a way that promotes food safety behavior execution.

Cha and Borchgrevink (2019), investigated customers perceptions in value and food safety on customer satisfaction and loyalty in restaurant environments. Using a valid sample of 334 restaurant diners, this study investigated the relative effects of perceived value and food safety on customer satisfaction and customer loyalty. The proposed model was consistent with other cognitive-attitudinal-behavioral frameworks. This study also explored how these two perceptions on customer satisfaction were different based on gender and restaurant type. We found support for all of the hypothesized relationships. Results from the structural equation modeling showed that

customer satisfaction mediated the relationships between two antecedents and customer loyalty. Implications of the findings, limitations of the study, and recommendations for future research were discussed.

Souza *et al.* (2018), conducted a study on food safety in Brazilian popular public restaurants. This study aims to assess food safety knowledge and practices of food handlers in popular public restaurants in Brazil. A questionnaire has been applied with 70 food handlers in different municipalities, with questions related to food safety knowledge and food safety self-reported practices, and observed practices. To check hygienic-sanitary conditions of restaurants, a checklist has been applied. Regarding food safety knowledge, an average of 72.64% of correct answers has been observed. Food safety self-reported practices presented 80.71% of adequacy, while observed practices were 75.40%. A positive correlation has been observed between food safety knowledge and self-reported practices of handlers. The observed food safety practice of handlers presented no correlation with food safety knowledge and self-reported practices. The average adequacy of hygienic-sanitary conditions was 68.08%, classifying the units as “regular.” Despite satisfactory results related to the handlers' food safety knowledge and practices, the hygienic-sanitary conditions of the restaurants are of concern.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in the executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through online journals and libraries.

FINDINGS

The results were grouped into various research gap categories namely as conceptual and contextual.

There is a gap in Knowledge on whether food handlers' play any significant role in customer process and extend of this food safety and hygiene training outbreaks by various means for decades. In addition to this, there is very little exploration on customer awareness of food safety issues and concerns for dining in native food establishments, their opinions on current food safety practices in these restaurants, and suggestions on how to improve food safety practices. There is limited emphasis on personal hygiene practices of the food handlers such as hand washing, grooming as well as their health status, as factors that promote food safety and hygiene in native restaurants. Most of the research studies were about what food hygiene entails, with very limited information on the customers' attitudes towards the safe food practices of the food handlers.

The reviewed literature indicated that no studies has been carried-out locally on the food handlers' hygiene practices as determinants of customers' choice of restaurant. In addition, there is no clear study that has been carried-out specifically among the Asian native restaurants in China. The foodborne illnesses are on the rise despite the many interventions and research in food safety.

Native restaurants phenomenon is on upward growth and customer base is enlarging. It was therefore imperative to conduct this study in order to seal the existing gaps in knowledge.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study discovered that most customers are not keen on hygiene standards because this was quite evident in some restaurants where regardless of the poor hygiene practices present, there were still high flows of customers. The study therefore concluded that even though hygiene practices have an effect on the customers' choice of the restaurants, the effect is not significant. The study set out to establish relationship between food handlers' hygiene practices and customers' choice. The conclusion was that there is no significant relationship between the food handlers' hygiene practices and customers' choice of Asian native restaurants in China. There was high customer turnover especially in some native restaurants where poor hygiene practices such as dirty compounds and crockery observed. This meant that although hygiene is a major determinant in selecting where to dine, customers are not keen on it.

Recommendations

The relevant authority should enforce the laws and inform consumers through posters, the media and publicity campaigns about hazards associated with improper handling of food and the steps the authority require restaurants to take to minimize those hazards. Consumers should be educated about their responsibility in ensuring that they do not contaminate, dirtily or litter street food vending sites. Proper food safety and hygiene training will ensure correct passage of information to the employees (staff/Food handlers) and customers and thereby increase participation in implementation of food safety systems. The public health authorities in urban restaurants should extend their periodical spot checks and random sampling together with the sensitization on food safety standards to the Staff and managers of the food establishments. They should also do thorough checks on how food materials are received stored, issued, prepared and served to the customers.

REFERENCES

- Akbar, Y.A.A. & Alaudeen, M.S.S. (2022). Determinant of factors that influence consumer in choosing normal full-service restaurants: Case in Seri Iskandar, Perak. *South East Asian Journal of Contemporary Business, Economics and Law*, 1(4): 137-145.
- Ansari-Lari M., Soodbakhsh S. and Lakzadeh L.,(2020). “Knowledge, attitudes and practices of workers on food hygienic practices in meat processing plants in Fars, Iran”, *Food Control*, 21: 260-263
- Barber, N., & Scarcelli J.M. (2019).”Clean restaurant: How important are they to restaurant customers?” *Journal of food service*, 20 (6): 309-320.
- Brewer, M. S. and M. Rojas (2022). Consumer attitudes toward issues in food safety. *Journal of Food Safety* 28(3): 1-22.
- Campos, A..K.C., Cardonha, A.M.S., Pinheiro, L.B.G., Ferreira, N.R., Azevedo, P.R.M. and Stamford, T. L. M. (2019). Assessment of Personal Hygiene and Practices of Food handlers in Municipal Public Schools of Natal, Brazil,” *Food Control*, Vol.2, No. 10, pp. 807-810. doi:10.1016/j.foodcont.2008.10.010
- Cha, J., & Borchgrevink, C. P. (2019). Customers’ perceptions in value and food safety on customer satisfaction and loyalty in restaurant environments: moderating roles of gender and restaurant types. *Journal of Quality Assurance in Hospitality & Tourism*, 20(2), 143-161.
- Clark, J., Crandall, P., & Reynolds, J. (2019). Exploring the influence of food safety climate indicators on handwashing practices of restaurant food handlers. *International Journal of Hospitality Management*, 77, 187-194.
- FAO (2015), “*Foodborne disease monitoring and surveillance systems*”, available at <http://www.fao.org/docrep/meeting/006/j2381e.htm> (accessed 20 May 2015).
- Food and Drug Administration. (2019). *FDA reports the occurrence of food borne illness risk factors in selected institutional food service, restaurant and retail food store facility types, US: FDA National Retail Food Team*. Retrieved July 21, 2014, From <http://www.fda.gov/food/guidanceregulation/retail-foodprotection/Foodcode/ucm2019396>.
- Food and Drug Administration. (2020). *FDA trend analysis report on the occurrence of food borne illness risk factors in selected institutional food service, restaurant and retail food store facility types. FDA National Retail Team*: Retrieved July 21, 2014, from <http://www.fda.gov/food/guidanceregulation/retailfoodprotection/foodcode/ucm2019396.htm>
- Grace, D. (2015). Food safety in low and middle income countries. *International Journal of Environmental Resources. Public Health*. 12: 10490–10507.

