

**THE FACTORS INFLUENCING ONLINE PURCHASE INTENTION
FOR PLANT PROTEIN SHAKES FOR MILLENNIALS IN BANGKOK**



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THE FACTORS INFLUENCING ONLINE PURCHASE INTENTION FOR PLANT PROTEIN SHAKES FOR MILLENNIALS IN BANGKOK

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ABSTRACT

The importance of this study lies in its contribution to understanding consumer behavior toward plant protein shakes in the Bangkok market. By identifying the factors that influence online purchase intention, this study can inform marketing strategies and help an entrepreneur who is interested in this business better meet their target consumers' needs and preferences. This study investigates the determinants of online purchase intention for plant protein shakes among millennials in Bangkok. A survey was conducted on 209 millennials who had previously purchased plant protein shakes online within the last six months, and the data were analyzed using multiple regression analysis. The findings reveal that the perceived value of price, product knowledge, and information search positively influence online purchase intention. The study also examines the demographic characteristics of the respondents, providing insights into the target market for plant protein shakes in Bangkok. Additionally, the study explores the buying behavior of respondents, identifying their preferences for channel, price range, bottle size, and flavors. The results provide valuable insights for entrepreneurs, marketers, and manufacturers of plant protein shakes. Overall, this study contributes to the understanding of the factors driving online purchase intention for plant protein shakes among millennials in Bangkok, providing guidance for entrepreneurs seeking to develop effective marketing strategies and meet customer needs.

KEY WORDS: Plant Protein Shake / Millennia / Target Customer / Purchase Intention

50 pages

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CHAPTER I

INTRODUCTION

1.1. Introduction

Presently, the global consumption of healthy food and beverages continues to grow, Thailand ranks one of the top 20 in the world and ranks 19. The global consumption of food and beverages for health is worth more than 30 trillion baht, with an average continuous growth of 6 to 7 percent per year in 2017. The market has the potential to grow as high as 33 trillion baht. The country with the highest consumption of healthy food is China, the second is Brazil, and the third is the United States (Euromonitor, 2015). Thailand's healthy food and beverage market in 2017 is likely to grow continuously at an average of 3.5 percent per year, which numbers around 187,000 million baht. The healthy beverage market is valued at 86,700 million Thai baht, accounting for 46 percent of the total market. The other 54 percent is a healthy food market valued at 99,900 million baht, with an average growth rate of 5.9 percent per year over the past five years. This means that a healthy drink is essential to drive the growth of the healthy food and beverage market. Even though the economy of Thailand is in a slowdown, consumers are concerned with their spending. While most healthy foods and beverages are priced higher than conventional foods compared to the market, therefore, consumers still want to buy healthy products to take care of themselves to be healthy which resulted in 2022, the market value increased to 213,099 million baht and average growth of 2.7 percent per year. (Yongyut Saovapruk, 2018)

The growth of the healthy drink market in Thailand has the highest market share in the ASEAN region and still has great potential for producing plant protein shakes, even in the economic slowdown, which is the growth of the healthy drink market situation around the world that is still growing well. The manufacturers should pay attention to the popularity of millennial consumption. There is a group of consumers who influence the healthy food and beverage market. The reason is that the Millennials focus on buying health products with functions that are convenient for consumption that

matches with lifestyle (Tetra Pak, 2016). The coronavirus (COVID-19) pandemic has also affected many aspects of Thai consumers' food preferences. The current food trends are influenced by various factors, such as promoting food sustainability and increasing health mindfulness, resulting in the popularity of plant-based food consumption in Thailand. The market value of plant-based food in Thailand indicates that, in 2019, the plant-based food market in Thailand was valued at around 845 million U.S. dollars. The market value was forecast to reach 1.5 billion U.S. dollars in 2024. From 2019 to 2024, the compound annual growth rate of the plant-based market was also estimated to be 10% (Statista Search Department, 2023)

Plant-based protein products have gained popularity over the past few years because of changes in consumption patterns, especially in Bangkok, Thailand, and other urban areas. The main point that drivers promoting dramatic changes in Thai eating habits by consuming fewer snacks ("Siam Scope Magazine", 2017), trying to eat better food, and looking for cleaner labels (Cassity, 2018) are increasing incomes and urbanization.

Millennials, or Generation Y people, are people born between 1981 to 1996 and currently the age between 24 to 39 years old. Millennials have a population of more than 1,800 million people from the total population. More than 7 billion people worldwide. In Thailand, there are more than 20 million out of the total population of Thailand, which numbers about 69 million or accounts for one-third of the population. There is 65% of millennials in Thailand spend time taking care of their health in order to look good on social media. (marketingoops.com, 2018) Millennials came with the technological revolution when the Internet and electronic devices became more convenient and easier to access (Gurau, 2012). Millennials tend to have high involvement in various areas of life (Viswanathan & Jain, 2013). Consumption is the basis for creating opportunities to stimulate feelings and perceptions and open up new experiences for millennials (Turow, 2015).



Figure 1.1 Thailand internet user behavior 2020 (ETDA,2020)

According to the internet usage behavior in 2020 by Thai people, they have averaged 11 hours and 23 minutes per day, showing an increase of 1 hour and 31 minutes from 2019. Regarding the occupation of using the Internet, it was found that there was almost no difference for all occupations they used. As for the generation of Internet use, Generation Y is a group of Millennials, the most for five consecutive years, with internet usage hours at 12 hours 26 minutes, followed by Generation Z at 12 hours 8 minutes, Generation X at 10 hours 20 minutes, and Generation Baby Boomer at 8 hours 41 minutes, respectively, most of the Thai people, more than 95.3 percent, use the Internet to use social media such as Facebook, Instagram, and Line is the most popular activities for seven consecutive years, followed by watching movies and listening to music, 85 percent searching for information online. 82.2 percent of them sent and received emails, 69 percent of them, and 67.3 percent of shopping online and 56.5 percent of payments for goods and services reflected the growing confidence in the security of Thailand's online payment services (ETDA,2020)



Figure 1.2 Thailand internet user behavior 2020 (ETDA,2020)

Moreover, online food and beverage ordering increased from 2018 to 15.1 percent, followed by the use of services for goods and services payment, which increased by 11.4 percent. The use of online delivery of goods and parcels increased by 11.0 percent respectively. It is undeniable that online channels have become more popular, The best is E-Marketplace which is Shopee at 75.6 percent, followed by Lazada at 65.5 percent, and social media platforms, which is the Facebook page at 47.5 percent and Line at 38.9 percent, all the channels mention sellers use most to sell online which are Facebook fan page 64.7 percent, followed by Shopee 47.5 percent and Instagram 40.8 percent and also found that 98.29 percent of Thais prefer to use Line to communicate, followed by Facebook messenger, FaceTime, and WhatsApp, respectively (ETDA, 2020)

The use of online food delivery by Thai people during the COVID-19 epidemic is another critical factor affecting the decision-making behavior of Thai people choosing online food ordering services because they are most concerned about the spread of COVID-19. For popular online food ordering applications of Thais, it is an application that is intermediary to order food, such as Grab Food, Lineman, Food Panda, and Get Food, up to 88.47 percent, followed by the application. 62.93% of restaurants direct sales, and Thai people still prefer to order food via direct message on the restaurant's social media. For instance, on Facebook, Instagram, and also in stores that offer food delivery services, up to 13.08 percent, with the time when most food orders

are ordered at lunchtime (11:00 a.m. – 1:00 p.m.), 42.06 percent, followed by dinner (17.00 - 20.00) 39.88 percent and afternoon (14.00 - 16.00) 14.02 percent (ETDA, 2020) From the data as mentioned earlier, it shows the opportunities of the plant protein shake business through online channels with the millennial group.

