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The Application of Food Safety Concept Within the Reference Standards for Halal Food in Malaysia: An Overview

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Abstract

Food safety aspects play an important role in ensuring that tayyib (good) components are adhered to such as healthy, quality, hygienic and safe foods. Hence, food safety and halal principles are interconnected and inseparable. In determining safety, the hygiene and quality of food—the concept of halālan tayyiban (halal and good) becomes the main benchmark. This article attempts to examine the importance of food safety parallel to the concept of halālan tayyiban in positioning food safety in the halal food industry; to review the reference standards used in halal certification that are consistent with the concept of halālan tayyiban in Malaysia, and to identify the aspects of food safety in the reference standards used for halal food in Malaysia. The aspects of food safety have to be continuously strengthened so that there will be no loop holes and manipulation in its implementation.

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Keywords

Food safety, halal food, *halālan ṭayyiban*, halal standards, halal logo.

Introduction

The growth of the Muslim population has greatly influenced countries including non-Muslims and this has encouraged more food producers or manufacturers to enter the halal market. The rapid development in food technology has resulted in the productions of food to undergo various complex processes which then makes it difficult to differentiate between halal and haram.²

Modern food technology has had an impact on the current food supply. The quality and safety of food can be sustained or even increased. Food production must increase by 70 per cent for an additional 2.3 billion people by 2050.³ As a result of population expansion and increased income, food demand is projected to increase significantly. This projected population is expected to involve an additional annual consumption of nearly three billion metric tonnes of cereals and 470 million metric tonnes of meat in 2050, up to 58 per cent than today.⁴ Therefore, the use of digital technology is fundamental for reducing and preventing the disturbances in the food and agriculture value chain. The bioinformatics, alternative proteins, and ingredient

Emi Normalina Omar and Harlina Suzana Jaafar, "Halal Supply Chain in the Food Industry-A Conceptual Model" in *IEEE Symposium on Business, Engineering and Industrial Applications*, Langkawi, Malaysia: IEEE, 2011, 384–389.

^{2.} Mohamed Syazwan Ab Talib, et al., "Halal Supply Chain Critical Success Factors: A Literature Review," *Journal of Islamic Marketing* 6, no. 1 (2015): 44–71. doi: 10.1108/JIMA-07-2013-0049; Marco Tieman, et al., "Principles in Halal Supply Chain Management," *Journal of Islamic Marketing* 3, no. 3 (2012): 217–243.

^{3.} Food and Agriculture Organization of the United Nations, "2050: A Third More Mouths to Feed," accessed 9 May 2021, https://www.fao.org/news/story/en/item/35571/icode/.

^{4.} Ibid.

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informatics are examples of how technology has transformed the food sector.⁵

This dilemma has triggered alarm among Muslims with issues on the questionable status of halal and food safety that are frequently being discussed. The increasing number of foodborne diseases has raised concerns on food safety among consumers. It is estimated that one out of ten people would fall sick eating contaminated food. Each year around the globe, 600 million cases of food borne diseases involve the death of 420,000 people due to unsafe food.⁷ Although foodborne illness can be avoided, the World Health Organization (WHO) estimates that 33 million healthy lives are lost due to unsafe food globally each year. The number of food poisoning cases that was reported by the Ministry of Health Malaysia (MOH) increased 3.2 per cent in 2019 compared to only 500 cases in 2018.8 Such incidents have caused Muslims to doubt and have destroyed their confidence in foods that have been certified as halal. Hence, it is crucial to position the component of food safety in the halal certification standards that is practised in Malaysia nowadays.

Halālan Tayyiban Food

In the food production segment today, the halal definition is not a stand-alone, but it has to be integrated with the value of wholesomeness that consists of hygiene, purity, safety and high quality. Therefore, food manufacturers have to realise the importance of being able to fulfil the needs of such a

Sam Danley, "Three Technologies Transforming the Food Technology," Food Business News, https://www.foodbusinessnews.net/articles/18000three-technologies-transforming-the-food-industry (accessed 22 February 2021).

World Health Organization, Estimating the Burden of Foodborne Disease, https://www.who.int/activities/estimating-the-burden-of-foodbornediseases (accessed 28 Oct. 2020).

^{7.} Ibid.

^{8. &}quot;Food Poisoning Cases Increase by 3.2 Percent Last Year," *New Straits Times*, https://www.nst.com.my/news/nation/2020/09/621583/food-poisoning-cases-increase-32-cent-last-year (accessed 3 September 2020).

