

**THE IMPACT OF HEALTH CONSCIOUSNESS TOWARD  
DIETARY SUPPLEMENTS AND NATURAL EXTRACTED  
PRODUCTS BUYING MOTIVATION IN THAILAND**



**A THEMATIC PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR  
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entitled  
**THE IMPACT OF HEALTH CONSCIOUSNESS TOWARD  
DIETARY SUPPLEMENTS AND NATURAL EXTRACTED  
PRODUCTS BUYING MOTIVATION IN THAILAND**

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**THE IMPACT OF HEALTH CONSCIOUSNESS TOWARD DIETARY SUPPLEMENTS AND NATURAL EXTRACTED PRODUCTS BUYING MOTIVATION IN THAILAND**

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ABSTRACT

The purpose of the thesis is to aim to investigate and understand the impact of health conscious behavior toward dietary supplements and natural extracted products leading to buying intention in the Thai context. The qualitative method was adopted in the research by conducting in-depth interviews with 12 Thai participants from Bangkok and upcountry living in Bangkok through face-to-face interviews and phone call interviews.

The research result shows that there are some patterns of interviewees that can be grouped to see motivations, both rational and emotional motivations, encouraging them to aware more of their health which leads to supplements and natural extracted products consumed and bought differently in each group divided by many factors. Also found that there are some factors that drive them to switch brands or change their behavior of the product consumption.

**KEY WORDS:** health consciousness / dietary supplement / natural extracted products/  
buying motivations / brands switch

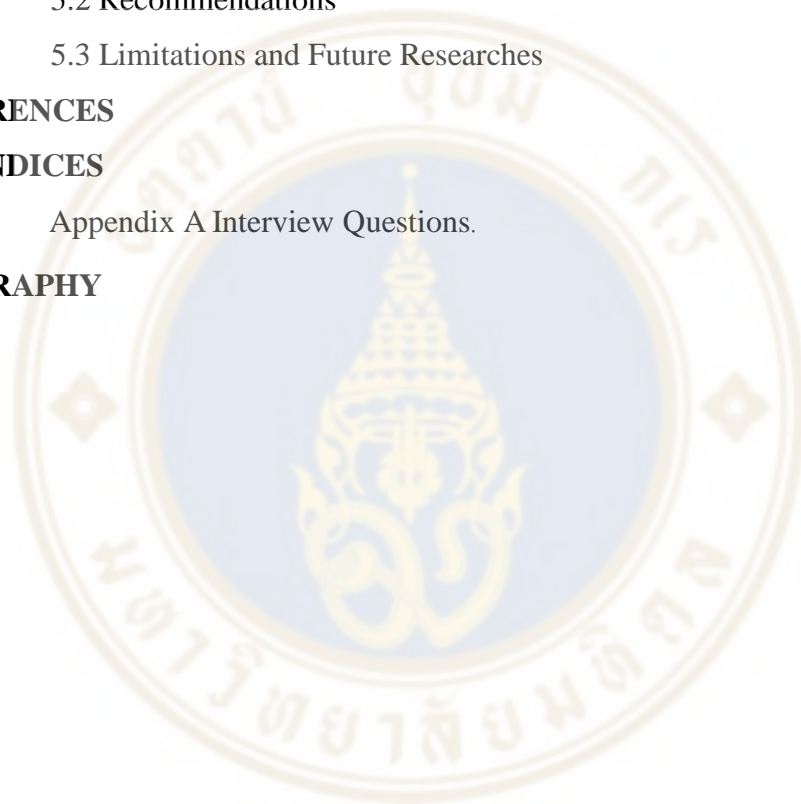
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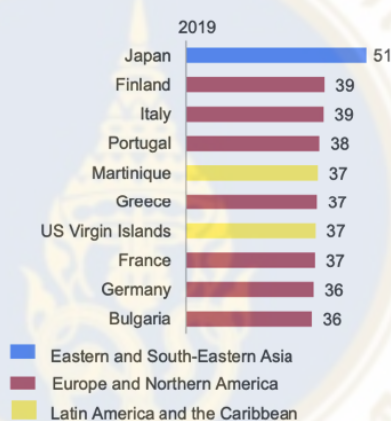


## CHAPTER I

### INTRODUCTION

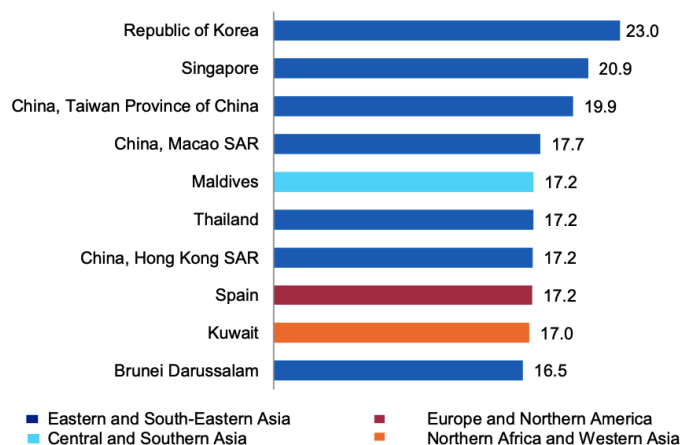
#### 1.1 Background and problem statements

Healthy trends are spreading all over the world, not only in Thailand for decades. People are more conscious about their health and quality of life. As we could see apparently during the COVID-19 situation, there are many of content on online channels talking about exercise, health improvement, home-made cleaned food, and so on.



**Figure 1.1 Ten countries or areas with the highest old-age dependency ratio (65+/20-64), 2019**

As the United Nations World Population Ageing 2019 indicated Japan is the country with the highest old-age dependency ratio in the world and forecasts Japan to remain at the highest ratio followed by Eastern and South-Eastern Asia, Europe and Northern America, and Latin America and the Caribbean. More Asian countries will be among this group in 2050 (Department of Economic and Social Affairs Population Division, 2019). While Thailand is becoming an aging society at the sixth rank country, in the world, with the largest percentage share of elders aged 65 years or over increasing between 2019 and 2050.



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*.

**Figure 1.2 Countries or areas with the largest percentage point increase in the share of older persons aged 65 years or over between 2019 and 2050**

People who give attention to health in their daily routine refer to health consciousness persons (Willis et al, 2016). Different people have their approaches to improving their health such as food control, exercise, taking dietary programs, or in this case, this research would focus on taking supplements or natural extracted product methods. As from Food and Drug Administration, the definition of dietary supplement products is

*“dietary substances for use by man to supplement the diet by increasing the total dietary intake; or a concentrate, metabolite, constituent, extract, or combination of the preceding substances.”*

Not the same as drugs or medicine, supplements are not used to treat, diagnose, prevent, or cure diseases (Food and Drug Administration, 2020).

The reason for being interested in taking an additive approach is the method is not only to use the extra effort of the taker to keep their schedule but also extra budget for investing in a product by themselves without a consultant like the dietary program. This study will investigate what kind of supplements and natural extracted product factors could motivate consumers to buy. What drivers and barriers to switching brands or trying new products in the categories are? With the hope that this research would be useful for dietary supplements or natural extract brand owners and marketers to pick up ideas and generate product or marketing communication plans to serve Thai consumers who are more health-conscious efficiently. Moreover, it could be one of the tools to

understand Thai supplements consumers for adapting or creating any policies in the future.



