

Halal Nutraceutical in Singapore: A Scientific Approach

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KEYWORDS	ABSTRACT
Halal Nutraceutical concept, conceptual Framework, Scientific approach, Muslim and Non-Muslim Entrepreneurs' Perceptions.	The increasing demand of Halal Nutraceutical products by consumers, Muslim entrepreneurs and non-Muslim entrepreneurs entail a need to analyze the development of the Nutraceutical sectors within the Halal Industry in Singapore. This study will illuminate the potential growth of the Halal industry which has become a significant contributor to all facets of the economic growth in Singapore. This study will also help to further improve the compliance towards halal standard among the participants and key players of the halal industry. This too will encourage investment of resources in Halal Research and Scientific approach in the road to transform Singapore into a leader in the Halal market. Focus of this study on nutraceutical products, which has the capability to expand from its own niche market to a global market, especially in a commercial hub like Singapore. For this reason, non-Muslims entrepreneurs in the halal industry need to have a clear understanding and the right perception of the Halal Concept for it would contribute towards the creation of a halal business environment in Singapore

1. INTRODUCTION

The purpose of this research is to analyze the development of the health and nutraceutical sectors within the Halal Industry in Singapore. The findings will illuminate the potential growth of the Halal industry which has become a significant contributor to all facets of the economic growth in Singapore. This study will also help to further improve the compliance towards halal standard among the participants and key players of the halal industry. This too will encourage investment of resources in Halal Research and Development in the road to transform Singapore into a leader in the Halal market. This research is focused on

Nutraceutical products, which has the capability to expand from its own niche market to a global market (The Global Market Potential of Halal, 2010), especially in a commercial hub like Singapore.

Singapore's strategic location at the very heart of Asia is a significant factor for the potential growth of its halal Industry. Surrounded by a predominantly Muslim populated region, Singapore is the natural gateway to some 350 million Muslim in South East Asia. Singapore signed its first

free trade agreement (FTA) with the six-Nation-Gulf Cooperation Council (GCC) in November 2006. Qatar, Kuwait and the United Arab Emirates have agreed to recognize Islamic Religious Council of Singapore Halal Certification and Halal Mark. This recognition augurs well for Singapore position as a vital trading hub and it will help boost halal trade between Singapore and the GCC countries.

In Singapore some 9,264 halal certificates are being issued by the Singapore Islamic Religious Council in the year 2009 (Singapore Halal Directory 2012/2013). In 2011, the number of halal-certified premises stood at 3,000 and this number is set to grow by 60% to 5000 premises in 2015, halal products approved by Muis went up seven times from 2,240 to 15,600 in the last decade, according to the Dr. Yaacob Ibrahim, the Minister for Muslim Affairs, when speaking at the Muis Halal Seminar (Channel News Asia, 9th October 2011).

Given this scenario, it is thus important for the Singaporean community, both Muslim and non-Muslim, to recognize the potential of the Halal industry. This is because delving into an emerging billion dollar industry such as the Halal industry could help to further develop the economy of Singapore just as it would serve to solve some of the long standing problems faced by the Muslim community. There are reasons why the Halal industry is important to Singapore's growth as a multi racial society. Many Muslims and non Muslims consumers still do not understand the spirit of Syariah governing these products. Halal principles are not confined to the strictly religious, but involve health, cleanliness and safety. This study will help to deepen understanding of the concept of Halal so as to familiarize non-Muslims and non Muslims in Singapore about Halal principles, particularly in the areas of nutraceutical products.

2. BACKGROUND OF THE STUDY

The halal industry is a lucrative trillion dollar business globally. A research conducted by the World Halal Secretariat estimated that the global halal products market is estimated at a whopping USD2.3 trillion (not including banking), which USD1.4 trillion, 67 % of this market represents food and beverages. Pharmaceuticals, on the other hand, make up USD506 billion, 22 % with cosmetics and personal care amounting to USD230 billion (The Halal Journal, 2010). Given the huge demand from 1.8 billion or 25% of the world population, according to 2030 new population projection by the Pew Research Centre (Forum on Religion & Public Life, 2010), halal consumers world-wide, business entrepreneurs and governments around the world are tapping into the halal industry for the economic benefits it offers. To reap the tremendous economic benefits the halal industry stands to offer, effective business strategies need to be in place by halal entrepreneurs. Halal products and services are also gaining increasing acceptability among non-Muslim and the global market value trade in halal food and non-food products is estimated at US\$2.1 trillion annually. This market has created interest among producing countries, both Muslim and non-Muslim. The growing interest in the potential of the market has hastened the move towards the development of global standards, as well as expanded the coverage of standards to include activities, such as logistics and packaging. (The 3rd Industrial Master Plan, IMP3, 2010)

Halal industry is all about being on bringing to the world a better quality of life. Halal products and services are fast gaining worldwide recognition as a new benchmark for safety and quality assurance. Many of the proponents of halal value proposition constitutes not only the profile local players who dare to venture into the global market but now the big international player are joining this lucrative bandwagon.

