

Consumers
perception and
intention towards
purchasing tropical
seaweed
marketing ...



**ASSIGN
BUSTER**

Human and animals has been using seaweeds for thousands of years ago in many countries. It had been recorded that the use of seaweeds dates back to 2700 BC in the compilation on “ Chinese Herbs” by Emperor Shen Nung. Furthermore, the Japanese include seaweeds as part of their diet since 300 BC (National Academy of Agricultural Sciences [NAAS], India, 2003). Oriental countries like Japan, Korea and China consume large amount of seaweeds. Lately, seaweeds also eaten in countries like USA and Europe. This is because the knowledge of its high nutritional value has spreads to the western countries. Besides using it as a food, hydrocolloids can be extracted from seaweeds, which can be use in the food, cosmetic and pharmaceutical industries. Other than that, it is also used in agriculture and horticulture as organic fertilizer.

NAAS (2003) shown that Laminaria, Porphyra, Undaria, Eucheuma, and Gracilari are the top five cultivated seaweeds in the world and it accounted for 5. 97 million metric tons of seaweed production. NAAS (2003) also mention that the top 10 largest seaweed production countries are China, Korea, Japan, Philippines, Indonesia, Chile, Taiwan, Vietnam, Russia, and Italy. Since 1984, the world production of commercial seaweeds has grown by 119% till 2003. According to Othman (n. d.), Eucheuma cottonii is the main species cultured commercially in Sabah, Malaysia. This seaweed cultured is mainly export to Denmark (Othman, n. d.).

Seaweeds contain multi vitamins, minerals, and amino acids and is intended to supplement one’s normal diet. Other than that, it is believed to prevent hypercholesterol, obesity, oxidative stress, goiter, cardiovascular disease,

diabetes, and hypertension. Despite how highly nutritious seaweed is, at this moment, there is no product of seaweed dietary supplement produced.

In Malaysia, there are increasing sales of dietary supplements from RM477.5 million in 2003 to RM671.8 million in 2008 as shown in the report. Experts also forecasted that the sales of dietary supplements will be increase dramatically. The sale of dietary supplements is forecasted to be RM814.4 million in 2013. In other words, the percentage of value growth 2008-2013 base on Compound Annual Growth Rate (CAGR) for dietary supplements is 3.9%. The major reasons for this increase is due to the increasing health awareness among Malaysian, aging population, and urbanization trend that led to hectic and stressful lifestyles. Furthermore, marketing efforts from industry players also plays an important role in influencing consumers to consume dietary supplements (Euromonitor International, 2009).

As a result, an innovative dietary supplement made of *Eucheuma cottonii* (a type of red seaweed) had developed. Since the product is not release to the market yet and it is still in the development stage, a study that focus on aspects that will influence consumer purchasing intention towards the product will be done. Other than that, this study also focus on consumers' perception towards the current features of the product.

Problem Statement

In recent years, many people suffered from various diseases, such as cardiovascular disease, cancer, diabetes, osteoporosis, and other health conditions. In order to reduce the risk of suffering from these diseases, consumers are willing to spend lots of money to invest on supplements. As

consumers are getting more educated and having greater access to health information from the Internet and mass media, they are increasingly taking proactive role in taking care of their own health. Due to the demand for dietary supplement, thus, there is an opportunity to supply the product to the consumers. In a consumer point of view, a new type of dietary supplement gives consumer an opportunity to supplement one's diet, prevention of diseases and to be use in self-treatment for chronic diseases. Whereas, in the business point of view, innovation of a new product can ensure a company remain competitive in the current market and to create new business opportunity.

Prior to the release of the new product in the market, it is vital to ensure that the product meet customers' expectation. According to Philip Crosby, a philosopher of quality management, it is important to do it right the first time. He believe that it is cheaper to do the things right the first time, instead of reengineered the product again and again. And it is very true in the current situation. If the product fail (for example the packaging of the product is not attractive enough to draw customer attention towards the new product), it incur loss as there is no demand or the sales of the product cannot cover its total cost. In addition, the company is interested to know the consumers' perception towards the current product's features as it plays an important role in deciding whether the product is marketable.

Research Question

Does the product developed meet the expectation of consumers?

What are the factors that influence consumer purchase intention?

<https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

How does the consumer perceive the product?

What are the aspects that need to be modified in order to meet consumers' expectation?

Research Objective

The objective of this study is to identify the aspects that need to be reached in order to ensure that the product has high marketability.

To determine consumer perception towards the product's current non-functional attributes.

