



**UNIVERSITI PUTRA MALAYSIA**

***FACTORS AFFECTING CONSUMERS' DECISION MAKING PROCESS IN  
PURCHASING SAFE STREET FOOD IN NAKHON SI THAMMARAT  
PROVINCE, THAILAND***

**JATUPORN KHONGTONG**

**FSTM 2016 5**



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PROVINCE, THAILAND**

By

**JATUPORN KHONGTONG**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfilment of the Requirements for the Degree of  
Doctor of Philosophy**

**February 2016**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

**FACTORS AFFECTING CONSUMERS' DECISION MAKING PROCESS  
IN PURCHASING SAFE STREET FOOD IN  
NAKHON SI THAMMARAT PROVINCE, THAILAND**

By

**JATUPORN KHONGTONG**

**February 2016**

**Chairman : Assoc. Prof. Muhammad Shahrin Ab Karim, PhD**  
**Faculty : Food Science and Technology**

Nakhon Si Thammarat (NST) province is one of the cities in Thailand that offers various types of street foods. However, the number of street vendors that the food was certified safe is very low, and there are many consumers who still purchase street food because of their lifestyle. As a result, the consumers may get effect from food risk. Therefore, this research aims to evaluate the significant factors that influence consumers' decision-making process on safe street food purchasing.

The objectives of this research are to identify the individual factor that influences their decision making process, to examine the effects of each variables on each level of consumers' decision making process, and to evaluate the effectiveness of food safety certification on consumers' purchasing. Quantitative method was used to examine the influence of various factors on decision making process based on the decision making model of Engel-Miniard-Blackwel (EMB) as well as the Utility Function Theory.

Structural Equation Model (SEM) results showed all factors affected the variables in consumers' decision-making process; the consumers' motivation (MOTI) affected every stage of the process, the consumers' food safety knowledge (KNOW) affected the consumers' need recognition in purchasing safe street food (NEED) and the consumers' pre-purchase evaluation (PREP) and the consumers' convenience food-purchasing lifestyle (LIFE) affected only consumers' safe food purchasing (PURC). In addition, the variable of the decision making in one stage also affected each variable in the next stage, such as, NEED→PREP, and PREP→PURC. Furthermore, the consumers' attitude towards food safety certification (CERT) could not moderate PREP→PURC.

This study can be utilized by the authorities in order to understand the significant factors when developing strategies that may encourage consumers to purchase safe street food, including effective procedures to promote the food safety certificate. Future

study can examine what other factors that might influence consumers' safe street food purchasing.

Keywords: Street Food, Food Safety,  
Consumer Decision- Making,  
Structural Equation Model



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**FAKTOR YANG MEMPENGARUHI PROSES MEMBUAT KEPUTUSAN  
OLEH PENGGUNA DALAM MEMBELI MAKANAN JALANAN YANG  
SELAMAT DI WILAYAH NAKHON SI THAMMARAT, THAILAND**

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Nakhon Si Thammarat (NST) adalah antara bandar terbesar di Thailand dengan pelbagai jenis makanan jalanan ditawarkan di Bandar ini. Walaubagaimanapun, bilangan pengusaha makanan jalanan yang menepati piawaian sijil keselamatan makanan adalah sangat rendah. Sungguhpun begitu, disebabkan oleh gaya hidup, masih terdapat ramai pengguna yang membeli makanan jalanan tanpa menyedari bahawa kesihatan mereka mungkin terjejas dengan pengambilan makanan tersebut. Oleh sebab itu, kajian ini adalah bertujuan untuk menilai bagaimana pengguna membuat keputusan mengenai keselamatan makanan terhadap makanan jalanan.

Objektif kajian ini adalah untuk mengesan faktor yang mempengaruhi proses membuat keputusan oleh pengguna, untuk meneliti kesan setiap pemboleh ubah pada setiap peringkat proses membuat keputusan oleh pengguna, dan untuk menilai keberkesanan sijil keselamatan makanan terhadap keputusan membeli oleh pengguna. Kaedah kuantitatif telah digunakan untuk mengkaji pelbagai faktor yang mempengaruhi proses membuat keputusan oleh pengguna berdasarkan model membuat keputusan *Engel-Miniard-Blackwel* (EMB) dan teori penggunaan fungsi.

