

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Base on the results obtained in Chapter 4, a discussion of the finding is presented in this chapter. The findings from the study are used to discuss whether the proposed hypotheses are supported. All research questions will be answered subsequently and finally the achievement of research objectives are determined. Vendors are provided with managerial implications and recommendations, to enable them to draft appropriate strategic in gaining consumers' intention to purchase functional (healthy) food products. Finally, the contributions of the study are discussed based on theoretical, methodological, practical approaches and end with suggestions for future research.

5.2 Discussion of Results

There are nine hypotheses proposed in this study. The nine hypotheses tested and all were found supported except for **H_{1b}**, **H_{1c}**, **H_{1d}**, **H_{1e}**, and **H_{1f}**. The summary of the hypothesis testing results are show in **Table 4.17**.

There are five major research questions raised in this study. First question is. how consumers attitude' influence on intention to purchase of the functional (healthy) foods in Malaysia. One of the factors have been identified, namely a

benefit from using functional (healthy) food was found positively significant to the intention to purchase of functional (healthy) food products. However, from this examination of the others five dimensions are show not significant different in the intention to purchase of functional (healthy) food products. Nonetheless, only one dimension is in consumers attitude' indentified have positively significant to the intention to purchase of functional (healthy) foods but this factor is consider important how consumers attitude' influenced the intention to purchase of the functional (healthy) food products.

The second question is how does the subjective norm's influence on intention to purchase of functional (healthy) foods in Malaysia. The finding shows that subjective norm's is positively related to the intention to purchase functional (healthy) food products.

The third question is how do the perceived behavioral control's influence on intention to purchase of functional (healthy) foods in Malaysia. The finding shows that perceived behavioral control's is positively related to the intention to purchase functional (healthy) food products.

The forth question is does this intention to purchase lead the consumer to purchase functional (healthy) foods in Malaysia. The outcome from this study shows there have positive significantly the intention to purchase lead to purchase of functional (healthy) food products.

Finally, the fifth question what are the important factors or attributes influence consumers' intention to purchase of functional (healthy) foods in Malaysia. From the finding shows all the independent variables are the importance antecedents have influenced the intention to purchase of functional (healthy) food products, there are consist of attitude, subjective norm and perceived behavioral control.

5.2.1 Consumer's attitude toward of functional (healthy) foods

According to the results obtained from SPSS analysis on the overall model (refer to **Figure 4.4**), consumer's attitude of functional (healthy) foods is positively related to intention to purchase. The result shows consumer's attitude on intention to purchase of functional (healthy) foods is consistent with the previous the studies by (Lobb, Mazzocchi, & Traill, 2007; Mahon et al., 2006; Shepherd & Sparks, 1994; Sparks, Hedderley, & Shepherd, 1992) on the investigating food intention and consumption behavior which the consumer's own attitude is far more important than perceived social pressure or norm or perceived behavioural control. There are six sub-constructs in this approach, namely, benefits from using functional (healthy) food products, confidence in functional (healthy) food products, necessity for functional (healthy) food products, functional (healthy) food products as medicine, functional (healthy) food products as part of health diet and absence of nutritional risk in for functional (healthy) food products.

However, separate examination of the six sub-constructs offers different insight, the results obtained from SPSS (refer to **Table 4.17**) shows only one dimension was positively related to the intention to purchase functional (healthy) food products, namely benefits from using functional (healthy) food products. The others five dimensions result from SPSS show that, were not significant related to the intention to purchase of functional (healthy) food products consist of confidence, necessity, as medicine, as part of health diet and absence of nutritional risk in for functional (healthy) food products.

According to this study the result, the constructs of consumers attitude towards functional (healthy) foods which show benefits from using functional (healthy) food products, functional (healthy) food products as part of health diet and absence of nutritional risk in for functional (healthy) food products are consistent with the previous studies result by (Urala & Lahteenmaki, 2004). However the results from this current study show confidence in functional (healthy) food products, necessity for functional (healthy) food products, functional (healthy) food products as medicine, were not significant to the intention to purchase of functional (healthy) food products.

