



**MARKETING OPPORTUNITY OF THE FUNCTIONAL
CANDY TOWARD THAILAND'S AGING POPULATION**

BY

MISS KANOKNAPA PONGBORIPAT

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2015
COPYRIGHT OF THAMMASAT UNIVERSITY**

**MARKETING OPPORTUNITY OF THE FUNCTIONAL
CANDY TOWARD THAILAND'S AGING POPULATION**

BY

MISS KANOKNAPA PONGBORIPAT



**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)**

FACULTY OF COMMERCE AND ACCOUNTANCY

THAMMASAT UNIVERSITY

ACADEMIC YEAR 2015

COPYRIGHT OF THAMMASAT UNIVERSITY



THAMMASAT UNIVERSITY
FACULTY OF COMMERCE AND ACCOUNTANCY

INDEPENDENT STUDY

BY

MISS KANOKNAPA PONGBORIPAT

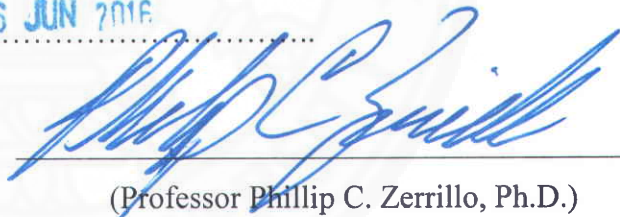
ENTITLED

MARKETING OPPORTUNITY OF THE FUNCTIONAL CANDY TOWARD
THAILAND'S AGING POPULATION

was approved as partial fulfillment of the requirements for
the degree of Master of Science Program in Marketing (International Program)

on..... 6 JUN 2016


Chairman


(Professor Phillip C. Zerrillo, Ph.D.)

Member and Advisor


(Associate Professor James E. Nelson, Ph.D.)

Dean


(Professor Siriluck Rotchanakitumnuai, Ph.D.)

Independent Study Title	MARKETING OPPORTUNITY OF THE FUNCTIONAL CANDY TOWARD THAILAND'S AGING POPULATION
Author	Miss Kanoknapa Pongboripat
Degree	Master of Science Program in Marketing (International Program)
Major Field/Faculty/University	Faculty of Commerce and Accountancy Thammasat University
Independent Study Advisor	Assoc. Prof. Dr. James E. Nelson
Academic Years	2015

ABSTRACT

There is a great opportunity for the functional candy market in Thailand which growing from not only serving niche market to capture the healthy trend; therefore, the main target market of the functional candy has been shifted from the mass to the premium segmentation. Hence, the functional candy's growth rate rose up the pricing value than volume growth in 2014. It is implying that the unit price of functional candy is increasing. However, there are many players in the industry, but only a few are in the purely functional candies that offer the outstanding value of functional candy. The main competitions of functional candy are still dominated by the large companies of fun candy who fight the price war, which they have received from the economy of scale. On the other hand, the private label and smaller brand that try to develop their product through innovation, marketing activities and offline-online advertising to gain market interest.

In term of consumer's consumption trend, the believe efficacy plays the most important role of buyer decision-making process. Most of the customers tend to buy well-known and long-established brands but still concerning to purchase the only affordable product. This situation has created the barrier to penetration of local private brand in the functional candy market. On the other hand, the functional candy still consider as the snack product, therefore, consumer always response from the impulse and convenience factors such as to satisfy a emotion, to satisfy craving, like the taste and simple to eat.

ACKNOWLEDGEMENTS

It would be impossible to success with individual study without high support from many people. The sincerely appreciation and thankfulness are given to those who are involved in and supported. The most important person is the advisor, Assoc. Prof. Dr. James E. Nelson for his expertise and kindly attention throughout the whole course which his valuable advice and fully support. However, family and college who also give full support during the project period. Last but not least, a special thank to all MIM program, Professors, Directors, officers, alumni, beloved MIMers and MIM28 who give a great experience I have had in my life by offering a unique learning. It was a challenging to enriched education and completely turns world upside down.

