



CONSUMER'S BUYING INTENTION TOWARDS FIBRE-FORTIFIED SNACK FOOD

NG MEI XIN SIRISA¹

WONG CHEE TENG²

NG KIM SOON³

INTI International University¹

Universiti Tun Hussein Onn Malaysia^{2,3}

sirisang@yahoo.com

cheeteng0115@gmail.com

ngksoon@gmail.com

Abstract

There is a growing trend of awareness of dietary fibre products that support a healthy diet and lifestyle. Fortification of food is about adding extra nutrients such as fibre to food products that are normally absent from the food itself. Although the demand and growth of the number of fortified food product is substantial and fast in Malaysia, the real factors that influence the consumer's buying intention towards the fortified food market in Malaysia is still lacking. Hence, this research has been carried out to identify factors that influence the consumer's buying intention towards fibre-fortified snack foods. This research uses a quantitative method by collecting data through the survey questionnaires. The respondents are the general public who visit the supermarket in Perak. A total of 384 respondents has been selected to response to the questionnaire using convenient sampling method. The data collected were analysed by using descriptive analysis, T-test and regression analysis. Results revealed that the identified factors affecting buying intention are health consciousness, availability, knowledge of fibre-fortified snack food and the subjective norm. All these factors significantly influence consumer's buying intention towards fibre-fortified snack food. On the other hand, perceived price is not a factor that influence consumer's buying intention towards fibre-fortified snack food. This research provides useful information and better understanding to various parties such as marketers and manufacturers. Overall, this research has achieved the objectives of the study in identifying the factors that influence consumer's buying intention towards fibre-fortified snack food.

Keywords: Buying Intention, Fortified Snack Food, Fibre, Theory of Reasoned Action

1.0 Introduction

In Malaysia, the demands of types and categories of fortified snack food products are growing rapidly creating a more diverse market segment and the need to explore the consumers' needs and want so that people had new options to try different products. The higher concern with the healthier food are also prompting manufacturers to produce successful new fortified snack food in the market.

Sethi et al. (2001) stated that the primary determinant that lead to product success is the product developed must be different from the competing alternatives that valued by customers. Novelty refers to the idea, concept and object that differs from the conventional practice within the domain of interest. There is a growing trend of awareness of dietary fibre products that support a healthy diet and lifestyle. According to Mustapha (2017), lack of fibre intake may cause chronic constipation which is the symptoms of colon cancer. This relates to the invention of fibre fortified snack food which in the form of ready to eat by fortifying the snacks with fibre which high nutritional value (Sayanjali et al., 2019).



Hartley et al. (2019) defined that snack foods are processed, nutrient-poor foods and energy-dense which not consumed during the main meals. Examples are chips, crackers and cookies. Nor et al. (2014) proved that fortification of foods is adding extra nutrients such as vitamins, calcium or fibre into food products that are normally absence from the food itself. The food products that fortified with nutritional value are aimed to promote better health and preventing chronic diseases.

Consumer behaviour refers to the ways customers choose, purchase and use the products and services in order to satisfy their needs and wants. It also meant the actions of customers in the marketplace and their underlying motives (Chand, 2018).

Today, the world population had a higher demand for nutritional value, the presence of functional ingredients, chemical composition and quality in food products. This is because unbalanced nutrition problem was faced due to the consumption of refined and purified products (Pyanikova et al., 2019).

Svisco et al. (2019) claimed that consume a huge number of ultra-processed food which involving less whole food ingredients and consists large number of artificial flavours, colours, sweeteners and preservatives will cause numerous negative impact to diet-related health diseases such as Type 2 Diabetes, cancer, obesity and cardiovascular diseases. Therefore, the products should be fortified with micronutrients which rich in protein, fibre, and vitamins. Gould et al. (2019) stated that it was relatively new for product developers to wrest with the complexity of sustainability. This complexity brought the impact of difficult decision-making condition.

Luo (2019) proposed that recently there have a high demand for snack foods as convenience items. This is because people found that they have insufficient time. There were many consumers expressing a desire for healthier snack foods which provide health benefits. In addition, consumers requested that the snack foods could maintain the texture and deliciousness after the snack products had been fortified. Thus, the fortified snack products produced must meet consumer expectations and acceptances.

Tabassum and Ozuem (2019) agreed that the development of successful new products were the most challenging yet critical tasks faced by managers. It was essential for a company to keep updated with technologies in order to facilitate the company's financial transactions. This is because the latest technology was circulated speedy which change the nature of the company. Based on Hoque et al. (2018), consumers had become more concerned about their health and highly educated. Hence, consumers chose the food products carefully by considering the food attributes and factors that acted as predictors when purchasing products. However, studies on factors influence consumers' buying intention towards fortified products were limited.