There are five dimensions were found not significant different valid in our study however out these five dimensions there are two dimensions shows consistent with previous study by (Urala & Lahteenmaki, 2004). The others three dimensions show different were found to be not valid possibly due the fact that Malaysian respondents have different levels of education or educational background compared to their counterparts in western countries.

There is definitely a big difference in the point of view from the perception of consumers to functional (healthy) food products as evidenced in the different results generated from this study.

Furthermore, the level of understanding of functional (healthy) foods for Malaysian consumers might be different compared to those in western countries. This might have led to different confidence levels of perception of functional (healthy) food products, which may result in the perception that there is no necessity for functional (healthy) food products in daily lifestyle. This particular reason might have also lead consumers to perceive functional (healthy) food products as having medicine-like effects which result prevents them from consuming such products. Previous studies by (Bech-Larsen & Grunert, 2003; Frewer et al., 2003; Poulsen, 1999; Urala & Lahteenmaki, 2003) has raised the likelihood of functional (healthy) foods having medicine like effect.

From previous studies by (Urala & Lahteenmaki, 2004), the results have the same consistency as our study, which showed that there consumers in western countries are no different from those in Malaysia, as they perceive that it not less important to consume functional (healthy) food products as the part of health diet in their daily lifestyle for the purpose of prevention against critical illness.

Finally, Malaysia consumers have perceptions that functional (healthy) food products are risky to consume, which is the same findings as in previous

studies by (Urala & Lahteenmaki, 2004), and that concurred with the findings of Frewer, et al. (2003) which postulated that from the consumers' point of view, the perceived risk of functional (healthy) foods would be one barrier in the consumption of functional (healthy) food products.

5.2.2 Consumer's subjective norm of functional (healthy) foods

According to the results obtained from SPSS analysis (refer to **Table 4.17**), the consumer's subjective norm of functional (healthy) foods is positively related to intention to purchase leading to the purchase of functional (healthy) food products. In this study, the consumer's subjective norm of functional (healthy) foods influenced their intention to purchase leading to purchase of functional (healthy) food products. Studies from several recent meta-analysis (Armitage & Conner, 2001; Godin & Kok; Van den Putte, 1991) have supported Azjen's (1991) findings and argued that the subjective norm, in the way it is used in these models, is a poor predictor of intention of behavior. However this finding indicates a relationship with the consumer's subjective norm of functional (healthy) foods, which in turn have an effect on their intention to purchase functional (healthy) foods.

On the other hand, the results show strong support for the subjective norm of functional (healthy) foods may be explained by the studies, including that of Rogers, Brug, van Assema and Dagnelie (2004), which found that social norms was a significant predictor of intention to consumer fruits and vegetables among children in the Netherlands. Few studies have also shown

consistency in results and awareness of the role of social norms in influencing consumption of seafood behaviour. Bredhal and Grunert (1997) found that in Danish households, family expectations explained as much of the variance in both fresh and frozen seafood consumption as the attitude factors (taste and/or preferences). These results were similar to those found in a representative sample of Norwegian households by Olsen (2001), and by Verbeke and Vackier (2005) in Belgium.

5.2.3 Consumer's perceived behavioral control of functional (healthy) foods

The results from the SPSS analysis for the overall model (refer to **Figure 4.4**), consumer's perceived behavioral control was found positively related to intention to purchase functional (healthy) foods. From this study outcome and the previous literature review have shown the same consistency where perceived behavioral control has been proven strong influenced intention to consume several forms of foods products which by (Povey et al., 2001; Saba & Vassalo, 2002), including intention to purchase or loyalty toward fish or seafood (Olsen, 2007; Verbeke & Vackier, 2005). For example, perceived behavioral control was the most influential predictor of intention to consume vegetables among children in the Netherlands'.

