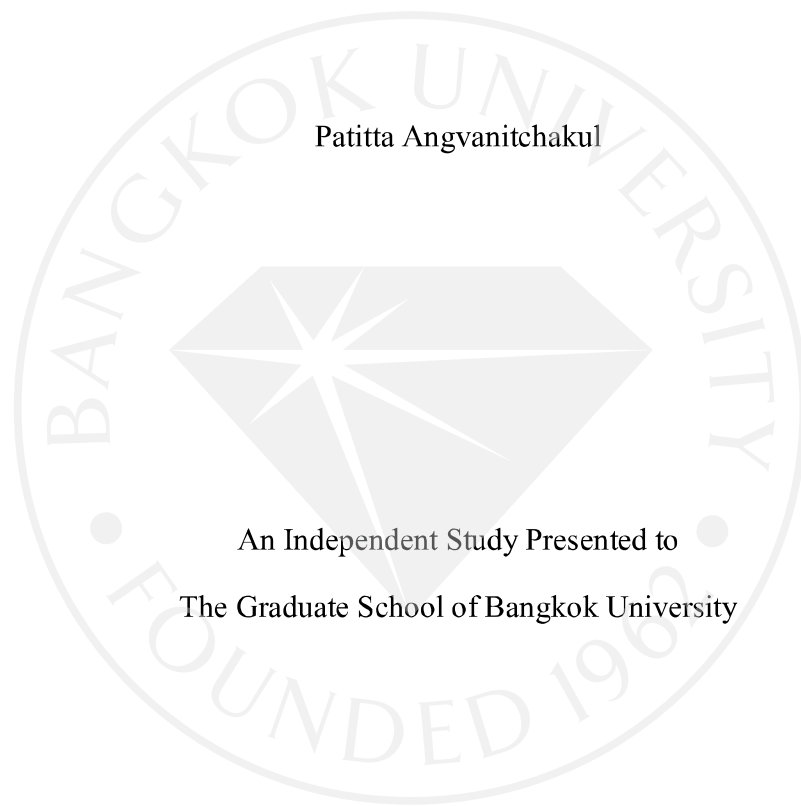


CONSUMER PERCEPTION AND ATTITUDE TOWARDS
VARIOUS CATEGORIES OF VEGETABLE



CONSUMER PERCEPTION AND ATTITUDE TOWARDS
VARIOUS CATEGORIES OF VEGETABLE

Patitta Angvanitchakul



An Independent Study Presented to
The Graduate School of Bangkok University

In Partial Fulfillment
of the Requirement for the Degree
Master of Business Administration

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**This Independent Study has been approved by
the Graduate School
Bangkok University**

Title: CONSUMER PERCEPTION AND ATTITUDE TOWARDS TO VARIABILITY OF
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Consumer perception and attitude towards various categories of vegetable (87 pp.)

Advisor of Independent Study: Dr Wuthichai Sittimalakorn, Ph.D.

ABSTRACT

The purpose of this study is to study the consumer perception and attitude towards various categories of vegetable. The methodology used in this study is quantitative approach by descriptive research design in order to collect the primary data. The data collect by using questionnaire with multi-stage random sampling from 400 housewives who bought one of that variability of vegetable categories from six locations in Bangkok. The data analyzed by descriptive statistics by using Statistical Package for the Social Sciences program. The data collected were analyzed by percentage, frequency, means, modes, standard deviation, a Chi Square test and Correlation Coefficient test.

From the data collect, the majority of them were age between 31 – 40 years old, monthly income 25,000 Baht or below, a half of sample group work as private employee, education level below or equal to Bachelor's degree, access information of five categories of vegetable via press, interest to earn more information to those vegetable at moderate level, and decide to pay for those vegetable if they more understand or more knowledge toward to those vegetable.

ACKNOWLEDGEMENT

The success of this independent study can be attributed to the extensive support and assistance from my advisor, Dr Wuthichai Sitthimalakorn and Dr Paul TJ James, Thank you for his advice and guidance in this study.

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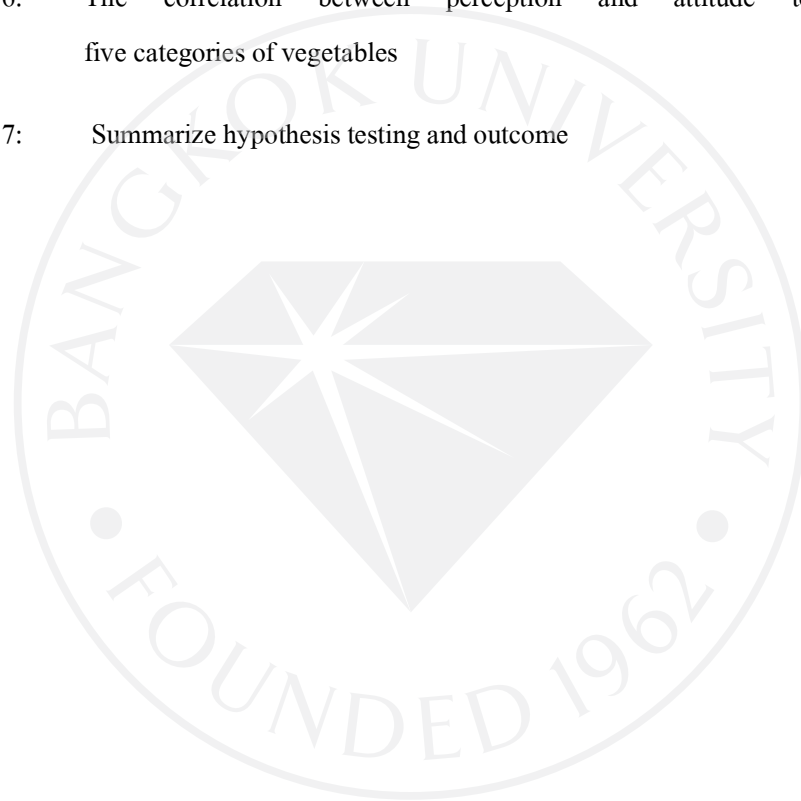
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CHAPTER 1

INTRODUCTION

1.1 Introduction

Basic needs such as eating, drinking and sheltering are considering as physiological needs of the basis of human needs (Akpinar, Aykin, Sayin and Ozkan, 2009). For a healthy and balanced living, one has to consume basic food products. Today foods are not intended to only satisfy hunger and to provide necessary nutrients for humans but also to prevent nutrition-related disease and improve physical and mental well-being of the consumers (Menrad, 2003). In this regards, vegetable is one kind of food which is very well accepting that important to human's health has become to concerned.

Vegetable is one kind of Thai economic plants which are highly consumed in country and distributed to other country as export product. According to the consensus in 2009 by National Statistical Office, Thai people consume vegetable approximately 26 million tons and 10.4 million tons of vegetable were exported (Depthai, internet, 2010). The demand for vegetables has been increasing annually.

To deal with the high demand, chemical use in agriculture has come to be use. It has seen as a two-edge sword.

“On the positive side, agricultural chemicals have become the engine of the world-wide productivity gains. These chemicals have contributed to increased yields per acre and have reduced waste in storage and distribution. On the negative side, agricultural chemicals are perceived by many to present risks to the safety of the food we eat, to the quality of water and to people who in advertently come to point contact with them” (Taylor, Penson, Smith and Knutson, 2001, p.15).

1.2 Background

In fact, the Department of Agriculture indicated the project of vegetable safe from toxic substances since 1983, this project aim to accelerate problem with toxin or other substances that harmful to consumer's health. There are hundred agriculture from various places in Thailand were participated in this project. During 1994 – 2003, the vegetable in local market in Bangkok contain with chemical 73.73%. With this, in year 2004, Department of Health of the Ministry of Public and together with

Tourism Authority of Thailand and Ministry of Interior who is responsible for all local governments in provinces around the country have joined hands in a project aiming at assuring the food safety and quality equal to international standard. The “Food Safety” project is concern to emphasizing the serious problem of chemical concern in food especially vegetable and fruit how it affects the quality of life and health.

From this project, the rate of toxin usage to vegetable decreases dramatically. Consumer become more concerned than ever with the health and nutrition of the foods they eat.

1.3 Problem Statement

As people are becoming more concerned with the quality and safety of their food, opportunities like healthy vegetable are emerging. Many fresh markets, supermarkets or hypermarkets are offering consumers huge variety of vegetable since even rare to super expensive vegetables.

Presently, there are five categories of vegetable on the shelves of places where selling vegetable; hygienic, pesticide safe, pesticide free, hydroponics and organic vegetable. The vast variety of vegetable may turn consumer into an obsessive compulsive buyer. The sheer choice would make consumer go back and forth, pick this one up and put that one down. Even though, the label on the package of those vegetable, price or categories may lead consumer to consider before making a decision to pay for it. Although they are clueless on it, they are mainly focusing for fresh product that safe and clean for them.

As those five categories of vegetable are growing and on growing and Consumers are the most important segment of the market and them ultimately the success of failure of products (Asp, 1999). It is very interesting and challenging to understand their perception and attitude towards to those five categories of vegetable. What is their real perception to different categories of vegetable and what is their attitude in elements of marketing mix will be focusing in this study.

1.4 Objectives of Study

1.4.1 To study consumer perception towards various categories of vegetable

1.4.2 To study consumer attitude towards various categories of vegetable

1.4.3 To study the correlation between consumer perception and attitude towards various categories of vegetable

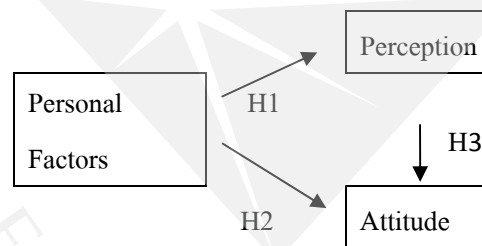
1.5 Research Questions

1.5.1 Do consumers with different personal factors have different perception towards various categories of vegetable?

1.5.2 Do consumers with different personal factors have different attitude towards various categories of vegetable?

1.5.3 Do consumer perception is related to attitude towards various categories of vegetable?

1.6 Conceptual Framework



1.7 Hypothesis

H1 Consumers with different personal factors have different perception towards various categories of vegetable

H2 Consumers with different personal factors have different attitude towards various categories of vegetable

H3 Consumer perception is related to attitude towards various categories of vegetable

1.8 Significance of the Study

The significant of this study is worthwhile examining factors which precede purchase. The concerned organization will be able to use it as guidance for planning or strategy. The marketer is able to use this study order to develop an appropriate marketing plan for its target market. The people who interest shall be able to continue on studying and utilize it.

1.9 Limitation research

This research is limit to gather data from the respondents who is housewives and living in Bangkok. Data will collect from them when they came to buy one of five categories of vegetable (hygienic, pesticide free, pesticide safe, hydroponic and organic vegetable) at Lemon Farm shop at Sukhunvit Soi 39 and 63, Gourmet Market at Emporium Department Store, Bonne Marche Market and Aw Tor Kor Market. Each place will limit to conduct 80 sets of questionnaire.

In addition, the survey was conducted during the political situation in Bangkok, which is the peak time of consumers to go outside their home to buy product. Another potential limitation is that the respondents to the questionnaire are voluntary, and some visitors may be reluctant to reply. Therefore, the responses even from buyers to those vegetable investigated may not be totally representative.

1.10 Definition of Terms

Demographic:

In this study refers to gender, age, education level, occupation and income.

Knowledge:

In this study refers to facts, information, and details to gain and known in definition, benefit, attribute of pesticide residue free vegetable.

Attitude:

In this study refers to the expression of feeling and belief of a respondent's toward pesticide residue free vegetable. It is based on backgrounds knowledge, experiences and environment of personal that

advantage to considering and evaluating before decision to express attitude that may agree or disagree.

Five categories of vegetable

1. Hygienic vegetable is vegetable contains acceptable and control level of chemical residues pesticides, synthetic fertilizers, weed control substances and growth hormones, which are not harmful to consumers.
2. Pesticide safe vegetable is not use manmade pesticide but it produces from fertilizers and growth substances.
3. Pesticide free vegetable is done in a healthy soil that has been clear from chemical residues and without any use of pesticides, synthetic fertilizers or any chemical concerns.
4. Hydroponics vegetable is cultivated without soil but with its roots immersed in water to which essential have been added
5. Organic vegetable uses fertilizer with natural forms of weed control and pest management.

CHAPTER 2

LITERATURE REVIEW

The content of this chapter is following this:

2.1 Concept of Demographic

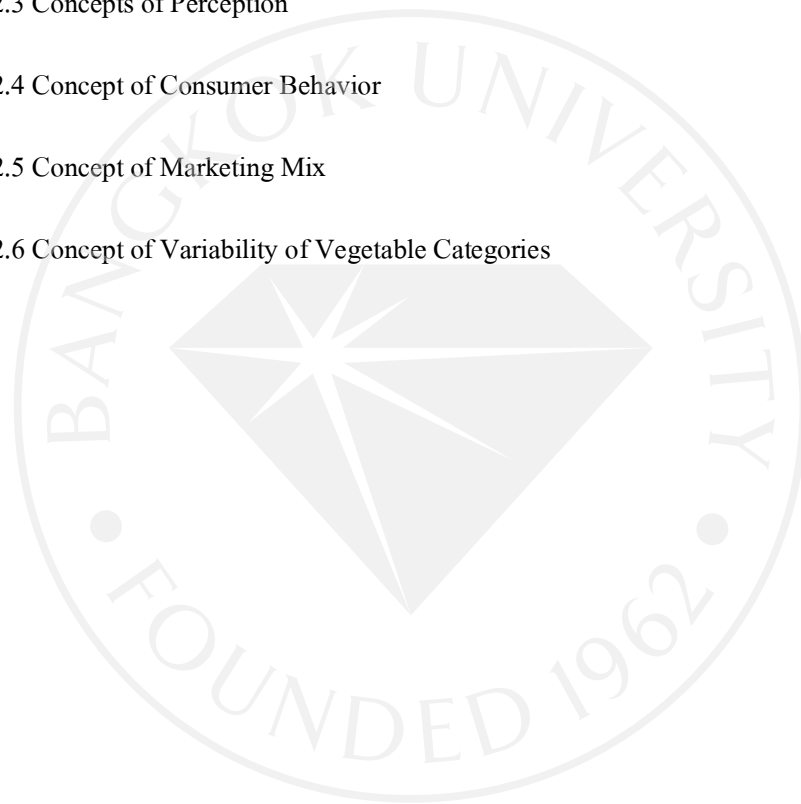
2.2 Concept of Attitude

2.3 Concepts of Perception

2.4 Concept of Consumer Behavior

2.5 Concept of Marketing Mix

2.6 Concept of Variability of Vegetable Categories



2.1 Concept of Demographic

In terms of consumers, demographics concerns the statistics of an area's population, such as number of households and their composition gender, age, education, and occupation (Blankenship, Breen & Dutka, 1998, p.30). The study of population and how it is changing is of key importance in understanding the total market and segments of it (Bareham, 1995, p.108). It enables fairly accurate forecasts to be made for the future which are important in order to predict likely purchase and consumption patterns (Bareham, 1995, p.110).

2.2 Concept of Attitude

Attitude is mentioned and used by the society so often with various meaning. Simply, attitude has been defined as a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which related (Solomon, 2002).

“Attitude has a significant effect on purchasing a brand and choosing the place for shopping, also, attitude measurement is necessary for finding out how marketing strategies and advertisements are influence people. Moreover, new products emerge in the market or existing product's future demand can be predicted by measuring consumers' attitude” (Blackwell, Miniard & Engel, 2001).