Global acceptance of the Halal industry is growing at a feverish pace based on the keen interest shown by regional and international companies. Apart from countries with Muslim majority like Pakistan, Iraq, Turkey, Kuwait, Indonesia and Malaysia, even countries with minority such as USA, UK, France, Germany, Australia and Russia has started to educate themselves in understanding the value concept of 'Halal & Tayyib'.

2. PROBLEM STATEMENT

Singapore has always prided itself from being open and receptive to look for to the 'best practices' in the realm of syariah compliant products and was known to have sent its personnel abroad to learn from countries known to possess such best practices. There exists a practice of bringing in experts to Singapore. This can be seen in the Islamic Banking and Finance sector in the recent years. The Global Halal Industry has many similarities to the Islamic Banking and Finance industry. At the heart of it, both industries strive to serve the Muslim community and the growing purchasing power of Muslim communities by focusing on Shariah-compliance aspect of respective products. Both industries have grown beyond looking at their respective 3 4 domestic markets and are looking for cross-border flows to drive growth and achieve economies of scale. Both industries have piqued the interest of the Singaporean government and businesses which have recognised the potential commercial value as well as the humanistic values ingrained in Syariah compliant products.

One of the main considerations that undergird this study is, before these business strategies can be formulated, are halal entrepreneurs equipped with the right understanding and perception of halal? In seeking answers to this question, it is critical to take into account two distinct groups of 'halal entrepreneurs', whose right understanding and perception of halal need

to be studied. The Non-Muslim and Muslim entrepreneurs in the halal industry can offer insights into their behavior and strategizing based on their respective understanding and perception of halal. A related issue in the pursuit for answers for this question hinges on the fact that 'halal consumers' understanding and perception in a specific halal market could be a key factor for effective business strategies to be devised.

Tackling these challenges will help halal entrepreneurs to appreciate why halal consumers shy away from purchasing their products even though there is a halal logo, the factors that influence purchasing of competitive halal products, why halal consumers still buy 'halal claimed' products (without the halal logo) and the significance of halal certification to both the halal consumers and halal entrepreneurs' communities.

3. CONCEPT OF HALALAN AND TAYYIBAN

The word halal and tayyib have been mentioned repetitively in the holy Qur'an. However, it's understanding, by many Muslims is shallow to say the least. Many understood that food is halal as long as it does not contain pork or liquor. The word halal in Arabic means something that is permissible (Ibrahim Mustaffa et.al. 1989). From the perspective of Islamic Jurisprudence (Fiqh), the word means a choice that is allowed by the Islamic law (syari'at). That is one has a choice either to do or not to do it.

In another word, it is synonym with another arabic word: "mubah" (Sanu, 2000). The opposite is haram which means totally not allowed or forbidden. According to the fundamental of Islamic Jurisprudence (Usul Fiqh) it is defined as something that must be 4 5 avoided according to the Islamic law (Ibn Abd al-Barr, 2000). Both terms however are a part of the principles of Fiqh.

There may be changes according to place, time and situation. However, each difference must be based on the due process of *ijtihad* (decision making process). Based on the language definition, the word *tayyib* has been traditionally translated as pure (Ibn Rajab, 1980), good and superb¹. The opposite of it is "al-khabith" which means something that is not good, not perfect, bad, rotten and bring harms (al-Marbawi, 1990). It connotes bad quality, imperfection and impurity. (Anas Mohd. Yunus, A., & Wan Mohd. Yusof et.al 2010).

Consequently, the phrase *halal* and *tayyib* goes simultaneously together to create a different level of consumerism and to elevate the stringent criteria in not only food industry but in every facets of the Muslim life. This is in line with Allah S.W.T. proclamation that He is pure and except nothing less but pure. (Hadith narrated by Muslim) In this aspect *halal* and *tayyib* encompasses not only dietary consumables but also in cosmeceuticals, personal healthcare, nutraceuticals, and pharmaceuticals products.