Nonetheless, it can be assumed that Malaysia consumers' generally have perceived behavioral control of functional (healthy) foods; which may

influenced in formation of intention to purchase functional (healthy) food products.

5.2.4 Intention to purchase and purchase functional (healthy) foods products

The result from SPSS analysis (refers to **Table 4.17**), consumer's intention to purchase was found positively related to purchase functional (healthy) foods. This study outcome has shown the consistency with the theory planned behavior by (Ajzen, 1991).

From previously study by (Lilien & Kotler, 1983), Intention is often used as a behavioural indicator Intention to purchase and lead to purchase is also suggested to be one of the most important behaviour indicators to estimate a potential demand for the new products. The result of this study has shows that supported for Malaysia consumers' as well which Intention is often used as a behavioural indicator Intention to purchase and lead to purchase for purchase functional (healthy) foods.

5.2.5 Consumer's gender and perception of functional (healthy) foods

The Independent sample t-test result for male and female respondent towards proposed variables (refer to **Table 4.13**), the ten proposed variables were not significant different between the gender respondents. These variables consist are consumer attitude toward functional (healthy) food

products (benefits, necessity, medicine, health diet and absence of nutritional risk), subjective norm of functional (healthy) foods and perceived behavioral control of functional (healthy) foods.

The study findings indicated that Malaysia consumer between male and female are not different in their intention to purchase of functional (healthy) food products. However the result is not supported from previous study by (Urala & Lähteenmäki, 2004, Verbeke W, 2005) attitudes and lifestyle factors in addition to demographic factors such as gender, age or education, strongly affect the acceptability or intention to use functional foods. The study from (Bogue J, Coleman T & Sorenson D, 2005), shown women are compared to men, more likely to eat health-enhancing foods and foods in line with the dietary recommendations. For women's higher awareness of health issues it is argued to be caused by the responsibility they feel for the health of their family members, Verbeke W (2005).

From this study can conclude that, since they not significant different in gender for intention to purchase of functional (healthy) food products. Marketers not need to spend additional or extra to have special design and manage for integrated marketing communications (IMC) activities to capture the potential target consumers in Malaysia market since the target consumers don't have significant differences in their purchase intention according to gender.

5.2.6 Consumer's academic background and perception of functional (healthy) foods

The analysis of the significantly different between the respondents' academic backgrounds of consumers (refer to **Table 4.15**), the results revealed that four out of ten variables are significantly different between them. These variables are purchase the listed functional (healthy) food products, intention to purchase, subjective norm and perceived behavioral control and the other seven variables are not significantly different between respondents' academic backgrounds.

The variable of "purchase the listed functional (healthy) food products" respondents of group (C) Postgraduate (Master/Doctorate) and group (B) Bachelor Degree backgrounds and have higher mean values compared to, qualification group (A) Secondary/high school, Certificate or Diploma STPM academic backgrounds.

The variable of "Intention to purchase functional (healthy) food products" respondents of group (C) Postgraduate (Master/Doctorate) backgrounds have higher mean values compared to group (A) Secondary/high school, Certificate or Diploma STPM background but the finding is not significant with Group (B) Bachelor Degree.

This study found that respondents of group (C) Postgraduate (Master/Doctorate) background make more frequent purchases of functional

(healthy) food products. Professionals who are more body and image conscious or health conscious compared to others group of respondents also make more frequent purchases. The finding is the same as previous studies by (Ngapo, Martin, & Dransfield, 2007. Nielsen, Bech-Larsen, & Grunert 1998; Prescott & Bell, 1995), where consumer needs or preferences for particular products may vary considerably between individuals, segments, groups and cultures. However, some studies proposed that differences among individuals are dependent on the products (Jeager, Andani, Wakeling, & MacFie, 1998)

The variable of “subjective norm to purchase functional (healthy) food products” respondents of Group (A) Secondary/high school, Certificate or Diploma STPM background have significant different with group (C) Postgraduate (Master/Doctorate) backgrounds have higher mean values compared to but not significant with Group (B) Bachelor Degree. However the Group (A) Secondary/high school, Certificate or Diploma STPM background not significant with Group (B) Bachelor Degree. This may due to Group (A) respondent lack of products knowledge, easy or need influence from the surrounding people to are important to them (e.g. family members, doctors, media and others.

