FACTORS THAT INFLUENCE THAI HEALTH-CONCIOUS CONSUMERS IN THEIR PURCHASING DECISION TOWARDS HEALTHY SNACK FOODS

BY

MISS CHADCHANUN KONGDECHAKUL

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 2018
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ENTITLED

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was approved as partial fulfillment of the requirements for

the degree of Master of Science Program in Marketing (International Program)

on ....**13 MAY 2019**.............

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Independent Study Title	FACTORS THAT INFLUENCE THAI HEALTH-CONCIOUS CONSUMERS IN THEIR PURCHASING DECISION TOWARDS HEALTHY SNACK FOODS
Author	Ms. Chadchanun Kongdechakul
Degree	Master of Science Program in Marketing (International Program)
Major Field/Faculty/University	Faculty of Commerce and Accountancy Thammasat University
Independent Study Advisor	Associate Professor James E. Nelson
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ABSTRACT

Global healthy snack food market is growing according to the changing lifestyle of consumer towards the rising awareness of healthy and nutritious food consumption. Thai consumers are also keen for snacks that have high nutrient and convenient. This study covers the area of health and focuses on contemporary topics in applied marketing. The main research objectives are (1) to determine customer behavior of health-conscious consumer towards healthy snack foods and (2) to identify health-conscious consumers segments toward purchasing decision process of healthy snack foods. This study allows the readers to better understand the consumption behavior of health-conscious consumers and the factors that influence their purchasing decision; and how the readers can gap this business opportunity by developing the right marketing strategy based on the result of this study

The research used both exploratory and descriptive methods. Secondary research and in-depth interview were conducted to understand insight of consumer behavior and healthy snack food consumption and to further develop effective survey questionnaire design. Descriptive research was conducted by 123 qualified survey questionnaires to understand health-conscious consumer behavior and the influenced factors to purchase healthy snack foods. Target population is health-conscious consumers who purchased healthy snack foods in the past year and fall into one of

health-conscious criteria which either having exercise or eating healthy food. Survey questionnaires were analyzed by using Statistical Package for the Social Science (SPSS) software which included frequency, percentage, mean, standard deviation, Chi-square test, one-way ANOVA was used to classify consumer segments based on the consumption levels. Multiple regression was also used to examine the effect of influential factors on healthy snack foods consumption. Non-probability sampling or convenience sampling used for data collection.

The results of this study answer the following questions: what are health-conscious consumer behavior of healthy snack food consumption?, what are the factors in marketing that influence the consumer purchasing decision?, what are the influenced factors different among consumer segments?

ACKNOWLEDGEMENTS

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INTRODUCTION

1.1 Introduction

The study of factors that influence Thai health-conscious consumers in their purchasing decision towards online marketing of healthy snack foods is a contemporary topic in applied marketing in subject area of health industry. Regarding to *Grand View Research* (2017), healthy snack market size is expected to grow at a CAGR of 5.1% due to the changing lifestyle of consumer towards the rising awareness of healthy and nutritious food consumption in between meals. Asia pacific is expected to remain the second largest market during 2017 to 2025. According to *Mintel Research* (2017), Thai consumers are avid for snacks but they seek for convenient and healthy snacks such as fruit and vegetable-based snacks that has naturalness, low in sugar, high fiber etc.

The important questions that results of this study would answer are: What are health-conscious consumer behavior of healthy snack food consumption?, What are the factors in marketing that influence the consumers' purchasing decision?, Are the influenced factors different among consumer segments?

Results of this study allow readers who wish to enter to this business area, healthy snack companies, marketers and digital marketers to better understand about the influential factors of healthy snack food purchasing decision; and assist to develop effective marketing strategies for Thai health-conscious consumer.

1.2 Research Objectives

The purpose of this study is to understand factors that influence Thai health-conscious consumer purchasing decision towards consumption of healthy snack food in order to add-value into promotional and marketing and of healthy snack food businesses. The research objectives are as follows.

1. To determine customer behavior of health-conscious consumer towards healthy snack foods.

a To identify the reasons and motivation of healthy snack food consumption.

b To identify the behavior of healthy snack food consumption.

2. To identify health-conscious consumers segments toward purchasing decision process for healthy snack foods

a To identify demographics, measured by age, gender, education, income, and occupation, of health-conscious consumer.

b To identify health-conscious consumer lifestyle and activities that related to health such as exercise routine, eating routine etc.

c To identify purchasing criteria of healthy snack foods in marketing mix aspects (4P) – product , price , place , promotion.

d To identify influencing factors in online and other activities towards purchasing decision of healthy snack foods.
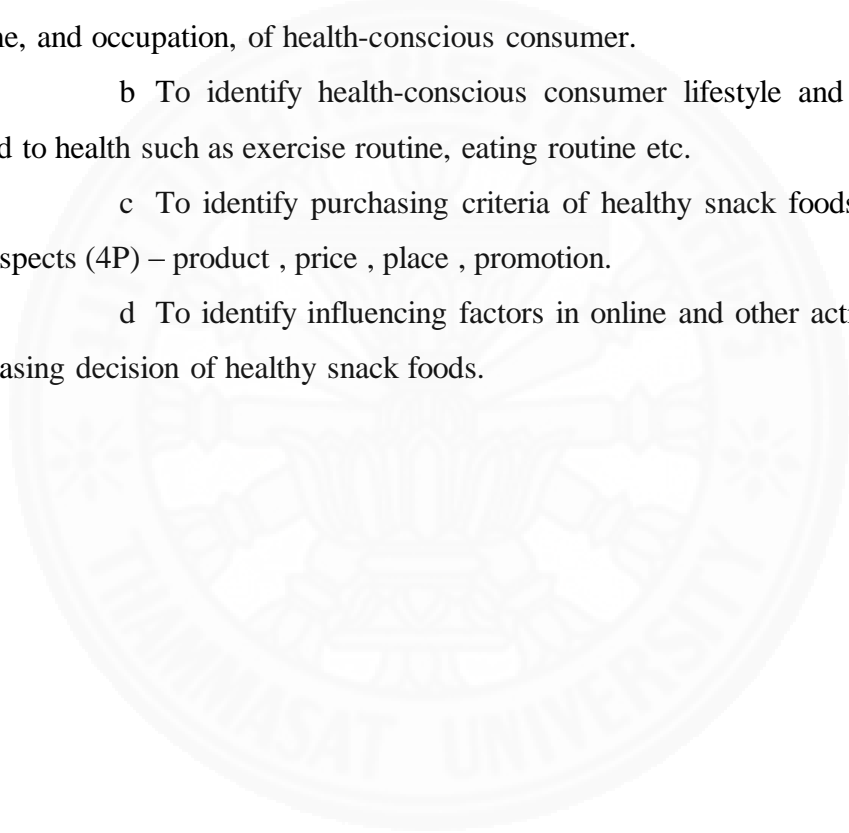
CHAPTER 2
REVIEW OF LITERATURE

2.1 Healthy Snack Foods

According to *Forbes.com* (2015), there are two main reasons of people snack globally which are for enjoyment and for nutritional reason. First, 75 percent of world consumers snack in order to satisfy hunger and craving in between meal. Second, 63 percent of world consumers snack to intake the nutrition. In addition, *Food and Nutrition* (2015) stated that people snack "to satisfy cravings for sweet or salty foods, prevent or relieve hunger, boost nutrient intakes, control weight, rev their metabolic rate, pass the time, deal with unsettling emotion or replace meals." Millennial consumers shift their mindset toward snack by seeking for the healthier snack options (Forbes, 2015). Snack trends for millennial include 1. Meal replacement with little to no clean up, 2. High-protein snack such as granola, nuts, lean meat, 3. Better-for-you snack such as fruits, bars, and veggies, and 4. Convenient which to serve on-the-go lifestyle. This shifted behavior of millennial towards rising of health awareness will also change the taste preference of the future generation; thus, creating a huge opportunity for brands to gain market share in healthy snack market.

