

# [The introduction of food hygiene health essay](https://assignbuster.com/the-introduction-of-food-hygiene-health-essay/)

Nowadays, public are emphasize on food hygiene. There are many food poisoning cases happen because of poor food hygiene standards. Food service businesses are taking important role in the proper hygiene standard. As Kashif Hussain(2005) stated that, food hygiene in a food service operation is the responsibility of everyone working in that establishment in order to prevent and reduce the risk of food borne illness.

This paper is intended to study the relationship of food hygiene and customers purchasing behaviors among TARC Perak Branch Campus students. Food hygiene is very important to every restaurant. Maintaining standard hygiene in a restaurant may result in good reputation and increase restaurant table turnover rate. A proper hygiene standard in restaurant may influence customer’s purchasing behaviors.

## 1. 2 Background of research

Kampar is a town which located in Perak, Malaysia. In the early time, Kampar is a town which rich with tin reserves. After constructing TAR College and University, the job opportunities in Kampar are increased especially for food and beverage business. Among the restaurant business in Kampar, there are some of restaurant owner did not have proper hygiene knowledge or did not apply the food safety knowledge when operating their business. The lack of concern of hygiene will directly affect the health of Kampar residents as well as Kampar students such as food borne illness.

## 1. 3 Problem Statement

Statement of problem is to study the relationship between food hygiene and customers purchasing behaviours among TARC students. Food hygiene is very important for any food service industry. Good practicing in hygiene standard can help to enhance the restaurant reputation, customers purchasing behaviour and the most important issue is reduced the risk of food borne illness.

## 1. 4 Objectives of the study

The objectives in this research attempted to achieve the following:

1. To investigate how application of HACCP influence the purchasing behaviour among Kampar students

2. To investigate the relationship between food borne illness and purchasing behaviour among Kampar students

## 1. 5 Research Questions

1 Will Application of HACCP influence purchasing behaviour among Kampar students?

2. Will factor of food borne illness influence the purchasing behaviour among Kampar students?

## 1. 6 Research Hypothesis

1. Application of HACCP influence the Kampar students purchasing behaviour

2. Food borne illness will influence Kampar student’s purchasing behaviour.

## 1. 7 Significance of Research

This study will be a guideline for the restaurant business to understand that the importance and application of food hygiene in a restaurant. Besides that, this research will provide opportunity for person, who involved in restaurant industry to understand more about food hygiene, and the right way in the process of preparing, storing and serving the foods which safe for human consumption.

## 1. 8 Scope and limitations of research

This research is focused on food hygiene and customers purchasing behaviour. The area of this research was in Kampar restaurant and TARC Perak Branch Campus students are the population for this research.

There are some limitations faced in this research. Researcher are facing problem when finding journals to support the research topic because most of the journal are old.

## 1. 9 Operational Definition of Terms

Food Hygiene, hazards, HACCP, Food borne illness

## Chapter 2

## Literature Review

## 2. 1 Introduction of food hygiene

Educational Foundation of the National Restaurant Association (1992) defines food hygiene as the creation and maintenance of healthful or hygienic conditions. In a food service situation, the word food hygiene means wholesome food, handled and prepared in a way that, the food is not contaminated with disease causing agents. The World Health Organization 2002 stated that, food safety is an increasingly important public health issue and inadequate food safety control was a key contributor to the 2. 1 million deaths from diarrhoeal disease globally in 2000. Keyvan Amjadi (2005), annual estimates for industrialised countries show that there are up to 30% of the populations are affected by food borne illness each year. Kashif Hussain(2005) stated, food hygiene in a food service operation is the responsibility of everyone working in that establishment. Proper food hygiene is known as healthful, clean and safety environment, and pleasant working conditions. Saunders (1991) stated that, everybody must eat to survive and food safety is considered very important to consumers. Mossel (1992) add on that, a discrepancy between medically acknowledged risks and food safety risks as perceived by the consumer. Shapman and Shapman,(1992), Waites and Arbuthnott, (1991) add on that, many cases of food poisoning occur as a result of failure to control growth of pathogens in foods, but with due diligence at all stages in the food chain this is largely preventable

## 2. 2 Definition of food hygiene

The World Health Organization (2006) define food hygiene as all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food-chain. Malcolm Tatum (2012), “ food hygiene” is used to describe the storage and preparation of foods in order to make sure that, food is safe for human consumption. Malcolm Tatum (2012) adds on, food hygiene is usually refers practices at an individual or family status, whereas the “ food sanitation” normally refers to types of procedures at the commercial level within the food industry.