## CHAPTER II

### LITERATURE REVIEW

#### 2.1 Health consciousness behavior

*The health-conscious* habit seems to be a normal habit for humans as a health belief and attitude. Health-conscious consumers value their health as prior. Their daily routine was designed to improve or maintain their health condition (Willis et al, 2016). Nowadays it is becoming a trend as a healthy lifestyle. Recently, many marketers indicate an aging population as an eye-catching target because of a large proportion of consumers while they used to be stereotyped negatively because of their disabilities (Schewe, 1988). Schewe also presents the fact that the proportion of consumers' expenditures coming from households aging over 50 is larger than that under 35 years old. Considering the main expense of old consumers, the unique component of longevity is health expense (Balestra & Dottori, 2012). The 'life expectancy' is not only to deserve wants and needs but more deeply for 'life satisfaction', the stage that one can please activities they have done in a day. They will take health-related actions on specific concerns ensuring their health condition will be prevented from negative status (Rosenstock, 1974).

Besides, after the COVID-19 pandemic, people are more conscious about hygiene and seeking health products to strengthen their health. The new social norm, 'New normal', became the new guideline for the brand to adapt itself. Being a source of truth and avoiding appearing to profit from the crisis are the things brands mainly beware of (Murphy, Naert, & Strong, 2020). Health products brands' communication turned to staying safe and healthy supporting. This would lift the level of health consciousness up.

In terms of health-related products, as Aksornsart (2015) said in her study, to be healthy is the main reason why people would like to apply for health programs and the second reason is to lose weight reflecting their health concerns in how they perceive their body. Also, Williams (2012) suggested the Health Belief Model to understand the

health-conscious consumers' attitudes which resulted in a positive effect on health-related products.

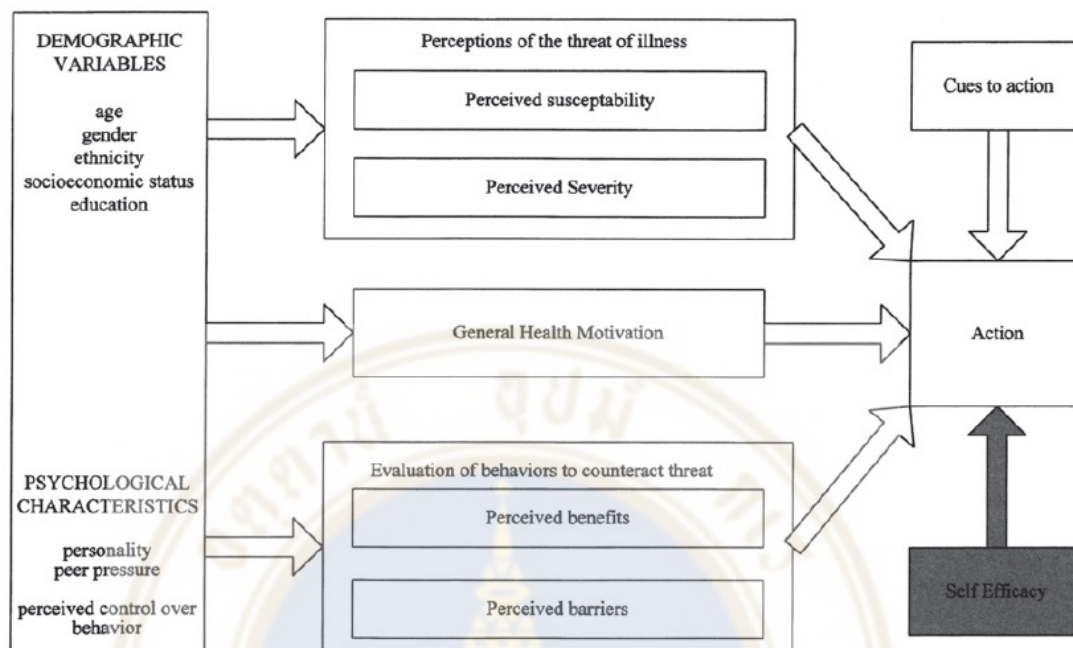


Figure 1. The health belief model [the model with self-efficacy represents the modified HBM suggested by Rosenstock et al. (1998)].

**Figure 2.1 The Health Belief Model (Psychology. Health Belief Model, n.d.d**  
**Retrieved from: <http://psychology.iresearchnet.com/health-psychology-research/health-belief-model/>)**

People will take the health-related action when they feel uncomfortable with their health condition which might not be anything wrong with their body. It could say that it is related more to psychological belief than pure logic.

## 2.2 Dietary supplements and natural extract products

As mentioned in the previous section about dietary supplements definition by FDA, in the global context, the Dietary Supplement Health and Education Act (DSHEA), amended the Federal Food, Drug, and Cosmetic Act, announced the new regular of safety and labeling of dietary supplements that “*FDA is not authorized to review dietary supplement products for safety and effectiveness before they are marketed.*”. While in Thailand, the Thai FDA must review and approve all products' ingredients for registration. Thai FDA classified dietary supplements as the food

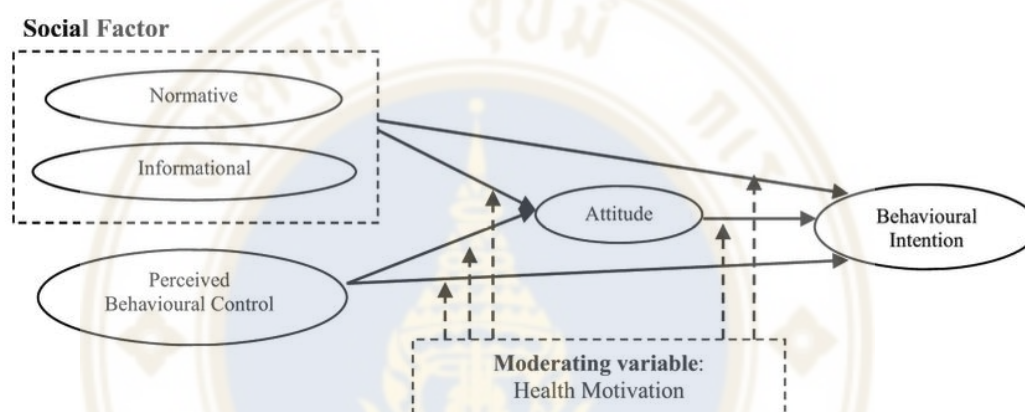
supplement which besides vitamin and mineral Thai FAD allows adding herbal ingredients and other bioactive ingredients at a daily dosage level (U.S. Commercial Service Contact Information, n.d.). According to Thai government support, herbal supplements and remedies are promoted to register in the National Master Plan 2017-2012 for supporting the development and effective usage of the Thailand 4.0 government campaign (ณัฐพร รักสัจย์, ม.ป.ป.). Supplement products in Thailand are more varied than in the US with the support from the government in research and development to propose Thai herb as One Tambon One Product (OTOP) in which each tambon will have its signature products. This research will focus on the intention to use products rather than the product content; including vitamins, minerals, or herbs.

In Thailand, most people take dietary supplements for a good appearance with the healthy from inside to outside belief (นันทิตา & ปราวณี, 2017). For health-conscious people, even if they know the price of dietary supplements and some natural extract products are high, they still purchase which means they value what they believe in, a healthy lifestyle as the high cost involves, so they are willing to pay at the price as long as the products make them believe it is good (Willis et al, 2016). Online media today also influences consumers' attitude toward supplements products. As Chyanee Chuprayoon (2019) suggested in his article, once there is a bad rumor or news such as a non-standard or over exaggerated claim, it affects how consumers perceive the products, especially from the e-commerce channel where people have high risk perception. Even dietary supplements and natural extract products are conceived to be food supplements but science points out that safety and its side effects need to be considered for usage in some situations such as having surgery or pregnancy cases (Using Dietary Supplements Wisely, 2019).

