

Food Safety Practices for Catering Employees

Adhip DESWAL

Resource Person, IHTM, MDU, India

ABSTRACT

Food safety and quality issues have turned out to be most successive in India and different nations. Studies have demonstrated that with increasing awareness among customer today demand safe food. Food safety and Standard Act is one law guaranteeing that all the food provided to purchaser is safe. Nourishment cooking Food catering ventures need to adhere to food safety measures to guarantee safe food to buyers. Safe steps in food handling, cooking, and capacity are fundamental to prevent foodborne disease. You can't see, smell, or taste hurtful microorganisms that may cause disease. The studies in past have demonstrated the presence of hurtful synthetic compounds and pathogens in the different food things particularly street food. However, there is a striking scarcity of reliable data in quality assessment and food safety looks into in catering organization are few in India. More research should be done in providing catering organization to get an unmistakable picture about food safety in these organizations. This research is done to study the food safety adherence to food hygiene and safety practices by food catering employees and the various hazards identified that cause illness.

Keywords : Food Safety, Food Hygiene, Hazards, FSSA

I. INTRODUCTION

Food is any substance devoured to give wholesome support to a living being. Food safety alludes to the conditions and practices that save the quality of nourishment to avert tainting and food borne diseases. Now days everyone likes to go out and enjoy their meal in a restaurants, food court, resorts and cafes. The food caterers those handling food material must follow the safety standards because if the same is not followed it can cause food borne illness. Food organizations get awful press for making consumer sick. Indeed, even without an authoritative association, there is in some cases a conviction that the last supper prompted the episode of gastrointestinal misery. While foodborne diseases do happen at foodservice foundations, it is hard to measure what number of and to what degree. Regardless of the absence of information, the foodservice business, with the organization of general wellbeing, has been proactive

in tending to foodborne ailment hazards inside their kitchens. Where things separate is at the usage arrange: if the 14-year-old table attendant doesn't wash his hands or if the 21-year-old line cook cross-pollutes.

The World Health Organization (WHO) reports that up to 30% of people in created nations procure diseases from the nourishment and water they consumer yearly. In accordance with the WHO, U.S., Canadian and Australian wellbeing authorities have comparable evaluations. Foodborne disease is a major issue, and not simply from a general wellbeing trouble. It has been assessed that sustenance related ailments cost the U.S. between \$152 billion and \$1.4 trillion yearly. Flare-ups, or even just gossipy tidbits about sickness, are in charge of business terminations consistently.

A culture of food safety is based on an arrangement of shared qualities that administrators and their staff take after to deliver and give food in the most secure way.

In an association with a good food safety society, people are relied upon to authorize hones that speak to the common esteem framework and bring up where others may fail. Using an assortment of devices, results and motivations, organizations can show to their staff and clients that they know about current food safety issues, that they can gain from others' oversights and that food safety is imperative inside the association. Making a culture of food safety inside a business implies supporting a situation where staff knows the risk and how to manage them, and where they value not making benefactor's sick. A food safety culture requires utilization of the best science with the best administration and correspondence frameworks, including convincing, fast, pertinent, solid and rehashed messages.

With developing worldwide exchange, food safety has risen as a vital worldwide issue in these new thousand years. The arrangement they call for is high food quality and integrity, security guarantees and transparency. Governments are forcing new enactment; retailers are making new requests on their supply chains. Food supply chains are responding by executing frameworks to enhance their item quality in an endeavor not exclusively to ensure the wellbeing of the items, yet additionally to raise the consumer network's consciousness of their endeavors. Such endeavors are performed at the level of either an individual organization or a total inventory network arrange. Food safety (FS), in this manner, is as of now thought to be an essential issue for all partners in the territory of food creation and also governments in setting new enactment in regards to food safety. The World Health Organization (WHO) was likewise asked "to give more noteworthy accentuation on food safety with the objective of creating reasonable, incorporated food safety frameworks for the diminishment in safety hazard along the whole evolved way of life, from essential maker to the buyer"

