

The Hygienic play significant role on Food Safety Practices in select food companies

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ABSTRACT: *Hygiene refers to good practices that prevent disease and lead to good health. The hygiene is important to prevent food poisoning and control microbial growth. To prevent food poisoning using of good personal hygiene and follow these hygienic tips like employees wash and dry hands thoroughly before handling food products. The wash and dry hands again frequently during work place then prevent microbial contamination in the food products. The food companies are installing the correct facilities for staff to ensure proper personal hygiene is met contributes towards meeting food safety requirements. The bacteria can easily be spread through biological and physical contamination. This can put in foods at high risk of carrying food-borne diseases. The proper Hygienic of food products plays a significant role to ensuring food safety in a product and more importantly, protecting consumers from health dangers such as food spoilage or contaminations. The hygienic in the select food companies play important role to protect food products. It can be achieved by identifying and eliminating sources of hygienic problems. The research selected four food companies are following the hygienic methods. The data collected from the respondents are 520 from the total population of 3800 from selected food companies which are working different designations. The four food companies are following the food safety standards and guidelines. The food manufacturing companies must maintain the proper hygienic then food products are assuring safe to eat. The new International environment for food trade places considerable obligations on both importing and exporting countries to strengthen their food hygienic systems and to implement and apply risk-based food hygienic strategies.*

KEYWORDS: *food safety, hygienic, food hygiene, personal hygiene.*

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I. INTRODUCTION

The Food hygiene and safety usually refer to contamination with 'microorganisms' or 'microbes', the study have to give due emphasis to good hygienic practices to prevent and control foodborne diseases. The term 'food hygiene' refers particularly to the practices that prevent microbial contamination of food. The Food safety is a closely related but broader concept that means food is free from all possible contaminants and hazards. The hygienic influence that food companies layout and process flow of the production line. It should allow easy maintenance and cleaning of machinery surrounds and prevent contamination of the food products during the production process. The design of machinery used for food processing also has to be taken into account to comply with food safety regulations. The without hygienic conditions in the area of food companies microbial contamination take place like *Staphylococcus aureus*, *Clostridium perfringens*, *Salmonella*, *Streptococcus*, *Shigella*, *Clostridium botulinum*, *E. coli*. It can be controlled by using advance hygienic methods and Food safety logical tools for protect effectively in food processing sector. The based on the observation of the thesis carried out the fallowing conclusion are made that the raw material management and final product management enhance the safety through proper hygienic. The Food Safety practices looks for hazards and check every critical control point if anything goes wrong that could correct action may take immediate regarding food product safety. The Food safety system mainly focuses on identifying and preventing hazards. The food hygienic methods are more effect in the food companies and more responsibility and give assure to customers such food products are safe to eat without any contamination. The select food companies are making biscuits, cookies, chocolates, the companies are following best hygienic methods.

Research Methodology and Data Analysis

The research study was performed in four food companies which are private limited food companies in Hyderabad, Telangana state. The four food companies are working employees total population three thousand eight hundred members for three shifts. The companies are making the different types of biscuits and cookies, chocolates. The respondent sample size Five hundred twenty employees are taken from the total population. The

simple random sampling method is using for selection of sample size from total population. The sampling size basis for selection model of Cochran Formula. The biscuit making companies are following the good hygienic practices as per food safety standards and guidelines. The best hygienic practices take place in select food companies as per the respondents perspective. The hygienic practices play significant role for the food safety.

II. FINDINGS AND INTERPRETATION

The research study presents the consequences of the data analysis of the responses obtained from the employees which are working in the select food companies in Hyderabad, Telangana state. The data analysed by using of Descriptive statics, Chi-Square, ANOVA. The Data analysis is a process of allowing to collected data, analysis of data significance and determination of finding and conclusions. The data analysis benefits in finding conclusions and results helps with help of scientific methods. The significance of the data analysis is to provide suitable findings for proper results and conclusions. The data collected and coding of data is done with suitable software like SPSS version.23. The data collected by several respondents of select food companies with help of questionnaires based on seven-point Likert scale.

The Hygienic methods are following Respondents perception of food safety practices.

1. Data Analysis as per the Dimension of Hygienic

Table: 1. Descriptive statistical analysis as per the dimension of Hygienic

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Mean Scores Percentage
HY1	520	1.0	3.0	708.0	1.362	.5412	27.24
HY2	520	1.0	2.0	805.0	1.548	.4982	30.96
HY3	520	1.0	3.0	897.0	1.725	.6767	34.5
HY4	520	1.0	3.0	977.0	1.879	.7042	37.58
HY5	520	1.0	3.0	726.0	1.396	.5524	27.92
HY6	520	1.0	3.0	787.0	1.513	.6685	30.26
HY7	520	1.0	2.0	809.0	1.556	.4974	31.12
Valid N (listwise)	520						

Interpretation: -

From the table 1. Described the Statistics Data Analysis, that result shows the above table that Hygienic wise mean score percentages. This is descriptive statistics analysis Number of Respondents 520, Minimum values maximum values, mean, Std. Deviation, mean score percentage indicates the above table.

2.The Respondents perception of Good Hygienic Practices for food safety practices.

Table: 2. Chi-Square Test Statistics

	HY1
Chi-Square	320.554 ^a
df	2
Asymp. Sig.	.000

Interpretation: -

Based on table 2. described that statistical analysis indicates that the Chi-Square result is 320.554, the significant difference value (P value) obtained 0.000. It is found that a significant (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted the Alternative Hypothesis. The food safety Practices influence by Good Hygienic on as per intension of Respondents.

