A study of consumption patterns on green food among students in Universiti Utara Malaysia

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Health consciousness, food safety, and environment consciousness are the main reasons why the consumers progressively aware about the products they consume. Since the nature is getting worst due to environmental problems, it has become a public concern to introduce green concepts in many countries include Malaysia. The objective and aim of the study is to identify the green food consumption patterns among undergraduate students in Universiti Utara Malaysia. Even the awareness of food quality and eating patterns could influence students mentally and physically. There are various numbers of companies to be more responsive in addressing the development of environmentally friendly product to the consumers. Green food consumption patterns are different from country to country. The changed due to the rapid growth of socioeconomic through an increasing number of consumer demand. The consumers aware and changed their favourite of food choice toward more healthy and nutritious lifestyle. Since, the consumers have a strong power in purchasing and consuming food, it is necessary to concern about food safety and health consciousness. The findings show that environmental consciousness, perceived consumer effectiveness and health consciousness have relationships with consumption patterns of green food. However, social influence doesn’t have a relationship with consumption patterns of green food.

Keywords:
Consumption patterns of green food, Environment consciousness, Perceived consumer effectiveness, Health consciousness, Social influence

1. Introduction

As Malaysia is moving towards becoming a developed country where the population are increased by the time. Malaysia is getting educated and will be concerned with the environment, food safety and animal welfare. The change to go green was along with the change in consumer preferences, standard of living, improved quality in agriculture and marketing in order to encourage

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society to increase the demand of green food products. Green food can be defined as safe and have high quality products, nutritious, healthy, and do not harm to the environment. Due to interest of green product response to environmental consciousness, perceived consumers effectiveness, health consciousness and social influence are extremely growing progressively. Green food is extremely playing an important part of a healthy diet since nowadays people more concern about their way of life. Consumption of green concept can be recyclable, beneficial to the environment and concern for the natural world. The consumers have to start being responsible and realize their consumption will give the huge impact toward the environment. In addition, some companies nowadays have already adopted green marketing which includes the variability of demand and consumer perception of green products [1]. Green marketing is one of method that involved all activities that designed to generate any exchange in order to satisfy the human needs or wants to minimal unfavourable impact on the natural environment. This is to satisfy the consumers and having a strong relationship with them [2].

The green marketing also preserves the natural environment and provides advantages to the public in more maintainable way. Malaysia government is strongly involved and support the promoting of green foods. The government was launched the good agricultural practices (GAP) program to enhance the development of food quality and productivity. Along the GAP platform, the government introduced Malaysian Farm Accreditation Scheme, which focuses on the fresh fruit and vegetable industry. This scheme to convince the yield products are safe, high quality and suitable to consume. Malaysia Organic Scheme, which provides guideline for the production, processing, labelling and marketing the products based on Malaysia Standard requirement [3]. The scheme will give benefits to other parties like consumers, producers and workers to become more alert to the natural environment. The green food certification consists of two grades; green food “Grade A” and green food “Grade AA” [2]. Green food “Grade A” discusses on the using of minimum chemicals and was control of the government [4]. However, green food “Grade AA” categorized as special one that do not use any chemicals, fertilizers or pesticides ever in the production process.

2. Problem statement

Malaysia is one of the fastest and developing countries in terms of carbon emission and facing the increasing of energy consumption among other countries. Hence, the government should take into consideration in creating the awareness of environmental concern among the society to reduce the greenhouse level. Past research figured out that 70% of consumers shown their concern about the environment, yet they did not consume for the green products [5]. Head of Malaysian Agriculture Research and Development Institute (MARDI), Datuk Dr Sharif Haron said the manufacture of green food in Malaysia a bit slow compared to other Asian countries. This shows the negative sign in the growth of agriculture in the country. Besides, marketing problem and lack variety of green foods also become major issues. The problem will cause the Malaysian have a doubt to consume green food in daily routine since the quality of the product too vague. Malaysia has developed a number of quality assurance programs with farm certification schemes, including the fresh fruit and vegetables sector certification (SALM). However, since the scheme is managed and audited by Department of Agriculture, there is still having a lack of transparency. The scheme does not receive any recognition of equivalence with other countries or private sectors. The situation creates a negative perception on green food from Malaysia.