Malcolm Tatum (2012) also mentions that there are some steps are needed to be emphasis and follow accordingly in order to maintain the food hygiene. The steps need to be concern are included washing hands before handling food, proper storage of food before use, make sure that all serving dishes are clean and free of contaminants when preparing the food and lastly maintaining a clean environment.

## 2. 3 HACCP

Eunice Taylor, (2008) define Hazard Analysis Critical Control Point (HACCP) as a risk-based management system which designed for assure the microbiological safety of food manufactured for use in the United Stated manned space missions of the 1960s. Eunice Taylor (2008) add on that, HACCP has become the internationally recognised system of managing food safety and its use has been extended to control the full range of biological, chemical and physical hazards since that time. BenEmbarek (2002) define HACCP as an advance in modern technology, producing safety food and keeping it safety remains a worldwide public health problem with illness caused by the consumption of contaminated food described as the most widespread health problem now a days. Codex (1997) stated that, the systems of the HACCP “ building block” are developed through application of the internationally agreed HACCP Principles. Motarjemi (1999) and Kaferstein (1999) stated that, the HACCP system will help to prevent from food borne illness outbreaks only if it is understood and applied it correctly. Motarjemi (1999) and Kaferstein (1999) add on, there are very few records of food borne illness outbreaks in which a food company operating with full commitment and understanding of the HACCP system has been involved. Motarjemi(1999) and Kaferstein (1999) emphasis that, food-borne illness would not occur if HACCP system is applied correctly. Whilst Motarjemi and Kaferstein (1999) argue with this point of view and stated that positive results may be expected when the HACCP system has been applied correctly, it is also necessary to establish ways of measuring HACCP effectiveness that are not based solely on retrospective analysis of outbreak data.

## 2. 4 Food borne illness

United Stated Food and Drug Administration (2000) found that the majority of food borne illnesses can be cause to five risk factors which included inadequate cooking, food from unsafe sources, improper holding temperatures, poor personal hygiene and contaminated equipment. Generally the causes to food borne illnesses can be divided into three distinct categories of hazards, which included biological, chemical, and physical. Educational Foundation of the National Restaurant Association (1992) defines the three categories of hazard. From the sources of Educational Foundation of the National Restaurant Association (1992), Biological hazard is defined as viruses, harmful bacteria, parasites or fungi. While for chemical hazard, Educational Foundation of the National Restaurant Association (1992) defined this term as contamination of food with food service chemicals and chemical substances containing in food. For physical hazard, is presence of foreign item that are not supposed to be a part of a food product. Knight and Lendal (1989) point out some critical offences of food handling in behavioural errors and leading operation that can lead to outbreaks of food borne illnesses in food and beverage operations. The critical offences that Knight and Lendal (1989) pointed out included failure to properly cook, reheat or cool foods to proper temperatures, foods prepared in advance or more than a day before serving, raw contaminated ingredients incorporated into foods that receive no further cooking, food allowed to remain at bacteria incubation temperatures and lastly employees who practice poor personal hygiene,

## 2. 5 Proper handling of food

NHMRC (2003) said that, proper handling of food during all stages of its preparation and storage is factor in reducing the risk of food borne illness. (Redmond and Griffith, 2003) agree with this point of view and add on, a systematic review of food safety studies identified that consumer commonly implement unsafe food-handling behaviours during domestic food preparation. Jay et al. (1999) and Jevsnik et al. (2008) have done an observation research and found out that improper and infrequent hand-washing techniques are common in Australian food handlers and up to two-thirds of participants did not wash knives and cutting boards after use with raw meat and before reuse of implements and these also are the factors that cause food borne illness. There are another of research into food borne illness appears to show a difference between knowledge of correct food safety behaviours and applying this knowledge during actual behaviour. Redmond and Griffith (2003) compared studies into consumer food safety information and found that although the respondents have good knowledge in food safety, they did not apply in these food safety knowledge and behaviours in their actual operation.