3. The respondent perception of effective cleaning methods.

Table: 3. Chi-Square Test Statistics

	HY2
Chi-Square	4.808 ^a
df	1
Asymp. Sig.	.028

Interpretation: -

From table 3. in the value described that the statistical analysis indicates that the Chi-Square result is 4.808, the significant value (P value) obtained 0.000. It is found that a significant value (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted Alternative Hypothesis. indicate that the Hygienic effective cleaning methods are influenced by employees perception on the food safety Practices

4. The Respondents perception of food Handling methods

Table: 4. Chi-Square Test Statistics

	HY3
Chi-Square	100.988 ^a
df	2
Asymp. Sig.	.000

Interpretation: -

Based on table 4. Described that the statistical analysis indicates that the foundation is 100.988, the significant value (P value) obtained 0.000. It is found that a significant (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted Alternative Hypothesis, it is concluded that the food safety Practices influence by Hygienic food Handling methods as per intension of Respondents.

5. The Respondents perception of maintaining Hygienic at the time of entry the plant.

Table: 5. Chi-Square Test Statistics

	HY4
Chi-Square	69.165 ^a
df	2
Asymp. Sig.	.000

Interpretation: -

Based on table 5. Described that the statistical analysis of the Chi-Square result found is 69.165, the significant difference value (P value) obtained 0.000. It is found that a significant (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted Alternative Hypothesis. The food safety Practices influence by It maintains Hygienic at the time of entry the plant as per Respondents perception.

6. The Respondents perception of using the latest sanitation technology.

Table: 6. Chi-Square Test Statistics

	HY5
Chi-Square	284.427 ^a
df	2
Asymp. Sig.	.000

Interpretation: -

Based on table 6. described that the statistical analysis indicates that the Chi-Square result is 284.427, the significant value (P value) obtained 0.000. It is found that a significant value (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted Alternative Hypothesis. It concluded that using the latest sanitation technology influence on Respondents perception of food safety Practices.

7. The Respondents perception of using microbial free water for production.

Table: 7.Chi-Square Test Statistics

	HY6
Chi-Square	185.242 ^a
df	2
Asymp. Sig.	.000

Interpretation: -

Based on table 7. Described that the statistical analysis result in 185.242, then a significant value (P value) obtained 0.000. It is found that a significant value (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, accepted Alternative Hypothesis. The food safety Practices influence by using microbial free water for production on Respondents perception.

8. The Respondents perception of an adequate system for waste management.

Table: 8.Chi-Square Test Statistics

	HY7
Chi-Square	6.469 ^a
df	1
Asymp. Sig.	.011

Interpretation: -

Based on table 8. Described that the statistical analysis indicates that the Chi-Square result is 6.469, the significant difference value (P value) obtained 0.011. It is found that a significant value (P value) below 0.05. As per the results from the table show that the rejected Null hypothesis, the accepted Alternative Hypothesis. It results that the adequate system for waste management influence on Respondents perception on the food safety Practices.

9. The Hygienic statistical analysis of Chi-Square Tests

Table: 9. Chi-Square Test Statistics

	Value	df	Asymptotic Significance
Pearson Chi-Square	5.496 ^a	21	.000
"Likelihood Ratio"	5.426	21	.000
"Linear-by-Linear Association"	.866	1	.000
N of Valid Cases	520		

Interpretation:

Table 5.7.8. Described that the correlation with Hygienic of the Respondents and their Food safety practices. This analysis concludes that the found value is 5.496, the significant difference value (P value) obtained 0.000. It is found that a significant (P value) below 0.05. As per the results from the table indicate that the rejected Null hypothesis, the accepted Alternative Hypothesis is. Hence, it is concluded that the Food Safety Practices influence by Hygienic on Respondents influences.

10. The Hygienic statistical analysis of ANOVA

Table: 10. ANOVA Test Statistics

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.113	3	.038	.329	.000
Within Groups	58.913	516	.114		
Total	59.026	519			

Interpretation: -

Table 10. Described that the relationship between the Hygienic of the Respondents and their Food safety practices. This analysis concludes that the result found is 0.329, the significant value (P value) obtained 0.000. It is found that a significant value (P value) below 0.05. As per the table indicate that rejected the Null

hypothesis, accepted Alternative Hypothesis. it results Food Safety Practices influence by Hygienic as per intension of Respondents. It helps to enhance the food quality of the products.

III. CONCLUSIONS

The research study concluded that the employees response on food safety practices in select food companies. The selected food making companies are following the food safety standards and regulations. The companies adopted Food Safety Standard Authority of India and Hazard Analysis Control Critical Point, International Organisation for Standards (ISO22000:2005) and BRC is an international Food Safety Management Systems standard, and is one of the GFSI recognized certification schemes, Agricultural and Processed Food Products Export Development Authority (APEDA). The reasonable association between Food Safety Standard Authority of India and other international bodies responsible for ensuring food safety and standards. The role of hygienic must be considered within the circumstance of inspections are carried out from companies. The inspection surface cleaning and pest control, fumigation at companies surrounding areas. As the study is limited to four food companies which is located at Hyderabad, Telangana foods. The select food companies have produced biscuits and cookies ensure crispiness and high quality which is more acceptable. The select food companies are following the Hygienic as per food safety standard and guidelines, it is providing suitable training for employees about hygienic for make safe food, the companies overall hygienic practices satisfied with the export quality of food products. The research study from select food companies are following suitable hygienic practices for safety foods.

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