MOTIVATION TO EAT HEALTHILY IN CAMBODIA: WHY DO PEOPLE WITH
BUSY LIFESTYLES NOT EAT HEALTHILY?

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This Independent Study Manuscript Presented to

The Graduate School of Bangkok University

in Partial Fulfillment

of the Requirements for the Degree

Master of Management in Business Innovation

Academic Year 2022

This manuscript has been approved by

the Graduate school

Bangkok University

Title: Motivation to Eat Healthily in Cambodia: Why do People with Busy

Lifestyles not Eat Healthily?

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Lak, Sokty. Master of Management (Business Innovation), June 2023,
Graduate School, Bangkok University.

Motivation to Eat Healthily in Cambodia: Why do People with Busy Lifestyles not
Eat Healthily? (53 pp.)

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ABSTRACT

This independent study aims to understand how people with tight schedules could balance their time for work, personal life, and eating habits. Moreover, the goal is to know what would happen, in terms of health conditions, to those who do not pay attention to the foods they consume. Other than that, the paper aims to encourage those who read this paper to consider food nutrition despite how busy they are. In addition, as the meal delivery service revenue has been increasing, the paper will answer if a healthy meal delivery service helps individuals to eat healthier. The study used online questionnaires to gather data from individuals who have busy schedules and have been or have the intention to eat healthily.

Keywords: Eating healthy, Busy Lifestyle, Poor Eating Habits, Negative Health Impacts

ACKNOWLEDGMENT

I would like to express my deepest gratitude and appreciation to all the individuals and organizations who have contributed to the successful completion of this market research independent study. First and foremost, I would like to express my sincere gratitude to my supervisor, Dr. Ronald Vatananan-Thesenvitz, for his unwavering guidance, insightful feedback, and continuous support throughout this research journey. His expertise and encouragement have been invaluable in shaping this research. I would like to extend my gratitude to the faculty members at Bangkok University, whose commitment to educational quality and determination to teach have greatly influenced the development of my research knowledge and skills. Their passion for the subject has motivated me to keep pushing creative concepts as well as high standards in my work. I would also like to acknowledge the support and assistance provided by the staff and administrators of Bangkok University. Their logistical support and resources have been instrumental in facilitating the smooth execution of this research. Furthermore, I would like to express my heartfelt appreciation to all the researchers and scholars whose previous work in the field of market research and similar topics served as a foundation for this study. Their contributions have significantly enriched my understanding of the subject and guided me in formulating research questions and methodologies.

I would like to say thank you to all the participants who generously shared their time, knowledge, and ideas to provide the necessary data and insights for this research. Without their participation, this study would not have been possible. I sincerely appreciate their contributions.

Lastly, I am grateful to my family and friends for their tremendous encouragement, patience, and understanding during this demanding academic pursuit. Their love and support have been my constant motivation, and I am truly blessed to have them be a part of my journey.

I extend my deepest gratitude to all those mentioned above and the countless others who have contributed in various ways. However, any errors or omissions in this thesis are entirely my own. Thank you all for being part of this journey and for your indispensable contributions to the successful completion of this market research study.

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CHAPTER 1
INTRODUCTION

From my own experiences as a young student, I usually skip breakfast to get to school on time. Moreover, the lunch break is only one to two hours, which is a short period to get a warm freshly cooked lunch. So, in order not to be late I have to grab a quick lunch such as a sandwich or instant noodles, without thinking about the nutrition's and ingredients used. If I am not satisfied with the food I had during lunch, during the 15-minute break, I would get some sugary drinks to fill my stomach. I and my friends know that in the long term, it is not a good food choice, however, this option is the most convenient. As a result, after we graduate high school, some of my friends are now having diseases such as obesity and high blood pressure. Luckily for me, I was an athletic person during high school and I would stay late after classes end just to play some sports such as soccer or basketball. I believe doing exercise is one of the factors that keeps me from those diseases my friends are having. According to Bassey, Nelson, Effiom and Udosen (2022), eating instant noodles cooked/prepared with seasoning for a long period of time could modify the synthetic integrity of the cells and alter membrane permeability leading to hepatocellular damage. They also proved that after a long consumption, synthetic instant noodles spice could bring negative impacts on human health.

This chapter serves as an introduction to the research study focusing on healthy meal delivery services and the eating habits of time-limited professionals. It provides the research background and context while underlining the importance of the subject in the busy society of today. The need for understanding the eating patterns of time-constrained professionals and the possibility of the benefit of healthy meal delivery services for the promotion of healthier dietary choices are both mentioned in the problem statement. The research questions aim to investigate the variables affecting the dietary habits of time-constrained professionals, perceptions of healthy foods, and the effects on general health and well-being. The significance of the research rests in its potential to further promote the development of healthy meal delivery services, which will ultimately aid time-constrained professionals in making wise nutritional choices. Definitions of key terms, such as eating healthy, busy

lifestyle, poor eating habits, and negative healthy outcomes are provided. Lastly, an outline of the paper is presented, describing the subsequent chapters, including the literature review, methodology, findings, discussion and conclusion.

1.1 Background and Context of the Study

Most people overlook how important the nutrition in foods they consume is. According to the Centers for Disease Control and Prevention (2022), good nutrition is essential to individuals at any age, it helps children grow and develop properly and prevent future chronic disease. Adults who eat healthily have longer lifespans and lower chances to have chronic diseases such as obesity, heart disease, diabetes, and certain types of cancer. Poor eating habits include under or over-consuming foods that our body needs each day, consuming foods that are low in fiber and high in calories, and consuming foods that contain too much sugar or salt. Poor eating habits could have effects in the short term and long term. In the short term, eating unhealthy food could lead to tiredness while in the long term, eating unhealthily could cause illnesses and health problems such as high blood pressure, high cholesterol, tooth decay, eating disorders, being overweight, obese, heart disease, stroke, and depressions (Government of South Australia, 2022).

Sometimes eating healthy is not an option for those who live in rural areas and low-income communities. So, they settle for foods that are high in calories and low in nutrition. Having access to healthy food is challenging, other than that, healthy food can be costly. Too few people can afford healthy food (Kelly-Linden, 2020). "We have this situation where it is very easy to buy very cheap calories with very low levels of nutrients. Whereas the same is not true for some of the more nutrient-rich foods like fruits and vegetables." Ms. Taylor said. Unhealthy food is cheap because the ingredients can be mass-produced and have a longer shelf-life. It cost less to transport processed foods compared to the standard of healthy food transportation.

This motivates me to find the right solutions to help students and busy workers eat healthy while maintaining their work efficiency. The idea of a food subscription service that customers could subscribe to weekly and choose their breakfast, lunch, and dinner daily based on our menu were proposed. The food will be delivered to their schools or offices from 5 to 10 minutes before the break or

whenever they want. The foods will be made from organic ingredients which we can track where those ingredients are coming from. Moreover, we could support local farmers by purchasing directly from them once or twice a week. We know that the middle man is the one who makes the most profit from businesses, so in order to cut some costs while also making a better living for our local farmers, we could help them by creating a community online or posting the information on a billboard about the ingredients we will need in the following weeks so that they can be prepared ahead of time.

1.2 Problem Statement

It is common for time-limited professionals to prepare and eat unhealthily due to their busy lifestyles. Many professionals may find themselves working long hours, attending meetings, and traveling back and forth, leaving little to no time to prepare their own nutritious meals. As a result, they may resort to quick and convenient options such as fast food, processed snacks, and sugary drinks. This type of eating habit can lead to negative health outcomes such as weight gain, fatigue, and increased risk of chronic diseases such as high blood pressure, heart disease, kidney failure, diabetes, and certain types of cancer. In addition, lacking essential nutrients can affect cognitive function, mood, and well-being which as a result could affect their productivity. On the other hand, those who care about the nutrition in the foods they eat tend to stay in shape and have great health conditions. Eating healthy foods which contain all the nutrients necessary for our body provides many benefits such as having great mental health, sustaining energy levels, enhancing physical fitness, improving sleeping habits, and preventing diseases.

There are several solutions that time-limited professionals can adopt to maintain a healthy diet despite their busy schedules. Some of these solutions include using healthy meal delivery services, eating healthy snacks, and eating mindfully. There are now healthy meal delivery services that cater to busy professionals. These services offer healthy and nutritious meals that can be delivered to the office or home, saving time and effort in meal preparation. Time-limited professionals can keep healthy snacks on hand, such as fruits, nuts, and vegetables, to avoid unhealthy

snacking throughout the day. Drinking plenty of water throughout the day can help to keep energy levels up and prevent overeating.

Overall, many time-limited professionals struggle to maintain a healthy diet due to their demanding schedules and lack of time to prepare nutritious meals, leading to unhealthy eating habits and negative health outcomes. To eat healthy while maintaining their work efficiency, people with busy lifestyles can use healthy meal delivery services and order the healthy food they desire.

1.3 Research Objective and Questions

The main objective of this research is to understand the intention to why people with busy lifestyles still choose to eat unhealthily while knowing the consequences However, there are some cases where those individuals do not have options for their food choices, therefore, the idea of wanting to figure out what are the barriers that take those choices away from them is important. Moreover, this research paper aims to motivate and show the benefits of healthy eating habits to people of all ages. We also want to raise the awareness of people who are too focused on their work and not taking food nutrition into consideration before consuming, that in the long term, there will be negative consequences to their overall health.

The main research question is:

What are the main factors that push people with busy lifestyles to eat unhealthily?

Sub-questions:

1) Are healthy foods expensive?

2) How difficult is it to have access to healthy food?

3) How to encourage people to eat healthier?

4) Will healthy meal delivery service encourage people to eat healthier?

1.4 Significance and Importance of the Study

The findings of this study will have practical implications for people with busy lifestyles who are struggling to maintain a healthy eating diet due to their busy schedules. By identifying the barriers and challenges to having healthy eating habits,

the study can help time-constraints individuals to prepare and manage healthier foods despite their busy schedules. For example, the study will provide the best solutions to the reasons behind their unhealthy eating habits, or provide suggestions about the available options for eating healthier. Such practical intervention can help improve their diets which would improve their well-being and overall health outcomes, which will further increase their productivity and work efficiency.