This research may help understand the factors that may impact the customer and develop future business. Therefore, the researcher was interested in factors influencing the purchase intention of plant protein shake through online channels of Millennials in Bangkok. This study's results can be used as a guide for people who would like to start an online plant protein shake business. Moreover, the research results can be used to make business development or improvement decisions.

Keywords: Plant Protein Shake, Millennia, Target Customer, Purchase Intention

1.2. Problem statement

There needs to be more research on what factors affect the intention of purchasing plant protein shake through online channels of target consumers.

While The market is growing, there are many brand failures to sell plant protein shake online. Moreover, many brands may focus on sales rather than consider factors that may affect their sales.

1.3 Research objectives

To study what factors affect the intention of purchasing plant protein shake through the online channels of target consumers.

To study how are demographic factors, gender, age, marital status, education, and income of millennials in Bangkok who used to buy a plant protein shake have experienced.

To study factors influencing the purchase intention of plant protein shake via online channels of the target group.

To obtain information or make recommendations for entrepreneurs wishing to enter the plant protein shake market through online channels.

1.4. Scope of the study

Study and find information from domestically and internationally relevant research, papers, articles, these publications, journals, and video media. Including various information from the Internet. In addition, a survey was conducted using an online questionnaire from the sample group who had used to order food online both for their consumption and for others. The data collected through the quantitative research is through a questionnaire survey made available online using Google Forms. The research design is a single cross-sectional design Using convenience sampling. The period for keeping the data or analysis is around six weeks from February to March 2023. The population is those living, working, or studying in Bangkok who use the Internet. The sample population in Bangkok is the Millennial group who used to order food through online channels for their consumption and others, totaling 209 people. Study period starting from February to March 2023 The minimum of respondents required to do the questionnaire set the sample target to be at least 200 samples of respondents that pass the screening questions.

1.5 Expected benefits

To benefit entrepreneurs who want to enter the business or are running an online plant protein shake business, knowing the trends of the needs of millennial consumers in Bangkok. This information can be used to develop products that meet the needs of consumers.

CHAPTER II

LITERATURE REVIEW

In this chapter, the researcher has studied and reviewed relevant literature by searching articles, academic papers, and research from various sources to present ideas. Theories and research related to the study variables and used to formulate the assumptions as follows.

2.1 Plant Protein

Protein is a nutrient people's body needs to grow and repair cells and to work properly. It requires the essential protein nutrient, making it crucial for individuals to consume enough protein in their daily diet (Better Health Channel, 2022). Protein intake has many benefits beyond meeting the recommended dietary allowance (RDA). Consuming adequate amounts of high-quality protein has been shown to have numerous benefits, including supporting muscle health and function, promoting satiety and weight management, maintaining bone health, supporting immune function, promoting wound healing and tissue repair, reducing the risk of chronic diseases such as type 2 diabetes (Malaeb, S., Bakker, C., Chow, L. S., & Bantle, A. E. (2019) and cardiovascular disease. To gain better benefits, individuals should aim to consume a variety of protein sources, including both animal-based and plant-based options, and distribute their protein intake evenly throughout the day. The significant role that protein plays in promoting optimal health and well-being. (Phillips, Chevalier & Leidy's, 2016)



Figure 2.1 Vegan protein shakes (Myvegan,2021)

A plant protein shake is created for the ready drink produced by protein plants base, and it has many flavors for customers, such as chocolate, strawberry, and vanilla. Plant-based protein provides plenty of nutrients that people need, including fiber and antioxidants that can improve consumers' overall health. Plant protein is the food source of protein which is from plants such as pulses, tofu, soya, tempeh, nuts, seeds, certain grains, and even peas. To create more convenience for the customer, plant protein shakes can instantly consume a more convenient meal, providing more health benefits. Consumers consider many benefits that they will receive and therefore choose to consume. Manufacturers add messages to evoke feelings and perceptions of quality by specifying that no added sugar is made from organic ingredients and nature (Koutchma, Ros- Polski, & Popielarz, 2016; Timmermans et al., 2011). In order to raise demand arising from increasing population, increased demand for protein globally is driven by socio-economic changes such as rising incomes, increased urbanization, and aging populations, whereby the contribution of protein to healthy aging is increasingly recognized and recognition of the role of protein in a healthy diet (Henchion, M., Hayes, M., Mullen, A. M., Fenelon, M., & Tiwari, B.2017). It is a driving force for the industry to develop the production of quality plant proteins. Consumers consider many benefits that they will receive and therefore choose to consume. Manufacturers add messages to evoke feelings and perceptions of quality by specifying that no added sugar is made from organic ingredients and nature (Koutchma, Ros- Polski, & Popielarz, 2016; Timmermans et al., 2011).

2.2 Millennials

Millennials, or Generation Y people, are people born between 1981 - 1996 (th.wikipedia.org, 2020) who are currently between 24 - 39 years old. There are more than 1,800 million people from a total population of over 7,000 million around the world, with more than 20 million people in Thailand from the population of Thailand, about 69 million people, or 1 in 3 of the population in Thailand. Moreover, 65% of millennials in Thailand spend time taking care of their health and are concerned about their look to look good on social media. (Marketingoops, 2018) Millennials thrived during the technological revolution when the Internet and electronic devices became commonplace and accessible (Gurau, 2012). Scholars determine that Millennials are well-educated and rational compared to older generations (Syrett & Lammiman, 2003). Millennials tend to have higher awareness and involvement in various areas of life (Vijay & Arsha, 2013). Creating a high level of involvement concerning consumption is the basis for creating opportunities to stimulate feelings and perceptions and open up new experiences for them (Turow, 2015). They are more likely to spend at specialty food stores than older generations, with a focus on everything, from eating out to the traditions and conveniences of food. In addition, Regine, D.K. (2011) also found that demographic factors, age, sex, income, education level, and ethnic groups of consumers Generation Y or Millennials, influenced their satisfaction with organic products. Currently, Generation Y is the largest group of consumers and the high-income population of Thailand, even when young and still in the middle of life, they spend most of their income. Moreover, the Generation Y group in Thailand is also interestingly different compared to the Generation Y group in Western countries like Europe and America. Millennials may become the drivers of a healthy eating trend that is developing lately (Peskett, 2006). However, these days only some of the representatives of mentioned generation are ready to follow a healthy diet (Food Navigator, 2016). Therefore, the study of Millennials' decision-making process regarding healthy food emerges as a relevant and practical research object, especially understanding the fact of limited research in this area (Corvi & Bigi, 2007; Schewe & Meredith, 2004).