Regarding the price as an influential factor for green food consumption, the consumers see these products as more expensive than normal food. Price is the main element in the purchasing process and the consumers feel that green food should not be categorized as expensive product. These kinds of products quite expensive due to using high green technology and try to produce high value and
best quality. If the foods are expensive, it might be an issue among the consumers and rather to consume normal foods in daily. Overweight and obesity lead to adverse metabolic effects on blood pressure, cholesterol, and insulin resistance. It was reported that more than 10,000 people in Malaysia died each year from diseases linked to hypertension like stroke, heart attack and about 6000 deaths due to coronary heart disease. At present, 3 million of Malaysians are suffering from high cholesterol while another 2.1 million Malaysian have diabetes. More than 40,000 new cancer cases are reported and on a daily basis, about 110 Malaysians suffer a stroke which is the country’s third killer. It is clearly that Malaysia is facing critical unhealthy lifestyle related to health problems. The most apparent reason of those health problems is unhealthy lifestyle, including unhealthy eating habits, lack of physical activity and so forth. Malaysian is tending to eat high-fat foods and put the taste and convenience ahead in choosing food products. In addition, the reported say the consumers rely more on dietary supplements and do not follow the general healthy, balanced eating consumption patterns as recommended by the government and other health organization.

Furthermore, more than 100 countries around the world still have no legislation to implement the policies of international food safety systems. When the country does not set the standard of policies and there is no food security, majority the people are not sure what exactly they are going to get the food to market. Eating the wrong type of nutrition, having high fat in food could give the consumers heart disease, diabetes and lead to obesity.

For the past ten years, the number of fast food restaurant and outlets were increased in Malaysia. Fast food A&W first introduced in Malaysia during 1963. The expanding development of fast food is growing and wins consumer’s heart. In fact, the main customer group of fast food is among the students. As we know, the fast food might cause negative health effects include obesity, cardiovascular disease and some cancer due to excessive portion of fast food, high content of fat, and low content of fiber. Student’s perception towards consuming fast food because they believe the fast food or convenience and efficient. This will increase the analysis of statistical on fast food consumption. Lack of exposure in green food cause students to choose and consume fast food. Consumption pattern of fast food becomes a common thing among Malaysian especially the students.

In Sweden and Norway, these countries have banned the advertising of fast food to children, especially under 12 [6]. In Malaysia, the advertising of fast food only banned on children’s programs and the companies of various fast foods in the country are not allowed to sponsor the event as well. Malaysia should follow the example of Sweden and Norway to ban any fast food advertising include in the newspapers, TV, radio, magazines and online media. As mentioned earlier, consumption of fast food will give the negative effect to the children. It should prevent at an early stage before it gets worst. In the study of Ohio State University, Dr Kelly Purtell, he said the excessive of consuming fast food could have poorer academic scores at school. This might contribute to the childhood obesity epidemic.

According to 9th Malaysian Plan (2006-2010), there are increasing in using chemical substances in agriculture field. In Malaysia, the main sources of pollution include open burning activities, motor vehicles, and agricultural industries [7]. Hence, to reduce the environmental issue in developing country like Malaysia, there must increase the greatness and ecological production by changing the eating of consumers consumption patterns in human behaviour and practices a good culture. According to [8], it is not easy to embark on studies that relating of understanding environment behaviour. So, there should be more studies about the consumers’ awareness and their consumption of green foods.

3. Literature review
3.1. Consumption patterns of green food
Attitudes and knowledge are strong predictors of behavioural awareness on green food consumption. Consumption of green food as well as the broad food industry in Malaysia to understand the consumer’s motives in consuming these products. Consumption of green food is one of option without damaging the environment and contributes to a better sustainable world ahead. Currently, the consumers believe the consumption of green food can provide a good quality, and better performance for their life. As mentioned earlier, green food is safe for consumption, fine in quality, and provide nutritious. The consumption of green food in Malaysia is growing rapidly since it leads to developed country.