The study will contribute to the academic literature on food nutrition and health by providing new insights into busy individuals' factors that lead to their food choices, challenges, and health outcomes. The finding of this study will also contribute to existing research papers related to the relationship between work-related stress, tight schedule, and dietary habits. It will help to advance the understanding of the problems and solutions related to eating habits.

1.5 Definition of Main Terms

Eating Healthy is defined as the consumption of a well-balanced diet that provides the human body with all the necessary nutrients it needs. Eating healthy typically means eating a variety of fruits, vegetables, grains, meat, and dairy products that contain proteins and healthy fats. Limiting the consumption of processed foods, sugary drinks, and foods that contain high saturated and trans fats is also a part of eating healthy. Moreover, it is important to consume proper portion sizes and adequate amounts of water to stay hydrated. Eating healthy can help prevent chronic disease, maintain a healthy weight, and promote overall physical and mental health.

A busy Lifestyle is defined as the way in which a person lives, mostly occupied by a full schedule of activities and events, such as work, school, responsibilities, social events, personal hobbies, and more. A person with a busy lifestyle tends to have little to no free time. Because of their tight schedule, this type of person tends to face a high level of stress due to the pressure. Some examples of a person with a busy lifestyle include students who spend most of their time at school doing work and extracurricular activities, professionals who spend hours at their workplace, parents who have to work and look after their children, and those who have multiple work shifts. A busy lifestyle can be challenging, however with good time management, skills, tolerance, and practice it will not be a problem.

Poor Eating Habits are defined as the consumption of foods and beverages that are low in nutritional value and high in calories, sugar, fats, and sodium. Examples of poor eating habits include eating fast food and processed snacks, skipping meals, eating large portions, eating too many sugary drinks, and not consuming enough fruits, vegetables, whole grains, and lean protein sources. Poor eating habits can lead to many diseases such as weight gain, obesity, and a range of chronic health conditions such as type 2 diabetes, high blood pressure, heart disease, and various types of cancer. Other than that, poor eating habits can also have a bad impact on mental health and lead to tiredness, mood swings, and poor efficiency. It is important to establish healthy eating habits to maintain good physical and mental health.

Negative Health Impacts are defined as the adverse effects on a person's physical and mental health resulting from various factors such as unhealthy lifestyle habits, exposure to toxic substances, or genetics. Examples of negative health impacts include chronic diseases such as heart disease, diabetes, and cancer, as well as mental health conditions like depression and anxiety. Negative health impacts can also include physical symptoms like fatigue, headaches, and pain. These health impacts can affect a person's quality of life, productivity, and overall well-being. Preventing negative health impacts often involves making positive lifestyle changes such as eating a healthy diet, exercising regularly, getting enough sleep, reducing stress, and avoiding harmful substances such as tobacco and excessive alcohol. Regular medical checkups and screenings can also help detect potential health problems early, which can lead to better outcomes.

1.6 Outline of the Paper

The structure of this research paper is organized as follows:

Chapter 1: Introduction - Provides an overview of the research, highlighting the background, context, problem statement, research questions, the significance of the study, definition of main terms, and the outline of the paper.

Chapter 2: Literature Review - Reviews existing theories, frameworks, and empirical studies relevant to consumer behavior and digital marketing, establishing a theoretical foundation for the research.

Chapter 3: Methodology - Details the research methodology, including data collection methods, sampling techniques, and analytical approaches employed in this study.

Chapter 4: Findings and Analysis - Presents the findings of the research, accompanied by an in-depth analysis and interpretation of the collected data.

Chapter 5: Discussion and Conclusions - Explores the implications of the research findings, discusses their relevance to existing theories, and provides practical insights for businesses operating in the digital marketing realm.

CHAPTER 2
LITERATURE REVIEW

Chapter 2 provides a concise literature review on healthy eating habits and food security in Cambodia. It covers the importance of healthy eating and the concept of food security, focusing on availability, accessibility, utilization, and stability. The review includes findings from a survey conducted among nursing students, highlighting their awareness of healthy eating. It explores the impact of globalization, urbanization, and informal markets on eating habits, as well as the relationship between food cost and nutrient intake. The chapter also addresses the influence of technology, such as meal delivery services. It concludes by identifying research gaps and the need for customized tools in studying Cambodia's context. This literature review serves as a foundation for subsequent chapters, enhancing understanding of the factors affecting professionals' eating habits in Cambodia.

2.1 Review of Relevant Literature, Theories, and Previous Research Related to the Research Question or Objective

According to the Office of Disease Prevention and Health Promotion (2023), eating healthy means following healthy eating patterns which include foods and drinks that contains all the nutrients our body need. Eating healthy is consuming foods that contain the right amount of sodium (salt), sugar, protein, vitamins, and fats. Eating healthy is important for people of all ages, starting from young children to the elderly. You need to keep track of how you age and see what is the best consumption amount for your body. As people age, their bodies will also change which means the calorie intake and nutritions need may vary (MedlinePlus, 2019). To maintain a healthy lifestyle eating habits alone are not enough, you have to be physically active by doing some exercises or playing some sports. Drinking alcohol like wine, beer, and liquor is okay as long as you drink at a moderation level, however, keep in mind that the less you drink the better. By consuming the right amount of nutrition that our body needs, we could keep control of our weight and prevent long-term chronic disease. Eating healthy could reduce the risk for overweight, obesity, heart disease, type 2

diabetes, high blood pressure, and some cancers (Office of Disease Prevention and Health Promotion, 2023).

The World Bank (2023) stated that food security is when people have enough physical and economic resources to access nutritious food that meet their needs and food preferences for an active healthy lifestyle. The four main components to meeting food security are availability, accessibility, utilization, and stability to consume healthy food. Moreover, 61 percent of Cambodians live in rural areas, where of those 77 percent rely on agriculture, fisheries, and forestry for their living which means they are really sensitive to climate change, climate pattern shifting, and temperature increases. 45 percent of Cambodians live in moderate or severe food insecurity. (United States Agency for International Development, 2023) Organizations around the world have been helping Cambodia to improve food security and increase Cambodian income through the provision of training and technological aid.

To understand the level of awareness of the students on the principles of healthy eating habits and to see if they know about "useful" and "harmful" foods, a survey was conducted on 40 first-year students of Nursing major at Trakia University. (Andonova, 2014) The results show that most students have a high level of understanding regarding what food will benefits and harm them, however, only 17.5% follow the healthy eating principles and another 75% use them partially in their daily life. Furthermore, the survey has asked about the source of information on healthy eating, it shows that 67.5% of the respondents obtain their knowledge from the Internet, 45% from friends, 27.5% from families, and 25% indicated other sources such as books, movies, etc (As shown in Figure 2.1) (Andonova, 2014).

Figure 2.1: Main Sources of Information on Healthy Eating
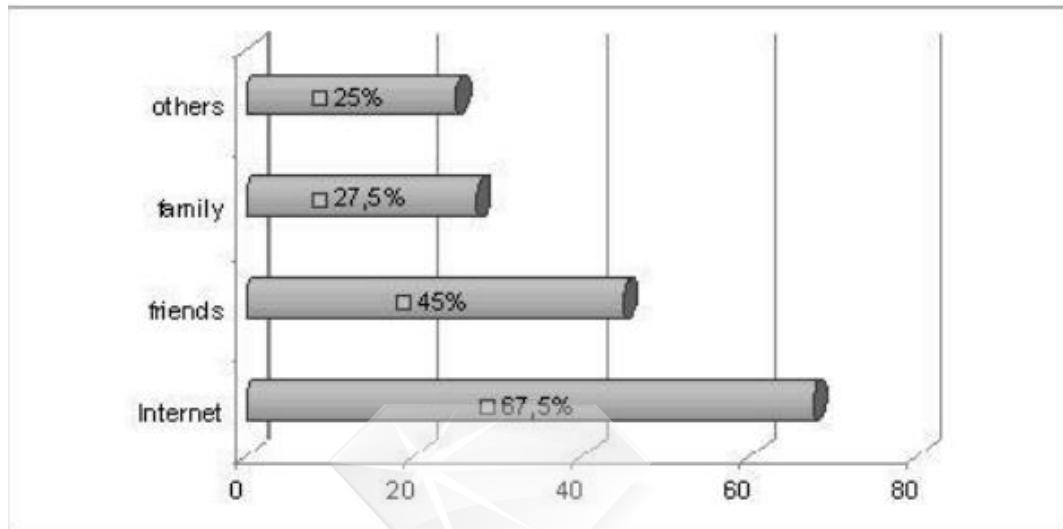
Source: Andonova, A. (2014). Information and awareness of the students' healthy
eating. *Trakia Journal of Sciences, 12*(1), 362-366.

Figure 2.1 shows how well the internet can educate students on healthy eating
information compared to other sources. Surprisingly, families have a relatively low
percentage of information sharing.

Globalization and urbanization have influenced lifestyles so much that one
has no time to think about what we are eating and the consequences it could have
(Zehra, Shafiq, & Bashir, 2018) Research and studies have been trying to raise
awareness of what junk foods could do to consumers, but unfortunately, the taken
measures are not very effective. Eating healthy and living healthy is essential to living
a healthy lifestyle, however in today's world people are choosing to eat high calories
food, so-called junk food, which could cause serious health hazards such as coronary
artery disease, obesity, and diabetes (Zehra, et al., 2018). Working families with
school-going children have no time for meal preparation themselves, so the children
would have breakfast at home and fast food at school or after. It has been seen that
overweight children can recognize fast food logos better than other foods logos.
Consumption of foods high in fat, sugar, salt, and calorie content at an early age will
lead to the early development of obesity and other diseases. Studies have shown that

there has been a positive correlation between fast food consumption and an increase in body mass index (Zehra, et al., 2018).

