

Food Safety, A Global Challenge: Consumers' Perspective

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Abstract:

Food, with water and air, is an essential basis of all living being. It is a source of nutrition, growth and health. It does not have only sociocultural significance, but also it comprises of considerable economic and developmental implications. No poverty, Zero hunger, and Good health and well-being depend directly on the sufficient availability and affordability of safe and nutritious food. Due to its universality, and relatively lower start-up costs and investments involved, food offers enormous opportunities for entrepreneurs, and business start-ups in food are very common. At the same time any food operator or business has the responsibility to ensure that the food which is supplied will not cause harm to the consumers. Unsafe or unhygienic food can make people very sick, spread diseases, and may even cause death. Due to this, food is also a highly regulated sector where governments takes an enormous responsibility to safeguard the health and safety of their population through laws that set down conditions and parameters for food business operators and their operations. The cost of disease, sickness and premature death takes a heavy toll not only in terms of medical care, but also socially and economically in terms of lost productivity and potential. Food safety is the foundation of trust in the food business.

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I. INTRODUCTION

Entrepreneurs can establish a good reputation built on food safety and quality and derive profit. Small and medium-sized businesses very often do not realize that not applying food safety and quality improvement measures turns out to be more expensive than applying them. This means not leaving this important element to chance, or ignoring it, but actively and alertly plans, implement and pursue food safety from the initial stage of food production, inputs, processing, packaging, storing and distribution.

II. SIGNIFICANCE OF THE STUDY

This study was important in articulating food safety and hygiene practices as observed in households, with the hope to compare their operations and take

necessary corrective measures to lift themselves from under-performance, as well as set strategy for improvement. This study may help both consumers and the producers to focus on specific known challenges and be able to better their performance instead of generalizing behavior. Besides, the generated data and knowledge that could be used as reference material by the institutions, general readers and researchers. In essence, this study was vital in enhancing the body of knowledge in food safety and hygiene practices. In addition, the recommendations gathered from this study will help future development of policies and curriculum that will give comprehensive training programmes on food safety and hygiene practices.

III. GENERAL OBJECTIVE

The general objective of the study was to carry out to observe the food safety practices and hygiene hazards of the consumers in the Coimbatore region.

IV. SPECIFIC OBJECTIVES

Specific objectives of the study were;

- ❖ To establish the level of awareness towards food preparation of the consumers in the Coimbatore region
- ❖ To analyze the food-storages practices of the consumers
- ❖ To understand the personal hygiene in offering food safety and hygiene practices.
- ❖ To assess the cleanliness aspects followed by the respondents regarding the food store, consumption and preparation

V. LIMITATIONS

✚ This study focus only on the house holds consumers.

✚ It doesn't focus on any other biological aspects

✚ This research study has restricted within the Coimbatore city due to the time constraints.

✚

VI. REVIEW OF LITERATURE

(Ilesanmi, 2017) have examined his research on senior secondary school students by deputed 276 respondents in Nigeria. To opt the samples the researcher has utilized simple random sampling which flows under probability sampling technique. This research has essentially focused on the knowledge and the best practices of personal hygiene considered by the respondents. Finally it is explored in the critical analysis that majority of the respondents have the good level of practices and knowledge towards the personal hygiene. The analysis also revealed about the missing aspects that has to be concentrated in the further scenario. Those aspects are further attention towards monitoring the hygiene practices and additional educational programs needed to the selected respondents (Kaisoglu & Coskum, 2016) have examined his research by conducting a survey from the

Research Design – Descriptive

Target Population - 559 Household consumers

Sample design – Both primary and secondary data

Analysis

sample of about 300 respondents in the center of Tekirdag province. The researcher opted chi square technique as a statistical tool to derive the solution to his research taken. This study has focused on the other dimensions regarding the awareness and safety perception among the respondents. Finally it is observed that the food additives are impossible to avoid but the respondents have the sufficient knowledge about it and additionally 70.3% of the respondents have the habit of reading the labels to the dates of production and expiry. Hence it is found that there are some missing aspects in the analysis which will be concentrated later, those are the risks of additives must be reduced; the manufacture must pay attention towards food quality before sales.

(Kim & Kim, 2013) have examined his research on elementary school by conducting survey on 376 respondents in Korea. The researcher has opted many tools: frequency analysis, Pearson's correlation, analysis of variance. The research has focused on the food safety and hygiene knowledge, attitude and practices and there is a comparison in gender factor. Finally it is explored that the children had a good knowledge of food hygiene and safety and there are some difference between boys and girls in terms of attitude, knowledge and practices. There are some missing aspects in this study those are, though there was good knowledge and attitude towards hygiene and safety among the students but it wasn't accepted and there is a requirement in creating awareness towards effective educational interventions on food hygiene.