According to the research of snack food purchasing behavior (Kahiya, 2015), the factors that drive consumer purchasing behavior come from internal and external factors which internal factors included flavor, texture, energy and satiety and external factors are those marketing aspects such as advertising or promotions, price, brand name, and product packaging. This research found that taste, price, convenience, and brand are the most important factors evaluated by consumers when making decision. Besides, for healthy eating consumer, it was found that nutritional information labelling is the important factor that used by consumer to guide their selection. Other studies indicated that price was the biggest factor when making decision on food and beverage (Babicz, Cross, & Cushman, 1994). To be specific on healthy snack, *Gilbert* (2018) stated that the cost of buying healthy snacks is the biggest barrier to purchase; 46% of UK shoppers claim that they are too expensive.

The healthiness and nutrition of food are more concerned; the study shown that in the United States, consumer seeks for high nutrient food but low calories (Healthy Eating Research, 2018). However, from the study of the affect of nutrition knowledge on food label use (Cassady & Soederberg Miller, 2015), it was found that nutrition information on food label is complex and not always communicate effectively. Conversely, consumer, by having nutrition knowledge, will pay attention on food label and ignore marketing features that do not relate to the nutritional qualities and also will effect on consumer behavior of food choice and dietary intake.

2.2 Use of Social Media

Digital marketing becomes the newest and fastest-growing marketing communication tool for a brand (Kotler & Keller, pp. 642-650). Social media, which is the important component of digital marketing, allows brand to have greater interaction, deeper level of engagement with consumers, and support the flow of word of mouth. Word of mouth is powerful marketing tool to drive sales and awareness. One interesting insight is that to decide to share the information, consumers are motivated by intrinsic factors such as they are having fun or learning, but most of the time they are influenced by extrinsic factors such as social and self-image considerations. Customer reviews are also influential. According Kotler, online customer reviews were the second-most trusted source of brand information (the first source was recommendation from family and friends). However, a research has also shown that the negative review is more likely to be influential as much as positive ones.

2.3 Summary of Literature

As summary of literature, (1) research on purchasing decision on healthy snack food in Thailand is very limited; only found research on healthy food and clean food in Thailand but not healthy snack food, (2) research about healthy snack food in other countries often examines purchase intention but never intentions associated with online activities. (3) research that focus on health-conscious consumer towards healthy snack food has as yet not examined. The study of factors that influence Thai health-conscious consumers in their purchasing decision towards online marketing of healthy snack foods addressed these issues using consumer buying process model to determine the key finding and recommendations.
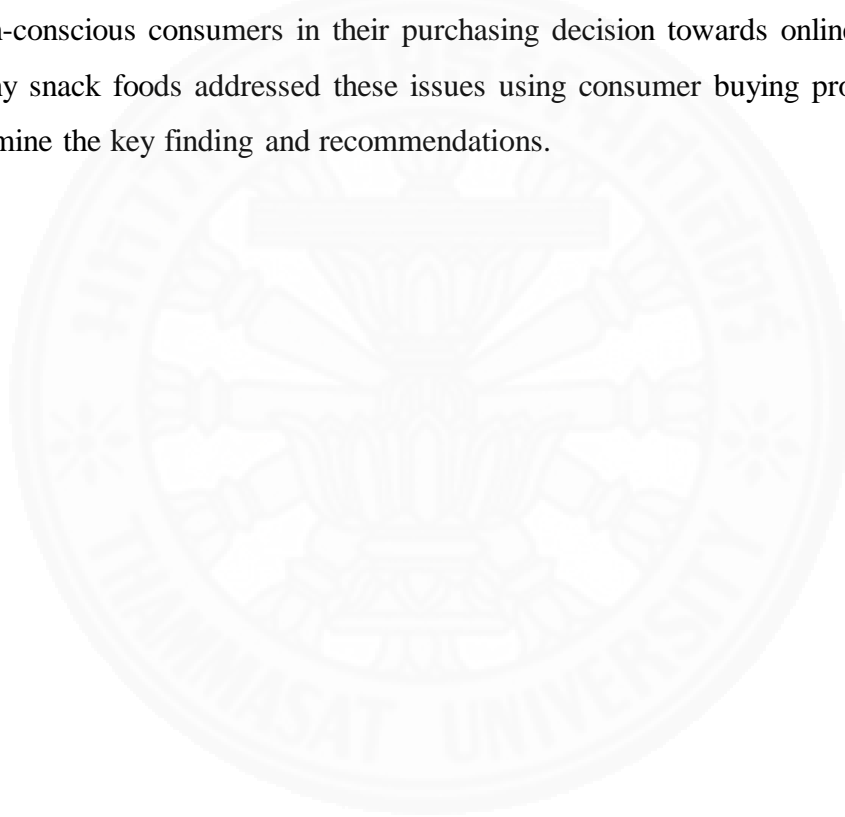
CHAPTER 3
RESEARCH METHODOLOGY

The research was conducted using both qualitative and quantitative methods which consist of exploratory research and descriptive research. The purposes of using these methods are described as follows.

3.1 Exploratory research

In qualitative research, secondary research and in-depth interview were conducted in order to understand the insight of these consumers' behavior and reasons for consumption towards healthy snack food.

3.1.1 Secondary research

This research utilized the data collected from books, articles, journals, websites, and online sources in order to

- To identify the reasons and motivation of healthy snack food consumption [Objective 1.1]
- To identify the behavior of healthy snack food consumption [Objective 1.2]
- To identify health-conscious consumer lifestyle and activities that related to health [Objective 2.2]

3.1.2 In-depth interview

The purpose of in-depth interview is to understand insight of consumer and to further develop effective survey questionnaire design which use for the following objectives;

- To determine customer behavior of health-conscious consumer towards healthy snack foods [Objective 1]
- To identify the reasons and motivation of healthy snack food consumption [Objective 1.1]

- To identify the behavior of healthy snack food consumption [Objective 1.2]
- To identify purchasing criteria of healthy snack foods in marketing mix aspects (4P) – product , price , place , promotion [Objective 2.3]
- To identify influencing factors in online channels and online activities to purchase decision of healthy snack foods [Objective 2.4]

3.2 Descriptive research

Descriptive research was conducted in the form of survey questionnaire to gather data of consumer behavior, decision making process, and influential factors to purchase healthy snack foods.

3.2.1 Survey Questionnaire

The survey questionnaire was used for the following objectives;

- To determine customer behavior of health-conscious consumer towards healthy snack foods [Objective 1]
- To identify health-conscious consumers segments toward purchasing decision process for healthy snack foods [Objective 2]

3.3 Key Research Variables

Independent Variables
Customer Characteristics Demographic: Lifestyle: Activities, Interest, and opinion Reason and Motivations: well-being, losing weight etc.

Independent Variables
Marketing Variables of purchasing decision 4P: Product, Price, Place, Promotion

Independent Variables
Other Factors that influence purchasing decision Online activities, reviews etc.

Dependent Variable
Consumption of healthy snack food: Consumption behavior: Frequency, Quantity, When to eat, Where to eat etc.