It is commonly believed that attitudes are shapes behavior (Bareham, 1996, p.168). A person who has a favorable attitude towards French food may occasionally buy Brie or baguettes. The assumption is that a positive attitude will almost automatically lead to a related behavior. In other words, an attitude may lead to a behavior, or the reverse, a behavior to an attitude (Bareham, 1996, p.172). The importance for consumer researchers and marketers is whether knowledge about person's attitude can enable prediction of their behavior (Chisnall, 1995).

Attitudes are normally considered to consist of three components. There are an element of belief or disbelief (cognitive), an emotional response, good or bad (affective), and a tendency to behave in a certain way (co native) (Bareham,1996, p.177). These three components are usually measured on the basis of responses to a series of attitude statements each followed by a Linkert scale ranging on a 5- or 7- point scale from strong agreement to strong disagreement (Bareham, 1996, p.180).

2.3 Concept of perception

Perception is important elements in explaining how consumers buy because the information to which they attend and so perceive can strongly influence their choice (Howard, 1994, p.62). The perception derives from translating or interpreting and varies in each person depending on existing experience or knowledge (Srisawd, 2003).

2.4 Concept of Consumer Behavior

Minor and Mowen (2001) defined consumer behavior as “the study of the buying units and the exchange processes involved in acquiring, consuming, and disposing of goods, services, experiences, and ideas”. Consumer behavior is the totality of consumers’ decisions with respect to the acquisition, consumption, and disposition of goods, services, time, and ideas by human decision making units (overtime) (Hoyer & Macimimis, 2009, p.3). A study of consumer behavior is the study of how consumers differentiate among those products to explore the reason why people buy product and how they think and the reaction when they buy the product (Howard, 1994, p.1).

The importance of understanding the consumer is found in the definition of marketing as a “human activity directed at satisfying needs and wants through human exchange processes” (Sanbonmatsu & Kardes, 1988). From this definition emerge two key marketing activities. First, marketers attempt to satisfy the needs and wants of their target market. Second, marketing involves the study of exchange process by which two parties transfer resources between each other. Trying to understand the buyer behavior of consumers is a very trying and challenging task (Ferrell and Hartline, 2008, p.150).

The benefits to study consumer behavior include assisting managers in their decision making, providing marketing researcher with a knowledge base from which to analyze consumers, helping legislators and regulators create laws and regulations concerning the purchase and sale of goods and services, and assisting the average consumer in making better purchase decisions (Minor & Mowen, 2001, p.4). In addition, the study of consumers can help us understand the social science factors that influence human behavior.

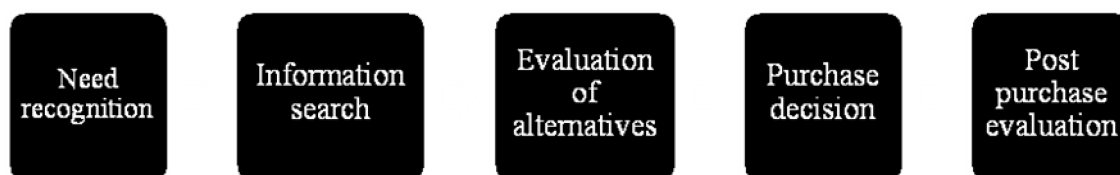


Figure 2.1: The consumer decision making model (Ferrell and Hartline, 2008, p.175).

Consumer decision making consists of five stages. The process begins with the recognition of a need and then passes through the stages of information search, evaluation of alternatives, purchase decision, and post purchase evaluation.

Need recognition is the start of the process when consumers recognize that they have an unmet need. This occurs when consumers realize that there is discrepancy between their existing situation and their desired situation. Consumers can recognize needs in variety of setting and situations. Some needs have their basis in internal stimuli such as hunger, thirst or fatigue. Other needs have their basis in external stimuli such as advertising, or window shopping.

Engel, Kollat and Blackwell (1993) recognize three key determinations of need which they identify as individual differences, environmental influences and information stores in the memory. Within the first two of these three categories are a variety of cultural, social and individual factors which will have an influence on the level of need as identified in figure 2.2:

The next stage is the search for information about available purchase options. A consumer engages in active information search when he or she purposely seeks additional information. Information can come from a variety of sources. Internal sources including personal experiences and memories are typically the first type of information that consumers search. Information can also come from personal sources including advice from friends, family, or coworkers. External sources of information include advertising, magazines, website, packaging, displays, and salespeople (Rice, 1993, p.54).

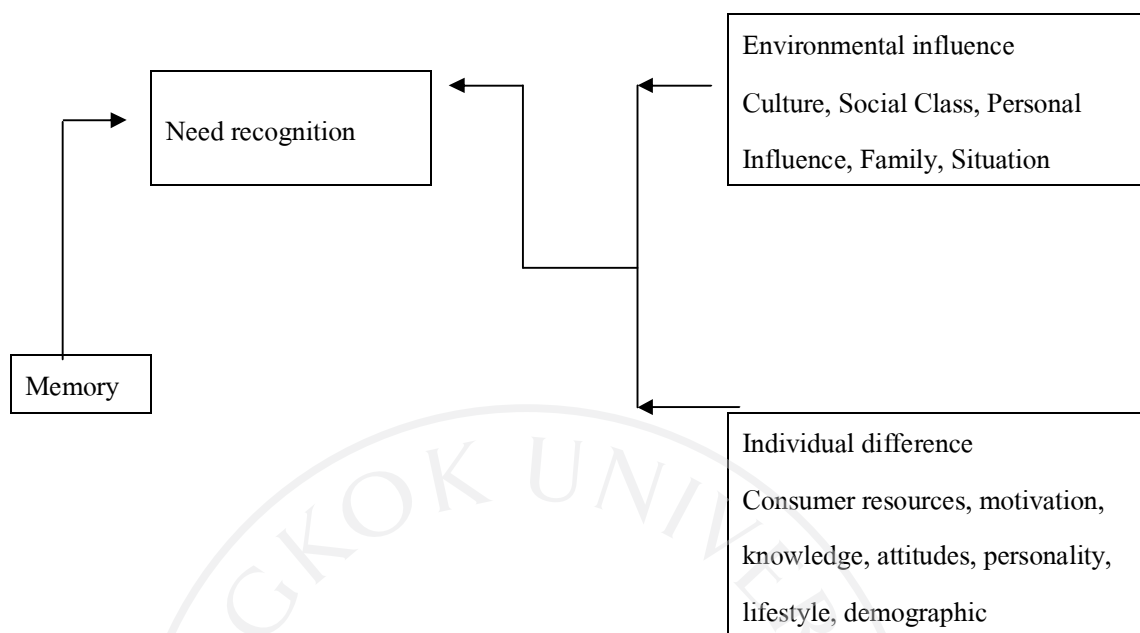


Figure 2.2: Need recognition model (Rice, 1993, p.53).

Evaluation of alternatives is the basic process of consumer evaluation are start with satisfying consumer' need; consumer will looking for product and service that can satisfy their needs, second step is consumer will looking for a certain benefits from product and serve, then they will consider each product and services as a set of attributes with various abilities in order to deliver the benefit to satisfy their need (Kotler and Keller, 2009, p.209). The evaluation of alternatives is the “black box” of consumer behavior because it is typically the hardest for marketers to understand, measure, or influence (Ferrell and Hartline, 2008, p154).

After the consumer has evaluated each alternative in the evoked set, he or she forms an intention to purchase a particular or brand. However, it is important to remember that the intention to purchase and the actual act of buying are distinct concepts (Ferrell and Hartline, 2008, p155).

In the post purchase evaluation, buyers will experience one of these four outcomes: delight, satisfaction, dissatisfaction and cognitive dissonance (Post purchase doubt) (Ferrell and Hartline, 2008, p155). “Delight means to the product’s performance greatly exceeds the buyer’s expectations. Satisfaction refers to the product’s performance matches they buyer’s expectation. Dissatisfaction

defines as the product's performance falls short of the buyer's expectation. And for the cognitive dissonance or post purchase doubt is mean to the buyer is unsure of the product's performance relative to his or her expectations" (Ferrell and Hartline, 2008, p160).

The following factors will consider in detail and one at a time specific factors which have an influence on decision making process. These are organized into four clusters, identified as: Decision-Making Complexity, Individual Influences, Social Influences, and Situation Influences (Kotler and Keller, 2009, p.190).

Decision-Making Complexity: the complexity of the purchase and decision-making process is the primary reason why the buying process will vary across consumers and with the same consumer in different situations (Assael, 1998, p.42). "Highly complex decisions are very involving for most consumers. These purchases are often characterized by high personal, social or financial risk; strong emotional involvement; and the lack of experience with the product or purchase situation. In these instances, consumer will spend a great deal of time, effort and even money to help ensure that they make the right decision. In contrast, purchase tasks that are low in complexity are relatively non-involving for most consumers. In some cases, these purchase tasks can become routine in nature. For example, many consumers buy groceries by selecting familiar items from the shelf and placing them in their carts without considering alternative products (Ferrell and Hartline, 2008, p156).

Individual Influences: such as the factors of age, life cycle, occupation, socioeconomic status, perceptions, motives, interests, attitudes, opinions, and lifestyles (Ferrell and Hartline, 2008, p180). Some of these factors are fairly easy to understand and incorporate in to the marketing strategy (Ferrell and Hartline, 2008, p156). And these individual factors are useful for marketers in target market selection, product development, and promotional strategy (Ferrell and Hartline, 2008, p161).

Social Influences: there is a wide range of social influences that can affect the buying process (Ferrell and Hartline, 2008, p157). Social influences such as culture, sub culture, social class, reference groups, and family have a profound impact on what, why, and how consumers buy (Assael, 1998, p.56).

Situation Influences: A number of situation influences can affect the consumer buying process. Such as physical and spatial influences, social and interpersonal influences, time, purchase ask or usage, and the consumer's disposition (Ferrell and Hartline, 2008, p181).

2.5 Concept of marketing mix

Marketing concerns with elements of the marketing mix which combines with product, price, place, and promotion:

Product or service is the most important part of the marketing mix (Ott, 1990). It is the product or service that provides the benefits that satisfy consumers' needs and wants after the price and the store are forgotten. Products differ largely on their characteristics and marketing considerations.

Convenience, shopping and specialty goods are often distinguished as product categories requiring different marketing strategies. The quality of products and services is an important means to keep customers loyal and to keep them satisfied. Although expectations with regard to products and services are going up, products and services have to be improved to meet these higher expectations.

Price is a key factor in producing revenue for a firm. It is the easiest of all marketing variables to change. It is important consideration in competitive intelligence. It is considered to be the only real means of differentiation in mature markets plagued by commoditization. It is among the most complex decisions to be made in developing marketing plan (Ferrell and Hartline, 2008, p.249).

Place provides a complex physical situation which can influence consumer behavior (Foxall and Goldsmith, 1994). Consumers are affected first of all by where a shop is in relation to other shops. Supermarkets and other major departmental stores tend to attract people to shopping area. The design and layout of a store, for instance ease of parking and width of aisles will influence the level of satisfaction and hence purchase patterns (Jonquieres, 1993).

Promotion is more important with services than with physical products (Proctor, 1996). An important purpose of the whole of marketing strategy is to persuade people to buy a product for the first time or to buy it again (Bareham, 1995, p.192). Promotions are an attempt to change an attitude on the assumption this will lead to a change in behavior (HMSO, 1992).

2.6 Basic knowledge about pesticide residue free vegetable

Vegetable defines as “an edible part of plant (as seeds, leaves, or roots) that is used for human food and usually eaten cooked or raw during the principle part of a meal rather than as a dessert (Nanassy, 1960).

Basically, there are five categories of pesticide residue free vegetable: hygienic (Pak Anamai), Pesticide safe vegetable (Pak Plod Pai), Pesticide free (Pak Plod Sarn), hydroponic and organic (Pak In See) (Ellis, Panyakul, Vildoza and Jasterine, 2006):

Hygienic or Pak Anamai indicated that the vegetable contains acceptable and controlled levels of chemical residues from pesticides, synthetic fertilizers; weed control substances and growth hormones, which is not harmful to consumers (Ellis et al, 2006).

Pesticide free vegetable is not use manmade pesticide but it produces from fertilizers and growth substances.

While the phase “Pak Plod Sarn” or pesticide free has mislead consumers to think that such vegetable have been grown without chemicals, it in fact, the produce is simply toxin-free, meaning safe to eat. Even though there is no use of manmade pesticide or synthetic weed control substances in the farming process there are fertilizers and growth substances.

Hydroponic vegetable is cultivated without soil but with its roots immersed in water to which essentials have been added. Grown indoors with controlled temperature, hydroponic produce usually appears perfectly clean and beautiful. The price of hydroponic vegetables is approximately 10 percent higher than conventionally grown vegetables.

Organic vegetable or Pak In See is done in a healthy soil that has been clear from chemical residue and without any use of pesticides, synthetic fertilizers, growth hormones or any chemical substances. Instead, agricultural waste is uses as fertilizer together with natural forms of weed control and pest management. Usually sold in sealed packaging, organic vegetables usually cost about 20 percent more than their conventionally grown counterparts.

CHAPTER 3

METHODOLOGY

This chapter is divided into six sections and describes the methodology used to develop the instrument and collect data following this:

3.1 Research Design

3.2 Population and Sample Selection

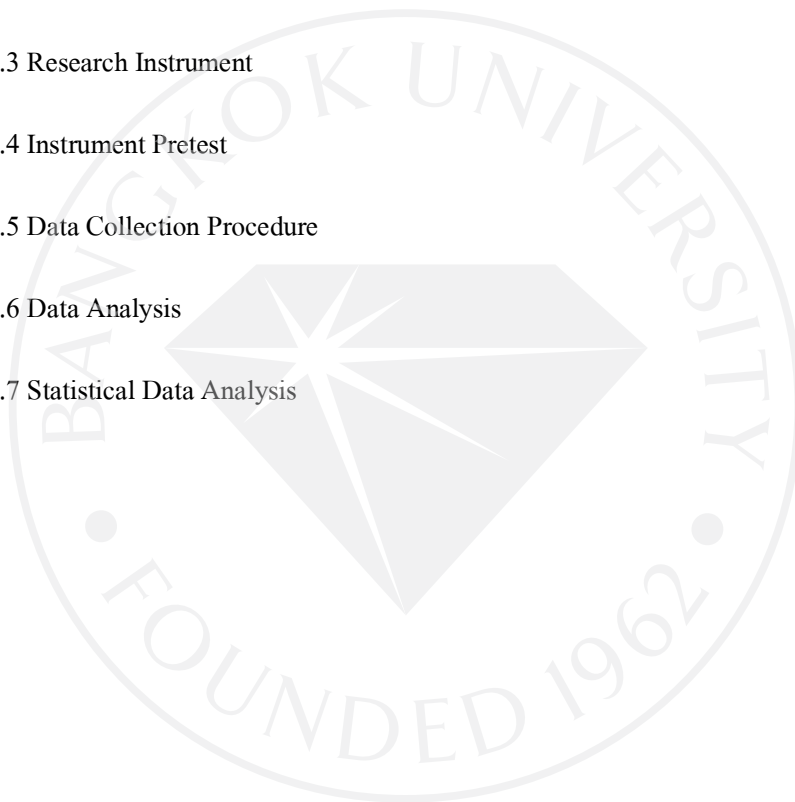
3.3 Research Instrument

3.4 Instrument Pretest

3.5 Data Collection Procedure

3.6 Data Analysis

3.7 Statistical Data Analysis



3.1 Research Design

Questionnaire of this study firstly prepared in English language and after consult and get approve from advisor, Dr Wuthichai Sittimalakorn, it were translated into Thai language with small adjustment for proper language.

In the first part of questionnaire are for identifying personal factors. In the next section of questionnaire concerns to their perception to five kinds of vegetable, the optional two answers are using in this section. For the section three, questions concerns to consumer attitude in six point Likert Scale from strongly agree to strongly disagree.

