

SCOPE AND IMPLEMENTATION OF FSSAI STANDARDS - IN FREE STANDING RESTAURANTS

Bhavna Sharma¹, Toshaan Harjai² and Anshu Singh³

¹Student, ²Student, ³ Senior Faculty, Institute of Hotel Management Catering and Nutrition, PUSA, New Delhi
prabalvir@yahoo.com

ABSTRACT

Background: The current study on "Scope and Implementation of FSSAI Standards"- in free standing restaurants was done with the aim of studying the aspects of food safety in restaurants in Delhi NCR. **Objective:** The objective of the study was to find out the implementation of FSSAI standards by restaurants. **Methods:** Restaurants were selected through random sampling. Checklist was administered in order to find out the existing scenario of FSSAI standards. **Result:** It was observed that only 17% of the restaurants were following FSSAI Standards.

Key Words: FSSAI, Food Safety Practices, Checklist

INTRODUCTION

Food-borne diseases are a major health burden worldwide. According to the National Centre for Disease Control (2009) 3.5 billion cases of infectious diarrhea are reported with 1.8 million deaths annually. In India, approximately 400,000 deaths of children below five years due to diarrhea are reported annually (Sudarshan et al, 2009). Food borne illnesses is associated with improper reheating, inappropriately storage and cross contamination (Walker et al, 2003). This brings forth the importance of establishing standard procedures so as to overcome such food borne diseases outbreak. Lee et al, 2004 did a study on Prevalence of high risk egg preparation practices in restaurants that prepare Breakfast Egg Entrees highlighted that use of pasteurized eggs may facilitate or hinder transmission of *Salmonella enterica* serotype Enteritidis (SE) in restaurants that prepare a large volume of egg products.

Coleman et al, 2013 did a study on handling practices of fresh leafy greens in restaurants Receiving and Training. The study concluded the restaurants are introducing of the Food and Drug Administration (FDA) guidelines for the safe handling of leafy greens since 2009. Practicing such guidelines should be a leading force for other restaurants to follow FDA guidelines. Brown et al, 2012 did a study on Restaurant Food Cooling Practices. The study indicated that 91% of the sampled restaurants were not adhering to FDA regulations in actuality. Such study results should not be ignored and immediate action should be taken against defaulters.

It was reported that restaurants with food safety-certified kitchen managers are less likely to have critical violations on their food safety standards than restaurants without these managers. (Cates et al, 2009). Similarly in a study on Restaurant manager and worker food safety certification and knowledge. The data was collected through interviews and surveys of 377 managers and 365 workers in randomly selected restaurants. The analyses showed that certified managers and workers had greater food safety knowledge than non-certified managers and workers. Additionally, managers and workers whose primary language was English had greater food safety knowledge than those whose primary language was not English. Other factors associated with greater food safety knowledge included working in a chain restaurant, working in a larger restaurant, having more experience, and having more duties. (Brown, 2014). From the study it can be understood that regular training programs should be planned for effective practice. These clearly indicate that there should be frequent monitoring of restaurants in order to have strict adherence to the food safety standards.

FSSAI or the Food Safety and Standards Authority of India, mandated and established under Food Safety and Standards Act, 2006; which consolidates various acts and orders that have hitherto handled food related issues in various Ministries and Departments. The FSSAI has been created for laying down science based standards for articles of food and regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. The FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety. (FSSAI, 2006). The situation of food safety in India with coming in of FSSA, 2006 will certainly take a leap in improving the quality of food served to the common man. Keeping this in purview the objective of present study was to identify the existing scenario of FSSAI standards.

METHODOLOGY

Survey design was adopted for the study. Checklist on the basis of FSSAI guidelines was formulated. Checklist was developed for the observation of the premises. Free standing restaurants (n=30) located in Delhi NCR were selected through random sampling. Checklist was administered on the manager along with the observation of the premises. For analysis of data a scale was developed with following ranges, excellent grade was allocated for the points in range of 30-35, good (25-29), average (20-24) and poor (0-19) on basis of which restaurants were graded.

RESULTS AND DISCUSSION

A. CHECKLIST ANALYSIS:

The checklist was administered in 30 restaurants of Delhi NCR. The checklist was adapted from FSSAI (2006).

All the restaurants were set up away from environmentally polluted areas (Table 1). Around 13% of the

restaurant did not have adequate space for manufacturing and storage. Adequately clean, lighted, ventilated and sufficient free space for movement was observed in 94% of the restaurant.

Cleanliness in and around the kitchens is the key for safe food. Though only 30% of the restaurants were following cleaning schedule planned for the organization, but it was observed around 80% and above restaurants have waste management systems, practice personnel and work station hygiene. This figure also includes appropriate storage of grocery item and cleaning agent.

