Assessing the consumers' perception towards street foods in Anand – Vidhyanagar

ABSTRACT

In India, Eating out is part of the culture. Street food, in particular, has been popular not only among young people but also for different age groups. The street food mainly comprises of unorganized sector which is served on the streets without any formal establishment. Due to its popularity and low entry barriers, the street food market is competitive in Gujarat. Understanding the consumers demand about the food they want and give them what they want becomes critical for the success of street food vendors. Thus, this descriptive study aims to examine "Assessing the consumers' perception towards street foods in Anand – Vidhyanagar" in Gujarat state of India. Quantitative method was used for the study and 275 questionnaires were conveniently distributed to the people who are consuming street food near Anand – Vidhyanagar area of Gujarat state and collected for further analysis. The data were analyzed using SPSS and it was found that consumers have very positive perception towards street food. Study revealed that about 39.3 percent of the consumers took street foods 2 to 3 times per week. Panipuri was found to be the most preferred choice of street food by the sample respondents. It was also found that taste of the food was the most important reason for consumption of street food, followed by convenient and easy accessibility of such foods and their inexpensive prices. Study indicated that about one fourth of the consumers were unsatisfied with the cleanliness of the vending area.

Keywords: Street food, Consumers' perception, easy accessibility, inexpensive prices

1. INTRODUCTION

The 'Street-vended foods' or 'street foods' are foods and beverages prepared and/or sold by vendors in streets and other public places for immediate consumption or consumption later without further processing or preparation (World Health Organization, 1996). The street-vended foods are usually inexpensive, convenient and often nutritious besides being a major source of income for a vast number of vendors; thus, provide a chance for self-employment and grant an opportunity to develop business skills and sustain a business with low capital investment. It is estimated that street food contributes significantly to the daily diet of urban consumers in developing countries (Suneetha, Manjula and Depur, 2011).

Despite having many benefits, street vended foods often pose risk to health of consumers if not prepared or served hygienically. Mass production, environmental factors and inadequate knowledge on the part of food handlers have contributed to increased contamination of primary foodstuffs (Kaferstein et al., 1997). Foodborne disease has an enormous public health impact, as well as significant social and economic consequences. In India, food vending on streets pertains to unorganized sector of food processing where sometimes poor hygiene and inappropriate sanitation measures may cause contamination of food products. People become sick if they eat street food contaminated with physical, chemical or biological hazards. There are reports of foodborne illness associated with the consumption of fruit juices at several places in India and elsewhere (Parish, 1997; Sandeep et al., 2001). A study conducted in Hyderabad, India, revealed that a total of 42 outbreaks were reported with 1,008 people being affected during 2002-03. Some of the foods involved were kheer, lemon rice and khoa, and the organisms involved were Staphylococcus aureus and Bacillus cereus (Bhat, 2004).

Comment [O.I.1]: *Staphylococcus aureus* and *Bacillus cereus*

Most of the vendors are uneducated and lack awareness on hygiene and sanitation while preparing foods on streets. The hygiene and sanitation of vending sites have always been a matter of concern for public health. The unavailability of potable and running water; inappropriate space for cooking and washing of food supplies and utensils; washing hands and dishes in buckets and bowls; are some of the commonly observed practices of street food vendors. Leftovers if not handled properly may attract rodents and insects which increases the chances of food contamination thereby multiplying the risk of food borne hazards. The Food Safety and Standards Act of 2006, is expected to ensure improved

quality of food for the consumers by laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. Several other first-time changes the new law is expected to incorporate are: registration of street food vendors with the state health departments; authority given to the individual citizens to get the food testing done as per the guidelines laid down by the Food Safety and Standards Authority of India (FSSAI, 2011).

Food quality and safety should receive high priority for sustained economic growth of any country. Consumers are frequently unaware of their role in the prevention of foodborne diseases and underestimate the incidence of foodborne diseases and the frequency of serious consequences (Byrd-Bredbenner et al., 2007). Research has also described failure to avoid unsafe foods, neglect of cleaning and sanitation, improperly trained staff and unaware consumers as threats to food safety (Stivers and Gates, 2000; Medeiros et al., 2001). The study also premises that consumers can be potential educators who can inculcate knowledge and good practices related to food safety among vendors and peers. Food vendors, on the other hand can be motivated through consumers. There has been a continuous increase in consumption of street food in Anand - Vidyanagar city. Very little is known and documented about the consumers' perception about street food here.