3.2 Population and Sample Selection

Population in this research is 400 of consumers who are housewives buying 1 of 5 kinds of vegetable; Hygienic, pesticide safe, pesticide free, hydroponics or organic from the six shops of vegetable in Bangkok location; Lemon Farm Sukhumvit Soi 39 and Soi 63, Gourmet Market Emporium, Bonne Marche Market and Aw Taw Kor Market.

3.2.1 Sample Size

The sample size of this study was calculated from following proportion formula:

$$N_0 = \frac{Z^2 pq}{e^2}$$

Where $Z = Z$ value (e.g. 1.96 for 95% confidence level)

$p =$ percentage picking a choice, expressed as decimal (.5 used for sample size needed)

$e =$ confidence interval, expressed as decimal (e.g., .04 = ± 4)

$$= \frac{(1.96)^2 (0.5) (0.5)}{(0.05)^2} = 385$$

The sample size in this study is 400, 385 from the test of sampling size and plus with 15 more from spare sample test. Therefore the total sample size in this study is 400.

3.2.2 Sample Selection

To set the sampling selection as the following steps:

Step 1 The Purposive sampling techniques were use in this step to choose where sells pesticide residue free vegetable in Bangkok area.

Table 3.1: Name of the shops and locations where selling pesticide residue free vegetable in Bangkok

| Name of shops | Locations |
|---------------------|--------------------------------|
| Lemon Farm | Sukhumvit Soi 39 and Soi 63 |
| Gourmet Market | Siam Paragon Mall and Emporium |
| Bonne Marche Market | Prachaniwet 1 Road |
| Talat Aw Taw Kaw | Khampaeng Phet Road |

Source: Where to buy organic and pesticide free produce in Bangkok, James (2009).

Step 2 The Quota Sampling technique use in this step to determine the size of sampling. Due to the political situation, the Gourmet Market at Siam Paragon is temporally close, therefore its places is not concerned.

Table 3.2: the sample size to collect data in different shops and locations

| Name of shops | Locations | Number of sampling |
|---------------------|---------------------|--------------------|
| Lemon Farm | Sukhumvit Soi 39 | 80 |
| Lemon Farm | Sukhumvit Soi 63 | 80 |
| Gourmet Market | Emporium | 80 |
| Bonne Marche Market | Prachaniwet 1 Road | 80 |
| Talat Aw Taw Kaw | Khampaeng Phet Road | 80 |
| | Total | 400 |

Step 3 The Accidental Sampling use in this step to collect data from people who come to buy pesticide residue free vegetable following place in step 2.

3.3 Research Instrument

Research instrument of this study was created after studying from concerned documentation, researches and textbooks. The questionnaire is research instrument of this study. There were consisted of three parts as following:

Part 1: Question of personal factors. It consists of age, monthly income, occupation, education level, access to information and consumption frequency.

For the consumption frequency scoring as following this:

| | |
|---------------------------------------|------------------|
| Never consumed or First time consumed | acquire 0 point |
| 1 time to consume | acquire 1 point |
| 2 times to consume | acquire 2 points |
| 3 times to consume | acquire 3 points |
| More than 3 times to consume | acquire 4 points |

The consumption frequency classify by using the values of mean and standard deviation (S.D.) as the following:

1. Group of low consumption frequency - Group with range score lower than mean negative S.D.
2. Group with moderate consumption frequency – Group with range of scores mean negative S.D. up to mean positive S.D.
3. Group with high consumption frequency – Group with range of scores higher than mean positive S.D.

Part 2: Consumer perception

The question consists of the meaning, government measures and policy and general knowledge concern to five categories of vegetable.

Scoring of this part is following this:

1 points for answer of Yes and

0 points for answer of No or Not Sure

The perception level toward to those five categories of vegetable can be classified using the values of Mean and S.D. as the following:

1. Group of low level of perception - Group with range of score lower than mean negative S.D.
2. Group with moderate level of perception – Group with range of scores mean – S.D.up to mean + S.D.
3. Group with high level of perception – Group with range of scores higher than mean positive S.D.

Part 3: Question of attitude toward to five categories of vegetable. Type of questionnaire in this part was the Rating Scale of Likert Scale of strongly agree, agree, neutral, disagree and strongly disagree. There are consisted of four kinds of questions which classified to product, price, distribution and promotion following to the four factors of marketing mix.

Scoring of this part is following this:

Strongly Agree acquire 5 points

Agree acquires 4 points

Neutral acquires 3 points

Disagree acquires 2 points

Strongly disagree acquire 1 point

The attitude towards to five categories of vegetable can be classified by use the value of mean and standard deviation following this:

1. Group of low level of attitude or negative attitude - Group with range of score lower than mean negative S.D.
2. Group with moderate level of attitude or moderate attitude – Group with range of scores within mean – S.D.up to mean + S.D.
3. Group with high level of attitude – Group with range of scores higher than mean positive S.D.

3.4 Instrument Pretest

Once questionnaire was taking to consult and get approve from advisor, the questionnaire was pre test with 30 persons to determine whether the instrument could be clearly understand and to determine if any significant problems exists with the items. After that, all 30 pre test questionnaires were analyzed for reliability.

For the part of perception was analyzed by the difficulty level, Discrimination power and Reliability as the following formula:

$$p = \frac{Ph + Pl}{2n}$$

$$r = \frac{Ph - Pl}{n}$$

where p = difficulty index

r = item total Correlation

Ph = the proportion of correct responses in high group only

Pl = the proportion of correct response in low group only

n = all responses in both group

To choose question in this part, it selected from questions which difficult range between 0.2 – 0.8 and classified power value at least 0.2.

To test the reliability was evaluated by Split Half Method of Spearman Brown's Correction with the following equation:

$$r_{11} = \frac{2r_{\frac{1}{2}\frac{1}{2}}}{1 + r_{\frac{1}{2}\frac{1}{2}}}$$

Where: r_{11} = reliability of the whole questionnaire

$r_{\frac{1}{2}\frac{1}{2}}$ = reliability of half questionnaire

The questions about perception to those five kinds of vegetable have reliability score equal 0.73.

For the part of attitude was evaluated by the Likert item total correlation to t-test. The questions with t value of 2.0 or above were used in this study.

For reliability, it was tested by Cronbach's Alpha (

$$\alpha = (k/(k-1)) * [1 - \frac{\sum(s_i^2)}{s_{sum}^2}]$$

The questions about attitude toward to pesticide residue free vegetable have reliability in each part following this:

Attitude toward to product = .7178

Attitude toward to price = .7077

Attitude toward to distribution = .7277

Attitude toward to promotion = .8221

3.5 Data Collection Procedure

Data collection was performed by conducting questionnaire from 400 housewives, by following this:

1. Conduct 80 set of questionnaire from housewife who comes to buy any kinds of five categories of vegetable at Lemon Farm, Sukhumvit Soi 39.
2. Conduct 80 set of questionnaire from housewife who comes to buy any kinds of five categories of vegetable at Lemon Farm, Sukhumvit Soi 63.
3. Conduct 80 set of questionnaire from housewife who comes to buy any kinds of five categories of vegetable at Gourmet Market, Emporium Department Store.
4. Conduct 80 set of questionnaire from housewife who comes to buy any kinds of five categories of vegetable at Bonne Marche Market.
5. Conduct 80 set of questionnaire from housewife who comes to buy any kinds of five categories of vegetable at Talat Aw Taw Kor.

3.6 Data Analysis

After data was completely conduct. All the data were analyzed by the Statistical Package for the Social Sciences or SPSS.

3.7 Statistical Data Analysis

For the personal factors, perception and attitude are presented by in term of percentages, means, standard deviation, modes and frequency.

To test relation of one of the independent variables which are age, monthly income, occupation, education level, access to information and consumption frequently) and one for the dependent variables which are perception and attitude was performed using the Chi-Square Test.

To test the relation of the dependent variables which are perception and attitude was analyzed by the Pearson's Product Moment Correlation Coefficient technique.

CHAPTER 4

FINDINGS

This chapter presents all the data from all questionnaires that conducted from 400 samples. The research result will present by following this:

4.1 Personal Data

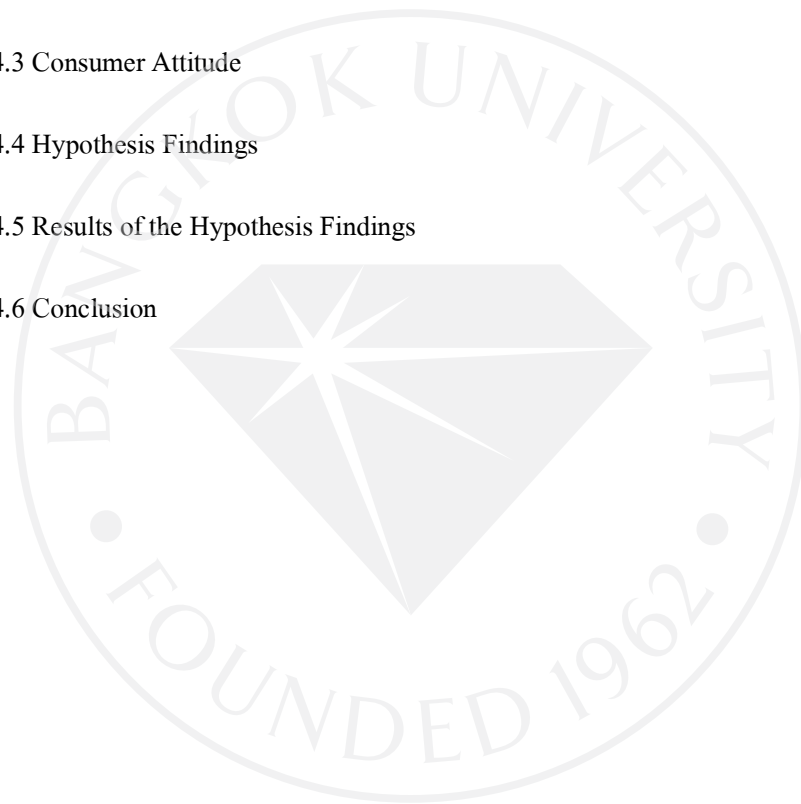
4.2 Consumer Perception

4.3 Consumer Attitude

4.4 Hypothesis Findings

4.5 Results of the Hypothesis Findings

4.6 Conclusion



4.1 Personal Data

Regarding to the age of sample group, it was found that 47.00% of sample group or 188 persons belonged the group of 31 – 40 years old, 40.00% of sample group or 160 persons belonged the group of age 30 years old or below and the minority of the sample group accounted 13.00% of sample group or 52 persons belonged the group of age 41 years old or higher. The number and percentage of sample group classified by age is indicated by the table of 4.1.

Table 4.1: The number and percentage of sample group classified by age

| Age | Number | Percentage |
|--------------------|--------|------------|
| 30 years or below | 160 | 40.00% |
| 31 – 40 years | 188 | 47.00% |
| 41 years or higher | 52 | 13.00% |
| Total | 400 | 100.00% |

Regarding to the monthly income, it was found that the majority of the group is 42.00% of sample group or 168 persons belonged to the group of monthly income 25,000 Baht or below, 41.00% or 164 persons belonged to the group of monthly income 25,001 – 50,000 Baht, and for the minority of the group is 17.00% or 68 persons belong to the group of monthly income 50,001 Baht or higher. The number and percentage of sample group classified by monthly income is indicated by the table of 4.2

Table 4.2: The number and percentage of sample group classified by monthly income

| Monthly Income | Number | Percentage |
|----------------------|--------|------------|
| 25,000 Baht or below | 168 | 42.00% |
| 25,001 – 50,000 Baht | 164 | 41.00% |

(Continued)

Table 4.2(continued): The number and percentage of sample group classified by monthly income

| Monthly Income | Number | Percentage |
|------------------|--------|------------|
| 50,001 or higher | 68 | 17.00% |
| Total | 400 | 100.00% |

Regarding to the occupation of the sample group it was found that, the majority of the group is private employee, accounted 200 persons or 50.00%, 12.50% of sample group or 50 persons is government officer, 11.00% of sample group or 44 persons is state enterprise officer, 10.50% of sample group or 42 persons is housewives, 10.00% of sample group or 40 persons is freelance employee and for the remain 6.00% of sample group or 24 persons were entrepreneur. The number and percentage of sample group classified by occupation is indicated by the table of 4.3

Table 4.3: The number and percentage of sample group classified by occupation

| Occupation | Number | Percentage |
|--------------------------|--------|------------|
| Private Employee | 200 | 50.00% |
| Government Officer | 50 | 12.50% |
| State Enterprise Officer | 44 | 11.00% |
| Housewives | 42 | 10.50% |
| Freelance Employee | 40 | 10.00% |
| Entrepreneur | 24 | 6.00% |
| Total | 400 | 100.00% |

Regarding to education level of the sample group, it was found that the majority of the sample group accounted 60.00% or 240 persons had the level of education at Bachelor's degree, follow by 32.00% or 128 persons of sample group had education level below than Bachelor's degree and the minority

group, accounted 8.00% or 32 persons were who educated higher than Bachelor's degree. The number and percentage of sample group classified by education level is indicated by the table of 4.4

Table 4.4: The number and percentage of sample group classified by education level

| Education Level | Number | Percentage |
|------------------------------|--------|------------|
| Below than Bachelor's degree | 128 | 32.00% |
| Bachelors degree | 240 | 60.00% |
| Higher than Bachelor degree | 32 | 8.00% |
| Total | 400 | 100.00% |

Regarding to the channel or media that sample group normally access for gain news or general information, the top three is television is majority, 65.00% or 260 persons of sample conduct information via this media, follow by press like as Newspaper, magazine or public paper, accounted for 30.00% or 120 persons and for the minority of top three is radio, accounted for 4.00% or 16 persons. The number and percentage of sample group classified the top three of media channel that they normally access for news or general information as in the table 4.5.