The majority of foods consumed by Cambodians are purchased from informal markets such as fish and vegetable markets. In Cambodia, informal markets often have no proper rules and regulation execution and have weak sanitation guidelines (Wiwanitkit & Kaewla, 2015). However, Cambodian housewives would still choose to shop at informal markets over well-regulated markets, such as supermarkets, due to its price and location. Chor Lyda, a Cambodian housewife, says that even with the acknowledgment of knowing that the informal market is dirty, it is hard to avoid shopping there because items are cheaper and the small informal market is close to her house. On a rainy day, she does not want to go to a wet market at all because her feet get itchy from the water collected on the ground in the market and she has to clean them with alcohol as soon as she arrives home (Banung, 2012). Sok Ouch, a vegetable seller, in the wet market believes that storing the vegetable above the ground is enough to keep the food clean. Other than that, Sok Ouch mentioned that it is not the seller's responsibility alone for the food hygiene, the customers themselves should be mindful when it comes to buying and cleaning their food. In response to this problem, Kong Choy, a cleaner at the market, mentioned that there are rules to follow in the market, however, some sellers sell their stuff over the lines or on the ground after he and his colleagues walk past, as they think it would make their stuff stand out to attract more customers. There will be fines and penalized if any sellers get caught not following the guidelines (Banung, 2012). According to Schwan, et al. (2021), studies conducted on informal markets in Cambodia show that the foodborne pathogen contaminations rates in informal vegetable markets products such as fresh vegetable, poultry, and pork products are relatively high, 75% and 25% of food contact surfaces and non-contact surfaces, respectively. Particularly the pathogens Salmonella enterica and Escherichia coli. As a result, eating vegetables and foods with high nutrition levels from improper handling environment does not necessarily mean healthy. In short term, in a period of 48 hours, eating unhygienic foods could cause illness such as diarrhea, and in long term it could cause stomach cancer.

According to National Institute of Statistic (2022), Cambodia Socio-Economic Survey (CSES) was conducted and presented to show essential statistical evidence for effective decision and policy-making in order to contribute to the improvement of raising the standard of living of Cambodian people. The sampling frame was stratified based on the province with further stratified into urban and rural areas of those provinces.

Table 2.1: Total Number of Villages in the Frame and Sample by Strata

Province Name	Number of Villages in the Frame			Sample Sizes (PSUs/Villages)		
	Urban	Rural	Total	Urban	Rural	Total
Banteay Meanchey	176	494	670	20	32	52
Battambang	109	702	811	12	42	54
Kampong Cham	108	813	921	8	45	53
Kampong Chhnang	105	464	569	10	30	40
Kampong Speu	826	553	1379	33	21	54
Kampong Thom	57	723	780	5	40	45
Kampot	33	455	488	4	38	42
Kandal	690	320	1010	40	20	60
Koh Kong	28	92	120	10	11	21
Kratie	25	260	285	5	28	33
Mondul Kiri	31	66	97	8	12	20
Phnom Penh	954		954	95	0	95
Preah Vihear	20	216	236	3	22	25
Prey Veng	44	1105	1149	5	53	58
Pursat	87	424	511	7	29	36
Ratanak Kiri	21	224	245	4	17	21
Siemreap	149	808	957	18	37	55
Preah Sihanouk	67	43	110	17	6	23
Stung Treng	25	103	128	6	14	20
Svay Rieng	140	550	690	13	28	41
Takeo	308	811	1119	18	37	55
Oddar Meanchey	93	247	340	9	17	26
Kep	14	4	18	8	2	10
Pailin	61	34	95	15	5	20
Tboung Khmum	69	804	873	5	44	49
Total	4,240	10,315	14,555	378	630	1008

Source: National Institute of Statistic. (2022). *Report of Cambodia socio-economic survey 2021*. Phnom Penh, Cambodia: National Institute of Statistics.

The survey was conducted in 24 provinces and one capital, Phnom Penh, which has no rural areas (National Institute of Statistic, 2022).

Figure 2.2: Average Monthly Consumption per Household, 2009 to 2021

　　　　　(In Thousand Riels)
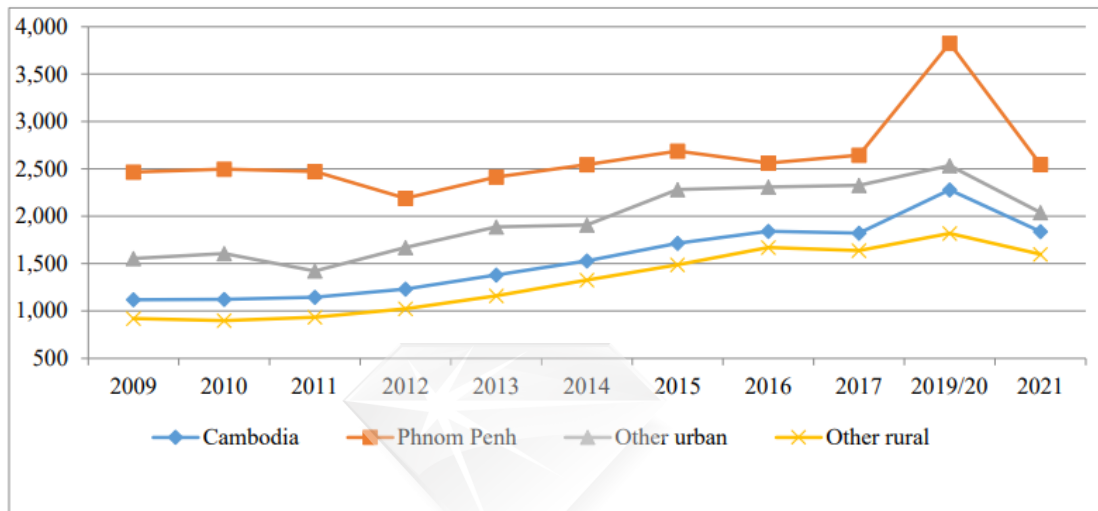
Source: National Institute of Statistic. (2022). *Report of Cambodia socio-economic survey 2021*. Phnom Penh, Cambodia: National Institute of Statistics.

　　　　Figure 2.2 shows that household consumption has an increasing trend over the 10 years period, however there was a significant drop in 2021 due to Covid-19 (National Institute of Statistic, 2022)

　　　　According to the National Institute of Statistic (2022), data from the Cambodia Socio-Economic Survey (CSES) shows that food and non-alcoholic beverages are the largest expenditure for every household in Cambodia, comprising 48 percent, while non-food consumption such as utilities and clothing were 23.7 percent, 4.7 percent for health care, approximately 11.3 percent for transportation and communication, about 1.4 percent for education, and 73 percent for other items. It shows how each household spends a very large portion of its income on food. On average, about 1.7 percent of households relied on unhealthy and less expensive foods. Moreover, the proportion of households that relied on unhealthy and less expensive foods was highly found in rural areas rather than in Phnom Penh and other urban areas. Cambodians have to spend more on food due to the food and fuel crisis that causes the food prices to increase dramatically across the country (National

Institute of Statistic, 2011). Food insecurity mostly affects those who live along Tonle Sap and the plains region (Sophal, 2011).

To study how the cost of food could impact nutrient intake, a survey was conducted in rural Kandal province, Cambodia. Twenty-four hours of recall, activities, socioeconomic surveys, focus groups, and market survey has carried out on 67 women from 5 villages in rural Kandal province, Cambodia (Wallace, et al., 2014). The study shows that 97 percent of the women did not meet the daily required intake of iron, while 70 percent of the women did not meet the daily required intake of vitamin A. Although they consume iron and vitamin A every day, they do not consume enough amount of food. Results showed that the cost of food and nutrition knowledge are the factors linked to nutritional practice (Wallace, et al., 2014).

Technology development has been booming in the last century. As with any other country in the world, Cambodia's total market value of e-commerce, as of 2021, was at $970.10 million, showing an increase of 19.29 percent from $813.25 million in 2020 (Narayan, 2022). One of the most important factors that push the climb in total e-commerce market value in Cambodia is the sharp rise in digital payments. Cambodia has 13.6 million mobile payments user in 2021, an increase of 42 percent from 9.56 million in 2020 ("Rise in digital payments driving", 2022). The National Bank of Cambodia (NBC) has launched the Bakong digital payment system and KHQR which is the quick response code system for retail payments that allow its users to transfer money from anywhere at any time, among any banks within the Bakong's network (Bakong National Bank of Cambodia, 2023). With this ease of use and access to online technology, we can see that there is also an increase in the use of meal delivery services. According to Statista (2022), in 2022 the revenue generated from meal delivery service stood at 24.09 million USD, including 4.21 million and 19.88 million revenue generated from Plateform-to-Consumer and Restaurent-to Consumer, respectively. Compare to the year 2021, revenue has increased by 2.72 million USD. Moreover, the meal delivery service is predicted to keep on increasing in the next couple years.

Figure 2.3: Meal Delivery Revenue in Cambodia
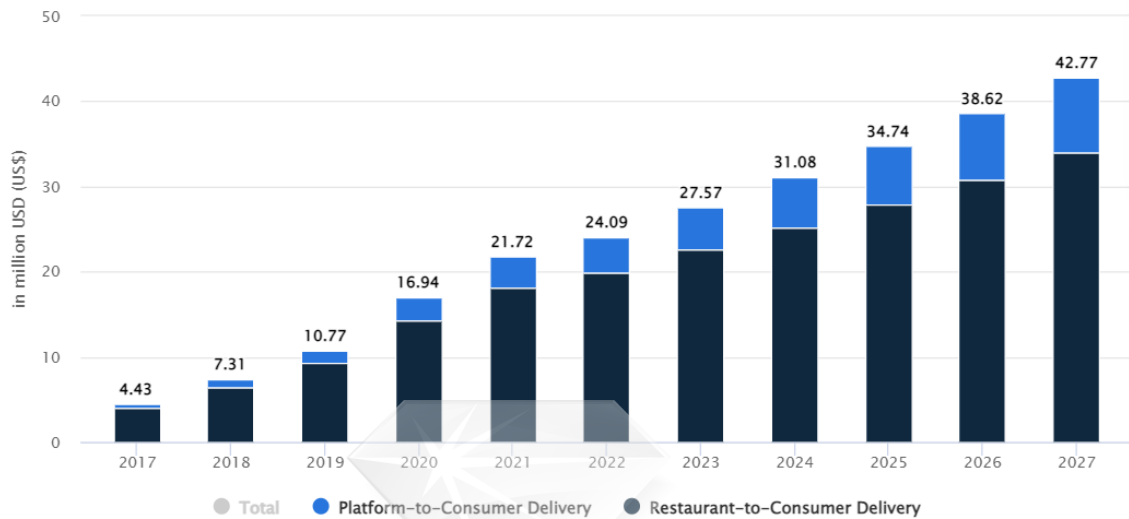
Source: Statista. (2022). *Meal delivery - Cambodia*. Retrieved from
https://www.statista.com/outlook/dmo/online-food-delivery/meal-
delivery/cambodia.

