



# KNOWLEDGE OF STREET FOOD VENDORS ON HYGIENE PRACTICES AND SAFETY ASPECTS OF STREET FOODS

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## ABSTRACT

**Introduction** Street food refers to foods and beverages which are prepared and sold by the sellers on places like streets, festival areas and consumed by the consumers there and then. Street food is the food which is widely consumed and has become an integral part of community life in urban as well as rural areas. Street food has become a prominent feature of diet of youngsters, especially in developing countries.

**Objective** The main aim was to check the knowledge of street food vendors on hygienic practices and safety aspects of street foods.

**Methodology** The study was conducted with street food vendors of Naraingarh District Ambala. Purposive sampling technique was used to select a sample of 30 street food vendors. Self-structured knowledge questionnaires were developed and 5-point attitude Likert scale was formulated.

**Results** Knowledge of street food vendors was assessed on their personal cleanliness, premises cleanliness, storage of food and food safety. Out of total, 70 percent of street food vendors had knowledge about personal cleanliness. With regards to cleanliness of premises, half of the vendors were found to be ignorant about cross-contamination. In terms of appropriate storage, only 20 percent of the vendors were found to store the food in right way followed by 30 percent of the vendors cleaning the refrigerator regularly. However, only 17 percent of the vendors attached importance to food safety and hygiene for avoidance of food safety. Emphasis is required for induction and training of street food vendors in order to have food safety. Regular laws and inspections must be mandatory in addition to licensing of such vendors.

**Keywords** Knowledge, Vendors, Hygiene, Safety, Consumption, Practices, Street Foods.

## INTRODUCTION

Street foods are defined as ready to eat foods and beverages prepared and or sold by vendors and hawkers especially in streets and other similar public places (FAO, 1987). Street foods are ready to eat foods and beverages prepared and sold by vendors especially in streets and similar public places (FAO, 1989). It is almost universal in developing countries and in industrial world. Street food refers to foods and beverages which are prepared and sold by the sellers on places like streets, festival areas and consumed by the consumers there and then. In other words, street foods are ready-to-eat foods or drinks sold by a hawker or vendor at any public place. They are often sold from a portable food booth, food cart or food truck and meant for immediate consumption. As compared to restaurant foods, these foods are more affordable alternatives to homemade food. Street food is a global phenomenon which bonds communities at a universal level. Street foods are basic part of a country's cuisine. Their role in preserving cultural and social heritage of local cuisine can't be overlooked. Approximately 2.5 billion people around the world consume street food every day. In Latin America, people spend nearly 30 percent of their budget for street food. Street food feeds millions of people daily with a wide variety of foods that are relatively cheap and easily accessible (Latham, 1997; Tambekar et al., 2011).

Street food enterprises don't seem to be welcomed by native authorities as their activities are seen as a hindrance to modernization. Finally, officers scrutinize street food vendors for having poor hygiene practices and conducive to unfold communicable diseases' outbreaks. Globally, food safety and quality have received exaggerated attention from both customers as well as researchers (Naspetti and Zanolli, 2009) and as per analysis customers usually like food products that are safe and of prime quality (Grunert, 2005). Consumers' concerns about the protection and quality of food tend to have an effect on their future intentions to buy food. In fact, analysis shows that there was associate degree inverse relationship between safety issues and supposed future consumption (Smith and Riethmuller, 2000).

Food quality and safety are therefore necessary that buyers are even willing to pay a premium over the conventional worth as long as they need a guarantee concerning the protection and quality of the food they purchased (Ortega et al. 2011; Wilcoy et.al, 2004). Therefore, food quality and safety are necessary in influencing consumers' perceptions and choices concerning food stuff decisions.

Food safety issues are notably turning into associate degree progressively serious threats to public health in developing countries. From totally different studies on the street food safety, perception of street food vendors is not utterly unaware of basic food safety practices. Studies reported that majority vendors knew that they need clean bath tubs frequently and not connected bath tub to visible dirt or objectionable odour, washed their hands throughout food preparation, serving, when exploiting the bathroom, sneezing, coughing and handling contaminated materials like exchange of cash (Omemu, 2008; Muyanja, 2011).

Street food safety is influenced ranging from the standards of raw material to food process and storing and similar steps within the method. Besides the actual fact that raw materials employed in these products are of poor quality, these foods are hold on underneath wrong and unsafe conditions for a protracted time, commerce

point of street food have a restricted infrastructure as regards to clean drinking water, toilets, state change ice-creams, medical aid, hand laundry, and removal of wastes. (Hanashiro et. al., 2005; Lucca and Torres, 2006).

Keeping in view the above-mentioned issues, this study was conducted for better understanding of the knowledge level of our street food vendors and also to suggest some preventive measures for food safety.

## OBJECTIVES

1. To check the knowledge of street food vendors on hygienic practices of street foods
2. To review the knowledge of street food vendors on safety aspects of street foods
3. To explore the knowledge of street food vendors on hygienic practices for prevention of diseases
4. To assess the hygiene and safety precautions implemented by street food vendors for reducing the risk of food contamination and re-contamination

## REVIEW OF LITERATURE

Amaami et al. (2017) found that street foods have now become a major source of food for most homes and individuals especially in developing countries. Zanin et al. (2017) revealed that 50 percent of the selected studies reported that knowledge was not translated into attitudes or practices. This is in accordance with the findings of our study. Jespersen et al. (2017) concluded that the occurrence of a social desirability bias may also have contributed to the divergence between self-reported and observed practices of food handlers. Samapundo et al. (2015) reported in their study conducted in Haiti that 60 percent of food-borne diseases were caused by flies and other animals and that 65 percent arose from lack of drinking water. They also reported that food was served with bare hands, and that sellers did not wash their hands after touching money and that 70 percent of sellers did not freeze the cooked food. Liu et al. (2015) stated that most of 171 food processors working at 22 food facilities operating at coast did not know maximum storage time for food at room temperature. Besides, they observed that food processors were mixing all of the products (raw and cooked) in the same containers.

Silva et al. (2014) mentioned that in Brazil 22.6 percent of street food sellers did not disinfect their hands while working and that 80.2 percent touched food and money at the same time. In their study, they emphasized that many of the street food sellers worked under poor hygiene conditions and they stated the socio-economic importance of street food sector. Liu et al. (2013) exhibited in a study carried out in China that the increasing threat of food safety has increased worries of consumers regarding food quality and reliability and that consumers now emphasize more on correct information, attitude and behaviours of vendors relating to food safety. It was also found that although consumers were aware of food safety, they had limited information as they did not read the labels well and also the labels were limited in describing safe food. Consumers are willing to pay higher amounts for safe food products.

According to Boustedt and Mair (2013), the physical risks that street food vendors face while working go often unseen. First of all, working in the street, especially at night, brings risks of being attacked or harassed by customers of random offenders. Even within markets, vendors reported to be verbally abused and

economically exploited at times; some people do not pay the food, and vendors do not react as they fear to lose a customer.