Table 4.5: The number and percentage of sample group classified the top three of media channel that they normally access for news or general information

| Media Channel | First | | Second | | Third | |
|---------------|-------|------------|--------|------------|-------|------------|
| | No. | Percentage | No. | Percentage | No. | Percentage |
| Television | 260 | 65.00% | 108 | 27.00% | 28 | 7.00% |
| Radio | 16 | 4.00% | 112 | 28.00% | 232 | 58.00% |
| Press | 120 | 30.00% | 176 | 44.00% | 100 | 25.00% |

(Continued)

Table 4.5 (continued): The number and percentage of sample group classified the top three of media channel that they normally access for news or general information

| Media Channel | First | | Second | | Third | |
|---------------|-------|------------|--------|------------|-------|------------|
| | No. | Percentage | No. | Percentage | No. | Percentage |
| Internet | | 1.00% | 4 | 1.00% | 36 | 9.00% |
| Friend | - | - | - | - | 4 | 1.00% |
| Total | 400 | 100.00% | 400 | 100.00% | 400 | 100.00% |

Regarding to experience to hear about variety categories of vegetable of sample group found that over the half, accounted 69.00% or 276 persons ever heard about that before and 31.00% or accounted 124 persons never had experience to hear about variety categories of vegetable before. The number and percentage of sample group regarding to experience to hear about variety categories of vegetable as in the table 4.6

Table 4.6: The number and percentage of sample group regarding to experience to hear about variety categories of vegetable

| Experience to hear about variety categories of vegetable | Number | Percentage |
|--|--------|------------|
| Never | 124 | 31.00% |
| Ever | 276 | 69.00% |
| Total | 400 | 100.00% |

Regarding to the media that sample group were heard from about variety categories of vegetables, the majority of groups was by television accounted 41.00% or 164 persons, follow by press or accounted 36.00% or 144 persons, radio accounted 13.00% or 52 persons, internet accounted 9.50% or 38

persons and for minority found that it was from their friends or relatives accounted 0.50% or 2 persons. The number and percentage of sample group regarding to source of media that they from as in the table 4.7

Table 4.7: The number and percentage of sample group regarding to source of media that they from

| Kinds of media | Number | Percentage |
|----------------------|--------|------------|
| Television | 164 | 41.00% |
| Press | 144 | 36.00% |
| Radio | 52 | 13.00% |
| Internet | 38 | 9.50% |
| Friends or relatives | 2 | 0.50% |
| Total | 400 | 100.00% |

Regarding to the interest level to access information about varieties categories of vegetable of sample group, from data collect found that the majority of sample group, accounted 55.00% or 220 persons were moderate level interest, 21.00% or 84 persons were not much interest, 17.00% or 68 persons were high interest level and for the minority of the group, accounted as 7.00% or 28 persons were absolutely not interest at all. The number and percentage of sample group regarding to interest to access information to those kinds of vegetable as in the table 4.8

Table 4.8: The number and percentage of sample group regarding to interest to access information to those kinds of vegetable

| Level of interest | Number | Percentage |
|-------------------------|--------|------------|
| Absolutely not interest | 28 | 7 |
| Not much interest | 84 | 21 |

(Continued)

Table 4.8(continued): The number and percentage of sample group regarding to interest to access information to those kinds of vegetable

| Level of interest | Number | Percentage |
|--------------------|--------|------------|
| Neutral | 220 | 55 |
| Very much interest | 68 | 17 |
| Total | 400 | 100.00% |

Regarding to the decision to continue to buy or not buy when they know more information or more understand in different categories of vegetable found that the majority of sample group, accounted 81.50% or 326 persons were continue to buying and for remain 18.50% or 74 persons decide to not buying anymore. The number and percentage of sample group regarding to make a decision to continue to buy or not buy when they know more information or more understand in different categories of vegetable as in the table 4.9

Table: 4.9 The number and percentage of sample group regarding to make a decision to continue to buy or not buy when they know more information or more understand in different categories of vegetable

| Buying Decision | Number | Percentage |
|------------------------|--------|------------|
| Yes, continue to buy | 326 | 81.50 |
| No, not buying anymore | 74 | 18.50 |
| Total | 400 | 100.00% |

Regarding to frequency of consumer and consumer's family member consumer different categories of vegetable, from data conduct in mode function analysis found that, sample group had never consumes hygienic vegetable, pesticide vegetable, pesticide vegetable, and hydroponic vegetable or just had it as the first time. And for organic vegetable found that, sample group were familiar with

this kind of vegetable, they had consumed it more than 3 times or always to consumed it. The number and percentage of sample group regarding to consumption frequency regarding to five categories of vegetable as in the table 4.10

Table 4.10: The number and percentage of sample group regarding to consumption frequency regarding to five categories of vegetable

| Categories | Never consumed | | 1 times | | 2 times | | 3 times | | More than 3 times | | Total | | Mode |
|-------------------|----------------|----|---------|----|---------|----|---------|---|-------------------|----|-------|-----|-------------------------------------|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | |
| 1.Hygienic | 224 | 56 | 124 | 31 | 8 | 2 | 24 | 6 | 20 | 5 | 400 | 100 | Never |
| 2.Pesticide safe | 268 | 67 | 100 | 25 | 8 | 2 | 4 | 1 | 20 | 5 | 400 | 100 | Never Consumed/First time consuming |
| 3. Pesticide free | 184 | 46 | 80 | 20 | 44 | 11 | 32 | 8 | 60 | 15 | 400 | 100 | Never Consumed/First time consuming |
| 4. Hydroponics | 180 | 45 | 96 | 24 | 56 | 14 | 32 | 8 | 36 | 9 | 400 | 100 | Never Consumed/First time consuming |
| 5. Organic | 96 | 24 | 40 | 10 | 44 | 11 | 28 | 7 | 192 | 48 | 400 | 100 | More than 3 times/ Always |

From the number and percentage of sample group regarding to consumption frequency regarding to five categories of vegetable, after analyzed data, it found that majority of sample group, accounted 73.50% or 294 persons were moderate frequency to consume those categories of vegetable, follow by

16.00 % or 64 persons were high frequency to consumer those categories of vegetable and for the minority of sample group, accounted 10.50% or 42 persons were low frequency to consume those categories of vegetable. The number and percentage of sample group regarding to consumption frequency regarding to five categories of vegetable presents number of mean, standard deviation, min and max number as in the table 4.11

Table 4.11: The number and percentage of sample group regarding to consumption frequency to five categories of vegetable, presents number of mean, standard deviation, min and max number.

| Frequency | Number | Percentage |
|--|--------|------------|
| Low | 42 | 10.50% |
| Moderate | 294 | 73.50% |
| High | 64 | 16.00% |
| Total | 400 | 100.00% |
| Mean = 1.25 S.D. 0.73 Min = 0 Max = 4 | | |

4.2 Consumer Perception

This part of question were consists of three categories of meaning, general knowledge Government measures and policies on operation. The results were analyzed as following:

In the part one consists of five questions concerns to perception of meaning. The results following this

Question 1: Hygienic vegetable is vegetable contains acceptable and control level of chemical residues pesticides, synthetic fertilizers, weed control substances and growth hormones, which are not harmful to consumers. There were 216 or 54.00 % of sample group select the wrong answer and remain 184 or 46.00% of sample group select the correct answer.

Question 2: Pesticide free vegetable is not use manmade pesticide but it produces from fertilizers and growth substances. There were 64 or 16.00 % of sample group select the wrong answer and remain 336 or 84.00% of sample group select the correct answer.

Question 3: Pesticide free vegetable is done in a healthy soil that has been clear from chemical residues and without any use of pesticides, synthetic fertilizers or any chemical concerns. There were 172 or 43.00 % of sample group select the wrong answer and remain 228 or 57.00% of sample group select the correct answer.

Question 4: Hydroponics vegetable is cultivated without soil but with its roots immersed in water to which essential have been added. There were 120 or 30.00 % of sample group select the wrong answer and remain 280 or 70.00% of sample group select the correct answer.

Question 5: Organic vegetable uses fertilizer with natural forms of weed control and pest management. There were 274 or 68.50 % of sample group select the wrong answer and remain 126 or 31.50% of sample group select the correct answer.

In the part of meaning, Mean is equal to 2.87, S.D. is equal to 1.10, Min is equal to 0 and Max is equal to 4.

Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of meaning as indicated all information in table 4.12

Table 4.12: Number, percentage, mean, S.D., Min, and Max value of perception towards in term of meaning

| Statement | Wrong Answer | | Correct Answer | | Total | |
|---|--------------|----|----------------|----|-------|-----|
| | No. | % | No. | % | No. | % |
| 1. Hygienic vegetable is vegetable contains acceptable and control level of chemical residues pesticides, synthetic fertilizers, weed control | 216 | 54 | 184 | 46 | 400 | 100 |

(Continued)

Table 4.12 (continued): Number, percentage, mean, S.D., Min, and Max value of perception towards in term of meaning

| Statement | Wrong Answer | | Correct Answer | | Total | |
|---|--------------|------|----------------|-------|-------|-----|
| | No. | % | No. | % | No. | % |
| substances and growth hormones, which are not harmful to consumers. | | | | | | |
| 2. Pesticide free vegetable is not use manmade pesticide but it produces from fertilizers and growth substances. | 64 | 16 | 336 | 84 | 400 | 100 |
| 3. Pesticide free vegetable is done in a healthy soil that has been clear from chemical residues and without any use of pesticides, synthetic fertilizers or any chemical concerns. | 172 | 43 | 228 | 57 | 400 | 100 |
| 4. Hydroponics vegetable is cultivated without soil but with its roots immersed in water to which essential have been added | 120 | 30 | 280 | 70 | 400 | 100 |
| 5. Organic vegetable uses fertilizer with natural forms of weed control and pest management. | 274 | 68.5 | 126 | 31.50 | 400 | 100 |
| Mean = 2.87 S.D. = 1.10 Min = 0 Max = 4 | | | | | | |

Part two consists of three questions concerns to perception of General Knowledge. The results following this:

Question 6: Five kinds of vegetable above are spent less time to wash than ordinary vegetable. There were 285 or 71.25 % of sample group select the wrong answer and remain 115 or 28.75% of sample group select the correct answer.

Question 7: If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. There were 144 or 36.00 % of sample group select the wrong answer and remain 256 or 64.00% of sample group select the correct answer.

Question 8: Eating vegetable containing pesticides residues at level below the safety limits is not harm consumer's health. There were 226 or 56.50 % of sample group select the wrong answer and remain 174 or 43.50% of sample group select the correct answer.

In the part of general knowledge, Mean is equal to 1.37 S.D. is equal to 0.89 Min is equal to 0 Max is equal to 3. Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of meaning as indicated all information in table 4.13.

Table 4.13: Number, percentage, mean, S.D., Min, and Max value of perception towards in term of General Knowledge

| Statement | Wrong Answer | | Correct Answer | | Total | |
|--|--------------|-------|----------------|-------|-------|-----|
| | No. | % | No. | % | No. | % |
| 6. Five kinds of vegetable above are spent less time to wash than ordinary vegetable. | 285 | 71.25 | 115 | 28.75 | 400 | 100 |
| 7. If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. | 144 | 36 | 256 | 64 | 400 | 100 |
| 8. If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. | 144 | 36 | 256 | 64 | 400 | 100 |
| 9. If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. | 144 | 36 | 256 | 64 | 400 | 100 |

(Continued)

Table 4.13 (continued): Number, percentage, mean, S.D., Min, and Max value of perception towards in term of General Knowledge

| Statement | Wrong Answer | | Correct Answer | | Total | |
|---|--------------|-------|----------------|-------|-------|-----|
| | No. | % | No. | % | No. | % |
| 10. If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. | 144 | 36 | 256 | 64 | 400 | 100 |
| 11. Eating vegetable containing pesticides residues at level below the safety limits is not harm consumer's health. | 226 | 56.50 | 174 | 43.50 | 400 | 100 |
| Mean = 1.37 S.D. = 0.89 Min = 0 Max = 3 | | | | | | |

Part three consists of two questions concerns to perception of government measures and policies on operation. The results following this:

Question 9: Department of Agricultural Extension is an official pesticide monitoring program me checks chemical or pesticide residue in vegetable supply, to ensure that there are not any unexpected residues. There were 86 or 21.50 % of sample group select the wrong answer and remain 314 or 78.50% of sample group select the correct answer.

Question 10: The "Food Safety" project is concern to emphasizing the serious problem of chemical concern in food especially vegetable. There were 152 or 38.00 % of sample group select the wrong answer and remain 248 or 62.00% of sample group select the correct answer.

In the part of government measures and policies on operation, Mean is equal to 1.38 S.D. is equal to 0.71 Min is equal to 0 Max is equal to 2. Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of meaning as indicated all information in table 4.14

Table 4.14: Number, percentage, mean, S.D., Min, and Max value of perception towards in term of government measures and policies on operation

| Statement | Wrong Answer | | Correct Answer | | Total | |
|--|--------------|-------|----------------|-------|-------|-----|
| | No. | % | No. | % | No. | % |
| 12. Department of Agricultural Extension is an official pesticide monitoring programme checks chemical or pesticide residue in vegetable supply, to ensure that there are not any unexpected residues. | 86 | 21.50 | 314 | 78.50 | 400 | 100 |
| 13. The “Food Safety” project is concern to emphasizing the serious problem of chemical concern in food especially vegetable | 152 | 38 | 248 | 62 | 400 | 100 |
| Mean = 1.38 S.D. = 0.71 Min = 0 Max = 2 | | | | | | |

According to data analysis in perception of meaning, majority of sample group 62.00% or 248 persons had the perception toward to ward to the meaning of those five categories of vegetable at the moderate level, 26.50% or 106 persons had the perception toward to ward to the meaning of those five categories of vegetable at the low level and the minority of the group accounted 11.50% or 46 persons had the perception toward to ward to the meaning of those five categories of vegetable at the low level.

In the part of perception to meaning, Mean is equal to 2.87 S.D. is equal to 1.10 Min is equal to 0 Max is equal to 4. Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of meaning as indicated all information in table 4.15.

Table 4.15: Number and percentage of perception level towards to meaning

| Perception Level | Number | Percentage |
|---|--------|------------|
| Low | 46 | 11.50% |
| Moderate | 248 | 62.00% |
| High | 106 | 26.50% |
| Total | 400 | 100.00% |
| Mean = 2.87 S.D. = 1.10 Min = 0 Max = 4 | | |

According to data analysis in perception of general knowledge, majority of sample group 54.50% or 218 persons had the perception toward to ward to the general knowledge of those five categories of vegetable at the low level, 36.25% or 145 persons had the perception toward to ward to the general knowledge of those five categories of vegetable at the moderate level, and the minority of sample group 9.25% or 37 persons had the perception toward to ward to the general knowledge of those five categories of vegetable at the high level

In the part of perception of general knowledge, Mean is equal to 2.87 S.D. is equal to 1.10 Min is equal to 0 Max is equal to 4. Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of general knowledge as indicated all information in table 4.16.

The number and percentage of perception level towards to general knowledge as in table 4.15

Table 4.16: Number and percentage of perception level towards to general knowledge

| Perception Level | Number | Percentage |
|------------------|--------|------------|
| Low | 218 | 54.50% |
| Moderate | 145 | 36.25% |

(Continued)

Table 4.16 (continued): Number and percentage of perception level towards to general knowledge

| Perception Level | Number | Percentage |
|---|--------|------------|
| High | 37 | 9.25% |
| Total | 400 | 100.00% |
| Mean = 2.87 S.D. = 1.10 Min = 0 Max = 4 | | |

According to data analysis in perception of government measures and policies on operation, majority of sample group 54.00% or 216 persons had the perception toward to ward to government measures and policies on operation of those five categories of vegetable at the high level, 31.75% or 127 persons had the perception toward to ward to government measures and policies on operation of those five categories of vegetable at the moderate level, and the minority of sample group 14.25% or 57 persons had the perception toward to ward to government measures and policies on operation of those five categories of vegetable at the high level

n perception of government measures and policies on operation, Mean is equal to 1.38 S.D. is equal to 0.71 Min is equal to 0 Max is equal to 2. Number, percentage, mean, S.D. , Min, and Max value of perception towards in term of meaning as indicated all information in table 4.17.

The number and percentage of perception level towards to meaning as in table 4.17.

Table 4.17: Number and percentage of perception level towards to government measures and policies on operation.

| Perception Level | Number | Percentage |
|------------------|--------|------------|
| Low | 57 | 14.25% |
| Moderate | 127 | 31.75% |
| High | 216 | 54.00% |

(Continued)

Table 4.17 (continued): Number and percentage of perception level towards to government measures and policies on operation.

| Perception Level | Number | Percentage |
|---|--------|------------|
| Total | 400 | 100.00% |
| Mean = 1.38 S.D. = 0.71 Min = 0 Max = 2 | | |

4.3 Consumer Attitude

In this part, attitude focuses to four categories of marketing mix: product, price, distribution and promotion. The result analyzed following this:

Product: there were seven questions, the data as following this:

Question 1: Taste of five kinds of vegetable is better than ordinary vegetable. 48 persons or 12.00% were strongly agree, 116 persons or 29.00% were agree, 172 persons or 43.00% were neutral, 50 persons or 12.50 % were disagree, and 14 persons or 3.50% were strongly disagree. Overall attitude of this question was neutral.

Question 2: All five kinds of vegetable should get approve quality form FDA before launch to the market. There were 48 persons or 12.00% were strongly agree, 116 persons or 29.00% were agree, 172 persons or 43.00% were neutral, 50 persons or 12.50 were disagree, and 14 persons or 3.50% were strongly disagree. Overall attitude of this question was strongly agree.

