## YANGON UNIVERSITY OF ECONOMICS DEPARTMENT OF COMMERCE

# CONSUMER BUYING BEHAVIOR TOWARDS ORGANIC FOOD PRODUCTS (A Case Study of Organic Food Consumers)

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## CONSUMER BUYING BEHAVIOR TOWARDS ORGANIC FOOD PRODUCTS

(A Case Study of Organic Food Consumers)

This thesis is submitted to the Board of Examiners in Partial Fulfillment of the Requirements for Degree of Master of Commerce (M.Com)

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#### **ABSTRACT**

This paper presents consumers buying behavior of organic food products in Yangon. It aims to explore the influential factors on consumers buying behavior of organic food products through examining the demographic characteristics of respondents, attitude towards organic food products, health consciousness and social norms. Moreover, this study aims to identify the relationships between all these factors and the consumption of organic food products and to provide the valuable information for organic foods producers and marketers. The sample size of 120 organic food consumers in Yangon was interviewed with structured questionnaires and face-to-face interview. To analyze the collected data, the T-test, One-way ANOVA and the statistical analysis of Statistical Package for Social Science were applied. The findings show that age, education and monthly income have significant relationship with the attitude towards organic food consumption. Gender, occupation and marital status do not have significant influence on the attitudes towards the organic food consumption. There are many barriers between the relationships of attitude, health consciousness and social norms with the frequency of organic food consumption. The main barriers are that the organic food products are expensive and the consumers have little knowledge and information about the organic food products. Therefore, marketers can increase the consumption of organic food products by lowering the selling price of organic food. Moreover, marketers should communicate and share the knowledge and information for consumption of organic food products to consumers. Marketers should also consider for providing the better quality and larger variety of organic food products at the organic food stores.

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#### **CHAPTER 1**

#### INTRODUCTION

Buying behavior is the decision process and act of people involved in buying and using products. According to Blackwell (2006), consumer buying behavior is itself a complex, dynamic issue which cannot be defined easily and commonly. It is a widely studied field because it is related so closely to human mind. Consumer buying behavior consists of ideas, feelings, experiences and actions of consumers with additional environmental factors like price, comments and advertisements. Furthermore, consumer buying behavior is a dynamic process because of the continuous changes in ideas, perceptions and activities of consumers as an individual or in a group (Olson and Peter, 2008).

The study of consumer buying behavior is rooted in a marketing strategy (Kotler and Keller, 2011). Thus, understanding of the influential factors on consumer buying behavior is essential for marketers in order to develop suitable marketing mixes to appeal to the target consumers. Some marketers began to realize that they could sell more goods, more easily, if they produced only those goods they had already determined that consumers would buy. Therefore, consumer needs and wants became the firm's primary focus.

Therefore, marketers realize the importance of research for consumers' buying behavior. Marketers studied the buying behavior of consumers through the several researches such as (research for commodity, research for food selection, research for choosing car and so on). Among them, studying for the selection of foods is very important because the foods are essential for the body in a healthy and active condition. The body requires food for growth, repairs and replacement of its worn-out tissues. Hence, food has to provide the required raw material, energy and other regulating substances, like vitamins and for the smooth functioning of the body and meeting the requirements, like carbohydrates, proteins, fats and so on.

Consumers are more concerned about the health, nutrition and food quality. Healthiness has become as the most important measure among the food purchasers (Magnusson, 2001). Among the several kinds of food products, organic food products are attractive to consumers because the organically grown foods are healthier, more

nutritious, better testing and safer than conventional foods (Beharrel and MacFie, 1991). Moreover, organic food production is better for the environment. This can eliminate soil and water contamination. This production helps preserve local wildlife by avoiding toxic chemicals. Additional, organic food productions reduce global warming and erosion. The major reason among the public to buy organic food is the concern with regard to improvement in health maintenance.

Therefore, the positive attitude of consumers about the organic food products is gradually growing. From the marketing view, the food manufacturers and marketers need to aware of the market condition of organic food products in the future and to analyze the influential factors on the organic food selections. The main purpose behind marketing a product is to satisfy demands and wants of the consumer. Study of consumer behavior helps to achieve this purpose.

As consumers are the most important persons for marketers, it is important for them to consider the likes and dislike of the consumers so that they can provide them with the goods and services (Solomon, 2009). Therefore, understanding consumer buying behavior is important for any organization before launching a product. This can help marketers and sellers to create suitable marketing strategies, to retain the customers and to create sustainable competitive advantage to meet the sales objectives and improve and sustain the market share.

### 1.1 Rationale of the Study

Nowadays, consumers' perception towards organic food products is changing into positive view all over the world (Laroche, 2001). Eating organically grown foods is the only way to avoid the cocktail of chemical poisons present in commercially grown food. Organically grown foods have more nutrients- vitamins, minerals, enzymes and micronutrients than commercially grown foods. From environmental view, producing organic food products can reduce pollution and protect water and soil (Eotopoulas and krystallis, 2002). Consumption of organic food products is a direct vote for a sustainable future for the many generations to come.

During the last few decades, the market of organic food has grown continuously. From a marketing perspective and taking a macro view, organic food is a niche industry (Pearson & Henryks, 2008). In Myanmar, the producers and

marketers need to consider for craving a niche out for itself for organic produce in the world market. If it wants to be a successful agricultural export nation, Myanmar needs to rethink its agricultural strategy (Ruth Nyun, Vol 4 issue 23). Although there is little awareness of organic food products, some consumers have a positive thinking towards the organic products. They are aware that organic products bring the benefits in terms of rejuvenating the human health and provide full of nutritional value to their body. However, there are still less purchasers of organic products in the market of Myanmar. For introduction and market penetration of organic food products, the effective marketing strategies are essential. In order to implement the effective marketing strategies, finding out and examining the actual factors which affect people to consume organic products are very important for marketers.

Some previous studies proved that there are many influential factors on the consumers buying behavior of organic food products. Some stated that there is a positive association between income level and organic food products. Higher the income level, greater the consumption and upper income group households are particularly expected to buy more (Schobesberger, 2008). In Western countries, the organic food purchase has a positive relationship with age (Hughner, 2007), which means that organic food purchase appears to be less among younger consumers. In Denmark, researchers found that the high price and the availability are the main barriers for Danish young consumers (AschemannWitzel& Niebuhr Aagaard, 2014).

Therefore, the aim of the study is to explore the influential factors of organic food consumers in Yangon about purchasing the organic food products. Moreover, this study is to find out the demographic characteristics, attitudes, health consciousness and social norms in relation to the frequency of organic food consumption. Based on the consumer analyses, it can provide the valuable information for marketers to develop successful marketing strategies.

#### 1.2 Objectives of the Study

The main objectives of the study are as follows:

1. To analyze the consumer buying behavior on the consumption of organic food products.

- 2. To explore the influencing factors on the attitude of organic food consumers.
- 3. To analyze the relationships between attitudes and the frequency of organic food consumption, between health consciousness and the frequency of organic food consumption and between social norms and the frequency of organic food consumption.

#### 1.3 Scope and Method of the Study

This study only focuses on consumer buying behavior of organic food products among many kinds of food products. Target group was the organic food products consumers who buy from organic food shops in Yangon. A sample of 120 consumers is collected from organic food consumers who buying at organic food shops in Yangon. The consumers were interviewed with structured questionnaires and face-to face interview.

In this study, descriptive research was conducted. For descriptive research, the primary data were collected by using the structured questionnaires and face-to-face interview. Respondents are chosen by using simple random sampling method.

The structured questionnaire is composed of six parts. All the questions in the survey are designed based on the factors of demographic characteristics, attitude, social norms, health consciousness, purchase barriers, purchase behaviors, and marketing mix.