Keputusan Permodelan Persamaan Struktural (SEM) menunjukkan kesemua faktor mempengaruhi pemboleh ubah dalam proses membuat keputusan oleh pengguna; Motivasi pengguna (MOTI) mempengaruhi setiap peringkat proses membuat keputusan, pengetahuan pengguna dalam keselamatan makanan (KNOW) mempengaruhi pengiktirafan terhadap keperluan pengguna dalam membeli makanan jalanan (NEED). Penilaian pra-pembelian pengguna (PREP) dan gaya hidup dalam pembelian makanan mudah/segera (LIFE) hanya mempengaruhi pengguna dalam pembelian makanan yang selamat (PURC). Selain daripada itu, pemboleh ubah untuk membuat keputusan dalam satu peringkat juga mempengaruhi setiap pemboleh ubah pada peringkat seterusnya, seperti, NEED → PREP, dan PREP → PURC. Selanjutnya, sikap positif pengguna terhadap pensijilan keselamatan makanan (CERT) tidak boleh meneutralkan PREP→PURC dengan mengukuhkan kesan-kesannya.

Kajian ini boleh digunakan oleh pihak berkuasa untuk memahami faktor penting dalam membangunkan strategi yang mungkin akan menggalakkan pengguna untuk membeli makanan jalanan yang sihat, termasuklah prosedur yang efektif untuk mempromosi sijil keselamatan makanan. Kajian masa hadapan pula boleh meneliti faktor lain yang mungkin mempengaruhi pengguna dalam pembelian makanan yang selamat.

Kata Kunci : Jalan Makanan , Keselamatan Makanan ,  
Keputusan Membuat, Pengguna, Permodelan  
Persamaan struktural



## ACKNOWLEDGEMENTS

First and foremost I would like to thank and convey my highest appreciation to my main supervisor, Associate Professor Dr. Muhammad Shahrin Abdul Karim for his contributions of time, idea, suggestion throughout this study. The joy and his willingness to share his knowledge were meaningful for me. I am also thankful for his inspiration that he provided as a productive and a successful researcher.

I would also like to thank my committee members, Associate Professor Dr. Mohhidin Othman for guiding me to organize the research, Associate Professor Dr. Jusang Bin Bolong for guiding me to understand statistical analysis. Moreover, I really thank all committee members for their helpful suggestions, views and comments on every stages through out my study.

Many thanks to all Malaysian friends, especially in “Food Service and Management Office (FOOD4)” and the students who are under Associate Professor Dr. Shahrin, and others supportive staff in Faculty of Food Science and Technology for their hands and kind assistance during my study. A special thanks to my Thai friends (P’San, P’Ann, P’Mam, P’Mod, P’Jo, P’Euy and P’Nang) for their well understand, encourage and moral support me during our PhD journey. An appreciation to my “Siamese” friends Mr. Chessada Uttraphan and Mr. Krachong Champakeow who offered their hands to translate my abstract from English to Bahasa Malay. Moreover, I would like to express the deepest appreciation to Mrs. Juliet Tan, my proof reader, to donate the wholeness of her time during the week to edit grammatically error on my thesis.

I would like to especially thanks to Nakhon Si Thammarat Rajabhat University to provide me the financial support and allow me the full time of study through these four years, including all my colleges in Food Science and Technology Program and in Faculty of Science and Technology for their cheer.

Finally, my heartfelt thanks to my family who always stay with me, thank you for your love and motivation, and thank you for giving me energy through my PhD journey, without you I could not complete my study.

Jatuporn Khongtong

February 2016



I certify that a Thesis Examination Committee has met on 22 April 2016 to conduct the final examination of Nurul Atiqah binti Zulazmi on her thesis entitled "Anti-Allodynic and Antihyperalgesic Activities of Zerumbone in Chronic Constriction Injury-Induced Neuropathic Pain and its Possible Mechanism of Action" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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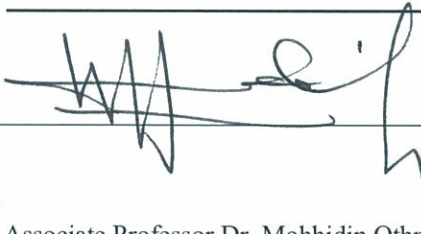
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## LIST OF ABBREVIATIONS