Question 3: 3. On the package should clearly identify the origin source of product. There were 44 persons or 11.00% were strongly agree, 128 persons or 32.00% were agree, 120 persons or 30.00% were neutral, 128 persons or 27.00% were disagree, and not found strongly disagree in this part. Overall attitude of this question was neutral.

Question 4: You trust in those kind of vegetable that promise to improve your health. There were 68 persons or 17.00% were strongly agree, 152 persons or 38.00% were agree, 136 persons or 34.00% were neutral, 40 persons or 10.00% were disagree, and 4 persons or 1.00% were strongly disagree. Overall attitude of this question was agreed.

Question 5: The information on the label of product, it makes you more confident to pay for. There were 168 persons or 42.00% were strongly agree, 112 persons or 28.00% were agree, 108 persons or 27.00% were neutral, not found disagree, and 12 persons or 3.00% were strongly disagree. Overall attitude of this question was strongly agreed.

Question 6: Those five kinds of vegetable is limited kind of products. There were 34 persons or 8.50% were strongly agree, 106 persons or 26.50% were agree, 216 persons or 54.00% were neutral, 44 persons or 11.00% were disagree, and not found strongly disagree in this question. Overall attitude of this question was neutral.

Question 7: Those five kinds of vegetable always fresh. There were 28 persons or 7.00% were strongly agree, 92 persons or 23.00% were agree, 44 persons or 11.00% were neutral, 128 persons or 32.00% were disagree, and 108 persons or 27.00% were strongly disagree. Overall attitude of this question was disagreeing.

From seven question of attitude towards to products, found that mean = 3.02, S.D. 0.41, Min= 2, and Max = 4.14.

Overall information indicated following table 4.18

Table 4.18: Number and percentage of attitude toward to product.

| Statement | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | Mode |
|--|----------------|----|-------|----|---------|----|----------|------|-------------------|-----|-------|-----|---------|
| | No | % | No | % | No | % | No | % | No | % | No | % | |
| 1. Taste of five kinds of vegetable is better than ordinary vegetable. | | | | | | | | | | | | | |
| | 48 | 12 | 116 | 29 | 172 | 43 | 50 | 12.5 | 14 | 3.5 | 400 | 100 | Neutral |

(Continued)

Table 4.18 (continued): Number and percentage of attitude toward to product.

| Statement | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | Mode |
|---|----------------|------|-------|------|---------|------|----------|----|-------------------|----|-------|-----|----------------|
| | No | % | No | % | No | % | No | % | No | % | No | % | |
| 2. All five kinds of vegetable should get approve quality form FDA before launch to the market. | | | | | | | | | | | | | |
| | 168 | 40.5 | 156 | 39 | 6 | 16.5 | 16 | 4 | - | - | 400 | 100 | Strongly Agree |
| 3. On the package should clearly identify the origin source of product. | | | | | | | | | | | | | |
| | 44 | 11 | 128 | 32 | 120 | 30 | 108 | 27 | - | - | 400 | 100 | Neutral |
| 4. You trust in those kind of vegetable that promise to improve your health. | | | | | | | | | | | | | |
| | 68 | 17 | 152 | 38 | 136 | 34 | 4 | 10 | 4 | 1 | 400 | 100 | Agree |
| 5. The information on the label of product, it makes you more confident to pay for. | | | | | | | | | | | | | |
| | 168 | 42 | 112 | 28 | 108 | 27 | - | - | 12 | 3 | 400 | 100 | Strongly Agree |
| 6. Those five kinds of vegetable is limited kind of products. | | | | | | | | | | | | | |
| | 34 | 8.5 | 106 | 26.5 | 216 | 54 | 44 | 11 | - | - | 400 | 100 | Neutral |
| 7. Those five kinds of vegetable always fresh. | | | | | | | | | | | | | |
| | 28 | 7 | 92 | 23 | 44 | 11 | 128 | 32 | 108 | 27 | 400 | 100 | Disagree |
| Mean = 3.02 S.D. 0.41 Min= 2 Max = 4.14 | | | | | | | | | | | | | |

Price: there were five questions in this part, the data as following this:

Question 8: Price of those kinds vegetable is reasonable to pay for. It found that 12 persons or 3.00% were strongly agree, 136 persons or 34.00% were agree, 196 persons or 49.00% were neutral, 50

persons or 12.50 % were disagree, and 6 persons or 1.50% were strongly disagree. Overall attitude of this question was neutral.

Question 9: Price of those kinds vegetable is appropriate with quality. It found that 60 persons or 15.00% were strongly agree, 184 persons or 46.00% were agree, 128 persons or 32.00% were neutral, 28 persons or 7.00 % were disagree, and strongly disagree were not found. Overall attitude of this question was agrees.

Question 10: Price of those kinds vegetable is appropriate with quantity. It found that 20 persons or 5.00% were strongly agree, 68 persons or 17.00% were agree, 234 persons or 58.50% were neutral, 70 persons or 17.50 % were disagree, and 8 persons or 2.00% were strongly disagree. Overall attitude of this question was disagreeing.

Question 11: It would be good if you bargain the price. It found that 52 persons or 13.00% were strongly agree, 188 persons or 47.00% were agree, 144 persons or 36.00% were neutral, 16 persons or 4.00 % were disagree, and strongly disagree was not found. Overall attitude of this question was agreed.

Question 12: It would be good to get special discount when you pay by cash. It found that 72 persons or 18.00% were strongly agree, 168 persons or 42.00% were agree, 124 persons or 31.00% were neutral, 36 persons or 9.00 % were disagree, and strongly disagree was not found. Overall attitude of this question was agreed.

From five question of attitude towards to price, found that Mean = 2.49 S.D. 0.52 Min= 1 and Max = 3.8.

Overall information indicated following table 4.19

Table 4.19: Number and percentage of attitude toward to price.

Price:

| Statement | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | Mode |
|--|----------------|----|-------|----|---------|-------|----------|-------|-------------------|-----|-------|-----|----------|
| | No | % | No | % | No | % | No | % | No | % | No | % | |
| 8. Price of those kinds vegetable is reasonable to pay for. | | | | | | | | | | | | | |
| | 12 | 3 | 136 | 34 | 196 | 49 | 50 | 12.50 | 6 | 1.5 | 400 | 100 | Neutral |
| 9. Price of those kinds vegetable is appropriate with quality. | | | | | | | | | | | | | |
| | 60 | 15 | 184 | 46 | 128 | 32 | 28 | 7 | - | - | 400 | 100 | Agree |
| 10. Price of those kinds vegetable is appropriate with quantity. | | | | | | | | | | | | | |
| | 20 | 5 | 68 | 17 | 234 | 58.50 | 70 | 17.50 | 8 | 2 | 400 | 100 | Disagree |
| 11. It would be good if you bargain the price. | | | | | | | | | | | | | |
| | 52 | 13 | 188 | 47 | 144 | 36 | 16 | 4 | - | - | 400 | 100 | Agree |
| 12. It would be good to get special discount when you pay by cash. | | | | | | | | | | | | | |
| | 72 | 18 | 168 | 42 | 124 | 31 | 36 | 9 | - | - | 400 | 100 | Agree |
| Mean = 2.49 S.D. 0.52 Min= 1 Max = 3.8 | | | | | | | | | | | | | |

Distribution: there were six questions in this part, the data as following this:

Question 13: There are many shops and places to buy those kinds of vegetable. It found that 10 persons or 2.50% were strongly agree, 244 persons or 61.00% were agree, 30 persons or 7.50% were neutral, 104 persons or 26.00 % were disagree, and 12 persons or 3.00% were strongly disagree.

Overall attitude of this question was neutral.

Question 14: It would be good if there are deliver services to deliver vegetable to you house or places. It found that 12 persons or 3.00% were strongly agree, 124 persons or 31.00% were agree, 224

persons or 56.00% were neutral, 40 persons or 10.00 % were disagree, and not found strongly disagree. Overall attitude of this question was neutral.

Question 15: Vegetable on the shelf of supermarket is very outstanding therefore you happy to pay for. It found that 8 persons or 2.00% were strongly agree, 104 persons or 26.00% were agree, 266 persons or 66.50% were neutral, 32 persons or 8.500 % were disagree, and not found strongly disagree. Overall attitude of this question was neutral.

Question 16: The places and shops you went to buy those vegetable is very convenience. There are empty of car park. It found that 12 persons or 3.00% were strongly agree, 80 persons or 20.00% were agree, 280 persons or 70.00% were neutral, 22 persons or 5.50 % were disagree, and 6 persons or 1.50% were strongly disagree. Overall attitude of this question was neutral.

Question 17: There are empty of shopping cart therefore you feel very convenience when you were shopping. It found that 11 persons or 2.75% were strongly agree, 109 persons or 27.25% were agree, 248 persons or 62.00% were neutral, 32 persons or 8.00 % were disagree, and not found strongly disagree. Overall attitude of this question was neutral.

Question 18: The places you go to buy those vegetable, you are privately to choose those product. It found that 16 persons or 4.00% were strongly agree, 103persons or 25.75% were agree, 476 persons or 55.25% were neutral, 52 persons or 13.00 % were disagree, and 8 persons or 2.00% were strongly disagree. Overall attitude of this question was neutral.

From six question of attitude towards to distribution, found that Mean = 2.84 S.D. 0.37 Min= 1.67 Max = 3.67

Overall information indicated following table 4.20

Table: 4.20 Number and percentage of attitude toward to distribution.

Distribution:

| Statement | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | Mode |
|--|----------------|------|-------|-------|---------|-------|----------|-----|-------------------|-----|-------|-----|---------|
| | No | % | No | % | No | % | No | % | No | % | No | % | |
| 13. There are many shops and places to buy those kinds of vegetable. | | | | | | | | | | | | | |
| | 10 | 2.5 | 244 | 61 | 30 | 7.5 | 104 | 26 | 12 | 3 | 400 | 100 | Neutral |
| 14. It would be good if there are deliver services to deliver vegetable to you house or places. | | | | | | | | | | | | | |
| | 12 | 3 | 124 | 31 | 224 | 56 | 40 | 10 | - | - | 400 | 100 | Neutral |
| 15. Vegetable on the shelf of supermarket is very outstanding therefore you happy to pay for. | | | | | | | | | | | | | |
| | 8 | 2 | 104 | 26 | 266 | 66.50 | 32 | 8.5 | - | - | 400 | 100 | Neutral |
| 16. The places and shops you went to buy those vegetable is very convenience. There are empty of car park. | | | | | | | | | | | | | |
| | 12 | 3 | 80 | 20 | 280 | 70 | 22 | 5.5 | 6 | 1.5 | 400 | 100 | Neutral |
| 17. There are empty of shopping cart therefore you feel very convenience when you were shopping. | | | | | | | | | | | | | |
| | 11 | 2.75 | 109 | 27.25 | 248 | 62 | 32 | 8 | - | - | 400 | 100 | Neutral |
| 18. The places you go to buy those vegetable, you are privately to choose those product. | | | | | | | | | | | | | |
| | 16 | 4 | 103 | 25.75 | 476 | 55.25 | 52 | 13 | 8 | 2 | 400 | 100 | Neutral |
| Mean = 2.84 S.D. 0.37 Min= 1.67 Max = 3.67 | | | | | | | | | | | | | |

Promotion: there were five questions in this part, the data as following this:

Question 19: Free coupon or promotion campaign at selling point makes you highly to pay for that kind of vegetable. It found that 56 persons or 14.00% were strongly agree, 128 persons or 32.00% were agree, 156 persons or 39.00% were neutral, 60 persons or 15.00 % were disagree, and were not found strongly disagree. Overall attitude of this question was neutral.

Question 20: Government should provide accurate fact information through any media including distribute brochure, poster or document to make consumer more understand to those kinds of vegetable. It found that 10 persons or 2.50% were strongly agree, 76 persons or 19.00% were agree, 148 persons or 37.00% were neutral, 148 persons or 37.00 % were disagree, and 22 persons or 5.50% were strongly disagree. Overall attitude of this question was neutral.

Question 21: To collect point from buying, make you to buy again in the future. It found that 12 persons or 3.00% were strongly agree, 16 persons or 64.00% were agree, 228 persons or 57.00% were neutral, 88 persons or 22.00 % were disagree, and 8 persons or 2.00% were strongly disagree. Overall attitude of this question was neutral.

Question 22: Seller at selling point makes you more confident to purchase those vegetable to consume. It found that 16 persons or 4.00% were strongly agree, 156 persons or 39.00% were agree, 212 persons or 53.00% were neutral, 12 persons or 3.00 % were disagree, and 4 persons or 1.00% were strongly disagree. Overall attitude of this question was neutral.

Question 23: It would be good to have a cooking show by use those vegetable. It found that 14 persons or 3.50% were strongly agree, 148 persons or 37.00% were agree, 168 persons or 42.00% were neutral, 58 persons or 14.50 % were disagree, and 12 persons or 3.00% were strongly disagree. Overall attitude of this question was neutral.

From five question of attitude towards to promotion, found that Mean = 2.93 S.D. 0.34 Min= 2 and, Max = 3.8 Overall information indicated following table 4.21.

Table: 4.21 Number and percentage of attitude toward to promotion.

Promotion:

| Statement | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | Mode |
|---|----------------|------|-------|----|---------|----|----------|-------|-------------------|------|-------|-----|---------|
| | No | % | No | % | No | % | No | % | No | % | No | % | |
| 19. Free coupon or promotion campaign at selling point makes you highly to pay for that kind of vegetable. | | | | | | | | | | | | | |
| | 56 | 14 | 128 | 32 | 156 | 39 | 60 | 15 | - | - | 400 | 100 | Neutral |
| 20. Government should provide accurate fact information through any media including distribute brochure, poster or document to make consumer more understand to those kinds of vegetable. | | | | | | | | | | | | | |
| | 10 | 2.50 | 76 | 19 | 148 | 37 | 148 | 38 | 22 | 5.50 | 400 | 100 | Neutral |
| 21. To collect point from buying, make you to buy again in the future. | | | | | | | | | | | | | |
| | 12 | 3 | 16 | 64 | 228 | 57 | 88 | 22 | 8 | 2 | 400 | 100 | Neutral |
| 22.Seller at selling point make you more confident to purchase those vegetable to consume | | | | | | | | | | | | | |
| | 16 | 4 | 156 | 39 | 212 | 53 | 12 | 3 | 4 | 1 | 400 | 100 | Neutral |
| 23. It would be good to have a cooking show by use those vegetable. | | | | | | | | | | | | | |
| | 14 | 3.50 | 148 | 37 | 168 | 42 | 58 | 14.50 | 12 | 3 | 400 | 100 | Neutral |
| Mean = 2.93 S.D. 0.34 Min= 2 Max = 3.8 | | | | | | | | | | | | | |

Following to analysis in each issue, the sample group had the most attitude toward to product accounted by mean at 3.02, promotion at the moderate level accounted 2.93, for distribution accounted for 2.84 and for the minority was price, accounted for 2.49. From this date represent that consumer consider product as the most important of attitude factors. All of this information represents following table 4.22.

Table 4.22 Mean and Standard deviation of consumer attitude

| Attitude to | Mean | S.D. | Level |
|--------------|------|------|----------|
| Price | 2.49 | 0.52 | Moderate |
| Product | 3.02 | 0.41 | Moderate |
| Distribution | 2.84 | 0.38 | Moderate |
| Promotion | 2.93 | 0.33 | Moderate |
| Total | 2.82 | 0.28 | Moderate |

For overall analysis 80.00% of sample group or 320 persons had attitude toward to all marketing mix factors at moderate level, 14.00% or 56 persons had attitude toward to all marketing mix at low level and 6.00% or 24 persons had attitude toward to all marketing mix factors at high level. All information represent following table 4.23.