The first part asked about the background information of the respondents. The second part of the survey is based on the purchase behavior of consumers. The third part is the attitude of consumer's organic food products purchase. The fourth part is about organic food consumer's purchase intention can be influenced by their family and friends' advice and purchase behavior of organic food. The fifth part is about health consciousness of organic food consumers. The next question is to find out the main barriers which cause the gap between purchase intention and purchase behavior.

The last question of the survey is about the factors which can be attractive to organic food consumers for buying more organic food products. These questions are valuable for organic food producers to know more about the consumers in order to

expand the market. To analyze the collected data, the statistical analysis of Statistical Package for Social Science (SPSS) was applied. Data analysis methods are One-way ANOVA, independent sample T-test and Linear Regression.

## 1.4 Organization of the Study

This study includes five main chapters. Chapter (1) includes introduction, rationale of the study, objectives of the study, scope and method of the study and organization of the study. Chapter (2) discuss theoretical background and it presents the importance of consumer behavior, factors influencing on the consumption of organic food products, previous studies and conceptual framework for the study. Chapter (3) is the background of the consumption of organic food products. Chapter (4) consists of analysis on consumer buying behavior about consumption of organic food products. Chapter (5) consists of findings, suggestions and needs of further study.

#### **CHAPTER 2**

#### THEORETICAL BACKGROUND

This study relates to consumers' purchasing and consumption of organic food products. This chapter consists of five sections; they are the concept of consumer behavior, importance of organic foods, factors influencing on the purchase and consumption of organic food products, previous studies and conceptual model of consumer behavior.

#### 2.1 Role of Consumer Behavior

Consumer behavior is based on concepts and theories about people that have been developed by scientists in such diverse disciplines as psychology, sociology, social psychology, cultural anthropology and economics. Many authors have defined the definition of consumer behavior. Consumer behavior is the study of the process involved when individual or group select, purchase, use or dispose of products and services ideas or experiences to satisfy the needs and desires (Solomon, 1995). Engel, Blackwell and Miniard (1995) added a new aspect the decision process and defined it as those activities directly involved in obtaining, consuming, and disposing of products and service, including the decision processes that precede and follow these actions.

The field of consumer behavior is rooted in a marketing strategy. Consumer behavior is the study of ways of buying and disposing of goods, services, ideas or experiences by the individuals, groups and organizations in order to satisfy their needs and wants (Kotler, 1999). It is difficult to understand consumer behavior as the consumer change their mind, decision making. The obscene of consumers' knowledge with respect to their motivation, wants, needs and preferences may go for a major mistake (Kotter, 2000). Therefore, firms need to analyze buying behavior for the reactions to the firms' marketing strategies that has a great impact on the firm success.

Finally, consumer behaviors are the activities people undertake when obtaining, consuming and disposing of products and services (Blackwell, 2001). The first and foremost base for marketing philosophy is that the consumer is a person who has to be at the Centre of everything the firm carries out (Blythe, 2013). Thus, understanding consumer behavior is important for any marketer in order to promote

their product successfully. Consumer needs and wants became the firm's primary focus. This consumer-oriented marketing philosophy came to be known as the marketing concept. The marketing concept focuses on the needs of the buyers and consumer behaviors, how individual make decisions to spend their available resources (time, money and effort) on consumption related items. In addition to, consumer researchers also need to interest in how individuals dispose of their once new purchases.

Therefore, firms need to analyze behavior for buyers' reactions to the firms' marketing strategy that has the great impact on the firm success. Firms should create the marketing mix that satisfies consumers' needs and wants through analyzing what, where, when and how consumers buy the products and services. Moreover, marketers have to predict how consumers will respond to the marketing strategies.

## 2.2 Importance of Organic Food Products

Food is primary requirement in the lives. All the necessary energy is derived from the food intake for all the mental and physical activities of an individual. Balanced diet and healthy eating keeps the body and mind fit and active. Diet helps to attain and maintain a healthy weight in addition with the physical activity. It also reduces the threat of chronic diseases and supports the overall health (National Institutes of Health).

Among the variety of food products, balanced diet and intake of rich nutrients can be gained from having organic food products. Organic foods do not use of chemical fertilizers, insecticides, fungicides, herbicides, growth promoters. Organic farming tends to improve soil quality and the conservation of ground water. It also reduces pollution and may be better for the environment. Organic foods are a smart priority. Opting for organic foods is an effectual choice for personal and planetary health. Buying organically grown food free of harmful chemicals, bursting with more nutrition, taste, and sustainable sustenance-is a direct vote for immediate health and hopeful future of generations to come. These are the attraction of organic food products for consumers' consumption (Fotopoulos and Krystallis, 2002).

Although the importance and advantages of consumption of organic food products seem to be well known to many consumers (Von Alvensleben, 1998), the

(Fotopoulos and Krystallis, 2002). There are many reasons for few consumption of organic food products among consumers. Organic food consumption has been linked to several consumer characteristics such as human, animal and environment centered values, personal and social norms, emotions, attitudes, intentions and so forth. Macro factors such as laws and regulations, local market, and supply and demand issues also impact the volume of organic food consumption. Some studies have found linkages between cultural dimensions and organic food consumption as well and product related features like price, quality and availability also play their part. Ethical consumption is closely related to organic consumption as well, since both consider aspects of health, environment and animal welfare. Additionally, certain demographic factors have found to be related to the increased likelihood to purchase organic food such as sex, disposable income, education, household consistency, age and ethnicity.

### 2.3 Factors Influencing on Consumer Behavior

Consumer buying behavior involve in searching for, purchasing, using, evaluating and disposing of products and services to satisfy their needs and desires (Schiffman and Kanuk, 2007). There are several factors that influence on the consumers' decision-making process and buying behavior, such as social, cultural, personal and psychological.

#### 2.3.1 Cultural Factors

Consumer behavior is deeply influenced by cultural factors, such as buyer's culture, subculture and social class.

#### Culture

Culture is a part of the external influences that impact the consumer. It refers to the set of values, ideas, and attitudes that are accepted by a homogenous group of people and transmitted to the next generation. Culture is the major cause of the person who wants and behavior. It provides people with a sense of identity and an understanding of acceptable behavior within the society. Culture affects what people buy, how they buy and when they buy. The influence of culture on the purchasing

behavior varies from country to country therefore sellers have to be very careful in the analysis of the culture of different groups, regions or even countries.

#### Subculture

Each culture consists of smaller subcultures that provide more specific identification and socialization for their members. Each culture has different subcultures, such as religions nationalities, geographical regions, racial, etc. Many subcultures make up important market segments and marketers can design products according to the needs of a specific geographical group.

#### Social Class

Social classes are relatively homogeneous and enduring divisions in a society, which are hierarchically ordered and whose members share similar values, interests and behavior. Social classes do not reflect income alone, but also other indicators such as occupation, education, and area of residence. Social classes differ in dress, speech patterns, recreational preferences and many other characteristics. Thus marketing activities could be adapted to different social classes.

#### 2.3.2 Social Factors

Social factors also influence the purchasing behavior of consumers. Social factors are: the reference groups and social norms.

#### Reference groups

A reference group is any person or group that serves as a point of comparison for an individual in forming either general or specific values, attitudes or a specific guide for behavior. A person's reference group consists of all the groups that have a direct or indirect influence on the person's attitudes or behavior. Reference groups have the potential for the formation of an attitude or behavior of the individual. The impact of reference groups vary across products and brands. Marketers must understand the power of family and reference groups, the basic concept of group dynamics and how references groups both directly and indirectly influence consumer behavior.

#### **Social Norms**

Social norms are based on specific groups or individual (normative beliefs) and motivation to comply with other persons' wishes (Fishbein&Ajzen 1975, Olsen 2004). Normative belief refers to the significant others like family and friends regarding whether one should or should not do something. The motivation to comply with others' wishes means the willingness of someone to behave according to expectations of family and friends (Ajzen&Fishbein 2000). Family members can strongly influence buyer behavior. The family is the most important consumer buying organization in society, and it has been researched extensively. Therefore, marketers are interested in the roles and influence of the husband, wife and children on the purchase of different products and services.