The market and consumers experience give the impact towards their food consumption patterns. Changing the old eating lifestyle from normal products to green food is a priority since the products could give the benefit health to our body indeed. According to [9], the consumers should understand what they consume every day and it will able to control their consumption in a good way. [10] mentioned that high level of defect in green food would affect the consumers’ consumption. A specific damage will make the issue even bigger.

Natural content, for example, no additive substances and free from any chemical substances are the main reasons to consume green food. This will give the positive view and consumers will change their lifestyle to a better consumption. The vitamins that content in green food are higher than conventional food. Green food content high Vitamin C to protect the body as it could help to fight the serious illnesses like cancer. Regarding the weight control, green food has different nutritional content due to low fat and more carbohydrate over than normal food.

Green food consumption and production should view as holistic concept and respect the capacities of natural ecosystems. It should include all the consideration such as sustainable lifestyle, diets, food waste management and minimize the impact on the environment. The production nowadays will give an effect to present and future generation. Consumers who have strong influence through the way they consume in their food. Food convenience, food choices and food availability will affect the consumers’ consumption. [11] found similar studies in Malaysia where the consumers that concerned about their health and environment protection will have a positive attitude to sustainable food. This will lead to increased growth of agriculture product [12].

3.2. Environment consciousness

The environmental consciousness is rooted in a person’s concept of self and how the individual perceives him or herself to be an integral part of the natural environment. Environmental consciousness is one of the factors that lead to consumer in making any consumption including green food. Past research has been said that consume green food is one of methods that can reduce the hazards to the nature. Nowadays, the consumer is becoming more concern to protect the environment. They believe consuming green food could help to solve environmental problems. Besides, the environmental consciousness could be defined as the individual’s value of natural protection.

The majority of the consumers is concerned and aware toward the environment. The consumers who are aware and interested in environmental issues are called green consumers [13]. They believe consuming the green food will help and overcome the problem of environmental consciousness. Past research found consumer’s awareness toward the green food has an optimistic view on environmentally conscious living. In addition, those consumers who have positive thoughts about environmental consciousness, they tend to consume a friendly product which is green products.
In Malaysia, more people demand safer, healthier, hygienic and environmentally friendly food [14]. According to [15], the consumers should understand and be responsible to the environment. Consumers consume green food strongly facilitated by positive awareness towards the nature protection and environmentally consciousness. The Malaysia government suggests various strategies to implement the consumption and the development of environmental protection. The government should educate Malaysian in gaining awareness and take extra care about the environment. Environment consciousness and awareness are important factors in preserving the nature. The number of vegetarians nowadays has been increasing time by time compared to last few decades. Another reason why the people adopt a vegetarian lifestyle is because they care about the environment.

Environmentally friendly products could be said the products with recyclable packaging to improve the quality of the environment. The quality of improvement refers to the level of knowledge, attitude, concern and value of practices among consumers. The consumers feel obligated to protect natural environment. Plus, it can save the natural resource on Earth. In addition, the consumers with positive attitudes and belief will relate the environmental issue with their daily lives, family and work [16].

Environment consciousness describes five dimensions to understand environment awareness. There are environment knowledge, environment, values, environmental attitudes, willingness to act and actual action. All the aspects can solve the problem of environment issues. These also related to the behaviour of human being on how they react towards the natural. The consumers who believe in self-improvement and put the effort on environmental consciousness will protect the environment in their society.

The consumers who purchase and consume green food or any green products not because of healthier aspects, but at the same time could help in sustaining the environment for the next generation. They willing to change to another product that can give benefit to the nature and prevent consume any products that causing pollution. Other researcher [17] said the consumers who believe in environmental consciousness are well educated and have more money to spend. They expect green food or other products can satisfy their needs and desires. It was mentioned before, the consumers ready to pay premium price for green food or other products since it can verify the environmental issue and could help nature for better life.

In addition, according to [18], the awareness of green food is important to create the environmental ethic and the change of consumption behaviour. Previous research by [19], a study of Greek consumers seems to show how they are informed about environmental issues. The factor influences them to consume as much as possible green food in daily life.