To determine the non-functional attributes that influence consumers' purchasing intention towards the product.

To determine the consumer purchase intention towards the product.

Significance of the Study

Malaysian's Health is worsening by various factors. One of the main factors is poor intake of nutrients. Thus, a dietary supplement that is made from tropical seaweed (*Eucheuma cottonii*) was developed in order to provide a win-win situation. However, the successfulness of the product is unknown. Therefore, the significance of this study is to ensure that the product will meet customers' expectation in order to increase sales and profit for the company.

Chapter 2

Literature Review

Overview of Seaweed

There are three groups of marine plants: microalgae, macroalgae, and rooted plants. Seaweeds are considered as macroalgae, which are multi-cellular plants that usually anchor on hard surfaces. According to Roesijadi, Copping, Huesemann, Foster, and Benemann (2008), Mann (1973) cited that microalgae and macroalgae gain their nutrients directly from seawater when they are continuously wash by the seawater. Seaweeds are more complex form of organisms as compared to algae. Most of them have specialized tissues and they may have very complicated sex. Many of the seaweeds produce sex pheromones (a type of chemical that attract sperm), and with many different types of sex organs. Basically there are three types of seaweeds that differentiate in colour – red, green, and brown (Guiry, 2010).

Background of *Eucheuma cottonii* / *Kappaphycus alvarezii*

Classification:

Empire : Eukaryota

Kingdom : Plantae

Subkingdom : Biliphyta

Phylum : Rhodophyta

Subphylum : Eurhodophytina

Class : Florideophyceae

Subclass : Rhodophyta

Order : Gigartinales

Family : Areschougiales

Genus : *Kappaphycus* (algaebase, 2010)

In the genus of *Kappaphycus*, there are five types of species (algaebase, 2010). The three commercial kinds of *Eucheuma* are farmed to produce carrageenans. *Eucheuma alvarezii* (cottonii) producing kappa carrageenan (containing 28% sulfate or less); *Eucheuma denticulatum* (spinosum) producing iota carrageenan (containing 30% sulfate or over); and *Eucheuma gelatinae* (gelatinae) producing a mixture of gamma, beta and kappa carrageenans (containing 20% sulfate). *E. striatum*, formerly dominating the farming was replaced by *E. alvarezii* as it is much easier to grow (FAO, 1987).

Santos (1989) also mentioned that “Cottonii” is the commercial name for *Kappaphycus alvarezii* and *Kappaphycus striatum*. While “spinosum” is the commercial name for *Eucheuma denticulate*. These are the three species that are farmed for the purpose of commercial use and are known as “*Eucheuma of commerce*” (Santos, 1989). Suresh Kumar, Ganesan, and Subba Rao (2008) found that the world production of *Kappaphycus* species is about 28000 tons per annum. Due to its easily accessible in a massive amount, thus it account for the largest worldwide consumption for food and pharmaceutical applications.

Source: Doty, M. S., Caddy, J. F., & Santelices, B. (Eds.). (1987). FAO

Corporate document repository: Case studies of seven commercial seaweed resources. Retrieved February 20, 2010, from <http://www.fao.org/docrep/x5819e/x5819e00.htm#Contents>.

Structure and Cultivation of *Eucheuma cottonii* / *Kappaphycus alvarezii*

Eucheuma cottonii has irregular branching and they are composed of rigid cylindrical branches. The thalli of commercial *cottonii* are usually weighed at 56kg alive. It is generally a multiaxial filamentous red algal genus which becomes strongly pseudoparenchymatous.

Eucheuma grows almost entirely in high water motion areas, where light and temperature are not important factors. For commercial importance, they are mostly found in water less than half a meter deep at low tide level. Water motion plays an important role in the growth of *Eucheuma cottonii*. This is due to the materials move into and out of the algae by diffusion. Therefore, as the water motion increases, their growth rate will be increases, up to the point where the water force lead to excessive physical damage. Other than that, water motion often affects sediment in the water and thus affects the light. This will eventually affect the growth of the seaweed as light is directly proportional to growth (Doty, 1987).

Chemical Component and Health Benefit of *Eucheuma cottonii* / *Kappaphycus alvarezii*

According to Doty (1987), the most important component in *Eucheuma* for the industry is its carrageenans. It is a cell wall component that represents

40 to 75 percents of the seaweed's salt-free dry weight. Other than that Eucheuma contain small amount of cellulose and other unspecified materials. At that moment, Doty (1987) shown that the nutritional value of Eucheuma and its carrageenan are unknown and he believed that Eucheuma and foods containing it does not bring any health benefit to human.