Attitudes influences consumers, their trust and confidence, feelings, values and tendency to act which will produce stimulation whether to support or to dispute. Subjective norm or motivation to comply is an individual's perception of social normative pressures, or relevant others' beliefs that he or she should or should not perform such behavior. There are many studies which have proven that religion could influence consumers' attitude and behavior (Delener, 1994; Pettinger et al., 2004) in Ilyia Nur, et al., (2011). Perceived Behavioral Control also captured the motivational factors that influence behavior and indicate how hard people are willing to try to perform the behavior in question (Ajzen, 1991) in (Ilyia Nur, et al., 2011).

¹ Ibn Rajab, 1980) The writers are of the opinion that the word *tayyib* can be aptly translated as 'with quality' or 5 'surpassed standard quality' in context of modern usage of the word quality.



Figure 1.1 Theoretical Framework of Consumer's Behavior (Ajzen, 1991)

The theory of planned behaviour (Ajzen, 1991) proposes that there are dominant factors influencing behaviour, namely, attitude, subjective norm, and perceived behavioural control as shown in Figure 1.1.

These four factors were awareness, attitudes, subjective norms, and perceived behavioural control, will determine the consumer intention to consume Halal nutraceutical products. Hence it will be shown in their consumption behaviour. In a related vein, Bergeaud and Bonne (2006) showed that religion is a very important motivator for eating Halal meat or (consuming Halal nutraceutical products). Moreover, they described how eating Halal or consuming Halal health products are part of a Muslim or Islamic Identity. In general, identity may be a critical issue where individuals or communities feel a threat to significant cultural symbols (Burton, 2004). Consequently, all the factors above will be the determinant factors that could influence the decision making process of Halal consumers in consuming Halal food products.

According to Sungkar (2010), religiosity is generally defined as: "The extent to which an individual is committed to the religion he or she professes and the teachings, such as the individual's attitudes and behaviour reflect this commitment". The present Islamic resurgent and increasing complexities of the consumer market have led to increasing awareness on the contents, processes, sources and other determinants of consumer products they plan to purchase (The Halal Journal, 2010).

The Halalan Toyyiban principle is one of the Shari'ah rules intended to protect decency of human life, as to promote best dietary habit granted by Allah S.W.T. This concept must be understood through integration of its' internal and external aspects. It is important that this concept be absolutely understood as it is a measure quality of consumerism. It has to be applied in the field of consumerism by all parties involved whether it is the consumer, government agency, manufacturer, supplier or businessmen (Yunus et al., 2010).

The Singaporean Halal vision is in many ways comparable to that of Malaysia, that is to become world leader in Halal, but it takes place radically different country and context right across the one-kilometer-long causeway that links the two countries geographically, politically, and historically. This section provides the reader with a broader context for understanding Halal in the Singaporean region and the ways this is similar to and different from what we have been seeing in Malaysia (Fischer, 2016).

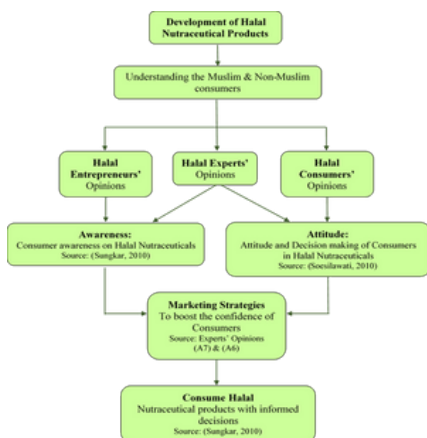


Figure 1.2 Conceptual Framework (AFBE, 2008)

The researcher will present a detailed description and justification of his research framework. This process will begin with an extensive review of the literature that

establishes the theoretical basis for the research and identifies gaps in the current literature. This review will be assisted in the construction of a conceptual model that will guide the formulation of the research questions.

3.1 Definition of Terms

3.1.1 Halal

According to Al-Qaradawi (2010), Halal (the lawful) means, that which is permitted, with respect to which no restriction exists, and the doing of that which the Law Giver, Allah, has allowed. Haram (the prohibited or unlawful) means that which the Law Giver has absolutely prohibited; anyone who engages in it is liable to incur the punishment of Allah in the Hereafter as well as a legal punishment in this world.

The word Halal has entered English dictionaries. It literally means lawful. In technical terms, it means the name given to the legal category of things which are permissible in Islam. Halal is that which has been made lawful through the Holy Quran or through the Sunnah of the beloved Prophet (PBUH) (Al-Sheikh et al., 2004).