Rezai et al. (2017) indicated that consumer's satisfactory level and demand for food products had changed considerably. Besides that, the consumers who believe that food can directly affect their health and well-being have increased all around the world. Therefore, it was similarly being felt by the Malaysian consumers due to their preference towards consumer's food consumption patterns and lifestyle. Although the demand and growth of the number of fortified food product is substantial and fast in Malaysia, the real factors that influence the consumer's buying intention towards the fortified food market in Malaysia is still lacking.

The research question of this study is what are the factors that influence consumer's buying intention towards fibre-fortified snack foods? The research objective of this study is "To identify the factors that influence the consumer's buying intention towards fibre-fortified snack foods". The consumption of snacks food are increasing significantly in Malaysia. Hence, the development of fortified snack food was significance to Malaysian. This would increase the consumer's nutrition value and promote a healthy diet among consumers. For the researcher, this study provide information about the snack foods which is fibre fortified. Moreover, this research provides data that help the researcher



to gain more information about the perception and acceptance of the consumers towards fibre-fortified snack foods. This can help researcher to reduce the cost by testing a new idea and avoiding invest in failure ideas. For the marketer, the factors that influence the consumer's buying intention towards fibre-fortified snack foods was determined. Thus, the marketer can consider the most significant factor in order to understand more about the customer's needs and wants so that the sales of a particular product can be maximised. This study is essential for a company to target their segmented and potential customers. Therefore, hope that this study can assist the marketers to understand more about consumer's buying behaviour and purchase intention when making effective decision.

This study explain factors influence consumer's buying intention towards fibre-fortified snack foods. Fibre-fortified snack foods were investigated to increase consumer's nutrition value and prevent diet-related diseases. This research has used the quantitative method through the survey questionnaire. The respondents are the consumers who visit the supermarket in Perak.

2.0 Literature Review

The demand for functional food has increased in the developed economies because many people are looking ways to improve their healthy lifestyle. According to Marzena and Maria (2015), foods are not only satisfy human's hunger and provide nutrients that necessary for humans. The main types of functional foods are enhanced, enriched, altered as well as fortified food products. There are numerous components contained in food that provide benefits to human's health especially dietary fibres (Lau et al., 2012). Fibre is essential to human health in order to prevent the lifestyle diseases. Hence, the fibre content brought a strong effect on the consumer's perceptions of nutritional value and healthiness.

According to Fuller (2011), a new food product must be the product that is not presented and is new in the marketplace. Most of the new products had a similar look with the products produced by the competitors. For the company, a food product that company not sold it before, it is consider new, not necessary that it should be new in a marketplace. Generally, a successful company should own a deep and width of line extension of products. Line extension refers to a variety of established line of food products in a company as well as it indicates the extension of similar products. A new product of snack food that has been fibre fortified is known as high fibre products.

Past studies related to factors influencing consumer's buying intention is described in this section. Table 2.1 presents the summary of previous literature.

Table 2.1: Factors influencing consumer's buying intention

Authors	Factors influencing consumer's buying intention
Singh and Verma (2017)	✓ Socio demographic factor
	✓ Health consciousness
	✓ Subjective norms
	✓ Availability
	✓ Knowledge of fortified food
	✓ Perceived Price
Al-Swidi et al. (2014)	✓ Subjective norms
	✓ Attitude
Tarkiainen and Sundqvist (2005)	✓ Subjective norms
	✓ Attitude
	✓ Availability
	✓ Perceived Price
Michaelidou and Hassan (2008)	✓ Health Consciousness
Paul and Rana (2012)	✓ Health Consciousness
Urala and Lähteenmäki (2007)	✓ Attitude
Marzena (2015)	✓ Socio demographic factor
Ong et al. (2014)	✓ Socio demographic factor



	✓ Knowledge of fortified food
Ljubicic et al. (2017)	✓ Socio demographic factor

Characteristic such as gender, age, education level, geographical area as well as income were considered as the socio demographic. Research revealed that socio demographic characteristics were the factors that influence the consumer's buying intention (Singh and Verma, 2017). Marzena (2015) reported that no matter what the products were, women have a higher willingness to eat the products than men. In addition, the location of the residents has influence the intention of consumers purchasing the products that had been fortified with fibre. Medium-size cities residents indicated lower intention to purchase food products that enriched with the fibre compared to residents from villages and small town. Moreover, results showed that respondents with lower education level expressed lower intention to purchase fibre-fortified food products than respondents who had a higher education level.

