

Malaysian Local Functional Food Attributes and Customer Satisfaction

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Abstract

The purpose of this article is to identify the local functional food attributes and literature on their relationship with customer satisfaction. Quality functional food attributes can provide a powerful competitive advantage towards consumer behavior. The literature indicated that the impact of local functional food taste, appearance and functionality are influenced with customer satisfaction. The study proposes six propositions, focusing on the local functional food attributes which correspond with customer satisfaction. It is believed that this article will provide clear insights into how local functional food attributes affect satisfaction. The assessment is vital as customer satisfaction is the key ingredient in capturing customer loyalty and the retention of purchase.

Keywords:

Functional Food Attributes, Customer Satisfaction, Malaysia

1 Introduction

Functional food is looked upon as more than mere sustenance but as a convenient way of maintaining optimum health. This concept or perspective on functional food has brought a substantial market demand globally. The reliance on functional food may become a norm as most people obtain minimal nutrients from their daily meals due to poor food selection and preparation. There are more than 1200 species of medicinal plants, which have been known to be potential to benefit the human body and this shows the richness of Malaysia's biodiversity (Hussin & Abdul Rahman, 2006). Food technology institutes and agricultural research centers are beginning to focus on producing functional foods with the addition of indigenous bioactive ingredients in fulfilling the consumers' growing demand.

According to the market report from Euromonitor (2014), the sales of herbal products in Malaysia, which include functional beverages made with local herbs, are expected to increase from RM 2.12 billion in 2013 to RM 2.45 billion in 2017. The consumption of these alternative health foods dates far back into time as traditional herbs, and local plants have been used as remedies for many ailments (Busmann & Sharon, 2006). Although the product is favorable to many, customer attitudes and behaviors differ regarding consuming these health-based foods. The practice is a norm in the Malaysian culture, and the potency of each functional food is regarded as closely adhering to traditional beliefs.

The lucrative business prospect of the local functional food industry in Malaysia is attracting many food manufacturers, both international companies as well as the local SMEs. Thus, the functional food market risks being saturated with similar functional foods. Ahmad (2007) and Raja Yusof et al. (2010) have stated that local entrepreneurs are less sensitive to the newer issues around them and tend to become “followers” instead of “innovators.” Besides competing against other local functional foods, the competition between local and imported health-based foods and products is also undoubtedly stiff, and some of the Malaysian consumers still perceive that the quality of these goods is still inferior (Muhammad & Awaisu, 2008). In 2014, the total imports from other countries were RM 2.7 billion, while the local exports were at RM 2.12 billion (Department of Statistics, 2016).

Innovative and good quality functional food can provide a powerful competitive advantage for a producer. However, the funding for research into the development of herbal health-based foods is still low and the technology capabilities are limited in producing better quality goods (Heng, 2014). This study intends to investigate the strength of local functional food products’ attributes in providing satisfaction for the customer. This is vital as customer satisfaction is the key ingredient in capturing customer loyalty and the retention of purchase (Kordupleski, Rust & Zahorik, 1994).

2 Research Proposition

The research framework is based on the minor part of the repurchase intention model by Spais and Vasileiou (2008) and Hellier et al. (2003). It represents the perceived quality of food, in which this case, is the extrinsic and intrinsic attributes of local functional food. There are six hypotheses, which are the local functional food attributes which correspond with customer satisfaction.

2.1 Local functional food labels have a significant effect on customer satisfaction

The label is one of the extrinsic attributes that can affect the customer’s choice when deciding to buy a product (Grunert, 1997). The aesthetic characteristics of labels such as coloring, graphics, and wording, are important to invoke a positive reaction to any commercial product (Davies, MacPherson & Froud, 2010). Labels also deliver information on the value of the product, which leads to the likelihood of an increase in sales (Prinsloo et al., 2011).

Proposition 1: Local functional food labels have a significant effect on customer satisfaction.