The first principle established by Islam is that the things which Allah has created and the benefits derived from them are essentially for man's use, and hence are permissible. Nothing is Haram except what is prohibited by a sound and explicit evidence from Quranic verse and authentic or explicit Hadith, from the Law-Giver. This leads us to understand that the sphere of forbidden things is extremely is very small, while the sphere of permissible things is extremely vast (Al-Sheikh et al., 2004).

According to a Hadith, the Prophet (PBUH) has mentioned about the traders and businessmen of the end of time who disregard the issue of Halal and Haram (al-Bukhari, 1990: 2059)

عَنْ أَبِي هُرَيْرَةَ رَضِيَ عَنِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ: "يَأْتِي عَلَى النَّاسِ زَمَانٌ لَا يُبَالِي الْمَرْءُ بِمَا أَخَذَ مِنْهُ، أَمِنَ الْجِلْدِ أَمْ الْخَرَامِ؟".

Means: "There will come to mankind a time when man will not be concerned about what he takes, whether what he takes is from that which is Halal or Haram. (Indeed) their supplication will not be answered."

(Al-Bukhari)

3.1.2 Halalan and Toyyiban

The words Halal and Toyyib have been mentioned repetitively in the holy Quran. However, it's understanding, by many Muslims is shallow to say the least. Many understood that food is Halal as long as it does not contain pork or liquor. The word Halal in Arabic means something that is permissible (Mustaffa et al., 1989). From the perspective of Islamic Jurisprudence (Fiqh), the word means a choice that is allowed by the Islamic law (syari'at). That one has a choice either to do or not to do it.

In another words, it is synonymous with another Arabic word: "mubah" (Sanu, 2000). The opposite is Haram which means totally impermissible or forbidden. According to the fundamentals of Islamic Jurisprudence (Usul Fiqh) it is defined as something that must be avoided according to the Islamic law (Al-Barr, 2000). Both terms however are a part of the principles of Fiqh (Yunos et al., 2010).

There may be changes according to place, time and situation. However, each difference must be based on the due

process of Ijtihad (decision making process). Based on the linguistic definition, the word Toyyib has been traditionally translated as pure (Rajab, 1980) good and superb². The opposite of it is "al-khabith" which means something that is not good, not perfect, bad, rotten and brings harm (Al-Marbawi, 1990). It connotes bad quality, imperfection and impurity (Yunos et al., 2010).

Consequently, the phrase Halal and Toyyib goes simultaneously together to create a different level of consumerism and to elevate the stringent criteria in not only the food industry but in every facets of the Muslim life. This is in line with Allah S.W.T. proclamation that He is pure and accepts nothing less than but pure (Muslim, 2346). In this aspect Halal and Toyyib encompasses not only dietary consummables but also in personal care, nutraceutical, pharmaceuticals, and health products. Halal takes into consideration not only the origin of raw material and sources, but also the entire value chain, that comply with the concept of Toyyiban.

3.1.3 Tayyib

Besides the problem of halal & haram the second aspect that must necessarily be given attention to, is the word tayyib. This word is not used in relation to food in general, but it also covers various circumstances such as our intentions, words, acts, and beliefs (Ibnu Rajab, 1980) In general, the concept derived from this word is rather abstract and seemed to suggest to a separate standard. . (Anas Mohd. Yunus, & Wan Mohd Yusof et.al 2010).

²Ibn Rajab (1980), the writers are of the opinion that the word *Toyyib* can be aptly translated as 'with quality' or 'surpassed standard quality' in context of modern usage of the word quality.

First: The use of the word *tayyib* in the holy Qur'an is always associated with the acceptance of a particular deed. It is linked closely with purity of one's heart in doing something. For example, a *hadis* of the prophet *pbuh* narrated by Abu Hurairah *r.a* stated that the messenger of Allah *S.A.W* which means:

Abu Hurairah *r.a* reported that the messenger of Allah *s.a.w* said:

عن أبي هريرة ، قال رسول الله صلى الله عليه وسلم :
يَا أَيُّهَا النَّاسُ إِنَّ اللَّهَ طَيِّبٌ ، لَا يَقْبَلُ إِلَّا طَيِّبًا .