Quality control has turned into a cornerstone of nourishment wellbeing approach over the previous

decade in the food business. A significant part of the attention has been on vital quality administration frameworks. These frameworks incorporate all means in the food generation chain, for example, supply of raw materials food fabricating, bundling, transportation and coordination's, innovative work, support of creation gear, and preparing and training of staff . Additionally, "Food quality is related with a proactive approach and the formation of controls to keep up a protected sustenance supply. The business network in the sustenance inventory network respects the call for wellbeing from their clients, customers, government and different partners as a vital main impetus for constant advancement. These developments have been centered around executing frameworks to enhance the item's quality, to ensure its wellbeing and in addition to bring issues to light of these advancements all through their inventory network partner".

Food safety programs have turned out to be progressively essential because of technological advances in food and agrarian areas and furthermore because of social changes presenting new food propensities. Before, food was devoured by the individuals who delivered it or by their quick neighbors. Expanded world creation, urbanization, industrialization and relocation have anyway brought new food safety issues into our food supply.

So as to ensure that the food sectors coordinate to the best worldwide standards, the Government of India instituted an incorporated food law called the Food Safety and Standards Act in August 2006 and moreover a Food Safety Authority is being built up in no time. The FSSAI is nation's apex food controller, has planned a system trading off four annexures to take up the errand of fitting India's food norms with those laid by Codex Alimentarius Commission, set up by the United Nations, WHO, and the FAO. Additionally the target of FSSAI is to make food safety an across the nation development , to set down science based benchmarks for nourishment articles and to manage their produce , capacity, dispersion,

deal and import to guarantee the accessibility of protected and entire some sustenance for human utilization.

Need of study

Now day's people like to enjoy their weekends by going to restaurants, clubs, food courts, resorts, café and street food. So the staff employed for catering must have knowledge about the food safety and hygiene practices. This is important as if any rotten food or unhygienic food is given to the customer it can cause various food illness. This research is done to study the food safety adherence to food hygiene and safety practices by food catering employees and the various hazards identified that cause illness.

II. Objective

The objective of this research is to study the food safety practices that are followed by food catering employees and the various hazards identified that cause food illness.

III. Method of data collection

The research was basically done by secondary data published in journals, websites and published information from colleges as doctoral theories, books and papers. For this, review for the years 1995-2013 was inspected. The consideration criteria for investigating the literature on food safety was to address all issues that had an immediate or circuitous bearing on food safety issues, for example, food borne ailments, pathogenic creatures, sustenance contaminants and adulterants, Hazard Analysis and Critical Control Point (HACCP), chance evaluation, cleanliness and sanitation, food norms, learning, states of mind, convictions and practices (KABP), street food, food additives and food safety education. The food can be called healthy and nutritious when it is wholesome and is free from risks. The findings of the selected studies have been discussed under following topics:

- Hazards identified
- Food safety of catering establishments – adherence to food hygiene and safety practices.

IV. Review of literature

A study by Rodríguez and Gregory (2005) revealed that an effective training program surveyed whether members obtained new aptitudes amid the preparation, and whether the recently procured abilities were exchanged to the activity setting. The report additionally demonstrated that food safety preparing was suggested for all units of staff including junior food service staff, directors and chiefs who had to know the threats of food borne diseases and their anticipation. Another examination by (Egan et al., 2006) likewise watched that viable preparing relied upon both state of mind of the administration and their ability to give assets expected to execution of food safety frameworks. As indicated by Birchenough (2000), there was a solid relationship among knowledge and food taking care of practices. Prior investigations on execution of people showed that food safety information expanded with age and practice. Nurul (2008) proposed that preparation and inspiration should have been given to urge food handlers to rehearse suitable demeanor and methodology when working in the food field. By a similar token, another investigation directed by Coleman and Roberts (2005) watched that for food security conveyance frameworks to be viable, the predominant food safety convictions, learning and practices of food handlers must be evaluated, to figure out what was expected to change their mentality. All the more imperatively, Howells, Roberts, Shankling, Pilling, Branson and Berret (2008) proposed that there was a relationship between certain practices (mentalities) and proceeded with training of food handlers towards sustenance of safe nourishment taking care of practices. Howells et al. (1996; 2008) demonstrated that roughly 97.0% of foodborne episodes were because of uncalled for food dealing with rehearses in food benefit outlets. Then again, Ehiri and Moris (2001) brought up that learning alone was not adequate to advance uplifting demeanors and safe conduct among food taking care of work force. Ehiri and Moris (2001) additionally watched that