Table 4.23: Number and percentage of attitude towards to marketing factors to five categories of vegetable.

| Attitude level | Number | Percentage |
|---|--------|------------|
| Low | 56 | 14.00 |
| Moderate | 320 | 80.00 |
| High | 24 | 6.00 |
| Total | 400 | 100.00 |
| Mean = 2.82 S.D> =0.29 Min = 2.01 Max = 3.8 | | |

4.4 Hypothesis Finding

From this study, according to chapter one, there were three hypothesis. To analyses each hypothesis as following this:

Hypothesis1: Consumers with different personal factors have different perception to those five categories of vegetable.

This hypothesis was correlation with the variable of age, monthly income, occupation, education level, access information, consumption frequency and perception. The result from statistic analysed as following this:

1. Age

There are three groups of age which was 30 years old and below, 31 – 40 years old and 41 years or higher. The correlation between age and perception to those five categories of vegetable was tested by Chi Square. The result found that all three level of age, their perception were moderate level. There was no correlation between age and perception toward to those five categories of vegetable with the statistical significant of 0.05. The statistical number from analysis was as following table 4.24

Table 4.24: The correlation between age and perception to those five categories of vegetable.

| Age | Perception | | | | | | | |
|---|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| 30 years or below | 40.00 | 23.40 | 108.00 | 62.77 | 23.00 | 13.83 | 171.00 | 42.75 |
| 31-40 years | 40.00 | 24.00 | 112.00 | 64.55 | 22.00 | 11.45 | 174 | 46.65 |
| 41 years or higher | 12.00 | 20.00 | 36.00 | 66.67 | 7.00 | 13.33 | 55 | 13.60 |
| Total | 92.00 | 23.00 | 256.00 | 64.00 | 52.00 | 13.00 | 400.00 | 100.00 |
| Chi Square = 0.433 df= 4 Significance = 0.978 | | | | | | | | |

2. Monthly Income

The correlation between monthly income and perception toward to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between monthly income and perception toward to those five categories of vegetable with the statistical significant of 0.05. And the result show that all monthly income groups had perception at moderate level. The statistical number from analysis was as following table 4.25.

Table 4.25: The correlation between monthly income and perception to those five categories of vegetable.

| Monthly Income | Perception | | | | | | | |
|---|------------|-------|----------|-------|--------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| 25,000 Baht or – | 33.00 | 20.00 | 111.00 | 67.78 | 20.00 | 12.22 | 164.00 | 40.90 |
| 25,001 – 50,000 | 34.00 | 21.35 | 104.00 | 64.04 | 23.00 | 14.61 | 161.00 | 40.45 |
| 50,001 - + | 26.00 | 34.15 | 42.00 | 56.10 | 7.00 | 9.75 | 75.00 | 18.65 |
| Total | 93.00 | 23.18 | 257.00 | 64.10 | 50.000 | 12.72 | 400.00 | 100.00 |
| Chi Square = 3.787 df= 4 Significance = 0.434 | | | | | | | | |

3. Occupation

The correlation between occupation and perception toward to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between occupation and perception toward to those five categories of vegetable with the statistical significant of 0.05. The result shows that all occupation groups had perception at moderate level. The statistical number from analysis was as following table 4.26.

Table 4.26: The correlation between occupation and perception to those five categories of vegetable.

| Occupation | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Government Officer | 9.00 | 18.52 | 33.00 | 66.67 | 7.00 | 14.81 | 49.00 | 12.30 |
| State Enterprise | 6.00 | 12.50 | 26.00 | 58.33 | 13.00 | 29.17 | 45.00 | 10.90 |
| Employee | 49.00 | 24.55 | 131.00 | 65.45 | 20.00 | 10.00 | 200.00 | 50.00 |
| Business Owner | 4.00 | 13.33 | 23.00 | 86.67 | - | - | 27.00 | 6.81 |
| Freelances | 10.00 | 28.57 | 21.00 | 57.14 | 7.00 | 14.29 | 38.00 | 9.54 |
| Housewives | 14.00 | 34.78 | 22.00 | 52.17 | 5.00 | 13.05 | 41.00 | 10.45 |
| Total | 92.00 | 23.18 | 256.00 | 64.09 | 52.00 | 12.73 | 400.00 | 100.00 |
| Chi Square = 13.57 df= 10 Significance = 0.192 | | | | | | | | |

4. Education Level

The correlation between education level and perception to those five categories of vegetable was tested by Chi-Square. It found that there were correlation between education level and perception toward to those five categories of vegetable with significant of 0.05. From analysis found that, the sample group who had education higher than bachelor's degree had perception at moderate level, and for bachelor's degree and below that had the perception at moderate level. The statistical number from analysis was as following table 4.27.

Table 4.27: The correlation between education level and perception to those five categories of vegetable.

| Education Level | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Below Bachelor's degree | 38.00 | 32.31 | 74.00 | 63.08 | 6.00 | 4.61 | 118.00 | 29.55 |
| Bachelor's degree | 55.00 | 22.73 | 151.00 | 62.88 | 34.00 | 14.39 | 240.00 | 60.00 |
| Higher than Bachelor's degree | - | - | 31.00 | 73.91 | 11.00 | 26.09 | 42.00 | 10.45 |
| Total | 93.00 | 23.18 | 256.00 | 64.09 | 51.00 | 12.73 | 400.00 | 100.00 |
| Chi – Square = 14.930 df = 4 Significance = 0.005* | | | | | | | | |

5. Access Information

The correlation between access information and perception to those five categories of vegetable was tested by Chi-Square. It found that there were correlation between education level and perception toward to those five categories of vegetable with significant of 0.05. From analysis found that, most of sample group had access to vegetable information and those who ever or never access information before had the perception to access information at moderate level. For the sample group who used access information before, they had high higher level of perception than who those group who never access information. The statistical number from analysis was as following table 4.28.

Table 4.28: The correlation between access information and perception to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Never | 48.00 | 42.19 | 64.00 | 56.25 | 14.00 | 1.56 | 116.00 | 29.10 |
| Ever | 45.00 | 1538 | 192.00 | 67.31 | 47.00 | 17.31 | 284.00 | 70.90 |
| Total | 93.00 | 23.18 | 251.00 | 64.09 | 51.00 | 12.73 | 400.00 | 100.00 |
| Chi – Square = 23.767 df = 2 Significance = 0.000* | | | | | | | | |

6. Consumption Frequency

The correlation between consumption frequency and perception to those five categories of vegetable was tested by Chi Square. From test analysis found that, the entire sample group had consumption frequency at low level. The correlation test result presents that there was no correlation between consumption frequency and perception towards to those five categories of vegetable. The statistical number from analysis was as following table 4.29.

Table 4.29: The correlation between consumption frequency and perception to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|--------------------|------------|-------|----------|-------|-------|-------|--------|-------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Low | 62.00 | 25.19 | 156.00 | 63.70 | 27.00 | 11.11 | 245.00 | 61.35 |
| Moderate | 31.00 | 21.80 | 89.00 | 62.82 | 21.00 | 15.38 | 141.00 | 35.45 |

(Continued)

Table 4.29 (continued): The correlation between consumption frequency and perception to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|---|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| High | - | - | 11.00 | 85.71 | 13.00 | 14.29 | 14.00 | 3.20 |
| Total | 94.00 | 23.18 | 256.00 | 64.09 | 28.00 | 12.73 | 400.00 | 100.00 |
| Chi – Square = 3.177 df = 4 Significance = 0.528* | | | | | | | | |

Hypothesis 2: Consumers with different personal factors have different attitude toward to those five categories of vegetable.

This hypothesis was correlation with the variable of age, monthly income, occupation, education level, access information, consumption frequency and perception. The result from statistic analyses as following this:

1. Age

The correlation between age and attitude towards to those five categories of vegetable was tested by Chi Square. The result found that all three level of age, their attitude were moderate level. There was no correlation between age and attitude toward to those five categories of vegetable with the statistical significant of 0.05. The statistical number from analysis was as following table 4.30.

Table 4.30: The correlation between age and attitude towards to those five categories of vegetable.

| Age | Attitude | | | | | | | |
|--|----------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| 30 years or below | 16.00 | 9.58 | 149.00 | 87.23 | 6.00 | 3.19 | 171.00 | 42.72 |
| 31-40 years | 31.00 | 17.71 | 127.00 | 72.92 | 16.00 | 9.37 | 174.00 | 43.63 |
| 41 years or higher | 7.00 | 13.33 | 42.00 | 76.67 | 6.00 | 10.00 | 55.00 | 13.65 |
| Total | 54.00 | 13.64 | 318.00 | 79.54 | 28.00 | 6.82 | 400.00 | 100.00 |
| Chi Square = 6.745 df= 4 Significance = 0.9149 | | | | | | | | |

2. Monthly Income

The correlation between monthly income and attitude towards to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between monthly income and attitude toward to those five categories of vegetable with the statistical significant of 0.05. And the result show that all monthly income groups had perception at moderate level. The statistical number from analysis was as following table 4.31

Table 4.31: The correlation between monthly income and attitude towards to those five categories of vegetable.

| Monthly Income | Perception | | | | | | | |
|----------------|------------|------|----------|-------|------|------|--------|-------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| 25,000 Baht | 14.00 | 8.90 | 140.00 | 85.55 | 9.00 | 5.55 | 163.00 | 40.90 |

(Continued)

Table 4.31 (continued): The correlation between monthly income and attitude towards to those five categories of vegetable.

| Monthly Income | Perception | | | | | | | |
|---|------------|-------|----------|-------|-------|------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| 25,001 – 50,000 | 27.00 | 16.85 | 123.00 | 76.40 | 11.00 | 6.74 | 161.00 | 40.45 |
| 50,001 - + | 13.00 | 17.07 | 55.00 | 73.17 | 8.00 | 9.76 | 76.00 | 18.65 |
| Total | 54.00 | 13.64 | 175.00 | 79.54 | 28.00 | 6.82 | 400.00 | 100.00 |
| Chi Square = 3.976 df= 4 Significance = 0.448 | | | | | | | | |

3. Occupation

The correlation between occupation and attitude toward to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between occupation and attitude toward to those five categories of vegetable with the statistical significant of 0.05. The result shows that all occupation groups had attitude at moderate level. The statistical number from analysis was as following table 4.32.

Table 4.32: The correlation between occupation and attitude to those five categories of vegetable.

| Occupation | Perception | | | | | | | |
|--------------------|------------|-------|----------|-------|------|------|-------|-------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Government Officer | 6.00 | 11.00 | 41.00 | 85.19 | 2.00 | 3.70 | 49.00 | 12.30 |

(Continued)

Table 4.32(continued): The correlation between occupation and attitude to those five categories of vegetable.

| Occupation | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| State Enterprise | 10.00 | 20.83 | 30.00 | 70.84 | 4.00 | 8.33 | 44.00 | 10.90 |
| Employee | 27.00 | 16.64 | 162.00 | 80.91 | 11.00 | 5.45 | 200.00 | 50.00 |
| Business Owner | 3.00 | 13.33 | 21.00 | 73.34 | 3.00 | 13.33 | 27.00 | 6.81 |
| Freelances | 7.00 | 19.05 | 26.00 | 66.67 | 5.00 | 14.28 | 38.00 | 9.54 |
| Housewives | 2.00 | 4.35 | 38.00 | 91.30 | 2.00 | 4.35 | 42.00 | 10.45 |
| Total | 55.00 | 13.64 | 318.00 | 79.54 | 27.00 | 6.82 | 400.00 | 100.00 |
| Chi Square = 7.839 df= 10 Significance = 0.643 | | | | | | | | |

4. Education Level

The correlation between education level and attitude toward to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between education level and attitude toward to those five categories of vegetable with the statistical significant of 0.05. The result shows that all education level had attitude at moderate level. The statistical number from analysis was as following table 4.33.

Table 4.33: The correlation between education level and attitude to those five categories of vegetable.

| Education Level | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Below Bachelor's degree | 5.00 | 4.62 | 108.00 | 90.77 | 5.00 | 4.61 | 118.00 | 29.55 |
| Bachelor's degree | 45.00 | 18.94 | 176.00 | 73.48 | 18.00 | 7.58 | 239.00 | 60.00 |
| Higher than Bachelor's degree | 4.00 | 8.69 | 34.00 | 82.61 | 5.00 | 8.70 | 43.00 | 13.45 |
| Total | 54.00 | 13.64 | 318.00 | 79.54 | 28.00 | 6.82 | 400.00 | 100.00 |
| Chi – Square = 9.371 df = 4 Significance = 0.052 | | | | | | | | |

5. Access Information

The correlation between access information and attitude toward to those five categories of vegetable was test by Chi Squire. From test analysis found that, there was no correlation between access information and attitude toward to those five categories of vegetable with the statistical significant of 0.05. The result shows that all access information level had attitude at moderate level. The statistical number from analysis was as following table 4.34

Table 4.34: The correlation between access information and attitude to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|---|------------|-------|----------|-------|-------|------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Never | 4.00 | 3.13 | 105.00 | 90.62 | 7.00 | 6.25 | 116.00 | 29.10 |
| Ever | 51.00 | 17.95 | 213.00 | 75.00 | 20.00 | 7.05 | 284.00 | 70.90 |
| Total | 55.00 | 13.64 | 318.00 | 79.54 | 27.00 | 6.82 | 400.00 | 100.00 |
| Chi – Square = 8.748 df = 2 Significance = 0.013* | | | | | | | | |

6. Consumption Frequency

The correlation between consumption frequency and attitude to those five categories of vegetable was tested by Chi Square. From test analysis found that, the entire entire group had consumption frequency at low level. The correlation test result presents that there was no correlation between consumption frequency and attitude towards to those five categories of vegetable. The statistical number from analysis was as following table 4.35.

Table 4.35: The correlation between consumption frequency and attitude to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|--------------------|------------|-------|----------|-------|-------|------|--------|-------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| Low | 38.00 | 15.55 | 190.00 | 77.78 | 16.00 | 6.67 | 244.00 | 61.00 |
| Moderate | 16.00 | 11.54 | 116.00 | 83.33 | 8.00 | 5.13 | 140.00 | 35.00 |

(Continued)

Table 4.35(continued): The correlation between consumption frequency and attitude to those five categories of vegetable.

| Access Information | Perception | | | | | | | |
|--|------------|-------|----------|-------|-------|-------|--------|--------|
| | Low | | Moderate | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| High | - | - | 11.00 | 71.43 | 5.00 | 28.57 | 16.00 | 100.00 |
| Total | 54.00 | 13.64 | 317.00 | 79.54 | 29.00 | 6.82 | 400.00 | 100.00 |
| Chi – Square = 7.014 df = 4 Significance = 0.135 | | | | | | | | |

Hypothesis 3: Consumer perception is relevant to attitude toward to those five categories of vegetable.

The correlation between perception and attitude towards to those five categories of vegetables were tested by Pearson Product Moment Correlation Coefficient technique. From data analysis found that there were correlation between perception and attitude with statically significant at 0.05. All can summaries that, consumer who have high perception level, they will have positive attitude towards to those kinds of vegetable as well. The statistical number from analysis was as following table 4.36.

Table: 4.36 The correlation between perception and attitude toward to those five categories of vegetable.

| | Attitude |
|--|----------|
| Perception | |
| Pearson Correlation | 0.255** |
| Sig (2-tailed) | 0.000 |
| N | 400 |
| Pearson correlation = 0.256 Significant = 0.000* | |

4.5 Results of the Hypothesis Findings

The result of hypothesis testing in this study was summarized in following table.