"Verily Allah the Exalted is pure. He does not accept but that is pure. Allah commands the believers with what He commanded the messengers. Allah the Almighty has said:

يَا أَيُّهَا الرُّسُلُ كُلُّوْا مِنَ الطَّيِّبَاتِ
وَأَعْمَلُوا صَالِحاً إِنِّي بِمَا تَعْمَلُونَ
غَلِيْمٌ

" O Messengers, Eat of the good things and act righteously" (23:51-53) and Allah *S.W.T* also said: "O You who believe! Eat of the good things that We have provided you with" (2:167 -172)

Then the Prophet mentioned of a person who was away farer from a distance with dishevelled hair and dusty face. He raised his hands towards the heaven and called out: "O My God! O My God!" while his food was haram, his drinks were haram and his clothes too were from haram sources; in fact, (his mouth) had been fed with that which were haram; how can his prayers be answered? (*Hadith* narrated by Muslim)

Second: Al-Imam an-Nawawi Rahimahullah explains that in the above *hadith* does not simply mean that the substance is *halal* (lawful) but that it is also free from *shubhah* (doubtful) elements. (*Sahih Muslim* complementary by an-Nawawi, 1978)

Third: *Tayyib* as a quality standard for goods or products. In this matter, (Al Sonhaji, 1990) said: "Allah commands the believers to eat

good and pure things that Allah has provided and be grateful if they really worship Him" Good and pure foods are divided into two categories:

- a. Good and pure in quality
- b. Good and pure because it is *halal*.

According to Ahmad Al-Sonhadji (1990), Food that is of good quality is well known. Besides having good taste, it also has necessary vitamins and nutrients. As for *halal* food, it is a term defined by religion. At times, a particular food type is not of quality but *halal* status. So men are asked to give priority to food of good quality, both in terms of decency or healthy when choosing food and lawful terms of religious requirement as well.

Besides the problem of *halal* & *haram*, the second aspect that must necessarily be given attention to, is the word *tayyib*. This word is not used in relation to food in general, but it also covers various circumstances such as our intentions, words, acts, and beliefs (Ibnu Rajab, 1980) In general, the concept derived from this word is rather abstract and seemed to suggest to a separate standard.

The use of the word *tayyib* in the holy Qur'an is always associated with the acceptance of a particular deed. It is linked closely with purity of one's heart in doing something. For example, a *hadis* of the prophet *pbuh* narrated by Abu Hurairah *r.a* stated that the messenger of Allah *S.A.W* which means:

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" O You Messenger! Eat of the good things and act righteously" (23:51-53)

The concept of Halalaan toyyiban was inconjunction with WHO guidelines for the assessment of herbal medicines, as indicated in Figure 1.3



Figure 1.3 The Concept of Halalaan Toyyiban in Nutraceutical Products (WHO Guidelines for the assessment of Herbal medicines, 1991)

At its 34th meeting in 1991 World Health Organization (WHO) published the 'Guidelines for the Assessment of Herbal Medicines' in recognition of the worldwide increasing popularity in the use of herbal-based preparations in both allopathic and traditional medicine. These guidelines represent criteria for the assessment of the safety, efficacy, and quality of herbal-based medicines. These guidelines also call for the recognition that long-term traditional use of herbal-based products as a presumption of safety unless contradicted by modern scientific research (Saad B., & Said Omar, 2011).

Regarding establishing efficacy, WHO guidelines state: The indication(s) for the use of the medicine should be specified. In the case of traditional medicines, the requirements for the proof of efficacy shall depend on the kind of indication. For treatment of simpler diseases and for nonspecific indications, some relaxation is justified in the requirements for proof of efficacy, taking into account the extent of

traditional use; the same considerations apply to prophylactic use. Experience with individual cases recorded in reports from physicians, traditional health practitioners or treated patients should be taken into account. Where traditional use has not been established, appropriate clinical evidence should be taken into account (WHO, 1991).

3.1.4 Nutraceutical

Nutraceutical basically comes under the umbrella of pharmaceutical studies and is a combination of the words "nutrition" and "pharmaceutical". It is a food or food product that reportedly provides health and medical benefits, including the prevention and treatment of diseases. Such products may range from isolated nutrients, dietary supplements and specific diets to genetically engineered foods, herbal products, and processed foods. The definition of nutraceutical that appears in the latest edition of the Merriam-Webster Dictionary is as follows: A food stuff (as a fortified food or a dietary supplement) that provides health benefits (Merriam-Webster Dictionary, 2005).

3.1.5 Meaning of Nutraceutical

Nutraceuticals is a term coined in 1979 by DeFelice (1992). According to Defelice; it is defined as a food or parts of food that provide medical or health benefits, including the prevention and treatment of disease. Subsequently, several other terms (medical food, functional food and nutritional supplements) were used.