%	Percentage
NST	Nakhon Si Thammarat Province
EMB	Engel Miniard Blackwell Model
KL	Kuala Lumpur
CFGT	Clean Food Good Taste Certificate
CDP	Consumer Decision Process Model
ISO	International Organization for Standardization
HACCP	Hazard Analysis and Critical Control Points
GMP	Good Manufacturing Practice
SEM	Structure Equation Model
CFA	Confirmatory Factor Analysis
CMIN	Relative Chi square
DF	Degrees of Freedom
GFI	Classical Goodness of Fit Index
AGFI	Adjusted Goodness of Fit Index
IFI	Incremental Fit Index
CFI	Comparative Fit Index
TLI	Tucker-Lewis Index
NFI	Normed Fit Index
RMSEA	Root Mean Square Error of Approximation
MI	Modification Indices
AVE	Average Variance Extract
CR	Construct Reliability
CI	Confidence Interval
ANOVA	Analysis of Variance
THB	Currency in Thai Baht
USD	Currency in US Dollar
SFBT	Safer Food for Better Health Certificate
NEED	Consumers' need recognition
PREP	Consumers' pre-purchase evaluation
PURC	Consumers' safe street food purchasing
MOTI	Consumers' motivation
KNOW	Consumers' food safety knowledge
LIFE	Consumers' convenience food-purchasing lifestyle
IV	Independent Variable
DV	Dependent Variable
MD	Moderator

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

This chapter aims to discuss about the meaning of street food as well as the history of street food in Thailand that can make us more understand on how street food in Thailand began. In addition, the important of street food history is also addressed to inform that why street food becomes more popular among Thais. Nevertheless, this chapter also shows another side of street food that is about food safety problem by stating the number of people who suffered from unsafe food. Moreover, food safety certification shows how authorities try to solve the problem, and data street vendors who received certificate reveals the situation of street food problem in Nakhon Si Thammarat (NST). Accordingly, statement of problem is cited, and research gap is identified. The end of this chapter establishes five research objectives, and finally stresses the significances of the study as theoretical and managerial contributions.

### 1.2 History of Street Food in Thailand

“Street food” defined as an informal food sector that operates of food business on foot paths, next to roads and streets (Food and Agriculture Organization of the United Nations (FAO), 2011). Street food in Thailand originated in Bangkok which reflected Thailand’s economy and culture exemplified by the local people (Skinner, 1957). In 1782, most Thai natives in Bangkok sold raw agriculture products and food in canals, known as the “floating market”, while Chinese migrants operated businesses on land, emphasizing Chinese’ business control over Thai economy (Skinner, 1957). From 1851 to 1868, road construction began in Thailand, and the number of Thai and Chinese street vendors increased (Nirathron, 2006). Chinese vendors were mostly men and Thai were women (Kanchanakphand, 2002) who sold food as a good source of supplementary income. The revenue from selling street food was not for the reinvestment of their business, as in the case of the Chinese, but was only an additional savings for family, as their main occupation was farming (Porphand, 1996). After World War II, economic problems forced ethnic Thais to find new source of income, this is when they realized that selling street food can be the main source of income after witnessing the Chinese achieve success through these means, as a result of the vast number of migrants from rural areas, especially those from “Isan”, the northeastern region of Thailand which had the nation’s lowest income (Yasmeen, 2000). During that period, the authorities in Bangkok tried to limit the number of vendors and reserve this for ethnic Thais only (Skinner, 1957). However, the policy regarding street food entrepreneurship became flexible because the government realized that it could solve the poverty problem, and a good strategy to increase national cash flow (Skinner, 1957). The peak of street food entrepreneurship did not only allowed distribution of money from Bangkok to the rural areas, it also ensured the rapid urbanization of Bangkok, and developed the Thai street food culture as well (Yasmeen, 2000).

The number of street food dramatically increased in 1997, even though Asia was confronted with a major economic crisis. Thailand was one of the countries directly affected by the crisis, and thus had many unemployment. The people found it was difficult to survive in cities where household expenditure increased dramatically (Piaseu and Mitchell, 2004), so those unemployed returned to their hometowns, while the others decided to look for a new source of income. The street food business was one of the more interesting source for those unemployed both inside and outside Bangkok because of low investment requirement, which was enough for the survival of their whole family (Nirathron, 2005). Yesmeen (1999) mentioned that international media revealed an interesting case of Mr. Siriwut Worrawatewutthikul, a bankrupt well-known stockbroker, is selling sandwiches on the street because he did not have enough finances to proceed with his macro enterprise. Moreover, local media featured pictures of white collar professional becoming food vendors in Bangkok's streets. The employees affected by the crisis took the street food business as a new source of income because it was easy, and required low investment (Nirathron, 2005). In many cases, street vendors pursued their street food business even after the crisis has subsided, and since that time, street food has become an integral part of Thai society, not only in Bangkok, but in other provinces as well.