### **2.3 Consumers motivations for dietary supplements and natural extract products buying**

Consumers consider products from their motivations which are extrinsic and intrinsic motivations. Most of the products consumers consider safety, quality, and effectiveness as the factors to select (Council for Responsible Nutrition, 2014).

Supported by the research from Wiwat Wangcharoen (2013) investigating Chiang Mai, Thai consumers, the value on products qualities more than its attractiveness or claims in an advertisement. The Health Belief Model was used to predict how people adapt themselves to related or recommended actions based on their health attitudes and beliefs (Willis et al, 2016). While Azila Mohd Noor (2014) proposed to use the Theory of Planned Behaviour (TBS) to frame the scope of the research which investigates attitude, subjective norm, and perceived behavioral control. The TBS theory performs on analyzing given behavior from what is their attitude to a result, how others conceive the result, and predicting how a person will behave.



**Figure 2.2 Conceptual framework of dietary supplements consumption (Azila Mohd Noor, 2014)**

### 2.3.1 Rational motivation

Aronovitch (1979) suggested the Rational Motivation concept explaining how a person is reasonable or logical as long as those reasons or logic are accepted by his or her belief. Many people take supplements to make sure that they will get enough nutrition to maintain their health condition or avoid deficiency disease (Dietary Supplements, 1993). Referring to Kongdechakul (2018) and Moorman & Matulich (1993) studies, the result shows that health concerned consumers consider ingredients and Nutrition as primary. The more people are concerned about their health, the more health information they will seek for their safety (Phanchita, 2013). And to ensure quality, which refers to Wiwat's study, they will be looking for Reliability signs such as the Thai FDA logo, well-known brand/manufacturer, and so on. In terms of Price, many pieces of research and studies point out that the consumers are not sensitive to the price

because they value it as their health which is worth to invest. But for those who are not concerned about their help will perceive the price as high (Wiwat, 2014; นันทิลา, 2017; Balestra, 2012).

### 2.3.2 Emotional motivation

There is a quote from Smith (1984)'s article saying that "*emotion and feeling were indeed social structured and could be investigated*" presents how external environments shape people. Physical appearance is perceived differently in each culture. It depends on their experience getting from the environment they are in (Egan, 2006). Not only health conditions that people are concerned about but also physical '*Appearance*' since many advertisements on dietary supplements or natural extracted products use appealing models to persuade and motivate consumers to wish for the outcome (Amos et al, 2019). Chyanee (2019) suggested using good looking influencers or promoters, people being representative of real consumers to encourage as well. Even people consider things in their reasonable way but many times their 'for reason' is created from what they *believe* in (Aronovitch, 1979). There is a quote from Smith (1984)'s article saying that "emotion and feeling were indeed socially structured and could be investigated" presents how external environments shape people. Physical appearance is perceived differently in each culture. It depends on their experience getting from the environment they are in (Egan, 2006). Not only health conditions that people are concerned but also physical appearance since there are many advertisements on dietary supplements or natural extracts pick up this point to do marketing (Aronovitch, 1979). The present proportion of the elderly over the world is becoming larger, many health organizations appear to educate and support people to have a wellness life. The course of life summarizes the human general life cycle where nutrition is recommended for each state including for the elderly which creates managing social contexts affecting health beliefs. (Koehler et al, 2008) The *trends* can be one factor that people are influenced in this online mass media world because of overwhelming information availability (Chyanee Chuprayoon, 2019).

Regarding this study, to clarify what are factors playing an important role in motivating Thai consumers to purchase dietary supplements or natural extracted products when the situation leads them to be more health-conscious, I would use rational



and emotional motivation concepts in the investigation. Apart from the past research results using quantitative and mixed methods, this research would like to inspect deeply without a board to scope the respondent's answers by using qualitative methods. The factors from reviewing the past researches '*Nutrition concern*', '*Reliability concern*', and '*Pricing concern*' for Rational motivation and '*Appearance concern*' and '*Beliefs and trends concern*' for emotional motivations as the basic factors for the interview.



## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 Research Objective

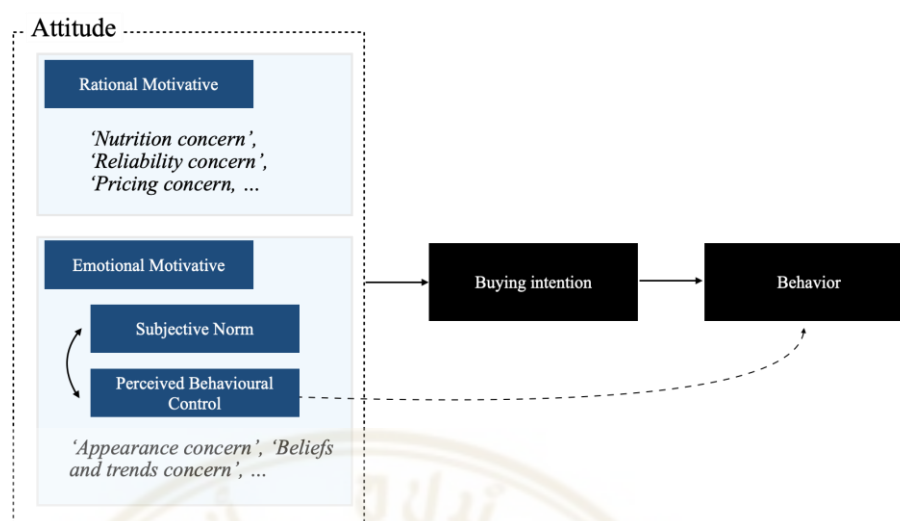
This research is aiming to investigate and understand the impact of health conscious behavior toward dietary supplements and natural extracted products leading to buying intention in the Thai context. Initially, I analyze the consumers' target needs via the Hierarchy of needs theory. People who buy and take dietary supplements or natural extracted products need safety or love and belonging.



**Figure 3.1** Maslow's Hierarchy of Needs

Along with this concept. The main concept of motivations would be divided into 2 that are rational motivation; to secure which could imply as 'safety needs' stage, and emotional motivation; to improve and maintain their health as 'love and belonging' needs stage.

By specifying factors related to these motivations and barriers from the literature review, The study will use the Theory of Planned Behaviour (TBS) and Rational motivation concept to frame the interview. From reviewing the Health Belief Model, we have known that people will act according to their beliefs in this case when people are more conscious of their health, it could assume that they have a positive attitude toward buying motivation and consider more to select the best things. In the decision making process, I use the TBS theory and rational motivation concept for framing the research.



**Figure 3.2** The research framework

The rational motivation concept shows how people consider buying things in a logical way, but there also are consumers' beliefs blended in. The researcher adds emotional motivation to the frameworks to complete possible aspects as much as it can to find interesting results. Subjective norm is considered to be emotional motivation because in the Thai context people are collectivist and feminine like to fit harmoniously in a group. This shows the emotional part that they would like to avoid uncertainty and uncomfortable situations. In addition, perceived behavioral control is the factor that consumers perceive by themselves, referring to the Health Belief Model, it would be located on emotional motivation in this research.

### 3.2 Research questions

- Do Thai people these days be conscious of their health condition?
- How do Thai consumers conceive of dietary supplements and natural extracted products?
- How does health consciousness affect dietary supplements or natural extracted products buying consideration?
- What are the factors that Thai consumers decide to use and choose supplementary products/brands?