Figure 3.1 *Conceptual model for the study*

Key variables of this study are divided into the dependent variables of consumption of healthy snack food and the independent variables that affect the

consumption of healthy snack foods are demographic, lifestyle, consumption behavior, reasons and motivation of consumption, online channels and online activities that influences purchasing decision, and purchasing criteria (marketing mix).

3.4 Target population

Target respondents of this research are Health-conscious consumers who consumed healthy snack foods in the past year and fell into one of these criteria: health issue, weight loss, improving wellness (Hu, 2013).

Sample size of each research type show below:

In-depth interview

In-depth interview was conducted with one person of pretest pilot to see if there were enough information that require in the in-depth interview. Total sample size of interviewee is 10 people of both gender – male and female, age 25 years old and above. Target of the interviewee is health-conscious consumers.

Survey Questionnaires

Survey questionnaire was conducted with the pretest pilot of five people before official hand out to the public. Sample size of questionnaire is 120 people who are health conscious consumers with age of 16 years old and above.

3.5 Data collection plan

Non-probability sampling or convenience sampling was used for data collection. All of respondents have to pass the screening questions to fit the target respondent criteria.

3.5.1 In-depth interview

All the interviewee was recruited by personal connection. In-depth interview was conducted on October 27th and November 10th – 16th, 2018 by using face to face interview at Gaysorn Village Building. The duration to interview each

respondent took around 15-30 minutes. The example of in-depth interview questions, see Appendix A.

3.5.2 Survey Questionnaires

Survey Questionnaires was distributed on February 10th, 2019 to friends and personal connection via online channels such as personal Facebook, LINE application, email as well as online communities such as Facebook Fan Page, named "Jub-Jak", in order to reach the expected number of respondents. To motivate the response rate, 5 packs of Diamond grain were randomly given away to 5 respondents. Questionnaire was designed to take around 20 minutes for each respondent to complete in Thai language. Questionnaire design was divided into main five sections as followings. The sample of questionnaire are referred to Appendix B.

Section 1: Screening questions
Section 2: Lifestyle – Activities , Interests, Opinion)
Section 3: Marketing criteria towards purchasing decision (4P)
Section 4: Other criteria towards purchasing decision
Section 5: Demographic

3.6 Data analysis plan

The research was utilized data collected from both primary data and secondary data. Primary data that come from in-depth interview were used to further design effective survey questionnaire.

Survey questionnaires were analyzed by using Statistical Package for the Social Science (SPSS) software to carry out the statistical outcome. Descriptive statistics included frequency, percent, mean ($\bar{x}$), and standard deviation (S.D) was applied. Multiple regression was tested for examining the effect of influential factors on healthy snack foods consumption. Furthermore, the chi-square test, one-way ANOVA was additionally used for classifying the segments of users based on the consumption level.

CHAPTER 4
RESULTS AND DISCUSSION

In this chapter, the author provides the data analysis for responding to research objectives. The study aims to examine factors that influence Thai health-conscious consumers in their purchasing decision towards healthy snack foods through the both qualitative and quantitative analysis.

4.1 Key Result from Primary Research

4.1.1 In-Depth Interviews

In-depth interviews were conducted with 11 interviewees (3 males, 8 females) face-to-face on 27th October and 10-16th November, 2018. Interviewees are qualified by screening questions. They all purchased healthy snack foods in the past year. They are categorized in healthy conscious consumer who fall into either having regular exercise or having healthy diet. All interviewees live in Bangkok, age range between 25-37 years old, work, and have different occupations. The findings from in-depth interview are summarized as followings;

The most common healthy snack food is granola and granola bar. Other kinds of healthy snack food that were mentioned are wheat, cereal, low fat / low sugar / gluten free cookie and bakery, smoothie bowl, dried fruits. Interviewees have a wide range of healthy snack food definition. Some of them perceive fresh fruits and vegetables are healthy snack food since they define snack according to time and reason of consumption.

According to all interviewees, there were five reasons to consume health snack food which are (1) to lose weight , (2) to keep fit and stay healthy, (3) taste preference, (4) meal replacement, and (5) reduce hunger. Three of the interviewees said that the reason to eat healthy snack food is to lose weight by having them instead of normal types of snack that contain high calories and high sugar. They normally eat healthy snack with healthy food in order to lose weight. Other four interviewees said that they have healthy snack food to keep fit and stay healthy;

besides, they explained that by keep fit and stay healthy meaning not to gain weight as well. One of the interviewees said that she prefers the taste of healthy snack foods rather than normal snacks. Lastly, the rest two of interviewees said that they usually eat healthy snack food to reduce hunger and sometimes to replace meal.

From the interview, there are four ways of consumption which are between meals, meal replacement, after meal, and sometimes before exercise. Frequency of consumption per day is different; it depends on activities and period of time. However, all interviewees have at least consumed healthy snack food once or twice a month. They usually purchase the product from supermarket, specialty health shops and online shop. Most of interviewee said that to purchase convenience is important for them.

Taste and nutrition are the criteria that all interviewee mentioned. Important nutrition that was mentioned are low kilocalories, low or no sugar, low or no fat, low sodium. Other purchasing criteria are price, packaging, appearance, quantity. Moreover, there are influencing factors that were mentioned as followings;

- Recommendation from friends and family
- Information from internet sources such as blog, website, Facebook fan page, Instagram etc.
- Review from influencers such as blogger, health specialist and celebrities etc.

4.1.2 Survey Questionnaire

4.1.2.1 Demographic Profiles

Data collection was done between 10 and 18 February 2019 via electronic survey platforms (Surveymonkey.com). Firstly, total of 285 questionnaires were completed; but only 213 questionnaires were met the study criteria. Since the study is concerned only Thai health-conscious consumers, the respondents were selected only who have a high score in the health conscious index, which is calculated from two questions of activities "I regularly exercise and play sports" and "I have an active and healthy lifestyle" with the 50 quantile or total index is above 8. The result shows 73.2% or 123 respondents have an adequate score and

considered as a health-conscious consumers in this study. Thus, 43.1% is the response rate of survey results.

Table 4.1

Health-conscious indicator

	Frequency	Percent
Health conscious index (min-max) (2-12)		
8 or higher	123	73.2
7 or below	90	26.8

After the data screening, descriptive statistics were applied for summarizing demographic data of 123 respondents. The result shows the majority of the respondent is female (74.8%). The largest age distribution was found in the range of 31 to 40 years old (35.8%). 60.2% was completed the Bachelor's degree as the highest education. Majority of Thai health conscious person was employed in the private sector (45.5%). According to income distribution, it was found that the largest group was less than 15,000 THB (28.5%) and 15,001 - 35,000 THB (25.2%).

Table 4.2

Summary of Respondent's Demographic Characteristics

	Frequency	Percent
Gender		
Male	31	25.2
Female	92	74.8
Age		
16 - 25	23	18.7
26 - 30	31	25.2
31 - 40	44	35.8
41 - 50	15	12.2
Above 50	10	8.1

Table 4.2

Continued

	Frequency	Percent
The highest education		
High school or below	22	17.9
Bachelor degree	74	60.2
Graduate degree	26	21.1
Doctoral degree	1	.8
Occupation		
Student	8	6.5
Full-time employee	56	45.5
Part-time employee	4	3.3
Business Owner	18	14.6
Freelance	9	7.3
Unemployment	17	13.8
Others	11	8.9
Personal monthly income		
Less than 15,000 THB	35	28.5
15,001 - 35,000 THB	31	25.2
35,001 - 55,000 THB	21	17.1
55,001 - 75,000 THB	19	15.4
75,001 - 95,000 THB	8	6.5
95,001 - 115,000 THB	1	.8
Above 115,000 THB	8	6.5

4.1.2.2 General Consumption Behaviors

According to table 4.3, it was found that majority of health-conscious consumers choose to consume fruits / vegetables (75.6%), followed by yogurt / Greek yogurt (71.5%), and granola / wheat / oat / muesli (69.9%). The descriptive outcome reveals that most of them consume healthy snack food at home

(17.7%) and workplace (15.3%). Majority of respondents consume 2-3 times a week (48%), which found most of them consume between meals (57.7%) and breakfast substitute (or) with breakfast (43.1%).