Miss Kanoknapa Pongboripat

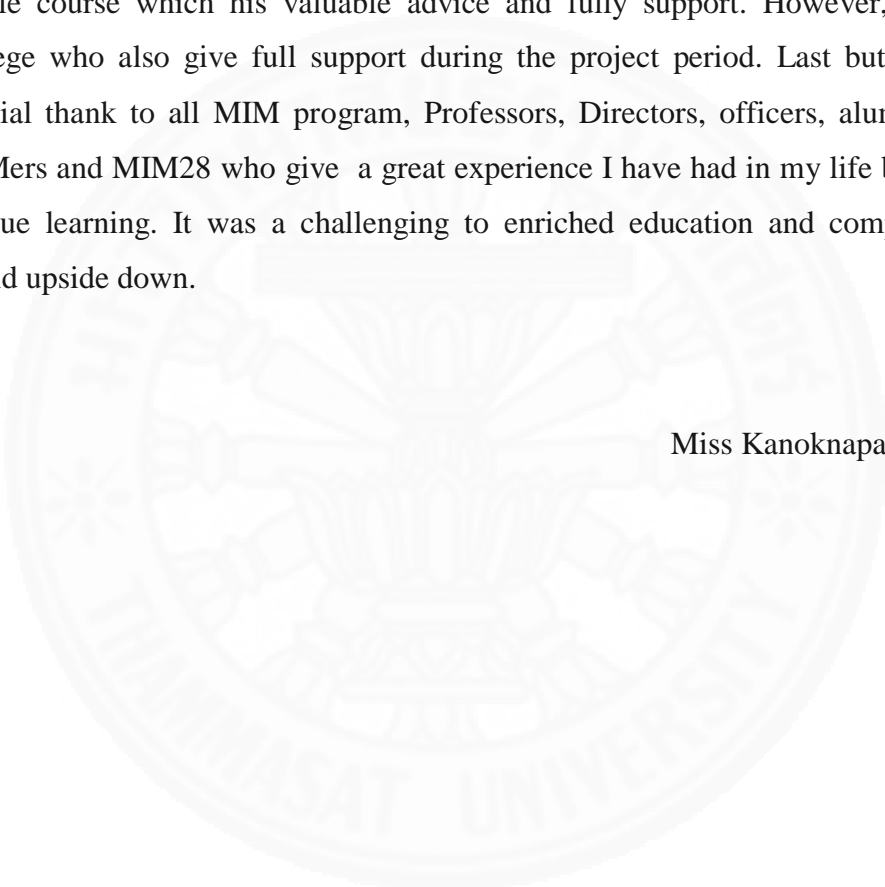


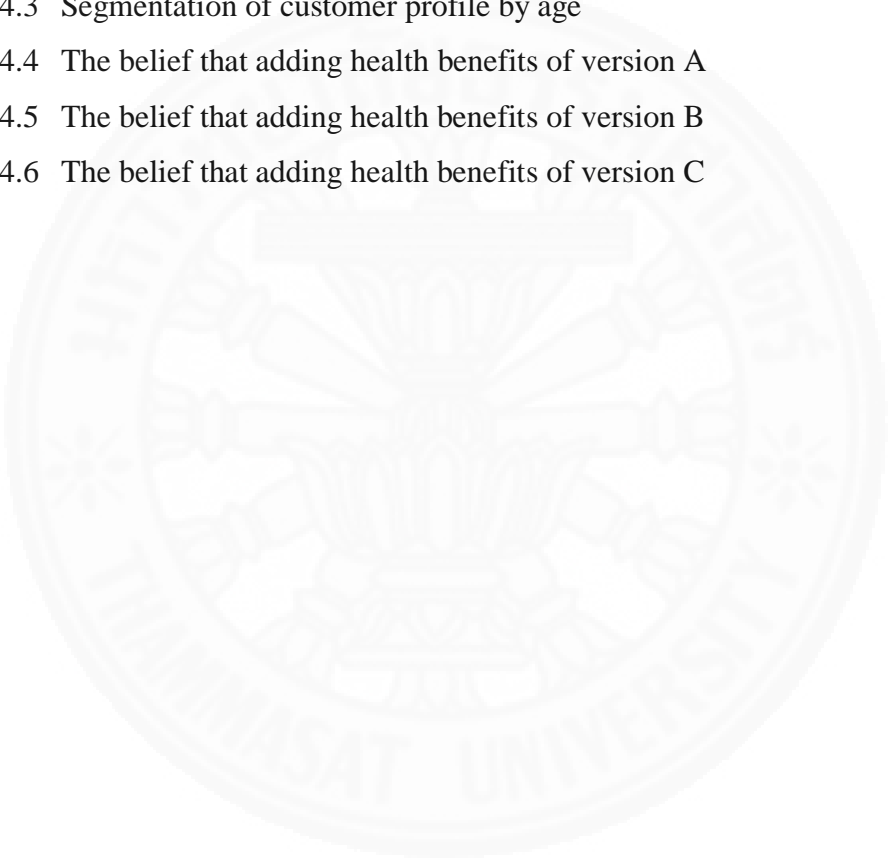
TABLE OF CONETNTS

	Page
ABSTRACT	(1)
ACKNOWLEDGEMENTS	(2)
LIST OF TABLES	(5)
LIST OF FIGURES	(6)
CHAPTER 1 INTRODUCTION	1
1.1 Background of study	1
1.2 Study purpose and objectives	1
CHAPTER 2 REVIEW OF LITERATURE	2
CHAPTER 3 RESEARCH DESIGN	7
3.1 Keys variable of the study	7
3.2 Target population	8
3.3 Questionnaire design	8
3.4 Pilot testing	9
3.5 Data analysis plan	10
CHAPTER 4 RESEARCH FINDING AND RESULT	11
4.1 Review of in-depth interview	11
4.2 Type of user who purchase functional candy	12
4.3 Consumption of functional candy the past three months	13
4.4 Keys features of premium functional candy	14
4.5 Attitudes toward functional candy	16
4.6 Segmentation	17

	(4)
4.7 Customer profile	18
4.8 Belief efficacy and price expectation	20
CHAPTER 5 CONCLUSION AND RECOMMENDATION	22
5.1 Conclusion and recommendation	22
5.2 Future research	23
REFERENCES	24
APPENDICES	26
APPENDIX A SURVEY QUESTIONNAIRE	27
APPENDIX B TABLES	35
BIOGRAPHY	42

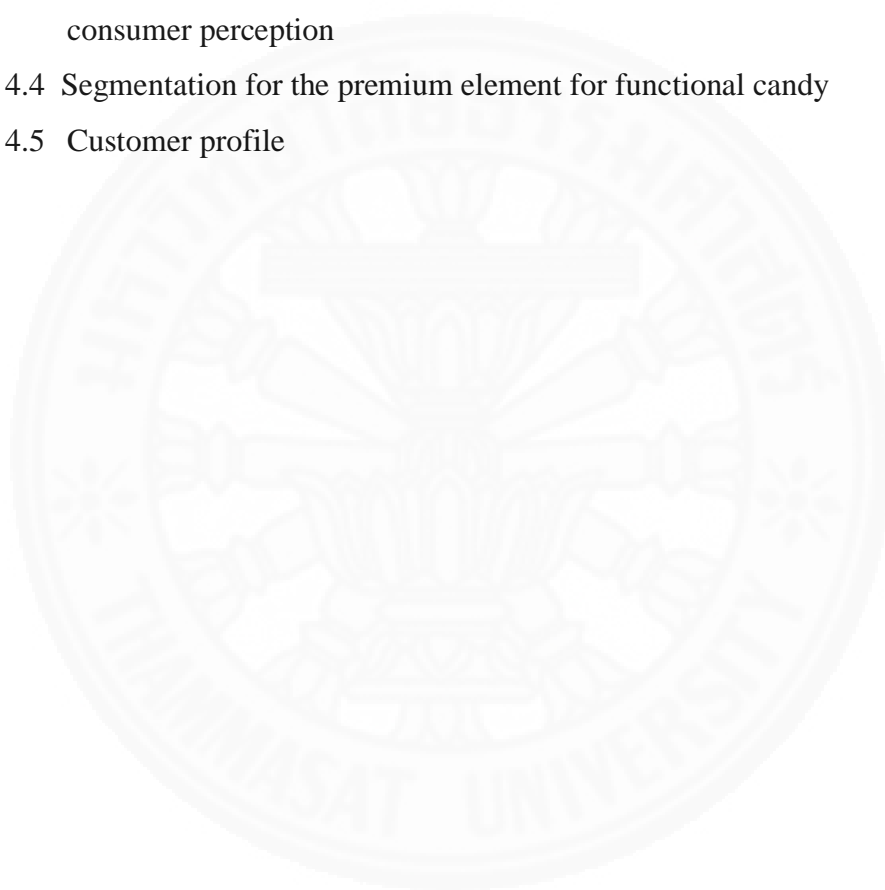
LIST OF TABLES

Tables	Page
3.1 Table of type of product claim	9
4.1 Background characteristics of respondents	11
4.2 Pair sample t-test for each type of the products which buy for	15
4.3 Segmentation of customer profile by age	18
4.4 The belief that adding health benefits of version A	20
4.5 The belief that adding health benefits of version B	20
4.6 The belief that adding health benefits of version C	20



LIST OF FIGURES

Figures	Page
4.1 Consumption of functional candy in the past three months	13
4.2 Mean value for each type of functional candy products, which buy, for yourself and friends/relatives	14
4.3 Elements in the functional candy that add value for consumer perception	16
4.4 Segmentation for the premium element for functional candy	17
4.5 Customer profile	18



CHAPTER 1

INTRODUCTION

1.1 Background of study

The function candy has been turning from mass consumption to popular snacks, which many brands try to upgrade their original positioning candy to reach a premium positioning. Most significant, this trend towards premium-seeker in healthy functional candy offers company higher profit margins, which is important in functional candy industry, where competition is extremely intense. This research is covered all the hard functional candy, which is sold in Thailand both imported and locally made. The scope of this research is covered both analysis and further forecasting for both traditional and modern trade store. The study is conducted to explore the contextual factors affecting Thailand's aging population perception of in the area of consumer behavior. This study also intends to evaluate variables that influence aging population's intentions of buying.

1.2 Study purpose and objectives

The research objectives are as follows:

1. Belief efficacy: to test the belief that adding a health benefit such as vitamin, antioxidants and energy could extend a person's health expectancy.
2. Price expectation: to prioritize the willing to pay value of functional candy
3. Purchase intention: to identify the relevant motivation for self-use and gifting

CHAPTER 2

REVIEW OF LITERATURE

Perceived health and taste ambivalence in food consumption

Functional candies products, the key difference; Taste-valuators classified them as tasty and unhealthy. Health-valuators regarded the popular candies as tastiness and unhealthy as functional candies. “Taste-valuators” (Journal of consumer marketing, 2014) viewed them as tasty and healthy. Furthermore, the un-tastiness and healthiness cannot consider as tasty functional candy aspects, but “Health-valuators” (Journal of consumer marketing, 2014). In consumer’s mind, even the weighting of the key attribute is effect in the evaluation of alternative, but, most of the consumer always has the mental shortcut to illuminate and decide choice. Both of healthiness and tastiness possible to combine in consumer’s mind, the method and result are overlap and confuse interaction.