- Do the rational motivations (Such as nutrition concern, reliability concern, pricing concern, and so on) really matter in the Thai context leading to dietary supplementary or natural extracted products buying intention? Why?
- Do the emotional motivations (Such as subjective norm, appearance concern, beliefs and trends concern, and so on) really matter in the Thai context leading to dietary supplementary or natural extracted products buying intention? Why?
- What is the most effective factor that drives consumers to buy dietary supplementary or natural extracted products?
- Do the consumers still believe in the brands and keep buying the brands they have used if the trend is changed? Why?
- What are the criteria of decision making in repeatedly buying supplementary products in the same brand?
- How do Thai dietary supplementary or natural extracted products consumers value the products?

### 3.3 Scope of the study

The study is designed to understand more deeply by using qualitative methods, finding more aspects apart from the past research that used quantitative methods. It is focusing on 3 main points which are

Section 1: Health consciousness competency and its perception effect

Section 2: Dietary supplementary or natural extracted products<sup>[1]</sup> involvement

Section 3: Dietary supplementary or natural extracted products buying factors of consideration

The study will focus on the consumer and customers' side. The interviewees will be in Bangkok and some from upcountry.

### **3.4 Population and Sample size**

There will be 12 Thai respondents from Bangkok and upcountry living in Bangkok. The respondents must buy dietary supplements or natural extracted products in the past year and if they are current dietary supplements or natural extracted products users would be favorable. The 12 respondents will be divided into 3 groups by their age that are 4 interviewees between the ages 20-30 years old and 4 interviewees between the age of 31-40 years old, and 4 interviewees between the age of 41-65 years old. The study will be conducted through face-to-face interviews, telephone, or online interviews depending on the available time and convenience of the interviewees. The gender of the consumers will be similar to those of the Bangkok population male 30%-40%, female 60%-70%.

Thai respondents are screened by selecting questions about the health consciousness that they have a signal of being conscious of their health such as seriously doing exercise, going gym, working, or having an education background in food science, health-care, or science-related field. And all of them are the current users of dietary supplements or natural extracted products that they are aware of or bought in any approach and at any cost of more than 3 types of supplements.

## CHAPTER IV

### DATA ANALYSIS

The data is collected and analyzed based on the interview questions in descriptive form by grouping the theme of the context found in the interviews. The findings show what are the motivating factors for buying dietary supplements or natural extracted products in the current environment where people are becoming more conscious about their health.

#### 4.1 Demographic Profiles of Respondents

The interview was conducted for a period of 2 months and yielded 12 respondents, all of them currently live in Bangkok, Thailand and they currently consume dietary supplements or natural extracted products. All of them are conscious of their health for different reasons depending mainly on their age, career, and experience which will be clarified in the next section.

**Table 4.1 Demographic Data**

Demographic	Frequency	Percentage(%)
<b>Gender</b>		
Male	4	33%
Female	8	66%
<b>Age</b>		
20-30	4	33%
31-40	4	33%
41-65	4	33%
67 and above	0	0%

**Table 4.1 Demographic Data (cont.)**

Demographic	Frequency	Percentage(%)
<b>Career</b>		
Employee	4	33%
Freelance	1	8%
High School Teacher	2	17%
Food Scientist	2	17%
Pharmacist/Nurse	2	17%
Business owner	1	8%

## 4.2 Health consciousness competency and its perception effect

The questions of this part of the interview aim to understand how people of different ages and careers perceive their health consciousness and let them evaluate how health conscious they are in their understanding perspective.

**Table 4.2 How interviewees conscious about their health**

How interviewees conscious about their health	
Non-health related studying/working	Health related studying/working
<ul style="list-style-type: none"> <li>● See surrounding people get sick.</li> <li>● Close people (Parents, Cousins, Friends, Co-workers) give suggestions.</li> <li>● The body is not working well like usual.</li> </ul>	<ul style="list-style-type: none"> <li>● Aware of maintaining health since being a college student.</li> <li>● See update scientific research/study.</li> <li>● Public health announcement/campaign</li> </ul>

The knowledge of health care and food science base is related directly to how people perceive their health concerns. As we could see that the interviewees who have the knowledge tend to take action on taking care of their health since they were

young while those who do not have the knowledge will start to be concerned after seeing some evidence or case around them.

**Interviewee A (Employee, 27)** said, “Seeing other people around my age getting sick or affected by external factors like PM2.5 or the COVID-19 is the most trigger for people at this age to start taking care of their health by consuming or exercising especially if those who got recovered are recommended.”

**Interviewee B (Employee, 25)** confirmed the concerns about health will happen after seeing many people get affected by outside factors such as PM2.5 and inside factors such as aging. He also added, “My mother always reminds him to take supplements and do exercise to maintain the body in a good condition for protecting myself from any disease.”

**Interviewee C (Employee, 32)** believed that consuming supplements and doing proper exercise since we are young is important. The interviewee starts doing exercise at around 25 for muscle building. He said, “Recommendation from my trainers, my friends, and the cousin who is a pharmacist really encourages me to be concerned and prepare for maintaining my health.” He also emphasized, “You can see that after 30 years old the body system will drop a lot from seeing other people or what really happens to me”. As well as **interviewee H (High School Teacher, 31)** who became a lot concerned about her health after seeing the health check-up result.

**Interviewee D (Pharmacist, 31)** said “Since I was in the university, I start consuming some dietary supplements” and she believed in preparing the body because all the body system efficiency can decline every minute.

**Interviewee E (High School Teacher, 31)** who graduated from the food science faculty said she has been taking care of her body since young because her interest of food science makes her more concerned about what she eats or takes for additives.

**Interviewee F (Retired Nurse, 56)** who used to be a nurse and experienced working in the USA for more than 10 years explained that for her, as a nurse and being in this field for a while, she takes care of her body and her family health a lot. She also added “Public health provided information is really important. In the US everyone is well educated about supplements usage like it is a household remedy while in Thailand



does not have much education about this which leads to misunderstanding and wrong usage or even do not dare to use.”

**Table 4.3 Behavior toward the health perception**

Behavior toward the health perception
<ul style="list-style-type: none"> <li>● To prevent/maintain</li> <li>● To improve</li> </ul>

From the interview, there are 2 main purposes of consuming supplement products that are to prevent and maintain, or to improve. In the researcher's view to prevent and maintain in the same type of objective because both are to keep their body healthy before having some negative condition while improving is happens after the bad condition is happen.

Those who have a health care or food science knowledge base will start taking care of their health for preventing their body from any diseases or bad conditions while those who do not have the knowledge will consume only when they feel anxious by seeing their close people having a bad condition on their health to maintain good health. And those who face it by themselves both from what other people told them or from self-awareness, will find something to improve their health.

**Interviewee G (Employee, 28)** explained “I started the supplement products for health improvement after the PM2.5 problem and the pandemic is booming in Thailand while most of the supplements are vitamins and ginger. Because of this age, the importance of having supplements is not seen and the surrounding people also do not consume this kind of product.”

**Interviewee H (High School Teacher, 31)** said “After the health shows the sign of sickness or degenerating that is the time serious health taking care starts to improve and maintain for the age.”

**Interviewee I (Food-Scientist, 62)** suggested that “It is better to prevent our health from any disease or degenerating. Even the efficiency is going to decline but maintaining good health is better than repairing later.”

The age range of the interviewees also shows the different tone of their answers on how they become consuming the products which can be concluded as

- 20-30 years old said they do not want to face that kind of bad health condition in the future.
- 31-65 years old said they faced these health problems by themselves and want to improve and maintain so it is not gotten worse. Or seeing people around their age have these bad conditions and do not want to.

### 4.3 Dietary supplementary or natural extracted products involvement

All interviewees basically consume some functional food, supplements, and herbs, as usual, such as Vitamin C, Vitamin B, Collagen, Biotin H, King of bitters (*Andrographis paniculata* (Burm.f.) Wall. ex Nees), or turmeric extract.