- Hejar,A.,NorAfiah,M.,Hayati,K.,Salmiah,S.,Yusma,M.andTiti,R.(2021), “Cleanliness of food in Bahau”, *Malaysian Journal of Public Health Medicine*, 11 (3): 31.
- Howes, M., McEwen, S., Griffiths, M. and Haris, L. (2016). Food handler certification by home study: measuring changes in knowledge and behaviour. *Dairy Food Environmental Sanitation* 3: 208-214.
- Isara, A.R., & Isah, E.L.(2019). Knowledge and practices of food hygiene and safety among food handlers in fast food restaurants in Benin City, Edo State, Nigeria. *Post-Graduate Medical Journal*, 16 (3): 207-212.
- Jang, S., Liu, Y., Namkung, Y., (2021) "Effects of authentic atmospherics in ethnic restaurants: investigating Chinese restaurants", *International Journal of Contemporary Hospitality Management*, 23 (5): 662 - 680
- Jiang XP, Doyle MP (2019). Fate of Escherichia coli 0157:H7 and Salmonella enteritidis on currency. *Journal of Food Protection*, 62: 805–807.
- Kim, W.G., & Moon, Y. J.(2019). Customers’ cognitive emotional and actionable response to the service scale: A test of the moderating effect of the restaurant type: *International journal of hospitality management* 28 (1): 144-156.
- Kubde SR, Pattankar J, Kokiwar PR. (2016). Knowledge and food hygiene practices among food handlers in food establishments. *International Journal of Community Medicine. Public Health*,3: 251-6
- Kusumaningrum HD, Van Putten MM, Rombouts FM, Beumer RR (2022). Effects of antibacterial dishwashing liquid on foodborne pathogens and competitive microorganisms in kitchen sponges. *Journal of Food Protection*, 65: 61–65.
- Namkung, Y., & Jang, S. (2019). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality and Tourism Research*, 31(3): 387-410.
- 476.
- Nizame, F. A., Alam, M. U., Masud, A. A., Shoab, A. K., Opel, A., Islam, M. K., ... & Unicomb, L. (2019). Hygiene in restaurants and among street food vendors in Bangladesh. *The American journal of tropical medicine and hygiene*, 101(3), 566.
- Odeyemi, O. A. (2022). Perception of foreign students on food safety and hygiene practices among food handlers in Malaysian restaurant. Public Health Perspective: *International Journal of Public Health Research*, 3 (1): 214-222.
- Osagbemi, G.; Abdullahi, A.; Aderibigbe, S.(2020). Knowledge, Attitude and Practices concerning food poisoning among residents of Okene Metropolis, Nigeria. *Research Journal of Social Science*, 1: 61–64.

- Rabbi S. E, and Dey N. C.(2015). Exploring the gap between hand washing knowledge and practices in Bangladesh: A cross comparative study. *Sectional BMC. Public Health*. 213:89
- Roberts, K., Arendt, S., Strohbehn, C., Ellis, J., & Paez, P. (2022). Educating future managers to motivate employees to follow food safety practices. *Journal of Foodservice Management and Education*, 6: 1-8.
- Ryu, J.H., Ko, J., Park, H., Yang, S.& Kim, H.(2021), “Microbial examination of non- heated foods served in feeding programs of elementary schools, Iksan City, Jeon buk Province, Korea”, *Journal of Food Protection*, 74(9): 1564-1568.
- Scott E, Bloom W. S.F.(2020). The survival and transfer of microbial contamination via cloths, hands and utensils. *Journal of Applied Bacterial*, 68: 271–278.
- Souza, C. V. S. D., Azevedo, P. R. M. D., & Seabra, L. M. A. J. (2018). Food safety in Brazilian popular public restaurants: Food handlers’ knowledge and practices. *Journal of food safety*, 38(5), e12512.
- Ungku F, U.Z.A, Boo, H.C., Sanbasivan, M.,& Salleh, R.(2021). Food service hygiene factors that Consumer perspective. *International Journal of hospitality Management*, 30(1): 38-45.
- Usman, E. (2022). Factors important for the selection of fast food restaurants: An empirical study across three entries in Pakistan. *British’s Food Journal*. 114(9): 1251-1264
- Wilfred, S. R. and Fairoze, N. (2021). Effect of processing condition on Microbiological quality of market poultry meat in Bangalore, India. *Journal of Animal and Veterinary Advance* 10(2):188-191.
- World Health Organization. (2019). *Global Burden of Disease*: WHO: Geneva, Switzerland, 2019. Available online on http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf. (accessed May 17th 2014).