2.3 Product knowledge

Two types of product knowledge affect a person's decision to use products. Product knowledge is derived from personal evaluation of their own experience. There are two types of product knowledge: subjective product knowledge and objective product knowledge.

Subjective product knowledge is based on a person's beliefs, attitudes, and perceptions about a product, which are often influenced by personal experiences, social norms, and marketing messages. This type of product knowledge is subjective because it varies from person to person and can be influenced by emotions, biases, and opinions. On the other hand, objective product knowledge is based on factual information about a product, such as its features, benefits, and specifications. This type of product knowledge is objective because it is based on verifiable data and can be measured and compared across different products. It is about products that arise from information that people know about the product's properties (Brucks, 1985). According to Ferguson, Kang, and Oh's (2015) study, product knowledge significantly impacts purchase decision-making. The study revealed that higher levels of product knowledge are associated with greater purchase intention. Additionally, the study found that product involvement is a mediator in the relationship between product knowledge and purchase intention. This means that consumers' level of involvement with a product plays a crucial role in enhancing the impact of their product knowledge on purchase decision-making. Consumers' purchase intentions are different if consumers have different levels of knowledge (Chiou, 1998). If a person has a higher level of product knowledge, there will be an increase in confidence associated with making the right behavior decisions. Thus, the effects of individual knowledge contribute to behavior (Chiou, 2000) and research (Liu, 2007). Regarding food consumption, organic food shows that people perceive themselves as more knowledgeable about organic products. There will be an increase in the consumption of organic food by the level of knowledge about the product derived from personal evaluation of one's own experience (Subjective product knowledge). Attitudes toward organic food products significantly influence organic food purchasing and consumption behavior (Thambiah, Khin, Muthaiyah & Yen, 2015). Familiarity and price consciousness affect the intention to consume organic food.

In conclusion, knowledge of plant proteins means a consumer's understanding or knowledge of the products can differentiate from other proteins. Furthermore, know the benefits of consuming plant protein.

2.4 Health Consciousness

The health consciousness scale (HCS) was used to measure health awareness (Gould, 1988) where the study found that health awareness or health consciousness results from the four variables of health alertness, health self-consciousness, health involvement, and self-monitoring, the study measures an individual's overall health awareness. For consumers with a degree of health concern, healthy food choices and health consciousness affect their willingness to pay for healthy food. Lee, Conklin, David & Lee, (2014). Health awareness is the most critical factor influencing consumer purchasing behavior and intent, and purchase intent is low if consumers have low health awareness (Singh & Verma, 2017). In conclusion, health consciousness means that consumers are interested in their health and always want to maintain their health by choosing nutritious food and completing what they consume. Having clean, fresh, and safe is the priority, and they are willing to pay for healthy food despite the higher price.

2.5 Perceived value of the price

Perceived price refers to the perceived value within the product or service, whether in terms of everything the consumer knows and feels about the product or service (Syzmanski & Hernald, 2001). Hui & Malliga (2014) stated that the perceived price value is the monetary benefit that the customer receives. By coming from products or services that are worthwhile and suitable for money, including saving (Lee, Choi, Kim & Hong, 2007). The price value is a form of value. Perceptions are measured in terms of monetary benefits and costs associated with purchasing or using goods and services. Price benefit can be considered as preserving monetary price perception, which comes from reducing the price when purchasing goods or services, while the monetary cost is a kind of sacrifice. This is the total cost the consumer must bear in exchange for

purchasing the product or service. When the monetary benefits derived from the goods or services are more significant than the monetary costs, the perceived value of the price is high.

On the other hand, when monetary expenditures are higher than the benefits received from the goods or services, the perceived value of the price is low, where price refers to the product's value in monetary terms, the cost of consumers who have to pay the consumer will compare between the value and the price of that product. Consumers will decide to buy if the value is higher than the price. Therefore, pricing strategies may take into consideration four items 1) Perceived Value in the eyes of customers, which must consider customer acceptance of the value of the product that is higher than that product price 2) Product costs and expenses related 3) competition 4) other factors (Etzel, Walker & Stanton, 2007) In the conclusion perceived price means that the consumer perceives the cost of buying a product or use of products and services by benefiting from goods or services that are exchanged from money. If consumers feel that the product or service is good quality and beneficial to themselves, they are ready to pay a higher price because they recognize the value of that product or service.

2.6 Information search

Information search is the process whereby consumers search for appropriate information to make a reasonable decision about a purchase (Schiffman & Kanuk, 2005). There was a highly relevant purchase when the product was essential to consumers, and therefore customers may wish to learn more about products or look for alternatives. Consumers who are knowledgeable about product types start by gathering brand information and knowledge of product categories and situations that characterize them and products that the market wants (Schiffman & Kanuk,2005). Online stores and social media have influenced Millennials' buying decisions, especially searching for brand information and product information (Sproule & Archer, 2000). Consumers' online information search may impact their purchasing behavior because the more information they have access to they will use it to help them make a purchasing decision (Bento, Martinez, and Martinez, 2018). Customers' attitudes are motivated to search for

information to reduce uncertainty and make informed decisions that influence their online purchasing behavior (Khare & Rakesh, 2011).

Vazquez and Xu (2009) and Chen (2009) conducted research on the online search behavior of consumers and its impact on purchase intent. The study found that customers tend to search for products, prices, and promotional information on online shopping sites, with product information having the most significant influence on their initial purchase intent, followed by pricing in the second phase. Regarding information search, customers seek objective knowledge, which refers to knowledge that arises from reason or experience that can be explained or tested for others to know (Brucks, 1985). Objective knowledge of information search is utilized primarily in complex situations, and the level of object-oriented knowledge impacts information search behavior significantly. Product knowledge relates to information search, possessing objective knowledge about a product category can lead to even greater search efficiency, as consumers are better equipped to identify and evaluate the most relevant information. Consumers with greater levels of product knowledge are able to conduct more efficient searches.

According to the study of the factors influencing millennials' online shopping behaviors and purchase intentions. (Dharmnesti et al., 2019). This study concluded that information search significantly influences millennials' attitudes toward online shopping, which impacts their purchase intentions. Young consumers will search online stores to learn more about their desired products. Their search behavior results in getting more product information from online channels, which influences their intent to purchase the product. This result highlights the importance of having detailed product information available and realistic reviews by previous buyers. Moreover, the study found that social influence, in the form of recommendations from friends and family, also plays a significant role in shaping millennials' attitudes and intentions toward online shopping. (Dharmnesti et al., 2019).

In conclusion, information search refers to the process of searching for product information. When consumers engage in information search, they are typically seeking details that can help them make a purchase decision. This information may include brand information mentioned by previous buyers, reviews, and feedback about the product. Additionally, consumers may also search for price information to compare

the product's characteristics or properties and determine if it aligns with their needs and interests. Overall, gathering product information is crucial for making informed purchasing decisions.