VII. RESEARCH METHODOLOGY & RESULTS

This chapter has given a detailed outline on how the study was executed. It has also explored the research design employed in the study, highlighted data collection instruments, explained data analysis and hypotheses testing, as well as experimental designs used in the current research.

S.No.	Age	Frequency	Percent
1	Below 18	72	12.9
2	18-35	321	57.4
3	35-50	144	25.8
4	Above 50	22	3.9
	Total	559	100.0

	Educational qualification	Frequency	Percent
1	Illiterate	39	7.0
2	SSLC	64	11.4
3	HSSC	202	36.1
4	Graduate	254	45.4
	Total	559	100.0

	Residence	Frequency	Percent
1	Urban	311	55.6
2	Rural	166	29.7
3	semi-urban	82	14.7
	Total	559	100.0

S.No	Gender	Frequency	Percent
1	Male	217	38.8
2	Female	342	61.2
	Total	559	100.0
	Monthly income	Frequency	Percent
1	below 25000	262	46.9
2	25000-50000	220	39.4
3	above 50000	77	13.8
	Total	559	100.0
	Occupation	Frequency	Percent
1	Business	288	51.5
2	Student	58	10.4
3	Agriculture	38	6.8
4	Government employee	22	3.9
5	private employee	58	10.4
6	Others	95	17.0
	Total	559	100.0

From the above table, it is inferred that (57.4%) of the respondents belonged to the age group of 18-35, (61.2%) of the respondents are female, (45.4%) of the respondents are graduates, (51.5%) of the respondents are business men, (55.6%) of the respondents reside in urban area, (68.2%) of the respondents belong to nuclear family, (46.9%) of the respondents earn their monthly income below 25000

STORAGE OF SEMI COOKED FOOD IN THE REFRIDGERATOR

S.No	No. of days	Frequency	Percent
1	one day	324	58.0
2	2-3 days	126	22.5
3	one week	32	5.7
4	Never	77	13.8
	Total	559	100.0

(58%) of the respondents store semi cooked food in the refrigerator.

STORAGE OF COOKED FOOD IN THE REFRIGERATOR

S.no	Particulars	1-2 days		2-3 days		More than 3 days		Never	
		F	P	F	P	F	P	F	P
1	Gravy	391	69.9	61	10.9	20	3.6	87	15.6
2	Chutney	263	47	163	29.2	38	6.8	95	17
3	Non veg fries	148	26.5	58	10.4	77	13.8	276	49.4

From the above table, it is inferred that (69.9%) of the respondents store gravy in the refrigerator for 1-2 days, (47%) of the respondents store chutney in refrigerator for 1-2 days and (49.4%) of the

respondents never store non veg fries in the refrigerator

STORAGE OF FRAGMENTED BATTER IN THE REFRIDGERATOR

S. No	Option	Frequency	Percent
1	Yes	326	58.3
2	No	233	41.7
	Total	559	100.0

(58.3%) of the respondents frequently store batter in the refrigerator after fragmentation

THE PREFERENCES FOR FAST FOOD

S.no	Option	Strongly agree	Agree	Disagree	Strongly disagree	No answer
1	Instant availability	42.2	38.1	11.6	2.5	5.5
2	Inexpensive	16.5	44.5	28.8	5.5	4.7
3	Taste Preference	16.5	44.5	28.8	5.5	4.7
4	Offers a variety	20.0	47.8	11.3	10.4	10.6
5	Time saving	14.3	28.4	19.7	12.9	24.7
6	Convenient	23.1	37.4	11.4	5.0	23.1

From the above table, it is inferred that (42.2%) of the respondents strongly agree that the fast food are instantly available, (44.5%) of the respondents agree that the fast food are inexpensive, (44.5%) of the respondents agree that they like the fast food, (59%) of

the respondents have neutrally prefer that the fast food offers a variety and (28.4%) of the respondents agree that they prefer as fast foods, as its preparation saves time, (37.4%) of the respondents agree that fast food are convenient

FREQUENCY OF CLEANING THE REFRIGERATOR USING SOAP, WARM WATER AND OTHER CLEANING PRODUCTS

S. No	Option	Frequency	Percent
1	monthly once	284	50.8
2	2-3 times once	168	30.1
3	3-6 times once	86	15.4
4	more than 6 times	21	3.8
	Total	559	100.0

(50.8%) of the respondents clean inside of the refrigerator using warm water and other cleaning products for monthly once.

FREQUENCY OF CLEANIG UP THE WATER TANK IN YOUR HOME

S. No	Option	Frequency	Percent
1	once in a year	238	42.6
2	twice a year	226	40.4
3	two years once	81	14.5
4	more than 2 years	12	2.1
5	Never	2	.4
	Total	559	100.0

(42.6%) of the respondents clean up the water tank in their home once in a year.

CONSUMPTION OF FAST FOOD PREPARED BY QUICK SERVICE RESTRAUNTS.