Table 4.3

Healthy snack food consumption behaviors

	Frequency	Percent
Type of healthy snack food		
Granola / Wheat / Oat / Muesli	86	69.9
Mixed Nuts	78	63.4
Fruits / Vegetables	93	75.6
Yogurt / Greek yogurt	88	71.5
Health bakeries and cookies	50	40.7
Smoothies/smoothie bowl	64	52.0
Other, please specify	4	3.3
The percent of healthy snack food consumption is at (min-max, mean ± S.D)		
Home	0-100	(17.7 ± 21.2)
Work place	0-90	(15.3 ± 21.6)
Gym	0-78	(3.6 ± 9.6)
Restaurant	0-50	(2.7 ± 6.0)
On-the-go	0-55	(6.5 ± 11.9
The frequency of healthy snack food consumption		
Daily or almost daily	24	19.5
2-3 times a week	59	48.0
Once a week	16	13.0
Occasionally or once a month	24	19.5
Consumption period		
Between meal	71	57.7
After meal immediately	16	13.0

	Frequency	Percent
Breakfast substitute (or) with breakfast	53	43.1

Table 4.3

Continued

	Frequency	Percent
Lunch substitute (or) with lunch	26	21.1
Dinner substitute (or) with dinner	40	32.5
Late night meal	23	18.7
Before exercise	20	16.3
After exercise	42	34.1

4.1.2.3 Customer Segmentation

From the previous section, the respondents were segmented based on the level of consumption and classified into three groups, which are light, medium, and heavy users. The largest group of the respondent is medium users who consume healthy snack food for 2-3 times or one a week (61%). From this finding, the ANOVA test and chi-square test were applied for customer segmentation as a following.

Table 4.4

The classification of consumers

	Frequency	Percent
Heavy users - daily or almost daily	24	19.5
Medium users - 2-3 times or one a week	75	61.0
Low users - occasionally or once a month	24	19.5

According to chi-square test from table 4.5, there is an association between consumers and demographic groups, only in gender ($p < 0.05$). But it shows age, education, occupation, and income has no difference among users ($p > 0.05$). From the percentage distribution, it would explain that the majority of heavy

and medium users are female, accounted for 62.5% and 85.5%, respectively. Male was heavily distributed in low usage groups (45.8%).

Table 4.5

The difference of consumers across the demographic variables

	Heavy		Medium		Low		Chi-	p
	n	%	n	%	n	%	square	
Gender							11.76	.003
Male	9	37.5	11	14.7	11	45.8		
Female	15	62.5	64	85.3	13	54.2		
Age							3.11	.927
16 - 25	5	20.8	16	21.3	2	8.3		
26 - 30	7	29.2	17	22.7	7	29.2		
31 - 40	8	33.3	26	34.7	10	41.7		
41 - 50	3	12.5	9	12.0	3	12.5		
Above 50	1	4.2	7	9.3	2	8.3		
The highest education							9.52	.147
High school or below	3	12.5	16	21.3	3	12.5		
Bachelor degrees	18	75.0	40	53.3	16	66.7		
Graduate degrees	2	8.3	19	25.3	5	20.8		
Doctoral degree	1	4.2	0	0.0	0	0.0		
Occupation							5.01	.958
Student	2	8.3	5	6.7	1	4.2		
Full-time employee	10	41.7	33	44.0	13	54.2		
Part-time employee	2	8.3	1	1.3	1	4.2		
Business Owner	4	16.7	12	16.0	2	8.3		
Freelance	1	4.2	6	8.0	2	8.3		
Unemployment	3	12.5	11	14.7	3	12.5		
Others	2	8.3	7	9.3	2	8.3		

Table 4.5

Continued

	Heavy		Medium		Low		Chi-square	p
	n	%	n	%	n	%		
Personal monthly income							16.05	.189
Less than 15,000 THB	11	45.8	20	26.7	4	16.7		
15,001 - 35,000 THB	4	16.7	24	32.0	3	12.5		
35,001 - 55,000 THB	4	16.7	12	16.0	5	20.8		
55,001 - 75,000 THB	3	12.5	9	12.0	7	29.2		
75,001 - 95,000 THB	0	0.0	6	8.0	2	8.3		
95,001 - 115,000 THB	0	0.0	1	1.3	0	0.0		
Above 115,000 THB	2	8.3	3	4.0	3	12.5		

Table 4.5 represents the healthy snack food consumption behaviors among the users with chi-square statistic. From the result, there is an association between consumers and consumption period, only in "after meal immediately" and "before exercise" ($p < 0.05$). But it shows that the consumption type of healthy snack foods has no difference among users ($p > 0.05$). From the percentage distribution, it would explain that the majority of heavy users consume healthy snack foods after meal immediately (25%), but 50% of low users consume before exercise.

Table 4.6

The difference of consumers across type of healthy snack food and consumption behaviors

	Heavy		Medium		Low		Chi-square	p
	n	%	n	%	n	%		
Type of healthy snack food								
Granola / Wheat / Oat / Muesli	19	79.2	53	70.7	14	58.3	2.53	.283
Mixed Nuts	13	54.2	50	66.7	15	62.5	1.24	.539
Fruits / Vegetables	17	70.8	58	77.3	18	75.0	0.42	.810
Yogurt / Greek yogurt	19	79.2	55	73.3	14	58.3	2.86	.239
Health bakeries and cookies	10	41.7	35	46.7	5	20.8	5.04	.080
Smoothies / smoothie bowl	11	45.8	40	53.3	13	54.2	0.46	.793
Consumption period								
Between meal	13	54.2	46	61.3	12	50.0	1.11	.574
After meal immediately	6	25.0	10	13.3	0	0.0	6.65	.036
Breakfast substitute (or) with breakfast	12	50.0	34	45.3	7	29.2	2.52	.284
Lunch substitute (or) with lunch	6	25.0	17	22.7	3	12.5	1.39	.498
Dinner substitute (or) with dinner	9	37.5	27	36.0	4	16.7	3.43	.180
Late night meal	3	12.5	16	21.3	4	16.7	1.01	.602
Before exercise	0	0.0	8	10.7	12	50.0	26.45	.000
After exercise	7	29.2	25	33.3	10	41.7	0.89	.641

Table 4.6 represents the comparison of the users and willingness to pay for healthy snack food with chi-square statistic; the result shows that there is a no association between consumers and willingness to pay a price (p > 0.05).

Table 4.7

The difference of consumers across willingness to pay

	Heavy		Medium		Low		Chi-square	p
	n	%	n	%	n	%		
Less than 50 THB	3	12.5	10	13.3	2	8.3	3.74	.880
50 - 150 THB	14	58.3	52	69.3	17	70.8		
151 - 250 THB	4	16.7	8	10.7	2	8.3		
251 - 350 THB	1	4.2	2	2.7	2	8.3		
More than 350 THB	2	8.3	3	4.0	1	4.2		

Table 4.7 represents the place where users consume healthy snack food with one-way ANOVA. From the result, there is a significant difference in workplace, gym, and on-the-go at 0.05 ($p < 0.05$). But it shows no difference among users at home and restaurant ($p > 0.05$). From the mean distribution, it would explain that the majority of low users consume at the workplace, gym, and on-the-go higher than heavy and medium users.