#### 2.3.3 Personal Factors

Personal factors may also affect consumer behavior. Some of the important factors that influence personal buying behavior are: gender, age, education, occupation and income.

#### Gender

Gender is quite frequently a distinguishing segmentation variable. Female have traditionally been the main users of food products but male is unlikely the main users (Lea and Worsely, 2005). However, gender is no longer an accurate way to distinguish consumers in some product categories (Arbindra and Radman, 2005).

#### Age

Age and life cycle have a potential impact on the purchasing behavior of consumers. It is obvious that consumers change the purchase of goods and services over time. Family life cycle consists of different stages as young singles, married couples, un -married couples etc that help marketers to develop suitable products for each stage. Consumer wants and abilities change with age. The needs and interests about the particular product often vary with consumer's age (Jolly, 1991). In 2002, Fotopoulos and Krystallis stated that older people are more health conscious and more willing to pay a premium price for products.

#### **Education, Occupation and Income**

Education, occupation and income tend to be closely correlated in almost a cause-and-effect relationship. High level occupations that produce high incomes usually require advanced educational trainings. The educational level of the buyers plays an important role in purchase decision (Wier, 2003).

#### 2.3.4 Psychological factors

Psychological factor is a force within an individual that can affect purchasing behavior. There are four major psychological factors that affect the purchasing behavior of consumers. There are: motivation, perception, attitudes and health consciousness.

#### Motivation

A motive is an internal energizing force that orients a person's activities towards satisfying a need or achieving a goal. Actions are effected by a set of motives, not just one. According to the MASLOW'S hierarchies of needs, the consumers have physiological needs, safety needs, love and belonging needs, esteem needs and self- actualization needs. Marketers need to determine what level of the hierarchy the consumers are acting for determining what motivates their purchases.

#### Perception

Select, organize and interpret information in a way to produce a meaningful experience of the world is called perception. There are three different perceptual processes which are selective attention, selective distortion and selective retention. In the case of selective attention, sellers try to attract the attention of the customer. Whereas in case of selective distortion, customers try to interpret the information in a way that supports what customers already believe. Similarly, in the case of selective retention, marketers try to retain information that supports their beliefs.

#### Attitude

According to Ajzen (1991), the more favorable the attitude with respect to a behavior, the stronger is the individual's intention to perform the behavior under consideration. Moreover, attitudes toward behavior have contributed to the level a

person possesses a desirable or non-desirable estimation or behavior-based appraisal in question. Attitudes towards performing behavior are based on beliefs about the behavior and primarily its positive or negative consequences (Ajzen and Fishbein, 2000).

#### **Health Consciousness**

Health consciousness best describes those consumers are aware and concerned about their state of well-being and are motivated to improve and/or maintain their health and quality of life, as well as preventing illness by engaging in healthy behaviors and being conscious regarding health. Such individuals tend to be aware of nutrition and physical fitness (Kraft and Goodell 1993). Health consciousness refers to the degree to which health concerns are integrated into a person's daily activities (Jayanti and Burns, 1998). In general, health is considered as the prime motive for the food products purchasing. Health consciousness is considered as a subjective intention or motivation to improve an individual's health. This factor is also the important influential factor on consumer buying behaviors (Michaelidou, 2007).

#### 2.3.5 Barriers

Kotler states that potential consumers must have enough income and must have access to the product offer. the price of products is the main barrier for consuming the particular products. Although consumers may have positive attitude towards the particular products or services, the actual purchasing behavior may be inconsistent (Whitewell, 2010). It is necessary to consider barriers or factors influencing on the actual behavior. According to several researches, the price and the availability of products are the main barriers for consuming the particular products (Niebuhr Aagaard, 2014). Moreover, consumers' consumption habit could be a barrier for purchasing the particular products (Tsakiridou,2008). The mistrusting in food labels and the other factors may be the important factors that influence on the purchase intention of the particular food products.

#### 2.4 Previous Studies

There are many research studied concerning with the consumer behavior of organic food products. The conceptual framework of this study stems from the two conceptual models of previous researchers who developed these conceptual models based on the influential factors on consumer behavior. The first conceptual model is developed by Boutsouki, 2008. The influential factors on consumption of organic food products can be grouped into five groups: demographic factors, attitude, health consciousness, environmental concerns and organic food knowledge. That model is depicted with Figure (2.1).

**Demographic Factors** Attitude a. Age b. Gender c. Education Level d. Income Health e. Presence of Consumption Conscious Children in household ness of organic food products Environm ental Concerns Social Norms

Figure (2.1) Factors Affecting on Consumption of Organic Food Products

Source: Adapted from Boutsouki (2008)

The demographic factors of organic food buyers were revealed as female buying more frequently then male. Consumers aged between 36- 45 showed the highest frequency in the consumption of organic food products. Households with the

presence of children were found to consume organic food more often. The majority of the respondents had a positive attitude towards organic foods. However, the consumption rate on the organic food products was too small which reflect organic food market was a niche market. Consumers who were more health conscious, environmental friendly and have higher level of organic food knowledge were also confirmed to purchase organic food more frequently.

This study also revealed many barriers for the consumption of organic food products. The main barrier was the higher price of organic food products. Other barriers include the few organic food products available in the market, small variety of organic food products and few selling locations for organic food products.

The second conceptual model is developed by Peter and Olson, 2010. The influential factors on consumer behavior can be grouped into three: personal background, attitude and social norms. That model is depicted with Figure (2.2).

Figure (2.2) Factors Influencing on Organic Food Purchase

Source; Adapted from Peter & Olson (2010)

The demographic factors of the organic food consumers found that the buyers of organic foods were likely to be women and women hold positive attitudes and they also buy regularly. Because women are much worried about their health and

concerned on healthy food habits. The age group of elder people were more concerned about their health and also willing to pay additional price. On the other hand, young people were environmentally conscious but owing to less purchasing power their willingness to pay premium was also less. The educational level of the buyers played an important role in buying decision for the consumption of organic food products. Higher the education, better the knowledge and health consciousness and it could increase the consumption of organic food products. There was a significant association and positively correlated in relation with organic food consumption and consumer's attitudes. If the people who are significant to consumers have positive attitudes and opinion towards organic foods, they are more likely to have positive intention to buy them.

#### 2.5 Conceptual Framework

Some studies revealed that female seem to have positive attitudes towards consumption of organic food products than male and female are more frequent buyers than male (Lea and Worsely, 2005). However, gender is no longer an accurate way to distinguish consumers in some product categories (Arbindra and Radman, 2005). In 2002, Fotopoulos and Krystallis stated that older people are more health conscious and more willing to pay a premium price for organic food products. , demand for organic food products seems to be positively correlated to income (Von Alvensleben, 1998). Higher income level households are more likely to form positive attitudes and to purchase more organic food products (Magnusson, 2001). However, some lower income segments seem to be more entrenched buyers (Fotopoulos and Krystallis, 2002). Particularly, upper income group households are expected to buy more (Schobesberger, 2008).

In addition to, Magnusson (2003) found that the attitude towards organic food products and buying behavior of organic food products are strongly influenced by the perceived human health benefits of the foods. Moreover, the attitude towards organic food products is concerned about health, environment, food safety, animal welfare and desires for local economy (Hughner, 2007). Previous studies found that there was a critical relationship between consumer social norms and consumption of organic food products (Chen, 2007). Therefore, marketers are interested in the roles and influence of the husband, wife and children on the purchase of different products and

services. Past studies have shown that the most important reason for purchasing and consuming organic food appears to be health consciousness (Squires, 2001 and Padel and Foster, 2005). According to several researches, the price and the availability of products are the main barriers for consuming the particular products (Niebuhr Aagaard, 2014). Moreover, consumers' consumption habit could be a barrier for purchasing the particular products (Tsakiridou, 2008). The mistrusting in food labels and the other factors may be the important factors that influence on the purchase intention of the particular food products.