2.2 Local functional food brand has a significant effect on customer satisfaction

Zeithaml (1988) states that strong brands have the ability to create a positive image of a company or manufacturer. Satisfied customers tend to stick to a brand and encourage others to try the product as well (Aaker, 2012). It is in nature of humans to share good things with their closest kin or peers. This attribute aids the decision-making process in purchasing as brands provide the necessary product identity that can differentiate among similar substitutes (Kotler & Pfoertsch, 2006).

Proposition 2: Local functional food brand has a significant effect on customer satisfaction.

2.3 Local functional food appearance has a significant effect on customer satisfaction

Almost akin to the need for labeling, the physical presence of a local functional food is a rough indicator of its freshness or its expected standard of quality (Northen, 2000; Köster, 2009). The food appearance itself positively exerts direct or indirect effects on food consumption behavior (Deng & Srinivasan, 2013). Besides that, due to the changing of eating habit, most of the people love to go out to eat because they are captivated by the appearance of food (John & Tyas, 1996; Rozin, 2006).

Proposition 3: Local functional food appearance has a significant effect on customer satisfaction.

2.4 Local functional food functionality has a significant effect on customer satisfaction

The functionality of functional foods refers to the health benefits which the consumer gains after consuming them. In the eyes of the consumer, functionality can be seen from both perspectives. Health claims for functional foods, or any health-based product, are a primary characteristic which becomes the problem-solver for utilitarian consumers (Laverack, 2013), whereas for the hedonic buyer, it is the secondary attribute that they will look for in buying a functional food (Brechan, 2006). This also strengthens the point that people are looking into what the product can deliver in uplifting their state of well-being (McKinnon, 2010). This indicates the health benefits of the food are confirmed to be a priority when considering rebuying. The intensity of this cue is also supported by the findings in a study by Cranage, Conklin and Lambert (2004). Health conscious consumers make it a serious business to select which local functional food will fulfill their physical needs (Yoon & George, 2012).

Proposition 4: Local functional food functionality has a significant effect on customer satisfaction.

2.5 Local functional food price has a significant effect on customer satisfaction

The meaning of the perceived price could deliver more to a customer than financial terms, and it is applied to the quality of evaluation (Bei & Chian, 2001). Price fairness, where price equates to the value and effectiveness of the product, is one of the aspects which greatly affects satisfaction. In a study conducted by Sharmin (2012), consumers who had paid less for better product value than they had expected tended to become more satisfied than others who did otherwise and received a defective purchase.

Proposition 5: Local functional food price has a significant effect on customer satisfaction.

2.6 Local functional food taste has a significant effect on customer satisfaction

Taste is one of the important sensory appeals in selecting foods besides sight (Clark, 1998; Kavitha, Gopalakrishnapillai & Prabhu, 2011). The sensory appeal is also an important characteristic of functional food. Customer food preferences are heavily affected by this characteristic and it is specifically focused on the taste as well as the visual presentation and smell (Clark, 1998; Kavitha, Gopalakrishnapillai & Prabhu, 2011). These authors have also stated in their study that such preferences in these sensory attributes do contribute to the repurchase intention of a food product. The taste is a focused criterion for a food product to become marketable, and this is determined through rigorous sensory testing during research and development.

Proposition 6: Local functional food taste has a significant effect on customer satisfaction.

3 Conceptual Research Framework

In order to address the propositions outlined above, a conceptual research framework is presented below. The research framework was developed as a guide to the identification of key research questions. The framework was developed based on the review of existing research studies. The trends in the contextual factors, transitions, and outcomes was portrayed in the conceptual framework.

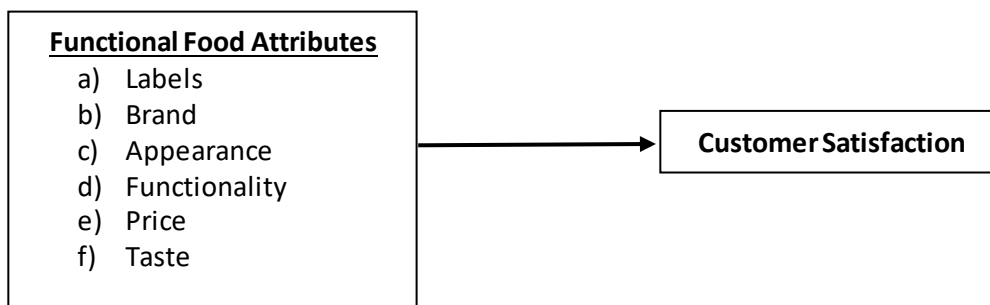


Figure 1: Conceptual Research Framework

Source: Researcher suggestion

Based on the above framework, six hypotheses were formulated as below:

- Hypothesis 1: Local functional food labels have a significant effect on customer satisfaction.
- Hypothesis 2: Local functional food brand has a significant effect on customer satisfaction.
- Hypothesis 3: Local functional food appearance has a significant effect on customer satisfaction.
- Hypothesis 4: Local functional food functionality has a significant effect on customer satisfaction.
- Hypothesis 5: Local functional food price has a significant effect on customer satisfaction.
- Hypothesis 6: Local functional food taste has a significant effect on customer satisfaction.

4 Methodology

The study is a cross-sectional quantitative study. The sampling method is non-random convenience sampling with time intervals to avoid data bias. As for the respondents, the study selected 384 consumers from 10 hypermarket outlets around Shah Alam, Malaysia. The survey was increased about 10% to avoid insufficient usable data during collection. The papers were distributed based on the non-proportionate calculation number of samples needed to be collected on three main hypermarket brand; Tesco, Giant, and Mydin. According to Nair, Wayland, and Soediro (2005), 61% of collected usable self-administered paper surveys are adequate for executing the data analysis. The instrument is adapted from Spais and Vasileiou (2008) with given permission. It is a multiple-item scale with the Likert scaling of 1-7 (1= strongly disagree, 7= strongly agree).

The questions in the survey started with determining the occurrences of purchases and the types of local functional food that the respondents normally bought from the hypermarket they had visited. The results were that most of the respondents (57.9 %) chose local functional beverages from the total sample population (N=259).

The analysis was conducted through multiple linear regression to determine the strength of significance of each local functional food attribute. The study framework (Figure 1.1), surprisingly, has a low beta reading of 0.051. The local functional food appearance has the beta of 0.214. Functionality has the beta of 0.237, which is the second highest reading and price, however, has the lowest beta of 0.042 to customer satisfaction.

As for customer demography, there was a high percentage of young adults, namely 38.2 percent and 23.6 percent. This sample group has become representative of the overall population in Shah Alam. The unbalanced proportion of females and males indicates that female subjects are more likely to respond to a study compared to male

respondents. It would be preferable to use a probability sampling method to reduce this bias in future studies.

All of the readings are significant $s=.000$ ($p<.001$), and the R^2 of the model is 78.5%. Local functional food label has the beta reading of 0.204 to customer satisfaction. The highest beta result is that of the taste attribute, which is 0.309. This result is in line with the research conducted by Kavitha, Gopalakrishnapillai, and Prabhu (2011), in which taste determines the level of acceptability of the product and the satisfaction towards food preference as well.

5 Discussion

Most of the respondents were young women. In a study conducted in Greece, younger individuals were interested in energy enhancement properties like added vitamins or minerals, while older groups were more into the prevention of diseases (Krystallis, Maglaras & Mamalis, 2008). Based on the study conducted by Salleh and Mohd Noor (2014), local functional foods are marketed more towards Malaysian women. Local functional food manufacturers commonly focus their product on improving one's self-image as well as being an alternative nutritional supplement. Since olden times, people have depended on natural plants, animals, and herbs to combat illnesses or facilitate body healing. De Boer and Cotingting (2014) found that women in Southeast Asia have incorporated these remedies into the culture of their people, such as during the postpartum period.

The sensory appeal of the taste of local functional food has a significant impact on customer satisfaction. The choice of sensory pleasure first and health benefits second clearly shows that the targeted consumers are hedonic users of functional food. The secondary impact of the label was due to the design and the information conveyed on the packaging itself. Overwhelming information on the label can overpower the consumer especially the older group (Best & McCullough, 1978).