Nutraceuticals may range from isolated nutrients, dietary supplements and diets to genetically engineered "designer" foods herbal products, and processed products, such as cereals, soups, and beverages. The increasing interest in Nutraceuticals reflects the fact that consumers hear about epidemiological studies indicating that a specific diet or component of a diet is

associated with a lower risk for a certain disease. Nutraceutical that are based on clear scientific data demonstrating efficacy and safety will indeed be a good and beneficial link between nutrition and medicine (Biesalski, 1992).

3.1.6 Nutraceutical in Nutritional Therapy

Thomas (2006) identifies nutritional therapy as healing system using dietary therapeutics or nutraceuticals as a complementary therapy. This therapy is based on the belief that foods can not only be sources of nutrients and energy but could also provide medical benefits. In other words, foods can be medicine if they were properly prepared. Both folk histories of foods, along with modern scientific research, continue to extend the idea about functional foods or nutraceuticals. Nutritional therapy mainly uses functional food, nutraceuticals and dietary supplements to promote the body's natural healing based on knowledge from foods sciences, clinical nutrition studies, and epidemiological studies.

According to Bland (1996), Phytotherapy mainly refers to use of medicinal plants or herbs to prevent or cure diseases or to improve health. Most phytotherapies are developed from folk medicinal plants. This concept is a summary for evidence based healing system that is widely practised by people widely all over the world. Compared with nutritional therapy, phytotherapy is more complicated because of its use of many phytonutrients with diverse chemical structures and biological activities. Most phytotherapeutic strategies are ahead of the scientific basis without strict controls in quality, safety, and efficacy. However, phytotherapy has a long history and has been used worldwide.

4. NUTRACEUTICAL: CONCEPTUAL FRAMEWORK

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5. CONSUMER'S BEHAVIOUR

According Soesilawati (2010), these three factors (attitudes, subjective norms, and perceived behavioural control) will determine individual intentions to consume Halal food, (or Halal nutraceutical products)

and will be shown in their behaviour. A subject norm is an individual's perception of social pressure of what to do or not to do. At this level, the culture of the society people live in may control their behaviour (Soesilawati, 2010). These factors need to be filtered through the qualitative research with thorough and concise interview questions pertaining to the attitudes, norms and perceived behaviour as highlighted.

Attitudes influence consumers, their trust and confidence, feelings, values and tendency to act which will produce stimulation whether to support or to dispute. Subjective norm or motivation to comply is an individual's perception of social normative pressures, or relevant others' beliefs that he or she should or should not perform such behavior. There are many studies which have proven that religion could influence consumers' attitude and behavior (Delener, 1994; Pettinger et al., 2004) in Ilyia Nur, et al., (2011). Perceived Behavioral Control also captured the motivational factors that influence behavior and indicate how hard people are willing to try to perform the behavior in question (Ajzen, 1991) in (Ilyia Nur, et al., 2011).

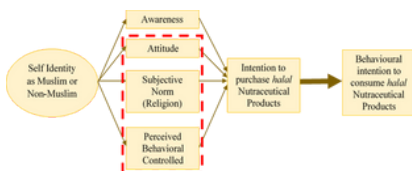


Figure 1.1 Theoretical Framework of Consumer's Behavior (Ajzen, 1991)

The theory of planned behaviour (Ajzen, 1991) proposes that there are dominant factors influencing behaviour, namely, attitude, subjective norm, and perceived behavioural control as shown in Figure 1.1.

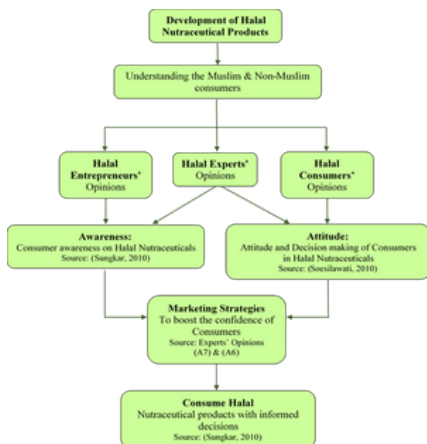
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Hence it will be shown in their consumption behaviour. In a related vein, Bergeaud and Bonne (2006) showed that religion is a very important motivator for eating Halal meat or (consuming Halal nutraceutical products). Moreover, they described how eating Halal or consuming Halal health products are part of a Muslim or Islamic Identity. In general, identity may be a critical issue where individuals or communities feel a threat to significant cultural symbols (Burton, 2004). Consequently, all the factors above will be the determinant factors that could influence the decision making process of Halal consumers in consuming Halal food products.