However, Matanjun, Mohamed, Mustapha, Muhammad (2009) found that the total dietary fibers in Eucheuma cottonii is 25.05% of dry weight of sample, and was higher than most of the terrestrial plants. 18.25% of dry weight of E. cottonii was soluble fibers. Soluble fibers were shown to have hypocholesterolemic and hypoglycaemic effects that can prevent metabolic syndromes. However, insoluble fibers help to reduce digestive tract transit time. The protein content of E. cottonii (9.76%) was within the ranges of the other seaweeds and is comparable with high-protein plants foods.

Matanjun et al. (2009) found that E. cottonii has 5.85% of dry weight of sample of vitamin E. In their research, Burtin (2003) cited that Vitamin E is also a type of antioxidant that helps to inhibit LDL oxidation and prostaglandin and thromboxan formation. While the vitamin C content, which was 35.3% of dry weight of E. cottonii sample is higher than the vitamin E. E. cottonii also had high ash content (46.19%). This shows that it contained high amounts of macrominerals and trace elements. However, it had very low Na/K ratios. Studied had found that intakes of high Na/K ratios will lead to higher incidence of hypertension. Due to the low Na/K ratio in seaweeds, it can help to balance high Na/K ratio diets. In addition, E. cottonii had high content of iodine (9.42 $\hat{1}$ /₄g g⁻¹) than terrestrial vegetables and fruits.

Besides having high content of macrominerals, *E. cottonii* had very high PUFA content (51.55%) and low saturated fatty acids (25.17%). Essential fatty acids that can be found in *E. cottonii* were the linoleic acid (C18:2 ω 6), linolenic acid (C18:3 ω 3), eicosanoid precursors arachidonic acid (C20:4 ω 6), and eicosapentaenoic acid (EPA) (C20:5 ω 3). While the most abundant fatty acid found in *E. cottonii* was omega-3 fatty acids (45.72%) (Matanjun et al., 2009). According to Matanjun et al. (2009), Stone (1997) found that Omega-3 fatty acids is very beneficial to human as it helps to prevent the growth of atherosclerotic plaque that affect blood clotting, blood pressure and improve immune system.

Shresh Kumar et al. (2007) found that algal polysaccharides are important as they act as free radical-scavengers in vitro and antioxidants for prevention of oxidation in living cells. However, their activity depends on: (1) degree of sulfation (DS); (2) the molecular weight; (3) the sulfation position; and (4) type of sugar and glycosidic branching. *Kappaphycus alvarezii* exhibited excellent scavenging effect (%) by 1, 1-diphenyl-2-picrylhydrazyl radical (DPPH) assay, ferrous ion-chelating activity, reducing power and antioxidant property in linoleic acid system. Thus, it is a good source of antioxidant (Shresh Kumar et al., 2007).

Dietary Supplements

The United States Dietary Supplement Health and Education Act of 1994 (United States DSHEA) defined dietary supplements as any product (other than tobacco) that is intended to supplement the diet that contains one or more of the following ingredients: a vitamin, a mineral, an herb or other botanical, an amino acid, a supplement used by man to supplement the diet

<https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

by increasing the total dietary intake, or a concentrate, metabolite, constituent, extract, or combination of any ingredient described above. It can be in the form of capsule, powder, softgel, gelcap, tablet, liquid, or other form that can be ingested. Dietary supplements are neither considered as drugs nor conventional food (National Institutes of Health, 2005).

Market for Dietary Supplements

Ayranci, Son a, and Son b (2005) identified a variety of reason for people to take dietary supplements. One of the reasons is to decrease their susceptibility to health problems such as stress, heart attacks, colds, osteoporosis, cancer and so on. According to Ayranci et al. (2005), Worthington and Breskin (1984) as well as Read, Bock, Carpenter, Medeiros, Ortiz, Raab, et al. (1989) found another reason for consumption of dietary supplement is to increase energy.

Malaysian report shown that, products targeting general health still accounted for the strongest contribution to sales of dietary supplements, at 59%. Experts forecasted that the dietary supplement market in Malaysia is a continuing upward trend in sales from RM671. 8 million in 2008 to RM814. 4million in 2013. This is due to the increasing health awareness among Malaysian, aging population, and marketing effort of the dietary supplements companies. As Malaysians becoming more educated, they know that dietary supplements can prevent certain disease.