Rehman et al. (2012) reported that in Malaysia, street sellers did not have enough knowledge and that there were malfunctions during applications, and that street sellers needed to be informed about food safety, hygiene and disease originating from food sources. Unsatisfactory food handling and hygienic practices are to a certain extent due to vendors' lack of education in food safety and hygiene matters (Hilmi, 2016; Marobhe & Sabai, 2016; Tiisekwa, 2013).

According to Rane (2011), street-vended foods pose a food safety hazard to consumers as vendors often lack basic food service infrastructure and equipment such as storage facilities, food reheating equipment, refrigerators and waste disposal facilities. The lack of adequate food service equipment hampers effective implementation of safe food storage practices at street food vending sites (Muyanja et al., 2011). For Effective implementation of food safety measures at vending points, the possession of adequate food safety knowledge and skills, adequate infrastructure and equipment are quint-essential. (Aluko et al., 2014; Cortese et. al., 2016)

Today, millions of people catch diseases originating from food sources and thousands of deaths occur in world due to food poisoning. One of the reasons for spreading of diseases originating from food sources is that street food sellers do not have proper information regarding food safety. Besides, in various researches conducted in some countries, insufficiencies were seen relating with application of hygiene and sanitation, preparation of food, food safety rules and knowledge of street food sellers. Poor hygiene, problem in getting beverage, not removing wastes and similar environmental issues and therefore the undeniable fact that street food is exempt from legal legislations, all these factors increase risks in making certain food safety (Omemu and Aderoju, 2008; Abdalla et al., 2009; WHO, 2010; FAO, 2011., Rane, 2011; Kealesitse and Kabama, 2012).

Currently, there is little research and information regarding street food vendors', food safety knowledge and the sanitary conditions of their street food vending sites. The aim of this study is to evaluate the food safety knowledge of street food vendors and the level of compliance to sanitary requirements of their street food vending environment.

## METHODOLOGY

**Research approach and research design:** For the present study, descriptive survey design was used to extract answers via means of self-structured questionnaires.

**Research design:** The study was conducted at street food vendors of Naraingarh District Ambala

**Target population:** Sample size was 30 street food vendors of different ages.

**Sample and sampling technique:** Purposive sampling technique was used to select a sample of 30 street food vendors.

**Inclusion criteria:** The present study included the street food vendors who was willing to participate and available during data collection.

**Exclusion criteria:** Street food vendors who had undergone any counselling and health education session regarding street foods.

- Review of research and articles related to hygiene practices and safety aspects of street food vendors.
- Self-structured knowledge questionnaires were developed after modifications done on the basis of responses from the pilot study and 5-point attitude Likert scale was formulated

**Description of tool:** The questionnaire was organised into two main sections as follows:

i) Part-A: Demographic information such as gender, age, religion, residential area, basic education, family income etc.

ii) Part-B: A self-structured knowledge questionnaire was used to assess the knowledge and 5-point attitude Likert scale related to hygiene practices and safety aspects of street food vendors.

## RESULTS

### A. Demographic Profile of Vendors

The demographic information in Table 1 indicated the dominance of street vendors (50 percent) who were aged 21-30 years, 23 percent belonged to 31-40 years, 17 percent were from age group of 41-50 years and only 10 percent belonged to the category of 51-60 years. Regarding educational status, 50 percent documented secondary education, 40 percent were from primary class while 10 percent were illiterate.

**Table 1: Demographic Characteristics of Selected Food Vendors**

	Parameter	Respondents (n=30)	
		Frequency	Percentage
<b>a.</b>	<b>Age (years)</b>	<b>(n)</b>	<b>(%)</b>
	21 – 30	15	50
	31 – 40	7	23
	41 – 50	5	17
	51 – 60	3	10
<b>b.</b>	<b>Educational Status</b>		
	Illiterate	3	10
	Primary	12	40
	Secondary	15	50
	College	0	0

### B. General Observations about the Establishments

Table 2 indicated that the ownership of vending site was divided into two categories, 50 percent had own and 50 percent had rented ownership. The vendors had sheltered, temporary, seasonal and permanent stalls in the following proportion as 20 percent was sheltered type, 10 percent temporary, 20 percent seasonal and 50 percent permanent vendor stalls. Maximum vendors were not registered, which was about 66 percent. Most of

the vendors worked for 6 -12 hours of operation. Online delivery was done only by 37 percent while 63 percent had no option of online delivery due to shortage of manpower as well as vehicles.

**Table 2: General Observations about the Selected Establishments**

	Parameter	Respondents (n=30)	
		Frequency	Percentage
		(n)	(%)
<b>a.</b>	<b>Ownership</b>		
	Own	15	50
	Rented	15	50
<b>b.</b>	<b>Type of Vendor Stall</b>		
	Sheltered	6	20
	Temporary	3	10
	Seasonal	6	20
	Permanent	15	50
<b>c.</b>	<b>Registered</b>		
	Yes	10	33
	No	20	66
<b>d.</b>	<b>Hours of Operation</b>		
	4 – 6 hours	8	27
	6 – 12 hours	22	73
<b>e.</b>	<b>Online Delivery</b>		
	Yes	11	37
	No	19	63

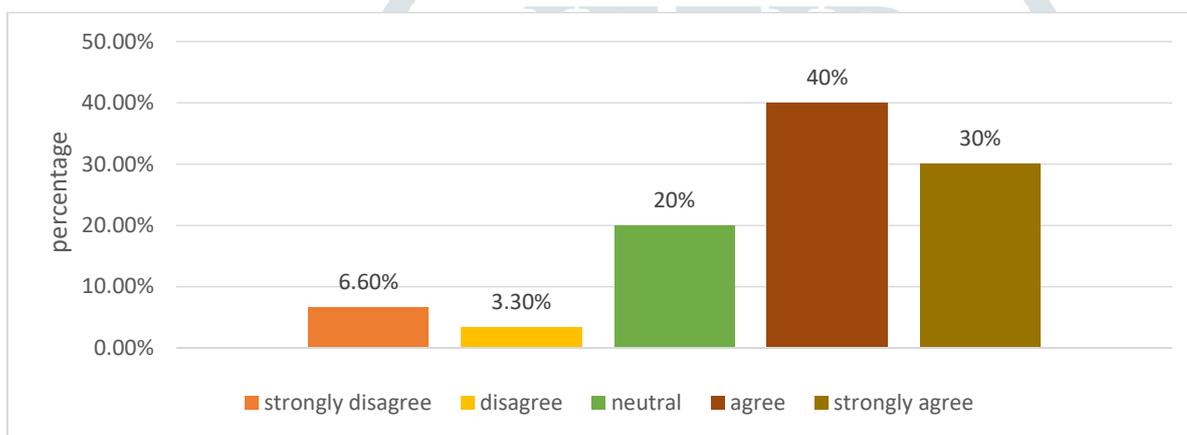
### C. Knowledge of Street Food Vendors on Hygienic Practices

Various research studies have narrated that 12-18 percent of food borne illnesses are attributable to contamination, poor food safety and unsuitable hygiene practices which were endorsed to street-cooked food handlers. These street food handlers are people who are wholly or partly engaged in the food preparation, dispensation and production value chain and who have a direct touch on food and cooking utensils. Foods prepared by food handlers under unhygienic conditions become a public health distress both in industrialized and low-income countries. Food safety and hygienic practices of food handlers are necessary to ensure that food is free from any kind of contamination through preparation and processing for consumption and to prevent the spread of food-borne diseases (Raymond Addo-Tham, 2020).