disposition was an essential factor that couldn't be disregarded if FBDs somehow managed to be limited. A microbiological investigation of open, prepared to-eat, arranged serving of mixed greens vegetables from retail providing food premises by Sagoo, Little and Mitchell (2003) distinguished an immediate connection between food cleanliness preparing and routine with regards to food safe techniques. Another investigation of prepared to-eat food from retail premises in North Eastern England by Richardson and Stevens (2003) additionally showed that individuals from staff who honed poor individual cleanliness could pollute food things with contaminated excreta, discharge, respiratory drippings or different irresistible releases. This claim suggested that food handlers were the significant wellsprings of defilement either as bearers of pathogens or through poor clean practices (Kaferstein, 2003). The investigation additionally recommended that food handlers could convey microbial pathogens on their skin, hair, hands, stomach related frameworks or respiratory tracts. Therefore, the report attested that it was basic for the staff to comprehend and take after fundamental food cleanliness standards to keep away from unexpected tainting of food, water supplies or potentially hardware utilized amid the handling of nourishment (Richardson and Steven, 2007) Sneed, Strohbahn and Gilmore (2004) directed another examination on food security practices and execution of HACCP program in offices in Iowa and distinguished various food safety practice concerns. They watched that hand washing was improperly done and food handlers had no powerful hair limitations. The investigation additionally noticed that sustenance temperature observing and recording were rare and sanitizer fixation utilized was not checked routinely. The investigation presumed that representatives in foodservice activities had adequate food safety learning and uplifting dispositions toward food safety however were not following the right techniques, a sign that there was have to enhance nourishment security rehearse (Sneed et al., 2004)

Data analysis and Interpretation

Hazards Identified

Food hazards are natural (organisms like microorganisms, parasites, yeast, and so forth.), concoction (like pesticides, allergens, and so on.) or physical specialists (paper, timber, tin , glass, metal,etc.) or physical state of a food with potential to cause harm or an antagonistic safety influence when the food is eaten. Different research conducted across India revealed incidents of microbial outbreaks across the nation over, pathogenic microorganisms like Coliform, Staphylococcus , Salmonella and Vibro etc. were found in various foods. Staphylococcus spp., Coliform, Salmonella spp. and Vibro cholera in fish, meat eggs and fish E.coli, Enterobacter spp. in milk and milk items fecal coliforms and E.coli in water and juices. Bacillus cereus in cooked food, S.typhi in vegetable plates of mixed greens, foods grown from the ground, Bacillus and E.coli in spices. Concentrates likewise demonstrated a portion of the rising pathogens water borne pathogens in food items. They were Listeria monocytogenes, Campylobacter jejuni, Salmonella, E.coli, Vibrio cholera. Concentrates likewise demonstrated utilization of non-allowed fake colour and flavors in different food items. Likewise, foods like drain, oil, red bean stew powder, turmeric were additionally discovered defiled. Exceptionally restricted information is accessible on the microbial sully in cooking association and was constrained to inns, school cafeterias and street foods. Be that as it may, few researches additionally demonstrated improper food hygiene in the associations under the study. Microbial testing of food served in school cafeterias demonstrated high microbial load in the food served there. The comparative study done in inns showed high bacterial tally in foods, swab tests of hands of workers and cooking surfaces likewise demonstrated microbial defilement. Additionally an exploration think about demonstrated deviation from the standard working strategies in lodgings Hence, food hygiene and safety usage is best in the prime providing food associations while little scale cooks