Kim and Chung (2011) elaborated health consciousness as a guideline for people to engage themselves in healthy behaviours. The consumer who is health conscious would care about their health well-being as well as have the desire to put more effort to maintain a healthy lifestyle. In addition, health consciousness only plays a small role when shaping the consumer's attitude towards buying intention (Michaelidou and Hassan, 2008). The regression analysis shown that health consciousness had influence consumer's attitudes towards buying intention (Singh and Verma, 2017). Apart from that, the hypothesis that tested by Ong et al. (2014) revealed that health consciousness would moderate the relationship between the consumer's buying intention.

According to Vermeir and Verbeke (2006), availability of the products was the essential determinants for consumer's buying intention. It meant by the difficulty or the ease to obtain the product. The increasing of products marketing have brought a positive effect which eases the accessible of the products to all consumers (Paul and Rana, 2012). The regression analysis showed that availability affect the consumer's buying intention was supported. Based on Tarkiainen and Sundqvist (2005), the availability of fortified products had no effect on the consumer's buying intention. This is because availability does not influence consumer's purchasing decision.

Price perception enclose with consumer's sense of a product price as right versus wrong. This perception affects numerous marketplace factors such as willingness to pay, willingness to engage with the firm and intentions. Generally, the price of fortified foods relative higher compared to normal foods. It would be difficulties for low income consumers to purchase fortified food products (Tarkiainen and Sundqvist, 2005). Previous study illustrated that the regression analysis done by Singh and Verma (2017) revealed that perceived price influences consumer's attitude was supported.

The existing knowledge could explain and give the predictability to meet human needs. There are many influences such as the people we mix with, experiences, beliefs as well as the people we desire to be. Knowledge of nutrition and nutrients defined as nutrition knowledge. In general, consumers define nutrition as food that include much more nutrients compared to normal food products. According to Singh and Verma (2017), results indicated that the consumer's knowledge had a positive influence on their attitude towards buying intention.

Based on Ajzen (1991), there is a wide definition of the subjective norm. Subjective norm means perceived social pressure whether to perform the consumer's behaviour. In addition, subjective norm refers to a person's belief and think whether to perform the buying behaviour (Lada et al, 2009). Apart from that, Tarkiainen and Sundqvist (2005) had conducted a research revealed that there were significant relationship between subjective norm and buying intention. According to Singh and Verma (2017), the study confirmed that the regression analysis revealed that subjective norm is supported.



Purchase intention refers to the intention of an individual engage in a certain behaviour (Al-Swidi et al., 2014). According to Tarkiainen and Sundqvist (2005), the theory of reasoned action (TRA) and the theory of planned behaviour (TPB) were applied in the consumer's buying intention. TRA was frequently used in the domain of food choice and in forecasting a big variety of behaviour. Numerous previous studies had applied the theory of TRA in order to study the consumer's buying intentions (Al-Swidi et al., 2014).

The theory of reasoned action (TRA) which introduced by Ajzen and Fishbein in the year of 1967, was a model that widely used for the prediction of purchase intention and behaviour. This theory proposed the behaviour intentions, which meant the immediate prior to consumer behaviour. The main objectives of TRA was expressed the volitional behaviours (Jerold et al., 2009). Sheppard et al. (1988) proved that this theory helped to identify the target consumer's behavioural by providing a simple basis. Base on Theory of reasoned action (TRA), consumer behaviour was determined by the consumer intention to perform the behaviour. There were two factors that influenced buying intention which were attitude and subjective norm. Ajzen and Fishbein claimed that attitude referred to a person's feeling of favourable or unfavourable toward behaviour.

3.0 Research Framework and Methodology

The research framework formulated for this study is shown in figure 2.1.

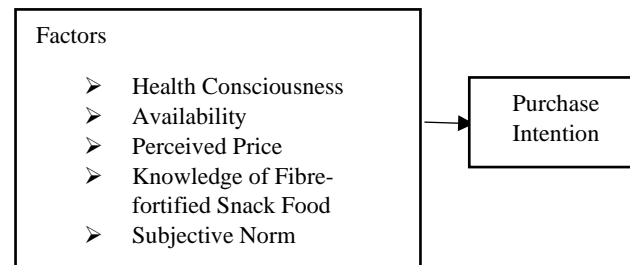


Figure 2.1: Research Framework

The hypothesis formulated for this study were:

H1: Health consciousness factor significantly influence consumer's buying intention towards fibre-fortified snack food.