### **1.3 Street Food Consumption**

A wide variety of street food has become part of Thai consumers' daily diet especially to those that belong to the working or labor force which comprises the majority of Thai population (Tiemmek, 2005) because it is very laborious and time consuming to prepare food at home. In addition, everyone are competing with each other on having good living conditions, they struggle to succeed all the time and without enough energy left to do other activities including preparing their daily meals at home. Moreover, many people consider the time for working more valuable than cooking (Tiemmek, 2005). Consequently, the knowledge and ability of Thai cuisine is decreasing. Furthermore, many houses in urban areas have limited space or no kitchen space; 20% of the houses in Bangkok do not have kitchen, so purchasing prepared food or taking out food is usually the best solution for this scenario (Tinker, 1997). Therefore, outside food consumption or dining out has become a common activity and is very popular at any levels of Thai society (Tiemmek, 2005). The term "Take-Out" or take away covers food that is eaten elsewhere, or food that is bought and eaten at home. Normally, during lunch, food is bought outside while for dinner it is served at home with the family (Yasmeen, 2000). Oftentimes, the food is packed in plastic bags, so Thai women in this modern society are called "plastic bag housewives" (Esterik, 1992; Yasmeen, 2000).

Gunniga (2009) revealed that seventy to eighty percent of households from the total of 1,325 in Bangkok, including the surrounding areas, prefer street food rather than restaurants. The factors that significantly influence street food purchasing are: urban lifestyle (66%), food price (51%) and convenience (45%). People spend approximately 25 to 30 percent of their income on street food because it is cheap, diverse, acceptably nutritious, convenient, and time saving (Tiemmek, 2005). Another explanation why some groups of consumers choose street food is that it is also a source of entertainment away from home (Yasmeen, 2000), as it is capable of bringing together food culture

and consumers' lifestyle, which attracts both foreign and Thai tourists to explore the local traditional food culture.

#### **1.4 Food Safety in Street Food**

Although, street food is popular to urban Thais, the level of food safety is still questionable. Thus, it is important that consumers pay attention when purchasing street food to avoid any food-borne diseases, even though most consumers are familiar with the street food. World Health Organization (WHO) stated that global street food stalls or hawkers symbolized unhygienic practices and often caused consumers' food borne illness (WHO, 2002). In Thailand, food hygiene practices, such as, displaying cooked food for many hours, presenting food without cover, improper food preparation, and physical contamination by sand, dust or hair are also the main issues that consumers are concerned with (Ladplee, 2010). More than 60 percent of street food consumers have had bad experiences related to unclean food containers, and raw products that were not fresh. When comparing the number of cases between food stalls and restaurants, it was found that, food stalls had higher cases than restaurants. Gunniga (2009) revealed consumers' food safety evaluation report that restaurant got higher score in food safety evaluation than street food stall, and the score for restaurant and street food stall are 6.73 and 5.29 out of 10 points, respectively. It showed that street food or hawker have more safety problems than the food served in formal establishments, such as, restaurant, cafeteria and food court.

Accordingly, since 1999 the Ministry of Public Health in-cooperation with the Ministry of Tourism of Thailand decided to promote the food safety campaign named "Clean Food Good Taste" (CFGT) in order to assist consumers, especially tourists, in evaluating which stalls are safe for consumption. In addition, the government believes that the CFGT campaign can also improve the hygienic practices of the food vendors by giving the CFGT certification to vendors who pass the food safety inspection, in order to encourage them to follow food sanitary regulations. The importance of the certification is to guarantee that the food from the stalls is safe. Thus, certified stalls have more opportunity to attract customers than other stalls that were not certified. This certification would assist consumers in making the right decision on purchasing food, and protect them from potential danger that may infect them from food borne illness (Burusnukul *et al.*, 2011). Twice a year, the local authorities evaluate vendors' food handling, investigating into whether they are in line with the CFGT regulations. The stalls that fail to comply with the food safety evaluation may potentially sell unsafe food because they are still allowed to continue regular business while improvement is being made in which consumers are unaware of (Ministry of Public Health, 2013).

The CGFT inspection is conducted all over Thailand according to strict criteria set by the Department of Health. Ten samples are drawn from food, water, containers and utensils and must fulfill the nine from ten criteria (Ministry of Public Health, 2013). A workshop is also required before the food handling test. At the end of the workshop, it was found that providing food sanitary education is closely related with the vendors' food handling attitude, and not in any way related with gender, age, education level and marital status (Tasegate and Pwuangnark, 2004). However, the difference of perception levels on food safety information is closely related with the degree of personal hygiene



behavior of the vendors (Ladplee, 2010). Accordingly, vendors paying more attention and having ample knowledge of food safety, allows for the prevention of food borne illnesses affecting consumers.