Considering the above facts, a research project was undertaken to assess consumers' perception towards street foods in Anand – Vidhyanagar.

2. RESEARCH METHODOLOGY

2.1 Sampling Method:

The study population consisted of consumers of street foods in the city of Anand - Vidyanagar. There are five localities in Anand - Vidhyanagar, namely, Railway station, Ganesh chowkdi, AV Road, Nanabazar and Borsad chowkdi, where street food vendors were concentrated. In each of these selected hubs 55 respondents consumers were interviewed in order to attain the estimated sample size of 275. Respondents were selected using convenient – quota sampling method sampling method because of unavailability of sampling frame due to the nature of the study population and site.

A semi structured questionnaire containing both open and close ended questions was used to collect information on the study variables including social demographic characteristics of consumers of street foods, their perception, knowledge and awareness about food safety & hygiene and its regulations.

2.2 Treatment

Data were entered into a computer database using MS Excel computer software. Responses were coded before entry into the computer. MS Excel computer software was used for data analysis.

Numerical data was analyzed using descriptive statistics and is presented in result section. Chi–square test was performed to assess statistical significance between the demographic characteristics of respondents and perception about cleanliness of the vending area, safety of street foods, illness associated with consumption of street foods; knowledge about sources of food borne diseases; and awareness about food safety regulations. Frequency analysis was performed to understand the respondent consumers' sources of information on food safety.

2.3 Objectives:

1) To analyze the background information of the sample respondents consumers of street foods

2) To investigate the perception of consumers about safe food and knowledge about food borne diseases

3) To evaluate awareness and sources of information of consumers on food safety Treatment

3. RESULTS AND DISCUSSION

3.1 Demographic characteristics of respondents (consumers of street food)

The demographic characteristics of the participants are presented in Table 1. A total of 275 consumers of street foods participated in this study. The majority of the respondent consumers of street foods were observed to be male (69.5 percent), below 30 years of age (68.0 percent) and having college and above level of education (75.3 percent). It was also found that more than half of the respondents belong to nuclear family (52.7 percent). Monthly income of majority of the sample consumers (42.2 percent) was in the range of Rs. 20,000 to 50,000.

Table 1: Demographic profile of street food consumers (n=275)

Characteristic (N =275)	Numbers	Percentage
Gender		
Male	191	69.5
Female	84	30.5
Age (Years)		
<30	187	68.0
>30	88	32.0
Level of education		
Upto school	68	24.7
College & above	207	75.3
Family type		
Alone	44	16.0
Nuclear family	145	52.7
Joint family	86	31.3
Monthly income (Rs.)		
<20k	96	34.9
20-50k	116	42.2
>50k	63	22.9

The frequency of the consumption of street foods by the sample respondents was presented in Table 2. It was observed that most of the respondents (39.3 percent) consume street foods 2 to 3 times in a week.

Table 2: Frequency of consumption of street foods (n=275)

Frequency	Numbers	Percentage
Once in a week	70	25.5
2-3 times in a week	108	39.3
4-6 times in a week	38	13.8
Daily once	27	9.8
More than 1 time daily	32	11.6

Information on the preference of street foods by the consumers were also collected and presented in Table 3. Panipuri was found to be the most preferred choice of street food, followed by vada pav/dabeli and Chinese/momo.

Table 3: Top ten most consumed street foods

Item	Percentage	Rank
Panipuri	18.5	1
Vada pav, dabeli	15.3	2
Chinese, momo	12.6	3
Pizza, burger, puff, sandwich	10.2	4
Pav bhaji, pulav	7.3	5
Dhokla, thepla, bhakhri, ganthiya, dal pakvan, chorafali	6.1	6
Pakoda, bhajiya	6.0	7
Bhel, chaat	6.0	8
Egg items	5.8	9
Samosa	5.3	10

Respondent consumers were also asked for the most important reason for eating street foods and the result is stated in Table 4. Taste of the food was found to be the most important reason for consumption of street food, followed by convenient and easy accessibility of such foods and their inexpensive price. It was also observed that about 88 percent consumers mentioned their high to medium level of happiness with the food served by the street food vendors of Anand - Vidhyanagar (Table 5).