Energy and antioxidants: Hot herbal candy trends

The biggest trend for the functional herbal candy is energy boosting and antioxidants function. Acerola and guarana are considered as herbal extracts are predicting to be popular because many health claims those European producers is allowed to add on their products that contained these two ingredients. The trend toward natural is also importance in candy with the firm connection between natural and healthy. More and more sports consumers are in the trend of 100% natural by looking for the natural ingredients including organic product. However, the challenges are from the manufacturer in term of flavor, color and price from using the botanical extract. On the other hand, there is just only the taste that most of the customer not familiar with, so it is hard for them to like it as well. Herbal is growing. Adding more vitamins substance in the functional candy is supposed to be cheaper in cost than adding other element but when the botanical ingredients are used the cost will be a little more due to its niche market.

Smart candy vitamin-infused kids' snack founder: 'Functional doesn't have to come in a brown paper bag

It is hard to develop the tasty snack with functional benefit, but to make them match with the target, which is the child and young, adult is the most difficult because People prefer the healthier snack with good flavors. Snap infusion's founder launched a vitamin-infused snack for kids which the aims to combine the fun, tasty and functional food together in an attractive packaging. This product was launched after the millennial version. Smart candy is full of vitamin A, B, C with various benefits in different flavors that are being positioned as a mainstream healthy alternatives snack for kids which they can bring with them to school in their everyday active lifestyle. Better for you product is becoming a mandate in most sale channels. For Smart candy, the main focus channel is mainstream distributions, which included traditional distribution less than the entertainment places. Healthier eating habit becomes a trend in customer lifestyle which Smart candy will be the product of step ahead of their competitors. People prefer the healthier snack with good flavors.

Candy that's good for you? Better believe it

The functional candy, which can provide the performance to stabilize blood sugar level and other health benefits have become more popular not just in Asian market but also worldwide. The trend of sugar confectionery is included medicated confectionery and sweets with add more benefit by herbal or exotic natural ingredients, some of which carry specific health claims. A previous year ago, confusing in the function of additional ingredients are occurring in the consumer mind. Both mint and vitamin are still unknown to the consumer whether they are health concerning of just mood food. However, now consumers are understood and view it as food more rather than therapeutic products.

Dietary supplements for the elderly

There are many different types of function and form of the dietary supplement. Some of them are guaranteed for health benefit. Even they have to pass certify from the U.S. Food and Drug Administration (FDA) but certify is for just safety and the functions claim. (Agingcare.com, 2015) Hence, the most concern of taking dietary supplements is "over-the-counter" (Agingcare.com, 2015). Otherwise, the overdose is lead to illness the overall health. Therefore, the best way is to get the vitamin and mineral in the natural food consumption way instead of the supplement was taken.

Nutrition labeling

Food producer, importer, and exporter are required food labeling approvals. It is critical to provide the significant information to the consumer not only the ingredient but also nutrition fact. For the food, which has the healthiness claim, is more important to inform the details of the health information, ingredients contain and nutrition functions to a consumer on the label. The format of the labeling depends on the display location and varies in each country also. In general, most of the information data is involved with the ingredients, process and nutrition data.

Industry voices on consumer demand for functional confectionery

The confectionery sweet has the potential growing to mainstream because the consumer is developing their idea to appreciate the value added that can improve their health. Hence, there are different requirements for the particular type of customers such as age, income and level of education. Moreover, the reason for consuming the confectionery sweet might be changing in consumer perception that they are not only looking for something tastiness but still give some benefit to their health also.

Confectionery as ‘the new tobacco’ and future functional trends

The confectionary sugar should become the new era of tobacco, which could be in turn the benefit of additional ingredient to the unhealthy product. In case of the sweet confectionary product tend to be more popular as tobacco, there is the possibility for the lawyer and government supposed to coming and looking carefully to the conduct the direction of the sweet confectionary industry. However, there is a great potential for moving into a healthier angle of confectionary sweet that are in two inventive ways, which are functional gums and flavor changing. Energy chewing gum with containing Taurine, Guarana, and B-vitamin could be a sale in more than 50 markets as well as in younger consumers. The function of gum is also promoted the breath freshener since it has similar principle as the capsule fragrance introduced by French firm "Swallowable perfume" (Oliver, 2012). It is also possible to add more excitement to the product such as changed flavor during the consumption especially for the young market, which loves to try basic things.

Process food to Thailand

According to the geography, culture and historical, Thailand is the world food hub. The growing, harvesting and processing are the whole food supply happening in Thailand and export to the global market. The necessary regulations within the country as well as in response to international competition and demand in term of hygiene, safety, toxic and quality in both raw and processed food is concerned as the primary factor to exported goods to another country where the government needs to take a closer look. Every product which requests to sale to consumers has to pass through the label regulation to check the information declare on the packaging include nutrition fact and other relevant information for the user. Although most processed food products of Thailand are exported, the domestic consumption is growing due to the busy lifestyles that have brought an increasing trend of convenient food options, which attract foreign investors including Indians to invest in Thailand.

Functional confectionery: Finding the sweet spot

Chocolate is the potential food ingredient lead to success in the functional candy industry because in there is benefit in chocolate both in the physical and also a psychological and emotional benefit for the customer. Consider the chocolate as a core of success in the market; a company should consider innovating the healthiness benefit of chocolate, instating of only focusing in the tastiness. The superior in chocolate that outstanding from the other natural ingredient is chocolate is perceived as mental help food. Therefore, the chocolate trend would shift from focusing on health issue by adding some nutritional, vitamin formula or any substantive to be promoting the mental benefit by adding the natural ingredient or some component to promote relaxation.

CHAPTER 3

RESEARCH DESIGN

Many methods used for collecting data in this research but mainly in quantitative studies, then, analyze those data. The conclusion was providing in detail how of these insights. The approaches, which take were not only looking for collected the extensive database for more accurately in the result but also find out more potential relevant information for more accurately conclusion.

3.1 Keys variable of the study

There are two categories of variables in every research design: dependent variable and independent variable.

Dependent variable: 1) Belief efficacy of various types of functional candy and the impact of the description of them, 2) Price expectation has validated the values that impact to customer mind both impulse purchase and deliberate purchase 3) Purchase intention is aiming to predict the buying behavior.

Independent variables: the independent variable will cover all factors that affect to the dependent ones which are the type of functional candy, the statement toward the type of functional candy and the consumer perception.

3.2 Target population

The sample was selected using convenient sampling (non-probability sampling). A non-probability sampling technique was developed, where questionnaires were distributed to attendees of 200 respondents. The survey was targeting to aging people.

The target respondents of the study are characterized as follows:

- Male and female age of 55-70
- Residents of Thailand

3.3 Questionnaire design

The questionnaire was designed base on the objective of the research, which was to study three main areas, which were belief efficacy, price expectation and purchase intention in aging population within sweet. For belief efficacy in this research, the area of the study tested the theory that adding health benefits such as vitamin, antioxidants and energy could extend a person's health expectancy. Moreover, price expectation was explored regarding the priority and the amount of money the aging population willingness to pay for the value of functional candy. So lastly, the study of purchase intention was to identify the relevant motivation for self-use and other as a gift for special occasion. The questionnaire was aiming to collect data to test hypotheses by using the statistical analysis.

The general benefits of functional candy include 1.) Freshen breath 2.) Relieve throat discomfort 3.) Contain low or no sugar 4.) Contain vitamin or collagen and 5.) Contain natural herbal additives. The likert scale was a required respondent to identify a degree of agreement and disagreement of 1.) Good taste and good for health and 2.) A degree of important and unimportant about stimulus objects.