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concept in developing a halal food ecosystem. To achieve this goal, the halal certification scheme in Malaysia engages the industrial manufactures including food products/beverages/food supplements, food premise/hotel, consumer goods, cosmetic and personal care, slaughterhouse, pharmaceuticals; and logistics sectors. However, any natural/fresh produce such as vegetables, fresh fish, seafood and eggs that are not involved in any processing, are not subjected to the Malaysian halal certification. ¹⁰

The concept of *halālan tayyiban* goes beyond the Muslims' belief and adherence to Islam. This concept is perceived as a coherent reference standard that is applicable to all parties regardless of their religion. It stresses that any product to be consumed must be lawful and permissible, as well as comply with the consistency, protection and cleanliness requirements laid down in Islamic law.¹¹

In principle, the terminology of *halālan tayyiban* can be divided into two. Firstly, it is in accord with the provision of the Shari'ah, which is reflected by the term "halal". In this context, the food must be lawful and permissible. Secondly, the food must be safe, clean, healthy and unharmful to be eaten, which is translated by the term "*tayyib*". The *halālan tayyiban* concept comprises all food processing activities, from farm to fork. These activities encompass the entire food supply chain including raw material selection, production, processing, storage and serving.

Halālan ṭayyiban is described as assuring and ensuring that both elements of halālan and ṭayyiban are integrated into holistic and balanced criteria that meet the requirement of condition,

^{9.} Ann Wan Seng, *Kamu Apa Yang Kamu Makan* (Sungai Buloh: Kemilau Publika, 2013).

^{10.} Jabatan Kemajuan Islam Malaysia, *Manual Prosedur Pensijilan Halal Malaysia*, Semakan Ketiga (Selangor: Firdaus Press, 2015).

^{11.} Sariwati Mohd Shariff et al., "Halal Supply Chain Awareness: Initial Case Study in Hong Kong," *Journal Applied Environmental and Biological Science* 6, no. 118 (2016): 64–71.

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situation and application.¹² Therefore, the combined phrase of *halālan tayyiban* is defined by Islamic scholars as the best of halal,¹³ halal that is pristine and not filthy,¹⁴ halal that is delicious¹⁵ and halal that is not harmful to religion, life and the mind.¹⁶ Hence, Islam points out that safe food is not only free from sources that are haram, but is also hygienic, pure, good, non-hazardous and non-toxic, as well as non-intoxicating precisely according to the concept of *halālan tayyiban*.

The implementation of the *halālan tayyiban* concept in food quality management makes use of the criteria of *halālan tayyiban* principles in a more general and simple form. For example, the definition of halal food (operational criteria) is stated clearly in the Trade Descriptions Order (Definition of Halal) 2011 and the Halal Standard MS1500: 2019.

Halal food and products consumption is not only emphasised by Muslims but non-Muslims as well due to the elements of safety and hygiene that are reinforced in the concept of *halālan ṭayyiban*. Both elements are characterised as products quality assurance of products and have elevated the confidence and awareness among consumers globally.¹⁷ This is because the quality of products or goods are related to consumers' satisfaction.¹⁸

Apnizan Abdullah, "The Difference between Halal and Halalan Tayyiban," New Straits Times, https://www.nst.com.my/opinion/ columnists/2018/04/357046/difference-between-halal-and-halalantoyyiban (accessed 14 April 2018).

^{13.} Muḥammad 'Alī al-Ṣabūnī, *Rawā'i' al-Bayān Tafsīr Āyat al-Ahkām min al-Qur'ān*, vol. 1 (Beirut: Dār Iḥyā' al-Turāth al-ʿArabī, 2001), 121.

^{14.} Abī Ja'far Muḥammad Ibn Jarīr al-Ṭabarī, *Tafsīr al-Ṭabarī*, vol. 1 (Kaherah: Dar al-Ma'ārīf, 1958), 81.

Fakhr al-Dīn Muhammad Ibn 'Umar al-Rāzī, Al-Tafsīr al-Kabīr, vol. 5 (Beirut: Dār al-Fikr, 1994), 3.

 ^{&#}x27;Imād al-Dīn Abī al-Fidā' Ismā'il Ibn Kathīr, Tafsīr al-Qur'ān al-ʿAzīm, vol. 1 (Beirut: Dār al-Rayyān li al-Ṭibā'ah wa al-Nashr wa al-Tawzī', 2004), 267.