Table 4.37: Summarize hypothesis testing and outcome

| Hypothesis | Test Statistical | Outcome |
|---|---------------------|--------------------------------|
| 1. Consumers with different personal factors have different perception to those five categories of vegetable. | | |
| 1.1 Consumers with different age have different perception to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 1.2 Consumers with different monthly income have different perception to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 1.3 Consumers with different occupation have different perception to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 1.4 Consumers with different education level have different perception to those five categories of vegetable. | Chi Square | Accordance with hypothesis |
| 1.5 Consumers with different access information have different perception to those five categories of vegetable. | Chi Square | Accordance with hypothesis |
| 1.6 Consumers with different consumption frequency have different perception to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |

(Continued)

Table 4.37(continued): Summarize hypothesis testing and outcome

| Hypothesis | Test Statistical | Outcome |
|--|------------------------------------|--------------------------------|
| 2. Consumers with different personal factors have different attitude toward to those five categories of vegetable. | | |
| 2.1 Consumers with different age have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 2.2 Consumers with different monthly income have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance With hypothesis |
| 2.3 Consumers with different occupation have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 2.4 Consumers with different education level have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 2.5 Consumers with different access information have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 2.6 Consumers with different consumption frequency have different attitude toward to those five categories of vegetable. | Chi Square | Not accordance with hypothesis |
| 3. Consumer perception is relevant to attitude toward to those five categories of vegetable. | Pearson Product Moment Correlation | Accordance with hypothesis |

4.6 Conclusion

From the data collect from 400 samples who was housewives, the majority of them were age between 31 – 40 years old, monthly income 25,000 Baht or below, a half of sample group work as private employee, education level below or equal to Bachelor's degree, access information of five categories of vegetable via press, interest to earn information more to those vegetable at moderate level, and decide to pay for those vegetable if they more understand or more knowledge toward to those vegetable.

For the perception towards to those five categories of vegetable found that

1. Most of the sample group had perception to those five categories of vegetable at moderate level.
2. There was no correlation between perception and age. The different age had not different perception toward to those five categories of vegetable.
3. There was no correlation between perception and monthly income. The different monthly income had not different perception toward to those five categories of vegetable.
4. There was no correlation between perception and occupation. The different occupations had not different perception toward to those five categories of vegetable.
5. There was correlation between perception and education. The different level of education had different perception toward to those five categories of vegetable.
6. There was correlation between perception and access information. The different level to access information had different perception toward to those five categories of vegetable. It found that consumer who had access information via others media had high level perception than who never accessed.
7. There was no correlation between perception and consumption frequency. The different consumption frequency had not different perception toward to those five categories of vegetable.

From these, it can summarized in part of perception that, the factors of age, monthly income, occupation, and consumption was correlation with perception except for education level factors and access information which found that there were correlation the perception.

For the attitude to those five categories of vegetable found that

1. Most of the sample group had attitude toward to five categories of vegetable in term of product, price, distribution and promotion at the moderate level.
2. There was no correlation between attitude and age. The different age had not different attitude toward to those five categories of vegetable.
3. There was no correlation between attitude and monthly income. The different monthly income had not different attitude toward to those five categories of vegetable.
4. There was no correlation between attitude and occupation. The different occupations had not different attitude toward to those five categories of vegetable.
5. There was no correlation between attitude and education. The different level of education had not different attitude toward to those five categories of vegetable.
6. There was correlation between attitude and access information. The different level to access information had different perception toward to those five categories of vegetable. It found that consumer who had access information via others media had high level attitude than who never accessed.
7. There was no correlation between attitude and consumption frequency. The different consumption frequency had not different attitude toward to those five categories of vegetable.

From these, it can summarize in part of attitude that, the factors of age, monthly income, occupation, education level and, consumption frequency was correlation with attitude except for access information which found that there were correlation the attitude.

Fir the correlation between perception and attitude towards to those five categories of vegetable, it found that the sample group who had high perception to those five categories of vegetable will have positive attitude as well.

CHAPTER 5

DISCUSSION

The contents of this chapter are following this:

5.1 Research Questions

5.2 Hypothesis Summary

5.3 Recommendation for Further Application

5.4 Conclusion



5.1 Research Questions

The correlation between the independent variables, perception and attitude of the sample group towards various categories of vegetable

5.1.1 Perception towards various categories of vegetable

From the study found that consumer had perception towards various categories of vegetable in term of meaning at the moderate level, in term of government measures at high level, and in term of general knowledge at low level. Overall are in moderate level which is accordingly to the study of Saenhom, 2002 in the study of the influential factors to perception and demand on buying natural product of population in Muang district, Chinagmai. The study found that the sample group had perception on natural products at moderate as well.

5.1.2 Attitude towards various categories of vegetable

From the study found that consumer had attitude towards various categories of vegetable at moderate level. The result of this study is accordingly to the study of Chatchaipholart, 2000 in the study of behavior on exposure to mass media, knowledge and attitude towards food and nutrition of middle-aged women in metropolitan Bangkok that the sample group had moderate attitude towards food and nutrition of middle-aged women.

5.1.3 Age

From the study found that there was no correlation between age and perception towards various categories of vegetable with statistical significant of 0.05. As well as the correlation between age and attitude, there was no correlation as well. From the result is not accordingly to the study of Kou Yai, 1997 that the different age will have different interest that depends on experience of each person.

5.1.4 Income

From the study found that there was no correlation between income and perception and attitude towards various categories of vegetable. This result is accordingly to study of Srijad, 2001, the study of consumer perception towards no.5 saving label and the factor of complex market and the decision making of target consumer, which the different group of family income monthly is not according to consumer perception towards to no.5 saving label.

5.1.5 Occupation

From the study found that there was no correlation between occupation and perception and attitude towards various categories of vegetable. The result is accordingly to the study of Wjitphat, 2001, the influential factors to the decision of unpolished rice consumer in Muang district, Chiangmai, this study found that there was no correlation between occupation and perception.

5.1.6 Education

From the study found that there was correlation between education and perception towards various categories of vegetable with statistical significance of 0.05 which is according to the study of Wanitlerthansasarn, 1998, in the study of the acceptance on knock-down goods.

5.1.7 Access information

From the study found that there was correlation between access information and perception towards various categories of vegetable with statistical significant of 0.05 which is according to the study of Saroj, 2000, found that consumer had different to access information depends on interest of each person.

5.1.8 Consumption frequency

From the study found that there was no correlation between consumption frequency and perception towards various categories of vegetable. This represent that consumption frequency was not related to the factors of perception towards various categories of vegetable. As well as there was no correlation between consumption frequency and attitude towards various categories of vegetable with significance of 0.05 which is not accordingly to the study of Maliwan, 1988, the study correlation between attitude and behavior towards consumption of products with industrial standard sign of teacher in secondary school in Bangkok.

5.2 Correlation between perception and attitude of sample group towards various categories of vegetable

From the study found that there was correlation between perception and attitude of consumer with statistical of 0.05. Consumer who has high level of perception will have high attitude. The outcome is accordingly to the study of Tanitkunarak, 2001, the study of behavior of consumer on Pioneer brand.

5.2 Hypothesis Summary

From the hypothesis 1, Consumers with different personal factors have different perception to those five categories of vegetable. It found that in term of meaning, consumer have perception at moderate level, in term of general knowledge consumer have perception at low level and for the government measures and policies on operation, consumer have perception at high level. Overall, they have perception at moderate level.

From the hypothesis 2, Consumers with different personal factors have different attitude toward to those five categories of vegetable. It found that age, monthly income, occupation, education level, and access information of consumer was moderate level. All it can said, all o these factors did not relevant to their attitude. Except for the consumer frequency found that it was in low level, there was no correlation consumption frequency and attitude towards to those five categories of vegetable.

From the hypothesis 3, Consumer perception is relevant to attitude toward to those five categories of vegetable. It found that consumer who have high perception, they will have positive attitude as well.

Based on the study, the recommendations for further application are:

1. While there are some differences when analyzing respondents between age and attitude toward to price, they are not large even if the statistically significant. It is notable that minority of consumer of pesticides residue free vegetable is student or younger consumer. They were more willing to pay for a premium quality vegetable, even though this group has some point in higher agreement with of low price. It is the main reason that the retailer, trader or seller should focus the target group who is younger like as teenager or student to expand their offering and selection as well. It could be by launch a specific product with special price for this target group.

2. Pesticide residue free vegetable farm owner as well as seller should sell the highest quality of product they possibly can. They should to define quality by evaluating freshness, safety, taste, nutritive value and appearance of all products they carry to consumer. This information is the one way to communicate with the consumer to make them easily to make a decision to purchase it.

3. The government agencies should generate greater appreciation to people by educating them about pesticide residue free vegetable via variety of media such as TV program, radio broadcast or health and food magazines. These sources of message in term of channel communication will affect its consumer trustworthiness which the source is perceived to have.

4. The Government Agencies should have special department to look after pesticide residue free vegetable seriously. They should have power to control quality of product that no chemical over standard that harmful to consumer. As well, they should have power to control the price of the product to be standard and well accept among Thai consumer.

5. The private sector and public sector should boost assistance in technology adaptation and uptake to promote the development of pesticide residue free vegetable

5.3 Recommendation for Further Research

1. From this study found that media is the most factors to the target group. It would be good if there is other research to focus on this point how it affects to target group or develop marketing strategy plan to reach them as the target group.

2. From this study is focusing only the consumer who is housewives, therefore for the next study, the researcher should focus to other group.

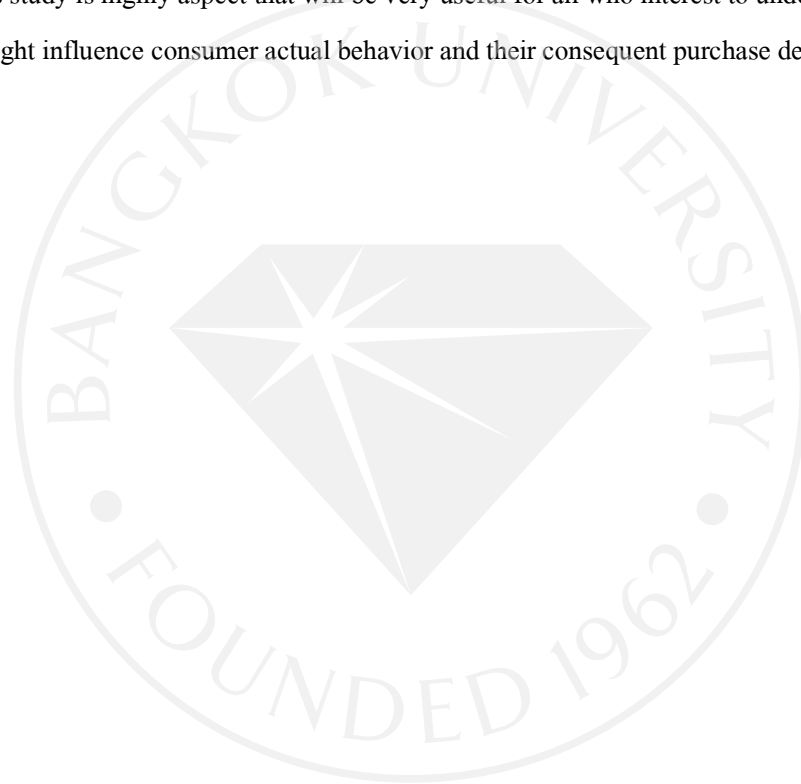
5.4 Conclusion

Consumer perception and attitude, it is obviously that it involved a set of factors complex that cannot easily to understand. There is still not much consumer concern the product itself. From these, it can say that those five categories of vegetable for Thai consumer are at the introductory stage of product life cycle.

The interest to conduct from this study is to better understand consumer perception and attitude toward to those five categories of vegetable. This study very useful to understand the factors that

consider being possible factors that consider as obstacle as well to purchasing decision is knowledge. From this point, the government agencies should to inform or to create awareness to reach consumer knowledge to encourage them consumer those vegetable. Although some consumer have well knowledge what is the benefit of product itself, still they are convenience on their current consumption, government agencies should to focus as well. In addition, in case of small items, like vegetable purchase, consumers tend not to stick to one kind alone; they are switching back and forth depending on price, special promotions and availability.

From this study is highly aspect that will be very useful for all who interest to understand the factors which might influence consumer actual behavior and their consequent purchase decision.



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Questionnaire

The purpose of this questionnaire is to study consumer perception and attitude towards various categories of vegetable. This questionnaire is an instrument research of an independent study for the completion of the Degree Master of Business Administration, Bangkok University.

Part 1: Personal Factors

Explanation: Please mark one which best describes you are.

1. Age

1. 30 years old or below 2. 34 – 40 years old 3. 41 years old or higher

2. Income

1. 25,000 Baht or below 2. 25,001 – 50,000 Baht 3. 50,000 Baht or higher

3. Occupation

1. Housewives but not working outside
 2. Housewives and working outside as: _____ (please indicate)

4. Education level

1. Below than Bachelor's degree 2. Bachelor's degree
 3. Higher than Bachelor's degree

5. What kind of media channel do you normally access for news or general information? Please indicate 3 sources.

1. _____ 2. _____ 3. _____

6. Have you ever heard about variety categories of vegetable or not?

1. Never

2. Yes. Please indicate 3 sources that you heard from.

1. _____ 2. _____ 3. _____

7. Do you interest to access information about varieties categories of vegetable?

1. Absolutely Not Interest

2. Not much interest

3. Neutral

4. Very much interest

8. If you know more information or more understand in different categories of vegetable will you continue to buy or not?

1. Yes, continue to buy

2. No, not buying anymore

9. How often do you and your family member consumer following categories of vegetable?

| Categories | Never consumed / First time | Ever consumed before | | | |
|-----------------------------|--------------------------------|----------------------|---------|---------|----------------------|
| | | 1 times | 2 times | 3 times | More than 3 times |
| 1. Hygienic vegetable | | | | | |
| 2. Pesticide safe vegetable | | | | | |

| Categories | Never consumed / First time | Ever consumed before | | | |
|-----------------------------|--------------------------------|----------------------|---------|---------|----------------------|
| | | 1 times | 2 times | 3 times | More than 3 times |
| 3. Hygienic vegetable | | | | | |
| 4. Pesticide safe vegetable | | | | | |
| 5. Pesticide free vegetable | | | | | |
| 6. Hydroponics vegetable | | | | | |
| 7. Organic vegetable | | | | | |

Part 2: Consumer perception

Explanation: Please mark ✓ one which best describes your understand

| Statement | Yes | No | Not sure |
|---|-----|----|-------------|
| Meaning: | | | |
| 1. Hygienic vegetable is vegetable contains acceptable and control level of chemical residues pesticides, synthetic fertilizers, weed control substances and growth hormones, which are not harmful to consumers. | | | |
| 2. Pesticide free vegetable is not use manmade pesticide but it produces from fertilizers and growth substances. | | | |

| Statement | Yes | No | Not sure |
|---|-----|----|----------|
| 3. Pesticide free vegetable is done in a healthy soil that has been clear from chemical residues and without any use of pesticides, synthetic fertilizers or any chemical concerns. | | | |
| 4. Hydroponics vegetable is cultivated without soil but with its roots immersed in water to which essential have been added | | | |
| 5. Organic vegetable uses fertilizer with natural forms of weed control and pest management. | | | |
| General Knowledge | | | |
| 6. Five kinds of vegetable above are spent less time to wash than ordinary vegetable. | | | |
| 7. If a vegetable or piece of its especially dirty, washing might not be enough to get it cleans, so then you could peel it. | | | |
| 8. Eating vegetable containing pesticides residues at level below the safety limits is not harm consumer's health. | | | |
| Government measures and policies on operation | | | |
| 9. Department of Agricultural Extension is an official pesticide monitoring programme checks chemical or pesticide residue in vegetable supply, to ensure that there are not any unexpected residues. | | | |
| 10. The "Food Safety" project is concern to emphasizing the serious problem of chemical concern in food especially vegetable | | | |