The new features of functional candy ask in the questionnaire, which includes 1) Safe to consume 2) Good taste, 3) Increase energy, 4) Improve memory 5) Relieve small aches in muscles 6) Reduce weight 7) Improve skin appearance 8) Reduce effects of stress 9) Improve mind concentration 10) Reduce risk of heart

disease 11) Improve bone health 12) Reduce high blood pressure 13) Reduce pain in joints (fingers, knees, ankles and hips) 14) Help to relax and 15) Lower cholesterol.

The questionnaires were separated into three versions. Each version A, B and C would be identical except for question 7 and 8. The differentiations of each questionnaire were based on combinations of three types of product claims and two types of product benefits. Version A of the questionnaire would have questions 7a and 8a. Version B would have questions 7b and 8b. Version C would have questions 7c and 8c. The three versions were used as part of different set of specific benefits in fictional candy, which supposed to add to meet the demand as follows: The difference between versions A, B, and C were shown in the table below:

Table 3.1 Table of type of product claim

Type of product claim	Physiological product benefit	Psychological product benefit
Nutrition (questions 7a and 8a)	Healthier-looking skin	Improves memory
Health (questions 7b and 8b)	Lowers cholesterol	Reduces risk of dementia
Disease (questions 7c and 8c)	Contains vitamins and omega-3	Contains herbs ingredient

3.4 Pilot testing

The three versions of the questionnaire had been developing through pilot-test, pre-test, and re-design. The questionnaire was administered on paper, the data collected need to be entered manually for avoiding the error. Three versions of questionnaires surveys were distributed to 200 respondents equally at Lumpini national park which located in the center of the target group on 6, 7, 13 and 14 February 2016. The sample was selected using convenient sampling (non-probability sampling). Target respondents of the survey were both male and female age between 55-70 years old and had to reside in Thailand. The sample was selected by using convenient sampling method (non-probability sampling).

One the other hand, to reduce confusion and incompleteness problem, which found at the very beginning of data collected state. The researcher discovered

that most of the respondent had difficulty to reading or writing in Thai. Some of them also had certain physical disabilities that interfere with their ability to understand the questions and give the answer. Therefore, to maximize the response rate and minimize the error, researcher offering help for respondents in explaining and writing down the answer on the questionnaire. These were the better way to collect data for better quality from these surveyed. After the data are collected, the researcher was enter, checking and cleaning data in Microsoft Excel program.

3.5 Data analysis plan

The research used quantitative analysis. Quantitative information will be obtained from questionnaire surveys analyzed by using Statistical Package for the Social Science (SPSS) such as mean, mode, ANOVA and t-test and small-scale in-depth interview. Asking the proper trends and wording term conducted the in-depth interview, which mean and understandable to people and how people interact with the topic. The result provided more understanding in the qualitative. The use of that information was considered as the idea to design the qualitative research and analysis. The research method, question, and analysis were all connects to each other. The result aimed to find the common form of insight toward the particular group who is Thailand aging people.

CHAPTER 4

RESEARCH FINDING AND RESULT

4.1 Review of in-depth interview

The informal interview with three respondents was conducted on October 30, 2015, which was mainly to test whether the key variables (belief efficacy, price expectation, and purchase intention). Those key variables were measured as an influence on the area of study. However, the interview also aimed to explore other potential aspects, which related to the research topic.

Table 4.1 Background characteristics of respondents

Background Character	Respondent 1	Respondent 2	Respondent 3
Age	55	62	65
Gender	Male	Female	Female
Marital Status	Married and living together	Widowed	Widowed
Education	Undergraduate	Undergraduate	High School
Resident	Urban	Urban	Urban
Number of family members	More than 5	3	3

Based on the interviews, there two main benefits of consuming functional candy were for self-use and gifting. For self-use, it was mainly used the candies for the health concern such as preventing dryness of throat, relieve a cough, relieve the discomfort of throat, hoarse, fresh breathing and additional food supplement. On the other hand, the functional candy was purchased for gifting as a gift in the either special event or important occasion such as sharing when meeting with family and as a gift for friend.

Surprisingly, the insight from interview showed that in aging people's perception of functional candy was not just a typical snack but also consider as a good gift for their beloved people. Therefore, it could be concluded that aging people's purchased criteria of functional candy was not only due to the self-use but also gifting aspect (personal and non-personal) as well.

4.2 Type of user who purchase functional candy

Almost a quarter (57%) of those surveyed for this project had brought functional candy is segment as the medium user who consumes about (50% - 15%) from total candy consumption. They spend about ₱71.21 per month. However, some of 30% of surveys consumers are the massive consumer spending about ₱191.93 per month which significant greater than the medium user spending by 2.7 times. The last group of consumer almost quarter (13%) is light call user. They spend about ₱32.13 per month. The heavy user is the most potential group who likely to buy the functional candy which adding more product benefit rather than new flavor. This result could imply that there is an opportunity to encourage the medium user who is the largest user group to spending more by introducer promotional, shelf talker and in-store display.

4.3 Consumption of functional candy in the past three months

Q.1) In the past three months, which of the following types of functional candies have you bought either for yourself or someone else? Candies that . . .

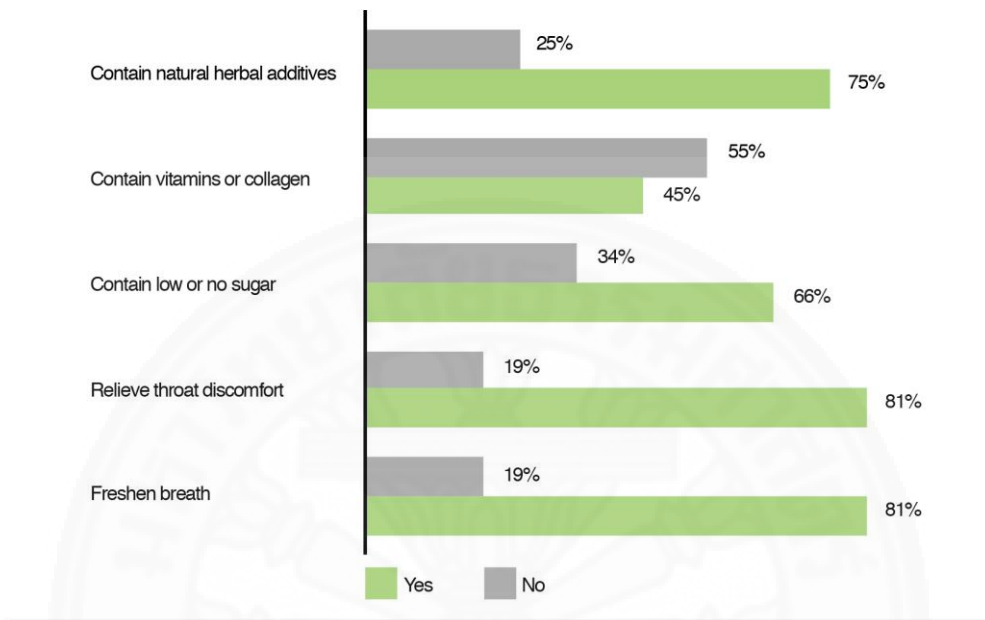


Figure 4.1 Consumption of functional candy in the past three months

Nowadays, the functional candy in Thailand has been already introducing much value added product both in functional health claim and extra health benefit ingredient. Consumers purchase the functional candy by 39.67% from overall candy purchases. However, the result from Figure 1 shows that the majority of functional candy consumption is for relieves throat discomfort (81%) and freshening breath (81%). The vitamin and collagen are the lowest consumption among other feature of the product. The issue to find out the opportunity for sugar confectionery both what should be the potential benefit and how to convince a customer to purchase those products in the specific targeting of Thailand aging people.