have demonstrated a tremendous deviation. Street food is an imperative piece of Indian food industry. Daily millions of individuals expend food from the street food sellers. Microbial examination of different food things served by road sellers in different parts of India showed the nearness of microorganisms in the majority of the food sold and also utilization of non-allowed colours and sweeteners. *S. aureus*, *E.coli*, Enterococci were found in drain lollies, desserts profound let go savories in Karnataka. In Tamil Nadu, browned fish, sugarcane juice, gulab jamun and atherosai (produced using rice flour and sugar) were recognized with vibrio and *E.coli*. An investigation in Hyderabad demonstrated that the greater part of the street food merchants were offering nibble arrangements which contained non allowed colour or were utilizing unhygienic practices, while different studied in same place demonstrated high sullying with *E.coli* in pineapple juice showing fecal pollution of water utilized and high yeast and form tallies in sugarcane juice. Likewise, high coliform tally and spread plate include was discovered other road nourishments of the city. The majority of the road food formula is straightforward and required not very many utensils. Subsequently, poor cleanliness and insufficient sanitation is a bottleneck of road food distributing. Deficient water accessibility, area close trash, presentation to climate contaminations, poor individual cleanliness of faculty included, all encourage to higher rates of medical issues.

Food Safety Of Catering Establishments – Adherence To Food Hygiene And Safety Practices:

Food hygiene and food safety form an integral part of every catering industry and high standards are needed to protect the health of consumers. At the point when a food benefit opens its entryways, a duty to serve "safe nourishment" is acquired. The expert administrator additionally understands that approach to guarantee long term achievement; it is basic to value the quality of the nourishment and administration being given to the clients. The consistent journey for items and administration

quality is a noteworthy test for food benefit foundations. Food hygiene and food safety has turned into an issue of awesome enthusiasm to everyone in the food division when the United States FSIS Pathogen diminishment or famously known as the HACCP run was distributed in July, 1996. These join the ideas of HACCP frameworks with FSIS necessities for composed Standard Operating Procedures (SOPs). Along these lines HACCP and SOPs have consequently turned into an essential piece of the food hygiene and safety frameworks in nourishment providing food units, particularly the bigger ones like lodgings. HACCP is characterized by numerous creators. A few definitions allude straightforwardly to food safety, mirroring the transcendent use to date of the HACCP approach in the food segment. Different definitions are more nonexclusive: a well ordered way to deal with the distinguishing proof and evaluation of dangers and dangers related with the make, conveyance, and utilization of items. For example, HACCP is characterized as a precise way to deal with the ID, evaluation and control of perils. In 1998, the Bureau of Indian Standards set out the Food Hygiene-HACCP-System and rules for its application as ISO 15000. HACCP thinks about were completed to look at the global exchange necessities of farming delivered. Different investigations were additionally completed to distinguish, assess and control dangers at different food creation stages. The research of these studied uncover that the HACCP framework is currently being advanced as a reason for administrative food control and as a standard for global exchange. A microbial report uncovered that various microorganisms were recognized from the hand swabs of handlers for coliforms in the scope of 1.7×10^4 to 2.2×10^7 . Another study demonstrated that by the use of HACCP to chosen formulas, the chose nourishment was totally without living beings like *Bacillus cereus* and *Staphylococcus aureus*. In providing food associations a unique accentuation is given on food safety and hygiene as a little rate of food harming can prompt serious outcomes. Providing food associations