On the contrary, there are many food hawkers who are not concerned with the regulations on food safety. In accordance with the national target number of qualified street food stall, 80 percent and above of the total number of vendors in each province must be certified, otherwise that province is considered unsuccessful in managing the food safety of the street food. According to the national goal, it was found that 10 provinces from the 77 provinces were not successful. The unqualified provinces with less than 80 percent were Narathiwat (46.13%), Chiangmai (73.72%), Nakhon Si Thammarat (74.51%), Maehongsorn (75.45%), Yala (75.58%), Uthaitani (76.05%), Prae (77.62%), Roi-ed (78.73%), Karnchanaburi (78.92%) and Nakhonsawan (78.93%) (Ministry of Public Health, 2013).

Nakhon Si Thammarat (NST) province is chosen in this study because it has the highest population among those provinces, and it also has the highest population (1,534,887) in southern Thailand (Ministry of Interior, 2012). From the population data, it is evident that urbanization tends to be expanded, resulting in the increasing of street food entrepreneurs as well, because the size of street food businesses will grow depending on the size of urbanization (Tiemmek, 2005). Therefore, consumers will largely be affected by unhygienic food problems.

Although the street food in NST seems to cause problems in terms of food safety, there are no hazardous chemicals found in the food samples, yet the level of photogenic bacteria is very high and difficult to accept. It can be emphasized that the customers who suffer from food borne illness have high potential in being infected from the unhygienic practices of vendors. Diarrhea is still on the top of the list in Thailand's epidemiologic infectious disease system, and it is also on the top of list in NST province. From 2012 to 2013 the number of patients who had diarrhea increased from 14,474 to 15,383, and most of them consumed food bought outside. Even though the record did not indicate that patients suffered the illness due to street food consumption, the evidence showed that consumers earned a lower food hygienic practice score to street food hawkers compared to restaurants (Gunniga, 2009). It demonstrates that the infection may be caused by street food rather than the food served in restaurants. Around 15,000 people underwent medical treatment in 2013 indicating that they suffered a high cost for the treatment and loss of working time, thus loss of income.

Presently in Thailand, there are no systematic attempts to penalize the vendors that do not comply with the food safety requirements; for example, no cancelation of their license; nor are they made to pay fines if their stalls failed the food safety test. These vendors do not take food safety conditions seriously. Furthermore, they believe that as long as consumers are still buying their food, their business will never have any problem even though they failed the food safety inspection. Therefore, the problem of unsafe street food is still unsolved, and consumers are at risk for unsafe food consumption. Consequently, awareness to food safety is the best solution to protect consumers themselves from unsafe street food. This idea relates to the content of the

CFGT project; if consumers only buy from safe stalls, and boycott the unsafe ones, hence, only consume the safe food, it would be enough to force the vendors to automatically improve their sanitation practice (Auitragul *et al.*, 2012).

As far as the previous documents on street food in the NST province were reviewed, only the characteristics of street food, street food culture, vendors' profiles and the success of street food entrepreneurs were revealed, but there were only a few comments directly related to the food safety issue, despite the province having a serious food safety issue, according to the data revealed by the Ministry of Public Health in 2013. Thus, this study will examine consumers' decision making process and investigate into the factors that influence each stage of the process to ensure which one of this is the most significant in affecting purchasing behavior when it comes to street food. Normally, the food safety concept can be influenced by psychological factors so decision making towards safe street food purchasing will be influenced by psychological considerations as well because consumer conceptualization is associated with consumers' purchasing (Rijswijk, 2008).

Mostly, the consumers' purchasing is formed by consumers' individual decision-making. Thus, all the stages of decision-making are guidelines to study how the consumers make decisions toward pre-purchasing street food in this study. In addition, a theory that explains consumers' decisions toward a particular product is the Utility Function Theory. The theory noted that consumers prefer products that have the greatest value or the highest quality with the highest number of products within the limitation of consumers' resources (Levin and Milgrom, 2004). The Engel Miniard Blackwell (EMB) model suggests factors that influence consumers' decision-making because consumers will have "cognitive bias" during making decision according to Wike and Mata (2012), and consumers cannot depend 100 percent of Utility Theory to evaluate their choices.

As a result, the major contribution of this study is that it could cited a set of factors that relates safe street food purchasing, such as, consumers' attitude, consumers' motivation, consumers' knowledge, consumers' convenience food-purchasing lifestyle, consumers' resources, consumers' food safety need recognition, consumers' attitude towards food safety certification, consumers' pre-purchase evaluation, and consumers' purchasing behavior on safe street food. Finally, this can figure out the suitable model that would explain how consumers purchase street food in accordance with food safety concern.