4.4 Key features of premium of functional candy

Q.4) When you buy candy for yourself, what is important when deciding which candy to buy? Make a mark on the line below to indicate relative importance of Good Taste or Good for Health.

Q.5) When you buy candy for friends or relatives, what is important when deciding which candy to buy? Make a mark on the line below to indicate relative importance of Good Taste or Good for Health.

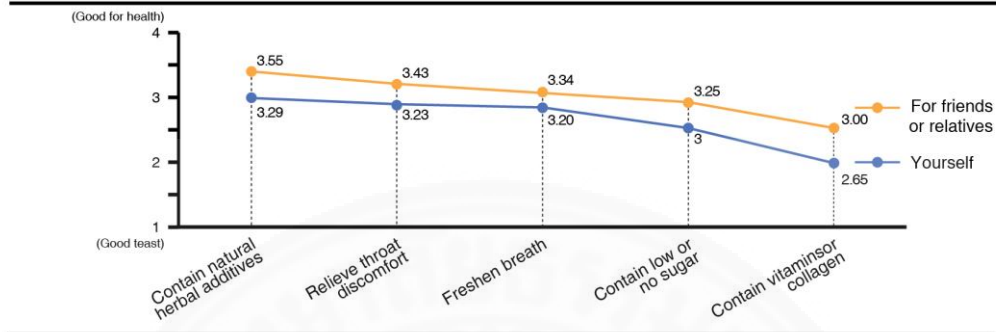


Figure 4.2 Mean value for each type of functional candy products, which buy, for yourself and friends/relatives

There are two primary purposes when consumers assort to buy functional candy, which is for self-use (yourself) and gifting (friends/relatives). For self-use, the mean value tends to closer to good taste more rather than good for health. For gifting, the average value tends to closer to good for health more rather than good taste. This result implies valuable insight to develop product features to match with the purchase reason for both self-use and gifting.

Table 4.2 Paired sample t-test for each type of functional candy products which buy for

Feature	Buy for yourself (Mean)	Buy for friends/ relatives (Mean)	t	p-value
Contain natural herbal additives	3.29	3.55	-4.45	0
Relieve throat discomfort	3.23	3.43	-2.74	0.007
Freshen breath	3.20	3.34	-2.80	0.005
Contain low or no sugar	3.00	3.25	-4.20	0
Contain vitamins or collagen	2.65	3.00	-4.68	0
(Good Taste 1 2 3 4 Good for Health)				

The analysis is comparing paired sample t-test between good taste. The hypothesis is set as $H_0: \mu_d = 0$ and $H_a: \mu_d > 0$. There is the rigid dimension when consumer assort which is main value to purchase functional candy for yourself as self-use and for friends/relatives as gifting. The result represents that it supposes to reject H_0 and conclude that for all features the customer has the significant expectation for candy. All of the surveyors tend to require for good for health more than good taste.

4.5 Attitudes toward functional candy

Q.6) Suppose a new functional candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. The new candy could have any one of the 15 features listed below. How important do you think each feature would be in making the new candy a success? Make a mark in one of the four boxes next to each of the 15 features listed below.

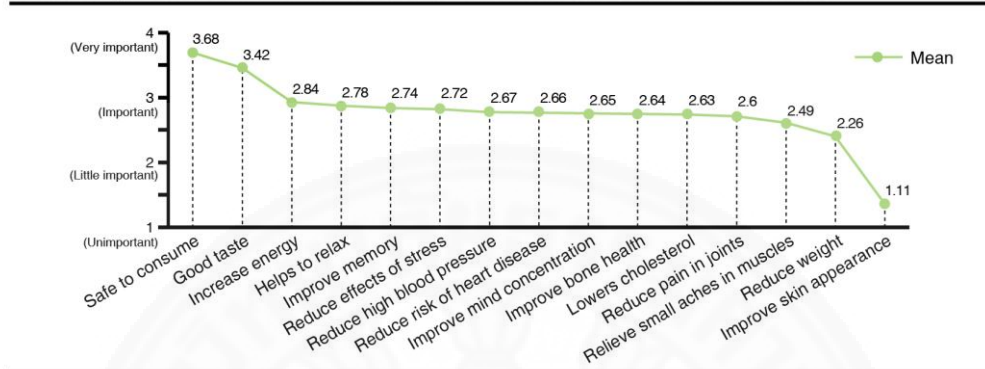


Figure 4.3 Elements in the functional candy that add value for consumer perception

The features analysis was done for priorities each feature, which has the impact to the respondent. It is the indicators for correlate and understanding which feature should be the key attribute. This key attribute supposed to be the strongest association with purchase intention and willing to pay for new product benefit. The features, which introduce in the research, are expected to be the features that respondent is interested and has a low barrier to try the new product. Especially for aging people, the result shows that the safe to consume is highly demand to purchase and consume functional candy. Meanwhile, the good taste is also considered as the second priority for them. However, another feature for psychological and physical product benefits is no significant differentiating to each other. For psychological product benefits such as increased energy, helps to relax, improve memory, reduce effects of stress and improve mind concentration are remain the similar value. Same as physical product benefits such as reduce high blood pressure, reduce risk of heart disease, improve bone health, lower cholesterol, reduce pain in joints and relieve small aches in muscles are also likely the same value on the functional candy additional benefits. The feature of increase energy is the potential feature of functional candy, which respondents tend to be interesting.

On the other hand, a consumer does not value improve skin appearance as great value added to the functional candy anymore. This result is possible not only to suggest to new product launches claiming set of features to capture attention for individual targeting consumer but also possible to raising selling price to the product. It also represents the willingness to pay more for functional candy, which has a safe to consume feature combining with other feature health benefits. The flavors and ingredient are considered as a good taste to be attractive for consumer and also possible to be the primary differentiation for other competitors.

4.6 Segmentation

Q.6) Suppose a new functional candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. The new candy could have any one of the 15 features listed below. How important do you think each feature would be in making the new candy a success? Make a mark in one of the four boxes next to each of the 15 features listed below.

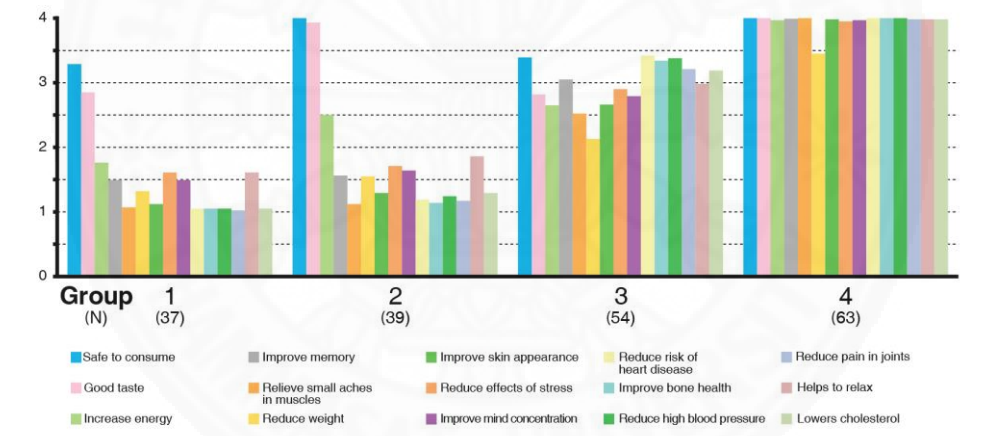


Figure 4.4 Segmentation for the premium element for functional candy

The ward's method cluster analysis technique was used to divide people into the group by finding the similarity among feature of functional candy that they demand, so that, each respondent that fall into the same cluster are share closer sense than to other clusters.