Environment consciousness and awareness has been ranked as the most important aspects of environmental behaviour. According to [20], the consumers who are not aware about environment issue because of lack exposure to the communication. The consumers need enough marketplace information about green foods such as the prices, availability the products in the store and the shopping location.

The consumers with a high level of environmental consciousness will always consume green products, especially green food and their evaluation of ecological view is high. Consumers’ awareness will capture the motivational factors and influence them to consume more of green food [21]. Green food is one of the satisfactions to consumers and meets their needs without harm and damaging the environment and at the same time will contribute to a better world.

3.3. Perceived consumer effectiveness
The concept of perceived consumer effectiveness as a measure of the extent to which an individual believes he or she can be effective in pollution problem. The perceived consumer effectiveness is the judgement of any individual about the way and how it can give effect to his/her behaviours. High perceived consumer effectiveness is an important part to remind consumers to put their trust and thought into real consumption. According to [22], the perceived behaviour can control the individual perceived performance. They support the intention to engage certain behaviours such as consume green food.

In addition, perceived consumer effectiveness is closely related to the concept of perceived behavioural and it is popular in investigating green consumers. The concept described the consumers’ intention to consume green foods based on their awareness, behaviour and perception about social pressure. Perceived consumer effectiveness is one of changing phenomenon. In other word, it can be observed in various situations [23]. If the consumers believe an environmental problem can be solved easily, they will change their consumption toward green foods.

Perceived consumer effectiveness can reflect the belief of people, which like consuming green foods and helping to solve environmental issues such as air and water pollution. According to [23], it proves that there is a positive relationship with environmental awareness. People with high exhibited in perceived consumer effectiveness are likely to be more environmentally concerned, compared to those people who have lower perceived consumer effectiveness. The concept is more to the dissimilarity since it differs from one to another. The different based on their knowledge and life experience in consuming any product.

Plus, perceived consumer effectiveness found directly influence consumers in consumption of green food and have the positive impact on intention to purchase the green products. The consumers will have a better understanding about their behaviour and consequently increase the awareness on green food. Engaging to motivate people will enhance the life of consumers’ quality of life. Consumers decide to purchase or consume any products based on three elements; knowledge, attitude and intention. Consumers’ knowledge is referring to the effects and what they decide to purchase. This includes the type and quality of information on the products. Thus, knowledge and awareness are the main aspects in consumers’ behaviour.

Education reported as a significant factor that influence or affecting consumer attitude towards green food [24]. People who have higher education are more toned and likely to express positive attitude or awareness on green food. Perceived consumer effectiveness is supposed to be a function of how consumers believe in their capacity and how they react to a positive environment. This is included in an individual’s intention to behave in certain ways by his/her attitudes towards positive behaviour and perception of green consumption [25].

Plus, perceived consumer effectiveness can be related to the concept of internal locus of control. This means, how an individual belief in his/her abilities to control their behaviours on consume any products. In addition, the concept of perceived consumer effectiveness can refer to self-evaluation in the terms of environmental issue which is contributing to pollution matter. Research by [26] found that the perceived consumer effectiveness is the most significant, especially among women to consume green food products.

3.4. Health consciousness

The worldwide phenomenon that people have become more worried about their health and consumers are seeking out certified products to protect themselves from any toxins and carcinogens. The consumers believe the green food has high quality on nutritional value. In addition, the green food could be defined as the foods that are safe, fine quality, nutritious, and healthy to consumers.
Health consciousness is considered as a subjective motivation to improve the individual’s health. The marketers and industry are more focused on the safe and healthy aspects especially in food products.

Consumers become more aware and concern about health and safe, according to their foods and consumption. For those who are concerned about the health issue, they will consume green food as their routine daily. Lack of knowledge on green food is the main factor contributing to health problems. According to Rahim [14], the consumers who are concerned about green food displayed positive attitude towards the consumption in Malaysia. They tend to change their daily life to the new way in consuming green food. [27] explained green food is natural content and nutritious. It is the main reason why the consumers should purchase this kind of food instead of normal foods. The natural content also can give the right impact on consumer purchasing behaviour.