### **1.5 Problems Statement**

Eating out or purchasing outside food has become a new trend in food consumption in NST's urban areas today because most people have very limited time to cook. Street food is more preferable choice rather than a restaurant because of consumer constraints, time, and money, for instance. However, data from the Ministry of Public Health (2013) show that around 25 percent of food stalls in the NST province were discovered unsafe for consumption. Nevertheless, many people are still consuming the street food. A report from Nakhon Si Thammarat Health Center (2014) revealed that diarrhea, an

illness that is caused by improper food handling, has remained the number one infectious disease in the province for many years. From 2012 to 2013, the cases of diarrhea increased from 14,474 to 15,383. In addition, the food handlers did not exert any efforts to improve their food practices. The ignorance of the vendors on improving food safety can be emphasized by the fact that the number of vendors that passed food safety inspection is still maintained at 74.51 % from 2010, despite the data from other provinces showing improvement (Ministry of Public Health, 2013). Thus, many consumers in this province have high chances of suffering from unsafe street food consumption.

Although, the local authorities in NST province are trying to minimize the number of unsafe stalls, their efforts have not proven to be successful, and the problem still exists. Thus, the authority aims to focus on the consumers instead of the food vendors. If the authorities are successful in encouraging consumers to buy safe street food, the situation could improve as consumers would be protecting themselves from unsafe food. Furthermore, it would automatically force the vendors to follow the street food regulations (Khonsombul, 2012; Uitragul, 2001). However, how to encourage the consumers to select safe food is questionable because no variables influencing consumers' purchasing decision-making regarding safe street food has been revealed (Khonsombul, 2012), and this is a gap that needs to be filled before creating strategies to encourage consumers to purchase the safe street food.

The Utility Function Theory is able to explain the logic behind how consumers make decisions on a product. Normally, after consumers evaluate their choice, they will buy a product that gave them the best value or best quality, but limited by consumer constraints (Levin and Milgrom, 2004). Carrying this concept into the purchasing of safe street food process, consumers will buy food items or choose the stall according to their perception that food is the safest for consumption. However, many research related to consumer behavior noted that purchasing behavior does not simply follow the Utility Function Theory, as there are influences by cognitive bias from individual. Thus, Blackwell *et al.* (2006) suggests the main factors that cause consumers' bias when purchasing product, such as, consumers' attitude, consumers' motivation, consumers' knowledge, consumers' lifestyle and consumers' resources. The factors are assumed to generate consumers' bias and will affect consumers' decision-making.

Although, there are reports from previous research to support Blackwell's idea and prove that the factors can really affect consumers' decision-making related to food safety. For example, consumers who have positive attitudes towards food safety recognized that they intend to buy only safe food (Wu *et al.*, 2013). In addition, consumers who have food safety knowledge could regularly make them aware and concerned with food safety (Jevsnik *et al.*, 2008). However, it presents the major gap that there is no specific indicator on what is the most important factor for consumer when selecting street food based on food safety. In reality, the authorities cannot create a policy by paying close attention on every factor due to limited time and budget. Furthermore, another gap was discovered from previous research which is the results of food safety consumption that was reported in general, and did not specify street food alone. Thus, the relevant factors on food safety achieved from previous research may be inappropriate for street food, and may be reluctant to be utilized in developing food

safety policy. Consequently, the factors need to be examined again under the scope of street food.

Therefore, the aim of this study is to investigate the factors that may influence consumers' decision-making process on purchasing safe street food in order to figure out the significant factors that can be used to further develop the strategies to encourage consumers to purchase safe street food. Finally, the consumers would then be safe from food borne illnesses if they are aware of food safety policies when they purchase street food, despite the continuing existence of unsafe foods in the streets.

## **1.6 Purpose of the Study**

Previous literatures on consumers' decision-making were reviewed; however, the review cannot specify the most important factor. Therefore, this study would like to bridge the gap by applying the Utility Function Theory with the cognitive bias concept, including the major factors from Blackwell *et al.* (2006) (EMB model) that cause consumers' bias. Finally, this study can figure out the suitable model that would explain how consumers purchase street food in accordance with food safety concerns.

The general purpose of this study is to evaluate factors affecting consumers' decision-making process towards safe street food purchasing in the NST province.