Table 4.8

The difference of consumers across the consumption location

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
Home	13.71	17.69	16.56	21.93	25.50	20.84	17.75	21.18	2.21	.115
Workplace	11.63	21.20	12.93	20.94	26.54	21.12	15.33	21.58	4.27	.016
Gym	1.79	2.80	2.64	6.53	8.38	17.64	3.59	9.57	3.98	.021
Restaurant	2.92	4.55	2.36	6.49	3.46	5.91	2.68	6.02	0.32	.726
On-the-go	2.46	3.15	4.31	8.50	17.38	18.74	6.50	11.89	15.79	.000

From table 4.8 there is a significant difference in activity and opinion among users at 0.05 ($p < 0.05$). The mean score of three users is a significant difference, as the heavy and medium users have scored on activity and opinion higher than low users ($p < 0.05$). It would explain that both heavy and medium users are health conscious as they have enough sleeping, and really have healthy activities and diets. In term of opinion, those heavy and medium users also think about consuming healthy snack food is better than a regular snack and believe it can maintain good health. The averaged value of activity, interest, and opinion are shown in the bold-face font in the table.

Table 4.9

The difference of consumers across activity, interest, and opinion

	Heavy		Medium		Low		Total		F	Sig.
	X̄	S.D	X̄	S.D	X̄	S.D	X̄	S.D		
Activity	**4.91**	**0.77**	**4.79**	**0.59**	**4.34**	**0.59**	**4.73**	**0.65**	**5.87**	**.004**
I regularly exercise and play sports	4.92	1.02	4.83	0.84	5.21	0.83	4.92	0.88	1.72	.184
I sleep at least 8 to 10 hours a day	4.58	1.32	4.47	1.33	3.67	1.27	4.33	1.35	3.90	.023
I regularly drink water at least 8 glasses (1.5litres) a day	5.08	0.83	5.11	1.06	4.58	1.14	5.00	1.05	2.42	.094
I regularly eat healthy diet	4.92	1.02	4.69	0.68	3.79	0.78	4.56	0.86	15.52	.000
I have an active and healthy lifestyle	5.04	0.75	4.85	0.80	4.46	0.83	4.81	0.81	3.46	.035
Interest	**4.88**	**0.72**	**4.90**	**0.64**	**4.68**	**0.59**	**4.85**	**0.65**	**1.04**	**.358**
I have good knowledge about healthy living	4.83	0.82	4.95	0.71	4.88	0.80	4.91	0.75	.24	.787
I have good knowledge about healthy diet	4.92	0.78	4.91	0.68	4.54	0.83	4.84	0.74	2.44	.091

Table 4.9

Continued

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
I have good knowledge about exercise	4.88	0.85	4.84	0.79	4.63	0.58	4.80	0.76	.84	.433
Opinion	**5.08**	**0.76**	**4.84**	**0.75**	**3.98**	**0.73**	**4.72**	**0.83**	**15.57**	**.000**
Healthy snack foods help you maintain good health	5.00	0.88	4.73	0.78	3.96	0.81	4.63	0.87	11.53	.000
Opinion	**5.08**	**0.76**	**4.84**	0.75	**3.98**	0.73	**4.72**	**0.83**	15.57	**.000**
Eating healthy snack foods is better than regular snacks	5.17	0.76	5.32	0.84	4.54	1.10	5.14	0.93	7.08	.001
Healthy snack foods provide additional nutrition from regular meal	5.00	0.88	4.68	1.03	3.58	0.88	4.53	1.08	14.98	.000
Healthy snack foods can help you stay in good shape	5.17	0.82	4.63	0.91	3.83	0.96	4.58	0.99	13.32	.000

According to table 4.9 there is a significant difference in motivations among users at 0.05 (p < 0.05). The mean score of heavy and medium

users are significant "I want to stay in good shape" and "I want to stay healthy and keep fit" higher than low users (p < 0.05). It would explain that both heavy and medium users want to stay in good shape and keep staying healthy and being fit.

Table 4.10

The difference of consumers across motivation

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
I want to lose weight	4.33	1.52	4.40	1.33	4.17	1.27	4.34	1.35	.270	.764
I want to stay in good shape	5.21	0.88	4.89	1.02	4.33	1.13	4.85	1.05	4.64	.011
I want to gain weight	2.71	1.68	2.37	1.43	1.96	1.27	2.36	1.46	1.61	.204
I want to stay healthy and keep fit	5.25	0.85	5.04	0.94	4.54	1.06	4.98	0.97	3.71	.027
I have health issue	2.83	1.46	3.31	1.55	3.04	1.49	3.16	1.52	.97	.381
I want to reduce body fat	4.83	1.37	4.85	1.35	4.83	1.17	4.85	1.31	.00	.997
I want to build muscle	4.71	1.20	4.31	1.43	4.17	1.43	4.36	1.39	1.04	.357
I want to have better health	5.58	0.72	5.35	0.98	4.92	1.10	5.31	0.98	3.04	.052

As shown in table 4.10 there is a significant difference in choosing a product among users at 0.05 (p < 0.05). The mean score of high vitamins, vegan, gluten-free, and organic is significantly different (p < 0.05). From the mean distribution, it would explain that heavy users have the highest consideration on

choosing the healthy snack foods with high vitamins, vegan, gluten-free, and organic. The averaged values of product ingredient and product elements are shown in the bold-face font in the table.

Table 4.11

The difference of consumers across product factors

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
Product ingredient	**4.31**	**0.57**	**3.93**	**0.60**	**3.68**	**0.53**	**3.96**	**0.61**	**7.27**	**.001**
Low Sugar	4.50	0.59	4.31	0.85	4.17	1.05	4.32	0.85	.93	.397
Sugar Free	4.29	0.81	4.16	0.90	4.42	0.65	4.24	0.84	.91	.404
Low Fat	4.58	0.58	4.36	0.67	4.25	0.68	4.38	0.66	1.66	.195
0%No Fat	4.63	0.58	4.33	0.72	4.25	0.74	4.37	0.71	2.05	.134
(Low Carb)	4.42	0.72	4.15	0.80	4.08	0.72	4.19	0.77	1.39	.253
Gluten Free	3.96	0.91	3.61	1.09	2.96	1.12	3.55	1.10	5.62	.005
High Vitamins	4.63	0.65	4.03	1.04	3.63	0.82	4.07	0.98	7.01	.001
Vegan	3.71	1.33	2.76	1.29	2.33	1.34	2.86	1.37	7.19	.001
Organic	4.13	0.99	3.69	1.01	3.04	1.20	3.65	1.09	6.59	.002
Product elements	**3.97**	**0.68**	**3.51**	**0.71**	**3.36**	**0.76**	**3.57**	**0.74**	**5.03**	**.008**
Packaging	3.71	1.08	3.27	1.04	3.21	1.18	3.34	1.09	1.75	.178
Appearance	3.71	1.04	3.20	1.03	3.00	1.06	3.26	1.05	3.13	.048
Amount per unit	4.13	0.74	3.57	0.98	3.54	0.83	3.67	0.93	3.68	.028
Taste	4.58	0.58	4.28	0.80	4.17	0.92	4.32	0.79	1.90	.155
Brand Reputation	3.71	1.16	3.23	1.11	2.88	0.95	3.25	1.11	3.56	.032

When comparing the users and price of healthy snack food with one-way ANOVA (table 4.12), there is no difference among users and perception toward the price of healthy snack food (p > 0.05).