Other research by [28] found the majority of Australians choose green food compared to normal food because of the high percentage of vitamin and minerals which are brought more benefit health especially to woman. This theory is supported that green food contains more minerals and antioxidants. The consumers buy green food, mainly because of health benefit. In addition, the consumption of green food is good among the children as it safer and healthier. The past research declared the consumers purchase green food for their children due to lack of existence of pesticides.

They believe consume high green food able to increase the level of health in their body [29]. Several studies mentioned health as an important key motivator to consume green food. However, these studies by [30] agreed that health conscious does not give an important aspect on purchase green food. The result explained health conscious was at least important influence.

Consumers believe the ingredients of green food or lack of artificial ingredients and other harmful substances. Researchers found that the consumers perceived high value on health and food security. Health conscious is aware and concerned about their health, and motivated the consumers to improve their quality of health by engaging self-conscious regarding the health. Past research by [31] identified the interest and priorities in health as a primary factor in consume green foods. In addition, the consumers believe the green foods can improve their health and appreciate the healthy and natural foods since it can affect their attitudes to consume these kinds of foods.

Consuming green food daily could stand for a diet and healthy meal. Health concern more seriously thought and idea to become a powerful motive to consume green food. Consumers have the right to choose their own consumption and it is influencing of by many factors. One of them related to health concern. On the other side, consumers consume green food as an investment to get good health.

Consumers consume green food as their primary needs and the factor of quality, convenience, and affordability is met and become a priority [32]. The importance, awareness such as confidence in food and health consciousness has combined as main attributes for the consumers to consume green food. The consciousness towards consuming any products will change and growing well with the increase of age.

Effective advertising and campaign are needed to create the awareness of consumers and willing to spend more money on green food [33]. India is one of the developing countries for marketing green food as it was point-of-view in health than normal food. However, they need the confidence among the consumers, especially the loyal one to consume green food from their country [34].

3.5. Social influence

The concept of social influence is discussed with the people that can give a big impact or influence another person. It can be meant as the situations that a person share the same thoughts, belief and values that he or she is communicating with. The social network and product involvement are related. Past research has found the social influence variable to have an important aspects of eating and
consuming behaviour. Specified social influence consists of friends, family, educator, employees, professional colleagues, experts and media.

Social influence is one of the factors that influence consumer to consume green food. This can be related to high social interaction among us that able to encourage people to purchase green food. In addition, the social influence also gives positive vibes to the attitude [35]. In the area of green food consumption, the past studies have found that social influence has either enabling effect on eating behaviour.

Peer pressure as a part of social influence to persuade the consumers on green consuming among Malaysian consumers. Social influence can attract the consumers to consume green food for their life. The surrounding plays an important role to encourage people to start and changing new life in consuming green food. Social influence is a change of the person’s attitude and behaviour which is influenced by other. Social influence plays an important role in influencing consumer purchase and consume green products.

[36] declared the social influence has a powerful relationship to nature friendly which is able to drive the people to consume green food. The research also concluded the social influence has a direct and significant effect on intention to consume green food. Plus, peer influence also able to encourage consumer consuming green food. An individual is highly influenced by his or her social surrounding including the relatives, friends, family, or colleagues. The younger generation always gets influence from their friends to purchase specific products. Indeed, they tend to purchase for green food when their friends do so.

The concept of green food can be more popularized in Malaysia if the society becomes more alert and aware with environmental issues. Social influence involved the marketers who introduce and generate knowledge about consumption of green food. The strategy involved advertisement, green packaging, promotion and green awareness program. Marketers who promote green marketing can satisfy consumer’s needs and at the same time can avoid harmful effect on the natural.

Social influence and awareness is one of the interesting factors to study the consumers of consumption pattern in green food [37]. Study in Thailand, many kinds of media, announces the benefit and advantage of consuming green food and it’s increasing the consumer knowledge and information about the product. Individuals in collectivist culture more likely engage any activities with family members and friends.

The value of crucial part is influencing people when the consumers feel the presence of others [36]. Most of the people will act what their peers or other people do. Social influence in young consumers is strongly affected by the group they belong to and it’s easy to make any changes [36]. Social influence also can be related to direct important role in individual itself, for example father, mother or teachers that have a great impact on gaining knowledge especially among younger consumers regarding the consuming of green food. In addition, role models or endorsers can also categorize to induce a social pressure in terms of high status and expensive products.