The specific objectives are:

- 1) To identify the significance of main factors that influence consumers' decision-making process
- 2) To examine the effects among stages in the decision-making process on Safe Street Food Purchasing
- 3) To evaluate the effectiveness of moderator on consumers' purchasing of safe street food
- 4) To examine the differences of purchasing food behavior based on the consumers' demographics
- 5) To explore the characteristics of street food and street food consumption of consumers in NST province

## **1.7 Significance of the Study**

This study is significant in terms of both theoretical and practical contribution. Some of the contributions are addressed as follows:

### **1.7.1 Theoretical Contributions**

- 1) The model used in this research was the first time that has been applied to investigate the significant factors of the decision making process of purchasing street food under the food safety issue. Although, this model is developed based on the study consumers' behavior in terms of complex decision-making, this study illustrates the

effectiveness of the research model in order to apply simple purchasing as the examination of consumers' purchasing behavior on street food.

2) It is the model that is able to investigate consumers' purchasing behavior, with the most specificity, to explain consumers' food purchasing with regard to food safety concerns. Moreover, the model is capable of being applied to consumers in other street food locations.

3) This study reveals significant factors that could affect consumers' decision making on purchasing safe street food, and the most important factor will be the guideline in developing strategies in order to encourage consumers to purchase safe street food.

### **1.7.2 Practical Contributions**

1) The information from the study will provide real and current data from the specific locations, and as a result it will be easier to understand the street food issues in NST province.

2) The differences in consumer demographics in relation to the differences in purchasing safe street food would guide the authorities when creating strategies because the consumers in different demographic will have differences in purchasing behavior, so the strategies should take into account the differences as well.

## **1.8 Definition of Terms**

### **1.8.1 Street Food**

Street Foods are ready to eat foods and beverages that are prepared or sold by vendors or hawkers in the street, beside a road, in public areas or in particular public places, in which their stall or shop has no permanent construction, and is easily movable (Tinker, 1987; FAO, 1995).

### **1.8.2 Food Safety**

Food safety is a condition of the food when it is preserved to protect consumers from food borne illnesses that are probably caused by contaminated food consumption. Food safety includes the condition of food preparation in cooking, storage, and serving that could transmit hazards to consumers (Medeiros *et al.*, 2004; Patil *et al.*, 2004; Griffith, 2003). The food safety factors are associated with the physical, chemical, biological and technological aspects (Griffith, 2000).

### **1.8.3 Consumer Behavior**

The traditional definition of consumer behavior is the study of "why people buy", and "how they buy", moreover, it also relates to the activities involved when people obtain, consume and dispose products and services. It can focus on study on consumers' activities in a specific field (Blackwell *et al.*, 2006).

#### **1.8.4 Decision-Making**

It is defined as the process by which people buy a certain product or service over alternatives. The process of decision includes: a stage of problem or need recognition; people realize that they are not satisfied with the situation they are currently in, so they need to escape from that problem, a stage of searching information; people are given information about the alternatives that can solve their problem, a stage of choice evaluation; people select the choice that is suitable for themselves, and can solve their problem under their constraints, and a stage of purchasing; in this stage people obtain the selected product (Solomon, 2012).

#### **1.8.5 Consumers' Need Recognition**

Need recognition is a situation in which people realize they require something to solve the problem. The problem can happen in one or two ways: it happens when people's ideal state is pushed upward "opportunity recognition", the second type of problem occurs when people's actual state is pulled downward – "need recognition" (Solomon, 2012).

#### **1.8.6 Safe Street Food Pre-purchase Evaluation**

It is a stage when people judge the competing options and try to compare the differences of the product choices. The product attributes are the primary features that people consider in differentiating between their choices (Solomon, 2012); however, it depends on their attention at the moment, and judgment does not always require people's decision (Hoyer and McInnis, 2012).

#### **1.8.7 Purchasing Safe Food**

Purchasing is an activity that makes people achieves their demands. They decide whether, when, what, where or how to buy before definitely buying the certain objects. The purchasing can be categorized into three types (Blackwell *et al.*, 2006). There are fully planned purchase, partially planned purchase and unplanned purchase.

#### **1.8.8 Consumers' Attitude towards Safe Street Food Purchasing**

Attitude is a concept which summarizes a given object both in favorable and unfavorable ways. The attitude is normally consistent with consumers' behavior when they are free to act as they wish; nevertheless, it may not be permanent because the behavior can depend on their affordability (Schiffman and Kanuk, 2009). Consumers' attitude towards safe street food purchasing is about how consumers think or believe in term of purchasing safe street food.