Figure 2.3 shows the increasing of meal delivery service revenue over the last
few years and the prediction of an increase in the upcoming years (Statista, 2022).
The usages of healthy meal delivery service tends to increase, both Platform-to-
Consumer and Restaurent-to-Consumer delivery.

2.2 Analysis and Synthesis of the Literature

Having a healthy lifestyle by staying conscious about the food you consume
and do some physical exercise could increase the longevity and quality of life. For
that reason, eating healthy is important for people of all ages, starting from a young
child to elderly. Eating healthy could reduce the risk of short term and long-term
diseases, such as overweight, obesity, diabetes, heart disease, etc. Furthermore, a
survey was carried out among young students to understand their level of awareness
toward eating healthy and what types of foods would benefit and harm them. The
result shows that the majority of the students have a clear understanding of nutrition
and what the foods could do to their bodies, however, only about 20% follow the

principles and guidelines of eating healthy (Andonova, 2014). Moreover, we know how important the internet is to raise awareness regarding food security and nutrition among young individuals, as it is the main source of information.

The rapid development of society has forced individuals to eat unhealthily despite knowing the facts that it could cause negative health impacts. The cause of that problem is, nowadays, everyone is so busy with their work, school, and other responsibilities to the point where they have no time to consciously buy and eat healthy foods. Other than that, the availability and accessibility to junk food/fast food is increasing due to the rapidly increasing number of fast-food restaurants and how convenient it can be in a busy situation. Many have shown that there has been a positive correlation between fast food consumption and an increase in body mass index to raise awareness of diseases that could cause by long-term consumption (Zehra, et al., 2018).

From the above articles, we can clearly see that in Cambodia's informal markets, the food is not being properly sourced and handled in the right conditions to prevent any possible contamination. Although, there are rules and regulations some vendors still prioritize profits over the well-being of their customers. In order to eat healthily, one must make sure to know the sources and the handling of ingredients. Moreover, the price of foods and ingredients has been increasing over the past decade, meaning that a large portion of every household is spent on food consumption. The average monthly consumption per household has almost doubled in the last 10 years (National Institute of Statistic, 2022). As a result, every household is trying to spend less on food by choosing less-expensive food from the fish or vegetable informal markets.

2.3 Identification of Gaps or Limitations in the Existing Research

The limitation of the Cambodia Socio-Economic Survey (CSES) is that not every household has been included, so the result could be biased, and also there are errors related to fieldwork and data process procedures. Generalized data could not be used to its full potential since the living situations are different in different parts of the country.

To answer the main research question and sub-research questions 8 independent variables were developed to see if they have any impact on the depedent variable. The questions used to test these variables were not based on any existing scale but instead were created for this research. This was done because there is no existing scale that accurately answers the research questions for the case of Cambodia.

Dependent Variable:

Time-limited Professionals' eating habits: refers to the type of foods they eat and their eating schedules. It is dependent on work schedule, time constrains, and availability of healthy food options.

Independent Variables:

Work schedule: refers to the amount of time individual spend on their work and the intensity to work. This impacts the amount of time to prepare healthy food for themselves. Some people will have little to no time to prepare healthy food, and for that reason they chose to buy unhealthy convenience foods such as fast food and drinks to fulfill their hunger.

Cost of healthy food: refers to the amount of money required to have access to healthy food. This impacts the food choices an individual decided to consume. When the cost of healthy food is too high, there are fewer people willing to buy it. On the other hand, if nutritious food is cheap and affordable, more people will be interested in buying healthy food.

Availability and accessibility to healthy food: refers to the availability and accessibility of healthy foods in the environment. This impacts the level of healthy food consumption. If an individual has easy access and there is a range of healthy foods available in the neighborhood, that individual tends to buy and eat healthier.

Availability and accessibility to fast food and junk food: refers to the availability and accessibility to unhealthy food in the environment. This impacts the level of healthy food consumption. When unhealthy foods such as fast food and junk food are convenient and have many choices to choose from, an individual tends to eat those kinds of foods more often.

Food consumption choices: refers to the type of foods an individual consumes. This impacts overall health being. Consuming healthy food on a daily basis

will help the person stay healthy, physically fit, mentally stable, and stay active during the day. On the other hand, consuming a lot of unhealthy foods on a daily basis will make the consumer feel tired, moreover, in long term it will cause many chronic diseases such as heart problems, obesity, high blood pressure and so on.

Mental and Physical health outcomes: Refers to the well-being of people, mentally and physically, related to the food consumption.

Productivity and work efficiency: Refer to the efficiency and effectiveness of the work outputs. This impacts the eating habits and work schedule.

Healthy meal delivery services: Refers to the use of healthy meal delivery services to maintain healthy eating habits or diets.

CHAPTER 3
METHODOLOGY

Chapter 3 describes the research methods used to address the research question and objectives of the study. The main objective is to understand the obstacles and challenges faced by time-limited professionals regarding their eating habits. The research aimed to identify common barriers to healthy eating and provide recommendations for maintaining a healthy diet despite a busy schedule. The study focused on individuals based in Cambodia, particularly in Phnom Penh. A quantitative survey was conducted using a 4-point Likert scale to gather data. The questionnaire consisted of screening questions, general questions, specific questions (including an Intention-to-Buy question), and demographic questions. The research hypotheses were established based on the conceptual framework, exploring the impact of various factors on eating habits. Google Forms survey and convenience snowball sampling methods were chosen for their convenience, cost-effectiveness, and ease of access. The survey was distributed to friends, family, co-workers, and through social media platforms. Data analysis involved cleaning and processing the data using Jamovi, performing factor analysis, regression analysis, Spearman's correlation analysis, and T-test function. The limitations of using Google Forms and snowball sampling were addressed, including the potential for bias and concerns about data legitimacy.

3.1 Description of the Research Methods Used to answer the Research Question or Objective

As previously mentioned, the main objective of this study is to understand the obstacles and challenges faced by time-limited professionals in term of eating habits. All of the responses will help to identify common barriers to healthy eating and provide recommendations for maintaining a healthy diet despite a busy schedule. We are simply interested in the respondents' personal experiences and opinions related to their dietary habits and overall health. The feedbacks are invaluable in helping to understand the needs of time-limited professionals and in developing strategies to support healthy eating habits. The research was focused on individuals who are based

in Cambodia, especially Phnom Penh. A careful analysis was done which, hopefully, could help and aids other similar projects in the future. Time-limited professionals tend to eat whatever is convenient for them without giving a lot of attention to whether the food is healthy or not.

In this questionnaire, a quantitative survey was conducted using the 4-point Likert scale because respondents must make decisions in order for the survey to be reliable and to know if they are going to agree with the proposed solution or not. The questionnaire consists of 4 sections which are the screening questions, general questions, specific questions, which include one Intention-To-Buy question, and demographics questions. Screening questions were asked to make sure that our respondents fall into our target respondent category, those who are eating healthy or have been considering eating healthy in the future. General questions were asked to catch the interest of the respondents and give them some insight into the following questions. Specific questions were asked to measure the construct by collecting the respondents' commitment and information regarding our variables. The specific questions consisted of questions related to the independent variables which are work schedule, cost of healthy food, availability and accessibility to healthy food, availability and accessibility to fast food and junk food, food consumption choices, mental and physical health outcomes, productivity and work efficiency, and healthy meal delivery services. Last but not least, demographic questions were asked to know the background information of our respondents, nevertheless, it might have some impact on the dependent variables.

