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# Customers' Perception on Food Hygiene and Safety at Pasar Siti Khadijah, Kota Bharu

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Abstract: The level of hygiene and safety of food served by sellers should be taken into consideration by the buyers or customers to ensure that the food provided is safe to eat. Therefore, this study was conducted to find out the perception of society on food hygiene and safety at Pasar Siti Khadijah, Kota Bharu. In this study, the researcher focused on two aspects which are the level of food hygiene and the level of food safety. For data analysis the researcher has chosen to use the questionnaire form method. The results of this study were analyzed using software Statistical Package for The Social Science (SPSS) version 25.0. Data analysis showed that average mean values were at a median level of 3.02 for food hygiene while average mean values for food safety were served at a median level of 3.09.

Keywords: Food Hygiene, Food Safety, Pasar Siti Khadijah

#### 1. Introduction

A key element to keep in mind when handling food is the safety and hygiene of food especially in food service such as markets or food stalls. Food safety is a very important matter that needs to be taken seriously to prevent consumers from being exposed to foodborne illnesses that can lead to food poisoning and can also affect human health (Fischer, Frewer & Nauta, 2006). Therefore, food safety and hygiene practices can prevent people from being exposed to diseases mainly caused by bacteria, virus infections and parasites present in food. According to Abbot, Byrd-Bredbenner, Schaffner, Bruhn & Blalock (2009), education on safety in food preparation is very important for those who handle food to the public which is most likely to cause foodborne illness. In this chapter, the researcher will discuss the issue of hygiene, which is a very important issue that needs attention by all departments, especially those who handle food. This is to ensure the quality and safety of food. In addition, hygiene also needs to be emphasized in various aspects such as food hygiene, personal hygiene of food handlers, premises cleanliness and equipment cleanliness. This is to prevent contamination that can cause foodborne illness. Therefore, this study is essential to identify the level of food hygiene conducted by food vendors

sold in the markets. Food handlers are those who are directly involved in the production and preparation of food. Sellers, chefs and waitresses at food premises are also known as food handlers. According to Hobbs & Roberts (1993), the operator is responsible for ensuring that the food served is clean and safe. Food store owners, merchants or workers need to maintain their personal hygiene when handling food and should be regarded by the public as consumers. According to food hygiene and safety guidelines, aspects of food hygiene include the food handler, the equipment and utensils used, the raw and dry ingredients and the environment such as the food preparation area. According to Pires et al., (2012), the leading causes of food poisoning agents are caused by Salmonella Typhi, Staphylococcus Aureus, Escherichia Coli and Clostridium Perfringens. Food premise grading systems are a structured and systematic way of recognizing restaurant or cafeteria restaurants or eateries striving to provide clean, safe and quality food and beverage service in compliance with all applicable regulations and guidelines set by the City Council. Food premises must be cleaned continuously during, before and after the operation of the food business. Routine hygiene be carried out, some to be cleaned daily and others once a week. This is to ensure that the premises are always clean and well-received by the public or customers. In the aspect of food packaging, the hygiene factor plays a very important role as it is usually food packaging that contains many types of chemicals such as glue, wax and so on. Food handlers must be wise in selecting food packages that suit their nutritional properties whether in liquid, solid, moist, dry and easily decomposed or damaged. Proper packing of food is very important in order to avoid contamination or reactions that can damage the food.

## 2. Methodology

Methodology this study is determined using the design of the study for review using quantitative research methods through the questionnaire as an instrument. According to Walonick (2005), the purpose of this questionnaire was chosen as a research instrument because it is easy to cooperate with respondents.

Thus, the population in this study were customers shopping or buying at Pasar Siti Khadijah, Kota Bharu. Kelantan. All the data obtained from the questionnaires were analyzed using the Statistical Package for the Social Sciences version 25.0 (SPSS). The results of the analysis are shown in tables obtained from SPSS such as min and standard deviation obtained from (Konting, 2009).

Mean	Interpretation phase		
Score			
1.00 - 2.33	Lowest		
2.34 - 3.66	Moderate		
3.67 - 5.00	Higher		

**Table 1: Mean score interpretation scale (Konting, 2009)** 

#### 3. Results and Discussion

Analysis of data is taken by calculating the mean score and standard deviation for finding answers studied using the computer software SPSS version 25.0. Based on the mean value obtained for each of the questions that have been in the questionnaire, the value will be classified into two levels as given which is the level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu and the level of food safety that served at Pasar Siti Khadijah, Kota Bharu either low, medium or high.

## 3.1The level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu

The analysis in this section is intended to answer the first research question, namely "What is the level of food hygiene that is served at Pasar Siti Khadijah, Kota Bharu". A total of 15 items were built and analysed to identify the level of food hygiene that was served at Pasar Siti Khadijah, Kota Bharu.