Therefore, the consumers' demographic factors, attitude, health consciousness, social norms are the influential factors on the consumption of organic food products in this study. The conceptual framework of the study is proposed in Figure 1 to explain the consumption of organic food products of Yangon Consumers. The Framework shows the relationships among consumers' demographic factors, attitude, health consciousness, social norms and the consumption of organic food products.

**Demographic Factors** Attitude a. Age b. Gender Consumption c. Education Level Health of organic d. Income Conscious -ness e. Occupation food products f. Marital Status Social Norms

Figure (2.3) Conceptual Framework

Source: Own Compilation

The framework is applied to design a questionnaire in the methodology part. All the questions are related to factors including the consumer profile, attitudes, health consciousness, social norms, barriers and consumption of organic food products. In this framework, the attitude of consumers on the consumption of organic food products include health, natural, taste, clean, fresh, and safe free from chemical fertilizers, quality and nutrients, supporting organic movement, controlling weight, animal welfare and environmental protection, positive image and fashion to consume. For health consciousness, the factors are that the customers try to protect against health hazards they hear about, the customers try to take action to prevent the health hazards, the customers know well how to eat for healthy and so on. In studying consumer buying behavior, the advice and purchase behavior of the family and friends can influence on the buying behavior of the particular consumers. The consumption of organic food products is measured by the frequency of consumption within one month.

#### **CHAPTER 3**

## BACKGROUND OF THE CONSUMPTION OF ORGANIC FOOD PRODUCTS

This chapter consists of three sections; they are the current trends for organic food products, Myanmar organic agriculture and the availability of organic food markets in Yangon.

#### 3.1 Current Trends for Organic Food Products

Currently, organic products are sold at premium prices in an ever-increasing number of stores, and increasingly compete for shelf space with conventionally grown produce in supermarkets. Reasons for the premium prices obtained for organic products include that they are grown without pesticides and thus may be more expensive to produce because of the added labor; because they are grown in a way that does minimal harm to the environment; because no genetically modified organisms are used in the production process; because of a perception that they are better tasting.

Because of its popularity, the organic industry grew at a fast pace since the mid-1980s. Throughout the 1990s in the United States, the organic industry grew by 20 percent annually. Similar trends were observed in regions where affluent and educated consumers support environmentally sound production programs, small family farms, locally grown produce, and products free of pesticide residues or bioengineered materials. Thus the organic industry has also grown in Europe, Japan, New Zealand and Australia, sometimes at a faster pace than in the United States. However, questions exist as to the future expansion of the industry. Even though many conventional farmers are interested in converting to organic production, this process becomes more difficult as the area under production increases. As the area of production increases significantly, from farming only a few acres, into farming hundreds of acres, problems of soil fertility or pest out breaks become more difficult to manage with organic techniques. This lack of appropriate technology is explained in part because in the past little formal research was conducted by universities to support organic farmers. During the twentieth century, most agricultural researchers

were busy supporting an agricultural system that relied on the use of expensive synthetic chemicals. Thus, considerable research support will be necessary in the future to develop production techniques that will allow for the successful production of organic crops on a wider scale than is possible today. Considerable consumer support will also be necessary to facilitate the expansion of the organic industry. Better informed consumers may learn to accept products with minor blemishes, realizing that the minor defects do not affect taste or nutrition and that these products were grown without the use of toxic chemicals. Educated consumers may also be willing to pay a premium price for organic product, knowing that a large organic industry translates in the long term into a healthier environment with cleaner lakes and rivers and potable aquifers.

#### 3.2 Myanmar Organic Agriculture

Due to the close-door policies, Myanmar organic agriculture is quite late to develop. A large part of the agriculture within the country are traditional farming with little or no-usages of agrochemicals, thus farmers' practices may be already quite close to organic farming. As early as mid1990s, several foreign investors had tried to initiate organic agriculture projects in Myanmar, hoping to utilize the clean environment and good soil fertility but most of these private projects did not last long. However, they helped to raise awareness within the country, especially among the private sector. Also, many representatives from both the public and private sectors have been exposed to the concept of organic farming and the market opportunities when travelling overseas. Theses help to incubate the local organic agriculture movements in Myanmar.

The Myanmar private sector started to take initiative since late 2000 to sell self-claim organic products in local supermarkets. In 2009, the Myanmar Fruits and Vegetable Producers Association (MFVPA) set up the Myanmar Organic Agriculture Group (MOAG) as private sector association to support organic agriculture development in the country. MOAG has around 100 members (December 2011), most of whom are individuals and only 4 are private companies. Besides providing being forum for experience-sharing, MOAG also provides technical advices to interested producers and organic certification services. A private sector national organic standard was developed and certification services were initiated in late 2010.

Currently, there are six organic farms in Myanmar, certified by MOAG. The organic products certified by MOAG are currently sold in domestic markets, mostly as conventional products as local organic markets are yet to be established. However, the Myanmar Government currently has no policies and regulations on organic agriculture (www.greennet.or.th).

#### 3.3 Availability of Organic Food Markets in Yangon

Organic is a term referring to food grown without use of chemicals or other techniques harmful to humans or the land it was farmed upon. Many Myanmar farmers apply pesticides excessively with little awareness of the effects on consumers and themselves. Concern of unregulated chemical use has inspired several expats and Myanmar entrepreneurs to provide healthier options to Yangon grocery stores and households. While most of the demand for organic food comes from the expat community, advocates are confident that more locals will 'go organic' once they taste the natural flavor of the slightly more expensive product. Organic food products distributors provide organic food products to customers via shops, online. In Yangon, *Mya Chemical Free (MCF)* and *Fresco* are online distributors and *Go Green* opens organic food shops as distribution channel.

Mya Chemical Free (MCF) is an online shopping option that brings chemical free and locally-grown produce and delivers the products that are free of pesticides and other chemicals to the doorstep of their customers. After trying tomatoes with a plastic like taste, a small group of Burmese friends turned their gardens into chemical free farms. Now, they operate three and contract independent farmers as well. There is no membership fee for household deliveries, just the cost of the product and the delivery. Consumers can also try their produce at Sharky's, District Coffee, Acadia and the restaurant at the Kandawgyi Palace Hotel. (myachemicalfree.com)

Fresco is another delivery service operating in the Yangon area and remains one of the largest food services in the country. The goal is to provide Myanmar with organic fruit and vegetables from local farmers, ensuring food safety while reducing carbon emissions. Fresco does not have a storefront, but consumers can taste their fruits and vegetables in dozens of hotels, restaurants and supermarkets (City mart being the main one) in almost every Myanmar city. They also have a home delivery

services for 2300 kyats for a veggie box that can be customized if given prior notice. (purchasing@frescomyanmar.com)

Go Green aims to help farmers grow chemical free crops for health-conscious consumers. Go Green sells the organic fruits and vegetables grown by farmers. Go Green is a small shop on the northern edge of Kandawgyi Lake and at Natmauk Street and the opposite of Japanese embassy in Bahantownship. The vegetables are free of pesticides and chemicals. The fruits still contain some chemicals, but these fruits are grown with Good Agriculture Practice methods. Go Green aims to practice organic farming in the future. Go Green provides dried fruit, varieties of uncooked rice and beans, peanut, sesame ad sunflower oil, ice cream, and various juices. Go Green plans to supply restaurants and hotels.