Table 4.12

The difference of consumers across price factors

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
Average mean of price	**3.98**	**0.77**	**3.72**	**0.65**	**3.52**	**0.54**	**3.73**	**0.67**	**2.96**	**.056**
Reasonable price compare to the size	4.21	0.98	4.01	0.78	3.83	0.64	4.02	0.80	1.33	.269
Price does not matter as long as it's tasty	3.75	0.90	3.43	0.95	3.21	0.83	3.45	0.93	2.14	.122

As shown in table 4.13, there is a significant difference in the place factors among users at 0.05 ($p < 0.05$). The mean score of online healthy stores is significantly different ($p < 0.05$). From the mean distribution, it would explain that heavy users have a higher willingness to buy from the online healthy store more than medium and low users.

Table 4.13

The difference of consumers across place factors

	Heavy		Medium		Low		Total		F	Sig.
	X̄	S.D	X̄	S.D	X̄	S.D	X̄	S.D		
Average mean of place	**3.20**	**0.67**	**2.87**	**0.70**	**2.55**	**0.56**	**2.87**	**0.69**	**5.67**	**.004**
Convenience stores	4.00	1.02	3.83	0.99	3.46	1.22	3.79	1.05	1.74	.179
Supermarket / Hypermarket	3.79	0.78	3.64	0.85	3.46	0.78	3.63	0.82	.99	.375
Specialty stores	2.83	1.13	2.56	1.23	2.38	1.06	2.58	1.18	.92	.400
Online healthy stores	2.88	1.23	2.17	1.13	1.75	1.07	2.23	1.19	6.06	.003
E-commerce website	2.50	1.25	2.17	1.21	1.71	0.95	2.15	1.19	2.77	.066

From table 4.14, there is no difference in the promotion factors among users at 0.05 ($p > 0.05$). However, the mean score of radio ad is significantly different ($p < 0.05$). From the mean distribution, it would explain that heavy users will rate the radio ads as a promotional campaign that motivate them to buying healthy snack foods more than medium and low users.

Table 4.14

The difference of consumers across promotion factors

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
Average mean of promotion	**4.38**	**0.68**	**4.11**	**0.96**	**3.85**	**0.89**	**4.12**	**0.91**	**2.10**	**.126**
TV commercial	4.33	1.24	4.12	1.39	3.71	1.40	4.08	1.37	1.33	.268
Print ads	4.04	1.37	3.73	1.34	3.33	1.20	3.72	1.33	1.75	.179
Point of sales promotion	4.54	0.98	4.49	1.07	4.33	0.87	4.47	1.01	.30	.744
Online advertising	5.08	0.97	4.67	1.13	4.92	0.93	4.80	1.07	1.58	.211
Radio ads	3.92	1.18	3.56	1.33	2.96	1.46	3.51	1.35	3.26	.042

According to table 4.15, there is a significant difference in the external factors among users at 0.05 ($p < 0.05$). The mean score of following healthy snack shop online is significantly different ($p < 0.05$). The mean distribution addresses that heavy and medium have a higher degree of agreement on following those channels than low users.

Table 4.15

The difference of consumers across external factors

	Heavy		Medium		Low		Total		F	Sig.
	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D		
Average mean of external factors	4.50	0.71	4.41	1.01	3.79	0.92	4.30	0.97	4.51	.013
I follow healthy blogger to see what they eat	4.46	1.14	4.33	1.34	3.54	1.53	4.20	1.37	3.69	.028

Table 4.15

Continued

	Heavy		Medium		Low		Total		F	Sig.
	X̄	S.D	X̄	S.D	X̄	S.D	X̄	S.D		
I follow healthy snack shop online for food choice	4.50	1.02	4.17	1.30	3.33	1.40	4.07	1.32	5.65	.005
I buy healthy snack foods that friends and family recommend	4.63	0.88	4.64	1.02	4.29	1.00	4.57	0.99	1.17	.314
I buy healthy snack food because of online/website review	4.42	0.97	4.48	1.21	4.00	1.25	4.37	1.18	1.53	.221

4.1.2.4 The Effect of Influencing Factors on Healthy Snack Food Consumption

In order to examine the factors influences on consumers' behavior towards healthy snack food, multiple regression was applied. The dependent variable is the consumption behaviors toward healthy snack food which include the frequency of consumption and willingness to pay in THB. The independent variables consist of nine variables which are activity, interest, opinion, product ingredient, product elements, price, place, promotion, and external factors. In order to check for the multicollinearity, correlation matrix of nine independent variables were tested. It resulted the ranges of coefficient from 0.194 to 0.579, which is less than the recommended benchmark with 0.90 ($r < 0.90$). Therefore, there is no presence of multicollinearity from all predictors. Afterwards, two regression models were represented in the following part.

Table 4.16

The impact of influencing factors on the frequency of consumption. Dependent variable: frequency of healthy snack food consumption

	Beta (unstandardized)	t	p
(Constant)	-2.903	-2.070	.041
Activity	.040	.128	.898
Interest	-.453	-1.649	.102
Opinion	.759	3.330	.001
Product ingredient	.428	1.288	.201
Product elements	.454	1.680	.096
Price	.055	.202	.841
Place	.597	2.469	.015
Promotion	-.214	-.904	.368
External factors	-.094	-.455	.650

$R = 0.525$, $R^2 = 0.275$, Adjusted $R^2 = 0.217$, $F(9,113) = 4.767$, $p = 0.000$

According to table 4.16, the frequency of healthy snack food consumption is the variance explained by nine factors at 21.7% (Adjusted R-square = 0.217). From the beta coefficient and p-value, it is found that p-value of opinion (Beta = 0.759) and place (Beta = 0.597) are less than 0.05 and those variables have positive impact on healthy snack food consumption ($p < 0.05$). Those factors are the key main variables that positively influenced on the frequency of healthy snack food consumption. Hence, the adjustment of regression model is made from the significant variables and represents in the table 4.17.

Table 4.17

The impact of influencing factors on the frequency of consumption. Dependent variable: frequency of healthy snack food consumption (adjusted model)

	Beta (unstandardized)	t	p
(Constant)	-2.733	-2.070	.041
Opinion	.734	3.974	.000
Place	.656	2.964	.004

R = 0.455, R^2 = 0.207, Adjusted R^2 = 0.193, $F_{(2,120)}$ = 15.629, p = 0.000

From table 4.17, the frequency of healthy snack food consumption is the variance explained by two factors at 19.3% (Adjusted R-square = 0.193). From the beta coefficient and p-value, it reveals the significant level of opinion (Beta = 0.734) and place (Beta = 0.656) are less than 0.05 (p < 0.05) (See appendix C). Those also implied the factors are the crucial indicators on increasing frequency of healthy snack food consumption. The regression equation for predicting the frequency of healthy snack food consumption can be written as a following.

Frequency of healthy snack food consumption = -2.733 + 0.734(O) + 0.656(place)

Table 4.18

The impact of influencing factors on willingness to pay (THB). Dependent variable: willingness to pay (THB)

	Beta (unstandardized)	t	p
(Constant)	120.578	1.364	.175
Activity	-14.138	-.726	.469
Interest	15.526	.896	.372
Opinion	-3.739	-.260	.795

Table 4.18

Continued

	Beta (unstandardized)	t	p
Product ingredient	-2.360	-.113	.911
Product elements	-1.766	-.104	.918
Price	-19.484	-1.142	.256
Place	28.212	1.849	.067
Promotion	2.871	.192	.848
External factors	3.222	.246	.806

R = 0.248, R^2 = 0.062, Adjusted R^2 = 0.013, F (9,113) = 0.824, p = 0.595

From table 4.18, willingness to pay (THB) is variance explained by nine factors at 1.3% (Adjusted R-square = 0.013). From the beta coefficient and p-value, it found p-value of all variables is more than 0.05 (p > 0.05). This finding implies no impact of influence factors on willingness to pay (THB). However, the regression equation for predicting willingness to pay (THB) can be written as a following.