2.7 Purchase intention

Purchase intention is a consumer's plan to purchase a particular product or service in the future. It also represents the tendency for consumers to buy brands regularly, and consumer purchase intent arises when consumers perceive the value of a product which reflects the consumer's desire for what they buy (Diallo, 2012) and (Schiffman & Kanuk, 2005) which refers to purchase intent. The likelihood determines the strength of the consumer's willingness to purchase the product. If the probability that determines the strength of a higher consumer willingness results in greater purchase intent. Product quality and characteristics are the most critical factors influencing purchase intent (Chen, 2016). Purchase intent refers to the likelihood that consumers will plan to buy certain products or services through online channels in the future. The most critical factor influencing purchase intent is product quality of the price of the product features. In conclusion, Purchase intention means that consumers plan to purchase certain products or services in the future, and consumers will have to prioritize the products or brands they want to buy, thus causing the consumer's purchase intention.

2.8 Conceptual framework

The literature reviews are based on concepts and theories related to knowledge about the product knowledge of plant protein shakes, health consciousness, perceived price, and information search, it was found that these variables influence purchase intention, which purchase intention affects actual buying. Therefore, it can be concluded that the research framework to study of factors influencing online purchase intention for plant protein shakes of millennials in Bangkok.

Conceptual framework

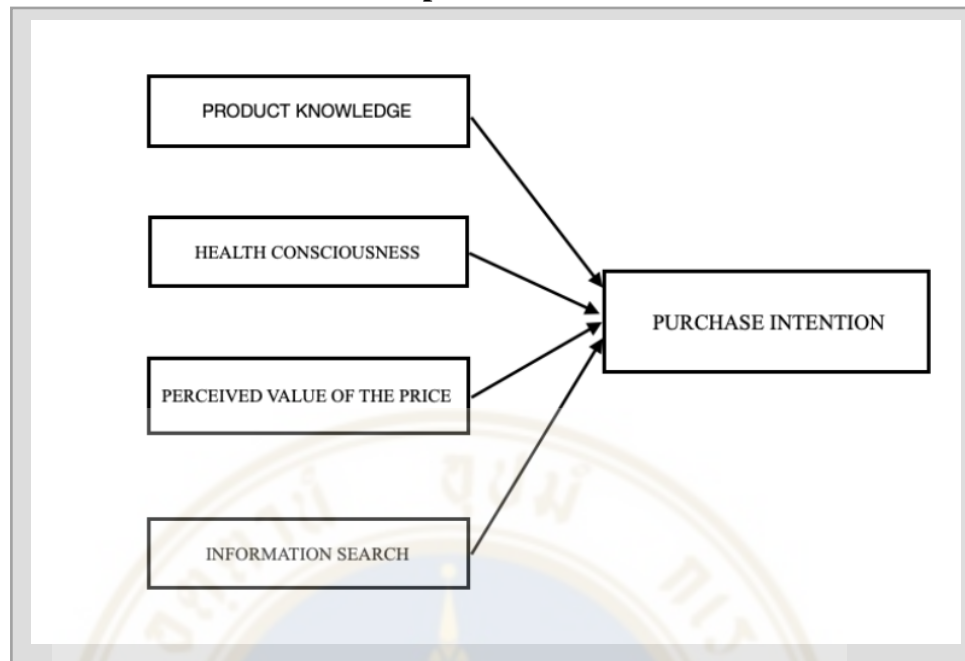


Figure 2.2 Conceptual framework

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This research focuses on understanding the factors influencing online purchase intention for plant protein shakes for millennials in Bangkok. Firstly, for secondary research data, the research will gather information via e-databases such as Emerald Insight, ScienceDirect, and others. Moreover, for the primary research data, to be able to understand the key factors influencing online purchase intention for plant protein shakes for millennials in Bangkok, the study uses quantitative research methodologies. The research would use a single cross-sectional design to gather information from our sample of respondents only once. The research methods will help the study secure the most relevant and applicable information to have quality research results and findings.

3.2 Population and sample

The sampling plan is through the use of mainly convenience sampling. The population used in this study is Millennials born from 1981 to 1996, aged between 24 - 39 years, and residing in Bangkok, Thailand. This research may use non-probability sampling. Moreover, the other category required as part of the sampling is finding consumers that have experienced buying plant protein shakes online within the last six months. If our consumers have yet to experience buying plant protein shakes online in the past six months, it will screen them out. The study can screen respondents through the screening questions set for the research methods. As the sampling criteria have been set, this will guarantee that respondents attempting to be part of the research fit for the study.

This research may apply a sample according to the principle of W.G. Cochran that has a confidence level of 95% and allow a 5% error in the statistically significant level equal to 0.05 as follows the formula:

$$n = \frac{P(1 - P)Z^2}{E^2}$$

N = sample size

P = the population proportions

E = acceptable sampling error (E = 0.05)

Z = z value at reliability level or significance level.

- Reliability level 95% or significance level 0.05; z = 1.96

In this case, the error is set to 0.05, which is the size of the sample group. A total of 209 samples.

In this study, researchers chose to use a sample size of over 209 samples to reserve for data error.

3.3 Instrument development

In terms of the quantitative research method, through using a questionnaire, the study has created a questionnaire with questions that reflect and link to the independent and dependent variables. Additionally, there are demographic questions included to help with further analysis too. All in all, the questions on the questionnaire come in two formats, one as a close-ended question and the other using the Likert scale format.

The information from past research was from e-databases that act as our secondary research data. The questionnaire is inclusive of the Likert scale. Lastly, the final part of the questionnaire included demographic questions. The demographic question purpose would be used for further data analysis. Furthermore, the demographic questions may all be formatted in a closed-ended question style. The tool used in this research is an online questionnaire. The data collection, in which the researchers divided the questionnaire responses into five parts, the details of the questionnaire are as follows.

Part 1: The questionnaire for screening the sample group must be millennials born between 1981 - 1996, aged between 24 - 39 years residing in Bangkok, and experienced buying plant protein shakes in the last six months.

Part 2: The key factors influencing online purchase intention for plant protein shakes for millennials in Bangkok. By using data collected in the form of Likert Scales, a 5-level scale is used to select only one answer, which has set the criteria. Scoring for each level is shown in Table 3.1.

Table 3.1 Criteria for using questionnaire scores in the research

- 1 — Strongly Disagree
- 2 — Somewhat Disagree
- 3 — Neutral
- 4 — Somewhat Agree
- 5 — Strongly Agree

This study will use the 5-level Likert scale to evaluate the degree of agreement. To determine the minimum and the maximum length of the 5-point Likert type scale and the Interval Scale can be calculated as $(5-1)/5= 0.80$

- 1.00 - 1.80 represents Strongly Disagree
- 1.81 - 2.60 represents Somewhat Disagree
- 2.61 - 3.40 represents Neutral
- 3.41 - 4.20 represents Somewhat Agree
- 4.21 - 5.00 represents Strongly Agree

Part 3: The online purchase intention for buying plant protein shakes for millennials in Bangkok, using the Likert Scales data collection model. Choose only one answer which has set criteria for giving. Scores for each level are shown in Table 3.1

Part 4: Buying behavior of plant protein shakes of the respondents by using the data collection model of the Nominal Scale.

Part 5: General information questionnaire of respondents, which questions the demographic factors of the farmers. A questionnaire can be filled in gender, age, education level, and monthly income.