Table 4: Reasons for eating street foods (n=275)

Reasons	Numbers	Percentage
Tasty	88	32.0
Convenient & easily accessible	61	22.2
Inexpensive	46	16.7
Fast services	34	12.4
Healthy & nutritious	25	9.1
Fresh	21	7.6

Table 5: Level of happiness with the food served by street food vendors (n=275)

Level	Numbers	Percentage
High	73	26.5
Medium	169	61.5
Low	33	12.0

3.2 Perception about safety of street foods

Association between demographic characteristics of respondents and their perception about cleanliness of vending area, safety perception of street foods and perception of illness due to consumption of street foods were analyzed and stated in Table 6, 7 and 8 respectively.

Table 6 indicates that of all the respondent street food consumers, about one fourth (23.3 percent) reported that they were unsatisfied with the cleanliness of the vending area, whereas rest of the sample respondents conveyed that they were either satisfied or very satisfied. Similar trend was observed among various categories of gender, level of education and family type. However, within the age group categories, 35.2 percent of consumers aged 30 years and above and within the monthly income categories, 29.3 percent of consumers of middle income group indicated that they were unsatisfied with the cleanliness of the vending area.

Out of the social demographic characteristics of respondents, results did not reflect statistically significant difference in the perception about cleanliness of vending area among various categories of genders (p=0.729), level of education (p=0.158) and family type (p=0.778). However, statistically significant difference were reflected by the chi-square test among respondents with different age groups (p=0.005) and monthly incomes (p=0.027).

Table 6: Association between social-demographic characteristics of respondents and the perception about cleanliness of vending area

Social-demographic variables	Perception about cleanliness of vending area, N=275			χ^2	P value
	Very satisfactory	Satisfactory	Unsatisfactory		
	Frequency (%)	Frequency (%)	Frequency (%)		
Gender				**0.632**	**0.729**
Male, n=191	**31**	**118**	**42**		
	16.2	61.8	22.0		
Female, n=84	**12**	**50**	**22**		
	14.3	59.5	26.2		
Age				**10.708**	**0.005**
<30 years, n=187	**33**	**121**	**33**		
	17.6	64.7	17.6		
>30 years, n=88	**10**	**47**	**31**		
	11.4	53.4	35.2		
Level of education				**3.692**	**0.158**
Upto school, n=68	**6**	**47**	**15**		
	8.8	69.1	22.1		
College & above, n=207	**37**	**121**	**49**		
	17.9	58.5	23.7		
Family type				**1.771**	**0.778**
Alone, n=44	**6**	**28**	**10**		
	13.6	63.6	22.7		
Nuclear family, n=145	**24**	**91**	**30**		
	16.6	62.8	20.7		
Joint family, n=86	**13**	**49**	**24**		
	15.1	57.0	27.9		
Monthly income (Rs.)					
<20k, n=96	**15**	**62**	**19**	**10.985**	**0.027**
	15.6	64.6	19.8		
20-50k, n=116	**23**	**59**	**34**		
	19.8	50.9	29.3		
>50k, n=63	**5**	**47**	**11**		
	7.9	74.6	17.5		

Table 7 indicates that of all the respondent street food consumers, about 61.5 percent mentioned that they perceived street food as safe for consumption, whereas rest of the sample respondents (38.5

percent) indicated that they did not feel street food safe. Similar trend was observed among various categories of gender and level of education and family type. However, within the age group categories, 47.7 percent of consumers aged 30 years and above, within different family types, 51.2 percent consumers belonging to joint family and within the monthly income categories, 47.6 percent of consumers of higher income group indicated that they did not perceive street food as safe for consumption.