Figure 3.1: The Relationship between the Dependent Variable and Independent
Variables of this Research Paper
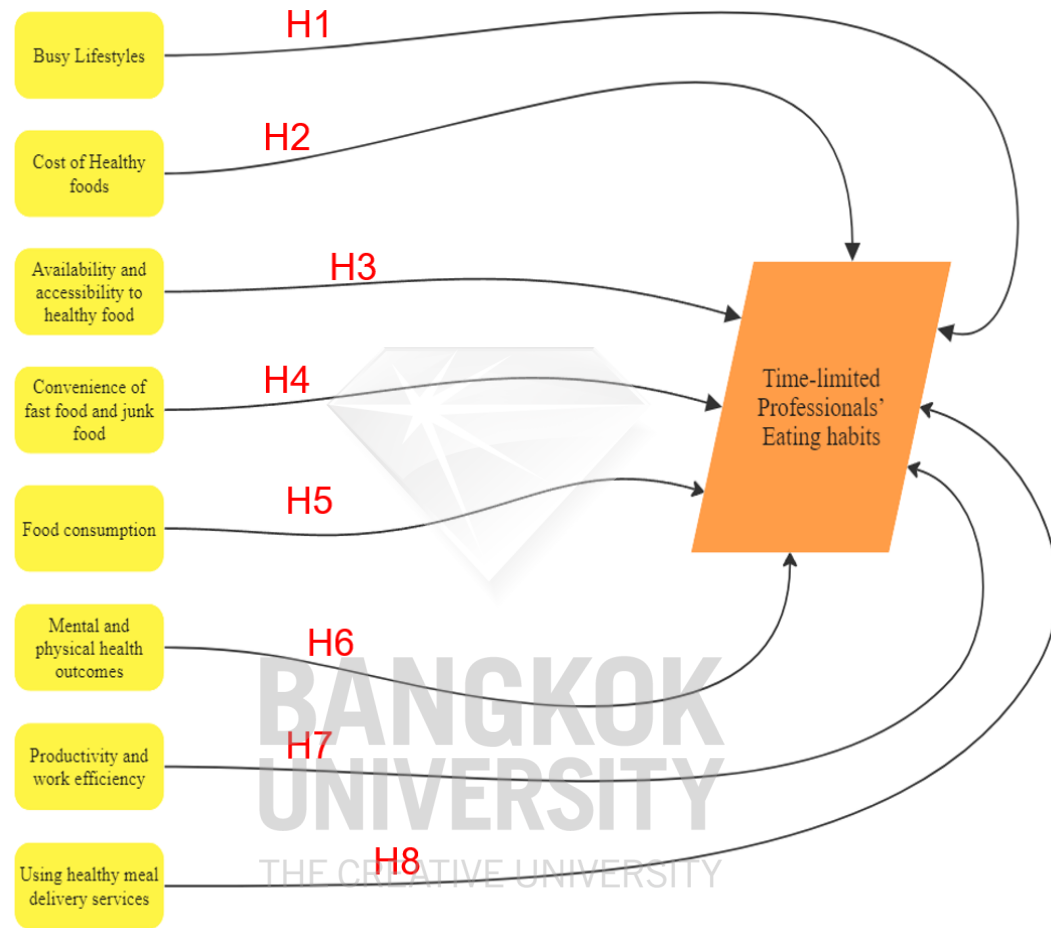
The eight independents of busy lifestyles, cost of healthy foods, availability and accessibility to healthy food, convenience of fast foods and junk foods, food consumption, mental and physical health outcomes, productivity and work efficiency, and using of healthy meal delivery services have different impacts on the eating habits of people with busy lifestyle.

Based on my conceptual framework, the following hypotheses were established:

H1: As the busier lifestyle a person got, the less healthy person would eat.

H2: As the price of healthy foods increases, the less likely people will eat healthy.

H3: As the availability and accessibility to healthy food increase, the more likely people will eat healthily.

H4: As the convenience of fast food and junk food increases, the less likely people will eat healthily.

H5: The food consumption choices will impact eating habits in one way or another.

H6: People who eat healthy tends to have strong mental and physical health outcomes.

H7: People who eat healthy tend to be more productive and have great work efficiency.

H8: The availability and accessibility of healthy meal delivery services will encourage people to eat healthier.

3.2 Justification for the Choice of Methods

Google Forms survey and convenience snowball sampling methods was used because of their convenience, cost-effectiveness, ease of access and many useful features. Google form is free to use, it also has many different tools and features, such as plotting and graphing, to help analyze the data after. Due to time constraint, using Google form and snowball sampling methods help with data gathering as much as possible in the shortest period of time. Google form survey could be created and distributed to a large number of participants in a short time period. Moreover, Google form allows the exportation of data in many different types of formats, such as Excel or Google Sheets, which can simplify the data analysis process. Using snowball sampling methods allows us to reach out to hard-to-reach participants, for this case, time-limited professionals. The participants can take the survey from anywhere at any time they think best. To complete the survey, the target respondent only needs a phone or a computer. For this reason, it is very convenient to use the method proposed. However, to avoid any bias we have to ask the respondents to make sure that the people they forward the survey to will also fall into the target criteria.

3.3 Data Collection

In the process of data collection, a questionnaire survey was sent out using Google Forms to friends, families, and co-workers who have little to no time to cook their own foods on a daily basis. In addition to that, the convenience snowball sampling method was used, which means those who have received the survey links will pass the link on to those who they think are fits to be the target respondents and could contribute to this study. Moreover, the survey link has been posted on social media platforms, such as Facebook and Instagram to collect as much data as possible. This research questionnaire does not have a specific quota; however, it tries to aim to target people who have a busy lifestyle (e.g., students, blue-collar workers) that have been or consider eating healthy. People with busy lifestyles were targeted because they are the ones who are most likely to be interested in the proposed solutions, as they are the group of people who do not have much time to cook and prepare healthy foods on their own. The bare minimum number of respondents for the survey is expected to be at least 70 while the best would be around 130.

3.4 Data Analysis

To start the analysis process, the cleaning and processing of data were done by removing invalid and unreliable data and would be performed using software called Jamovi. Jamovi is a statistical spreadsheet used to compute value, optimized for statistical data. It is compelling compared to other costly statistical products such as SPSS and SAS (Jamovi, 2023). The Factor analysis would be done by removing the cross-loading component with the highest uniqueness value first until there are no more cross-loading factors. Factor analysis was done to see what factors could affects individual with busy lifestyle eating habits. The remaining components with similarity will be used to create a compound variable. In each compound's variables, the mean of the questions in the same group is calculated. The mean is used to measure how representative of a population can be (Field, 2018). The rotation will be Varimax with the number of components based on an eigenvalue greater than 1. For the assumption test, Bartlett's test of sphericity is used, including the KMO measure of sampling adequacy. Moreover, the factor loadings will be sorted based on their size, hiding

loadings that are below 0.4. For the additional output, the initial eigenvalues and scree plots is shown.

When running a regression analysis, the evaluation of the reliability of the data is calculated by using internal consistency reliability. It tests the consistency within various items in the survey. In addition to that, regression analysis helps answer the first and second sub-research questions on whether participants perceive healthy foods are expensive or not, other than that, it will shows if participants have the accessibility to healthy foods despite their time and location. Also, it involves calculating Cronbach's alpha coefficient, which shows how the items are closely related to each other as a group. Cronbach's alpha ranges from 0 to 1, with an acceptable value of 0.7 or higher. The higher the alpha shows the better the consistency. Moreover, the value of R square should be at least 0.3. If the regression analysis shows no predictive power, Spearman's correlation analysis will be conducted to see if there are any correlated factors.

To investigate the difference between the two independent groups, T-test function will be used. This was done to see the relationship between our demographic data related to the motivation to eat healthily each individual. The p-value of the T-test results should be below 0.05, therefore it means there is a significant difference between the two groups. On the other hand, if the p-value is above 0.05, it means there is no significant difference between the two groups.

The limitation of collecting data using Google Forms is when it was sent out and posted the link on social media; some people think that it is a scam link which could lead to losing their account or financial loss. Answering and reassuring them individually that the link is legit and is not an auto-generated link from some untrusted website is a must. In addition to that, using snowball sampling might introduce some biases into the sample. For example, some participants that are referred to by others might share similar characteristics as my target participants, which could generalize my findings to a small group of people and not apply to the whole population.

CHAPTER 4
RESULTS

Chapter 4 presents the findings and analysis of the study, providing valuable insights into the research questions and objectives. The chapter begins with a descriptive analysis of the participants' demographics, giving insights on their characteristics and distribution. It then proceeds to explore the factors extracted through factor analysis, namely "Food Nutrition Awareness," "Productivity and Work Efficiency," "Food Prices," and "Busy Lifestyle." The reliability of these factors is assessed through reliability testing by calculating Cronbach's Alpha value. Additionally, regression analysis is conducted to examine the relationship between the factors and dependent variables. T-tests and Spearman's correlation analysis are employed to further investigate the impact of gender and the correlation between the factors and dependent variables. The chapter concludes with a comprehensive interpretation of the results and a discussion of their implications, providing valuable insights into the research questions and objectives addressed in the study.

4.1 Descriptive Analysis

The Google form survey data was collected, then proceed using analysis software to find the relation between variables. Moreover, the results could answer the research questions and objectives, which could further validate the hypothesizes in the previous sections.

4.1.1 Participants Demographics

In total, there were 86 participants taking part in the survey. There were 66.3% males (n=57) and 31.4% were females (n=29). 1.2% of the participants are under 18 years old (n=1), 53.5% are aged between 18-25 (n=46), 39.5% are aged between 26-35 (n=34), 4.7% are aged between 36-45 (n=4), and only 1.2% age above 55 (n=1) (Figure 4.1).

Figure 4.1: Participants' Age Range

How old are you?

Under 18 ■ 18-25 ■ 26-35 ■ 36-45 ■ 46-55 ■ Over 55
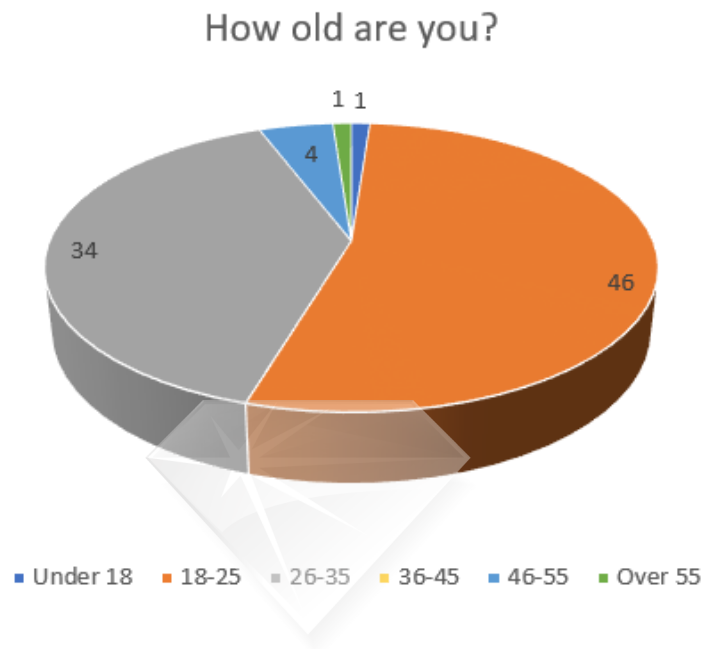
In the screening section, two questions were asked to validate the group of people that is targeted. The first question is "Are you eating healthy?" and the second question is "Have you considered eating healthy?". The result shows 69.8% of the respondents (n=60) are eating healthy or think they are eating healthy, while the other 30.2% are not eating healthy (n=26). Among those who are not eating healthy, 73.1% are considering eating healthy (n=19) and 26.9% are not planning to eat healthy any time soon (n=7). Those who are not eating healthy and do not consider eating healthy will lead to the final questions of the questionnaires since they do not fall under our target participants. Overall, our data was gathered from those who are eating healthy and are not eating healthy but are considering eating healthy at a number of 79 participants (As shown in Table 4.1)

Table 4.1: Target Participants

Frequencies of Are you eating healthy?