For the variable of “perceived behavioral control of functional (healthy) food products” respondents of group (C) Postgraduate (Master/Doctorate) and group (B) Bachelor Degree background exhibited higher mean values compared to, qualification group (A) Secondary/high school, Certificate or

Diploma STPM academic backgrounds. This outcome indicates that, respondents with group (C) Postgraduate (Master/Doctorate) and group (B) Bachelor Degree background have more have control, in term of financial ability and knowledge of purchase the functional (healthy) food products.

From this analysis, can be concluded that group (C) Postgraduate (Master/Doctorate) and group (B) Bachelor Degree background have more health conscious, more financial ability and knowledge to purchase functional (healthy) food products.

5.3 Implications and recommendations

From the results of this study, it is clear that in order to gain consumers' intention to purchase functional (healthy) food products, manufacturers, suppliers and marketers are advised to focus on a number of factors pertaining to intention to purchase. Firstly, it is imperative for functional (healthy) foods suppliers and marketers to educate and demonstrate the definition of functional (healthy) food products to create awareness by various initiatives such as public relations programs, sponsorship, and advertisement to assist functional (healthy) food vendors in developing consumers' attitude and perception. Simultaneously, functional (healthy) foods suppliers and marketers must also demonstrate the benefits of consuming functional (healthy) foods by providing more useful and health related information to increase knowledge and awareness about the benefits of functional (healthy) food products.

Furthermore, the factor that functional (healthy) foods suppliers and marketers should pay attention to is the consumers' subjective norm to functional (healthy) food products. From the findings, the ranking order and SPSS analysis showed that consumers are influenced by those who are important to them, for example, family members, close friend, expert opinions, mass media and others which can influence their intention to purchase. According to (Rogers, Brug, van Assema, and Dagnelie, 2004) social norm was a significant predictor of intention to consume fruit and vegetables among children in the Netherlands.

On the other factors, manufacturers, suppliers and marketers should take into consideration consumers' perceived control behavior towards functional (healthy) foods, as according to the ranking order and SPSS analysis of the respondents indicated that such behaviour is important in the development of initial formation of intention to purchase functional (healthy) food products. Whether consumers have control, financial ability, knowledge, etc. to purchase or consume functional (healthy) foods is entirely up to them. According to (Van Kleef, Van Trijp, & Luning 2005) the costs of adapting new products to new segments, particularly in international markets, encourages firms to learn more about local preferences before undertaking wider distribution. This allows marketers to reach out to the target market by understanding what, where and how together with the right marketing strategies to gain consumers' confidence in consuming of functional (healthy)

foods, which in turns helps to develop their intention to purchase functional (healthy) food products.

However, it will be very beneficial for marketers to understand the commercialization of their functional foods in Malaysia as this not only allows an increase in their profit margin for their company but it can also be interpreted as a competitive advantage.

5.4 Limitations of the Study

There were several limitations encountered in this study. Firstly, an important limitation of this study is that the samples were collected only in Kuala Lumpur area. Malaysian consumers are widely spread out, including those in the other states, including Sabah and Sarawak. Furthermore, the functional (healthy) food products are commonly available in both urban and suburban areas of Malaysia. The concentration of sample collection in Kuala Lumpur may not be adequate in generating an exhaustive picture that reflects the whole functional (healthy) food consumers' population in Malaysia. Functional (healthy) food consumers from other states or from suburban may show different attitudes, subjective norms and perceived control behavioral of intention to purchase, compared to consumers staying in the Kuala Lumpur area. As a result, the generalisation of the findings onto a wider population nationwide should be done with caution.