4.7 Customer profile

Q.) Demographic and Psychographic
- Gender - Age - General health condition





Title	Traditional	Safety concern	Healthcare	Extremer
	 (Group1)	 (Group2)	 (Group3)	 (Group4)
Gender	♀ Female (1.78)	♀ Female (1.56)	♀ Female (1.68)	♂ Male (1.42)
Age	55 - 70 Years old	56 - 60 Years old	50 - 55 Years old	More than 70 years old
General health condition (mean)	Average (3.22)	Average (3.43)	Good (3.59)	Average (3.14)
(N)	(37)	(39)	(54)	(63)

Figure 4.5 Customer profile

Table 4.3 Segmentation of customer profile by age

Age	Ward Method				Total
	Group1	Group2	Group3	Group4	
50 – 55 years	5	10	29	27	71
56 – 60 years	15	20	21	14	70
65 – 70 years	15	8	3	16	42
More than 70 years	2	1	1	6	10
Total	37	39	54	63	193
Average age (Weighted Mean)	61.28	58.55	55.53	58	58.05

This information was analyzed by ANOVA, cross-tabulation and chi-square test with many sets of data from the survey. The analysis includes the features sets, comparing with age, gender and general health condition. It allows taking a step further to make the assumption of segment target's characteristic. Introducing four group of customer profile that sharing similar characteristics, the demographic and

psychographic provide us the information of each group of segmentation. This result gives us an opportunity to create the critical winning edge by enable making more efficient in the advertising, proper marketplace and boost up sales.

Group 1: Traditional, This group of people is the wide age range between 55-70 years old (Average age 61.28 years old) but their demand for the functional candy is very broad. Therefore, it highly depends on the marketing strategy, which appropriates to encourage this kind of customer to purchase more. Because of comparing to another group, this group has the lowest demand on every feature. Figure out more detail is requiring in order designing the product benefit, which will fit into this target's need and lifestyle.

Group 2: Safety concern, this group of people is named as a safety issue because they have the highest mean value in "safe to consume". This group of people is the wide age range between 56-60 years old (Average age 58.55 years old). Hence, they still seek more the sweet treat and good taste. It can imply that this group of people looking for the excitement from the functional candy, especially for flavor inspiration, which brings the new value to the taste, experience.

Group 3: Healthcare, this group of people is mostly female age around 50 - 55 years old (Average age 55.53 years old). The unique character of this targeting is they are only one group who claim themselves as a good general health condition. From the set of features which consumer are enjoyable sensory health quality. Not only general benefit such as safety and good taste that they still concern but also other product benefits may drive their demand to consume in functional candy too.

Group 4: Extremer, this aging people group is far more willing to consume non-traditional product benefit in every feature which offering in the market. This group of people is the wide age range between 65-70 years old (Average age 58.00 years old). On the other hand, they still seek an exotic taste, which brings up the new taste experience to them too. There is the opportunity in a creative way to deliver the benefit product benefit, which is the new way of functional candy for them.

4.8 Belief efficacy and price expectation

Table 4.4 The belief that adding health benefits of version A

Version A	Physiological (Mean) Healthier-looking skin	Psychological (Mean) Improves memory	t	p-value
Effectiveness	3.05	3.31	-2.68	0.009
Price expectation	₱ 33.26	₱ 33.00	-0.38	0.970
Safety	3.26	3.32	-0.58	0.570
Referral	1.71	1.80	3.38	0.001

Table 4.5 The belief that adding health benefits of version B

Version B	Physiological (Mean) Lowers cholesterol	Psychological (Mean) Reduces risk of dementia	t	p-value
Effectiveness	3.01	3.32	-3.03	0.003
Price expectation	₱ 33.42	₱ 35.22	-1.25	0.220
Safety	3.10	3.33	-2.94	0.004
Referral	1.75	1.82	1.69	0.096

Table 4.6 The belief that adding health benefits of version C

Version C	Physiological (Mean) Contains vitamins and omega-3	Psychological (Mean) Contains natural ingredients	t	p-value
Effectiveness	33.42	3.59	-1.78	0.080
Price expectation	₱ 31.75	₱ 30.66	1.71	0.092
Safety	3.51	3.72	-1.92	0.058
Referral	1.79	1.88	3.18	0.022

Safe to consume and good taste are the key features to driving consumption in the functional candy market. Among the physiological and psychological product benefits, It is surprising that respondents seem willing to pay more for functional candy which adding the mental product benefit. Associating with the concern safety value also require higher value than the physiological product benefit. It implies that adding more the psychological product benefit would be an opportunity to charge the premium price for aging people. In term of the good taste assorted, the healthcare group of people seems to weight the lowest value the good taste factor. They pay less attention to the taste comparing to the other features. While other groups of people still really concern in the flavor of functional candy. The psychological product benefit is more attractive for a customer to refer the product to friends and relative.

The functional candy contains natural ingredients benefit is got the highest value to make the reference in functional candy, but it also requires the reliability to be safe to a consumer in the highest value comparing with the improve memory and reduces the risk of dementia. The psychological product benefit is more attractive for a customer to refer the product to friends and relative. The functional candy contains natural ingredients benefit is got the highest value to make the reference in functional candy, but it also requires the reliability to be safe to a consumer in the highest value comparing with the improve memory and reduces the risk of dementia.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Conclusion and recommendation

Combining the values of good taste and good for health can priority by the purchase occasion for a consumer. There is a significant differentiation of personal motivation and social motivation. The result shows that consumer concerns in the good for health when they purchase the functional candy for gifting to friends and relatives. However, they also regard the good taste as the important factor when they buy for self-use. Growing the potential market is be able to concern the referral rate. Due to among of the value of referral rate from the survey, the respondents in the younger group are more likely to be sensitive in the physiological and psychological product benefit. To convince this group of people to purchase the new feature in the functional candy should bring out the safe to consume as the core message combining with adding product benefit.

Because of the functional candy is better for health comparing with the regular sweet candy, which is not. This report stated that the functional candy is being able to associate with the health benefit both in the physiological and psychological feature and increase in purchase intention more than a fun snack for sweetness and flavor. This is also found as an opportunity to encourage and attract customers. However, they still prefer the product that conveys the safe to consume as the main aspect. As with the safe to consumer concern, customer seems to resist the product with bad taste. Adding a natural ingredient is perceives as the most will to try and referral to other, so, it provides the opportunity for the industry not just to attract customers by adding the artificial flavoring and additive. Hence, it is possible to sell them more expensive because they will pay for adding natural ingredients instead of other product benefits. Surprisingly that aging people group of people, mostly in the seventies who are in the extremer group are the interested group who willing to try and will to pay more in the functional candy which adding more in whatever physiological and psychological product benefit. This insight could be the opportunity

to target this target group as an early adopter. The health-promoting feature supposed to be very popular within this target group.

Finally, aging people is looking for the new benefit of functional candy. Therefore, there are many opportunities for functional candy trends to capture niche target marketing because there are many ways to segment the target market. Creating the new experience in flavoring, entertaining, exotic and benefit functional candy is interested combination for functional candy brand to create the new way of unique value to serve that targeting market profile.

5.2 Future research

The main problem of research is the limitation of research time and strategy. Therefore, more understanding in the customer profile and gain deeply detail of the research. The future research is aiming to find more useful data such as personal and social function, customer profile, target market size, target market differentiation, customer behavior, the reason for purchase and trend in consumption.