**Table 4.4 The supplements and natural extracted product entry**

The supplements and natural extracted product entry
<ul style="list-style-type: none"> <li>• Start using when he gets a recommendation from close people or a doctor.</li> <li>• The pandemic and PM2.5 that is clearly see the affect toward people health</li> </ul> <p><i>Some interviewees start using additive for beauty and appearance improving</i></p> <ul style="list-style-type: none"> <li>• Initially used for beauty like brightening up or smooth the skin.</li> <li>• I used to consume supplements like Zinc for the acne problem.</li> </ul> <p><i>Review on the social media also influence to buy</i></p> <ul style="list-style-type: none"> <li>• I saw people reviewing this supplement on Facebook and became interested.</li> </ul> <p><i>Interviewees who had studied or is working in food or science related get used to consuming this kind of product since they were young.</i></p> <ul style="list-style-type: none"> <li>• I have consumed some of the supplements since I was still in the university.</li> </ul>

Female interviewees seem to start consuming supplement products earlier than males which the main purpose of using is for beauty. The most influential for all of them is the close people and people with whom they are trusted.

As **interviewee C (Employee, 32)** got recommendations from close people around him, he started using some supplements and consuming functional food. The **interviewee H (High School Teacher, 31)** added “The current situation that is everyone concerns of the pandemic and the effect of PM2.5 that does occur with me, snitching and allergy sign, make me start buying supplements and some natural extracted products that are being trended topic on health improvement on the social media and news.”

**Interviewee A (Employee, 27)** said, “My friend recommended me to have collagen for firming skin and also improving bone health. At first, I bought it for my grandmother because she has a problem with her knee. So it became I was searching about bone health a lot and I was also concerned about my bone health as well.” While **Interviewee B (Employee, 25)** starts using Zinc from a skin doctor's prescription, and after that, he also took Vitamins for skin and to prevent illnesses as his mother has been doing since he was young.

**Interviewee J (Freelance, 28)** who works hard and has not had enough rest and sleep, does not take care of himself much. He started consuming the products from seeing reviews on social media which he emphasized, “It must be a review from real users, not the one that is a hard sale.”

**Interviewee D (Pharmacist, 31), Interviewee K (Business Owner & Food-scientist, 56), and Interviewee L (Food-Scientist, 63)** confirmed their past study and work to keep them updated on new research related to consuming things which lead them to be involved in these products since they were young. **Interviewee K** explained, “At that time it started from consuming natural extracted products as my parents or my grandparents did.”

Interviewees' career shows their circle of people they are trusted besides their family and cousin. For example, employees and teachers get recommendations from their friends or co-workers while health care and food science field get recommendations from their scientist friends or specialists in the field.

**Table 4.5 The effect of external factors to the supplements consuming**

The external factors encourage people to consume the supplements
<p><i>The situation does not affect the behavior change much.</i></p> <ul style="list-style-type: none"> <li>● I will take only the supplements that I normally consume for keeping my health ready to work.</li> </ul> <p><i>Became serious consumers by searching supplements for preventing and increasing body immunes.</i></p> <ul style="list-style-type: none"> <li>● The COVID-19 and the PM2.5 problem encourage people to find some supplements or additives for preventing their health from getting sick</li> <li>● I began searching for more information and comparing which one is the most suitable for me.</li> </ul> <p><i>Increased the amount of dietary supplements and natural extracted products</i></p> <ul style="list-style-type: none"> <li>● I have been searching and consuming more supplements to ready my health.</li> <li>● I find other kinds of supplements that people say or have on paper that are good in this situation.</li> </ul>

The external factors, the situation, in this case, do not affect **interviewee J (Freelance, 28)** for changing his behavior of consuming the supplements but it is his self-efficacy as he said, “I am not concerned of getting sick after working hard and have less sleep but I am more concerned of getting sick while working and cannot deliver my work efficiently. I am trying to keep my body healthy by taking some supplements that I usually take so at least if I get infected the condition will not be much worse.”

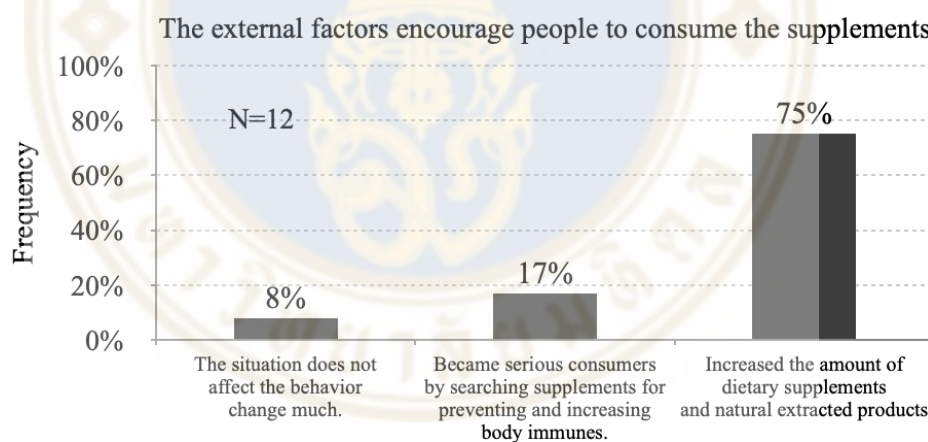
Some of the interviewees who consumed the dietary supplements sometimes like **Interviewee G (Employee, 28)** and **Interviewee H (High School Teacher, 31)** became more serious about taking supplements and exercising to prepare their bodies to be ready against the diseases by increase health immunity.

**Interviewee G (Employee, 28)** added, “I was searching a lot of information by reading reviews on websites and social media to compare before buying. Compared to before the pandemic situation, I will just buy whatever my friend or my cousin recommended.”

For those who normally take the supplements, add other kinds of dietary supplements and recommend others to take them too as the **Interviewee C (Employee, 32)** explained “During the COVID time, I spend a lot of time more with myself because of the working from home which my friends also like that ... The more we isolate, the more we inspect ourselves like our bodies. I become seen more problems with my health. It led me to consume more supplements, functional food, or even exercise continually.”

**Interviewee L (Food-Scientist, 63)** said, “These days there are a lot of new supplements that are enhanced from some of the existing supplements being used for improving health. It is developed for ease of consumption and decreases the nutrition lost giving a higher efficiency. I and my friends in the scientific group also consume this one.”

Health problem awareness takes a big role here as every interviewee becomes more serious about their health care after being aware of the result that might happen if their bodies are not in a good condition what it will affect.



**Figure 4.1** The external factors encourage people to consume the supplements

**Table 4.6** The importance of consuming the supplements or natural extracted products

The importance of consuming the supplements or natural extracted products
<p><i>It is nice to have but if not, it is also fine.</i></p> <ul style="list-style-type: none"> <li>• Taking care of nutritious food and doing exercise is enough but if you have no time to do that, better have supplements also.</li> </ul>

- It will be important when the body has something wrong.

*It is important to consume as at the particular age the body working will drop.*

- We should maintain our health before it is too late.
- Our public health should educate people more about the importance of using supplements.

**Interviewee J (Freelance, 28)** said, “At first before facing a health problem, I did not have enough sleep and exercise, I thought supplements are nonsense. But when I become a freelancer, I have a lot of work leading to not having time to take care of myself. So for me, I define supplements as a thing for those who have no time to take care of themselves.” he also emphasized, “I take the supplements more as an emotional thing like something to hold on even though it might not really help much.”