**Table 3: Responses of Vendors on Personal Cleanliness of Street Food Vendors (n=30)**

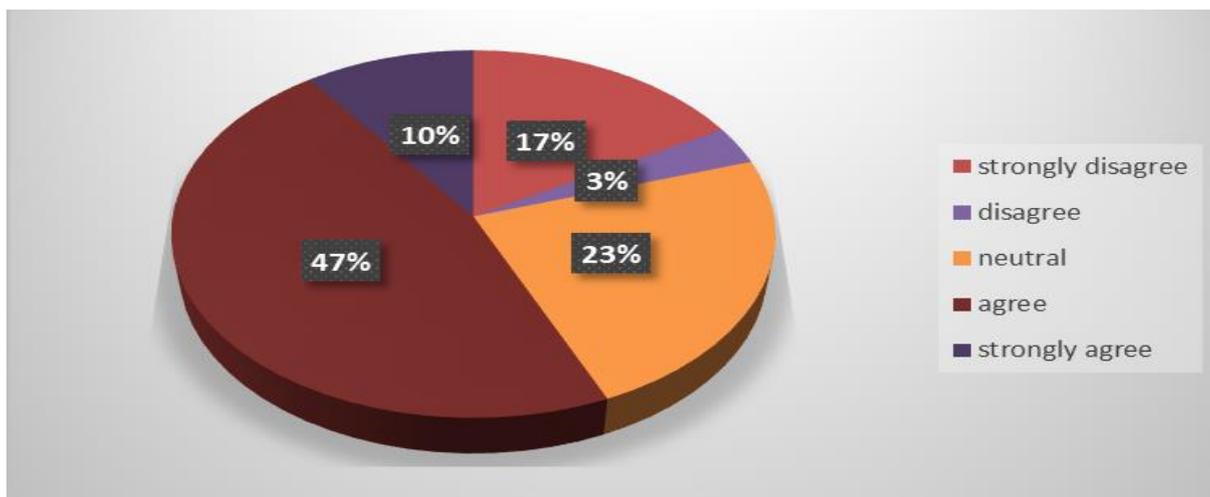
Sr. No.	Personal Cleanliness	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
1.	Knowledge about personal cleanliness	30	40	20	3.3	6.6
2.	Usage of protective clothes	10	47	23	3	17
3.	Tying hair back to avoid infection	24	10	24	11	31
4.	Thorough hand washing	30	23	20	17	10
5.	Avoidance of touching the food with abrasions or cut on hands	14	20	40	23	3

**i) Knowledge about Personal Cleanliness**

**Figure 1: Responses of Vendors Knowledge about Personal Cleanliness**

The graphical representation in Figure 1, shows that majority of the vendors had knowledge about personal cleanliness and bathed daily. They also agreed that personal cleanliness is very important. Personal hygiene is important because according to Marriot (1985), human beings are the largest contamination sources of food. Handling with bare hands may result in cross contamination. It was analysed that 30 percent of the vendors had thorough knowledge about personal cleanliness and 40 percent experience good knowledge of personal cleanliness. There was average knowledge on personal cleanliness found in 20 percent of the subjects followed by 3.3 percent who had little knowledge about the same and remaining 6.6 percent who were not at all bothered about personal cleanliness knowledge.

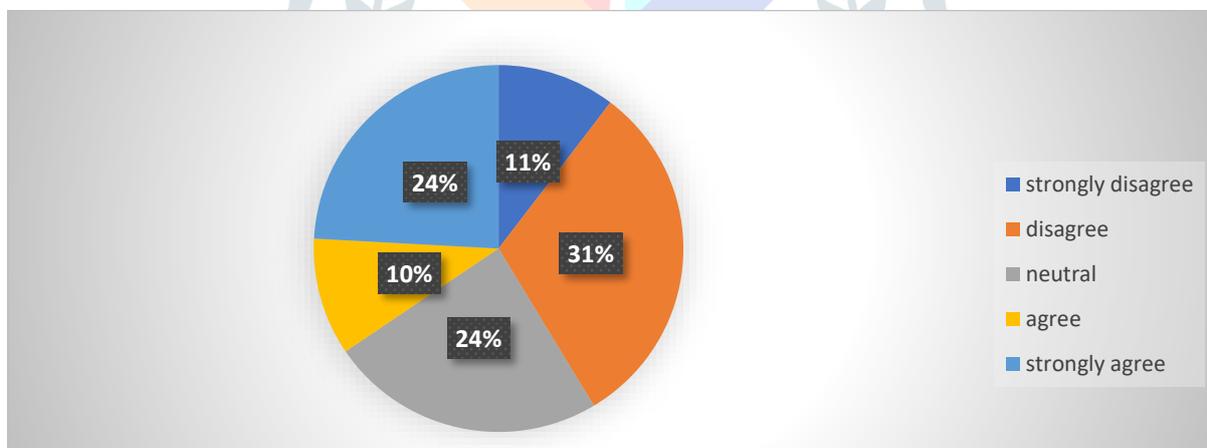
ii) **Compulsory Usage of Protective Clothes**



**Figure 2: Responses of Vendors on Compulsory Usage of Protective Clothes**

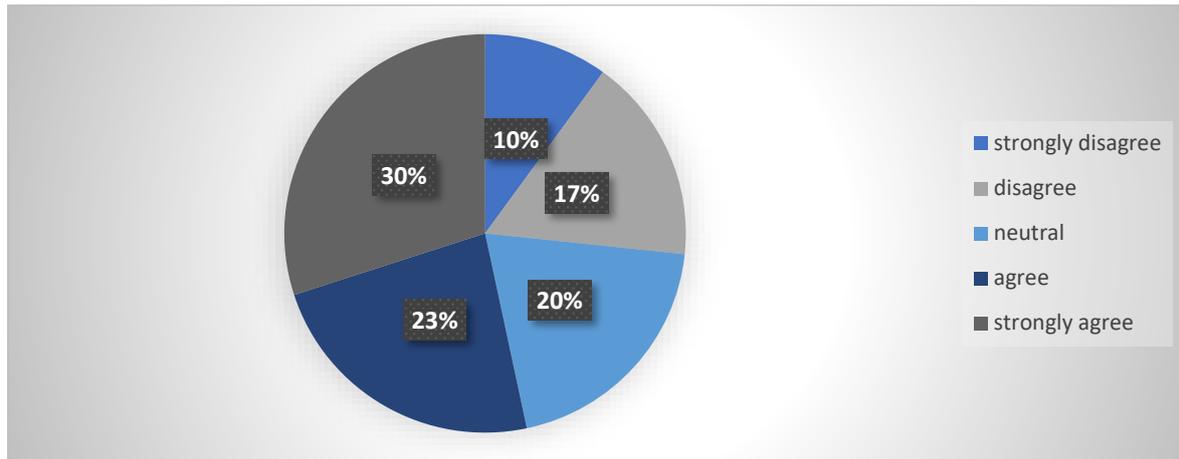
In Figure 2, the study disported in terms of usage of gloves, head coverings and aprons. The results revealed that 10 percent strictly practised to wear head cover, apron and gloves, 47 percent of the selected vendors practiced to sell their food with the use of protective clothes, while 23 percent responded neutrally as sometimes they can wear or not as per the availability. However, 3 percent of the subjects were least bothered whereas 17 percent never worn these protective clothes in their practice.