Are you eating healthy?	What is your gender?	Counts	% of Total	Cumulative %
Yes	Female	19	22.1 %	22.1 %
	Male	41	47.7 %	69.8 %
No	Female	10	11.6 %	81.4 %
	Male	16	18.6 %	100.0 %

Frequencies of Have you consider eating healthy?

Have you consider eating healthy?	What is your gender?	Counts	% of Total	Cumulative %
Yes	Female	6	23.1 %	23.1 %
	Male	13	50.0 %	73.1 %
No	Female	4	15.4 %	88.5 %
	Male	3	11.5 %	100.0 %

Source: *Jamovi*. (2023). Retrieved from https://www.jamovi.org/.

According to Figure 4.2, 43% spend 200,001 Riel- 400,000 Riel ($50.01-$100) on foods per week (n=34), 32.9% spend less than 200,000 Riel (<$50) per week (n=26), 12.7% spend 800,000 Riel-16,000,000 Riel ($200.01-$400) per week (n=10), 10.1% spend 400,001 Riel-800,000 Riel ($100.01-$200) per week (n=8), and only 1.3% spend Over 16,000,000 Riel (>$400) per week (n=1). This shows that more than 75% of the respondents spend less than 400,000 Riel ($100) on food per week.

Figure 4.2: Amount of Money Participants Spend on Food per Week

How much do you spend on foods per week?
79 responses
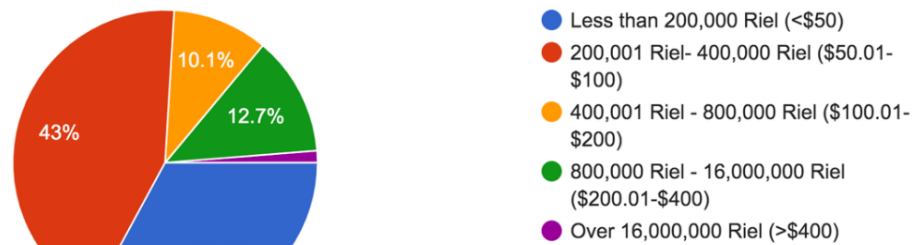
According to Figure 4.3, 60.8% of the respondents use food delivery service from one to five times a week (n=48), 7.65% use six to ten times a week (n=6), 2.5% use more than ten times per week (n=2), 2.5% always use meal delivery services (n=2), and 26.6% never use meal delivery service at all (n=21). This result shows that large number of people tend to use meal delivery services on a weekly basis.

Figure 4.3: Number of respondent's order Food According to how Frequently they use Food Delivery Services per Week

How often do you order delivery food per week?
79 responses
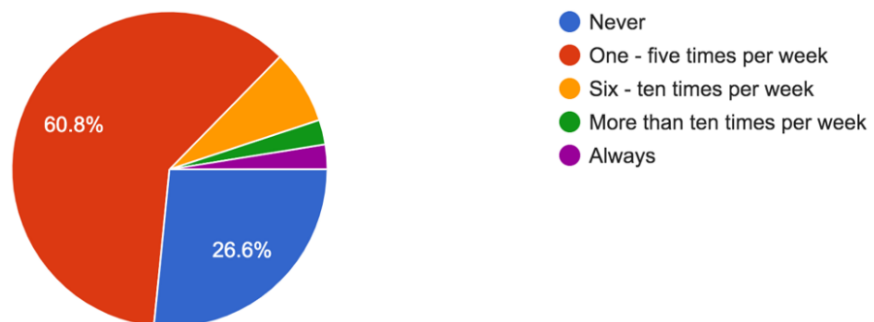
4.2 Factor Analysis

To answer research questions and objectives, a series of factor analyses using Varimax with Kaiser Normalization were conducted for data reduction. The initial analysis of the total of 50 items generated 14 factors by using Eigenvalues of 1 or higher. Some items were deleted from the scale due to cross-factor loading, by deleting those who have the highest uniqueness value first. Following by the deletion of the factors that only contain two items that do not share a similarity.

After the data cleaning and the removal of cross-loading variables, the factor analysis tables show 4 remaining factors. 3 items were strongly loaded on factor one, including items that shows nutrition awareness, which is "I take foods' nutrition into consideration before consuming even when I am busy.", "I am well aware of the nutritious facts in the food I consume.", and "I prioritize healthy food options even if they are inconvenience". Thus, factor one is named "Food Nutrition Awareness". 3 items were strongly loaded on factor two, indicating productivity and work efficiency, which are "I believe eating healthy help boost my work efficiency.", "I believe eating healthy help me focus throughout the day.", and "I believe eating healthy help boost my productivity.", thus this second factor is named "Productivity and work efficiency". Moreover, 3 items are loaded on factor three, showing the concern related to the price of foods, which is "I eat unhealthy food because it is cheaper compared to healthy foods.", "I think the ingredients used to make healthy foods are very expensive.", and "I find unhealthy foods to be cost-efficient.". Thus, the third factor is named "Food prices". Last but not least, factor four contains 4 items including "My daily schedule is always occupied.", "I often skip meals due to my busy schedule.", "I think it is hard to buy healthy foods.", and "I find unhealthy foods to be time-saving.", thus factor four is named "Busy lifestyle".

Table 4.2: Factor Analysis using Jamovi

Component Loadings

	Component				Uniqueness
	1	2	3	4	
Busy Lifestyle (4)	0.836				0.286
Food consumption (5)	0.828				0.309
Convenience of fast foods and junk foods (1)	0.787				0.342
Cost of Healthy Food (4)		0.797			0.360
Cost of Healthy Food (3)		0.776			0.388
Convenience of fast foods and junk foods (3)		0.721			0.405
Productivity and work efficiency (2)			0.844		0.276
Productivity and work efficiency (1)			0.834		0.244
Productivity and work efficiency (3)			0.733		0.299
Busy Lifestyle (6)				0.724	0.375
Busy Lifestyle (8)				0.709	0.494
Availability and Accessibilty to Healthy Food (3)				0.650	0.456
Convenience of fast foods and junk foods (4)				0.475	0.587

Note. 'varimax' rotation was used

      Table 4.2 shows 4 remaining factors with no cross-loading factors with 3 items in each factor except the fourth factor which has 4 items, all the items are strongly loaded.

      The Bartlett's test of sphericity presented in Table 4.3 shows the p value below 0.05 and KMO value over 0.5, suggest that there is a substantial correlation in the data. According to Table 3, Bartlett's Test of Sphericity shows the p-value at less than 0.001 which is below 0.05. Other than that, Table 4.4 shows the KMO measure of sampling adequacy value over 0.5.

Table 4.3: Bartlett's Test of Sphericity

X^2	df	p
260	78	<.001

Source: *Jamovi*. (2023). Retrieved from https://www.jamovi.org/.

Table 4.4: KMO Measure of Sampling Adequacy (Jamovi, 2023)

KMO Measure of Sampling Adequacy

	MSA
Overall	0.655
Busy Lifestyle (4)	0.580
Cost of Healthy Food (3)	0.643
Cost of Healthy Food (4)	0.679
Convenience of fast foods and junk foods (1)	0.710
Convenience of fast foods and junk foods (3)	0.660
Food consumption (5)	0.568
Productivity and work efficiency (1)	0.702
Productivity and work efficiency (2)	0.594
Productivity and work efficiency (3)	0.700
Busy Lifestyle (6)	0.698
Busy Lifestyle (8)	0.676
Availability and Accessibilty to Healthy Food (3)	0.723
Convenience of fast foods and junk foods (4)	0.676

In total, 4 factors were extracted from the data related to the motivation of eating healthy, include "Food Nutrition Awareness", "Productivity and work efficiency", "Food prices", and "Busy lifestyle". With the remaining 4 factors, we can see that the eigenvalues above 1 stand at 62.9% with 9.94% variance (Table 4.5). In addition to that, the scree plot in Figure 4.4 shows a clear distinction between each factor.

Table 4.5: Eigenvalues

Initial Eigenvalues

Component	Eigenvalue	% of Variance	Cumulative %
1	3.052	23.48	23.5
2	2.165	16.65	40.1
3	1.669	12.84	53.0
4	1.292	9.94	62.9
5	0.874	6.72	69.6
6	0.750	5.77	75.4
7	0.681	5.24	80.6
8	0.622	4.79	85.4
9	0.486	3.74	89.2
10	0.440	3.39	92.6
11	0.365	2.81	95.4
12	0.363	2.79	98.2
13	0.240	1.85	100.0

Source: *Jamovi*. (2023). Retrieved from https://www.jamovi.org/.