While some of the interviewees believe that the supplements' purpose is like medicine, as the definition of dietary supplement products, as FDA defines, it is not used for treating any diseases like drugs or medicine, that can kill some diseases. **Interviewee A (Employee, 27)** said, “Consuming supplements products will be important only when there is something wrong with the body.”

**Interviewee H (High School Teacher, 31)** explained, “I do not like taking medicine so I consume supplements and do exercise making my body healthy instead. I feel like if I have medicine, it will leave some chemicals in my body.”

All of the health-related studied/worked interviewees such as **Interviewee F (Retired Nurse, 56)** said, “In the US, everyone has dietary supplements in every household, like having remedy, while Thai public health has not educated much on how it is important, how to take, and how to choose.” **Interviewee D (Pharmacist, 31)** and **Interviewee K (Business Owner & Food-scientist, 56)** added that normal people cannot have enough nutrition as their body needs, especially when we get old. The body cannot absorb as much nutrition as it wants.

From here we can divide interviewees into 2 groups that are those who focus on short-term effects and those who focus on long-term effects on their bodies. If they are aware of what will get affect their life if their bodies are not healthy and are ready to face whatever in the future, there is a chance for them to consume supplements more

seriously. And also, how supplements are perceived in Thailand can also be a fence to keep people from trying or having wrong information due to the lack of education.

#### **4.4 Dietary supplementary or natural extracted products buying factors of consideration**

All interviewees have similar factors to consider for buying which are Ingredients, Reliability, Price, Promotion, Ease of access, and Recommendations from close people.

##### **4.4.1 The rational motivations**

This part will consider only the factors that can be reasonably compared to the interviewees' beliefs which are Nutrition concern, Reliability concern, Price concern, Promotion, and Ease of access such as channel of buying and getting information.

**Table 4.7 The rational motivations effect on the product buying**

The rational motivations effect on the product buying
<p><i>Nutrition concern</i></p> <ul style="list-style-type: none"> <li>● I always look at the label and compare each brand.</li> <li>● Not only the formula, I also selected the format that can enhance the highest effectiveness.</li> </ul>
<p><i>Reliability concern</i></p> <ul style="list-style-type: none"> <li>● Big brands surely be 'trusted' if the consumers do not have much information or experience to compare the products.</li> <li>● Packaging, brand image, promoting, information provided by brand, and the origin country are considered.</li> </ul>
<p><i>Price concern</i></p> <ul style="list-style-type: none"> <li>● Price is also one of the signals to represent reliability and quality.</li> <li>● Investment in health is worth it.</li> </ul>

*Promotion*

- If there are 2 products that I have considered as the same level of quality and price, I definitely will buy the lower price one with promotion.

*Ease of access*

- I can consume other products or brands that have the same benefits I want if I cannot find the product I normally use at that time.

## 4.4.1.1 Nutrition concern

All the interviewees who have the knowledge and interest in food science will consider brand and ingredients or formula as the top 2 factors for selecting dietary supplements or natural extracted products such as the **interviewee D (Pharmacist, 31)**, **E (High School Teacher, 31)**, **F (Retired Nurse, 56)**, **I (Food-Scientist, 62)**, **K (Business Owner & Food-scientist, 56)**, and **L (Food-Scientist, 63)** who work and studied in science and health care field. **Interviewee H (High School Teacher, 31)** does not study in the science field but she has a high interest in taking supplements so she has been searching and learning about the ingredient and their results by herself.

## 4.4.1.2 Reliability concern

Interviewees who do not have much experience in consuming the product will consider brands they have heard from reviews as **interviewee J (Freelance, 28)** explained, “I definitely have no idea about supplements so review and recommendations from my friends and internet helped me a lot. So after I saw many reviews I can grab some popular brands among the kinds of supplements I am looking for that they said are reliable brands.” **Interviewee A (Employee, 27)** also added that packaging is considered when comparing products on a shelf or the first impression on an advertisement on social media. “Any brand that I have seen from advertisement, the package design, and brand image is the first thing that can grab my attention and look for more information about that product.” Besides brand and packaging, the country of brand origin is also considered. **Interviewee C (Employee, 32)** said, “The brand that came from developed-countries, especially western countries, sounds more reliable to



me.” he also added, “It is not that some brand from Thailand is not good, but at the first glance it can motivate me more to interest.”

#### 4.4.1.3 Price concern

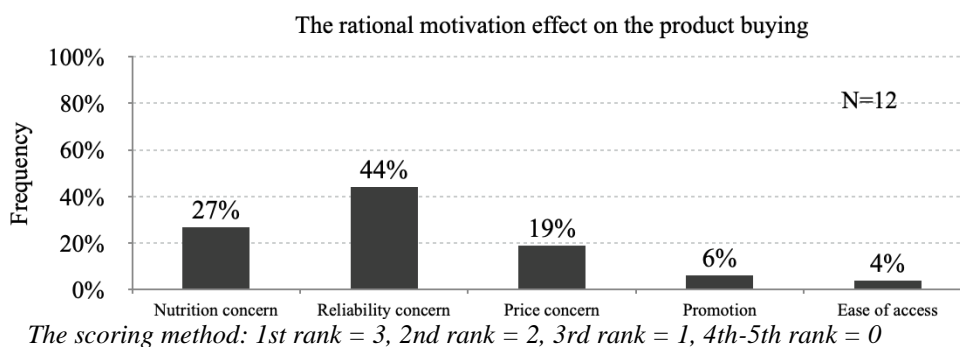
Price is one of the factors for almost all interviewees both who have knowledge or experience about food ingredients or have not. **Interviewee B (Employee, 26)** give an example situation when he was buying a supplement, “The price is surely be considered but since it gives some feeling that high price is a signal of good quality but it is not that I will buy the highest price one since there are also other factors to be considered.” **Interviewee F (Retired Nurse, 56)** confirmed that price is not that affects considering buying. “I understand that the dietary supplements or natural extracted products have a high price because of the cost of research, ingredient, processing, and so on. I believe that investing in health is worth it”

#### 4.4.1.4 Promotion

Promotion is not the factor for those who start buying the dietary supplements and natural extracted products since none of the interviewees consider it for buying. They consider the promotion when they decide to buy already but compare which brands to buy. **Interviewee B (Employee, 26)** stated that “If there are 2 brands in my consideration list, the ingredients are the same, the quality looks the same, and both are easy to buy at that time; let’s say on the shelf in front of me, I will buy one with a promotion.”

#### 4.4.1.5 Ease of access

Ease of access is considered when they have decided which products or brands they want to buy. But it is an important factor for some interviewees to start trying a new product or switching as **interviewee K (Business Owner & Food-scientist, 56)**, **interviewee B (Employee, 26)**, and **interviewee F (Retired Nurse, 56)** mentioned in the same way that because the supplements need to ‘consume in a long term’ so if the products can buy easily it would be another point to be considered but not as the main factor. **Interviewee K (Business Owner & Food-scientist, 56)** and **interviewee B (Employee, 26)**, and **interviewee F (Retired Nurse, 56)** also said that “If the dietary supplements and natural extracted products are quite general, not different much in the market, it can lead to buying another instead if cannot buy the one I want”



**Figure 4.2 The rational motivations effect on the product buying**

To see the frequency, the researcher scored what the interviewees rank up for the rational factors that they consider the most for buying the dietary supplement and natural extracted products.

As the graph shows and what **interviewee B (Employee, 26)** and **interviewee K (Business Owner & Food-scientist, 56)** said above, we can imply that promotion and ease of access are not the main factors for some people to buy but it is a trigger for them to switch the brands or product. While the 3 main considered factors like Reliability, Nutrition, and Price is the main information that if a brand wants to win the market competition, it is a must information be provided and make them notice.