Willingness to pay (THB) = 120.578 − 14.138(A) + 15.526(I) − 3.739(O) − 2.360 (product ingredient) − 1.766(product elements) − 19.484(price) + 28.212(place) + 2.871(promotion) + 3.222(external)

From the calculation, if there is an increasing of influencing factors at 1, the willingness to pay of health-conscious customer is equal to 128.922 THB.

CHAPTER 5
CONCLUSION AND RECOMMENDATIONS

5.1 Research Result Summarization

According to the objective of study, the result shows that Thai health-conscious consumers tend to have fruits and vegetables, yogurts, and granola/wheat/oat/muesli as their top healthy snack choices. The reason and motivations for consumption are mostly that they want to have better health, stay healthy, and keep fit. these people usually consume health snack foods 2-3times a week between meals and as a breakfast substitute at home and workplace. Moreover, the willingness to pay for meal for healthy snack foods is around 129 THB.

By segmenting these consumers into three groups of heavy, medium and light consumption, the result shows the significant in heavy and medium users in several aspects. Firstly, most of heavy and medium users are female and likely to consume healthy snack after meal immediately. Heavy and medium users obviously are health conscious consumers who not only have healthy diet; they stay healthy in other ways such as having enough sleep and having healthy activities. These groups, heavy and medium users, believe that healthy snack foods are better than regular snacks and help maintain good health. Heavy users are more selective choosing healthy snack food products by nutrition providing. Besides, heavy users show the higher willingness to buy online than other groups; they show the significant on following healthy snack shop online.

By using regression analysis to see the factors that influence these health-conscious consumers on healthy snack food consumption, it shows that opinion and location to buy are the most influencing factors among all nine factors – activities , interests, opinion, product ingredients, product elements, price, place, promotion, external factors.

5.2 Recommendation

For healthy snack food businesses regarding to the result of this study, the key influenced factors are opinion and location to buy; this means that the firms need to understand what the opinions or attitudes that drive them to consume health snack foods and should use those insights as a key marketing message. "Good health" and "Good shape" can be used to apply on marketing communication to this target group. Besides, firms should prioritize on place factor; the store locations or distribution channels should have enough and convenient to easily buy the products. Firm may consider online stores as one of main channels to reach health-conscious target consumers.

According to the three segments, the most attractive group of consumers is the heavy users as this group has the highest on consumption frequency and less sensitive to price. Besides, heavy users consume healthy snack food daily. To capture this consumer segment, firstly, the product packaging and label should state clearly on nutrition facts because this target group tends to select the product on the nutrition. Healthy snack food price should be set not more than 100-150 THB per one meal to be acceptable. Firms can also explore on doing online marketing and advertising to this target consumer since they buy healthy snack online.

5.3 Limitations

This study cannot be generalized to the whole population since the convenience sampling method was used in this study with limited number of samples, 123 qualified respondents, due to time and budget constraint. There were also disproportionate number of respondents on some of demographic factors such as lower social economic class are represented as majority in this sampling.

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APPENDICES

APPENDIX A

Sample questions from in-depth interview

In-depth Interview questions	Objectives
General Information (Age, Occupation) Have you ever had healthy snack food? Do you normally exercise or eat healthy? When was the last time that you buy healthy snack food?	Screening Question
- What kind of healthy snack food do you usually buy?	1
- Where do you buy this kind of product?	1
- What are the reasons for consumption?	1.1
- When do you normally have healthy snack? - How often do you have healthy snack food?	1.2
- What is your purchasing criteria? - What criteria is the most important?	2.3 , 2.4

APPENDIX B

Survey Questionnaire Questions

Factors that influence Thai health-conscious consumers in their purchasing decision towards online marketing of healthy snack foods

PART 1: SCREENING QUESTIONS

S1. (Q1) Have you consumed healthy food in the past year?

    a Yes

    b No (END OF QUESTIONNAIRE)

S2. (Q2) What kind of healthy snack foods do you usually have?

[Can select more than 1]

    a Granola / Wheat / Oat / Muesli

    b Mixed Nuts

    c Fruits / Vegetables

    d Yogurt / Greek yogurt

    e Health bakeries and cookies

    f Smoothies / smoothie bowl

    g Other, please specify _____

PART 2: LIFESTYLE

L1. (Q4: Activities) – please rate how the following statement best describe you

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I regularly exercise and play sports	1	2	3	4	5	6
I sleep at least 8 to 10 hours a day	1	2	3	4	5	6
I regularly drink water at least 8 glasses (1.5litres) a day	1	2	3	4	5	6
I regularly eat healthy diet	1	2	3	4	5	6
I have an active and healthy lifestyle	1	2	3	4	5	6

L2. (Q5: Interest) – please rate how the following statement best describe you

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I have good knowledge about healthy living	1	2	3	4	5	6
I have good knowledge about healthy diet	1	2	3	4	5	6
I have good knowledge about exercise	1	2	3	4	5	6

L3. (Q6: Opinion) – please rate how the following statement best describe you

	Strongly Disagree	**Disagree**	**Slightly Disagree**	**Slightly Agree**	**Agree**	**Strongly Agree**
Healthy snack foods help you maintain good health	1	2	3	4	5	6
Eating healthy snack foods is better than regular snacks	1	2	3	4	5	6
Healthy snack foods provide additional nutrition from regular meal	1	2	3	4	5	6
Healthy snack foods can help you stay in good shape	1	2	3	4	5	6

PART 3: CONSUMPTION BEHAVIOR & MOTIVATION

B1. (Q7) How often do you consume healthy snack food?

    a Daily or almost daily

    b 2-3 times a week

    c Once a week

    d 2-3 times a month

    e Occasionally or once a month

B2. (Q8) What percent of your healthy snack food consumption is at, please rate

    a Home _____%

    b Workplace _____%

    c Gym _____%

    d Others (specify) _____%

    e Total = 100%

B3. (Q9) When do you consume healthy snack food? [Select more than 1]

    a Between meal

    b After meal immediately

    c Breakfast

    d Lunch

    e Dinner

    f Late Night Meal

    g Before exercise

    h After exercise

B4. (Q10) I consume healthy snack foods because …

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I want to lose weight	1	2	3	4	5	6
I want to stay in good shape	1	2	3	4	5	6
I want to gain weight						
I want to stay healthy and keep fit						
I have health issue						

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I want to reduce body fat						
I want to build muscle						
I want to have better health						

PART 4: MAKETING CRITERIA TOWARD PURCHASE DECISION (4P)

P1. (Q11: Product Ingredient)

	Not Important	Slightly Important	Moderately Important	Important	Most Important
Low sugar	1	2	3	4	5
Low calories	1	2	3	4	5
Low fat	1	2	3	4	5
Low carbohydrate	1	2	3	4	5
Gluten free	1	2	3	4	5
High Vitamins	1	2	3	4	5
Vegan	1	2	3	4	5
Organic	1	2	3	4	5

(Product)