iii) **Tying Hair Back to avoid Infection**



**Figure 3: Responses of selected Subjects on Tying Hair Back to avoid Infection**

In Figure 3, study exposed that tying hair back to avoid infection is very important, if hair is not tied back or covered, it is more likely to fall into food. These can spread bacteria to food, especially if it is unwrapped. The results exhibited that 24 percent of the street food vendors strongly consented on tying of hair back to avoid infection further added by 10 percent who always cover their hair while 24 percent were neutral about tying hair sometimes. It was also found that 31 percent of the studied subjects did not attach importance on tying the hair back followed by 11 percent who presented strong disagreement for the same.

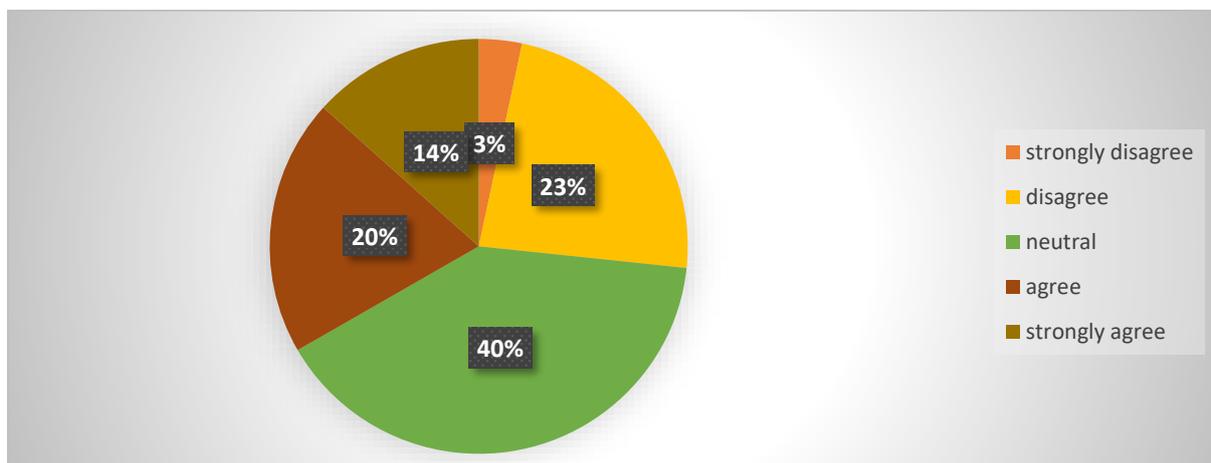
iv) **Thorough Hand Washing**

**Figure 4: Responses of Vendors on Thorough Hand Washing**

The researcher desired to find out whether the respondents washed their hand prior to food preparation. Food handling enforced good washing of hands at every step of making food, particularly, before handling of food, after touching any other contaminated materials, eating, using toilet and even touching the raw food materials (T. Cogan et.al. 2002). Figure 4 reflects responses of vendors on thorough hand washing where 30 percent food vendors strongly agreed on washing their hands before and after touching the food, 23 percent agreed and 20 percent were neutral about hand washing depending on situation and water availability. Whereas 17 percent were not bothered about hand washing and 10 percent totally neglected thorough hand washing.

v) **Avoidance of Touching Food with Abrasions or Cuts on Hands**

The findings revealed in Figure 5 depicted that 14 percent of the studied vendors were having a strong opinion for cleaning the cuts, if any, and using Elastoplasts or bandage while 20 percent of the respondents agreed on putting on bandage or Elastoplasts, 40 percent of vendors however were neutral about touching the food with abrasion and shared that they wrap the cut with homemade bandage and work throughout the day. However, 23 percent of the subjects stated that they use homemade bandage or any hanky in comparison to 3 percent who said that they have never used any bandage or Elastoplasts. They further added that it happens to have small cuts or abrasions on hands as a routine matter and such small cuts or abrasions do not cease their work.



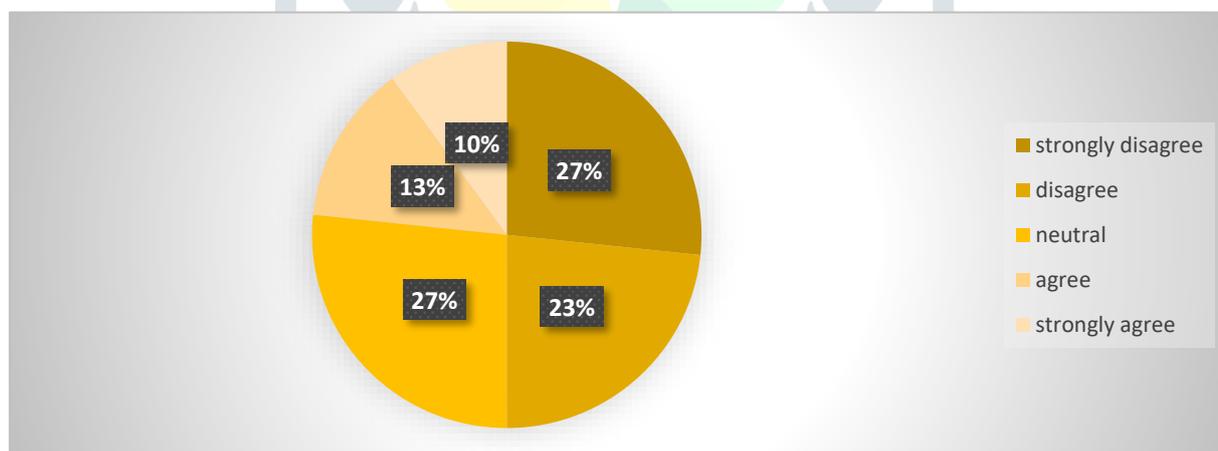
**Figure 5: Responses of selected Subjects on Avoidance of touching Food with Abrasions or Cuts on Hands**

**Table 4: Responses of Street Food Vendors Knowledge about Cleanliness of Premises (n=30)**

Sr. No.	Premises Cleanliness	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
1.	Knowledge about cross contamination	10	13	27	23	27
2.	Knowledge about basic food hygiene rules	23	20	10	23	24
3.	Cleanliness and hygiene of the cooking area	23	7	10	10	23
4.	Cleanliness and hygiene of the serving area	36.6	13.3	10	26.6	13.3
5.	Entry of pests or insects at the workplace	20	20	30	13.3	16.6