#### 4.4.2 The emotional motivations

This section will consider emotional factors that affect the interviewees' emotion and feeling that leads them to buy or have an intention to buy. It can reflect the social structure or norm that shapes people. These are Appearance concern, Recommends or Reviews from others, and Trends.

**Table 4.8 The emotional motivations effect on the product buying**

The emotional motivations effect on the product buying
<p><i>Appearance concern</i></p> <ul style="list-style-type: none"> <li>● I will be more concerned about my health when someone warns me.</li> </ul>
<p><i>Recommends or Review from others</i></p> <ul style="list-style-type: none"> <li>● Convincing from close people can influence me.</li> <li>● Hard sale review sometimes can turn me off.</li> </ul>

- Informative review looks reliable and can drive my interest.

#### *Trends*

- I am not relying on any trend, just finding the products that serve my body's needs is enough.
- I will not try any new dietary supplements until it has enough research for proving the benefits and side effects.
- Natural extracted products are easy for me to try without thinking much.

#### 4.4.2.1 Appearance concern

**Interviewee E (High School Teacher, 31)** said, “Even normally I am controlling my food and doing exercise but when there is someone telling me that my appearance looks different in a negative way, finding dietary supplements is one of the choices that I was thinking of.” and she also emphasized that the dietary supplement, in this case, is not for weight loss but for the digest system improvement.

#### 4.4.2.2 Recommends or Review from others

Recommendations and reviews from other people both on the internet or their close people are the factors that are said by almost all of the interviewees. All of those who mentioned confirmed that close people can influence them more than the internet reviews. **Interviewee L (Food-Scientist, 63)** explained besides searching for information on his own as a scientist the real user's result can tell other effects that might not be found in any studies. And he also added, “Close people around me know how I am, and if they recommend something to me, that means they are willing to help me improve my health.”

#### 4.4.2.3 Trends

Trends can create all interviewees' interest in many dietary supplements and natural extracted products but it is not the main factor to buy.

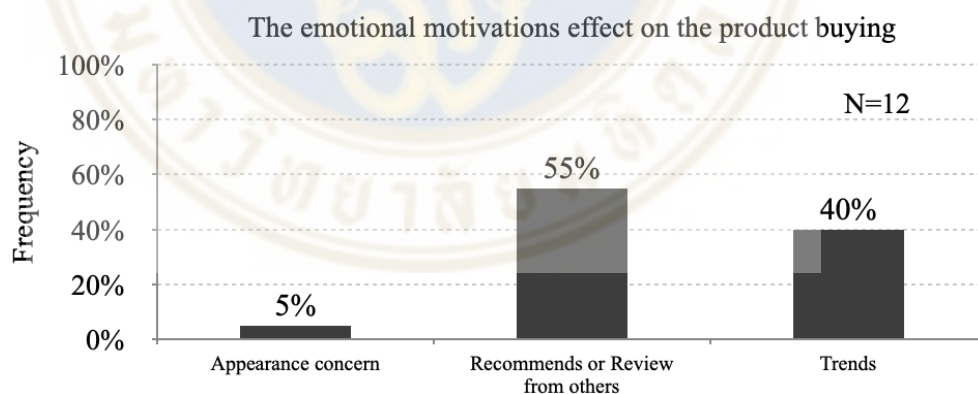
As we know that reviews from the internet have both from the real users and the mock-up or hiring one. For **interviewee J (Freelance, 28)**, “I can tell if there is a brand promoting their product by having a lot of reviews on Facebook posting at the same time or the same period. It really turns me off because I feel it is a

hard sale which I do not like even though it might be really good. I will avoid buying it.” he said.

**Interviewee E (High School Teacher, 31)** mentioned about the COVID and PM2.5 that “It is really made me worried and looking for some supplements to improve my health but if there is any brand using this situation information to promote, it will just help me to compare the ingredients that can help to improve the related immune only.”

**Interviewee F (Retired Nurse, 56)** also said that “Now that everyone talking about ‘Fah Tha Lai Jon’ (King of bitters) that it can help increase buddy immune, since this product we have been known about for a long time and there are many pieces of research about it, so the trend reminded me about the existing of this. It is easy for me to buy it because I know that it really works.”

**Interviewee I (Food-Scientist, 62), Interviewee D (Pharmacist, 31), and interviewee K (Business Owner & Food-scientist, 56)** both confirmed that they will not rush into any product when it comes out. They will wait for more papers proving the product’s efficacy or some reviews from their surroundings which most scientists as well first.



**Figure 4.3 The emotional motivations effect on the product buying**

To see the frequency, the researcher scored what the interviewees mentioned for the emotional factors that they considered for buying the dietary supplement and natural extracted products.

Recommendations or Reviews from real-users influence interviewees to buy the most while Trends can only trigger them to be interested which

leads to a brand switch. Appearance concern in this research is not a beauty standard concern since we are focusing on dietary supplements and natural extracted products but it reflects on how their health is which even it is the last factor interviewees are concerned but it can be a good representation for an advertisement to use as seeable evidence.

#### 4.4.3 Products and brands switching

What can make people change products or brands? What can be used as an opportunity for a new brand that wants to jump into this market? By asking the interviewees, the interviewer gave them a situation of having a new product that is trendy or new brands of the products they have been using, will they switch or not.

**Table 4.9 Products and brand switching factors**

Products and brands switching factors
<p><i>Changing to new products or brands</i></p> <ul style="list-style-type: none"> <li>● Depending on the scientific information supported on the product whether it is better and suits my body.</li> <li>● If my close friend recommends, I will try and if it is not as good as what I consume before I will not change.</li> </ul> <p><i>Changing to new brands</i></p> <ul style="list-style-type: none"> <li>● Promotion of the consideration listed products.</li> <li>● Cannot buy the current using supplements.</li> </ul>

Healthy Trends do not affect much the products and brands change but it can be a trigger for them to be interested and try, which can lead to switching if the result is at least as good as they expect.

##### 4.4.3.1 Changing to new products or brands

**Interviewee I (Food-Scientist, 62), Interviewee D (Pharmacist, 31), and interviewee K (Business Owner & Food-scientist, 56)** stated in the previous section, 4.4.2.3 Trends, that they need more official information like research to confirm the product's efficacy and side effect that might happen.

All interviewees said in the same way that, when they start consuming dietary supplements and natural extracted products or even now, they will consider their body first what needs to be improved. So once they have decided to buy any product and its result is the same as they expect they will rarely change.

**Interviewee B (Employee, 26)** said, “I might change to a new product or a new brand if there is any recommendation from my close people that the result is better than what I am consuming.” and he also highlighted that “Those who recommend must use both what he was using and the new one already.”

#### 4.4.3.2 Changing to new brands

All interviewees said the promotion is not the factor for considering during the first selecting stage that they did not get used to the products or brands. As the **interviewee C (Employee, 32)** said “Supplements are not like skincare that can try and see the result if allergy or it works well. Supplements are time-consuming to see the result like skincare but it needs to take in the body which is riskier. I need to get to know it by having enough information first. So promotion can drive me to buy at the consideration period.”

**Interviewee I (Food-Scientist, 62)** mentioned that “Each brand has its own processing method which even if it is the same product type but the benefits delivered might not be the same which means no matter how much the promotion is good but the products do meet my want I will not buy.”

**Interviewee K (Business Owner & Food-scientist, 56)** said, “I rarely change the brand when I find the one that gives a good effect for me but if that period is out of stock or cannot be bought for some reason, I am ok to use another that is similar.”

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

This research shows interesting findings about the way people in each state of life are concerned about their health which leads to a cause pushing them to consider having dietary supplements and natural extracted products.

