

## *The Influence of Attitude on Intention to Purchase Online Healthy Food*

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### ABSTRACT

There has been significant growth in the online food services sector in the past few years. Online food services allow consumers to view menus from different restaurants, place their order, and get food delivered to their doorstep. Nowadays, eating nutritious food has become a key element in achieving holistic health and wellness. In acknowledgement of the value of a health-conscious consumer, restaurateurs and food service companies have introduced a new business concept called online healthy food services. This study aimed to investigate the effect of consumers' attitude on the intention to purchase online healthy food. Data were gathered via survey questionnaires involving 227 respondents from Penang. Findings show that attitude has a positive influence on consumers' intention to purchase online healthy food.

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## 1 INTRODUCTION

In the Southeast Asian region, non-communicable diseases (NCDs), such as cardiovascular diseases, chronic respiratory diseases, diabetes and cancer, are the leading causes of mortality, with approximately 8.5 million deaths each year (Castillo-Carandang et al., 2020). Malaysia's Department of Statistics (2020) reported that ischemic heart disease is the main cause of death in Malaysia, with 16,325 deaths recorded in 2019.

Cases involving ischemic heart disease have increased gradually throughout the years. Consumption of unhealthy food on a regular basis can lead to an increased risk of obesity. Malaysia has the greatest number of obese people in Southeast Asia according to the World Population Review in 2019 (Said, 2020). In addition, alarmingly almost half of Malaysian adults are classified as being overweight or obese. The growing number of chronic diseases in Malaysia is of great concern; thus, prompt action needs to be taken to curb this situation. Figure 1 below illustrates the number of deaths due

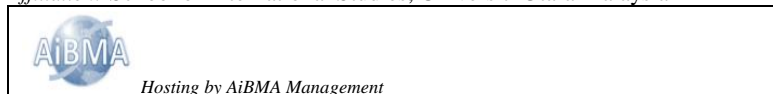
to ischemic heart disease in Malaysia from 2010 to 2019, whereas Figure 2 shows the statistics for obesity in South East Asia for the year 2019. Consumers in Malaysia have started to realise that health problems caused by excessive food consumption can be prevented and reduced through good eating habits.

A survey conducted by Food Industry Asia (FIA) and a research firm called IGD in 2019 discovered that most Malaysians were enthusiastic in achieving optimum health and fitness by consuming a balanced diet (The Sun Daily, 2019, May 16). Due to the rise in chronic diseases and obesity rates, consumers should avoid consuming foods that contain significant number of calories, fat, sugar, and sodium. In order to cope with changes in consumer needs and requirements, many restaurants and food service companies have started to incorporate organic, nutritious, and healthier meals into their menus.