Popularity of fish oils increase during 2008 in Malaysia, due to their various health benefit and low price. However, glucosamine saw 11% current value growth in 2008, and it was one of the fastest growing dietary supplements in

the year. Combination dietary supplements dominated sales within dietary supplements with around 23% value share in 2008. However herbal combination dietary supplements are more widely consumed due to consumer's perception towards herbal products as natural (Euromonitor International, 2009). Noonan a and Noonan b (2006) concluded that the marketplace for dietary supplements has grown dramatically, since the passage of the Dietary Supplement Health and Education Act in 1994 (DSHEA) in USA. Malden (1998) discovered that vitamins and minerals are the most widely consumed in the dietary supplement category.

Kim et al.(2001) found that most of the vitamin/mineral supplements in Korea are consumed by females, middle-aged and older persons, urban residents, and individuals in high socioeconomic groups. Kim et al. (2001) also found that the motivational factor for individuals to consume a supplement is their view about the health benefits of the vitamin/mineral supplements. Other than that, from previous research found by Dana Fennell (2004), the non-Hispanic Whites, females, higher education, and higher income seem to use more supplements (whether herbs, vitamins, or minerals) in United States.

Dana Fennell (2004) also found that the variables that have a relationship with dietary supplement use are: (1) race or ethnicity; (2) age; (3) education; (4) income; and (5) lifestyle variables such as smoking, drinking, and exercising. Other than that, Kim, Han, and Keen (2001) think that vitamin/mineral supplement usage is strongly affected by several characteristics: (1) sex; (2) residence; (3) socioeconomic status, and (4) age.

Consumers' Perception, Attitude, and Behaviour

Dewettinck, Van Bockstaele, Kühne, Van de Walle, Courtens, and Gellynck (2008) demonstrated that consumer makes food choice based on their beliefs and attitudes. Beliefs are the consumers' cognitive knowledge which link attribute, benefits and objectives. While attitudes are the consumers' feeling or the emotional responses towards the product attributes.

Consumers form an attitude towards the food product based on numerous characteristics perceived in a product and they evaluate their satisfaction on a food product base on various product criteria rather than one product criteria. According to Lindsay and Norman (1977), perception can be defined as “ the process by which organisms interpret and organize sensation to produce a meaningful experience of the world” and it serve as a filter between the external (objective) and internal (subjective) stimuli of the consumer. Perception determines consumers' preference, choice and attitude (Verbeke, 2002, p. 31).

Many researches had used Ajzen's (1991) behavioral intention model, the Theory of Planned Behaviour (TPB) in explaining consumer's product choice behaviour. Therefore in this study, it is to focus on understanding what factors determine the consumer's attitude towards dietary supplement, which will later influence the subsequent purchase intention based on Ajzen's (1991) TPB. Intention had been defined by Fishbein and Ajzen (1975) as “ a person's location on a subjective probability dimension involving a relation between himself and some action”. According to Bagozzi, Baumgartner, and Yi (1989), intentions are the best predictor of planned behaviour and an unbiased predictor of action.

However, Newberry, Klemz, and Boshoff (2003) found that purchase intention is not suitable for predicting actual purchase behavior including for non-durable goods, service, and impulse goods. A consumer who intended to buy may or may not actually make a subsequent purchase. Purchase intent is often used by management to distinguish between those who are most likely to purchase and those who are less likely to purchase. Thus, management can plan marketing strategies to target the segment which consist people who most likely to purchase

There are many factors that affect consumers' attitude and beliefs, as well as the purchasing intention. Sabbe, Verbeke, and Damme (2008) found that socio-demographic (gender, age, place of living, and level of education) and socio-environmental factors (family and friends' support) associate with consumers' general attitude, beliefs and purchasing intention towards tropical fruits. Differences in consumers' perceptions and consequently in preferences were influenced by various factors including culture differences across countries (Messina et al., 2008).

According to Yeung and Morris (2001), Rozin, Pelchat, and Fallon (1986) cited that psychological interpretation of product properties influenced food choice more than physical properties of products. One good example for psychological interpretation which influences the attitudes and behavior of consumers to purchase a food product is perception of food safety risk. Perceived need can strongly predicted behavioral intention to purchase rather than affective and/or cognitive attitude (Messina et al., 2008).

Attitude toward the Behavior

<https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

Behavioral

Beliefs

Behavior

Intention

Subjective Norm

Normative Beliefs

Actual Behavioral Control

Perceived Behavioral Control

Control Beliefs

Sources: Ajzen, I. (2006). Theory of Planned Behavior: TPB diagram.