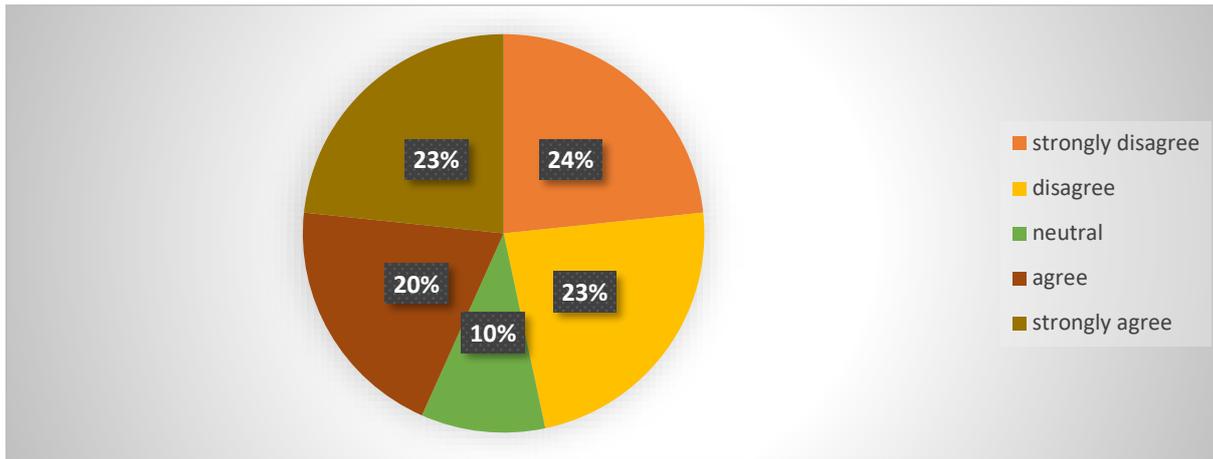
**vi) Knowledge about Cross Contamination**

Cross-Contamination is the physical movement or transfer of harmful bacteria from one person, object or place to another. In Figure 6, knowledge about cross contamination was recorded and it was revealed a poor response with only 10 percent of the vendors who knew about cross contamination and try to prevent it, 13 percent agreed that food display containers should be clean, dust and rust free, 27 percent were neutral in their response followed by 23 percent who did not know about cross contamination and another 27 percent who strongly disagree that touching money and food with the same hands can cause cross-contamination.



**Figure 6: Responses of vendors on Knowledge about cross contamination**

### vii) Knowledge about Basic Food Hygiene Rules

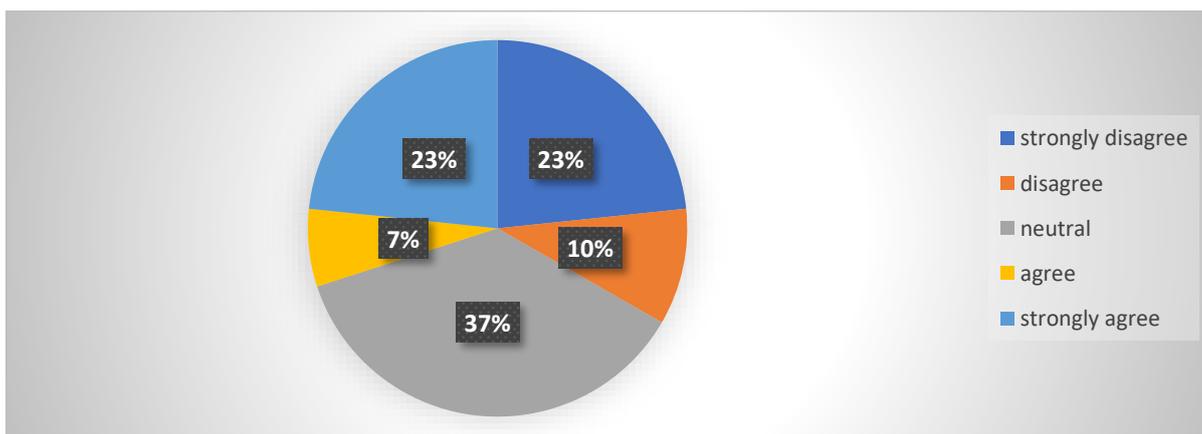


**Figure 7: Responses of Vendors on Knowledge about basic food hygiene rules**

Food hygiene and safety are important to prevent food borne illnesses. Basic food hygiene rules as washing hands and surfaces, cook at proper temperature and refrigerate promptly. In Figure 7, the researcher sought to find out the awareness on basic food hygiene rules amongst the selected respondents. The pie graph reflects mixed and mingled response with 23 percent of vendors having proper knowledge about food hygiene rules and following them in real practice, 20 percent had knowledge but not applying them in practice, another 23 percent were those who knew but executing them off and on in practice, 10 percent were those persons who had done in front stage and not on back stage and remaining 24 percent who did not know much about personal hygiene and food safety rules thus have never followed them.

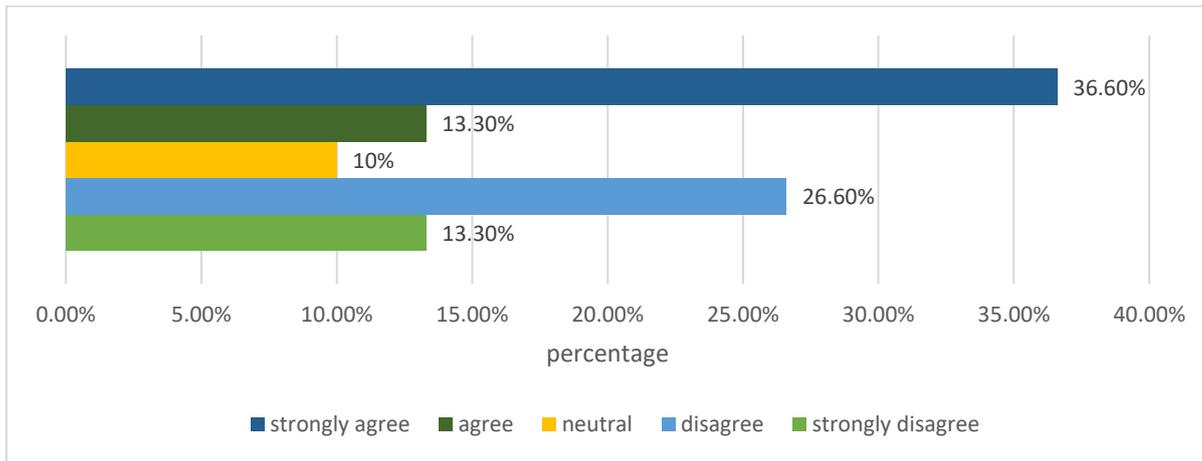
### viii) Cleanliness & Hygiene of the Cooking Area

Cleaning the cooking area by cleaning the counters and wiping them, wiping up spills, prevents cross-contamination from cutting and chopping boards. Knowledge of the street food vendors about cleanliness and hygiene of the cooking areas is presented in figure 8 which shows that 23 percent of the vendors really appreciated and they clean the cooking area immediately, cover food or keep it in sealed containers and another 7 percent also agreed to apply this. Whereas 37 percent vendors confessed that they do it if they have time, 10 percent did not agree that it is as compulsory as cooking and selling of food and 23 percent responded that they have never done it and start the work on same counter the next day.