Farming
Business

Wholesale
Distribution

Consumers

Figure (3.1) Distribution Channels of Organic Food Products in Yangon

Source: Survey Observation, 2018

#### **CHAPTER 4**

## ANALYSIS OF CONSUMERS BUYING BEHAVIOR ON ORGANIC FOOD PRODUCTS

In this chapter, analysis of survey data is presented. Analysis includes demographic of respondents, consumer buying behavior of organic food products, the preference of food categories and the relationship of the demographic characteristics, attitudes, health consciousness and social norms in relation to the frequency of organic food consumption.

#### 4.1 Research Design

In this study, descriptive research was conducted. For descriptive research, the primary data were collected by using the structured questionnaires and face-to-face interview. Respondents are chosen by using simple random sampling method.

The structured questionnaire is composed of six parts. All the questions in the survey are designed based on the factors of demographic characteristics, attitude, social norms, health consciousness, purchase barriers, purchase behaviors, and marketing mix.

The first part asked about the background information of the respondents. It comprised of questions on gender, age, education level, income per year, and number of children in the household. The second part of the survey is based on the purchase behavior of consumers.

The third part is the attitude of consumer's organic food products purchase. The fourth part is about organic food consumer's purchase intention can be influenced by their family and friends' advice and purchase behavior of organic food. The fifth part is about health consciousness of organic food consumers. The next question is to find out the main barriers which cause the gap between purchase intention and purchase behavior.

The sixth part is dimensions of organic food consumers on organic food products, the price of organic food products, the place for the purchasing products of organic food, the promotion activity of organic food products. The last question of the

survey is about what factors can be attractive to organic food consumers for buying more organic food products. These questions are valuable for organic food producers to know more about the consumers in order to expand the market.

To analyze the collected data, the statistical analysis of Statistical Package for Social Science (SPSS) was applied. Data analysis methods are as follows: Regarding attitudes towards organic food, One-way ANOVA was employed to find out the significant differences between each of the six demographic factors. Linear Regression was used to examine the relationship between the independent variables (health consciousness, attitude, social norms) and dependent variable consumption of organic food products. For all analysis, a probability level of <0.05 was considered significant.

## 4.2 Demographic Characteristics of the Respondents

Demographic characteristics of the respondents are analyzed by gender, age group, education, occupation, income level and marital status. Table 4.1 describes demographic characteristics of the respondents. From data analysis, table (4.1), found that among 120 respondents, male 33.33% and female 66.67%. Thus, female respondents took larger domain than male.

In this study, age is divided into five groups, consist of less than 20 years, 20-30 years, 31-40 years, 41-50 years and above 50 years.) Age of respondents (41-50) largely domain as 42.5% and others are as follow- age of respondents (less than 20) is 7.5%, age of respondents (20-30) is 14.17%, age of respondents (31-40) is 22.5% and age of respondents (above 50) is 13.33%.

Education is divided into four groups, consists of undergraduate, graduate, master graduate and other. According to table (4.1), 8.33% of respondents are undergraduate, 72.5% of respondents are graduate, 7.5% of respondents are Master Degree, 11.67% of respondents are others.

Table (4.1) Demographic Characteristics of the Respondents (n=120)

Variables		Respondents	Percentage
Gender	Male	40	33.33
	Female	80	66.67
Age	Less than 20	9	7.5
	20-30	17	14.17
	31-40	27	22.5
	41-50	51	42.5
	Above 50	16	13.33
Education	Undergraduate	10	8.33
	Graduate	87	72.5
	Master Degree	9	7.5
	Other	14	11.67
Occupation	Business owner	10	8.33
	Company employee	40	33.33
	Government employee	51	42.5
	Dependent	14	11.67
	Other	5	4.17
Monthly income	Under Ks100,000	6	5
	Ks100,001-Ks300,000	29	24.17
	Ks300,001-Ks500,000	42	35
	Ks500,001-Ks700,000	30	25
	Above Ks700,001	10	8.33
	Non available	3	2.5
Marital Status	Single	47	39.17
	Married with no children	15	12.5
	Married with children	58	48.33

Source: Survey Data (2018)

Occupation can be classified by five groups as business owner, company employee, government employee, dependent and other. According to survey data, the respondents are business owners (8.33%), company employees (33.33%), government employees (42.5%), dependents (11.67%) and others (4.17%).

For Income level of respondents, there are income five groups: under K100,000, K100,001-K300,000, K300,001-K500,000, K500,001-K700,000 and above K700,001. From this study found that the highest income above K700,001 with 8.33%, second highest in income K500,001-K700,000 with 25%, K300,001-K500,000 with 35%, K100,001-K 300,000 with 24.17% and under K100,000 with 5%.

The marital status of respondents is classified into three groups: single, married with no children and married with children. According to table 4.1, most respondents 48.33% are married with children, 39.17% of respondents are single and 12.5% of respondents are married with no children.

#### 4.3 Buying Behavior of Organic Food Consumers

This section describes the consumer buying behavior of organic food product such as spending on organic food, frequency of food purchase, source of information, place of organic food purchase and the preference of organic food categories. The following Table 4.2 describes consumption pattern of organic food consumers. By data, consumer spending on organic food products is analyzed into five groups. They are Less than K50,000, K50,001-K150,000, K150,001-K250,000, K250,001-K350,000 and K350,000 above. Less than 50,000 spending on organic food products is 8.33%, 50,001-150,000 spending on organic food products is 19.17%, 150,001-250,000 spending on organic food products is 12.5%, 250,001-350,000 spending on organic food products is 51.67%.

The frequency of organic food purchase is classified into four groups such as every day, weekly once, weekly twice and monthly once. Most of the respondents in this study answered that they purchase the organic food product every day with 20 members (16.67%), Weekly once with 49 members (40.83%), Weekly twice with 26 members (21.67%) and Monthly once with 25 members (20.83%).

The source of information about the organic food products is classified into eight groups such as Televisions, Friend and Family, Magazines, Newspaper, Internet advertisement, Poster in Public Places, Promotional Camp and Farmers. Most buyers know about the organic food information from friend and family (75.83%) other

sources of information about the organic food products are television (39.17%), Magazines (8.33%), newspapers (27.5%), internet (61.67%), poster in public places (4.17%), promotional campaign (23.33%) and farmers (15%)

**Table (4.2) Consumption Pattern of Organic Food Consumers** 

Variables		Respondents	Percent
Amount of Spending (K)	Less than K50,000	10	8.33
	K50,001-K150,000	23	19.17
	K150,001-K250,000	15	12.5
	K250,001-K350,000	10	8.33
	K350,000 above	62	51.67
Frequency of purchasing	Everyday	20	16.67
	Three days once	26	21.67
	Weekly once	49	40.83
	Monthly once	25	20.83
Source of Information	Friend / Family	91	75.83
	Internet	74	61.67
	Television	47	39.17
	Newspaper	33	27.5
	Others	61	50.83
Place of Organic Foods	Organic Food Stores	97	80.83
Purchase	Supermarkets	65	54.17
	Markets	65	54.17
	Farmers	25	20.83
	Health Stores	5	4.17
Type of Organic Food	Vegetables	35	29.17
Products	Fruits	36	30
	Milks	15	12.5
	Eggs	11	9.17
	Meat	3	2.5
	Grain and Beans	10	8.33
	Tea and Coffee	10	8.33

Source: Survey Data (2018)

Consumers purchase the organic food products mostly from supermarkets, organic food stores, health stores, local markets and farmers. In this study, most of the respondents purchase the organic food products from organic food stores (80.83%), and the other purchasing places for organic food products are supermarkets (54.17%), health stores (4.17%), local markets (54.17%) and farmers (20.83%).