Among the social demographic characteristics of respondents, results did not reflect statistically significant difference in the safety perception about street foods among various categories of genders (p=0.481), level of education (p=0.728) and monthly income (p=0.074). However, statistically significant difference were reflected by the chi-square test among respondents with different age groups (p=0.032) and family types (p=0.013).

Table 7: Association between social-demographic characteristics of respondents and safety perception of street foods

Social-demographic variables	Safety perception of street foods, N=275		χ^2	P value
	Yes	No		
	Frequency (%)	Frequency (%)		
Gender			**0.497**	**0.481**
Male, n=191	**120**	**71**		
	62.8	37.2		
Female, n=84	**49**	**35**		
	58.3	41.7		
Age			**4.606**	**0.032**
<30 years, n=187	**123**	**64**		
	65.8	34.2		
>30 years, n=88	**46**	**42**		
	52.3	47.7		
Level of education			**0.121**	**0.728**
Upto school, n=68	**43**	**25**		
	63.2	36.8		
College & above, n=207	**126**	**81**		
	60.9	39.1		
Family type			**8.667**	**0.013**
Alone, n=44	**31**	**13**		
	70.5	29.5		
Nuclear family, n=145	**96**	**49**		
	66.2	33.8		
Joint family, n=86	**42**	**44**		
	48.8	51.2		
Monthly income (Rs.)				
<20k, n=96	**67**	**29**	**5.197**	**0.074**
	69.8	30.2		
20-50k, n=116	**69**	**47**		
	59.5	40.5		

>50k, n=63	**33**	**30**		
	52.4	47.6		

In Table 8, it was observed that of all the respondent street food consumers, 18.9 percent indicated that they have suffered some illness due to consumption of street foods in their lifetime, whereas rest of the consumers (81.1 percent) indicated that they never suffered from any illness from street food consumption. Those who have suffered mentioned various illnesses, namely, food poisoning, vomiting, fever, diarrhea, cholera, allergy and typhoid. Similar trend was observed among various categories of age groups, level of education and family type. However, within the gender categories, female consumers (14.3 percent) and within the monthly income categories, consumers of higher income group (11.1 percent) reported much lesser level of perceived illness caused by consumption of street foods.

Among all the social demographic characteristics of respondents, results did not reflect statistically significant difference in the perception of illness due to consumption of street foods among various categories of genders (p=0.194), age (p=0.905), level of education (p=0.507), family type (p=0.394) and monthly income (p=0.193).

Table 8: Association between social-demographic characteristics of respondents and perception of illness due to consumption of street foods

Social-demographic variables	**Perception of illness due to consumption of street foods, N=275**		**χ^2**	**P value**
	Yes	**No**		
	Frequency (%)	**Frequency (%)**		
Gender			**1.686**	**0.194**
Male, n=191	**40**	**151**		
	20.9	79.1		
Female, n=84	**12**	**72**		
	14.3	85.7		
Age			**0.014**	**0.905**
<30 years, n=187	**35**	**152**		
	18.7	81.3		
>30 years, n=88	**17**	**71**		
	19.3	80.7		
Level of education			**0.440**	**0.507**
Upto school, n=68	**11**	**57**		
	16.2	83.8		
College & above, n=207	**41**	**166**		
	19.8	80.2		
Family type			**1.865**	**0.394**
Alone, n=44	**10**	**34**		
	22.7	77.3		
Nuclear family, n=145	**23**	**122**		
	15.9	84.1		
Joint family, n=86	**19**	**67**		
	22.1	77.9		

Monthly income (Rs.)				
<20k, n=96	**21**	**75**	**3.289**	**0.193**
	21.9	78.1		
20-50k, n=116	**24**	**92**		
	20.7	79.3		
>50k, n=63	**7**	**56**		
	11.1	88.9		

3.3 Knowledge regarding food borne diseases

Sample respondent consumers of street foods were provided with a list of 12 diseases which can be caused by consumption of street foods for identification to understand their knowledge regarding food borne diseases and the results are presented in Table 9. It was observed that the general knowledge about the diseases caused by street foods was very limited among the consumers. Only 8.4 percent of the respondents were able to identify 5 or more number of diseases.