H2: Availability factor significantly influence consumer's buying intention towards fibre-fortified snack food.

H3: Perceived price factor significantly influence consumer's buying intention towards fibre-fortified snack food.

H4: Consumer's knowledge of fibre-fortified snack food factor significantly influence consumer's buying intention.

H5: Subjective norm factor significantly influence consumer's buying intention towards fibre-fortified snack food.



The main function of research design is to make sure that data collected allowed the research problem addressed effectively and efficiency (Labaree, 2010). Descriptive research was research that presents a quantitative or qualitative picture of an activity. It involved the collections of quantitative information and data which allowed tabulated and described the information collected.

Perak is the fourth-largest states in Malaysia. Ipoh is the capital city of Perak. The general publics who visit the supermarket in Ipoh, Perak were targeted in this research. According to the Department of Statistics Malaysia (2018), there is a total 673,318 of population in Ipoh. Based on the table of determining sample size for a given population by Krejcie and Morgan (1970), there are a total of 384 respondents will be selected randomly to response the survey questionnaires as the representative for the whole population.

Instrument that used to collect the data was survey questionnaires. This is because questionnaires allow a huge number of respondents to give their responds and answers easily and economically. Furthermore, questionnaires provide quantifiable answers which ease researcher to analyse the research. In section A, respondents are required to tick the answer for each question given by using the nominal scale. From section B to section C, respondents are required to tick the answer by giving their opinion base on the 5 point Likert scales.

Pilot test used to test the data collection methods, research techniques and sample recruitment strategies. It is the most vital stages in research. Pilot test was conducted to determine the problem that potential occurs and deficiencies in the research instruments (Hassan et al., 2006). Besides that, the main objectives of implementing pilot test is to make sure that respondents understand each question in the questionnaires. An effective pilot test must revealed a value that exceed 0.7.

The Statistical Package for Social Sciences (SPSS) was implement to analyse the data and information collected. The data collected were transferred into SPSS. Descriptive analysis is the most frequently used to present a quantitative analysis of data. Normally, there are numerous variables that required to measure. Hence, descriptive analysis has the ability to break the data into a simple form. This assist researcher to reduce the time taken for the research.

T-test is the type of inferential statistics. T-test was applied to identify the significant difference between the means of two groups. The difference between two means were considered significant. The larger the difference between two means, the greater the difference between significant means. Besides that, sample size is extremely essential when determining the significant difference between means. T-test has two assumptions where the sample should randomly draw from the populations and the scores in the population should be normally distributed (Del Siegle, 2016).

Regression analysis defined as a simple method to investigate the functional relationship among the variables. The relationship was elaborated in a model which connect both dependent variables and independent variables. In addition, there are several applications in regression analysis. The most effective and efficient method and statistical tools to analyse the data was regression analysis (Chatterjee and Hadi, 2012).

4.0 Data Analysis

There were 384 set of questionnaires distributed to the respondents who visited a supermarket in Ipoh, Perak. Table 4.1 shows that only 371 sets of questionnaires were returned from the respondents which constituted a sum of 96.61% of the response rate.

Table 4.1: Questionnaire Response Rate

Description	Total
1. Sample Size	384
2. Questionnaire Distributed	384



3. Questionnaire Returned	371
4. Percentage	96.61%

Table 4.2 illustrates that there were 137 male and 234 female which take 36.9% and 63.1% respectively. Next, respondents who age 29-38 had the highest frequency which was 149 with a percentage of 40.2%. A total of 4 respondents who age were higher than 59 was the lowest which represent by 1.1%. Respondents who were married had the highest frequency which was 205 with a percentage of 55.3% while a total of 8 respondents who were divorce was the lowest which represent 2.2%.

Besides that, respondents who were Malay had the highest frequency which was 148 with a percentage of 39.9%. On the other hand, a total of 86 respondents who were Indian was the lowest which represent 23.2%. Furthermore, respondents who work in the private sector had the highest frequency which was 134 with a percentage of 36.1%. On the other hand, there were 53 respondents who were self-employed which same as 14.3%. A total of 23 respondents who work were others was the lowest which represent by 6.2%.

Apart from that, respondents whose education level were degree/diploma had the highest frequency which was 225 with a percentage of 60.6%. A total of 6 respondents whose education level were post graduate degree (Master/PhD) was the lowest which represent by 1.6%. In addition, respondents whose monthly income in the range of RM1501-RM3000 had the highest frequency which was 157 with a percentage of 42.3%. A total of 21 respondents whose monthly income higher than RM5000 was the lowest which represent by 5.7%.