## 6. 0 Customers risk perception and purchasing behaviour

Royal Society (1992) and HMSO (1995) define risk as a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence. Solvic (1993) stated that, much of the public’s reaction to risk could be attributed to sensitivity not only to the technical but also to the social and psychological qualities of hazards. HMSO (1995) add on that, with concern of food, people associate greater risk with circumstances and practices which they perceive are controlled by others, such as eating in restaurants, compared with situations in which they have perceived control, such as preparing and eating food at home. From the early research of Roselius and supported by Ruth M. W. Yeung (2002) stated that consumers tend to change their purchasing behaviour once a possible food hazard is perceived to reduce the perceived risk in a purchase. There are four types of purchasing behaviour, which include: stop, permanently or temporarily, the purchase of offending product; reduce the purchase of the offending product; shift from one product to another similar type of product; or continue to purchase and absorb the unresolved risk,

## 2. 6 Summary

Nowadays, public are emphasize on food hygiene. As the report from The World Health Organization 2002, food safety is an increasingly important public health issue and inadequate food safety control was a key contributor to the 2. 1 million deaths from diarrhoeal disease globally in 2000. There are many food poisoning cases happen because of poor food hygiene standards. As Kashif Hussain(2005) said, proper food hygiene results in healthful, clean, wholesome food, an orderly environment, and pleasant working conditions. Food industry and restaurant are taking important role in the proper hygiene standard. Kashif Hussain(2005) add on, food hygiene in a food service operation is the responsibility of everyone working in that establishment. Besides that, consumers have to understand the basic knowledge about food hygiene to reduce as well as prevent and the risk of food borne illness.

For overall definition, food hygiene known as a practice of food safety included storage, handle, cook and present food. In order to remain the cleanliness level, some of the important steps are needed to concern. For example, the proper storage of food, maintaining kitchen cleanliness level, as well as the staff personal hygiene. Hazard Analysis Critical Control Point (HACCP) is a form of food risk assessment used as a food safety control. HACCP helps to indentify the hazards of food and reduce the risk from storage, handler, and cook and serve the food to consumer.

Lastly, food borne illness is caused by conducting poor food hygiene in food industry. To prevent from food borne illness, food industries have to properly cook and handle the food. Besides that, food industries especially restaurant business must stringent requirements their staff with standard hygiene concept.

## CHAPTER 3

## 3. 1 Introduction

In this research, I will interview TAR college’s students in Kampar to gain their opinion toward the relationship between food hygiene and purchasing behaviour by using quantitative research method.

## 3. 2 Research Design

This research is to study the relationship between food hygiene and customers purchasing behaviours among TARC students. Quantitative survey method will be conducted because the information is more reliable. Besides that, it’s more convenience, and efficient which face to face survey with TAR college students about the awareness of food hygiene.

## 3. 3 Population

The respondent in this research is focus on TARC Perak Branch Campus students.

## 3. 4 Research Instrument

Questionnaire is divided into 3 sections. Section A is awareness of food hygiene, Section B is HACCP, and Section C is customers purchasing behaviour and lastly Section D is demographic. There total 15 questions on food hygiene and customers purchasing behaviour in Section B and respondents responded on a likert scale which range from strongly agree to strongly disagree. 5 questions on customers purchasing behaviour were asked in Section C and likert scale which range from strongly agree to strongly disagree is provided. For the last section is demographic which included respondent’s gender, age as well as education level.

## 3. 5 Research Procedure

The method that used to collect data is through face to face interview with Kampar college students. Face to face interview can make sure that the information is more accurate and reliable. The question is printed in black and white papers that allow respondents to answer the questions accordingly.

Before start my survey, I will have a short brief about my title and reason of research. After that, black and white printed question paper will be given to let respondents answer the question accordingly. Using face to face method with black and white printed questionnaire can make sure that respondents can answer accordingly and respondents can ask for question when they meet some problem in answering the question.

## 3. 6 Method of collecting Data

In this research, the instrument will use black and white printed survey form to interview Kampar students. All the survey questions are printed in black and white paper form to let respondents answer the survey question accordingly. Face to face survey by using black and white printed survey form can make sure that respondents are answering the question accordingly and also can get more reliable answers. Besides that, respondents can ask any question directly from me if they face any problem while answering the survey question.

## Method of Analysing Data

The Statistic Package for the Social Sciences (SPSS) is used for data analysis. Coefficient Alpha is used to test the reliability of question, independent- sample T-test is use to test the bias of respondents and lastly Pearson Correlation method are used to test the hypothesis.

## CHAPTER 4

## Introduction

The data analysis will be conducted by using Statistic Package for the Social Sciences (SPSS) software to find out the result for objective and hypothesis.

## Research Finding:

## Reliability Statistic Test

A study was conducted to estimate the internal consistency of the 20 items which included HACCP, Food borne illness as well as Customers’ purchasing behaviour. Coefficient alpha for the scale was 0. 770, indicating fair internal consistency among the items on the scale. The means of individual items ranged from 1. 40 to 2. 30, with a mean on the total scale of 32. 50 (Standard Deviation = 4. 171). Overall, the respondent’s responses on the scale indicated that they possessed a fairly degree of HACCP, Food borne illness and Customer’s purchasing behaviour.