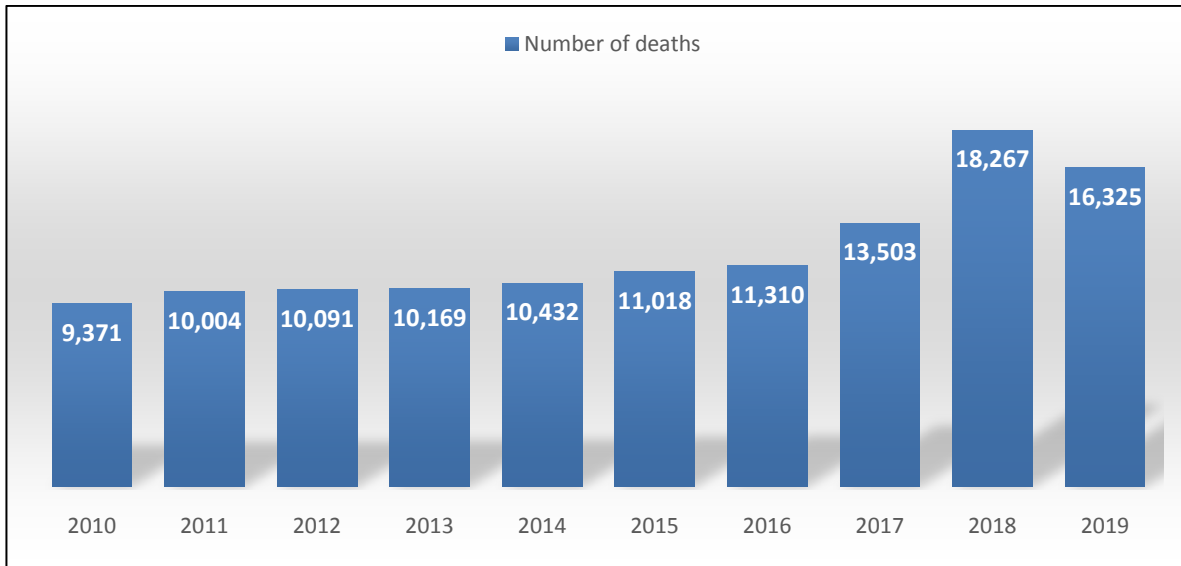
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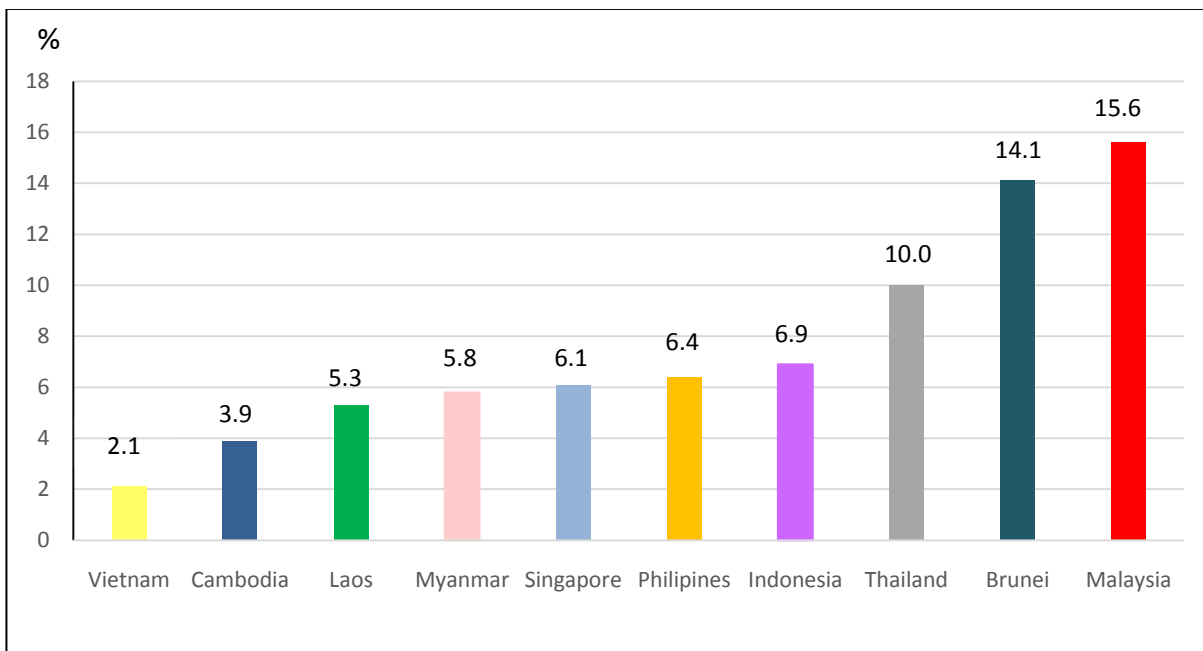


**Figure 1**  
Number of deaths due to ischemic heart disease in Malaysia from 2010 to 2019



Source: Department of Statistics Malaysia (2020)

**Figure 2**  
Obesity in ASEAN



Source: World Population Review (2019)

Online healthy food service is gaining popularity in Malaysia in tandem with evolving lifestyles and eating habits. According to Nair (2015), most healthy food providers are using online platforms to target urbanites with hectic schedules. Online healthy food service enables customers to enjoy quality meals without having to leave their home or office. Online healthy food business is still at its infancy and the number of organisations venturing in this type of business

is small. Currently, healthy food services in Malaysia can be found in big cities, such as Kuala Lumpur, Penang, and Johor Bahru. Among the popular online healthy food services in Malaysia are Dahmakan, Dietmonsta, Epic Fit Meals Co, The Naked Lunchbox, Health and Fitness Kitchen, Dietlicious, MamaDiet, and EatFit. In an attempt to explain consumer purchase behaviour, extensive studies have been conducted to investigate factors that drive consumers' intention to purchase

organic food (Hsu, Chan & Ling, 2016; Ling & Ang, 2018; Wang et al., 2019), ready-to-eat food (Baskaran et al., 2017), and functional foods (Nguyen et al., 2019). However, research on online healthy food purchasing behaviour has not been undertaken.