3.4 Data collection

The data collected through the quantitative research is through a questionnaire survey made available online by using Google Forms. The sample of respondents required to do the questionnaire and the sample target is 385 respondents that pass the screening questions. As the research design is a single cross-sectional design, the questionnaire survey that will be sent out and responded to is for two weeks, from February 17, 2023, to March 02, 2023.

3.5 Data analysis

When the number of responses to the questionnaire was complete according to the sample group studied, the data was used for statistical analysis, using the SPSS (Statistical Package for The Social Sciences) to find conclusions according to the objectives of this research.

Descriptive statistics are used for analyzing and displaying results for requests. The demographic value of the sampling group is determined by mean, percentage, and standard deviation presented by frequency distribution.

Inferential statistics is used for analyzing the relationship between the independent variables and dependent variables by using multiple linear regression analysis through SPSS (Statistical Package for Social Sciences).

CHAPTER IV

RESEARCH FINDINGS

The fourth chapter provides the results of the analysis and findings of the factors that influence online purchase intention for buying plant protein shakes for millennials in Bangkok.

The researcher collected data through an online questionnaire and set the required sample size to 250 samples, of which 209 samples were collected. The data were analyzed and statistical conclusions were drawn according to the objectives of the research.

4.1 Demographic characteristics of the respondents

Table 4.1 The gender of the respondents

Gender	The number of respondents (n)	Percentage (%)
Male	110	52.6
Female	90	43.1
Others	9	4.3
Total	209	100

Table 4.1 presents the findings on the gender distribution of the respondents who participated in the survey. The results reveal that the majority of the participants identified as male, accounting for 52.60% of the total respondents. The female respondents constituted 43.10% of the total, while the remaining 4.30% identified as other genders.

Table 4.2 Age of respondents

Age	The number of respondents (n)	Percentage (%)
24-29	71	34
30-35	101	48.3
36-39	37	17.7
Total	209	100

Table 4.2 shows the majority of the respondents fell within the age range of 30-35 years old, accounting for 48.30% of the total participants. The next most prevalent age group was 24-29 years old, comprising 34% of the respondents. The age range of 36-39 years old represented the smallest proportion of respondents, with only 17.70% falling within this category.

Table 4.3 The marital status of respondents

Marital status	The number of respondents (n)	Percentage (%)
Single	141	67.5
Married	63	30.1
Divorced / Widowed	5	2.4
Total	209	100

Table 4.3 shows the percentage of the respondents who answered the survey are mostly single with a percentage of 67.50% and married is 30.1% followed by divorced or widowed with a percentage of only 2.40%.

Table 4.4 The Educational level of respondents

Educational level	The number of respondents (n)	Percentage (%)
High School	7	3.3
Bachelor's Degree	130	62.2
Master's Degree	67	32.1
Doctoral Degree	5	2.4
Total	209	100

Table 4.4 presents the distribution of educational levels among the survey respondents, which can be categorized into four levels. The results indicate that the majority of the respondents held a Bachelor's Degree, accounting for 62.20% of the total participants. Following this, the second most prevalent educational level was Master's Degree, representing 32.10% of the respondents. High School education constituted the smallest proportion of respondents, with a percentage of only 7%. Finally, the percentage of respondents holding a Doctoral Degree was merely 2.40%.

Table 4.5 The average income of respondents

Average income	The number of respondents (n)	Percentage (%)
Less than 15,000 Bath	11	5.3
15,001-30,000 Bath	43	20.6
30,001-45,000 Bath	42	20.1
45,001-60,000 Bath	43	20.6
60,001-75,000 Bath	37	17.7
75,001-100,000 Bath	19	9.1
100,001-150,000 Bath	6	2.9
150,001-200,000 Bath	4	1.9
200,001-250,000 Bath	3	1.4
Over 300,000 Bath	1	0.5
Total	209	100

Table 4.5 displays the findings on the average income distribution among the survey respondents. The results indicate that the majority of respondents had an average income falling within the range of 15,001-30,000 baths and 45,001-60,000 baths, accounting for 20.60% each. The third most prevalent income range was 30,001-45,000 baths, representing 20.10% of the respondents. The proportion of respondents with an average income falling within the ranges of 60,001-75,000 baths and 75,001-100,000 baths were 17.70% and 9.10%, respectively. The remaining income ranges showed minimal variation, with each representing a percentage of approximately 5%.

4.2 The respondents' purchasing behavior of plant protein shakes

Table 4.6 Market channel to buy protein shakes

Market channel	Respondents	
	The number of respondents (n)	Percentage (%)
Department store	156	13.60
Hypermarket	103	9.0
Supermarket	118	10.30
Convention store	78	6.80
Applications Food Delivery	45	3.90
Social Media	75	6.50
IG	44	3.8
Facebook	68	5.9
Online market place	130	11.3
Shopee	142	12.4
Lazada	117	10.2
Others	19	1.7
Total	1147	100

Table 4.6 presents the results on the purchasing behavior of the plant protein shake channel among the survey respondents. The findings reveal that the most common

purchasing channel for protein shakes among the respondents was the department store, with a percentage of 13.60%. The second most prevalent channel was the online marketplace, which is Shopee, accounting for 12.40% of the respondents. The Supermarket channel followed closely behind with 10.3%, while Lazada showed a similar percentage of 10.20%. The proportion of respondents who purchased protein shakes from the supermarket channel was 9%. Convenience stores accounted for 6.80% of the respondents, while Facebook represented 5.90%. The remaining channels displayed minimal variation, with each representing a percentage of approximately 5%.

Table 4.7 The spending for buying a plant protein shake

Price	The number of respondents (n)	Percentage (%)
51-100 Bath	17	8.1
101-150 Bath	24	11.5
151-250 Bath	39	18.7
251-500 Bath	60	28.7
501-700 Bath	42	20.1
701-1000 Bath	15	7.2
More than 1000 Bath	12	5.7
Total	209	100

Table 4.7 This study reports the outcomes of a survey conducted to determine the optimal price range of plant protein shakes among the respondents. The findings revealed that the majority of participants, constituting 28.70% of the total sample, favored a price range between 251-500 baths. The second most popular price range was between 501-700 baths, with 20.10% of respondents preferring it. The third most favored price range was 151-250 baths, which was preferred by 18.70% of the participants. Notably, a price range of 101-150 baths was favored by 11.50% of respondents, whereas only 5.70% of participants preferred a price exceeding 1000 baths.

Table 4.8 The size of the plant protein shake

Size	The Number of Respondents (n)	Percentage (%)
Less than 200 ml.	13	6.6
220 ml.	42	19.9
250 ml.	50	23.7
350 ml.	44	21.3
More than 450 ml.	60	28.4
Total	209	100

Table 4.8 presents the findings on the preferred size of plant protein shakes among the survey respondents. The results indicate that the majority of respondents preferred a size larger than 450 ml, accounting for 28.40% of the total participants. Following this, the second most preferred size was 250 ml, representing 23.70% of the respondents. The third most prevalent size was 350 ml, accounting for 21.30% of the respondents. Nearly 220 ml was preferred by 19.90% of the respondents, while only 6.60% of the participants preferred a size smaller than 200 ml.