For the health consciousness and dietary supplements and natural extracted products involvement, the interviewees can be divided into 2 groups that are

1. The interviewees who do not have a basic knowledge; from the past studied or working fields, on food ingredients, food science, or health care.
2. The interviewees who have a basic knowledge; from the past studied or working field, on food ingredients, food science, or health care.

The first group starts to be concerned or conscious about their health after they have seen their surrounding people getting sick so they want to enhance their health and become immune to any disease or it is themselves whom the body does not work well like before so they would like to improve or maintain it. And the recommendations from their close people also influence them to start.

The second interviewee's group, they have been aware of maintaining their health since they were studying at a university and started to maintain their health since that time. They can be more aware if there is any new study. One of the interesting cases from this research is that one of the interviewees who have worked in the USA mentioned the US Public Health working with the Ministry of Education in educating their people to be aware and conscious of their health by consuming supplements like it is a remedy.

Interviewees' age reflects some patterns that can be described by stage of life that young interviewees in the age range 20-30 years old said they will start being concerned about their health and consume some supplements when they see the close people having bad conditions which they do not want to be like so they decided to

maintain their good health condition for preventing. While those in the age range 31-65 years old said they have faced some bad conditions and also seen from the close people and they know well that their bodies performance starts to decline so they need to improve and maintain.

Some of the interviewees, mainly female, started consuming and getting to know dietary supplements and natural extracted products for beauty purposes usage and turned into health improvement after the COVID-19 pandemic and PM2.5 problem in Thailand. It can imply that the situation can stimulate some Thai people to be more conscious of their health which affected the first group more because they do not have enough information on preventing themselves by dietary supplements. But since all the interviewees are current supplements and natural extracted products users so it does not affect their behavior much during the interviewing time. They will only be more serious about consuming or increasing other supplements product types and quantities.

Interviewees value the importance of consuming dietary supplements and natural extracted products differently which can be divided into 2 levels.

1. It is nice to have but if not, it is also fine.
2. It is important to consume as at a particular age the body working will drop.

Comparing how they gave an interview and the example they gave, those who said it is nice to have to focus on a short-term effect while those who said it is important are focusing on preparing their body for the future, and avoiding having severe diseases.

The motivations that drive the interviewees to buy dietary supplements and natural extracted products mainly are rational motivations and have the emotional motivations supporting at the first stage of making them aware and the final stage that they are considering and comparing to pick one of their option products.

The first thing they are concerned for rational motivations is Reliability followed by Nutrition concern, Price concern, Promotion, and Ease of access in order.

The reliability that they look for is the FDA certificate on the product as a priority and for those who do not have background knowledge on food ingredients, reviews from real users are really confirmed them to make a purchase decision. The packaging appearance is also mentioned to be one of the factors they consider as it



reflects how the brand minded customers' perception of their brand which the promoting materials such as Facebook or Instagram posts are included. For the group of interviewees that has background knowledge in the science-related field, they looking for proven evidence like scientific research, the research host, or who is the trusted professional recommending the product.

The nutrition concern that they focus on is only on finding the nutrition they need for their body at that time or for maintenance to prepare for the future. While price concern becomes one of the factors even if they are willing to pay the price for healthy products, some of the interviewees consider price as a signal of reliability since they feel that a high price represents a high-quality product somehow.

Promotion and ease of access are not the main factors for some people to buy but it is a trigger for them to switch brands or products.

For the emotional motivations which all of the variables in this research reflect on Thailand's norm and how society shapes Thai people, The Recommends or Review from others is the most supporting factor for them to decide. Sometimes the review can trigger them to make them feel positive or negative about their body so this is why it is counted in the emotional motivation.

Followed by Trends that drive them to interest and lead to searching for more information or back to search the reviews of the products. And the last one is Appearance concern which can be expected from this research that it be the last motivation they are concerned with since they are aware of what their body wants to make the system work well which a good appearance is like an extra benefit they can get.

This kind of product needs to be consumed continuously to see the result interviewees confirm that they have put in a lot of effort by searching for information and reviews to make sure before buying and consuming. All of them rarely change their products and brands if what they use still gives them the benefits they want. While the factors that might make them start trialing the new products or brands recommendation from their close people that it is better.

While for the brand switching, besides the recommendation of better results, Promotion can be good motivation in considering the period that the buyer has listed all the options they think it is in the similar comparison. And if the product cannot be

purchased due to inability or any other purchasing problems, some interviewees stated to change to other brands with the similar quality or any brands that can be bought at the moment.

## **5.2 Recommendations**

In this research, the stakeholders can get benefits from this research by using it as a tool to implement strategy and improve their businesses in the future in order to find customer needs.

For dietary supplements and natural extracted products brands, the insight of the consumers' motivations can help in product development and marketing strategy to promote the products effectively. As it indicates Nutrition is the most important factor they are concerned about and consider for selecting products. Since brands have their own products to promote, by providing information with different formats and different levels of scientific information to grab the attention of a specific group of customers such as providing benefits, results, and sources of the products information to those who do not want much scientific information while adding more paper or research in the promotional content for those who crave for referable source like a scientist. Also, brands need to make some promoting tactics that can catch each customer's eyes aligning with their interests, for example, the content promotion should be a result review format, informative content, or promotion content, and the message that will be used in promoting as well. Also, the tone of voice to be communicated with each target should be different from the insight from the research. For example, If a brand wants to communicate with a young target who does not have much knowledge on supplements and natural extracted products and the priority thing they are concerned is their good living, an advertisement should give them some effect of not having the products that might can happen and what it will affect not only the consumer but also their job their work-life-balance or so on to trigger them since the first funnel, awareness.

For the new brands, this research provided a bug picture of Thai dietary supplements and natural extracted products consumers can use to shape the target who

is the most suited to the brand image and reach them. Since one communication might not be able to serve everyone as mentioned in the previous paragraph.

For government and organizations, these findings will help shape key communication of educating dietary supplements and natural extracted products usage. The insight shows what each consumer group knows and still lacks which the government and organization can fill that knowledge gap by coming up with a campaign that will enhance Thai people's knowledge of the supplements and prepare themselves before it is too late which is a long term it will affect general Thai health improvement and decrease the subsidize on any health-related as well.

### **5.3 Limitations and Future Researches**

This research mainly focused on Thai respondents in Bangkok which might not represent Thai people from other regions. The future research can extend to other areas of Thailand.

There were only 12 interviewees living in Bangkok being chosen for this research. The future research can use a larger number of interviewees and apply quantitative methods to confirm the conclusion of this research.

The focusing product category, dietary supplements, and natural extracted products are investigated in the area of health-conscious consumers which limits the scale of the sample. And the result might not be able to apply all results to some specific products such as collagen, Thai herb supplements, or other products in the dietary supplements and natural extracted products category that can be studied further.

Some of the variables might be overseen, the upcoming variable could be interpreted and indicated in the research but it has to be noticed for further research to generalize as well.

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## **Appendix A Interview Questions**

1. Do you these days be conscious of your health?
2. What do you think about dietary supplements and natural extracted products?
3. Do you think the health consciousness affects dietary supplements or natural extracted products buying consideration? in your case and others from your perspective.
4. What are the factors you consider to use and choose supplementary products/brands? Why? (consider for rational and emotional motivation)
5. What is the most effective factor that drives you to buy dietary supplementary or natural extracted products?
6. Do you still believe in the brands and keep buying the brands you have used if the trend is changed? Why?
7. What are the criteria of decision making in repeatedly buying supplementary products in the same brand?
8. If you have to define the value or the critical point of having dietary supplements and natural extracted products, what is it?