**Figure 8: Responses of respondents on Cleanliness and Hygiene of the Cooking Area**

**ix) Cleanliness & Hygiene of the Serving Area**

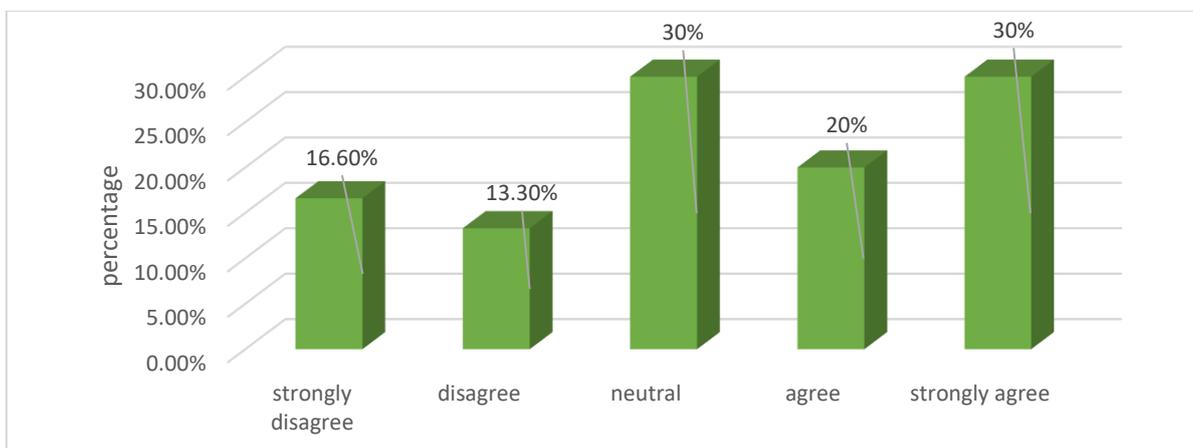


**Figure 9: Responses of Cleanliness and Hygiene of the Serving Area**

Cleaning and hygiene of the serving area is also the most important because it is the front stage of a stall. In Figure 9, knowledge of vendors about cleanliness of the serving area is displayed. It felt satisfying to get analysed that 50 percents of the selected subjects keep the serving area clean and maintain its hygiene with another 13.3 percent who agreed that they do it regularly. Ten percent of the vendors recorded neutral response in this domain. But it is saddening that 26.6 percent accomplished this target occasionally, 13.3 percent were those vendors who never bothered for cleanliness and hygiene of the serving area.

**x) Entry of Pests or Insects at the Workplace**

Pests or insects can run, crawl, fly and hitchhike their way into the facilities where we serve. Some paths are obvious like a door which is left open or poorly sealed but some are not so obvious. In Figure 10, knowledge about entry of pests or insects at the workplace was analysed and it was found that 20 percent of vendors use some pesticides or insecticides and never allow the pests or insects to enter in food areas, 20 percent told that they are aware about this method, 30 percent were neutral about insects’ entry and resulting food safety followed by 13.3 percent who do not depart any such methodology and remaining 16.6 percent of street food vendors shared that they have never worried about this fact. There is a need for training them so that they can understand the importance of getting rid of insects and pests.



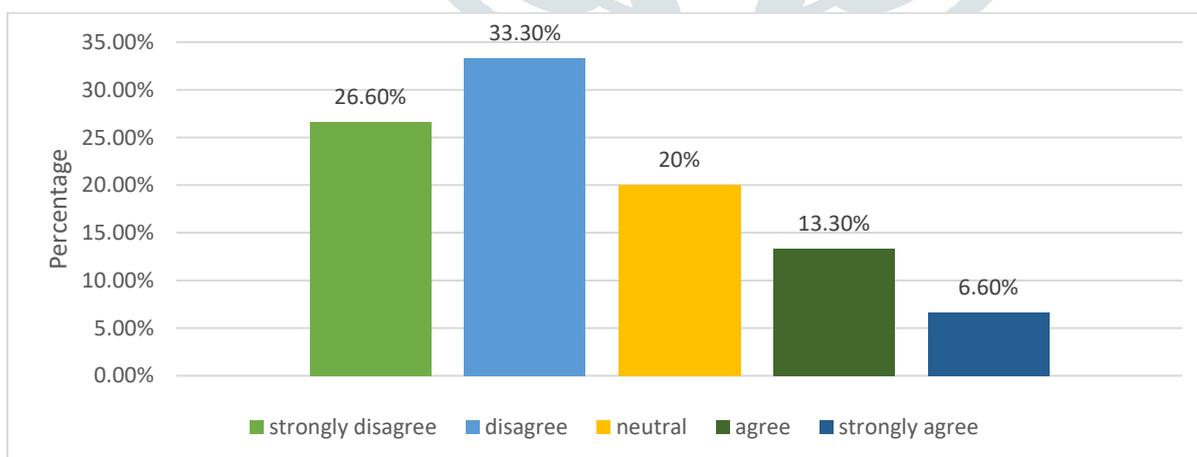
**Figure 10: Responses of Vendors towards Entry of pests or insects at the workplace**