Mustafa 'Afifi Ab. Halim, et al., "Halal Pharmaceuticals: Legal, Shari'ah Issues and Fatwa of Drug, Gelatine and Alcohol Contribution/Originality," International Journal of Asian Social Science 4, no. 412 (2014): 1176–1190.

^{18.} Syed Shah Alam and Nazura, M. S., "Applying the Theory of Planned Behaviour (TPB) in Halal Food Purchasing," *International Journal of Commerce and Management* 21, no. 1 (2011): 8–20.

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As the certified food products are assured of their hygiene and purity, thus the concept of *halālan ṭayyiban* is in line with the needs of consumers who prioritise health aspects of the food taken or prepared. ¹⁹

The importance of quality aspects in the food production drives the development of halal concept inclusively through the application of halālan tayyiban principles. 20 Generally, the shari ah perspective has been detailed in the MS1500: 2019 as the main reference for entrepreneurs and halal management.²¹ Meanwhile, physical evaluation is the main focus from a technical perspective, which is to evaluate the quality, hygiene, safety and health of a food product.²² In the context of food quality management, the concept of halālan tayyiban is more comprehensive, holistic, and integrated compared to GMP and HACCP, which is more concerned with physical evaluation.²³ Elements such as the slaughtering methods, physicality of the food, resources, and halal management procurement take into account both the physical and non-physical components. Therefore, conventional quality standards such as GMP, GHP and HACCP are used in integration with Islamic quality standards to facilitate the halal certification process as added value to the food products produced.²⁴

Vloreen Nity Mathewa, et al., "Acceptance on Halal Food among Non-Muslim Consumers," "Acceptance on Halal Food among Non-Muslim Consumers," Procedia - Social and Behavioral Sciences 121 (2014): 262–271.

^{20.} Harlida Abdul Wahab and Alias Azhar, 'Halalan Tayyiban dalam Kerangka Perundangan Malaysia.' *Kanun*, 26, (2014): 103–120.

^{21.} Department of Standards Malaysia, MS1500:2019 Halal Food General Requirements (Third Revision), 2019.

^{22.} Norazilawati Md Dahlal, "Elemen Pelaksanaan Konsep Pengurusan Kualiti Makanan Halalan Tayyiban Daripada Perspektif Ontologi Islam," paper work presented at the *Bengkel Antarabangsa Pembangunan Berteraskan Islam (WAPI-9)*, Universitas Muhammadiyyah Sumatera Utara (UMSU), Medan Indonesia, May 2016.

^{23.} Ibid.

 ^{&#}x27;Hayati @ Habibah Abdul Talib, and Khairul Anuar Mohd Ali, "An Overview of Malaysia Food Industry: The Opportunities and Quality Aspects," *Pakistan Journal of Nutrition* 8, no.5 (2009): 507–517.

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Food Safety as a Tayyib Component

Food safety is defined as a condition in which food is assured of its hygiene, safety and risk-free.²⁵ There is no possibility of any harm when certain food is consumed. The protection mechanism in the food safety framework is to deter consumers from the elements of destruction, contamination and invasion by harmful agents on food and its nutrients.²⁶

The World Health Organization (WHO) defines food safety as an approach or method used in ensuring the production, preparation, distribution and consumption of food are done in a safe manner.²⁷ In a wider context, food safety can be translated as a system that manages and ensures the safe preparation of food and beverages. This system is responsible in ensuring that ingredients, foods prepared and marketed are up to the standard or in accordance with any act or law that is practised by a country.²⁸ In Malaysia, Food Safety and Quality Division (BKKM) under the Ministry of Health Malaysia is the responsible party that ensures the safety of food products for consumption.²⁹

Safe food is able to achieve the objective and purpose of buying foods without having the risk of destroying one's life, family, asset and the environment. The concept of food safety and products in Malaysia shares the same objective with the concept of food safety in the *maqāsid al-sharī'ah*, which is

^{25.} Anne Wilcock, et al., "Consumer Attitudes, Knowledge and Behaviour: A Review of Food Safety Issues," *Trends in Food Science & Technology* 15, (2004): 56–66.

Ramalinggam Rajamanickam, et al., "Perspektif Global Terhadap Perlindungan Pengguna Melalui Undang-undang Keselamatan Makanan," Jurnal Undang-Undang Dan Masyarakat (JUUM) 16 (2012): 43–53.