Table 2: The level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu

	Table 2: The level of food hygiene that ser	Table 2: The level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu						
No	Item	Min	Level	Standard deviation				
1	Food served by sellers is exposed to pests and	2.64	Moderate	1.18				
1	other impurities.	2.04	Moderate	1.10				
2	Seller do not wear a gloves when	2.50	Moderate	1.18				
	preparing food.							
3	Sellers do not wear apron during	2.60	Moderate	1.09				
	meal preparation.	0.65	*** 1	0.55				
4	Sellers use cleanliness utensils to serve the food.	3.67	High	0.77				
5	Sellers focus on personal hygiene	3.58	Moderate	0.78				
5	first when preparing food.	3.30	Moderate	0.70				
6	Sellers wear a jewelry such	2.17	Low	0.80				
	as rings and bracelets when handling							
_	food.							
7	Sellers wash their hands before	3.52	Moderate	0.82				
8	prepare the food for customers. The food served by the sellers is	3.53	Moderate	0.86				
O	always kept clean and safe from start	3.33	Moderate	0.00				
	to finish.							
9	Sellers ensure that rubbish and food	3.56	Moderate	0.89				
	waste are cleaned in the event of							
1.0	impurities.	2.05	*** 1	0.50				
10	Sellers display grade of cleanliness	3.87	High	0.76				
	provided by health department and business licenses.							
11	Sellers keep their heads covered	3.55	Moderate	0.90				
	when handling food.							
12	Seller's nails are always clean	3.35	Moderate	0.83				
	and short.							
13	Sellers do not smoke during the	3.50	Moderate	0.89				
14	food preparation process. Sellers do not have health problems	3.61	Moderate	0.85				
14	such as cough and flu when handling	3.01	Moderate	0.83				
	food.							
15	Sellers wear a suitable and clean	3.76	High	0.72				
	shoes when handling food		-					
	Mean average overall	3.02	Moderate					

The mean score analysis for part B, which is the level of food hygiene that is served at Pasar Siti Khadijah, Kota Bharu. Overall, the mean score for this food hygiene is between 2.17 (SP = 0.80) and 3.87 (SP = 0.76).

Therefore, referring to table 2, the item with the highest score is item 10 (Sellers's display grades of cleanliness provided by health department and business licenses) with a mean score of 3.87 (SP = 0.76). Followed the second highest mean score of item 15 (Sellers wear suitable and clean shoes when handling food) with a mean score of 3.76 (SP = 0.72). Finally, the highest third min score is item 4 (Sellers use cleanliness utensils to serve the food) with a mean score of 3.67 (SP = 0.77).

Whereas, the findings from the 15 items are only 3 items that have the lowest mean value. Items with the lowest mean score are item 6 (Sellers wear jewelry such as rings and bracelets when handling food) with a mean value of 2.17 (SP = 0.80). Followed the second lowest mean score of item 2 (Sellers

do not wear gloves when preparing food) with a mean score of 2.50 (SP = 1.18). Finally, the lowest third mean score is item 1 (Food served by sellers is exposed to pests and other impurities) with a mean value of 2.64 (SP = 1.18). Overall, the total mean in the level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu is 3.02 which is at moderate level.

## 3.2 The level of food safety that served at Pasar Siti Khadijah, Kota Bharu

The analysis in this section is intended to answer the second research question, namely "What is the level of food safety that is served at Pasar Siti Khadijah, Kota Bharu". A total of 15 items were built and analysed to identify the level of food safety that served at Pasar Siti Khadijah, Kota Bharu.

Table 3: The level of food safety that served at Pasar Siti Khadijah, Kota Bharu

No	Item	Min	Level	Standard deviation
1	The food served does not have physical ingredients like hair and glass.	3.87	High	0.82
2	Packaging used by sellers is safe to protect food from impurities.	3.86	High	0.70
3	Sellers use too much sugar, salt and oil in their food.	2.30	Low	0.72
4	Food sold by the seller has an expiration date.	3.41	Moderate	0.87
5	The food served by the sellers are not covered.	2.70	Moderate	0.96
6	The equipment used for raw materials does not mix with cooked food.	3.45	Moderate	0.81
7	Sellers label foods with clearly used ingredients.	3.61	Moderate	0.86
8	Food sold by the sellers is kept separately between cooked and raw foods.	3.55	Moderate	0.82
9	The food served by the sellers does not appear to be foamy and is not surrounded by insects.	3.67	High	0.82
10	The food sold by the sellers does not have a pleasant smell.	3.54	Moderate	0.89
11	The food had cooked saved at the right temperature.	3.40	Moderate	0.89
12	The foods had processed are in closed condition.	3.58	Moderate	0.87
13	Sellers use quality raw materials and dry ingredients to produce food.	3.70	High	0.76
14	The equipment used by the sellers is always clean	3.47	Moderate	0.94
15	The food sold by the sellers has a halal logo.	3.87	High	0.75
	Mean average overall	3.09	Moderate	

The mean score analysis for part C, which is the level of food safety that served at Pasar Siti Khadijah, Kota Bharu. Overall, the mean score for this level of food safety is between 2.30~(SP=0.72) to 3.87~(SP=0.75).