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6. THE SINGAPOREAN HALAL VISION

The Singaporean Halal vision is in many ways comparable to that of Malaysia, that is to become world leader in Halal, but it takes place radically different country and context right across the one-kilometer-long causeway that links the two countries geographically, politically, and historically. This section provides the reader with a broader context for understanding Halal in the Singaporean region and the ways this is similar to and different from what we have been seeing in Malaysia (Fischer, 2016).



7. THE CONCEPT OF HALALAN TAYYIBAN

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represent criteria for the assessment of the safety, efficacy, and quality of herbal-based medicines. These guidelines also call for the recognition that long-term traditional use of herbal-based products as a presumption of safety unless contradicted by modern scientific research (Saad B., & Said Omar, 2011).

8. DYNAMISM OF THE NUTRACEUTICAL INDUSTRY AND TECHNOLOGY

The healthcare and nutraceutical industry is a dynamic industry driven by consumer demands and the need to reduce costs. Among the quality attributes of nutraceutical products are; reliability, health, efficacy, consistency, and safety. To illustrate this point, it was not too long ago when Singaporean first heard, a case involving Malay traditional or Java traditional products in Singapore. The case involved Darul Ilaaj, a Malay traditional healer. Mr Mohamad from Darul Ilaaj received a complaint from the Health Singapore Authority (HSA). One of his patients was awarded in hospital due to Cushing Syndrome even though the traditional Herb is Halal. However, the herbs' content was mixed with steroid and chlorpheniramine, a kind of drugs. HSA had warned consumers not to consume the Black pills from Darul Ilaaj (Berita Harian, 2015).

The second case involved a product of Malay traditional herbs 'PHQ 1001 Khasiat Penawar Herba Qaseh Serata Herb'. According to HSA, it was marketed as a traditional herbal medicine to encounter impotence, stroke, and kidney problem. HSA had therefore warned consumers not to purchase and consume that herbal product, due the risk of Cushing Syndrome. This is because the herb's content was mixed with steroid and dexamethasone, a kind of drugs (Berita Harian, 2017).

This critical concept in marketing approach assists Halal entrepreneurs in deploying the

proper strategies to boost the confidences of consumers towards Halal nutraceutical products. With generic Halal certification, there is no guarantee of success but people buy credibly Halal certified products, because they want greater assurance, peace of mind and tranquility which are related closely to spiritual wellness. Purchase intention is the process of analysing and predicting the behaviour of consumers (Lin & Lin, 2007).

8.1 Producing certified Halal nutraceutical products is not only a matter of business, but it's a matter of confidence and trust. There is a greater trust and confidence on MUIS's Halal certification. Muslim consumers globally depend on Halal claims being true for their spiritual well-being. While non-Muslim consumers buying Halal products want to be sure to consume the high quality they associate with Halal. They are trying things and exploring alternative and complementary medicines. Furthermore, while Halal certification approves a product as Halal, it does not mean that the product is *Toyyib*. What is the moral value of Halal if the production endangers God's creation? Halal is a parameter, *Toyyib* is the holistic ethical value concerning the society and environment. Proper labelling provides consumers with information, choice and clarity in their purchasing decisions. When people are well-informed, they can then make informed decisions on what to purchase or what to consume.

Together we can create a healthier ummah. The researcher suggested that there is a need for public education and a series of public forums on the Halal nutraceutical chain and its requirements for consumers. Halal consumers will understand the principles and requirements of Halal in terms of syariah and its technical aspects with better perspectives. In addition, it will be an impetus for suppliers and entrepreneurs to expand their business to meet the consumers' demand for truly Halal nutraceutical products in Singapore.

Hence, Halal consumers are not only looking for Halal certified products but they are also looking for quality, affordability, availability and variety.

8.2 Need for Variety

The world is changing and people are going back to green, going back to organic natural products, and they want a healthy lifestyle. Consumers want variety in their health and nutraceutical products to fulfill their needs and wellbeing. The demand for variety and diversity of Halal products will increase with the increase in household income, aggressive marketing strategies, promotions and greater trust and confidence in Halal certification. As wealth rises, consumers will substitute less costly inferior health products and services with higher priced but better quality alternative medicines. A number of several affluent societies in Singapore have reached this point today. The awareness and willingness of the young to purchase these healthy products reflect the increasing levels of education and affluence in the Muslim demography. This is in addition to the aggressive marketing of the local nutraceutical industry who utilizes various platforms from mainstream to new media.