Table 4.9 The flavor of plant protein shake

Flavor	Respondents	
	The number of respondents (n)	Percentage (%)
Vanilla	86	24.5
Chocolate	47	13.4
Strawberry	114	32.4
Green tee	33	9.4
Cookies and cream	71	20.2
Total	351	100

Table 4.9 illustrates the results on the preferred flavor of plant protein shakes among the survey respondents. The data reveals that the most favored flavor was Strawberry, accounting for 32.40% of the total respondents. The second most preferred flavor was Vanilla, representing 24.50% of the participants. The third most prevalent

flavor was Cookies and Cream, with a percentage of 20.20%. Chocolate was the fourth most preferred flavor, accounting for 13.40% of the respondents. A small proportion of the participants preferred Green Tea, which represented only 9.4% of the total respondents.

Table 4.10 The reasons for consuming plant protein shakes

Reasons	Respondents	
	The Number of Respondents (n)	Percentage (%)
More vitamins & minerals	119	21.6
Fewer digestive issues	113	20.5
Great flavors and textures	69	12.5
Get the same benefits as other protein options	55	10.0
Offers greater calorie control	104	18.8
Reduce your consumption of harmful bacteria	92	16.7
Total	552	100

Table 4.10 presents the distribution of the reasons for consuming plant protein shakes as reported by the survey respondents. The results indicate that the majority of the participants consumed plant protein shakes due to their higher content of vitamins and minerals, accounting for 21.60% of the respondents. The second most cited reason was the reduction of digestive issues, with a percentage of 20.50%. The third most common reason was the greater calorie control offered by plant protein shakes, representing 18.80% of the participants. Furthermore, 16.70% of the respondents stated that they consumed plant protein shakes to reduce their consumption of harmful bacteria. The fifth most frequently mentioned reason was the appealing flavors and textures of the shakes, which accounted for 12.50% of the participants. Lastly, a small proportion of the respondents (10%) consumed plant protein shakes to obtain the same benefits as other protein options.

4.3 Results from Survey Method - Key findings

Table 4.11 The mean score of each factor influencing online purchase intention for plant protein shakes. (Scored 1 to 5: 1= Strongly Disagree and 5 = Strongly Agree)

Variable	Mean	SD	
Knowledge of plant protein shakes	4.04	0.612	Somewhat Agree
1. I have knowledge what is plant protein shake.	3.48	1.451	Somewhat Agree
2. I know the benefits of plant protein shake.	4.22	0.59	Strongly Agree
3. I know the difference between plant protein shakes and general protein shakes.	4.40	0.708	Strongly Agree
Health consciousness	4.19	0.427	Somewhat Agree
1. I try to make healthy choices.	4.48	0.589	Strongly Agree
2. I am concern about the quality of fat that I get in my food.	4.08	0.675	Somewhat Agree
3. I check my health every year.	4.09	0.698	Somewhat Agree
4. I think my health is influenced by my food.	4.11	0.691	Somewhat Agree
Perceived price	4.17	0.479	Somewhat Agree
1.I think that plant protein shakes is more expensive than normal protein shakes in the market.	4.37	0.683	Strongly Agree
2. I am willing to pay for plant protein shakes.	4.12	0.700	Somewhat Agree
3. I think that buying plant protein shakes is kind of investment in my health.	4.03	0.664	Somewhat Agree

Table 4.11 The mean score of each factor influencing online purchase intention for plant protein shakes. (Scored 1 to 5: 1= Strongly Disagree and 5 = Strongly Agree) (cont.)

Variable	Mean	SD	
Information search	4.23	0.472	Strongly Agree
1. I search for the information about plant protein shakes before making a decision to purchase.	4.37	0.667	Strongly Agree
2.I search for the information about plant protein shakes via online market.	4.12	0.693	Somewhat Agree
3. I read for the previous review in the market place before making a decision to purchase.	4.21	0.653	Strongly Agree

As can be seen in Table 4.11 illustrates the mean scores of the factors that influence online purchase intention for plant protein shakes. The results indicate that the majority of factors received mean scores within the range of 3.41-4.20, with the remaining factors scoring within the range of 4.21-5.00. The highest-ranking factors included health consciousness (mean score of 4.48), followed by knowledge of the difference between plant protein shakes and general protein shakes (mean score of 4.4), perceived price (mean score of 4.37), and information search (mean score of 4.37). The study also found that knowledge of the benefits of plant protein shakes (mean score of 4.22) and information search for previous reviews in the marketplace (mean score of 4.21) Moreover, the study identified consumers' willingness to pay a premium price for plant protein shakes and searching for the information about plant protein shakes via the online market with a mean score of 4.12. Health consciousness was further linked to other factors such as the influence of food on health (mean score of 4.11), the practice of checking one's health annually (mean score of 4.09), and concerns about the quality of fat in food (mean score of 4.08). Conversely, the lowest-ranking factor was knowledge of what a plant protein shake is, with a mean score of 3.48.

4.4 Multiple linear regression analysis

Hypothesis testing to test variables affecting purchase intent for online plant protein shakes for millennials in Bangkok. By reporting the results with inferential statistics, which include analyzing all four hypotheses using statistics to test for relationships using multiple regression analysis at a confidence level of 95% or a statistical significance level of 0.05. data analysis for hypothesis testing. The assumption regression equations of all four variables are used in the prediction using linear regression analysis in the form of multiple regression analysis.

Multiple Regression:

Y = Dependent Variable (PI)

β_0 = (Constant)

β_1 = (Regression Coefficient)

Table 4.12 The data analysis knowledge of product influencing online purchase intention for a plant protein shake. (KOP)

Dependent Variable	SS	Df	Ms	F	Sig
Regression	4.844	3	1.641	7.682	<.001 ^b
Residual	42.880	204	0.210		
Total	47.724	207			
Independent Variable	B	SE _b	Beta	t	Sig
Constant	2.916	0.295		9.874	<.001
Knowledge what is plant protein shake.(KOP1)	0.014	0.022	0.042	0.629	0.53
Knowledge of the benefits of plant protein shake.(KOP2)	0.078	0.054	0.097	1.451	0.148
Know the difference between plant protein shakes and general protein shakes.(KOP3)	0.194	0.046	0.287	4.267	<.001
R = 0.319 R Square = 0.102 Adjusted R Square = 0.088 SEe = 0.458					
F = 7.682					

The findings of the multiple regression analysis are presented in Table 4.12. The table highlights the independent variables, including KOP1, KOP2, and KOP3, along with their R-squared value of 0.102. This indicates that these three variables collectively have the potential to predict the online purchase intention for plant protein shakes among Millennials in Bangkok, with an accuracy of 10.20%.

$$Y = 2.931 + 0.014KOP1 + 0.078KOP2 + 0.194KOP3 \dots \dots \dots (1)$$

Table 4.13 The data analysis of health consciousness influencing online purchase intention for a plant protein shake. (HC)