Previous studies have discussed several factors that influence consumer purchasing decision, and attitude is one of the factors. Suki and Suki (2011) and Felix and Braunsberger (2016) emphasised that purchasing decisions are most likely to be influenced by customers’ attitudes. The decision to purchase food products is often based on attitude. Honkanen, Verplanken and Olsen (2006) asserted that attitude is an important antecedent and predictor that helps explain consumers’ choices across products and services, including food products.

Previous findings have affirmed that attitude is an important construct for predicting consumers’ intention to purchase green packaged food (Zakersalehi & Zakersalehi, 2012), and organic foods (Chen, 2007; Irianto, 2015; Ueasangkomsate & Santiteeraku, 2016). Lack of studies that have investigated the relationship between attitude and online healthy food is evident. Hence, the current study aimed to further investigate whether attitude plays an important role in influencing the intention of Malaysian consumers to purchase online healthy food .

**2 LITERATURE REVIEW**

**Theory of Reasoned Action (TRA)**

The Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980) is one of the most prominent theories that explain individuals’ purchasing behaviour. The Theory of Reasoned

Action is based on the assumption that a person’s intention to undertake a certain behaviour is based on two important determinants, namely attitude and subjective norms.

Attitude refers to “an individual’s general positive or negative assessment of executing a behaviour” (Fishbein & Ajzen, 1975). With regards to purchasing food, scholars found that attitude is a predictor of the intention to purchase organic foods (Ueasangkomsate & Santiteeraku, 2016; Scalco et al., 2017), functional foods (Bakti et al., 2020), and green products (Hartmann & Apaolaza-Ibanez, 2012; Arli et al., 2018).

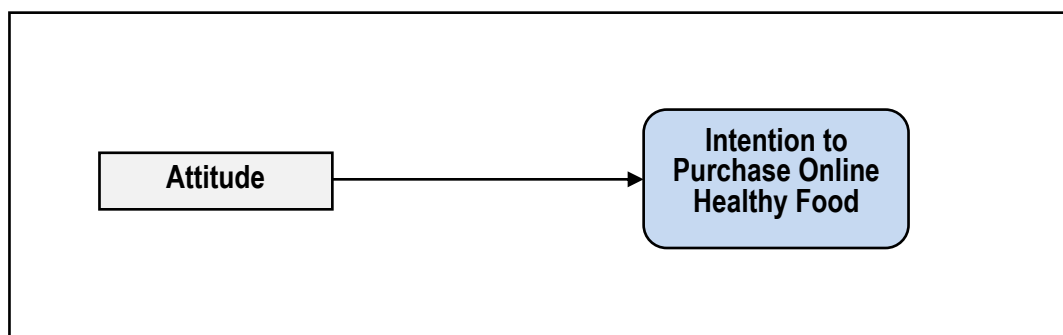
The outcome provides strong evidence that attitude plays a major role in determining the intention to purchase organic and healthy foods. However, it is yet to determine whether attitude plays a major role in influencing online healthy food. Attitude depends on consumers’ preferences and evaluation of a product (Solomon, 2020). In addition, Yean, Johari and Sukery (2015) asserted that attitude towards behaviour is reflected by the evaluation of behaviour together with its expected outcomes.

Online healthy food is perceived as fresher, more nutritious, and healthier compared to conventional food. Consumers also believe that eating healthy food can help them attain optimal health and reduce risk of chronic diseases. Hence, it is predicted that consumers’ positive attitudes towards the consumption of online healthy food will drive their intentions to purchase such products. Thus, it is hypothesised that:

*H<sub>1</sub>: Attitude has a positive influence on consumers’ intention to purchase online healthy food.*

This study’s research framework is presented in Figure 3.

**Figure 3**  
Research Framework



**3 METHODOLOGY**

**Sample and data collection**

This study employed the quantitative research method where primary data were collected via survey questionnaires. Data were gathered from a sample population of consumers in Penang, Malaysia who were selected by using the convenience sampling method.

Questionnaires were randomly distributed to the respondents in office areas, malls, grocery stores, restaurants, schools, colleges, and public areas in seven towns, namely Gelugor, Sungai Ara, Sungai Nibong, Seberang Perai, Sungai Dua, Tanjung Bungah, and Jelutong.