8.3 Halal Certifiers

8.3.1 Capacity Building and Service Improvements

Halal certifiers must facilitate the industry toward Halal certification rather than complicate it. Halal is a religious matter. It is necessary to provide credible Halal certification. Among the challenges in the Global trade of Halal products are reliance on basic and non-tradable goods, a fragmented market, inability to meet international standards and absence of globally accepted Halal standards. Halal Certification is a service industry. What is a

service industry without the Service? Efficient processes and professional services must be vastly improved.

8.3.2 Harmonious Halal Standards

The most obvious challenge for Halal certifiers would be to progress towards a more common, standardized and harmonious Halal guideline. Although there are variations in Halal prescribed practices, the principle of Halal is the same across all races and cultures. Perhaps the Halal certifiers can work towards such harmonious standards where mutual recognition and strategic alliances can be adopted as their strategy rather than working competitively or against each other.

8.3.3 Halal Beneficiaries

The research on the consumption of Halal nutraceutical and functional foods in the everyday lives of Muslims in Singapore raised several dynamic questions that are the central focus of this research; how do Halal drivers and beneficiaries such as Halal certifiers, Muslim consumer's groups, Islamic Institutions and manufacturing companies and suppliers understand and practice Halal production, trade, and standards? A difference between the two projects is that the latter explores how standardization and certification bodies are emerging in the field of Islamic production, trade, and regulation and the former as drivers provide the technical knowledge.

Thus, emerges hybrid collaboration between science, religion and technology to elevate the standard of Halal nutraceutical products. Many entrepreneurs do not have either sound religious background or basic technical and scientific knowledge. The Muslim and non-Muslim entrepreneurs in the Halal industry can offer diversity in their behavior and strategic approach based on their respective understanding and

perception of Halal. A related issue in the pursuit of answers for this question hinges on the fact that Halal consumers' understanding and perception of a specific Halal market could be a key variable for effective business strategies to be devised.

A balance of both is necessary to provide credible Halal nutraceutical products to consumers. The researcher situates his analysis of Halal nutraceutical between the experts' opinions, the entrepreneurs' strategies, and the consumers' awareness and attitudes.

9. RECOMMENDATION

The study suggests some further recommendations for the improvement of Halal Nutraceutical Quality Assurance System;

a) The importance and significance attached to the understanding of the attitudes and decision making of consumers in their Halal nutraceutical consumption. Hence, Halal nutraceutical's entrepreneurs and manufacturers were recommended to have in-depth knowledge on their Halal products and marketing strategies based on Islamic Law.

b) In addition, the findings of this study trigger the importance of documentation of Traditional Malay Islamic Medicine, and institutionalizing Malay Traditional Medicine as HALAL Nutraceutical products. This recommendation is in line with the path taken from the establishment and the development of Traditional Chinese Medicine. In addition, with existing universal ideal of Good Manufacturing Practice (GMP), and ISO in consonance with the syariah practices

c) To advance in this field, the final recommendation is to leverage the best expertise available and make smart partnerships between mainstream industries and global Halal entrepreneurs.

Halal entrepreneurs can succeed in their business by leaning their activities towards three strategic objectives;

i. To build the knowledge base for active management of HNP through appropriate national policies, eg. (HSA, NEA & AVA).

ii. To strengthen quality assurance, safety, efficacy, proper use and effectiveness of Halal Nutraceutical by regulating Halal Nutraceutical Products, practices and practitioners.

iii. To promote universal health coverage by integrating HNP services appropriately into healthcare.

establishment of a Halal Nutraceutical Quality Assurance System. In fact, there is a great need for such research in the future to cover the many areas relating to this topic.

10.CONCLUSION

In conclusion, this chapter has summarised and discussed the findings in accordance with the objectives of this study. Alhamdulillah, this study has identified the development of the Halal nutraceutical industry in Singapore. As for the first objective, the findings found that there are six contributing factors for the Development of Halal Nutraceutical Products. The results showed that factors such as increasing level of awareness and positive attitude significantly influence the decision of Halal consumers to purchase Halal Nutraceutical Products in Singapore. Concurrently, a main takeaway of this study is the proposed model eco-system LGE, which functions as a guide and business plan for local and global entrepreneurs in the Halal nutraceutical industry. This model could be useful in further research that seeks to evaluate the development of the Halal nutraceutical industry in Singapore. In addition, the model could be proposed to business entrepreneurs to strategise their approach to boost the confidence of consumers in Halal nutraceutical products in Singapore. At the end of this chapter, research areas have been suggested for further investigation. Because of the limitations of this research, the researcher suggests some recommendations for future research, which should concentrate on the

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