Table 9: Identification of diseases which can be caused by street foods (n=275)

Number of diseases identified	Numbers	Percentage
≤ 1	95	34.5
2	50	18.2
3	75	27.3
4	32	11.6
5	8	2.9
6	8	2.9
≥ 7	7	2.5

To assess the knowledge of the consumers of street foods about sources of food borne diseases, respondents had been introduced to 17 standard statements and their correct and incorrect answers converted into knowledge score. It was observed in Table 10 that of all the respondent street food consumers, 13.5 percent exhibited poor, 66.2 percent average and 20.4 percent good knowledge score about sources of food borne diseases. Similar trend was observed among various categories of age groups. However, within the gender categories, female consumers (6.0 percent) showed lesser proportion of poor score, within the level of education categories, consumers of up to school education with good score was in much lesser proportion (10.3 percent), and within the income categories, consumers with higher monthly income showed lesser proportion of poor score (7.9 percent). It was also observed that within the categories of family types, consumers staying alone reported much higher proportion (20.5 percent) of poor score and lower proportion (13.6 percent) of good score, and the consumers belonging to nuclear family reported lesser proportion of poor score (8.3 percent) than the general trend.

Out of all the social demographic characteristics of respondents, results did not exhibit statistically significant difference in the knowledge score about sources of food borne diseases among various categories of genders (p=0.053), age (p=0.889), level of education (p=0.057), family type (p=0.089) and monthly income (p=0.419).

Table 10: Association between social-demographic characteristics of respondents and knowledge about sources of food borne diseases

Social-demographic variables	Knowledge score on sources of food borne diseases, N=275	χ^2	P value

	Poor (< 5)	Average (5 to <10)	Good (≥ 10)		
	Frequency (%)	Frequency (%)	Frequency (%)		
Gender				**5.884**	**0.053**
Male, n=191	**32**	**121**	**38**		
	16.8	63.4	19.9		
Female, n=84	**5**	**61**	**18**		
	6.0	72.6	21.4		
Age				**0.235**	**0.889**
<30 years, n=187	**26**	**122**	**39**		
	13.9	65.2	20.9		
>30 years, n=88	**11**	**60**	**17**		
	12.5	68.2	19.3		
Level of education				**5.733**	**0.057**
Upto school, n=68	**11**	**50**	**7**		
	16.2	73.5	10.3		
College & above, n=207	**26**	**132**	**49**		
	12.6	63.8	23.7		
Family type				**8.076**	**0.089**
Alone, n=44	**9**	**29**	**6**		
	20.5	65.9	13.6		
Nuclear family, n=145	**12**	**101**	**32**		
	8.3	69.7	22.1		
Joint family, n=86	**16**	**52**	**18**		
	18.6	60.5	20.9		
Monthly income (Rs.)					
<20k, n=96	**17**	**63**	**16**	**3.904**	**0.419**
	17.7	65.6	16.7		
20-50k, n=116	**15**	**75**	**26**		
	12.9	64.7	22.4		
>50k, n=63	**5**	**44**	**14**		
	7.9	69.8	22.2		

3.4 Awareness about food safety regulations

Association between demographic characteristics of respondents and their awareness about existence of Sanitary and hygienic regulations for street food vendors, Food Safety and Standards Act and street food vendors' license or registration were analyzed and stated in Table 11, 12 and 13 respectively.

Table 11 indicates that of all the respondent street food consumers, only about half of the sample population (51.3 percent) reported that they were aware about existence of sanitary and hygienic regulations for street food vendors. Similar trend was observed among various categories of age and monthly income groups. However, within the gender categories, female consumers reported slightly higher awareness (54.8 percent), within the level of education categories, consumers with only up to school level education showed lower awareness (42.6 percent), and within the various categories of

family types, consumers belonging to nuclear family showed higher awareness (58.6 percent) and to joint family showed much lower awareness (37.2 percent) about existence of sanitary and hygienic regulations for street food vendors.