	Not Important	**Slightly Important**	**Moderately Important**	**Important**	**Most Important**
Packaging	1	2	3	4	5
Appearance	1	2	3	4	5
Amount per unit	1	2	3	4	5
Taste	1	2	3	4	5
Brand reputation	1	2	3	4	5

P2. (Q12: Price)

	Not Important	**Slightly Important**	**Moderately Important**	**Important**	**Most Important**
Reasonable price compare to the size	1	2	3	4	5
Price doesn't matter as long as it's tasty	1	2	3	4	5

How much are you willing to spend per meal for healthy snack foods?

    a Less than 50 THB

    b 50 – 150 THB

    c 151 – 250 THB

    d 251 – 350 THB

    e More than 350 THB

P3. (Q13: Place)) - please rate the place that you prefer for buying healthy snack foods

	Never	Rarely	Sometimes	Often	Always
Convenience store (e.g. 7-Eleven, Family mart, Lawson)	1	2	3	4	5
Supermarket /Hypermarket (e.g. Villa, Tops, Big C, Tesco)	1	2	3	4	5
Specialty store (e.g. Bai-meang, Lemon farm)	1	2	3	4	5
Online healthy store	1	2	3	4	5
E-commerce website (e.g. Lazada, Shopee)	1	2	3	4	5

P4. (Q14: Promotion) please rate the promotion that you prefer for buying healthy snack foods

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree
TV Commercial	1	2	3	4	5
Print Ads (newspaper, magazine etc.)	1	2	3	4	5
Point-of-sales promotion	1	2	3	4	5
Online advertising	1	2	3	4	5
Radio ads	1	2	3	4	5

PART 5: OTHER CRITERIA TOWARD PURCHASING DECISION

O1. (Q15)

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I follow healthy blogger to see what they eat	1	2	3	4	5	6
I follow healthy snack shop online for food choices	1	2	3	4	5	6
I buy healthy snack foods that friends and family recommend	1	2	3	4	5	6
I buy healthy snack food because of online/website review	1	2	3	4	5	6

PART 6: DEMOGRAPHIC

D1. (Q16) What is your gender?

    a Male

    b Female

D2. (Q17) What is your age?

    a 16-25

    b 26-30

    c 31-40

    d 41-50

    e Above 50

D3. (Q18) What is your highest education?

    a High school or below

    b College

    c Bachelor degree

    d Graduate degree

    e Other

D4. (Q19) What is your occupation?

    a Student

    b Full time employee

    c Part time employee

    d Business Owner

    e Freelance

    f Others

D5. (Q20) What is your personal monthly income?

     a Less than 15,000

     b 15,001 – 35,000

     c 35,001 – 55,000

     d 55,001-75,000

     e 75,001-95,000

     f 95,001-115,000

     g Above 115,000

D6. (Q21) Do you currently have any health issues?

     a Yes, please specify _____

     b No
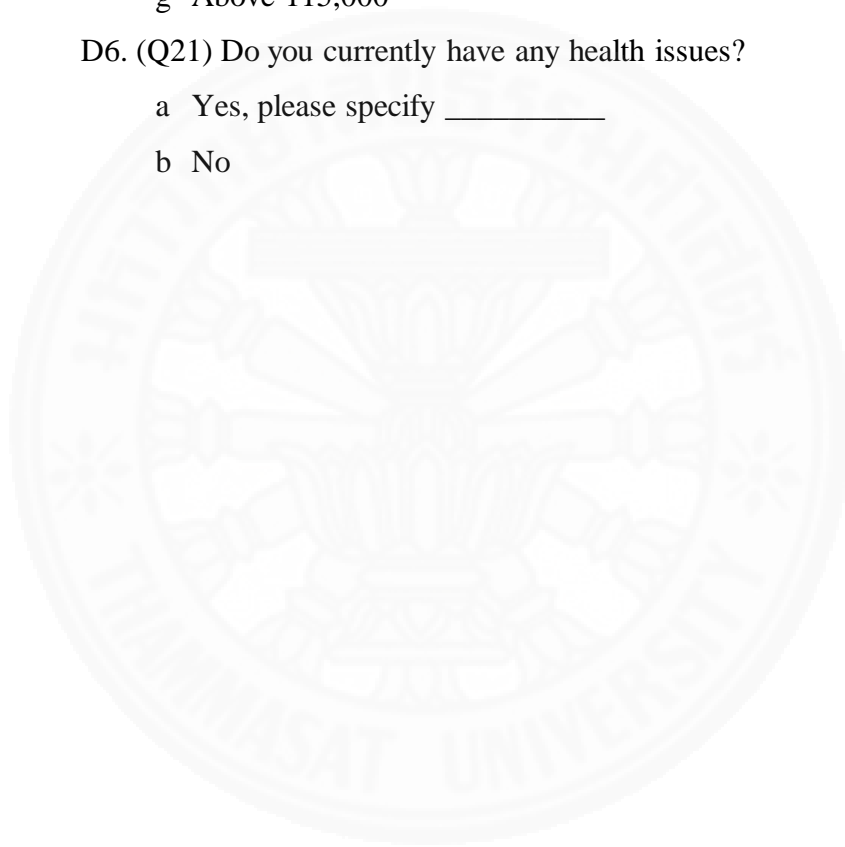
APPENDIX C

Correlation Table

Correlations

		activity	interest	opinion	product1	product2	price	place	promotion	external
activity	Pearson Correlation	1	.499**	.545**	.448**	.306**	.349**	.201*	.451**	.428**
	Sig. (2-tailed)		.000	.000	.000	.001	.000	.026	.000	.000
	N	123	123	123	123	123	123	123	123	123
interest	Pearson Correlation	.499**	1	.402**	.298**	.330**	.288**	.194*	.332**	.363**
	Sig. (2-tailed)	.000		.000	.001	.000	.001	.031	.000	.000
	N	123	123	123	123	123	123	123	123	123
opinion	Pearson Correlation	.545**	.402**	1	.413**	.320**	.264**	.220*	.488**	.415**
	Sig. (2-tailed)	.000	.000		.000	.000	.003	.015	.000	.000
	N	123	123	123	123	123	123	123	123	123
product1	Pearson Correlation	.448**	.298**	.413**	1	.550**	.392**	.356**	.522**	.345**
	Sig. (2-tailed)	.000	.001	.000		.000	.000	.000	.000	.000
	N	123	123	123	123	123	123	123	123	123
product2	Pearson Correlation	.306**	.330**	.320**	.550**	1	.516**	.208*	.481**	.283**
	Sig. (2-tailed)	.001	.000	.000	.000		.000	.021	.000	.002
	N	123	123	123	123	123	123	123	123	123
price	Pearson Correlation	.349**	.288**	.264**	.392**	.516**	1	.127	.370**	.159
	Sig. (2-tailed)	.000	.001	.003	.000	.000		.161	.000	.078
	N	123	123	123	123	123	123	123	123	123
place	Pearson Correlation	.201*	.194*	.220*	.356**	.208*	.127	1	.221*	.393**
	Sig. (2-tailed)	.026	.031	.015	.000	.021	.161		.014	.000
	N	123	123	123	123	123	123	123	123	123
promotion	Pearson Correlation	.451**	.332**	.488**	.522**	.481**	.370**	.221*	1	.579**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.014		.000
	N	123	123	123	123	123	123	123	123	123
external	Pearson Correlation	.428**	.363**	.415**	.345**	.283**	.159	.393**	.579**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.078	.000	.000	
	N	123	123	123	123	123	123	123	123	123

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

BIOGRAPHY

Name	Ms. Chadchanun Kongdechakul
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