Hence, referring to table 3, the item with the highest score is item 15 (The food sold by sellers has a halal logo) with a mean score of 3.87 (SP = 0.75). Followed the second highest mean score of item 2 (Packaging used by sellers is safe to protect food from impurities) with a mean score of 3.86 (SP = 0.70). Finally, followed by the third highest score of item 13 (Sellers use quality raw materials and dry ingredients to produce food) with a mean score of 3.70 (SP = 0.76). Meanwhile, the analysis of the research shows that from the 15 items only 3 items have the lowest mean value. Items with the lowest mean score are item 3 (Sellers use too much sugar, salt and oil in their food) with a mean value of 2.30 (SP = 0.72). Followed the second lowest mean score of item 5 (The food served by the sellers are not covered) with a mean score of 2.70 (SP = 0.96). Finally, followed by the lowest third mean score for item 11 (The food had cooked saved at the right temperature) with a mean value of 3.40 (SP = 0.89). Overall, the mean total in identifying the level of food safety that served at Pasar Siti Khadijah, Kota Bharu is 3.09 which is at a moderate level.

## 3.3 Discussions

Based on the findings, the researcher identified the level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu. This food hygiene section is divided into 15 items. It is found that the majority of respondents agreed on moderate hygiene, with a mean score of 3.02. Therefore, the researcher will discuss about 3 items only. Reward items are the highest mean item in the level of food hygiene that served at Pasar Siti Khadijah, Kota Bharu was item 10 "Sellers display grade of cleanliness provided by health department" with a mean score of 3.87 (SP = 0.76). This shows that the majority of respondents strongly agree that the sellers display the grade of cleanliness provided by health department and business licenses. Sellers are obliged to display the grade of cleanliness in each of their premises. According to Rosli Bakar (2016), food premises inspections should be carried out more regularly to ensure the quality of food hygiene is kept clean and safe compared to the old monitoring system.

Additionally, reward items are the moderate mean item 14 "Sellers do not have health problems such as cough and flu when handling food" with a mean score of 3.61 (SP = 0.85). It shows that sellers do not experience health problems when handling food and they know the effects and consequences of handling food when ill. According to FAO (1997) in the code of practice issued the food handler should not be allowed to handle food in the event of illness to prevent microbiological transfer of food. Subsequently, the results of the study conducted in this section found that low mean is an item 6 "Sellers wear jewelry such as rings and bracelets when handling food" with a mean score of 2.17 (SP = 0.80). This shows that the majority of respondents do not strongly agree that sellers wear jewelry when handling food. Sellers are not allowed to wear jewelry such as rings and bracelets when handling food can cause cross contamination. This statement is supported by Jamal (1998), who states that jewelry such as rings and bracelets can prevent hands from being cleaned, which can also accumulate impurities and contaminate food.

Based on the findings, the researcher identified the level of food safety that served at Pasar Siti Khadijah, Kota Bharu. These foods are divided into 15 items. It is found that the majority of respondents agreed moderately on the safety of food with a mean of 3.09. Therefore, the researcher will discuss about 3 items only. Reward items are the highest mean item in the level of food safety that served at Pasar Siti Khadijah, Kota Bharu was item 15 "The food sold by the sellers has a halal logo." with a mean score of 3.87 (SP = 0.75). This shows that the majority of respondents strongly agree that the sellers selling the food have a halal logo at Pasar Siti Khadijah, Kota Bharu. This shows that sellers at Pasar Siti Khadijah emphasize the halal logo to convince customers to buy their food. Additionally, reward items showed moderate mean for item 7 "Sellers label foods with clearly used ingredients" with a mean score of 3.61 (SP = 0.86). This shows that most of the sellers at Pasar Siti Khadijah do not clearly label the ingredients used. As a seller, we should label the ingredients in the food for sale so that the customers are confident of buying the food or product they sell. Subsequently, the results of the study conducted in this section found that low mean is an item 3 "Sellers use too much sugar, salt and oil in their food" with a mean score of 2.30 (SP = 0.72). This shows that sellers do not care about ingredients used in cooking. According to Albayrak (2015), consuming too much sugar and salt can turn the body unhealthy due to eating habits.

#### 4. Conclusion

The findings of the study are based on the data analyzed by the researcher. On the whole it can be concluded that the level of food hygiene and food safety at Pasar Siti Khadijah was at a moderate level. This means that food sold at Pasar Siti Khadijah was not clean and safe. Therefore, all departments must play an important role in ensuring the hygiene and safety of food at Pasar Siti Khadijah. In addition, some sellers at Pasar Siti Khadijah maintain good hygiene when handling food. This shows that they not only have the knowledge but also have the awareness to practice it.

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