^{27.} World Health of Organization, "Food Safety," https://www.who.int/news-room/fact-sheets/detail/food-safety (accessed 28 Oct. 2020).

^{28.} Musfirah Syahida Mohamad et al., "Keselamatan Makanan Menurut Perspektif Islam: Kajian Terhadap Pengambilan Makanan Berisiko," *Jurnal Fiqh* 12 (2015): 1–28.

^{29.} Kementerian Kesihatan Malaysia, www.fsq.moh.gov.my (accessed 15 Oct 2020).

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to protect consumers from products that are risky and able to threaten people physically or mentally.³⁰

Food safety not only prevents food from any contamination and foodborne illness that are spread by biological agents such as virus, bacteria and parasite, toxigenic and chemical substances, but also preserves the quality and condition of the food in reducing or eliminating the effects of harmful substances. Food safety also takes into consideration the aspects of health care and nutritious food intake. Therefore, the concept is consistent with the principles of *ḥalālan tayyiban* that emphasise the elements of hygiene, safety and nutrients. In addition, food safety within the concept of *ḥalālan ṭayyiban* not only determines that a product is halal, but also harmless and does not cause any hazard physically, emotionally, mentally and spiritually.

Food safety is an intrinsic component in the concept of halālan tayyiban. Even though food safety is not mentioned clearly in the phrase of halālan tayyiban, it covers a wide and wholesome definition. This is supported by a verse in surah al-Baqarah that proposes preventive steps from dangerous elements.³³ In the food sector, the verse can be translated into preventive measures from any harmful element that could generate disease if not controlled.³⁴ It is categorised as harmful in terms of biology, chemistry and physical especially bacteria that can trigger risks and endanger consumers.³⁵

^{30.} Nazatul Nabila Mohd Jalil, et al., "Kesaksamaan Prinsip-Prinsip Keselamatan Produk Sebagai Sebahagian Dari Aspek 'Halālan Tayyiban' Dengan Prinsip-Prinsip Syariah," *Jurnal Syariah* 27, no. 3 (2019): 435–458.

^{31.} Syuhaida Idha Abd Rahim, et al., "Food Safety, Sanitation and Personal Hygiene in Food Handling: An Overview from Islamic Perspective," *International Journal of Civil Engineering and Technology* (IJCIET) 9, no. 9 (September 2018): 1524–1530.

^{32.} Nazatul Nabila Mohd Jalil, et al., "Kesaksamaan Prinsip-Prinsip Keselamatan Produk," 435–458.

^{33.} Surah al-Bagarah (2): 195.

^{34.} Syed Fazal Ur Raheem and Marin Neio Demirci, "Assuring Tayyib from A Food Safety Perspective in Halal Food Sector: A Conceptual Framework," MOJ Food Processing & Technology 6, no. 2 (2018): 170–179.

^{35.} Ronald Schmidt and Gary Rodrick, Food Safety Handbook (New Jersey: John Wiley & Sons, 2003).

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Halal Laws and Standards in Halal Certification

Halal law is evolving in line with the rapid growth of the halal industry in Malaysia. There are more than 20 acts that can be referred to halal related in Malaysia.³⁶ The provision of halal laws in Malaysia have been administered under the Trade Descriptions Act 2011.³⁷

Furthermore, the Food Act 1983 has been discussed in explaining the concept of *ḥalālan ṭayyiban* in the Malaysian legal framework.³⁸ Several halal standards and procedures have also been introduced in Malaysia to assist industrial players comply with halal guidelines comprehensively. These laws and standards are intended to govern the food production operations particularly and protect consumers from harm and fraud in activities related to halal food processing.

The reference standard that is used by JAKIM (Department of Islamic Development Malaysia) in determining the halal status of food is based on the related standard and procedure manual. In this discussion, four related documents on the halal compliance are reviewed to determine the extent of food safety consideration in Malaysia halal certification.

1. MS 1500: 2019 (Halal Food—General Requirements)

The Malaysian halal food standard has been proven to be widely recognised and accepted. This reference standard is employed by JAKIM as the authority body in halal certification that is

^{36.} Che Rosmawati Che Mohd Zaina, et al., "Jurisdiction and Prosecution of Halal Matters in Malaysia: Challenges and Prospect," *Procedia—Social and Behavioral Science* 172, (2015): 294–300.

^{37.} Zalina Zakaria & Siti Zubaidah Ismail, "Perkembangan Pengaturan Halal Menerusi Akta Perihal Dagangan 2011 di Malaysia," *Jurnal Syariah* 23, no. 2 (2015): 189–216.