Table 4.2: Profile of Respondents

	Demographic	Category	Frequency	Percentage (%)
1	Gender	Male	137	36.9
		Female	234	63.1
2	Age	18-28	86	23.2
		29-38	149	40.2
		39-48	104	28.0
		49-58	28	7.5
		>59	4	1.1
3	Marital Status	Single	158	42.6
		Married	205	55.3
		Divorce	8	2.2
4	Race	Malay	148	39.9
		Chinese	137	36.9
		Indian	86	23.2
5	Occupation	Self-employed	53	14.3
		Unemployed	62	16.7
		Public Sector	99	26.7
		Private Sector	134	36.1
		Others	23	6.2
6	Education Level	Secondary/Vocational School	140	37.7
		Degree/Diploma	225	60.6
		Post Graduate Degree (Master/PhD)	6	1.6
7	Monthly Income	≤ RM1,500	126	34.0
		RM1,501-RM3,000	157	42.3
		RM3,001-RM4,999	67	18.1
		≥ RM5,000	21	5.7



Table 4.3 shows the Cronbach's Alpha coefficient for health consciousness was 0.901, availability was 0.860 and the perceived price was 0.898. Besides that, the Cronbach's Alpha coefficient for the knowledge of fibre-fortified snack food and the subjective norm was 0.910 and 0.946 respectively. In addition, the Cronbach's Alpha coefficient for purchase intention was 0.954. Last but not least, the Cronbach's Alpha coefficient for overall attributes was 0.954. Therefore, all of the variables for this research were reliable.

Table 4.3: Reliability Test

No.	Variables	Number of Items	Cronbach's Alpha
1.	Health Consciousness	4	0.901
2.	Availability	2	0.860
3.	Perceived Price	2	0.898
4.	Knowledge of Fire-fortified Snack Food	3	0.910
5.	Subjective Norm	4	0.946
6.	Purchase Intention	5	0.954
7.	Overall Attributes	15	0.961

Descriptive analysis is the most frequently used method to present a quantitative analysis of data. Normally, there are numerous variables that are required to measure. Hence, descriptive analysis has the ability to break data into simple form. Central of Tendency was used where 1.00-2.33 = low, 2.34-3.66 = medium while 3.67-5.00 = high.

The result on health consciousness statements is tabulated in Table 4.4. The statement which had the highest mean was I am prepared to eat as healthy as possible with a mean score value of 3.644. On the other hand, the statement which had the lowest mean was fibre-fortified snack food contains more nutritional value with a mean score value of 3.267.

Table 4.4: Health Consciousness

No.	Health Consciousness	Mean	Scale
1.	Fibre-fortified snack food contain more nutritional value.	3.267	Medium
2.	I am concerned about the types and the amount of nutrition in the food that consume daily.	3.410	Medium
3.	Fibre-fortified snack food is good to ensure our health.	3.391	Medium
4.	I am prepared to eat as healthy as possible.	3.644	Medium
	Average	3.428	Medium

The result about availability statements is tabulated in Table 4.5. The statement which had the highest mean was fibre-fortified snack food is available through online with a mean score value of 3.364. On the other hand, the statement which had the lowest mean was fibre-fortified snack food is easy to obtain in market with a mean score value of 3.291.

Table 4.5: Availability

No.	Availability	Mean	Scale
1.	Fibre-fortified snack food is easy to obtain in market.	3.291	Medium
2.	Fibre-fortified snack food is available through online.	3.364	Medium
	Average	3.328	Medium

The result about perceived price statements is tabulated in Table 4.6. The statement which had the highest mean was price of fibre-fortified snack food is relative higher with a mean score value of 3.544. On the other hand, statement which had the lowest mean was the price of fibre-fortified snack food is accordance with its benefits with a mean score value of 3.453.



Table 4.6: Perceived Price

No.	Perceived Price	Mean	Scale
1.	Price of fibre-fortified snack food is relative higher.	3.544	Medium
2.	The price of fibre-fortified snack food is accordance with its benefits.	3.453	Medium
	Average	3.499	Medium

4.4.4 Knowledge of Fibre-fortified Snack Food

The result about knowledge of fibre-fortified food statements is tabulated in Table 4.7. The statement which had the highest mean was I know that fibre-fortified snack food are healthier to consume with a mean score value of 3.434. On the other hand, statement which had the lowest mean was I know that the process of fibre-fortified snack food with a mean score value of 2.992.