Among the social demographic characteristics of respondents, results did not reflect statistically significant difference in the awareness about existence of Sanitary and hygienic regulations for street food vendors among various categories of genders (p=0.443), age (p=0.420), level of education (p=0.101) and monthly income (p=0.536). However, statistically significant difference was reflected by the chi-square test among respondents with different groups of family types (p=0.006).

Table 11: Association between social-demographic characteristics of respondents and awareness about existence of sanitary and hygienic regulations for street food vendors

Social-demographic variables	Awareness about existence of Sanitary and hygienic regulations for street food vendors, N=275		χ^2	P value
	Yes	No		
	Frequency (%)	Frequency (%)		
Gender			**0.589**	**0.443**
Male, n=191	**95**	**96**		
	49.7	50.3		
Female, n=84	**46**	**38**		
	54.8	45.2		
Age			**0.651**	**0.420**
<30 years, n=187	**99**	**88**		
	52.9	47.1		
>30 years, n=88	**42**	**46**		
	47.7	52.3		
Level of education			**2.690**	**0.101**
Upto school, n=68	**29**	**39**		
	42.6	57.4		
College & above, n=207	**112**	**95**		
	54.1	45.9		
Family type			**10.130**	**0.006**
Alone, n=44	**24**	**20**		
	54.5	45.5		
Nuclear family, n=145	**85**	**60**		
	58.6	41.4		
Joint family, n=86	**32**	**54**		
	37.2	62.8		
Monthly income (Rs.)				
<20k, n=96	**47**	**49**	**1.249**	**0.536**
	49.0	51.0		
20-50k, n=116	**64**	**52**		

	55.2	44.8		
>50k, n=63	**30**	**33**		
	47.6	52.4		

In Table 12, it was observed that of all the respondent street food consumers, about 58.9 percent reported that they were aware about Food Safety and Standards Act. Similar trend was observed among various categories of gender and age groups. However, within the level of education categories, consumers with only up to school level education showed lower awareness (50.0 percent), within the various categories of family types, consumers belonging to joint family showed higher awareness (66.3 percent) and within the monthly income categories, consumers of lower income group reported lower awareness (50.0 percent) and of middle income group reported higher awareness (65.5 percent) about Food Safety and Standards Act than the mean awareness of the population.

Out of all the social demographic characteristics of respondents, results did not exhibit statistically significant difference in the awareness about Food Safety and Standards Act among various categories of genders (p=0.891), age (p=0.966), level of education (p=0.085), family type (p=0.216) and monthly income (p=0.071).

Table 12: Association between social-demographic characteristics of respondents and awareness about Food Safety and Standards Act

Social-demographic variables	**Awareness about existence of Food Safety and Standards Act, N=275**		χ^2	**P value**
	Yes	**No**		
	Frequency (%)	**Frequency (%)**		
Gender			**0.019**	**0.891**
Male, n=191	**112**	**79**		
	58.6	41.4		
Female, n=84	**50**	**34**		
	59.5	40.5		
Age			**0.002**	**0.966**
<30 years, n=187	**110**	**77**		
	58.8	41.2		
>30 years, n=88	**52**	**36**		
	59.1	40.9		
Level of education			**2.962**	**0.085**
Upto school, n=68	**34**	**34**		
	50.0	50.0		
College & above, n=207	**128**	**79**		
	61.8	38.2		
Family type			**3.063**	**0.216**
Alone, n=44	**23**	**21**		
	52.3	47.7		
Nuclear family, n=145	**82**	**63**		

	56.6	43.4		
Joint family, n=86	**57**	**29**		
	66.3	33.7		
Monthly income (Rs.)				
<20k, n=96	**48**	**48**	**5.292**	**0.071**
	50.0	50.0		
20-50k, n=116	**76**	**40**		
	65.5	34.5		
>50k, n=63	**38**	**25**		
	60.3	39.7		

Table 13 indicates that of all the respondent street food consumers, only 38.2 percent were aware about the license or registration issued to the street food vendors under Food Safety and Standards Act. Similar trend was observed among various categories of age and monthly income groups. Alarmingly, within the gender categories, female consumers; within the level of education categories, consumers with only up to school level education; and within the various categories of family types, consumers staying alone and belonging to joint family reported even lower awareness, 29.8, 25.0, 31.8 and 29.1 percent respectively, about the license or registration of the street food vendors.