**Table 5: Responses of Vendors on Knowledge about food storage and food safety (n=30)**

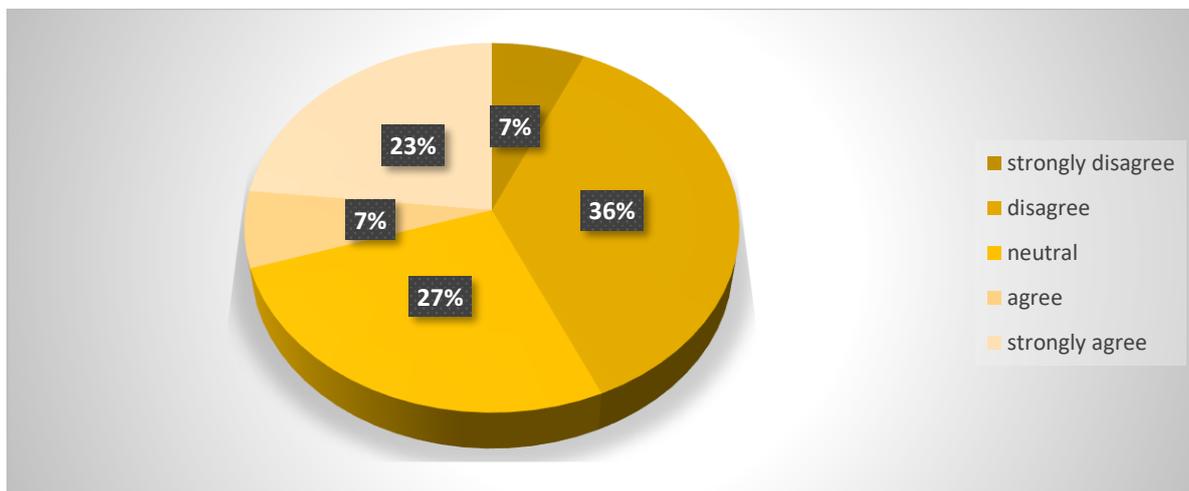
Sr. No.	Knowledge about Food Storage and Food Safety	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
1.	Appropriate application of food storage	6.6	13.3	20	33.3	26.6
2.	Regular cleaning of fridge and controlled temperature	23	7	27	36	7
3.	Washing of fruits and vegetables thoroughly before use	36.6	6.6	30	23.3	3.3
4.	Cooking the food at right temperature	20	7	23	10	40
5.	Maintenance of freshness and fragrance of food items	20	30	16.6	26.6	6.6
6.	Importance of food safety and hygiene to avoid food poisoning	17	13	17	17	36

#### xi) Appropriate Application of Food Storage

If foods are not handled properly, they pose a danger to the health of consumers. In Figure 11, knowledge about appropriate application of food storage is exhibited with a very was poor grade as most of them agreed that leftover is either consumed or stored for use for the next day. Some of them could afford storage in refrigerators. In this study, most of the street food vendors were observed to be careless about appropriate food storage. Only 6.6 percent of street food vendors stored their food in right and appropriate way (storage in dark and dry places away from sunlight exposure), 13.3 percent were found to be careful but did not follow it strongly, 20 percent were those vendors who stored food occasionally at proper temperature. While 60 percent of the studied street food vendors had never cared for proper food storage and this may be due to staff error or negligence.

**Figure 11: Responses of Vendors on Appropriate Application of Food Storage**

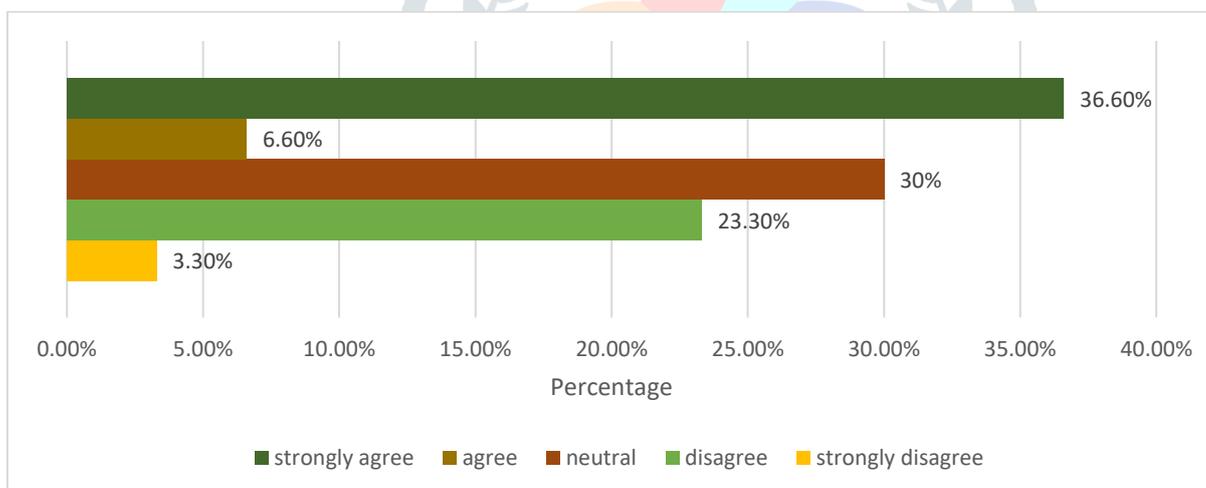
**xii) Regular Cleaning of Fridge and Controlled Temperature**



**Figure 12: Responses of Respondents on Regular Cleaning of Refrigerator and its Controlled Temperature**

Refrigeration is an important component in planning the storage of food items. Most fresh foods must be stored in refrigerator to delay their deterioration and decomposition so its cleaning and controlled temperature is very important. Figure 12 shows the knowledge about cleaning of fridge and its controlled temperature by the selected subjects and it was revealed that 30 percent of vendors cleaned their fridge regularly and maintained the temperature, 27 percent knew about cleaning but do it occasionally and 43 percent were those who never bothered for cleaning and controlled temperature of refrigerator.

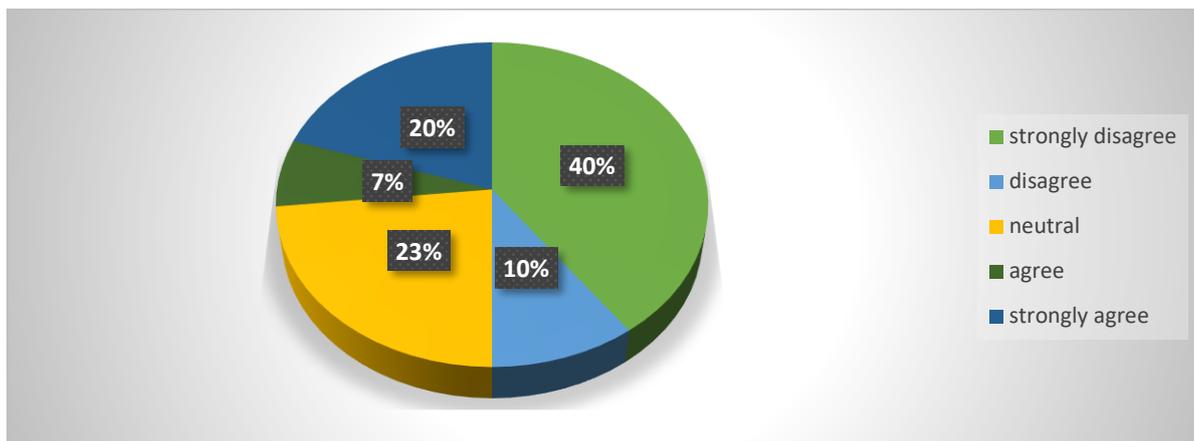
**xiii) Washing of Fruits and Vegetables thoroughly before Use**



**Figure 13: Responses of Vendors on Washing of Fruits and Vegetables thoroughly before Use**

The best way to wash fresh produce before eating is with cool water. Washing fruits and vegetables in vinegar is also a good way to remove potential bacteria. In Figure 13, the researcher sought to find out the knowledge about washing of fruits and vegetables thoroughly before use and it had come out to be very good. 43.2 percent of the vendors admitted that they washed fruits and vegetables before use, 30 percent pointed out that they wash if they have time or availability of fresh water, 23.3 percent selected street food vendors however disagreed to follow the general rules of washing and 3.3 percent responded that they have never washed and proceeded as they are.