The response bias from respondents can be expected as consumers with different background may respond to the questions differently. Some respondents are functional (healthy) food consumers, but some are not. To a certain extent, some respondents do not consume functional (health) food products at all. Therefore, evaluation made by respondents may not be accurate due to different levels of understanding on the issues. Furthermore, this study was conducted by way of a self administrated questionnaire, therefore, the assessment by the respondents to the questions in the questionnaire remains unknown. Respondents may evaluate the questions inaccurately due to the gaps or misunderstanding between the respondents' understanding and the concepts measured by the question. On the other hand, the honesty of respondents in answering the questions during the survey is taken for granted, which could pose a constraint in this study.

5.5 Suggestions for future research

The growth in functional (healthy) foods will continue and the antecedents of consumer attitude present a wide area of study. This research has only investigated a modest and small part of this area of study. Therefore, there may be other antecedents of consumer attitudes for functional (healthy) foods which might be useful to manufacturers and suppliers.

Firstly, it is suggested that the study be replicated using a longitudinal study design to test the causal relationship between the constructs in the model. This study has focused on samples collected from Kuala Lumpur, thus, it is

possible that the results taken from other parts of Malaysia might yield different results. Moreover, in light of the possibility of alternative models for understanding the relationships among the constructs, future researches may consider how these alternative models of the relationships among consumer attitude, and their antecedents to intention to purchase functional (healthy) foods may complement or contradict each other.

Another area in need of additional research is whether awareness of functional (healthy) food products itself helps in influencing the intention to purchase. For example, the relevant information and products of functional (healthy) foods are easy to access, available and as well as being easy to purchase? Is the product itself relevant in influencing the formation of intention to purchase functional (healthy) foods compared to other vendors offering similar products or services? If so, what are the differences or similarities?

Furthermore, the effect of cultural environment influences is another area that could be explored further, particularly the influence of consumer intention to purchase functional (healthy) food products. To what extent does the cultural environment influence the formation of intention to purchase, In addition, branding may be a potential antecedent in the formation of intention to purchase. Does branding help in the formation of intention to purchase. If so, to what extent does a particular brand play a role in influencing such intention in the process of leading to the purchase?

5.6 Conclusion

Functional (healthy) foods provide opportunities for consumers to maintain and improve their healthy lifestyle, besides having the potential to help reduce incidences of diet-related diseases such as cancer, heart diseases and osteoporosis. Consumers can reap many benefits as mentioned above, particularly for disease prevention, and perhaps for treatment purposes, as consumers take an increasingly proactive approach to health as they realised that certain dietary behaviours can reduce the risks of chronic diseases. Towards this goal, this thesis has taken the initiative to examine the factors of functional (healthy) food purchases in Kuala Lumpur.

The thesis primary goal is to find answers to five research questions. Firstly, how consumers attitude' influence on intention to purchase of the functional (healthy) foods in Malaysia? Secondly, how does the subjective norm's influence on intention to purchase of functional (healthy) foods in Malaysia? Thirdly, How do the perceived behavioral control's influence on intention to purchase of functional (healthy) foods in Malaysia? Fourthly, Does this intention to purchase lead the consumer to purchase functional (healthy) foods in Malaysia? and lastly, What are the important factors or attributes influence consumers' intention to purchase of functional (healthy) foods in Malaysia?

The findings indicated that to develop consumers' intention to purchase is through influencing consumer attitude by focusing on the benefits of using

functional (healthy) food. This factor is identified as an important factor in influencing on intention to purchase of functional (healthy) food products, besides other important variables being the subjective norm and the perceived behavioral control which have been shown to have influenced the intention to consume such products by customer. These identified factors lead to the formation of intention to purchase of functional (healthy) foods. Ultimately, the intention to purchase leads to purchase of functional (healthy) food products.