Table 4.7: Knowledge of Fibre-fortified Snack Food

No.	Knowledge of Fibre-fortified Snack Food	Mean	Scale
1.	I know that fibre-fortified snack food is more nutritional.	3.415	Medium
2.	I know that the process of fibre-fortified snack food.	2.992	Medium
3.	I know that fibre-fortified snack food are healthier to consume.	3.434	Medium
	Average	3.280	Medium

Table 4.8 tabulates the result about subjective norm statements. The statement which had the highest mean was the trend of purchasing fibre-fortified snack food among people around me is increasing with a mean score value of 3.129. On the other hand, there were two statements which had the lowest mean which were people around me expect me to purchase more fibre-fortified snack food for them and many people around me persuade me to buy fibre-fortified snack food in order to live healthier with a mean score value of 3.073.

Table 4.8: Subjective Norm

No.	Subjective Norm	Mean	Scale
1.	The trend of purchasing fibre-fortified snack food among people around me is increasing.	3.129	Medium
2.	People around me expect me to purchase more fibre-fortified snack food for them.	3.073	Medium
3.	Many people around me persuade me to buy fibre-fortified snack food in order to live healthier.	3.073	Medium
4.	My close friends and family members would appreciate if I buy fibre-fortified snack food.	3.121	Medium
	Average	3.1	Medium

The result on level of purchase intention is tabulated in Table 4.9. The statement which had the highest mean was I intend to purchase fibre-fortified snack food because they are more concern about the food quality with a mean score value of 3.391. On the other hand, statement which had the lowest mean was I intend to look for fibre-fortified snack food although outside the supermarket with a mean score value of 3.005.

Table 4.9: Level of Purchase Intention

No.	Level of Purchase Intention	Mean	Scale
1.	I plan to consume fibre-fortified snack food in the future.	3.310	Medium
2.	I intend to purchase fibre-fortified snack food for my long term health benefits.	3.353	Medium
3.	I intend to purchase fibre-fortified snack food because they are more concern about the food quality.	3.391	Medium



4.	I intend to purchase more fibre-fortified snack food for family and friend's needs.	3.097	Medium
5.	I intend to look for fibre-fortified snack food although outside the supermarket.	3.005	Medium
	Average	3.231	Medium

The T-test results conducted on gender in Table 4.10 indicate whether there is significant different between the variables under study. It reveals that differences between gender did not influenced health consciousness, availability, perceived price, and knowledge of fibre-fortified snack food, subjective norm as well as the purchase intention towards fibre-fortified snack food.

Table 4.10: T Test of Difference between Male and Female

Variables	F Value	Significant Value
Health Consciousness	1.875	0.172
Availability	0.022	0.880
Perceived Price	1.711	0.192
Knowledge of Fibre-fortified Snack Food	0.403	0.526
Subjective Norm	0.005	0.945
Purchase Intention	0.016	0.901

Table 4.11 reveals that differences between the groups of age did not influenced health consciousness, availability, perceived price, and knowledge of fibre-fortified snack food, subjective norm as well as the purchase intention towards fibre-fortified snack food.

Table 4.11: Anova Test: The Effect of Age on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	0.071	0.991
Availability	0.443	0.778
Perceived Price	0.643	0.632
Knowledge of Fibre-fortified Snack Food	0.044	0.996
Subjective Norm	0.135	0.969
Purchase Intention	0.558	0.693

Table 4.12 reveals that differences between marital statuses did not influenced health consciousness, availability, perceived price, knowledge of fibre-fortified snack food, subjective norm and the purchase intention towards fibre-fortified snack food.

Table 4.12: Anova Test: The Effect of Marital Status on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	0.458	0.663
Availability	0.743	0.477
Perceived Price	0.927	0.396
Knowledge of Fibre-fortified Snack Food	1.352	0.260
Subjective Norm	0.847	0.430
Purchase Intention	0.603	0.548

Table 4.13 reveals that differences between races had influenced on the availability towards fibre-fortified snack food where the significant value was 0.042. In addition, differences between races



also had influenced on the purchase intention towards fibre-fortified snack food where the significant value was 0.005.

Table 4.13: Anova Test: The Effect of Race on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	1.684	0.187
Availability	3.208	0.042
Perceived Price	2.905	0.125
Knowledge of Fibre-fortified Snack Food	0.817	0.443
Subjective Norm	2.366	0.095
Purchase Intention	5.364	0.005

Table 4.14 reveals that differences between occupations did not influenced health consciousness, availability, perceived price, knowledge of fibre-fortified snack food, subjective norm and the purchase intention towards fibre-fortified snack food.