REFERENCES

Electronic media

- Journal of Consumer Marketing. (2014). Perceived health and taste ambivalence in food consumption, Retrieved October 27, 2015 from http://www.researchgate.net/publication/279503817_Journal_of_Consumer_Marketing_Perceived_health_and_taste_ambivalence_in_food_consumption_Article_information_For_Authors?enrichId=rgreq-1d2e43a3-643e-4228-809c-dc5e65f571fd&enrichSource=Y292ZXJQYWdlOzI3OTUwMzgxNztBUzoyNDYzNTQ0MTI4MzA3MjBAMTQzNTc0Njg3Nzc2MQ%3D%3D&el=1_x_3
- Kacey Culliney. (2013, June). Energy and antioxidants: Hot herbal candy trends, Retrieved October 25, 2015 from <http://www.confectionerynews.com/Ingredients/Energy-and-antioxidants-Hot-herbal-candy-trends>.
- Maggie Hennessy. (2015, April). Smart candy vitamin-infused kids' snack founder: 'Functional doesn't have to come in a brown paper bag', Retrieved October 25, 2015 from <http://www.foodnavigator-usa.com/Manufacturers/Smartcandy-Functional-doesn-t-have-to-come-in-a-brown-paper-bag>
- Natalie Cajic. (2013). Candy that's good for you? Better believe it, Retrieved October 25, 2015 from <http://www.confectionerynews.com/Manufacturers/Carmit-Candy-CEO-Specialty-know-how-gives-bite-to-functional-candy-shift>
- National Institute on Aging. (2015). Dietary Supplements for the Elderly: More is Not Always Better, Retrieved October 25, 2015 from <https://www.agingcare.com/Articles/Dietary-Supplements-for-Seniors-More-is-Not-Always-Better-133854.htm>
- Notification of the Ministry of Public Health. (1998). Nutrition Labeling, Retrieved October 25, 2015 from http://www.fda.moph.go.th/eng/eng_food/Notification/182-41.pdf

- Oliver Nieburg. (2013, June). Confectionery as 'the new tobacco' and future functional trends, Retrieved October 25, 2015 from
<http://www.confectionerynews.com/Ingredients/Industry-voices-on-consumer-demand-for-functional-confectionery>
- Oliver Nieburg. (2013, June). Industry voices on consumer demand for functional confectionery, Retrieved October 25, 2015 from
<http://www.confectionerynews.com/Ingredients/Industry-voices-on-consumer-demand-for-functional-confectionery>
- SEA-LAC Tread center. (2014). Processed food to Thailand, Retrieved October 25, 2015 from
<http://www.indianembassy.in.th/pdf/Final%20Report%20Market%20Survey%20Thailand%20Food%20Processing%20Industry%20March%202014.pdf>
- Sean Moloughney. (2011, March). Functional Confectionery: Finding the Sweet Spot, Retrieved October 25, 2015 from
http://www.nutraceuticalsworld.com/issues/2011-03/view_features/functional-confectionery-finding-the-sweet-spot#sthash.k3Itsolm.dpuf



APPENDICES

APPENDIX A

SURVEY QUESTIONNAIRE

Questionnaire (Version--)

Student name Kanoknapa Pongboripat

Introduction. This study is conducted as part of a class at Thammasat University. The study will gather data only from Thai people age 50 and over. All responses to this questionnaire will be kept confidential. If you have any questions about this survey, please call K. Pang at +6681-199-6885.

This survey asks elderly Thai consumers about their beliefs about “functional candies.” Functional candies are sweets that contain extra ingredients that provide greater health benefits when compared to ordinary candy. An example of a is NIN JIOM HERBAL CANDY

Q1.) In the past three months, which of the following types of functional candies have you bought either for yourself or someone else? Candies that . . .

- | | | |
|------------------------------------|-----|----|
| • Freshen breath | Yes | No |
| • Relieve throat discomfort | Yes | No |
| • Contain low or no sugar | Yes | No |
| • Contain vitamins or collagen | Yes | No |
| • Contain natural herbal additives | Yes | No |

(If no purchase, then end the interview)

Q.2) Thinking about all your candy purchases in a typical month, about what percent of your purchases were functional candies? About _____ percent.

Q.3) In a typical month, about how much would you spend on candy of all types (not just on functional candies)? _____ baht

Q.4) When you buy candy for yourself, what is important when deciding which candy to buy? Make a mark on the line below to indicate a relative importance of Good Taste or Good for Health.

- Freshen breath

Good Taste	1	2	3	4	Good for Health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Relieve throat discomfort

Good Taste	1	2	3	4	Good for Health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain low or no sugar

Good Taste	1	2	3	4	Good for Health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain vitamins or collagen

Good Taste	1	2	3	4	Good for Health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain natural herbal additives

Good Taste	1	2	3	4	Good for Health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Q.5) When you buy a candy for friends or relatives, what is important when deciding which candy to buy? Make a mark on the line below to indicate the relative importance of Good Taste or Good for Health.

- Freshen breath

Good taste	1	2	3	4	Good for health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Relieve throat discomfort

Good taste	1	2	3	4	Good for health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain low or no sugar

Good taste	1	2	3	4	Good for health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain vitamins or collagen

Good taste	1	2	3	4	Good for health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

- Contain natural herbal additives

Good taste	1	2	3	4	Good for health
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Q.6) Suppose a new for elderly Thai people would be sold at stores without needing a prescription from a doctor. The new candy could have any one of the 15 features listed below. How important do you think each feature would be in making the new candy a success? Make a mark in one of the four boxes next to each of the 15 features listed below.

Feature	Unimportant	Little important	important	Very important
Safe to consume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good taste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve memory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relieve small aches in muscles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve skin appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce effects of stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve mind concentration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce risk of heart disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve bone health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce high blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce pain in joints (fingers, knees, ankles, hips, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps to relax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lowers cholesterol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q.7) Suppose a new candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. A statement on the package says “Regular consumption of this product will help you to have younger, -----.
Eat one candy after each meal each day and enjoy the good taste.”

a. How effective do you think this product would be in losing weight?

Excellent	Very good	Good	Average	Below average	Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b. How much a package of 20 would mints cost at 7-11 or Family Mart?
_____baht

c. How safe would this product be?

Excellent	Very good	Good	Average	Below average	Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. If you used this new candy, would you share it with your friends?

Yes	No
<input type="radio"/>	<input type="radio"/>

Q.8) Suppose a new candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. A statement on the package says “Regular consumption of this product will help ----- . Eat one mint each morning after your first meal and enjoy the good taste.”

a. How effective do you think this product would be in improving memory?

Excellent	Very good	Good	Average	Below average	Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b. How much a package of 20 would mints cost at 7-11 or Family Mart?
_____ baht

c. How safe would this product be?

Excellent	Very good	Good	Average	Below average	Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. If you used this new candy, would you share it with your friends?

Yes	No
<input type="radio"/>	<input type="radio"/>

Q.9) Please answer the next four statements using a rating scale.

Q9.1) I think a person’s day should be planned ahead each morning.

Strongly disagree	Disagree,	Average	Agree,	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9.2) Thinking about the future is pleasant to me.

Strongly disagree	Disagree,	Average	Agree,	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9.3) I like to make my decisions now, rather than wait for later.

- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly
disagree | Disagree, | Average | Agree, | Strongly agree |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q9.4) I try to live one day at a time and not worry about tomorrow.

- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly
disagree | Disagree, | Average | Agree, | Strongly agree |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please answer the next five questions about yourself.

Q.10) Compared to other Thais of your age, how would you describe your general health condition?

- | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Excellent | Very good | Good | Average | Below average | Poor |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q.11) What is your education level?

- Below bachelor's degree
- Bachelor's degree
- Master's degree
- Other.....

Q.12) What is your gender?