There are several kinds of organic food products such as vegetables, fruits, milks, eggs, meat, grain and beans, tea and coffee. The preference of consumers on the organic food is different. In this study, most of the respondents consume vegetables (29.17%), fruits (30%), milks (12.5%), eggs (9.17%), meat (2.5%), grain and beans (8.33%) and tea and coffee (8.33%).

### 4.4 Attitude towards Organic Food Products

According to the result of the survey, organic food consumers in Yangon have a positive attitude towards organic food. Mean scores of healthier, natural tastier, cleaner and fresher, safer free from chemical fertilizers, high quality and rich nutrients, support organic movement, control weight, animal welfare, environmental protection, positive image, fashion to consume, are above 3.

**Table (4.3) Attitude towards Organic Food Products** 

Attitude	Mean	Std.
		Deviation
Healthier	4.47	.501
Natural tastier	4.23	.526
Cleaner and fresher	4.24	.580
Safer free from chemical fertilizers	4.11	.719
High quality and rich nutrients	4.07	.707
Support organic movement	3.68	.648
Control weight	3.83	.653
Animal welfare	3.60	.771
Environmental protection	4.28	.767
Positive image	3.72	.688
Fashion to consume	3.55	.620
Average	3.98	

Source: Survey Data (2018)

According to Table (4.3), healthier is the most important motivation for organic food consumers in Yangon as it has the highest mean score 4.47. The organic food consumer holds the view that the organic food is produced without the use of fertilizers and pesticides. Thus, the organic foods are healthier than other food products. The nature and tastier, cleaner and fresher, safer free from chemical fertilizers, high quality and rich nutrients and environmental protection are also the key factors that motivate organic food purchase. The fashion to consume is the least important motivation for organic food consumer in Yangon as its mean score is 3.55.

#### 4.4.1 Analysis on Attitude of Organic Food Consumers by Gender

Table 4.4 shows mean scores of attitudes of male and of female. For the male group, it has the higher mean of 4.02 that show a more favorable attitude towards organic food over female. Independent sample t-test is employed to investigate on significant difference between attitude and gender as shown in Table 4.5. The figure (t=1.001, p> 0.05 or 0.01), therefore, there is no a statistically significant difference in the mean of attitudes between male and female.

Table (4.4) Attitude for Organic Food Consumption in Genders

Gender	Respondents	Mean	Standard Deviation
Male	43	4.02	.328
Female	77	3.95	.382
Total	120	3.98	.364

Source: Survey Data (2018)

Table (4.5) Independent Sample between Attitudes and Genders

	Levene's Test for		t-test for Equality of Means		
	Equality of Variances				
S	F	Sig.	t	df	Sig.
					(2-tailed)
Equal variances assumed	1.540	.217	1.001	118	.319
Equal variance not assumed			1.045	98.320	.299

Source: Survey Data (2018)

## 4.4.2 Analysis on Attitudes of Organic Food Consumers by Age Groups

Table 4.6 presents mean scores of attitudes by age group. All mean scores of such age groups as less than 20, 20-30, 31-40, 41-50, and more than 50, are above 3, therefore all age groups have good attitudes towards organic foods. One-way ANOVA is employed to investigate on significant difference between attitude and gender as shown in Table 4.7. The significant value is 0.001 which is below 0.01, therefore, there is a statistically significant difference in the mean of attitudes among different age groups.

Table (4.6) Attitude for Organic Food Consumption in Age Groups

Age	Respondents	Mean	Standard Deviation
Less than 20	9	3.63	.282
20-30	17	3.98	.250
31-40	27	3.94	.368
41-50	51	4.11	.351
More than 50	16	3.84	.376
Total	120	3.98	.364

Source: Survey Data (2018)

Table (4.7) One-Way ANOVA between Attitudes and Age Group

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between Groups	2.298	4	.574	4.918	.001
Within Groups	13.433	115	.117		
Total	15.731	119			-

Source: Survey Data (2018)

# 4.4.3 Analysis on Attitudes of Organic Food Consumers by Educational Level

Table 4.8 presents mean scores of attitudes by educational level. All mean scores of such educational levels as undergraduate, graduate, master degree and other are above 3. Therefore all educational levels have good attitudes towards organic foods. One-way ANOVA is employed to investigate on significant difference between attitude and gender as shown in Table 4.9. The significant value is 0.001 which is below 0.01, therefore, there is a statistically significant difference in the mean of attitudes among different educational levels.

Table (4.8) Attitude for Organic Food Consumption in Education Levels

Education Levels	Respondents	Mean	Standard Deviation
Undergraduate	10	3.68	.319
Graduate	87	3.97	.350
Master Degree	9	3.97	.295
Other	14	4.27	.347
Total	120	3.98	.364

Source: Survey Data (2018)

Table (4.9) One-Way ANOVA between Attitudes and Education Level

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between Groups	2.050	3	.683	5.795	.001
Within Groups	13.681	165	.118		
Total	15.731	119			

Source: Survey Data (2018)

## 4.4.4 Analysis on Attitudes of Organic Food Consumers by Occupation

Table 4.10 presents mean scores of attitudes by occupation. All mean scores of such occupation as business owner, company employee, government employee, dependent and others, are above 3. Therefore all occupation levels have good attitudes

towards organic foods. One-way ANOVA is employed to investigate on significant difference between attitude and gender as shown in Table 4.11. The significant value is 0.209 which is above 0.01 or 0.05. Therefore, there is no statistically significant difference in the mean of attitudes among different occupations.

Table (4.10) Attitude for Organic Food Consumption in Occupations

Respondents	Mean	Standard Deviation
10	4.20	.380
40	3.98	.293
51	3.95	.352
14	3.87	.451
5	4.11	608
120	3.98	.364
	10 40 51 14 5	10     4.20       40     3.98       51     3.95       14     3.87       5     4.11

Source: Survey Data (2018)

Table (4.11) One-Way ANOVA between Attitudes and Occupation Level

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between	.777	4	.194	1.493	.209
Groups					
Within Groups	14.955	115	.130		
Total	15.734	119			

Source: Survey Data (2018)

## 4.4.5 Analysis on Attitudes of Organic Food Consumers by Income

Table 4.12 presents mean scores of attitudes by income. All mean scores of such income levels as under 100000, 1000001-300000, 300001-500000, 500001-700000, above 700001, are above 3. Therefore all income levels have good attitudes towards organic foods. One-way ANOVA is employed to investigate on significant difference between attitude and gender as shown in Table 4.13. The significant value

is 0.043 which is below 0.05. Therefore, there is a statistically significant difference in the mean of attitudes among different income levels at 5% level.

Table (4.12) Attitude for Organic Food Consumption in Income Levels

Respondents	Mean	Standard Deviation
6	3.62	.342
29	3.99	.308
42	3.92	.358
30	4.03	.333
10	4.14	.433
117	3.97	.355
	6 29 42 30 10	6     3.62       29     3.99       42     3.92       30     4.03       10     4.14

Source: Survey Data (2018)

Table (4.13) One-Way ANOVA between Attitudes and Personal Income

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between	1.221	4	.305	2.549	.043
Groups					
Within	13.410	112	.120		
Groups					
Total	14.631	116			

Source: Survey Data (2018)

## 4.4.6 Analysis on Attitudes of Organic Food Consumers by Marital Status

Table 4.14 presents mean scores of attitudes by marital status. All mean scores of such marital levels as single, married with no children and married with children are above 3. Therefore all income levels have good attitudes towards organic foods. One-way ANOVA is employed to investigate on significant difference between attitude and gender as shown in Table 4.15. The significant value is 0.094 which is above 0.05 or 0.01. Therefore, there is no statistically significant difference in the mean of attitudes among different marital status.