A total of 400 questionnaires were distributed to respondents, and 268 questionnaires were returned, providing a response rate of 67.0 percent. After the responses were screened, 227 admissible questionnaires underwent further analysis. Data were collected within a three-month period.

**Measures**

This study adapted the scales introduced by Wang et al. (2013) to measure “attitude” (four items) and “intention to purchase” (three items). All the items were measured on a

seven-point Likert Scale with response categories ranging from 7 (Strongly agree) to 1 (Strongly disagree).

**4 FINDINGS**

This study used the Statistical Package for the Social Sciences (SPSS) software to analyse data and examine the hypothetical associations between the constructs in the proposed model.

**Reliability Test**

Cronbach’s alpha was utilised for assessing the reliability or internal consistency of a measurement scale. A Cronbach’s Alpha value of 0.7 and above proposed by Nunnally (1978) was used as the cut-off value when determining the instrumentation reliability.

**Table 1**  
Reliability Test Results

Constructs	Cronbach Alpha Statistics	N of Items
Attitude	4	0.920
Purchase Intention	3	0.919

The reliability of the scale was adequate as the Cronbach’s alpha values for all variables exceeded the suggested Cronbach’s alpha value of 0.7.

**Test for Determining Sampling Adequacy (Kaiser–Meyer–Olkin Test)**

Sampling adequacy was determined by using the Kaiser-Meyer-Olkin (KMO) test. The test measures the data’s suitability for factor analysis. The test measures sampling adequacy for each variable in the model. The KMO value should be ≥ 0.50 before proceeding with the factor analysis (Tabachnick & Fidell, 2013).

**Table 2**  
Kaiser-Meyer-Olkin Measure of Sampling Adequacy for the Main Variables

Construct(s)	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett’s Test of Sphericity		
		Approx. Chi-Square	Df	Sig.
Attitude	.844	706.030	6	0
Purchase Intention	.730	529.134	3	0

*Note: (\*) KMO value is above 0.50, significant at p<0.05*

As indicated in Table 2, the KMO values for all the variables are above 0.5, which confirms the adequacy of the sample.

**Hypothesis Testing**

For the one-tailed test, p<0.05 was used as a threshold for significance. The null hypothesis would be accepted if the T value is less than 1.65 and vice versa.

**Table 3**  
Hypotheses Testing

Hypotheses	Relationship	B	S.E	T	Sig	Results
H1	ATT> PI	.105	0.041	2.145	.033*	Supported

*(\*) Significant at p<0.05, at one-tailed T statistics value of 1.65. The ‘PI’ abbreviation refers to Purchase Intention; ‘ATT’ refers to attitude.*

As illustrated by Table 3, attitude (T=2.145) indicated a significant positive influence on purchase intention.

## 5 DISCUSSION

The results support the proposition that consumers' intention to purchase online healthy food is positively influenced by their attitude. Findings imply that consumers with positive attitudes are more apt at developing a stronger predisposition to purchase online healthy food. The results of the study were found to be consistent with prior studies by Ueasangkomsate and Santiteeraku (2016) and Scalco et al. (2017). Their study found that when consumer attitudes are more desirable, their intention to purchase organic foods become stronger. Health-conscious consumers will develop positive attitudes towards purchasing food which they believe can improve their health and well-being. Generally, consumers will evaluate the health benefits and quality of the food that they consume. In fact, consumers would prefer to purchase healthy food via online because it offers greater convenience, speed and variety. Consequently, the positive evaluation of online healthy food will lead to a stronger purchase intention.

## CONCLUSION

Demand for healthy food increases due to greater consumer awareness about living a healthy lifestyle. Introducing online healthy food to the marketplace can be a good option as it offers customers an expanded choice of healthy food, and also the convenience of shopping using their smart phones. Health benefits and convenience of ordering can motivate consumers to frequently purchase online healthy food. Results of the current study theoretically contribute empirical evidence concerning the relationships between attitude and intention to purchase online healthy food that could induce more attention in this area. Furthermore, this study has significant managerial and practical implications too. Findings can serve as a guideline for online healthy food providers and marketers when formulating an effective marketing strategy in order to enhance online healthy food consumption among Malaysians. Moreover, findings can be useful to policymakers when initiating appropriate awareness and promotional programs to encourage healthy eating habits among the public.

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