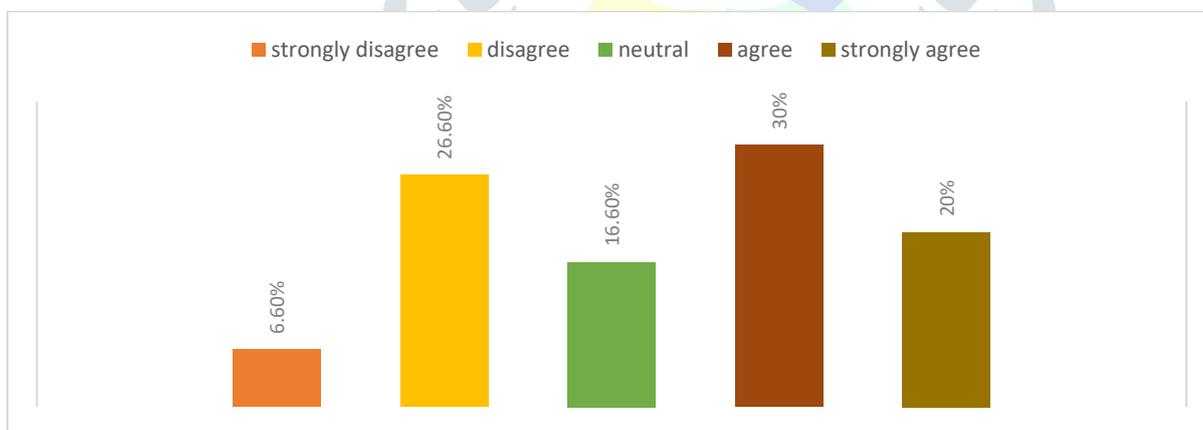
**xiv) Cooking the Food at Right Temperature**



**Figure 14: Responses of Vendors on Cooking the food at right temperature**

Temperature above 5<sup>0</sup>C and below 63<sup>0</sup>C is considered the danger zone. When foods are allowed to enter the temperature danger zone, bacteria may grow to unhealthy levels and cause the food to spoil. In Figure 14, knowledge of street food vendors about cooking the food at right temperature is indicated. The results revealed that 27 percent of the subjects were aware about cooking at the right temperature, 23 percent were having average knowledge about the same but not following it in practice firmly whereas 50 percent did not know about the right cooking temperature and they heated the food frequently owing to which the nutrients of the food were being lost.

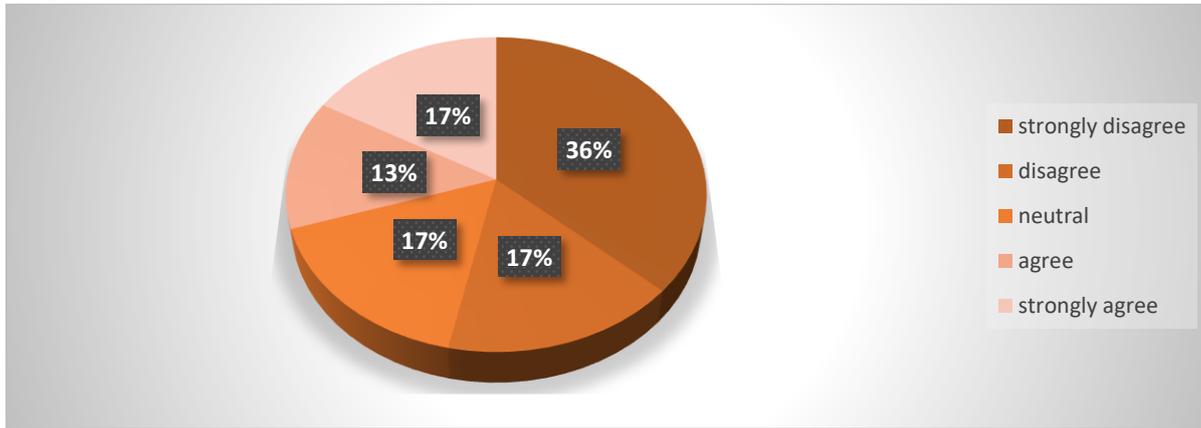
**xv) Maintenance of Freshness and Fragrance of Food Items**



**Figure 15: Responses of vendors on Maintenance of Freshness and Fragrance of Food Items**

Maintenance of freshness of street foods is top most priority. Flavour combinations are certainly important, but fresh ingredients will provide a richer flavour and more nutrients. In figure 15, knowledge about maintenance of freshness and fragrance of food items was analysed and it was exhibited that 50 percent of the studied street food vendors agreed that fresh ingredients will take our dishes to a new level. But 16.6 percent were neutral regarding freshness or fragrance knowledge and 33 percent street food vendors do not care at all for the freshness and flavour of their food items.

## xvi) Importance of Food Safety and Hygiene



**Figure 16: Responses of Vendors on Importance of Food Safety and Hygiene to avoid Food Poisoning**

Food poisoning outbreaks mostly occur when cooked foods are handled by persons who carry the pathogens in their nostrils or on their skin. In Figure 16, the researcher attempted to analyse the knowledge about importance of food safety and hygiene among street food vendors to avoid food poisoning outbreaks. The results indicated that only 30 percent of the respondents were aware about this concept. Whereas 17 percent were having a little knowledge followed by a major chunk of 53 percent street food vendors who were not at all aware rather disconcerted about this. It means majority of the street food vendors was not following food safety and hygienic practices for avoidance of food poisoning.

## CONCLUSION

Knowledge of street food vendors was assessed on their personal cleanliness, premises cleanliness, storage of food and food safety. Out of total, 70 percent of street food vendors had knowledge about personal cleanliness, 57 percent made use of protective clothes and only 34 percent tied their hair. Thorough hand washing was being practised by 53 percent of the studied vendors while only 35 percent applied bandages on cuts for safety. With regards to cleanliness of premises, half of the vendors were found to be ignorant about cross-contamination. Only 23 percent of respondents were following basic hygiene rules, 30 percent followed hygienic practices in cooking area whereas 40 percent of the subjects were not found to follow good hygienic measures at the service counters. It was also revealed that just 20 percent of vendors used pesticides and insecticides for insect entry restriction at their workplaces. In terms of appropriate storage, only 20 percent of the vendors were found to store the food in right way followed by 30 percent of the vendors cleaning the refrigerator regularly. Almost 43 percent of the respondents washed fruits and vegetables thoroughly while only 27 percent of vendors had good knowledge about cooking at right temperature. The results also showed that 50 percent of street food vendors had knowledge about maintenance of fragrance and freshness of food items however only 17 percent of the vendors attached importance to food safety and hygiene for avoidance of food safety. Emphasis is required for induction and training of street food vendors in order to have food safety. Regular laws and inspections must be mandatory in addition to licensing of such vendors.

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