Table (4.14) Attitude for Organic Food Consumption in Marital Status

Marital Status	Respondents	Mean	Standard
			Deviation
Single	47	3.89	.351
Married with no Children	15	4.08	.414
Married with Children	58	4.02	.352
Total	120	3.98	.364

Source: Survey Data (2018)

Table (4.15) One-Way ANOVA between Attitudes and marital status

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between Groups	.623	2	.311	2.411	.094
Within Groups	15.109	117	.129		
Total	15.731	119			

Source: Survey Data (2018)

### 4.5 Regression Analysis

Regression analysis was taken to prove the significance of the variables used in this study. In the present study, multiple regression is used to understand the impact of attitude, social norms and health consciousness on frequency of organic food consumption.

# 4.5.1 Regression Results of Attitude on Frequency of Organic Food Consumption

Table (4.16) Linear Regression of Attitude on Frequency

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	3.713	.911		4.076	.000
Attitude	309	.228	124	-1.355	.178

Source: Survey data 2018

Adjusted R Square = 0.007

Independent variable= Attitude

Dependent variable= Frequency of consumption per month

Significance level \*\*0.01 (1%) and \* 0.05 (5%) respectively

Table 4.16 shows that the coefficients in the model are not significant in attitude at 1% level or 5% level because its significance value 0.178 is greater than the alpha value. In addition, coefficient has expected negative sign. As the performance of regression model, the model can explain about 0.07% of the variation of attitude on frequency of organic food consumption.

# 4.5.2 Regression Results of Health Consciousness on Frequency of Organic Food Consumption

The mean score of health consciousness is 3.60 which show a fair level in health as shown in Table (4.17). Most consumers try to protect themselves against health hazards (Mean 4.02). Therefore, consumers buy the organic food products for protecting against health hazards.

**Table (4.17) Health Consciousness** 

Health Consciousness	1 14	
Touran Consciousness	Mean	Std
		Deviation
I try to protect myself against health	4.02	.518
hazards I hear about.	T F	
I consider myself very health	3.88	.543
I am concerned about health hazards and	3.95	.482
try to take action to prevent them.		
I try to prevent health problems before I	3.92	.512
feel any symptoms.		
I don't worry about health hazards until	3.44	.619
they become a problem for me		
I often worry about the health hazards	3.54	.533
I hear about, but don't do anything	3.60	.586
It is important to know well how to eat for	3.77	.576
healthy		
I don't ask myself the food I eat are good	3.51	.550
for me		
I trust those who sell certified products to	3.44	.562
indeed sell quality food		
I trust a quality label or logo	3.23	.444
I trust the institutions certifying organics	3.30	.460
food products		
Average	3.60	

Source: Survey Data (2018)

Table 4.18 shows that the coefficient in the model is significant in health consciousness at 1% level. In addition, coefficient has expected positive sign. The magnitude of each coefficient indicates the amount how much the score of the dependent variable will change if the score of an independent variable increases by 1 unit while other things remain unchanged. That is, if the score of health consciousness increases by 1 unit, while other thing remain unchanged, level of frequency will increase by 0.86 units. As the performance of regression model, the model can explain

about 4.8% of the variation of health consciousness on frequency of organic food consumption.

Table (4.18) Linear Regression of Health Consciousness on Frequency

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	5.590	1.182		4.728	.000
Health	.855	.325	.236	2.633	.010
Consciousness					

Source: Survey data 2018

Adjusted R Square = 0.048

Independent variable= Health consciousness

Dependent variable= Frequency of consumption per month

Significance level \*\*0.01 (1%) and \* 0.05 (5%) respectively

# 4.5.3 Regression Results of Social Norms on Frequency of Organic Food Consumption

From the results of the survey, a majority of the respondents agree or strongly agree that their family and friends' advice and purchase behavior can influence their purchase intention an organic food. Therefore, there is a strong relationship between consumer social norms and the organic food purchase intention among the organic food consumers in Yangon.

**Table (4.19) Social Norms** 

Social Norms	Respondents	Percent
Strongly Agree	30	25
Agree	84	70
Neither agree nor disagree	6	5
Disagree	0	0
Strongly Disagree	0	0
Total	120	100

Source: Survey Data (2018)

According to Table 4.19, the majority of the respondents strongly agree (25%), agree (70%) and neither agree nor disagree (5%) that their family and friends' advice and purchase behavior can influence their purchase intention of organic food products.

Table (4.20) Linear Regression of Social Norms on Frequency

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	2.154	.847		2.544	.012
Social Norms	.082	.209	.036	.391	.696

Adjusted  $R^2 = 0.007$ 

Independent variable= Social norms

Dependent variable= Frequency of consumption per month

Significance level \*\*0.01 (1%) and \* 0.05 (5%) respectively

Source: Survey data 2018

Table 4.20 shows that the coefficients in the model are not significant in attitude at 1% level or 5% level because its significance value 0.696 is greater than the alpha value. In addition, coefficient has expected positive sign. As the performance of regression model, the model can explain about 0.07% of the variation of social norms on frequency of organic food consumption.

## 4.6 Barriers for Organic Food Consumption

Although, the organic food consumers in Yangon have the high purchase intention, the actual purchase behavior may be different. There are many barriers between the purchase intention and actual purchase behavior. In this study, barriers are measured by seven statements. The following Table 4.21 presents the mean values of these seven statements.

According to Table 4.21, the mean value of consumers' reason for non-availability is 3.88, too expensive is 3.95, no trust the product is chemical free is 3.46, no believe the health benefits is 3.28, lack of information and knowledge is 3.95, used to buying conventional is 3.47 and no person who does food shopping is 3.31. Among them, the main barriers are too expensive and lack of information and knowledge.

**Table (4.21) Barriers for Organic Food Consumption** 

Barriers	Mean	Std
		Deviation
Non-availability	3.88	.602
Too expensive	3.95	.776
I don't trust the product is chemical free	3.46	.607
I don't believe the health benefits	3.28	.553
Lack of information and knowledge	3.95	.578
I am used to buying conventional	3.47	.593
I'm not the person who does food	3.31	.515
shopping		
Average	3.61	

Source: Survey Data (2018)

#### Chapter 5

#### Conclusion

There is a change in the pattern of food consumption among consumers across the world due to an increase in health concerns, environmental protection and high awareness about the pesticides used in the food production. Now-a-days consumers are more concerned about the food they take and wish to have more nutritious food which is produced without any chemicals. They are informed about the hazards of pesticides and chemicals to the nature and health through various social media.

The aim of the paper is to understand the main factors that can influence organic food purchase behaviors among organic food consumers in Yangon, which can provide valuable information and suggestions for organic producers to expand their market. The questionnaire is mainly focused on consumer's motivation, social norms, health consciousness, purchase barriers, and marketing of organic food.

#### 5.1 Findings

According to the research, the demographic factors of organic food consumers are revealed that there is more female consumers than male consumers. The consumers aged between 41-50 are the highest group in the consumption of organic food products. Most consumers are the graduate people and majority are government employee. Most of the consumers spends only K50,001-K150,000 on organic food products per month, which reflect organic food market as a niche market in Yangon. The households with the presence of children are found to consumer organic food products more than others. The reason behind may be perceived as a higher level of concern in food safety with the presence of children, especially for women.

The frequency of the organic food purchase is weekly once. Consumers get the information about the organic food products from friend and family. Most consumers buy the organic food products at the organic food stores. The most consumers buy the organic food products since last 6 months. Consumers buy the vegetables, fruits, milks, grain and beans and tea and coffee with moderate. There are few consumers for purchasing eggs and meats.

The majority of the respondents have a positive attitude towards organic food. Moreover, the health consciousness and social norms can influence the consumption of organic food products. However, there are many barriers for the relationship of organic food consumption and attitude, health consciousness and social norms. The main barriers for consumption of organic food products are too expensive (mean value=3.95) and lack of information and knowledge (mean value=3.95). Other barriers towards the consumption of organic food include not trust the product is chemical free, not believe the health benefits, using to buying conventional and non-availability of organic food products in the market. Organic food consumers in Yangon hold a positive attitude toward organic food. However, the high purchase intention does not lead to actual purchase behavior. The intention and behavior gap among the organic food consumers in Yangon is mainly caused by the high price of organic products and lack of information and knowledge.