^{38.} Harlida Abdul Wahab and Alias Azhar, "Halalan Tayyiban dalam Kerangka Perundangan Malaysia," *KANUN* 1, (2014): 103–120.

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recognised in the international market.³⁹ The halal certification covers holistic procedures such as application, inspection, monitoring and reinforcement that act as the guidelines for food manufacturers. Therefore, the halal logo of JAKIM is world renowned and a symbol of halal compliance.⁴⁰ The halal certification system that was introduced to assess the extent of commitment among food manufacturers in adhering to and fulfilling the needs that are required by the standard. In addition, the Trade Descriptions Act 2011 was gazetted to ensure that the halal logo is not being abused or misused and the term "halal" is not used illegally or in fraud.⁴¹

The MS1500 document was revised in 2009, since its first implementation in 2004. It is renamed MS1500: 2009 (Production, Preparation, Handling and Storage of Halal Food) with improvements made to the components of Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP)⁴² and are still maintained in MS1500: 2019..

In 2019, the newly revised version of the Halal food standards was made public and gazetted which is known as MS1500:2019 Halal Food—General Requirements (Third Revision). The standard prescribes practical guidelines for the preparation and handling of halal food, starting from the selection of raw materials to the distribution and promotion of food industry activities. The MS1500: 2019 provides clearer understanding among food manufacturers on the application

^{39.} Nik Maheran Nik Muhammad, et al., "Positioning Malaysia as Halal-Hub: Integration Role Of Supply Chain Strategy And Halal Assurance System," *Asian Social Science Journal* 5, no. 7 (2009): 44–52.

^{40.} Yvonne Tuah, "Meeting Demands of The Halal Industry," *The Borneo Post*, 3 March 2019, https://www.theborneopost.com/2019/03/03/meeting-demands-of-the-halal-industry/ (accessed 20 Oct. 2020).

^{41.} Khairul Anuwar Mustaffa, "Developing Halalan Tayyiban Concept in Malaysia's Food Industry," *Halal Journal* 3, (2019): 97–108.

^{42.} Zakiah Samori, et al., "Understanding the Development of Halal Food Standard: Suggestion for Future Research," *International Journal of Social Science and Humanity* 4, no. 6 (2014):482–486. http://dx.doi.org/10.7763/IJSSH.2014.V4.403.

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of the *halālan tayyiban* concept in the halal certification procedures. It also takes into account appropriate sources of halal food, including animals (both land and aquatic), plants, microorganisms, minerals, chemicals, beverages and genetically modified organisms.⁴³

Other related standards—MS1514 and MS1480—are implemented together in the determination of halal food to strengthen the application. This is stated in the 4.4.3 clause of MS1500: 2019. ⁴⁴ In the food production chain, both standards address topics of hygiene, sanitation and food safety aspects. ⁴⁵ To a certain extent, both standards ensure that the food consumed is not only safe, but also halal.

In the processing and manufacturing of food products, among the factors that should be considered are the hygiene factor, safety and good sanitation. These important components are clearly stated in the standard that focuses on the importance of food safety. Therefore, GMP or GHP is a compulsory requirement in preparing products that are certified as halal. ⁴⁶

2. MS1514: 2009 (Good Manufacturing Practice)

The certification scheme of Good Manufacturing Practice (GMP) was established in acknowledging officially the successful industry that is able to maintain elements of GMP that are in the MS1514 and simultaneously, to fulfil the needs of food safety and consumers satisfaction.⁴⁷ The process of certification involves compliance audit and monitoring by auditors who are

^{43.} Department of Standards Malaysia, MS1500: 2019 Halal Food General Requirements (Third Revision), 2019.

^{44.} Ibid.

^{45.} Zakiah Samori, et al., "Understanding the Development of Halal Food Standard," 482–486.

^{46.} M. Mufizur Rahmana, et al., "Food Safety Issues in Islam," *Health, Safety and Environment* 2, no. 6 (2014): 132–145. doi: 10.14196/hse.v2i6.144.

^{47.} Kementerian Kesihatan Malaysia, Bahagian Keselamatan dan Kualiti Makanan, http://fsq.moh.gov.my/v6/xs/page.php?id=210 (accessed 15 Oct. 2020).