Table 4.14: Anova Test: The Effect of Occupation on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	0.417	0.796
Availability	0.266	0.900
Perceived Price	0.885	0.473
Knowledge of Fibre-fortified Snack Food	0.404	0.806
Subjective Norm	0.036	0.998
Purchase Intention	0.367	0.832

Table 4.15 reveals that differences between education levels had influenced on the health consciousness towards fibre-fortified snack food where the significant value was 0.004. In addition, differences in education level also had influenced on knowledge of fibre-fortified snack food towards the buying intention of fibre-fortified snack food where the significant value was 0.026. Furthermore, differences in education level also influenced the purchase intention towards fibre-fortified snack food where the significant value was 0.001.

Table 4.15: Anova Test: The Effect of Education Level on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	5.504	0.004
Availability	1.137	0.322
Perceived Price	0.731	0.482
Knowledge of Fibre-fortified Snack Food	3.674	0.026
Subjective Norm	1.752	0.175
Purchase Intention	7.723	0.001

Table 4.16 reveals that differences between monthly incomes had influenced on health consciousness towards fibre-fortified snack food where the significant value was 0.022. In addition, differences in monthly income also had influenced on knowledge of fibre-fortified snack food towards the purchase intention of fibre-fortified snack food where the significant value was 0.045.

Table 4.16: Anova Test: The Effect of Monthly Income on the Variables Studied

Variables	F Value	Significant Value
Health Consciousness	3.250	0.022
Availability	0.136	0.938



Perceived Price	1.943	0.122
Knowledge of Fibre-fortified Snack Food	2.703	0.045
Subjective Norm	1.385	0.247
Purchase Intention	2.247	0.082

The acceptable value of kurtosis in order to prove normal distribution is between -2 and 2 (GoodData Documentation, 2007). Based on Table 4.17, the Kurtosis value was in the range from -0.726 to -1.148. Thus, all variables were normally distributed.

Table 4.17: Normality Test

	Mean	Std. Deviation	Kurtosis	
Health Consciousness	3.428	1.133	-.737	.253
Availability	3.328	1.168	-.869	.253
Perceived Price	3.499	1.224	-.726	.253
Knowledge of Fibre-fortified Snack Food	3.280	1.204	-.996	.253
Subjective Norm	3.1	1.213	-1.143	.253
Purchase Intention	3.231	1.228	-1.148	.253

Table 4.18 reviews that health consciousness, availability, perceived price, knowledge of fibre-fortified snack food and subjective norm had a strong relationship with the level of purchase intention where the value were 0.720, 0.694, 0.699, 0.797, 0.799 respectively and is significant at $p \leq 0.01$.

Table 4.18: Pearson Correlation Analysis

No.	Variables	Purchase Intention
1.	Health Consciousness	.720**
2.	Availability	.694**
3.	Perceived Price	.699**
4.	Knowledge of Fibre-fortified Snack Food	.797**
5.	Subjective Norm	.799**

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

Table 4.19 explains that health consciousness, availability, perceived price, knowledge of fibre-fortified snack food and subjective norm had the significant relationship with consumer's purchase intention where the beta coefficient were 0.164, 0.134, 0.072, 0.242 and 0.362 respectively. Beta coefficient which is positive indicates that every one unit increase in the predictor variable would affect the outcome variable increase by the beta coefficient value.

Besides that, health consciousness, availability, knowledge of fibre-fortified snack food and subjective norm were the factors significantly influence consumer's buying intention towards fibre-fortified snack food where the significance value was $p \leq 0.001$. On the other hand, perceived price was not the factor significantly influenced consumer's buying intention towards fibre-fortified snack food.

Table 4.19: Coefficients of Regression Analysis

No	Variables	Beta Coefficients	Significant Value
1.	Health Consciousness	0.164	0.000
2.	Availability	0.134	0.002
3.	Perceived Price	0.072	0.108
4.	Knowledge of Fibre-fortified Snack Food	0.242	0.000



5.	Subjective Norm	0.362	0.000
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5.0 Discussion, Suggestions and Conclusion

This research aimed to answer the objective of this research which is to identify the factors that influence consumer's buying intention towards fibre-fortified snack food. There were several factors to be identified.