The insignificance of the brand for the relationship with customer satisfaction was a contradictory outcome of the study by Spais and Vasileiou (2006) had proven otherwise. Local functional foods are often regarded as traditional foods and a part of the people's culture and heritage. Thus, the brand was not important in providing them with the satisfaction of consumption. Woodruff, Cadotte, and Jenkins (1983) also stated that the accompaniment of emotions at the conscious level could affect satisfaction and instigate a shift of interest. In this case, this influenced the customer satisfaction as with the brand commitment. With the combination of weak marketing efforts and the availability of an uncontrollable number of similar substitutes, the influence of brands eventually diminishes over time.

Local functional food appearance was another crucial attribute affecting satisfaction in this study. The design and colouration, as explained in Chapter Two, are the elements that the consumers are looking at in selecting consumables. Silayoi and Speece (2004) also stated that packaging with attractive, simple visuals could enhance consumer

behavior towards it. Government support for smaller local functional foods to improve their product's packaging could help with the marketing efforts as well as create purchase loyalty in their respective customers.

Likewise, the saturation of local functional foods and herbal functional foods in the Malaysian market means that a novel local functional food product must stand out from the others and this can be achieved through the packaging itself.

Other than that, consumers are attracted to particular sizes and shapes of the packages used. As mentioned by Blijlevens, Creusen and Schoormans (2009), and Ksenia (2013), both of these package characteristics can create a perception of value during its purchase. The insignificance of price, which was hypothesis H5, with the association of customer satisfaction was explained through the demography of the samples themselves. Chelliah et al. (2013) have conducted a study in Malaysia on the marketing mix for Tongkat Ali coffee, and the outcome of their study shows that, although there is a positive association of product attribute and consumer loyalty, price does not influence preferences for this functional beverage.

Not all of these functional foods are as expensive as their imported counterparts, and this marketing element does not affect those who have higher incomes. Many of these functional foods are within the same price range and with almost the same level of quality performance. The local functional foods' prices, nevertheless, have no effect on the consumers' preferences. This study found that price does not influence their satisfaction and they would still consume the food regardless of the price as long as the foods' qualities meet their expectations.

Taste has a strong influence on customer satisfaction. There is complexity in determining which taste fits the preferences of local functional food consumers. The aesthetics of taste were in close relation to the perceived quality of local functional food. Moreover, the majority of these bioactive ingredients are incorporated into everyday foods and beverages, for example, coffee and snacks.

From here, it is displayed that such incorporation into daily foods could change the consumers' choice of local functional food products due to their continual consumption as confirmed by Clark (1998). The aspect of taste was also supported by the sensitivity of the palate. The difference in gender in the perception of taste specifically affects the foods eaten. Males are found to be more insensitive towards certain flavors than their fairer counterparts, and this makes females more receptive towards various food tastes (Heiman & Lowengart, 2014). As we can see, most of the respondents are women, and this accounts for the sensitivity of taste on these functional foods.

6 Conclusion

Based on the discussion, there was a gap in this study that needs to be looked into in the future as well. The brand was known for its power in developing customer satisfaction. In spite of this, the relationship of the brand with customer satisfaction from the outcome was contradictory, considering the effort of government bodies to

improve the saleable value of functional foods with locally based brands. Since many in the discussion regarding functional foods as pharmaceutical foods, the perceived risk of using new or unknown brands and the extent of consumer knowledge on the potency of processed local functional foods need to be investigated further.

It is unquestionable that most Malaysians are quite familiar with the health potential of local herbs, plants, and natural medicinal ingredients, but not all of them are confident enough on the processes that are involved in the manufacturing of local functional foods. Then again, some of the respondents were even unsure of the differences between conventional and functional foods. Therefore, a thorough study needs to be conducted, as this research only touched the surface of the subject, as to whether the satisfaction is grounded more on local superstition than on proven scientific knowledge. Research with the qualitative design is recommended as it can shed light on the emotional value as well as the level of understanding and knowledge of the Malaysian consumer of what exactly local functional food is.

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