- Male
- Female

Q.13) Age

- 50-55 years
- 56-60 years
- 65-70 years
- More than 70 years

Q.14) Household monthly income

- Less than 10,000 baht
- 10,001 - 20,000 baht
- 20,001 - 30,000 baht
- More than 30,000 baht



APPENDIX B
TABLES

Q1.) In the past three months, which of the following types of functional candies have you bought either for yourself or someone else? Candies that.

	Yes		No	
	Fq.	%	Fq.	%
Freshen breath	185	81	43	19
Relieve throat discomfort	187	81	81	19
Contain low or no sugar	142	66	73	34
Contain vitamins or collagen	95	45	118	55
Contain natural herbal additives	165	75	55	25

Q.2) Thinking about all your candy purchases in a typical month, about what percent of your purchases were functional candies? About _____ percent.

Mean	39.67
Std. Dev	27.45

	% Valid	% of purchase
Heavy User	30	60 - 20
Medium User	57	15 - 50
Light User	13.00	0 - 10

Q.3) In a typical month, about how much would you spend on candy of all types (not just on functional candies)? _____ baht

Mean	฿ 109.5
Std. Dev	฿ 96.85

	% Valid	Price rang	Mean
Heavy User	37	฿ 100-400	฿191.93
Medium User	58	฿ 22-90	฿71.21
Light User	5.00	฿ 0-20	฿32.13

Q.4) When you buy candy for yourself, what is important when deciding which candy to buy? Make a mark on the line below to indicate relative importance of Good Taste or Good for Health.

Q.5) When you buy a candy for friends or relatives, what is important when deciding which candy to buy? Make a mark on the line below to indicate relative importance of Good Taste or Good for Health.

Title	Buy for yourself		Buy for friends/ relatives		t	p-value
	N	Mean	N	Mean		
Freshen breath	51	3.20	51	3.34	-2.80	0.005
Relieve throat discomfort	54	3.28	54	3.43	-2.74	0.007
Contain low or no sugar	47	3.00	47	3.25	-4.20	0
Contain vitamins or collagen	34	2.66	34	3.00	-4.68	0
Contain natural herbal additives	52	3.29	52	3.55	-4.45	0
(Good Taste 1 2 3 4 Good for Health)						

Q.6) Suppose a new for elderly Thai people would be sold at stores without needing a prescription from a doctor. The new candy could have any one of the 15 features listed below. How important do you think each feature would be in making the new candy a success? Make a mark in one of the four boxes next to each of the 15 features listed below.

			1 = Unimportant		2 = Little Important		3 = Important		4 = Very Important	
	Mean	Std. D.	Fq.	%	Fq.	%	Fq.	%	Fq.	%
Safe to consume	3.68	0.57	3.00	1.30	3.00	1.30	56.00	23.60	163.00	68.80
Good taste	3.42	0.70	3.00	1.30	18.00	7.60	86.00	36.60	117.00	49.40
Increase energy	2.84	1.02	30.00	12.70	46.00	19.40	75.00	31.60	71.00	30.00
Helps to relax	2.78	1.10	32.00	13.50	71.00	30.00	37.00	15.60	8.00	35.90
Improve memory	2.74	1.17	46.00	19.40	48.00	20.30	42.00	17.70	83.00	35.00
Reduce effects of stress	2.72	1.11	36.00	15.20	70.00	29.50	40.00	16.90	79.00	33.30
Reduce high blood pressure	2.67	1.35	80.00	33.80	12.00	5.10	33.00	13.90	98.00	41.40
Reduce risk of heart disease	2.66	1.36	82.00	34.60	11.00	4.60	33.00	13.90	99.00	41.80
Improve mind concentration	2.65	1.17	48.00	20.30	60.00	25.30	38.00	16.00	78.00	32.90
Improve bone health	2.64	1.36	83.00	35.00	13.00	5.50	30.00	12.70	98.00	41.40
Lowers cholesterol	2.63	1.33	79.00	33.30	16.00	6.80	37.00	15.60	92.00	38.80

	Mean	Std. D.	1 = Unimportant		2 = Little Important		3 = Important		4 = Very Important	
			Fq.	%	Fq.	%	Fq.	%	Fq.	%
Reduce pain in joints	2.60	1.34	83.00	35.00	14.00	5.90	37.00	15.60	90.00	38.00
Relieve small aches in muscles	2.49	1.33	87.00	36.70	24.00	10.10	31.00	13.10	83.00	35.00
Reduce weight	2.26	1.15	76.00	32.10	60.00	25.30	37.00	15.60	48.00	20.30
Improve skin appearance	1.11	1.27	77.00	32.50	39.00	16.50	33.00	13.90	76.00	32.10

Q.7) Suppose a new candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. A statement on the package says “Regular consumption of this product will help you to have younger, ----- . Eat one candy after each meal each day and enjoy the good taste.”

Q8.) Suppose a new candy for elderly Thai people would be sold at stores without needing a prescription from a doctor. A statement on the package says “Regular consumption of this product will help ----- . Eat one mint each morning after your first meal and enjoy the good taste.”

Version A	Physiological Healthier-looking skin (Mean)	Psychological Improves memory (Mean)	t	p- value
Effectiveness	3.05	3.31	-2.68	0.009
Price expectation	฿ 33.26	฿ 33.00	-0.38	0.970
Safety	3.26	3.32	-0.58	0.570
Referral	1.71	1.80	3.38	0.001

Version B	Physiological Lowers cholesterol (Mean)	Psychological Reduces risk of dementia (Mean)	t	p- value
Effectiveness	3.01	3.32	-3.03	0.003
Price expectation	฿ 33.42	฿ 35.22	-1.25	0.220
Safety	3.10	3.33	-2.94	0.004
Referral	1.75	1.82	1.69	0.096

Version C	Physiological Contains vitamins and omega-3 (Mean)	Psychological Contains natural ingredients (Mean)	t	p- value
Effectiveness	33.42	3.59	-1.78	0.080
Price expectation	฿ 31.75	฿ 30.66	1.71	0.092
Safety	3.51	3.72	-1.92	0.058
Referral	1.79	1.88	3.18	0.022

Q.9) Please answer the next four statements using a rating scale.

	Mean	Std. D.
I think a person's day should be planned ahead each morning.	3.91	0.82
Thinking about the future is pleasant to me.	4.07	0.71
I like to make my decisions now, rather than wait for later.	3.86	0.84
I try to live one day at a time and not worry about tomorrow.	4.4	0.63

Q.9) Compared to other Thais of your age, how would you describe your general health condition?

Mean	3.37
------	------

	Fq.	%
Excellent	1	1
Very good	5	2
Good	96	41
Average	106	45
Below average	24	10
Poor	0	0

Q.10) What is your education level?

	Fq.	% Valid
Below Bachelor's degree	58	24.50
Bachelor's degree	126	53.20
Master's degree	49	20.70
Other	1	0.40

Q.11) What is your gender?

	Fq.	%
Male	97	41
Female	138	59

Q.12) Age

	Fq.	% Valid
50-55 years	85	2
56-60 years	80	36
65-70 years	46	34
More than 70 years	10	19

Q.13) Household monthly income

	Fq.	% Valid
Less than ₱10,000	8	3.40%
₱10,001 - ₱20,000	26	11.00%
₱20,001 - ₱30,000	98	41.40%
More than ₱30,000	104	43.90%

BIOGRAPHY

Name	Miss Kanoknapa Pongboripat
Date of Birth	September 7, 1988
Educational Attainment	Attainment Bachelor degree in Architect and design, Industrial design (English program), King Mongkut's University of Technology Thonburi
Work Experiences	Marketing Executive ECHH R.O.P.