### **1.8.9 Consumers' Food Safety Motivation**

Motivation is an inner state of arousal that drives the consumers under particular action to fulfill their goal. The action can occur under conscious or subconscious situations to reduce tension from the settled goal (Schiffman and Kanuk, 2009).

### **1.8.10 Consumers' Resources on Purchasing Safe Street Food**

Consumers' resources are the budget that consumers spend when purchasing something. Money and time budget are the important sources that generate the purchasing. The budget is associated with the basic economics that people earn, and the time budget relates to the time that people spend on daily activities (Blackwell *et al.*, 2006).

### **1.8.11 Consumers' Convenience Food Purchasing Lifestyle**

Lifestyle is an actual pattern of people's behavior and is represented by their activities, interests and opinions. People in different demographics are considered to present different lifestyles (Hoyer and MacInnis, 2012).

### **1.8.12 Consumers' Safe Street Food Knowledge**

Consumers' knowledge is information that people keep in their memory, and will recall when they want to make a purchase, and consume a good or service. The knowledge can be classified into several types (Blackwell *et al.*, 2006). Subjective knowledge is the most important because it refers to the ability that consumers have in informing their individual mental processes about the importance of the product they choose.

### **1.8.13 Food Safety Certificate**

It is a certificate that is written by the third party to ensure that the food is guaranteed and has met the standards. The certificate mentioned in this study is provided to inform consumers whether the food and the process of the food preparation are safe for consumption. In the NST province, there are two types of food safety certificates provided in front of street food stalls. The first, the Clean Food Good Taste (CFGT) certificate, is provided by the Ministry of Public Health, and the second, the Safer Food for Better Health (SFBH) certificate is provided by the NST municipality (Nakhon Si Thammarat Health Center, 2014).

## **1.9 Organization of the Thesis**

Chapter 1 starts with the history of street food as well as the characteristics of street food in Thailand. The purpose and objectives of the study are discussed as well. The definition of important terms is explained, and a discussion about the significance and contribution of the study is also addressed.

Chapter 2 reviews all literatures relevant in this study. There is information about the street food industry and the food safety aspects of street food in Thailand and some other countries. In addition, the theory and model used in this study are identified. The concepts related to consumer behavior, consumers' decision making processes, factors influencing the decision making process and food safety certification are presented and discussed in term of the issue of purchasing safe street food as well. In addition, this chapter also includes research hypotheses that were written from the reviewed literatures, and would act as a guideline in the research analysis.

Chapter 3 discusses the methodology that covered the research design that was applied to examine the factors that affected consumers' decision making on safe street food purchasing. Instrumentation is revealed, including the type of measurement scale. Sampling method, sample size and locations of the study are also identified. Furthermore, data collection and analysis technique are divided among the preliminary study section, pilot study section and actual study section.

Chapter 4 reports the research data, figures and tables according to the research objectives. This chapter focuses on the result from the actual study that tested the hypotheses. Nevertheless, there is some information from the in-depth interview and observation presented to inform the background of street food in the NST province. The results are demonstrated according to the research objectives to ensure that all 5 objectives are achieved. The results are demonstrated as well to contribute to the basic information of the respondents. Some of the literature review in chapter 2 is recalled in this chapter again to discuss the results.

Chapter 5 presents the conclusion of the study followed by the contribution of the study, both in term of its theoretical contribution and contribution as well as its managerial contribution. Moreover, the limitations of the study and suggestions for future studies are presented as well.

### **1.10 Chapter Summary**

Street food is currently important for urban Thai people, yet there is a food safety problem that was never improved. The NST province whose problem is likely bigger than any of the other provinces. Twenty five percent of the food stalls from the 2,500 stalls in the NST may harm consumers. In addition, the number of patients who suffer from diarrhea has increased since 2012, emphasizing the logic that consumers who are favoring street food in this province should pay attention when purchasing. Therefore, creating strategies to encourage consumers to purchase safe street food would protect consumers from suffering from food borne illnesses. However, there is lack of information on the significant factors that influence consumers' purchasing decision. Thus, this study will examine the significant factors that may affect consumers' decisions on purchasing safe street food. The most significant factor will be developed to create policies in order to encourage consumers to purchase safe street food. Consequently, the consumers who pay attention when purchasing food would then be safe from food borne illnesses.



The next chapter, chapter 2 will review the literatures related to this study that are relevant with the characteristics of street food entrepreneurs in Thailand, the situation of food safety by focusing is Nakhon Si Thammarat (NST) province, Thailand. In addition, the theory and model that used in this study also will be mentioned in the chapter 2 that will link to research framework and research hypotheses.



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