Figure 4.4: Scree Plot
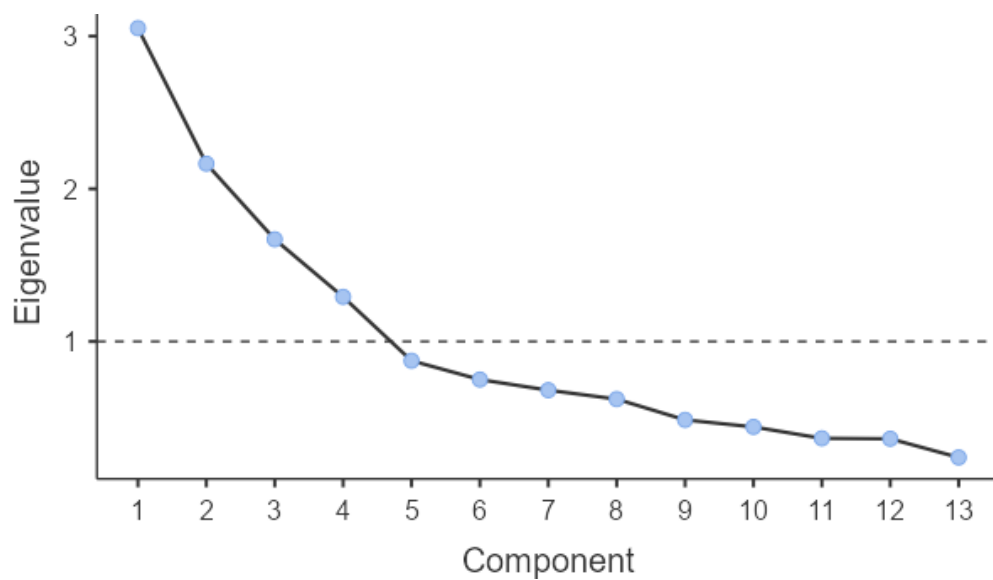
4.3 Regression Analysis

To measure the relation between the dependent variable and the factors, regression analysis was conducted. With the four remaining factors after factor analysis, the mean of each output was calculated. Jamovi's regression analysis shows the value of r and r squared. As seen in Figure 4.6, the R^2 value is 0.128 and the adjusted R^2 is 0.0802. The R^2 value is below 0.3 which means the dependent variable and the factors are not correlated. For this reason, the regression has no predictive power, therefore, it is not meaningful.

Table 4.6: Regression Analysis

Model Fit Measures

Model	R	R^2	Adjusted R^2
1	0.358	0.128	0.0802

Model Coefficients - DV

Predictor	Estimate	SE	t	p
Intercept	0.7922	0.678	1.1688	0.246
Food Nutrition Awareness	0.3472	0.147	2.3582	0.021
Productivity & Work Efficiency	0.1592	0.157	1.0120	0.315
Food Prices	0.1653	0.139	1.1875	0.239
Busy Schedule	0.0157	0.179	0.0877	0.930

4.3.1 Reliability Test

A reliability test has been conducted using reliability analysis in Jamovi, measuring the Cronbach's Alpha of each factor. In order for a factor to be reliability, the value of Cronbach's Alpha should be at least 0.7 or above. Moreover, the statistic shows if the Cronbach's Alpha value improves if any of the items were dropped. Food Nutrition Awareness (3 items) has shown good reliability ($\alpha = 0.770$) (Figure 4.7). Productivity and work efficiency (3 items) also showed good reliability ($\alpha = 0.760$) (Figure 4.8). Food prices have shown acceptable reliability ($\alpha = 0.695$) (Figure 4.9). Last but not least, a Busy lifestyle has shown reliability ($\alpha = 0.588$) (Figure 4.10). The

items from each factor cannot be removed since Cronbach's Alpha value of each factor will drop.

Table 4.7: Food Nutrition Awareness Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.770

[3]

Item Reliability Statistics

	If item dropped
	Cronbach's α
Busy Lifestyle (4)	0.662
Food consumption (5)	0.688
Convenience of fast foods and junk foods (1)	0.717

Table 4.8: Productivity and work efficiency Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.760

[3]

Item Reliability Statistics

	If item dropped
	Cronbach's α
Productivity and work efficiency (1)	0.658
Productivity and work efficiency (2)	0.618
Productivity and work efficiency (3)	0.756

Table 4.9: Food Prices Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.695

[3]

Item Reliability Statistics

	If item dropped
	Cronbach's α
Cost of Healthy Food (3)	0.532
Cost of Healthy Food (4)	0.617
Convenience of fast foods and junk foods (3)	0.653

Table 4.10: Busy lifestyle Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.588

[3]

Item Reliability Statistics

	If item dropped
	Cronbach's α
Busy Lifestyle (6)	0.453
Busy Lifestyle (8)	0.547
Availability and Accessibilty to Healthy Food (3)	0.513
Convenience of fast foods and junk foods (4)	0.548

4.4 T-Test

       T-test was conducted to see if gender have impact on whether people tend to eat healthy or not. The results in Table 4.11 show the p-value at 0.588, above 0.05, which mean gender has no impacts on whether a person would eat healthy.

Table 4.11: T-test between dependent variable and Gender

Independent Samples T-Test

		Statistic	df	p	Mean difference	SE difference
DV	Student's t	−0.544	76.0	0.588	−0.0958	0.176

Note. $H_a \mu_1 \neq \mu_2$

Group Descriptives

	Group	N	Mean	Median	SD	SE
DV	1	25	2.64	3.00	0.757	0.151
	2	53	2.74	3.00	0.711	0.0977

4.5 Spearman's Correlation Analysis

       The regression analysis shows there is no predictive power. For that reason, Spearman's correlation analysis was conducted to measure the correlation between the remaining factors after factor analysis and the dependent variables. Results in Table 4.12 show that there are 2 factors that has p-value above 0.1, which means there are 2 factors correlated to the dependent variables. The 2 factors are Food Nutrition Awareness, and Productivity & Work Efficiency.

Table 4.12: Spearman's Correlation Analysis: Correlation Matrix

Correlation Matrix

		DV	Food Nutrition Awareness	Productivity & Work Efficiency	Food Prices	Busy Schedule
DV	Pearson's r	—				
	df	—				
	p-value	—				
Food Nutrition Awareness	Pearson's r	0.303	—			
	df	76	—			
	p-value	0.007	—			
Productivity & Work Efficiency	Pearson's r	0.195	0.227	—		
	df	76	76	—		
	p-value	0.086	0.046	—		
Food Prices	Pearson's r	0.175	0.078	0.119	—	
	df	76	76	76	—	
	p-value	0.126	0.499	0.298	—	
Busy Schedule	Pearson's r	0.096	0.063	0.228	0.312	—
	df	76	76	76	76	—
	p-value	0.402	0.585	0.045	0.005	—

4.6 Interpretation of the Results

The factor analysis shows 4 remaining factors after the data has been cleaned and removed items that have cross-loading and high uniqueness values. The four remaining factors are "Food Nutrition Awareness", "Productivity and work efficiency", "Food Prices", and "Busy lifestyle". Reliability analysis was conducted by measuring the Cronbach's Alpha of each factor, the results show that all items in each factor are strongly loaded and are reliable. However, the regression analysis shows a value below 0.3 which means the factors and dependent variables are not really correlated. Moreover, the T-test shows that gender, whether a person is male or female, has no impact on their eating habits. After Spearman's correlation analysis was conducted, the results show Food Nutrition Awareness and Productivity & Work Efficiency are correlated to the dependent variables with p-value below 0.1.

4.7 Discussion of the Findings Concerning the Research Question or Objective

The survey data shows how people are aware of the foods nutritious they consume and how it helps them to stay alert and focused throughout the day when they consume healthy foods. However, they would still choose to eat unhealthily due to their busy schedule and the cost of healthy food ingredients. For this reason, the main research question was answered. Therefore, the main factor that pushes people with a busy lifestyle to eat unhealthily is the lack of time to prepare healthy foods and pricey ingredients even though they know the benefits and harmful impacts of how food intake could affect their productivity. Moreover, the results show the majority of the respondents agree that healthy foods are more expensive than unhealthy foods.

People are encouraged to eat healthier because they know food is one of the most important factors that could affect their overall health in the short term and long term. By knowing what foods could do to the body, people will be encouraged to be selective when it comes to food. The survey data summarized in Figure 4.5 shows that 7.6% of the respondents strongly agree to eat healthy if they could start using healthy meal delivery services tomorrow (n=6), while 62% agree to the statement (n=49), 22.8% disagree (n=18), and 7.6% strongly disagree with the statement (n=6). Approximately 70% of the respondents agree that healthy meal delivery services would help them eat healthier.

Figure 4.5: Respondents' Agreement on whether they will eat Healthily or not if the
Healthy Meal Delivery Services is Available Tomorrow

If I could start using healthy meal delivery services tomorrow, I would eat healthy.
79 responses
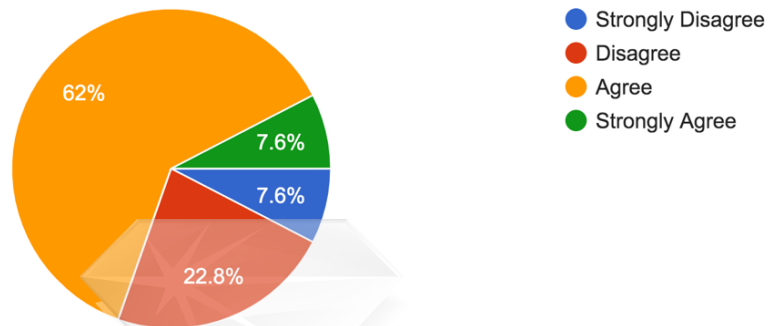
According to Spearman's correlation analysis, Figure 4.6 shows 4 new
hypotheses after the 8 initial hypotheses, which two of the four were accepted. "Food
Nutrition Awareness" and "Productivity & Work Efficiency" were accepted because
their Spearman's correlation analysis p-value is lower than 0.1. Food Nutrition
Awareness p-value stands at 0.007 while Productivity & Work Efficiency p-value
stands at 0.086.