During the processing of the food material 93% were segregating the vegetarian and non vegetarian foods, using color coded chopping boards (83%) and knives (43%). Around 90% were using the corrosion free materials for cooking of food material. Tagging of the food material to be stored was not practiced in about 63% of the restaurants. Adequate pot washing facility was available in 90% of the restaurant. Brown et al, 2013 reported in the study that only 43% of the managers knew the temperatures at which raw chicken must be cooked so that it is safe to consume. Bloomberg and Thomas, 2012 also reported 11% of restaurants reported cross contamination of food by contact with raw materials and non vegetarian food items. Temperatures for tomato cutting and holding temperatures was above 41% (Kirkland 2009)

Facilities for kitchen personnel's were also observed. It was found that 77% of the restaurants provided proper hand washing stations and provision of sanitizers. 94% restaurants provide lavatories and changing rooms. Separate rest rooms and refreshment room food processing and service area were considered in only 30% of the restaurants which in today scenario needs to be emphasized. Visual aids for food handlers regarding food safety issues were only present in 30% of the restaurants. Habit of smoking, chewing gutka in food handling areas were not practiced in 87% of the restaurants of the restaurants.

Documentation of records is a very important concept that food sector should maintain. During the study it was observed that 64% of the restaurants kept records of their procurements, 54% did not kept time and temperature records, 74% did not have standard operating procedures for the processing of food. Gould et al, 2011 in the study on beef grinding logs reported that only 22% of records had all the data needed for effective trace back.

Essential associated with kitchens like laboratory facilities for testing food material was not available with restaurants other essentials approachable like first aid box, fire extinguishers, and master cut off of gas and electricity was observed in 80% and above. Restaurant visitor's policy was functional only in 13% of the restaurants.

Upon analysis of the data it was found that majority (40%) of the restaurants were falling in grade category of average followed by 33.33% who were categorized as good. 16.67% restaurants were found to be excellent on the scale and only few (10%) were graded poor in conformance to the existing FSSAI standards.

Table1: Parameters for evaluating food safety standards at restaurants

Total (n = 30)				
Question	Particulars	Yes	No	NA
1	Set up away from environmentally polluted areas	30	0	0
2	Adequate space for manufacturing and storage	26	4	0
3	Clean, adequately lighted and ventilated and sufficient free space for movement	28	2	0
4	Floors, Ceilings and walls must be smooth & clean	29	1	0
5	Disinfectant used for cleaning	21	9	0
6	Access to potable water	29	1	0
7	Provision of Cleaning schedules for equipments	9	21	0
8	Availability of waste management systems	23	7	0
9	Use of clean aprons, hand gloves, and head wears	24	6	0
10	Adequacy of personal hygiene for food handlers (Nails, Hands, scratching)	27	3	0
11	Adequate space for storage of non-food items such as chemicals	26	4	0
12	Segregation of Vegetarian and non-vegetarian items	28	1	1
13	Provision of insect control measures such as insectocutors, wire mesh etc	24	6	0
14	Use of corrosion free materials for cooking	27	3	0
15	Segregation of chopping boards or provision of colour coded ones	25	5	0
16	Segregation of knives or provision of colour coded ones	13	17	0
17	Provision for covering of cooked food items (cling foil, lids etc)	27	3	0
18	Proper Tagging of stored food material	9	19	2
19	Adequate pot-washing facilities	27	2	1
20	Separation of bins for segregation of different kinds of waste	13	17	0
21	Proper handwashing stations with the provision of sanitizers	23	7	0
22	Miscellaneous Personnel facilities such as lavatories & changing rooms	28	2	0

Question	Particulars	Yes	No	NA
23	Separation of Rest and refreshments rooms from food process and service areas	27	2	1
24	A display board for sharing information & food safety issues	9	21	0
25	Records of raw materials, food additives and ingredients as well as their source of procurement is being maintained	19	10	1
26	Systems & Records to ensure that time and temperature are controlled	14	16	0
27	Proper outlets for smoke/steam etc. like chimney, exhaust fan etc.	30	0	0
28	Provision of Standard Operating Procedure (SOP) for the processing of food	6	22	2
29	Availability of laboratory for testing of food materials	0	17	13
30	Food handlers engaged in smoking, chewing gutka in food handling areas	4	26	0
31	Visitor policy for entering food handling areas	22	8	0
32	Presence of first aid box in close proximity	25	5	0
33	Availability of Fire Extinguishers	25	5	0
34	Provision of a master cutoff valve for gas	25	3	2
35	Provision of a master Switch for electricity	30	0	0

CONCLUSION

The study concludes that efficient strategies are required to put in place the existing standards of FSSAI in order to provide safe food to consumers. Efforts from both the ends- the restaurateurs and the government are needed to make it more effective. Mass awareness programs pertaining to "Food Safety" and "FSSAI Standards"; covering all aspects of food safety and its impact on the production of food; need to be designed and propagated to and through all enterprises and undertakings in the restaurant sector. Regular training sessions, external or internal should be implemented in restaurants. The government can encourage the safe production of food and maximum compliance with FSSAI standards by providing incentives like tax sops for the best performing restaurants.

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