S. No	Option	Frequency	Percent
1	Daily	91	16.3
2	1-3 times	276	49.4

3	twice a week	89	15.9
4	Never	103	18.4
	Total	559	100.0

(49.4%) of the respondents consume fast food prepared b the quick service restaurants for 1-3 time a week.

FREQUENCY OF GETTING HEALTH CHECK UPS

S.No	Option	Body check up	Dental check up
1	1-2 times a year	21.8	37.2
2	once in 2-3 years	25.6	21.8
3	3-5 years	9.8	9.7
4	5 years	3.9	5.5
5	more than 5 years	4.8	5.7
6	Never	34.0	20.0
	Total	100.0	100.0

From the above table it is inferred that (37.2%)of the respondents have their health checkup once in a year. (34%) of the respondents never have a dental check up

PUBLIC AWARENESS

S.No	Option	Always		sometimes		Never	
		F	P	F	P	F	P
1	Consideration of expiry date while purchasing packed food	337	60.3	171	30.6	51	9.1
2	Hygiene practice of closing mouth /nose while coughing and sneezing	366	65.5	170	30.4	23	4.1

From the above table it is inferred that (60.3%) of the respondents always take note of the expiry date while purchasing of any packed food, (65.5%) of the respondents always cover their mouth/nose while coughing and sneezing.

Chi-square test:

H₀: Frequency of cleaning kitchen containers.

Independent Factor: Frequency of cleaning kitchen containers

Dependent Factor: Occupation of the respondents.

Hypothesis

H₀: There is no significant relationship between the independent and dependent factors.

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.798^a	20	.005
Likelihood Ratio	37.796	20	.009
Linear-by-Linear Association	5.960	1	.015

(S-significant @5% level (p-value < 0.05), NS – Not significant @ 5% level)(p-value>0.05)

From the above table it is clear that the probability value (0.005) is lesser than the significant value (0.5). Hence there exists a significant relationship between variables taken for the study such as occupation and frequency of sscleaning containers

H₀: Frequency of dental check up taken by the respondents.

Independent factor:

Frequency of dental check up taken by the respondents

Dependent factor: Occupation of the respondents.

Hypothesis:

H₀: There is no significant relationship between the independent and dependent factors.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61.945^a	25	.000
Likelihood Ratio	62.841	25	.000
Linear-by-Linear Association	12.380	1	.000

(S-significant @5% level (p-value < 0.05), NS – Not significant @ 5% level)(p-value>0.05)

From the above table it is clear that the probability value (0.000) is lesser than the significant value (0.5). Hence there exists a significant relationship between variables taken for the study such as occupation and frequency of dental check up

Hypothesis:

H₀: There is no significant relationship between the independent and dependent factors.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.827^a	25	.000
Likelihood Ratio	81.995	25	.000
Linear-by-Linear Association	13.925	1	.000

(S-significant @5% level (p-value < 0.05), NS – Not significant @ 5% level)(p-value>0.05)

From the above table it is clear that the probability value (0.000) is lesser than the significant value (0.5). Hence there exists a significant relationship between variables taken for the study such as occupation and frequency of health check up.

Rank analysis:

On what basis the ingredients are purchased for food preparation at your home?.

S.No	Preferences	Mean Rank
1	Taste	2.26
2	Advertisement	2.93
3	Based on nutrients	2.56
4	Expiry date	2.28

Though the respondents have given various area of preferences in purchasing ingredients for food preparation, it is clear from the above table that among the various area of preferences, most of the respondents have given top priority to taste which has the mean value of 2.26 followed by expiry date, nutrient content and the least priority has been given to the term advertisement

VIII. CONCLUSION

This chapter has summarized study findings as presented in the preceding chapters. The purpose of the study was to critically compare food safety and hygienic practices in Coimbatore city. The conclusions and recommendations were highlighted through the

H₀: Frequency of health check up taken by the respondents.

Independent factor:

Frequency of health check up taken by the respondents

Dependent factor:

Occupation of the respondents.

four study objectives and hypotheses. The recommendations were made in relation to gaps in the study findings.

- After opening food packages it is necessary to seal and refrigerate the uneaten food in order to avoid spoilages.
- Microbes begin to multiply when the cooked food cools down to room temperature. The longer the food is held back the greater becomes the risk. Thus to be on a safer side eat cooked food immediately.
- It is everyone's responsibility to keep themselves and their surroundings clean and neat. Everyone must be aware that they should cover their nose and mouth while coughing or sneezing because, the diseases caused are easily communicable to others when they are not covered.
- Always clean the ceiling of rooms and water tank at your places regularly. The water that is used for doing daily chores is stored in overhead tanks. They must be cleaned at correct intervals because food poisoning might be caused if they are not properly cleaned.

Make sure to clean your refrigerator regularly because contamination of food can be caused if it is not cleaned. Clean the refrigerator every few months which can prevent growing of bacteria which might cause illness.

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