Therefore, the organic food producers and marketers need to increase consumers' knowledge of organic food. They should explain what makes organic food different from conventional food and educate consumers about the reasons for charging a premium price, so they are more willing purchase organic food. Organic food sellers can increase the availability of their products by distributing their products into the supermarkets, vegetable markets, and organic food specialty stores. They can also sell on he Internet to meet consumers' needs. To promote organic food, organic food sellers can take advantage of selling channels such as supermarkets and vegetable markets, since the main way for consumers to know about a new food product is by shopping in these places.

The future of organic food market in Yangon is promising. The new generations in Yangon are paying more and more attention to their health and quality of life. The rapid development of economy in Yangon will increase consumers' purchase power.

## 5.2 Suggestions and Recommendations

As discovered in the survey, female and households with children are more likely to consume organic products. These two groups therefore have a bigger potential as the major consumption group and can be identified as target customers. A

marketing mix could focus on these groups and investigate in any special needs in the groups. As female consumers are becoming more needy for detail information and knowledge about organic facts and benefits, in terms of advertising, when designing advertisement and packaging of products more feminine designs, like more use of warm colors, will be more appealing to the target group customers.

There is negative attitude towards organic food because of prices, "non-availability", "limited variety", "limited selling locations", and lack of knowledge and information. Selling locations and distribution channels should be increased so that the increase in convenience could attract both buyers and noon-buyers of organic food. By increasing the production volume or supply of more variety organic food products, reducing the price and increasing the selling locations could impact directly or indirectly on the buying and consumptions of organic food products.

Further, the pattern of distribution channels could also be changed. As supermarkets, organic food stores and markets occupied a large share as organic food shopping points, marketers should be placed the emphasis in these 3 channels. More organic food, especially vegetables and fruits, should also be directed to markets in order to absorb a broader consumption group.

Moreover, consumers are now increasingly aware of the threat of harmful additives and food safety and organic food products provide a safe and reliable way to "eat healthy". Aspects like "safe"; and "healthy" should be stressed in packaging, brand image development and advertising to draw favorable attitude towards the brand or products.

Moreover, efforts in educating consumers about health awareness can foster more favorable attitude and consumption for organic food. To do this, food marketers should work together with the Government for developing promotional campaigns to influences consumers' beliefs about the relationship between food safety and disease. The promotional campaign can be in different forms, depending on the target audience.

## 5.3 Needs for Further Study

The sample size of this paper is based on 120 organic food consumers in Yangon according to the time limits and financial constraints. Nowadays, there are several kinds of food products in difference form. The consumption of food products is essential for everyone. Among the Several kinds of foods, the organic food products are healthier, natural and tastier, cleaner and fresher, safer free from chemical fertilizers, high quality and rich nutrients, support organic movement, control weight, animal welfare, environmental protection. Therefore, the preference of consumers is growing to the consumption of organic foods and marketers should review the opportunities of the organic food market to get the marketing effectiveness by using product, price, place and promotion. These researches will help to examine factors that are critical to the success of the organic food product industry and also help to understand consumers buying behavior.

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**APPENDICES** 

#### Questionnaire

### Organic Food Consumption of Consumers in Yangon

### I. Personal Details

- 1. Gender
  - Male
  - o Female
- 2. Age
  - o <20
  - o 20<del>-3</del>0
  - 0 31-40
  - o 41—50
  - >50
- 3. Education Level
  - o Undergraduate
  - o Graduate
  - o Master Degree
  - o Other
- 4. Occupation
  - o Business Owner
  - o Company employee
  - o Government employee
  - Dependent
  - o Other
- 5. Monthly Income
  - o Under 100,000 Ks
  - o 160,001—300,000Ks
  - o 300,001—500,000Ks
  - o 500,001—700,000Ks
  - o Above 700,001 Ks
- 6. Marital Status
  - o Single
  - o Married with no children
  - o Married with children

#### II. Behavior

- 7. How much money would you spend on food every month?
  - o < 50,000 Ks
  - o 50,001—70,000 Ks
  - o 70,001—90,000 Ks
  - o 90,001—110,000 Ks
  - o > 110,000 Ks
- 8. I prefer to buy organic food products than other conventional food products
  - o Strongly agree
  - o Agree
  - o Neither agree nor disagree
  - o Disagree
  - Strongly disagree
- 9. Please rate for the type of organic food products that you would like to purchase per day

	Many	Moderate	Few
Vegetables			
Fruits			
Milks			
Eggs			
Meat			
Grain and Beans			
Tea and Coffee			

10.

I usually purchase	
Everyday	
Weekly once	
Weekly twice	
Monthly once	

- 11. I know about a new food product mainly by
  - o Media (TV; Radio)
  - o Friend/Family
  - o Leaflets, magazines
  - o Newspaper
  - o Internet advertisement
  - o Posters in public places
  - o Promotional camp
  - o Farmers

The place I buy organic product is				
Supermarkets				
Organic Food stores				
Health stores				
Local Markets				
Farmers				

13.

I bought organic for	od
Before 5 years	
3 to 5 years	
1 to 3 years	
Last 1 year	
Last 6 months	

## III. Attitude

14. Please rate what are the motivations of your organic food products purchase

	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				disagree
More healthier					
Natural, tastier					
Cleaner and more fresh					
Safer free from chemical fertilizers					
High quality and rich nutrients					
Support organic movement					
Control weight					
Animal welfare					
Environmental protection					
Positive image					
Fashion to consume					

#### IV. Social Norms

- 15. My family and friends' advice and purchase behavior of organic food can influence my purchase intention
  - o Strongly agree
  - o Agree
  - o Neither agree nor disagree
  - o Disagree
  - o Strongly disagree

## V. Health consciousness

16.

	Strongly Agree	Agree	Neutral	Disagree	Strongly
I try to protect myself against health	8.00				disagree
hazards I hear about.				9	
I consider myself very health					1
conscious					
I am concerned about health hazards					
and try to take action to prevent them.				1	
I try to prevent health problems					
before I feel any symptoms.			į.		
I don't worry about health hazards					
until they become a problem for me					
I often worry about the health hazards					
I hear about, but don't do anything	1		A		
about them		8	4		
It is important to know well how to		J.			
eat for healthy		1		1	
I don't ask myself the food I eat are	7				
good for me					1
I trust those who sell certified					
products to indeed sell quality food		1			
I trust a quality label or logo					
I trust the institutions certifying					
organics food products					

17. Reasons for not buying Organic Food Products

Reasons	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Non availability					
Too expensive					
I don't trust the product is chemical					
free					
I don't believe the health benefits					
Lack of information and knowledge					
I am used to buying conventional					
food					
I'm not the person who does food					
shopping					

### VI. Marketing Mix

18. Please rate your dimensions of organic food products

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Organic products are high in quality					
Several brands available to choose					
Good packaging					
Visual appearance					
Good for health and environment					
Taste is good					

19. Please rate your dimensions for the price of organic food products

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
High					
No difference with other foods (Fair)					
Not Important					

20. Please rate your dimensions for the place for the purchasing products of organic food

	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				disagree
Organic store is conveniently located					
Appealing atmosphere in store					
Several product available in store					
Using telephone and other					
communicational tools to order					
Stores sales specially organic					
products					

## 21. Please rate your dimension for the promotion activity of organic food products

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	1			

22. I would like to buy more organic food products if

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
More cheap prices					
More income					
More accessibility in the market					
More assortment availability					
Better appearance and taste			D. 10.	-	5
More trust to origin/production					
More information in the media					