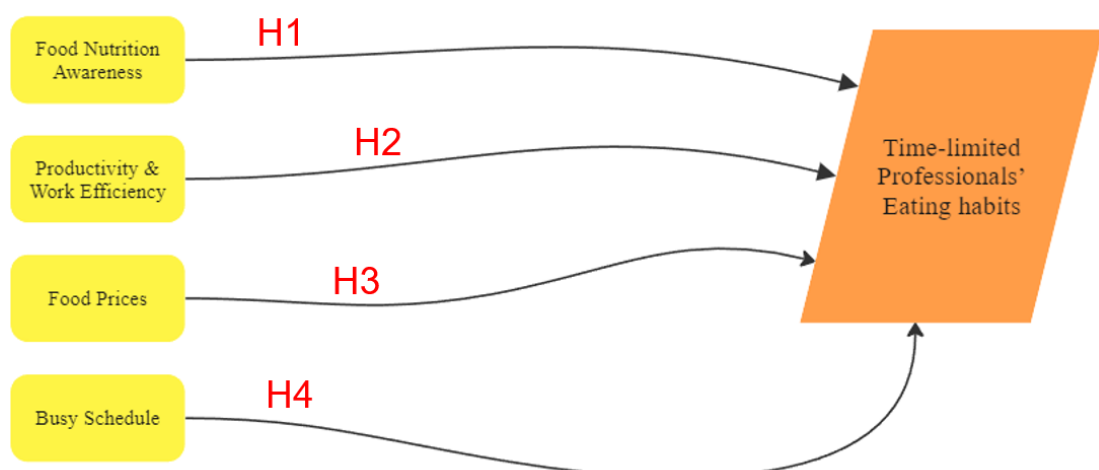Figure 4.6: Adjusted Conceptual Framework Model Based on the Statistical Tests
Results

Table 4.13: Spearman's Correlation Analysis

Hypotheses	Results
H1: As food nutrition awareness increases, people will eat healthier.	Accepted
H2: The productivity and work efficiency tend to increase, if the person eats healthier.	Accepted
H3: As food prices increase, people will eat less healthily.	Rejected
H4: As the schedule gets busier, people tend to eat less healthily.	Rejected

CHAPTER 5
DISCUSSIONS AND CONCLUSION

Chapter 5 presents the discussions and conclusion derived from an in-depth exploration of consumer behaviors and motivations related to healthy eating in Cambodia. Building upon the findings of the previous chapters, this section offers a comprehensive summary of key findings, explores their implications, addresses the study's limitations, and provides recommendations for future research and practical applications. By examining participants' knowledge, attitudes, and practices regarding nutrition and healthy food choices, this chapter sheds light on the challenges and opportunities in promoting healthier eating habits in Cambodia. The insights gathered here pave the way for informed discussions and evidence-based strategies to bridge the gap between knowledge and behavior, foster accessibility to affordable and nutritious options, and ultimately improve the overall well-being of the population.

5.1 Summary of the Key Findings

Overall, according to the results from Spearman's Correlation analysis the participants acknowledge the nutrition of the food and are aware of what type of food they are eating. However, due to many reasons such as busy lifestyles and food prices, they were forced to eat whatever convenience. These are the main factors that push people with busy lifestyles to eat unhealthily. Even though eating healthy foods helps boost their daily productivity and work efficiency, most people look over the long-term consequences of eating foods with no real nutritious value which could cause them illness in the future. The finding is similar to the test that was conducted on 40 first-year nursing students which stated their understanding related to healthy eating habits (Andonova, 2014), however, they did not follow the principles of having a healthy diet.

Household consumption has been increasing yearly in Cambodia (National Institute of Statistic, 2022). If people could pick the right food choice, then having healthy eating habits is not that expensive. Healthy meals can be made from locally grown fruits and vegetables, not only those expensive imported products. According to the factor analysis results, people perceive healthy foods as expensive and it is

difficult for them to have access due to their busy schedule. For this reason, some individuals chose to consume cheaper unhealthy foods and shop at the market closest to them. This results shows the similarity between the case that was sample from a Cambodian housewife, (Banung, 2012) who chose to shop at an informal market that is cheaper and closer to her house compare to well-regulated super market. In addition to that, about 70% of the participants agree to the statement that they would start to eat healthier if healthy meal delivery service is available. Therefore, healthy meal delivery service will encourage people to improve their eating habits to move toward a healthier lifestyle.

Other than that, the t-test results shows that gender has no impacts on whether a person tend to eat healthy or not. It is entirely based on the lifestyle and choices.

5.2 Implications of the Study

The study findings emphasize that the perception of healthy foods being expensive is a common misconception among participants. People often associate healthy eating with costly imported products or trendy foods promoted on social media, overlooking the nutritional value of locally available ingredients. It is crucial to raise awareness that Khmer cuisine can provide the necessary nutrients, and affordable options like locally grown fruits, vegetables, chicken, and eggs can contribute to a healthy diet. However, ensuring the safety and proper handling of these affordable local ingredients is essential, as studies have highlighted the risks associated with improperly handled products in Cambodian markets. The case in the Central market where products were not handled and sold properly (Banung, 2012) and the test that was conducted to measure the pathogen level in local Cambodian markets (Schwan, et al., 2021), shows that poultry and other products not safe to consume and might cause illness.

Looking at Thailand, a company has been offering healthy foods with the use of their cuisine instead of those which were made using expensive ingredients that were imported from other countries and labeled as organic (Appendix). We could do the same with Khmer cuisine since the two countries share similar food tastes and input ingredients. In addition to that, from the poster, if customers buy it as a pack of

7-30 days, each portion would cost 44.3-50 baht, which is about $2. I believe spending $2 for a meal is not expensive. Some junk foods and fast-food cost more than $2.

5.3 Limitations and Future Directions for Research

To examine the consumer behaviors and motivation to eat healthy, there is still some limitations that prevent this research from being a perfect study. Even if the number of people using online meal delivery service has been increasing over the past years, the number of respondents to this survey are still relatively low which could generalize the whole population.

As the survey was sent out randomly to the respondents, some questions might be misunderstood and answered incorrectly according to the participants' understanding. For future research, the questionnaires should be using a clear statement, and also provide a contact method for the respondents to clarify their misunderstanding statement. If possible, the researchers should give out the survey in person, so it would be much easier to explain each statement and make sure the respondents answer the questions correctly.

Moreover, the questionnaire construct might have some errors for the reason that it was adopted inaccurately. As a result, there are some unsupported hypotheses and invalid findings. Therefore, future research on the motivation to eat healthy using healthy meal delivery service should develop proper questionnaires construct which suits best for Cambodia's situations, with no bias question. Finally, as the respondents' number is too low, the next research paper should aim for more respondents in order to gather more accurate hypothesis testing. While sending out the survey, there was some misunderstanding that the survey link was a scam, for that reason, some respondents decided not to participate or tried to complete it as quickly as possible without reading the statement properly. Other than there, there might also be mediation and moderation effects while the survey was conducted.

5.4 Recommendations

Since the majority would think they would eat healthier if the healthy meal delivery service is available, the development of such application should be established. The healthy meal delivery service would have its own app which would work in the same way as other meal delivery services app. However, the customers could choose their food portions according to their preferences. For example, the customers can choose 2 eggs, 200 grams of chicken breast, 2 cups of corn, 300 grams of lettuce, and salad dressing of their choices. The app will then calculate the price based on the food portions. In addition to that, the customers could make orders daily or weekly by spending some of their time picking healthy foods beforehand and scheduling them for the next time. The healthy meal delivery service will also offer a ready-to-go menu on a daily basis with a few choices that are made for people who want it immediately. The delivery could be made every hour depending on the location or the customer could pay a little extra for their orders to be delivered right after they placed the order. These are some innovative features of the new healthy meal delivery App.

Even though people are aware of what they consume, however, they cannot source the ingredients used to make the healthy foods they eat. For this reason, to make healthy foods with the right sourcing of healthy ingredients we could purchase vegetables, spices, and fruits directly from our local farmers. Before the purchase was made, all farmers have to keep in mind that their products would be tested and have to be qualified to meet our safety standards. Using the safe and right amount of fertilizer to grow their crops, feed their poultry with natural foods, etc. By doing so, we could also support our local farmers financially by offering to buy their products at a higher price than the middleman. Furthermore, the business could also grow vegetables using vertical farming or hydroponic farming methods to make sure that all the vegetables used are healthy and safe to consume.

5.5 Concluding Remarks

Throughout this independent study, an in-depth exploration of consumer behaviors and motivations towards healthy eating in Cambodia has provided valuable insights and findings. The research journey unveiled several key learnings. First, it became clear that although people are aware of nutrition and the value of making good food choices, a number of factors make it difficult for them to maintain these behaviors. Individuals are more likely to choose convenient but unhealthy substitutes as a result of busy schedules, expensive meals, and restricted access to healthy options. This highlights the requirement for initiatives that address these issues and encourages the accessibility and affordability of wholesome foods. Furthermore, it was discovered that gender had no influence on healthy eating habits, emphasizing the significance of focusing interventions on lifestyle and individual preferences rather than gender-specific strategies. Additionally, it was found that the portrayal of pricey imported goods and trendy social media representations frequently lead to people perceiving healthy foods as expensive. Due to this misunderstanding, efforts must be made to inform consumers about locally accessible, inexpensive, and nutrient-rich options in Khmer cuisine.

In conclusion, this research underscores the need for comprehensive interventions to promote healthy eating habits in Cambodia. It is possible to allow people to make mindful and sustained dietary decisions by addressing obstacles including busy schedules, cost, and misunderstandings about healthy foods. A healthier food environment can be achieved by promoting the use of locally sourced ingredients, assuring their safety and proper management, and utilizing technology through healthy meal delivery services.

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APPENDIX

Motivation to Eat Healthy Scale

Factors	Items	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
Food Nutrition Awareness	I take foods' nutrition into consideration before consuming even when I am busy.				
	I am well aware of the nutritious facts in the food I consume.				
	I prioritize healthy foods options even if they are an inconvenience.				
Productivity and work efficiency	I believe eating healthy help boost my work efficiency.				
	I believe eating healthy help me focus throughout the day.				
	I believe eating healthy help boost my productivity.				

Factors	Items	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
Food Prices	I eat unhealthy food because it is cheaper compared to healthy foods.				
	I think the ingredients used to make healthy foods are very expensive.				
	I find unhealthy foods to be cost-efficient/				
Busy Lifestyle	My daily schedule is always occupied.				
	I often skip meals due to busy schedule.				
	I think it is hard to buy healthy foods.				
	I find unhealthy foods to be time-saving.				

Sources: *Cleanfit Delivery*. (2023). Retrieved from https://www.facebook.com/
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