Dependent Variable	SS	Df	Ms	F	Sig
Regression	1.495	4	0.374	1.641	0.165 ^b
Residual	46.229	203	0.228		
Total	47.724	207			
Independent Variable	B	SE _b	Beta	t	Sig
Constant	3.315	0.334		9.930	<.001
Try to make healthy choices (HC1)	0.089	0.059	0.109	1.501	0.135
Concern about the quality of fat from food.(HC2)	0.050	0.052	0.070	0.995	0.341
Checking health condition every year (HC3)	0.021	0.050	0.031	0.424	0.672
Aware that health is influenced by my food (HC4)	0.036	0.050	0.051	0.705	0.482
R = 0.177 R Square = 0 .031 Adjusted R Square = 0.012 SEe = 0.477					
F = 1.641					

The findings of the multiple regression analysis are presented in Table 4.13. The table highlights the independent variables, including HC1, HC2, HC3, and HC4, along with their R-squared value of 0.031. This indicates that these three variables

collectively have the potential to predict the online purchase intention for plant protein shakes among Millennials in Bangkok, with an accuracy of 3.10%

$$Y = 3.358 + 0.089 HC1 + 0.050 HC2 + 0.021HC3 + 0.036HC4 \dots\dots\dots(2)$$

Table 4.14 The data analysis of perceived price influencing online purchase intention for a plant protein shake. (PP)

Dependent Variable	SS	Df	Ms	F	Sig
Regression	8.155	3	2.718	14.015	<.001b
Residual	39.569	204	0.194		
Total	47.724	207			
Independent Variable	B	SE _b	Beta	t	Sig
Constant	2.426	0.270		8.988	<.001
Plant protein shakes is more expensive than normal protein shakes in the market. (PP1)	0.130	0.047	0.186	2.798	0.006
Willingness to pay for plant protein shakes.(PP2)	0.111	0.047	0.162	2.360	0.019
Buying plant protein shakes is kind of investment in my health.(PP3)	0.174	0.49	0.240	3.580	<.001
R = 0.413 R Square = 0.171 Adjusted R Square = 0.159 SEe = 0.440 F = 14.015					

The findings of the multiple regression analysis are presented in Table 4.14. The table highlights the independent variables, including PP1, PP2, and PP3, along with their R-squared value of 0.171 This indicates that these three variables collectively have the potential to predict the online purchase intention for plant protein shakes among Millennials in Bangkok, with an accuracy of 17.10%

$$Y = 2.426 + 0.130PP1 + 0.111PP2 + 0.174PP3 \dots \dots \dots (3)$$

Table 4.15 The data analysis of Information search influencing online purchase intention for a plant protein shake. (IS)

Dependent Variable	SS	Df	Ms	F	Sig
Regression	5.639	3	1.880	9.110	<.001b
Residual	42.086	204	0.206		
Total	47.724	207			
Independent Variable	B	SE _b	Beta	t	Sig
Constant	2.678	0.285		9.428	<.001
Search for the information about plant protein shakes before making a decision to purchase. (IS1)	0.113	0.050	0.156	2.255	0.025
Search for information about plant protein shakes via the online market.(IS2)	0.121	0.048	0.176	2.531	0.012
Reading for the previous review in the market place before making a decision to purchase.(IS3)	0.114	0.051	0.155	2.225	0.025
R = 0.344 R Square = 0.118 Adjusted R Square = 0.105 SEe = 0.454					
F = 9.11					

The findings of the multiple regression analysis are presented in table 4.15. The table highlights the independent variables, including IS1, IS2, and IS3, along with their R-squared value of 0.118. This indicates that these three variables collectively have the potential to predict the online purchase intention for plant protein shakes among Millennials in Bangkok, with an accuracy of 11.80%

$$Y = 2.678 + 0.113IS1 + 0.121IS2 + 0.114IS3 \dots \dots \dots (4)$$

Table 4.16 The data analysis of purchase intention influencing online purchase intention for a plant protein shake

	SS	Df	Ms	F	Sig
Regression	10.74	4	2.686	14.74	<.001b
Residual	36.98	203	0.182		
Total	47.72	207			
Independent Variable	B	SE_b	Beta	t	Sig
Constant	1.513	0.393		3.85	<.001
Health Consciousness (HC)	0.022	0.073	0.019	0.296	0.768
Knowledge of product (KOP)	0.106	0.050	0.136	2.121	0.035
Perceived Price (PP)	0.296	0.069	0.295	4.282	<.001
Information Search (IS)	0.209	0.070	0.206	3.001	0.003
R = 0.474 R Square = 0.225 Adjusted R Square = 0.210 SEe = 0.42682					
F = 14.74					

The results of the multiple regression analysis are presented in Table 4.16, which displays the independent variables, namely KOP, HC, PP, and IS, along with their R-squared value of 0.225. This suggests that these variables collectively have the potential to predict the online purchase intention for plant protein shakes among millennials in Bangkok with an accuracy of 22.50%. Further analysis of the relationship between the independent variables and online purchase intention revealed that perceived price, information search, and knowledge of the product demonstrated a positive relationship. The equation derived from the regression analysis is

$$Y = 1.513 + 0.106KOP + 0.296PP + 0.209IS$$

This equation shows that the perceived price, information search, and knowledge of the product are significant predictors of online purchase intention for plant protein shakes among millennials in Bangkok. Specifically, a one-unit increase in perceived price, information search, and knowledge of the product is associated with a 0.106, 0.296, and 0.209 unit increase in online purchase intention, respectively. In

conclusion, the multiple regression analysis provides valuable insights into the relationship between the independent variables and online purchase intention for plant protein shakes among millennials in Bangkok. The findings suggest that entrepreneurs and marketers should pay close attention to perceived price, information search, and knowledge of the product when developing effective marketing strategies for their target consumers.



CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The present study aimed to investigate the factors influencing the online purchase intention of plant protein shakes among millennials in Bangkok, as well as the demographic characteristics and buying behavior of this group. The study utilized a quantitative research design and collected data from 209 respondents through an online survey. The results indicated that the perceived value of the price, information search and product knowledge positively influenced the online purchase intention of plant protein shakes among millennials in Bangkok.

Furthermore, the study examined the demographic factors of the respondents, including gender, age, marital status, education, and income. The majority of the respondents were male, between the ages of 30-35, single, and held a bachelor's degree. Their average monthly income ranged between 15,001-30,000 baht and 45,001-60,000 baht. These findings provide insights into the characteristics of the target group of consumers for plant protein shakes in Bangkok.

Additionally, the study explored the buying behavior of the respondents and found that the most popular channel for purchasing plant protein shakes was department stores. The preferred price range was between 251-500 baht per bottle, and the most favored bottle size was over 450 ml. Among the available flavors, strawberry, vanilla, and cookies and cream were the top three choices. The main reason for choosing plant protein shakes among the target group was their perceived high vitamin content, digestive aid properties, and ability to assist in calorie control. These findings provide valuable information for marketers and manufacturers of plant protein shakes, as well as for future research in the area of health and wellness consumer behavior.

5.2 Recommendation

The recommendation for entrepreneurs wishing to enter the plant protein shake market through online channels. Based on the information, results, and data gathered from the survey, entrepreneurs seeking to enter the plant protein shake market through online channels can utilize these findings to enhance their marketing strategies and increase plant protein shake consumption among the targeted group of millennials in Bangkok.