Retrieved March 12, 2010, from <http://people.umass.edu/aizen/tpb.diag.html>.

Attributes that Influence Purchasing Behaviour

For the purchasing of fresh meat and meat product, Issanchou (1996) described that consumer's quality perception process starts with collection of intrinsic and extrinsic product features. Appearance, colour, shape and presentation of the product serve as the former cues, while price, brand name, store, stamp of quality, country of origin, as well as product and nutritional information serve as the latter cues. These cues are used by consumers to form beliefs about the quality attributes of the product. Other

<https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

than that, experience and credence attributes towards quality also identified by Issanchou (1996). Attributes including convenience, freshness, and sensory characteristics are considered as experience attributes, while healthiness and naturalness which is not directly perceivable for the consumer are considered as credence attributes. Finally, based on the perceptions of the product's quality attributes, consumer forms an overall quality evaluation towards the product.

Bhaskaran and Hardley (2002) found that younger consumers prioritized the non-functional attributes such as price, taste (Messina et al., 2008), packaging and promotional offerings ahead of the functional attributes of functional foods, whereas older consumers are more concerned of its functional attributes. Other than that, product form also influences how people perceive the product. Bogue, Sorenson and O' Keeffe (2009) found that pharmacological beverages are more appealing to parents of young children and adults with difficulty in swallowing tablets as it is in liquid form and it is convenient and potable. Messina, Saba, Turrini, Raats, and Lumbers (2008) also determine that knowledge and familiarity with the products are the common attributes that discriminate functional and conventional food.

However, the attributes used to judge dietary supplement is almost the same as the other food product. The nutritionaltree.com (n. d.) had identified a few guidelines for consumers to refer in order to select, evaluate and purchase a dietary supplement. These include company and brand reputation, ingredients in a product, quality assurance, product forms (tablets, capsules, or liquid), and claims or testimonials.

Packaging

According to Silayoi and Speece (2004), Prendergast and Pitt (1996) had reviewed the functions of packaging and define them according to their role either in logistics or marketing. The packaging's logistic function is to hold, protect, preserve, and facilitate handling of the product during the movement along the distribution channels. Whereas the marketing function is to convey messages about the product attributes and benefits to consumer at the point of purchase.

According to Ampuero and Vila (2006), Evans and Berman (1992) argued that packaging is considered as a product characteristic. However, Keller (1998) considered packaging as not related to the product. He considered brand, name, logo and/or graphic symbol, personality and the slogans as more important than packaging. For Rettie and Brewer (2000), packaging becomes a primary vehicle for communication and branding, thus making it as an important part of the selling process. It also differentiates itself from other brands. Packaging also attracts public's attention and it informs the public about the qualities and benefits of consuming the product (Silayoi and Speece, 2004). Hence, it has been called the "silent salesman", where the role of informing the customer has transferred from the salesperson to advertising and to packaging (Sara, 1990).

Silayoi and Speece (2004) had done a studied focus on understanding the link between packaging and consumer purchase behaviour. They identify the four main packaging elements that affect consumer purchase decisions.

Which are graphics and size/shape of packaging (can be categorized as visual elements) that relate to affective side of decision making. Whereas the <https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

information provided and technologies (can be categorized as informational elements) of the packaging are related to cognitive side of decision making. Visual elements are effective for low involvement product; information provided is useful for high involvement product whereas technologies are to satisfy consumers who are more demanding and sophisticated.

In addition, Ampuero & Vila (2006) had identified few packaging elements and divided them into 2 components: (1) graphic components (including colour, typography, graphical shapes used and the images introduced); and (2) structural components (including shape, size and the materials used to produce the containers). McNeal and Ji, (2003) had also identified some other packaging elements, including texts, structure, and personalities and those mentioned by Ampuero and Vila (2006). They found that all of these elements have to be combined to provide the manufacturers with last opportunity to convince possible buyers to purchase their brand.

Direct-to-consumer Advertising

Wu (2001) found that the main indicator for advertising strategy is the level of consumer involvement. A positive relationship between level of consumer involvement and advertising content importance was shown in the study. Advertising effect hierarchy and consumer involvement level also show positive relationship.