## Independent-sample T-test

## Research Question

1. Will Application of HACCP influence purchasing behaviour among Kampar students?

2. Will factor of food borne illness influence the purchasing behaviour among Kampar students?

## Hypothesis

Null Hypothesis 1: There is no significant difference in HACCP between purchasing behaviour.

Alternative Hypothesis 1: There is a significant difference in HACCP between purchasing behaviour.

Null Hypothesis 2: There is no significant difference in food borne illness between purchasing behaviour.

Alternative Hypothesis 2: There is a significant difference in food borne illness between purchasing behaviour.

## Interpretation of result

Table XXX indicated that the p-value is 0. 666 which is greater than 0. 05, means do not reject the null hypothesis and argue there is no significant difference in HACCP.

Table XXX indicated that the p-value is 0. 871 which is greater than 0. 05, means do not reject the null hypothesis and argue there is no significant difference in food borne illness.

Table XXX indicated that the p-value is 0. 682 which is greater than 0. 05, means do not reject the null hypothesis and argue there is no significant difference in purchasing behaviour.

## The Pearson r Correlations Coefficient

The correlation table XXX, indicated that the correlation between HACCP and purchasing behaviour is 0. 341\*\* with corresponding p-value of 0. 015 based on 50 respondents. Since the p-value is less than 0. 05, there is significant positive relation between HACCP and purchasing behaviour.

There is a relationship between HACCP and purchasing behaviour, r (0. 341) at p is less than 0. 05. Hence, there is a relationship which affirms that the two variables are positively related to population. The coefficient of determination: r the correlation between HACCP and purchasing behaviour of the respondent = 0. 341 and r² = the coefficient of determination = (0. 341)² = 0. 1163. Therefore 11. 63% if the variance in HACCP of the respondent can be explained by purchasing behaviour of respondents.

While for second hypothesis, there is no relationship between food borne illness and purchasing behaviour, r (0. 48) since the p-value is more than 0. 05.

## Questionnaire

## SECTION A: Food Hygiene

Below questions are continuous question

1(a). Based on the option below, which Kampar restaurants do you think that are having high level of cleanliness/ hygiene standard?

Mc Donald ( Fast Food restaurant)

Seng Yip ( Economy rice restaurant)

East Ocean “ Dong Hai” ( Chinese restaurant)

Ghany Corner (Mamak store)

2. What are the factors that influence you to choose the restaurant from question 1(a)?

The restaurant have proper standard to cook/serve the food (eg. Serve the food with clean tray)

The utilities provided are clean and safe to use

The restaurant environment are clean

Staffs with proper attire

Their dishes are fresh and nice

## SECTION B: Application of HACCP

Respondent is asked to indicate the extent to which they agreed or disagreed with each statement by using 5 Likert scale.

1. My perception of cleanliness level in a restaurant is based on…

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Proper handling of food

Food presentation

Restaurant environment

Utensils and equipment used in restaurant

2. Based on your experience, please rate the following statement by putting a tick (âˆš) in the box.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Food hygiene (sanitation level) is a factor that influence my choice of restaurant to dine in

Proper storage of food before use, washing hand before handling food and maintaining a clean environment can make sure that all foods are free of contaminants

3. The following question is asking about the factors that cause food borne illness.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Food come from unsafe sources will cause food borne illness

Inadequate cooking method will cause food borne illness

Improper holding temperature will cause food borne illness

Using contaminated equipment will cause food borne illness

Poor personal hygiene will cause food borne illness

4. Based on your dining experience, please rate the following statement by putting a tick (âˆš) in the box.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

The restaurant has standard sanitation level

The restaurant food I often dine in is cooking in proper cooking method

The restaurant food I often dine in is serving in proper temperature

The restaurant staff s have proper attire

## SECTION C: Customers Behavior

1. The below questions are asking about customers behavior. Based on your experience, please rate the following statement by putting a tick (âˆš) in the box.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

I will never dine in to the restaurant again if found a foreign object in my food

I will never visit to the particular restaurant again if I found out that they did not poorly handle of food (eg. Serve the food which dropped on floor)

I will never visit to the particular restaurant again if I found out that there is presence of pesticides

I will never visit to the particular restaurant again if I found out that the utilities provided is dirty

I will never visit to the particular restaurant again if my food is not serving in proper temperature (eg. Rice and dishes is cold and not fresh)

## SECTION D: Demographic

1. Gender

Male

Female

2. Age

18-21

22-24

25-27

3. Highest Level education acquire

SPM

Certificate

Diploma

Advanced Diploma

## Chapter 5