Firstly, perceived price should be addressed by emphasizing to consumers that protein consumption is an investment in one's health rather than an expensive drink option. Marketers should communicate the idea that purchasing plant protein shakes is a valuable investment for oneself.

Secondly, regarding information search, marketers should focus on organizing and supporting consumer search activities. This could include optimizing search engine results to ensure brand information is easily accessible and providing information generated by word of mouth to highlight the advantages of consuming plant-based protein shakes. This should be a key consideration for marketers.

Finally, entrepreneurs should focus on providing consumers with adequate product knowledge, emphasizing the nutritional value of consuming plant protein shakes to meet the body's needs. It also should highlight the convenience of protein shakes as a quick and easy solution for busy individuals. Marketing efforts should be directed through both offline and online channels, as most consumers focus on mall channels for offline shopping and rely on online channels for more information which may result in gaining more sales by doing both channels online and offline, which may enhance people to buy more plant protein shake in the nearly future.

Overall, marketers should consider tailoring their marketing efforts to the local context and characteristics of the target population, such as millennials in Bangkok. By addressing these recommendations, marketers can increase the likelihood of success in promoting plant protein shake consumption among their target audience.

5.3 Limitation

The present study was carried out as a thematic paper for the College of Management Mahidol University, with the aim of achieving a high level of credibility and trustworthiness among respondents. However, it is important to acknowledge that there are some limitations to this study. A potential limitation of this study is due to time limitations and also the generalizability of the literature to the local context, given that the majority of the existing research has been conducted in other countries with different demographic and psychographic characteristics. As a result, the questionnaire design and data collection process may not have been appropriately adapted to the local context, leading to potential errors in the analysis and insignificant findings. The lack of literature on plant protein shake consumption, specifically among millennials in Bangkok, highlights the need for further research to increase the findings' validity and generalizability. Additionally, the current study may have relied on pre-existing questionnaires that were not adequately validated for use in the local context, which could further limit the accuracy of the results. Future studies should consider developing and validating questionnaires tailored to the target population's local context and characteristics to ensure the accuracy and relevance of the data collected. Furthermore, researchers should consider using a mixed-methods approach that combines qualitative and quantitative data collection techniques to provide a more comprehensive understanding of the factors influencing plant protein shake consumption among millennials in Bangkok.

Furthermore, a limitation of the present study is the potential need for more control over the data collection process, which may have influenced the regression analysis results. Specifically, the analysis yielded no significant findings, which could be attributed to various factors such as the participants' voluntary nature of participation, lack of control over participant selection, or unclear and ambiguous survey questions. One possible source of bias is selection bias, which occurs when the sample is not selected randomly or in a representative manner. In this study, the potential for selection bias may have arisen from the reliance on a non-random or non-probability sampling method, such as convenience sampling. This could have resulted in a sample that is not representative of the population of interest, leading to a biased estimate of the effects of the independent variables on the dependent variable.

Moreover, the lack of control over the data collection process may have introduced other types of bias, such as response bias, where participants may have provided socially desirable answers, or measurement bias, where the survey questions may not accurately measure the constructs of interest. These limitations highlight the need for further research to address these issues and increase the validity and reliability of the findings.



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APPENDICES

Quantitative questionnaire

Section 1: Screening question.

Section 2: The key factors influencing online purchase Intention for plant protein shakes.

Section 3: purchase intention for buying plant protein shakes.

Section 4: Buying behavior of plant protein shakes.

Section 5: General information.

Section 1: Screening question

1. Where do you live currently?

Bangkok Not in Bangkok If not, end of the survey

2. Do you born between the years 1981 - 1996?

Yes No

3. Have you experienced buying plant protein shakes in the last six months?

Yes No

Section 2: The key factors influencing online purchase intention for plant protein shakes

Please rate a number to indicate how much you agree or disagree with each of the following statements. (5 = Strongly Agree, 4=Somewhat Agree, 3=Neutral, 2=Somewhat Disagree ,1=Strongly Disagree)

Factors influencing online purchase intention for plant protein shakes					
	5	4	3	2	1
Knowledge of plant protein shakes					
1. I have knowledge what is plant protein shake.					
2. I know the benefits of plant protein shake.					
3. I know the difference between plant protein shakes and general protein shakes.					
Health Consciousness					
1. I try to make healthy choices.					
2. I am concern about the quality of fat that I get in my food.					
3. I check my health every year.					
4. I think my health is influenced by my food.					
Perceived Price					
1.I think that plant protein shakes is more expensive than normal protein shakes in the market.					
2. I am willing to pay for plant protein shakes.					
3. I think that buying plant protein shakes is kind of investment in my health.					
Information Search					
1. I search for the information about plant protein shakes before making a decision to purchase.					
2. I search for the information about plant protein shakes via online market.					
3. I read for the previous review in the market place before making a decision to purchase.					

Section 3: Purchase intention of online plant protein shakes

Please rate a number to indicate how much you agree or disagree with each of the following statements. (5 = Strongly Agree, 4=Somewhat Agree, 3=Neutral, 2=Somewhat Disagree ,1=Strongly Disagree)

	5	4	3	2	1
Purchase Intention of online plant protein shakes.					
1. I will buy more plant protein shakes online in the future.					
2. I prefer to buy plant protein shakes online more than other beverages.					
3. I would strongly recommend others to buy plant protein shakes online.					

Section 4: Buying behavior of plant protein shakes.

1. Where did you buy protein shakes normally? (Can answer more than once)

- Department store
- Hypermarket
- Supermarket
- Convention store
- Applications Food Delivery (e.g. Line Man, Grab, Food Panda, GET)
- Social Media
- Facebook
- Instagram
- Line official
- Online market pace
- Shopee
- Lazada
- Own store/Website please specify.....
- Others.....

2. How much do you spend for buying one plant protein shake?

- less than 50 Bath.
- 51-100 Bath.
- 101-150 Bath.
- 151-250 Bath.
- 251-500 Bath.
- 501-700 Bath.
- 701-1000 Bath.
- More than 1000 Bath.

3. What size of plant protein shake that you prefer to buy?

- Less than 200 ml.
- 220 ml.
- 250 ml.
- 350 ml.
- More than 450 ml.

4. What flavor of plant protein shake that you prefer to buy?

- Vanilla
- Chocolate
- Strawberry
- Green tee
- Cookies and cream
- Others.....

5. What are the reasons that you consume plant protein shakes?

- More vitamins & minerals
- Fewer digestive issues
- Great flavors and textures
- Get the same benefits as other protein options.
- Offers greater calorie control.
- Reduce your consumption of harmful bacteria.

Section 5: General information

1. Gender

- Male Female Others

2. Your Age

- 24-29 30-35 36-39

3. Marital Status

- Single Married Divorced / Widowed

4. Educational level

- High School Bachelor's Degree
 Master's Degree Doctoral Degree

5. What is your average income per month?

- Less than 15,000 Bath
 15,001-30,000 Bath
 30,001-45,000 Bath
 45,001-60,000 Bath
 60,001-75,000 Bath
 75,001-100,000 Bath
 100,001-150,000 Bath
 150,001-200,000 Bath
 200,001-250,000 Bath
 250,001-300,000 Bath
 Over 300,000 Bath