Part 3: Consumer attitude to market mix factors

Explanation: Please mark ✓ one which best describes your attitude

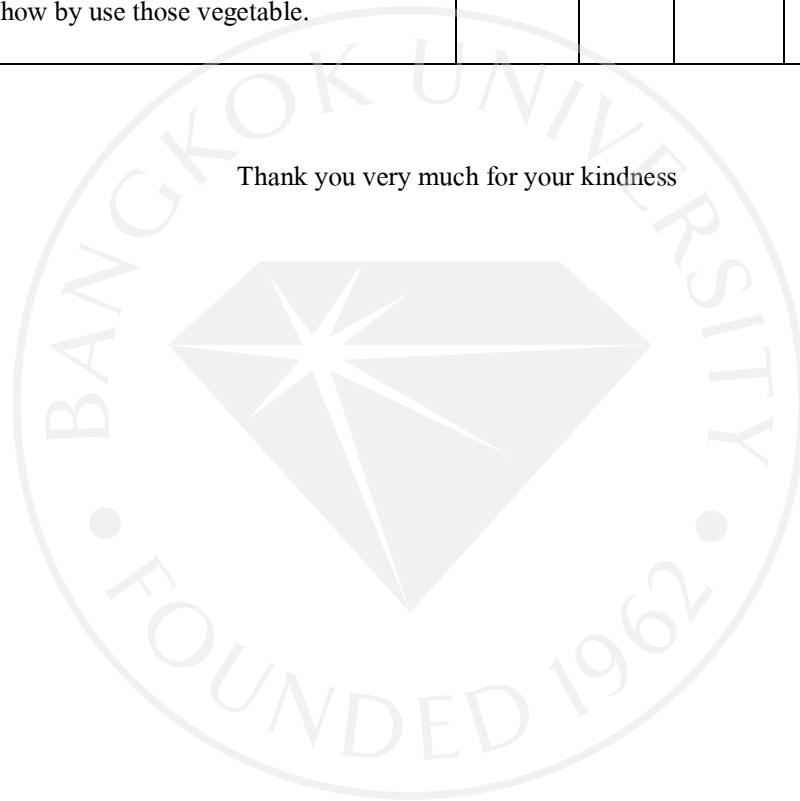
| Statement | Strongly Agree | Agree | Neutral | Strongly disagree | Disagree |
|---|-------------------|-------|---------|----------------------|----------|
| Product | | | | | |
| 1. Taste of five kinds of vegetable is better than ordinary vegetable. | | | | | |
| 2. All five kinds of vegetable should get approve quality form FDA before launch to the market. | | | | | |
| 3. On the package should clearly identify the origin source of product. | | | | | |
| 4. You trust in those kind of vegetable that promise to improve your health. | | | | | |
| 5. The information on the label of product, it makes you more confident to pay for. | | | | | |
| 6. Those five kinds of vegetable is limited kind of products. | | | | | |
| 7. Those five kinds of vegetable must always fresh. | | | | | |

| Statement | Strongly Agree | Agree | Neutral | Strongly disagree | Disagree |
|--|----------------|-------|---------|-------------------|----------|
| Price | | | | | |
| 1. Price of those kinds vegetable is reasonable to pay for. | | | | | |
| 2. Price of those kinds vegetable is appropriate with quality. | | | | | |
| 3. Price of those kinds vegetable is appropriate with quantity. | | | | | |
| 4. It would be good if you bargain the price | | | | | |
| 5. It would be good to get special discount when you pay by cash | | | | | |
| Distribution | | | | | |
| 1. There are many shops and places to buy those kinds of vegetable. | | | | | |
| 2. It would be good if there are deliver services to deliver vegetable to you house or places. | | | | | |
| 3. Vegetable on the shelf of supermarket is very outstanding therefore you happy to pay for. | | | | | |

| Statement | Strongly Agree | Agree | Neutral | Strongly disagree | Disagree |
|--|----------------|-------|---------|-------------------|----------|
| 4. The places and shops you went to buy those vegetable is very convenience. There are empty of car park. | | | | | |
| 5. There are empty of shopping cart therefore you feel very convenience when you were shopping. | | | | | |
| 6. The places you go to buy those vegetable, you are privately to choose those product. | | | | | |
| Promotion: | | | | | |
| 1. Free coupon or promotion campaign at selling point makes you highly to pay for that kind of vegetable. | | | | | |
| 2. Government should provide accurate fact information through any media including distribute brochure, poster or document to make consumer more understand to those kinds of vegetable. | | | | | |
| 3. To collect point from buying, make you to buy again in the future. | | | | | |

| Statement | Strongly Agree | Agree | Neutral | Strongly disagree | Disagree |
|---|----------------|-------|---------|-------------------|----------|
| 4. Seller at selling point make you more confident to purchase those vegetable to consume | | | | | |
| 5. It would be good to have a cooking show by use those vegetable. | | | | | |

Thank you very much for your kindness



แบบสอบถาม

จุดประสงค์ของแบบสอบถามนี้ใช้เพื่อเป็นเครื่องมือในการศึกษา การรับรู้และทัศนคติของผู้บริโภคต่อ ผลิตภัณฑ์สารชนิดต่างๆ

แบบสอบถามนี้เป็นส่วนหนึ่งของวิชาค้นคว้าอิสระ หลักสูตรบริหารธุรกิจ มหาวิทยาลัยกรุงเทพ

ส่วนที่ 1 คำถามส่วนบุคคล

คำชี้แจง ให้ทำเครื่องหมาย ✓ ลงในช่องที่กำหนดเพื่ออธิบายถึงตัวคุณ

1. อายุ

() 1. 30ปี หรือ น้อยกว่านั้น () 2. 34 – 40 ปี

() 3. 41 ปี หรือ มากกว่านั้น

2. รายได้ต่อ เดือน

() 1. 25,000 บาท หรือ น้อยกว่านั้น () 2. 25,001 – 50,000 บาท

() 3. 50,000 บาท หรือ มากกว่านั้น

3. อาชีพ

() 1. แม่บ้าน ที่ไม่ได้ทำงานนอกบ้าน

() 2. แม่บ้าน และทำงานนอกบ้าน: โปรดระบุอาชีพของท่าน _____

4. ระดับการศึกษา

() 1. น้อยกว่าปริญญาตรี

() 2. ปริญญาตรี

() 3. สูงกว่าปริญญาตรี

5. ท่านรับข้อมูล หรือ ข่าวสาร จากแหล่งใดมากที่สุด โปรดระบุ 3 อันดับแรก

1. _____ 2. _____ 3. _____

6. ท่านเคยได้ทราบข้อมูลประเภทของผักชนิดต่างๆหรือไม่

() 1. ไม่เคย

() 2. เคย โปรดระบุแหล่ง 3 อันดับ

2. _____ 2. _____ 3. _____

7. คุณสนใจที่จะรับรู้ข้อมูลผักประเภทชนิดต่างๆหรือไม่

() 1. ไม่สนใจเลยอย่างยิ่ง

() 2. ไม่สนใจ

() 3. สนใจ

() 4. สนใจเป็นอย่างยิ่ง

8. ถ้าคุณได้รับรู้ข้อมูลเพิ่มเติมของผักแต่ละชนิดต่างๆ คุณยังคงจะซื้อผักชนิดนั้นๆไปรับประทานอีกหรือไม่

() 1. ใช่

() 2. ไม่ใช่

9. คุณ และ สมาชิกในครอบครัวของคุณเคย / รับประทานผักชนิดต่างๆต่อไปนี้บ่อยแค่ไหน

| ชนิด | ไม่เคยรับประทาน / ครั้งแรก | เคยทานมาแล้ว | | | |
|------------------------|-------------------------------|--------------|---------|---------|-----------------|
| | | 1 ครั้ง | 2 ครั้ง | 3 ครั้ง | มากกว่า 3 ครั้ง |
| 8. ผักอนามัย | | | | | |
| 9. ผักปลอดภัยจากสารพิษ | | | | | |
| 10. ผักปลอดสารพิษ | | | | | |
| 11. ผักไฮโดโปรอนิก | | | | | |
| 12. ผักเกษตรอินทรีย์ | | | | | |

ส่วนที่ 2 ด้านการรับรู้

คำชี้แจง ให้ทำเครื่องหมาย ✓ ลงในช่องที่กำหนดตามความเข้าใจของคุณ

| ข้อความ | ถูก | ผิด | ไม่ แน่ใจ |
|--|-----|-----|--------------|
| ทางด้านความหมาย: | | | |
| 11. ผักอนามัย หมายถึง ผักที่มีสารที่เป็นส่วนประกอบตามประเภทที่ยอมรับได้ และมีการควบคุมปริมาณการใช้สารเคมี สารสังเคราะห์ สารควบคุมงัษพืช และ สารเร่งโต ในปริมาณที่ไม่เป็นอันตรายต่อสุขภาพ | | | |
| 12. ผักปลอดภัยจากสารพิษ หมายถึงผักที่ไม่ใช้ยาฆ่าแมลงที่ผลิตจากมนุษย์ แต่ใช้ปุ๋ย และ สารเร่งโต ในการผลิต | | | |

| ข้อความ | ถูก | ผิด | ไม่แน่ใจ |
|--|-----|-----|----------|
| 13. ผักปลอดสาร หมายถึง ผักที่ปลูกในดินที่อุดมสมบูรณ์ที่มีการกำจัดสารเคมีออกแล้ว และ ปราศจากยาฆ่าแมลงทุกชนิด ปราศจากสารเร่งโต หรือ สารเคมีใดๆทั้งสิ้น | | | |
| 14. ผักไฮโรโปรนิก คือ ผักที่ปลูกโดยปราศจากดิน ปลูกโดยใช้น้ำที่อุดมไปด้วยสารเติมแต่งต่างๆ | | | |
| 15. ผักอินทรีย์ใช้ปุ๋ยธรรมชาติในการปลูก และมีระบบควบคุมแมลงและวัชพืช | | | |
| ความรู้ทั่วไป | | | |
| 16. ผัก 5 ชนิดดังกล่าวใช้น้ำล้างทำความสะอาดน้อยกว่าผักอื่นๆทั่วไป | | | |
| 17. ถ้าผัก หรือ ส่วนใด ส่วนหนึ่งของผักมีรอยสกปรก การล้างด้วยน้ำนั้นอาจไม่เพียงพอ ดังนั้นตัดทิ้งเลยก็ได้ | | | |
| 18. การบริโภคผักที่มีสารเคมีอยู่ในปริมาณที่ควบคุมนั้น ไม่เป็นอันตรายต่อสุขภาพ | | | |
| มาตรการ นโยบาย รัฐบาล | | | |
| 19. กรมส่งเสริมการเกษตร คือ หน่วยงานที่รับผิดชอบตรวจสอบปริมาณสารพิษในผักว่าผักที่จำหน่ายในท้องตลาดนั้นไม่เกินอันตรายที่เป็นอันตรายต่อผู้บริโภค | | | |
| 20. โครงการอาหารปลอดภัยตระหนักถึงอันตรายของสารพิษในอาหาร โดยเฉพาะสารพิษในผัก | | | |

ส่วนที่ 3 ทักษะคิดต่อปัจจัยส่วนผสมทางการตลาด

โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับทัศนคติของท่าน

| ข้อความ | เห็นด้วย อย่างยิ่ง | เห็นด้วย | เฉยๆ | ไม่เห็น ด้วยอย่าง ยิ่ง | ไม่เห็น ด้วย |
|---|-----------------------|----------|------|------------------------------|-----------------|
| ผลิตภัณฑ์ | | | | | |
| 8. รสชาติของผัก 5 ชนิดนั้น ดีกว่าผัก ธรรมดาทั่วไป | | | | | |
| 9. ผักทั้ง 5 ชนิดนั้น ควรได้รับการรับรอง จาก อย ก่อนวางจำหน่ายในตลาด | | | | | |
| 10. บรรจุภัณฑ์ของผักทั้ง 5 ชนิดนั้น ควร ระบุแหล่งที่มาอย่างชัดเจน | | | | | |
| 11. การบริโภคผักชนิดใดชนิดหนึ่งใน อย่างนั้น ดีต่อสุขภาพมาก | | | | | |
| 12. ข้อมูลที่อยู่บนสลากของผลิตภัณฑ์ทำ ให้คุณมีความมั่นใจมากยิ่งขึ้นที่เวลาซื้อ | | | | | |
| 13. ประเภทของผักชนิดดังกล่าวนี้ไม่มี ความหลากหลาย | | | | | |
| 14. ผัก 5 ชนิดนั้นควรดูแลใหม่อยู่ ตลอดเวลา | | | | | |

| ข้อความ | เห็นด้วย อย่างยิ่ง | เห็นด้วย | เฉยๆ | ไม่เห็น ด้วยอย่าง ยิ่ง | ไม่เห็น ด้วย |
|---|-----------------------|----------|------|------------------------------|-----------------|
| ราคา | | | | | |
| 15. ราคาของผักทั้ง 5 ชนิดนั้น สมเหตุสมผลที่จะซื้อ | | | | | |
| 16. ราคาของผักทั้ง 5 ชนิดนั้น เหมาะกับ ปริมาณ | | | | | |
| 17. ราคาของผักทั้ง 5 ชนิดนั้น เหมาะกับ คุณภาพ | | | | | |
| 18. จะดีมากถ้าหากสามารถต่อรองราคาใน การซื้อได้ | | | | | |
| 19. การชำระค่าสินค้าด้วยเงินสด ควรจะ ได้รับส่วนลดพิเศษ | | | | | |
| 20. มีร้านค้า และ แหล่งจำหน่ายหลายแห่ง ที่ขายผักทั้ง 5 ชนิดนั้น | | | | | |
| 21. บริการส่งผักถึงบ้านคือสิ่งที่คุณ ปรารถนา | | | | | |
| 22. การจัดวางผักในชั้นวางของบริเวณ แผนกอาหารสดนั้น โดดเด่นทำให้คุณ อยากซื้อ | | | | | |
| 23. สถานที่ที่คุณไปซื้อผักดังกล่าวนี้มีที่ จอดรถสะดวกสบาย | | | | | |

| ข้อความ | เห็นด้วย อย่างยิ่ง | เห็นด้วย | เฉยๆ | ไม่เห็น ด้วยอย่าง ยิ่ง | ไม่เห็น ด้วย |
|---|-----------------------|----------|------|------------------------------|-----------------|
| ช่องทางจำหน่าย | | | | | |
| 24. สถานที่มีรถเข็นไว้ให้บริการ จึงทำให้ คุณรู้สึกสะดวกในการไปซื้อแต่ละครั้ง | | | | | |
| 25. สถานที่ที่คุณไปซื้อผักกั๋งเวลานั้น คุณ รู้สึกถึงความเป็นส่วนตัวได้อย่างไร แท้จริง | | | | | |
| การส่งเสริมการตลาด | | | | | |
| 26. ฟรีคูปอง หรือ โปรโมชั่น ทำให้คุณง่าย ต่อการจ่ายเงินเพื่อซื้อผักกั๋งมาบริโภค | | | | | |
| 27. รัฐบาลควรให้ข้อมูลเรื่องผักกั๋งกล่าว อย่างถูกต้องโดยผ่านทางสื่อต่างๆเช่น แผ่นพับ โปสเตอร์ หรือเอกสารแจกจ่าย เพื่อให้ผู้บริโภคเข้าใจในเรื่องผักชนิด ต่างๆได้อย่างแท้จริง | | | | | |
| 28. การสะสมแต้มจากการซื้อทำให้คุณ อยากซื้อผักมาบริโภคอย่างต่อเนื่อง | | | | | |
| 29. พนักงานที่แนะนำสินค้า ณ จุดขาย ทำ ให้คุณมั่นใจในการซื้อผักเหล่านั้น มารับประทาน | | | | | |
| 30. สถานที่จำหน่ายผักกั๋งกล่าวควรมีการ จัดโชว์การทำอาหาร | | | | | |

ขอบคุณทุกท่านที่ช่วยตอบแบบสอบถาม

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