like lodgings, eateries indicated more adherences to food hygiene and safety. While if there should be an occurrence of street food and network caterings like langars, and so on no food safety and hygiene standards were embraced. Absence of food safety awareness among the specialists brought about high microbial burdens. In a couple of studies, the Critical Control Points (CCPs) for disintegration of the nature of food was distinguished as coliform tainting from the hands of the food handlers and this was diminished radically when the food handlers utilized cleanser to wash their hands. Various investigations were completed to think about the nature of water, cleanliness and sanitation on institutional/mechanical containers, school flasks, and sterile conditions in dhabas (in India, thruways are dhabas, which by and large serve local cuisine, and furthermore fill in as truck stops), impact of hand washing agents on bacterial sully, microbial investigations of inn food administrations. The general cleanliness in those mechanical containers was inadmissible while in the vast majority of the lodgings and eateries, washing offices were insufficient. *E. coli* pollution was high (96.5% separation) in food served in school bottles. None of the food handlers had any training in food hygiene and just in 35% of the flasks drinking water was either sifted or bubbled. In dhabas, the aggregate bacterial include was high food, serving utensils, hands and nails of the food handlers and the material used to clean the dishes. A portion of the microorganisms recognized were *E. coli*, *Enterobacter*, *S. aureus*, *B. cereus*, however were inside their admissible cutoff points. In food industry, the food handlers are more often in contact with food. Thus, there is the need to instruct food handlers on GMP/GHP and furthermore that use of HACCP in the Indian setting is conceivable and would yield the coveted consequences of enhancing the security of food. Standard preparing and observing assumes an essential part in ensuring food safety in a providing food association. It causes the representatives to soak

up the essential cleanliness rehearses in their everyday work. Studies carried on in one of the urban communities of India to survey food safety in institutional providing food, modern containers, and doctor's facility cooking and chose business and noncommercial food benefit foundations demonstrated that around 20% of the staff who had experienced preparing in establishments indicated great scores when assessed for their awareness on food safety. This was apparent from their post-cooking stockpiling hones, food handlers' cleanliness and refuse transfer. A similar study done in industrial canteen of the food handlers to be in the propensity for washing hands, wearing garbs and covers while cooking and there were no occurrence of food borne sickness flare-ups, showing that the food handlers who experience preparing keep up great measures of cleanliness. A study likewise demonstrated that act of spontaneity of existing physical offices; sanitation cleanliness and work routine of a private container, instructing and preparing the faculty realized a more prominent awareness among the staff which thusly enhanced the bottle. Additionally, these are uncovered that a large portion of the nourishment handlers needed preparing in sustenance cleanliness which was research clear by the microbial tally from their hand washings. Since food handlers in greater eating foundations take into account a bigger number of individuals, they are epidemiologically more critical than local food handlers in spreading of food borne maladies executing food hygiene and safety standards at each phase of food generation in all sort of providing food associations is vital. In India, FSSAI was propelled in 2006 to guarantee that HACCP and other food security standard are embraced by all food providing food association. Indeed, even a street food seller must be ensured under FSSAI to ensure that food hygiene and safety is kept up at each level. This demonstration has been upheld in a large portion of the parts of India yet at the same time there are few states where it isn't authorized yet. The deferral in the requirement of act is prompting delay in selection of

food safety this act is aiming to bring a bright future to the word food safety in India.

V. CONCLUSION

In India there have been hardly any studies to assess the food safety and hygiene usage in the catering association. Additionally, there is a serious risk of microbial tainting of food because of poor food safety and hygiene information of food handlers. In India it is visualized that later on there would be a more serious spotlight on hazard appraisal, early cautioning/fast ready circumstances as the exporters of agro items and handled food have been confronting the stringent food safety principles in the created nation markets Indian government has had set out a FSSA to handle this issue and avoid disarray caused by different acts.

VI. REFERENCES

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About Author

Adhip DESWAL had done BHM from WGGSHA Manipal University, Manipal. Done MHM from IHTM, MDU Rohtak. Have attended various Internatioanl hospitality symposium and seminars. Have worked in BPSMV Khanpur as teaching assistant in H.M department and now working with IHTM MDU