Another study was conducted by [38] mentioned social network and product involvement is co-related. Usually, young consumers are impressively influenced by the social network they belong. Thus, they will collect the information from the people around them and decide to consume their own brand choice.

The referent could be neighbours, friends, colleagues, teachers, organization and forth. In terms of parental influence toward their children (young consumers) has forced some positive significant impact. At adolescent stage, parent shows and play an important role and main socialization factor to them. The children will consume what their parent does and tend to follow the specific products or brand same as their parents. . The mass media also one of social influence and found that young consumers have become more interested to gather the information from various sources. This
includes television, magazine, radio and newspapers. Peer influence also shapes and contribute consumers to consume green products. People may affect with their peers’ beliefs in their development stage, especially in the young generations. In China, the survey was done and the children ranked the friends as a third important influential factor. For instance, young generations would choose and purchase what their friends do based on their preference.

![Fig. 1. Theoretical framework](image)

### 4. Research methodology

#### 4.1. Sampling design

The researcher has chosen Undergraduate student in Universiti Utara Malaysia (UUM) as respondents to answer the questionnaire. According the latest data from the academic affairs department, the total number who is registered as a degree student is 16,979. According to [39], table to determine sample size for the number is 375 respondents are worth to represent the overall student in UUM. However, to get accurate and effective data, a total of 400 respondents has been chosen to complete the given questionnaire. According to this research, the researcher has decided only students from School of Business Management were chosen to participate in this study. Specifically, the study aimed Bachelor of Business Administration (Hons) student from year one to year four during the first semester 2015/2016. Due to this specific selection of programming, the researcher used probability sampling category whereby every element in the target population has an equal chance to be selected for this research. In order to achieve this probability, the researcher refers to schedule of [39] to determine the sample size from the overall population for determining sample size followed by a given population for easy references. The sample was obtained randomly due to reduce the opportunity for systematic bias in choosing a sample. Hence, increase the representativeness of the sample.

Selecting a sampling technique involves several decisions of a broader nature. Sampling method can be referred as a technique or a process that analyses the characteristics of the known population by selecting the exact elements of the population.

Literally, there are two types of data collection, which is primary data and secondary data. Data collection is an important aspect for each research. Hence, in this research, the researcher chooses to use primary data as one of data collection. Secondary data are the data that have already been
collected for purposes other than the problem at hand. These data can be located quickly and inexpensively. The data can get from written or electronic. Examples of secondary data are book, article, and journal, information from the internet or newspaper. Likert Scale named of its developer, Rensis Likert is a widely used to indicate the degree of agreement or disagreement with each of the statements in the questionnaire. Typically, each scale has five response categories from “strongly disagree” to “strongly agree”. In addition, the Likert Scale has several advantages. For instance, it is easy to conduct and administer. The respondents are willingly understood on how to use the scale.

5. Results and discussion

All the result and data will interpret and presented in this chapter. The tables were used to assist the presentation of the study. This research uses SPSS Version 22 to evaluate the data.

Pearson’s correlation coefficient (r) is a measure the strength of the association between linear relationships of two variables. The correlation greater than 0.5 is generally described as strong relationship, meanwhile correlation less than 0.3 described as weak. Positive correlation indicates that two variables increase or decrease together, whereas negative correlation explains that as one variable increases, or decrease and vice versa. No correlation or a weak linear correlation, r is close to 0. A value near to zero means there is a random, nonlinear relationship between two variables. The result of Pearson Correlation will be shown in the table below.