Results revealed that the average mean of health consciousness was 3.428. In addition, health consciousness had a strong relationship with the level of purchase intention where the value was 0.720. This is because for those consumer who are health conscious, they would concern about their health well-being and the desire to put more effort to maintain a healthy lifestyle. This is because fortified food was healthy where most of the consumers perceived it was benefits to their health (Tarkiainen and Sundqvist, 2005). In addition, findings showed that health consciousness factor significantly influenced consumer's buying intention towards fibre-fortified snack food. Previous study reported from Paul and Rana (2012) illustrated that most of the respondents agreed that health content on food products play an important role when making a purchasing decision.

The average mean of availability was 3.328. Furthermore, availability had a strong relationship with the level of purchase intention where the value was 0.694. It meant the difficulty or the ease to obtain the product. Hence, the increasing of products marketing have brought a positive effect to consumers which ease the access of the products (Paul and Rana, 2012). Moreover, analysis revealed that availability factor significantly influenced consumer's buying intention towards fibre-fortified snack food. The hierarchical multiple regression that conducted revealed that the relationship between the availability positively influenced the consumer's attitudes towards buying intention was mentioned (Singh and Verma, 2017).

Results revealed that the average mean of perceived price was 3.499. Besides that, perceived price had a strong relationship with the level of purchase intention where the value was 0.699. Generally, the price of fortified foods relative higher compared to normal foods. Therefore, this is the reason that cause consumers not purchasing fortified food. This can be shown clearly especially for those low-income consumers. Furthermore, results revealed that perceived price was not the factor significantly influenced consumer's buying intention towards fibre-fortified snack food. Besides that, Tarkiainen and Sundqvist (2005) proposed that perceived price have no influences on consumer's buying intention. This is because the price of fortified food would directly influence the consumer actual buying behaviours, not the buying intention.

Results revealed that the average mean of knowledge of fibre-fortified snack food was 3.280. Moreover, knowledge of fibre-fortified snack food had a strong relationship with the level of purchase intention where the value was 0.797. People who high educated rather make the buying decision for high nutrient food in order to increase the fibre consumption. Therefore, a high nutrient value of food products allow consumers shop effectively for the fortified food that enriched with fibre (Ljubicic et al., 2017). Besides that, analysis revealed that the consumer's knowledge of fibre-fortified snack food factor significantly influenced consumer's buying intention. As stated from previous study, knowledge of fibre-fortified snack food was significant in influencing the consumer's buying intention. Furthermore, previous study illustrated that there was a positive relationship between the knowledge of healthy food and the consumer's attitudes towards buying intention (Ong et al., 2014).

Results revealed that the average mean of subjective norm was 3.1. Apart from that, the subjective norm had a strong relationship with the level of purchase intention where the value was 0.799. Subjective norm refers to a person's belief whether to perform the buying behaviour (Lada et al, 2009). Subjective norm has the ability to affect the consumer's buying intention which consists of behaviours, ethical and health concern. In addition, findings showed that subjective norm factor significantly



influenced consumer's buying intention towards fibre-fortified snack food. Previous study done by Al-Swidi et al. (2014) claimed that subjective norms had a positive effect on the consumer's buying intention as well as on the attitude towards consumer's buying intention.

This research provided a better understanding and useful information to various parties. For marketers, this research had identified the factors that influence the consumer's buying intention towards fibre-fortified snack foods. Thus, the marketer can consider the significant factor in order to understand more about the customer's needs and wants. This would maximised the sales of a particular product. In addition, this study assisted the marketers to gain more information about consumer's buying behaviour and purchase intention when making effective decision.

For consumers, this research provided knowledge about fortified food to consumers who concern about their health benefits. For organization, organization could gain information about the perception and acceptance of the consumers towards the fibre-fortified snack foods. This helped organization to reduce cost by testing new idea and minimise failure investment.

In this research, researchers suggest this research should include respondents from all states in Malaysia. Moreover, a multilingual questionnaire such as Malay, Chinese and Tamil should be prepared in order to avoid the misunderstanding towards the questionnaires. For future, this research should increase the independent variables to enhance the result. Additional variables would create more accurate research results and findings. In addition, researcher suggests using both quantitative and qualitative method to achieve the research objective.

Research was conducted to have a better understanding of factors that influences consumer's buying intention towards fibre-fortified snack food. Overall, this research had achieved the objectives of the study which was identifies the factors that influence consumer's buying intention towards fibre-fortified snack food. Analysis such as descriptive analysis, correlation analysis, normality test, regression analysis and t-test had been done in this research. The contributions of this research has provide a better understanding and useful information to various parties such as marketers and manufacturer.

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