Among the social demographic characteristics of respondents, results did not reflect statistically significant difference in the awareness about the license or registration issued to the street food vendors under Food Safety and Standards Act among various categories of genders (p=0.057), age (p=0.915) and monthly income (p=0.551). However, statistically significant difference was reflected by the chi-square test among respondents with different groups of education level (p=0.010) and family types (p=0.029).

Table 13: Association between social-demographic characteristics of respondents and awareness about vendors' license or registration

Social-demographic variables	Awareness about vendors' license or registration, N=275		χ^2	P value
	Yes	No		
	Frequency (%)	Frequency (%)		
Gender			**3.633**	**0.057**
Male, n=191	**80**	**111**		
	41.9	58.1		
Female, n=84	**25**	**59**		
	29.8	70.2		
Age			**0.011**	**0.915**
<30 years, n=187	**71**	**116**		
	38.0	62.0		
>30 years, n=88	**34**	**54**		
	38.6	61.4		
Level of education			**6.650**	**0.010**
Upto school, n=68	**17**	**51**		

	25.0	75.0		
College & above, n=207	**88**	**119**		
	42.5	57.5		
Family type			**7.086**	**0.029**
Alone, n=44	**14**	**30**		
	31.8	68.2		
Nuclear family, n=145	**66**	**79**		
	45.5	54.5		
Joint family, n=86	**25**	**61**		
	29.1	70.9		
Monthly income (Rs.)				
<20k, n=96	**33**	**63**	**1.191**	**0.551**
	34.4	65.6		
20-50k, n=116	**45**	**71**		
	38.8	61.2		
>50k, n=63	**27**	**36**		
	42.9	57.1		

3.5 Sources of information on food safety

Responses of the consumers of street foods of Anand - Vidhyanagar on their different sources of information on food safety were also collected and presented in Table 14. It was obvious from the table that a very high proportion of consumers (32.4 percent) were always using social networks / internet as source of food safety information. On the other hand, health workers, friends/relatives, consumer organizations, advertisement in posters/hoardings and non-government organizations were never used as source of information for food safety by many consumers of street foods, 28.4, 24.4, 22.5, 22.1 and 21.1 percent of sample respondents respectively.

Table 14: Sources of information on food safety (n=275)

Sources	Percentage			
	Never	Rarely	Sometimes	Always
Articles in newspaper / magazines	16.7	26.9	42.9	13.5
Advertisements in TV / newspaper	10.2	34.9	40.4	14.5
Advertisements in posters / hoardings	22.2	34.2	31.6	12.0
School / college	18.2	33.1	29.5	19.3
Health workers	28.4	26.9	30.5	14.2
Friends / relatives	24.4	31.3	26.9	17.5
Consumer organizations	22.5	34.9	32.0	10.5
Non-government organizations	21.1	40.7	27.6	10.5
Social networks / internet	15.6	20.7	31.3	32.4

4. CONCLUSION

The respondent profiling of the survey on the basis of gender, age, level of education, family type and monthly income suggested that the selected study population and the convenient selection of respondents had a positive impact in getting a wide range of consumers' responses and views. Study revealed that about 39.3 percent of the consumers took street foods 2 to 3 times per week. Panipuri was found to be the most preferred choice of street food by the sample respondents. It was also

found that taste of the food was the most important reason for consumption of street food, followed by convenient and easy accessibility of such foods and their inexpensive prices. Study indicated that about one fourth of the consumers were unsatisfied with the cleanliness of the vending area. Results also showed that age and income level had statistically significant association with perception about cleanliness of vending area. It was observed that 61.5 percent of all the respondent street food consumers perceived street food as safe for consumption. Age and type of family had found to have statistically significant association with safety perception of street foods. Social networks / internet had emerged as the main source of food safety information for the consumers of street foods, which was expected as the sample population of street food consumer was dominated by young and educated. Information generated from this study may assist regulatory authorities with regard to policy and approaches to street food vendors.

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