Table 1
Value Pearson Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Consumption</th>
<th>Environment</th>
<th>Perceived</th>
<th>Health</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumption</strong></td>
<td>Person correlation</td>
<td>1</td>
<td>Environment person correlation</td>
<td>Environment</td>
<td>Perceived</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Person correlation</td>
<td>Environment person correlation</td>
<td>Environment</td>
<td>Perceived</td>
<td>Health</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.549**</td>
<td>.589**</td>
<td>.536**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived</strong></td>
<td>Person correlation</td>
<td>Perceived person correlation</td>
<td>Perceived</td>
<td>Environment</td>
<td>Health</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.663**</td>
<td>.516**</td>
<td>.530**</td>
<td>Environment</td>
<td>Health</td>
</tr>
<tr>
<td>N</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>Environment</td>
<td>Health</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>Person correlation</td>
<td>Health person correlation</td>
<td>Health</td>
<td>Environment</td>
<td>Social</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.516**</td>
<td>.525**</td>
<td>.544**</td>
<td>Environment</td>
<td>Social</td>
</tr>
<tr>
<td>N</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>Environment</td>
<td>Social</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Person correlation</td>
<td>Social person correlation</td>
<td>Social</td>
<td>Environment</td>
<td>Health</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.330**</td>
<td>.412**</td>
<td>.454**</td>
<td>Environment</td>
<td>Health</td>
</tr>
<tr>
<td>N</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>Environment</td>
<td>Health</td>
</tr>
</tbody>
</table>

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

Table 2 showed the summary of the relationship between independent variables (environment consciousness, perceived consumer effectiveness, health consciousness and social influence) to the dependent variable (consumption patterns of green food). The value of the Pearson correlation discusses the positive relationship and generally significant between independent and dependent variables. The value range 0.330 to 0.663. Consumption patterns of green food shown positive signs with the reaction of the environment (r=0.549), perceived (r=0.663), health (r=0.516) and social (r=0.330).

Regression analysis is used in a model to get a response between independent and dependent variables. In addition, it also measures the strength between the variables (environment
consciousness, perceived consumer effectiveness, health consciousness and social influence) and determines which variable is more significant to consumption patterns of green food. The result of regression is as follows.

**Table 2**

Model summary analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.647&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.419</td>
<td>.413</td>
<td>.40493</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Mean Social Score, Mean Environment Score, Mean Health Score, Mean Perceived Score
b. Dependent Variable: Mean Consumption Score

The value of R-Squared ($R^2$) in this study is 0.42, means four variables (environment consciousness, perceived consumer effectiveness, health consciousness and social influence) can explain any variation in dependent variable (consumption patterns of green food) growth at 42%. Furthermore, the other 58% of the model is explained by other variables which are able to affect the consumption patterns of green food. Summary of results in hypothesis testing was described in Table 3 below:

**Table 3**

Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>HYPOTHESIS DESCRIPTION</th>
<th>SIGNIFICANT</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$ Environmental consciousness has a relationship with consumption patterns of green food</td>
<td>$p=0.000$</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_2$ Perceived consumer effectiveness has a relationship with consumption patterns of green food</td>
<td>$p=0.000$</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_3$ Health consciousness has a relationship with consumption patterns of green food</td>
<td>$p=0.000$</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_4$ Social influence has a relationship with consumption patterns of green food</td>
<td>$p=0.371$</td>
<td>Rejected</td>
</tr>
</tbody>
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**6. Conclusion**

Nowadays, the major environmental problem and the issue of varying risk. More and more organizations are producing the environmentally friendly products, especially food categorize to ensure the people have a good health and a good lifestyle. The variables like environment consciousness, perceived consumer effectiveness, health consciousness and social influence are the possible factor that influence consumption patterns of green food. Based on the past research, consuming of green food is different by country. 

Plus, previously it provides a complete view of literature as it comes from numerous studies. In the next research, it may propose the different model and framework for better outcomes. The results and analysis could help the manufacturer and marketer plus increase the sale of green food among the consumers. The marketers should formulate the marketing strategies to encourage people in consume green food. Therefore, the party must practice and develop the segmentation of green food in order to success in this business. In addition, the producer and marketer should focus on functional attributes, for example develop consumer in eco-green label, run campaigns of green awareness and benefits of using green products to consumers especially in the long term.

Although, the market of green food is still new to Malaysians, more effort should be carried out to introduce and spread the concept of green food consumption to Malaysians in general. This will
help for next research to enhance the quality of study and environmental friendly industry. Therefore, it’s absolutely to help and create awareness among young generation, especially the student for consuming green products, especially the food.

References