A research had been done on consumer attitudes and behavioural intentions on direct-to-consumer advertising on prescription drug by Singh and Smith (2005). These authors found that DTC advertising do not increase consumers knowledge about the prescription drugs, yet, no doubt, it increased their

awareness towards the prescription drugs and positively influenced consumers' behavioural intentions. One study reports that for every 10% increase in DTC advertising of drugs within a prescription drugs class will lead to a 1% increase in sales of the drugs in that class (Kaiser Family Foundation, 2003). However, DTC advertisements face severe opposition. Consumers are doubtful of the truthfulness of the information in the DTC advertisement as they claim that drug manufacturers are motivated by profits rather than informing consumers about its safety. Moreover, DTC advertisement will harm the doctor-patient relationship by changing the physician-patient relationship into physician-consumer relationship and it might encourage self-diagnosis (Singh and Smith, 2005; Spake and Joseph, 2007).

Sabbe, Verbeka, and Damme (2008) suggested that the crucial tool in persuading people to consume and purchase tropical fruits is the persuasive and appropriate communication about nutritional properties, health benefits, usage, and consumption issues of the tropical fruits.

Pricing

Fearne (1992) found that previous evidence suggested that consumer purchasing behaviour is changing continuously due to changes in both economic factors (price and income) as well as non-economic factors. For instance, during economy downturn, consumers are less willing to pay higher price to purchase a product. Consumers often associate price with financial risk. Lower price is perceived as lower financial risk, thus consumers may be willing to trade-off risk of a food product against a lower price (Yeung & Morris, 2001). However, Blackwell, Miniard, and Engel (2006) believed that <https://assignbuster.com/consumers-perception-and-intention-towards-purchasing-tropical-seaweed-marketing-essay/>

consumer also often interpreted higher prices as an indicator of higher quality. Therefore, price promotions or discounts may lead to opposite effect.

Sabbe et al. (2008) suggested that taste samples in retail environment, price promotions, and sales incentives for tropical fruits can be used to stimulate trial purchase.

Information/ Labeling

Kimura, Wada, Tsuzuki, and Goto (2008) found that information including food origin and nutritional value plays an important role in food purchasing decisions. However, excessive information will lead to information overload where consumers may ignore more detailed information. Other than that, according to Yeung and Morris (2001), Taylor (1974) showed that consumers acquire information as a risk reliever if they are uncertain about the product safety and benefits. Kimura et al. (2008) also demonstrated that consumer were willing to pay higher for product with large amount of information in active-search condition. This is explained by the theory of consumer behaviour by Beatty et al (1988) in Kimura et al. (2008) studied, where consumers produce stronger commitment to products after extensive search for information. On the other hand, medium amount of information were highly valued by consumers in red-only condition. Therefore, they had suggested that for product such as dietary supplement, providing small and selected information especially on the front label, in addition to enable consumers to actively access further information about the product through web site or brochure can enhanced the effective information processing. Hence, lead to higher valuation of the product.

Individual with health problems or inherited health problems will actively search information on food and supplements for prevention and cure (Bhaskaran & Hardley, 2002). Consumer considered information from organizations and individuals that promoting health and well-being (for instance government, business or associations) as reliable sources but manufacturers of functional foods as unreliable sources (Bhaskaran & Hardley, 2002).

A survey of 16, 392 U. S. grocery shoppers indicated that consumers prefer label with “ rich in” than “ added”. For instance, “ rich in omega-3” rather than “ omega-3 added”. This is due to consumers perceive food rich in an ingredient are more natural and are less processed. However, with the label “ added” with the same ingredient, consumers perceive that these ingredients were added during manufacturing process (Natural Products Marketplace, 2010).

Familiarity

According to Sabbe, Verbeka, and van Damme (2008), Cheron and Hayashi (2001) found that familiarity is a combination measure of cognitive and behavioural experience. They found that purchasing behaviour is affected by the level of familiarity with a product or a product category. Other than that, in the studied of Sabbe et al. (2008), Pollard, Kirk, and Cade, (2002) as well as van Kleff, Trijp, and Luning, (2005) defined familiarity as the amount of experiences related to product that will lead to development of attitudes towards a product and thus behavioural and purchasing intention. Therefore, past experiences are predictor or later behaviour.

Sabbe et al. (2008) found that the most important determinant predictor or purchasing intention for both fresh and processed tropical fruit products is familiarity. They found that product familiarity is correlated with socio-demographic characteristics. Another study done by Messina et al. (2008) shown that familiarity with product or brand and product knowledge are significant to Southern countries and Sweden. The more consumers are familiar with the products, the more the products were recognized through beneficial and imagery attributes.

Chapter 3

Methods

The study is to determine the factors that influence consumer purchasing intention of dietary supplements. Other than that, it is also to determine cons