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appointed by the BKKM. Indeed, MS1514: focuses on the food chain, from the raw materials to consumers that emphasises the aspects of cleanliness in producing or manufacturing foods that are safe and suitable to be consumed.⁴⁸

The elements that are available in the GMP such as cleanliness and safety of premises and facilities, sanitation and maintenance, the needs of documentation control on the hazards of foods, hygiene control system and trained workers with personal hygiene practices before, during and after working are indicators that each food product manufactured has high quality standard. ⁴⁹ All elements reflect the level of safety and hygiene of a food premise that has been certified.

3. MS1480: 2019 Hazard Analysis and Critical Control Point (HACCP)

The certification of HACCP Malaysia is an accreditation system in the context of food safety under the MOH. The industry players must comply the system in all levels of preparation, labelling, packaging, transporting, storing and selling of food. The adherence to this system is a proof that the concept of halālan tayyiban is given priority in food production in Malaysia. ⁵⁰ In the certification of HACCP, the food products are ensured to be safe and do not pose any danger of microorganisms, chemical substances or foreign matters that are harmful. The HACCP system is able to identify any sources that make the

^{48.} Sazelin Arif and Safiah Sidek, "Application of Halalan Tayyiban in the Standard Reference for Determining Malaysian Halal Food," *Asian Social Science* 11, no. 17 (2015): 116128.

^{49.} Hadi Akbar, et al., "Incorporating Islamic Values and Shariah Compliance on Malaysian Standard Related to Food Industry," *Online Journal Research in Islamic Studies* 1, no. 3 (2014): 69–86.

^{50.} Elistina Abu Bakar, "Undang-Undang Pengguna dalam Konteks Halalan Toyyiban di Malaysia," in *Halalan Thoyyiban Perspektif Malaysia*, ed. Nurdeng Deuraseh, Russly Abdul Rahman, Shuhaimi Mustafa, Jamilah Bakar & Dzulkifly Mat Hashim (Serdang: Universiti Putra Malaysia, 2013), 87–98.

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food harmful clinically and systematically.⁵¹ In view of that, preventive measures can be taken at each level and not only focus on the end products.

The main purpose of introducing HACCP is to detect, assess and control any form of significant hazards that can threaten the safety of food. HACCP is able to fulfil the global needs in the food safety issue and eventually enables the manufacturers to promote and market their products and consumers are able to enjoy the products that are certified to be safe. ⁵² In term of application, both standards (MS1480 and MS1514) need to complement each other and need to refer to the Food Act 1983 and Food Regulation 1985. ⁵³

4. Manual Procedure for Malaysia Halal Certification (MPPH)

The MPPH is a detailed manual for the procedure of halal certification. The manual acts as a guideline and reference to the industry players who are applying for halal certification by JAKIM. The manual is a complementary document to the MS1500, MS1480 and MS1514 that covers procedures of application, inspection, monitoring and enforcement of law and it also states the important principles to be adhered to by the holders of Malaysia halal certificate.⁵⁴ The halal certification will only be issued after the applicants have fulfilled all standards and general requirement set in the manual.⁵⁵ In addition, the manual covers aspects of hygiene, safety and health of food.⁵⁶

^{51.} Ibid.

Hazard Analysis Critical Control Points, 6 January 2017, accessed 11 Nov. 2020, https://myagri.com.my/2017/01/analysis-critical-control/11 Nov. 2020.

^{53.} Sazelin Arif and Safiah Sidek, "Application of Halalan Tayyiban."

^{54.} Sazelin Arif and Safiah Sidek, "Application of Halalan Tayyiban in the Standard Reference for Determining Malaysian Halal Food," 116–128.

^{55.} Jabatan Kemajuan Islam Malaysia, Manual Prosedur Pensijilan Halal Malaysia, Semakan Ketiga (Selangor: Firdaus Press, 2015).

^{56.} Khairul Anuwar Mustaffa, et al., "Manual Prosedur Pensijilan Halal Malaysia Sebagai Suatu Aplikasi Memenuhi Keperluan Konsep Halalan Tayyiban: Suatu Analisis," *Online Journal of Research in Islamic Studies* 4, no.1 (2017): 1–16.

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Nowadays, it has become vital to eradicate any doubts on the ingredients available in food products. This is due to the number of whose original sources are not known; whether they originate from plants or animals, chemical substances or others. Hence, a detection system is needed before halal certification can be conducted. Among the main elements in the manual that focus on the importance of food safety is the confirmation of halal status of the ingredients used.⁵⁷ Hence, the needs for supplementary or complementary documents on the sources of ingredients used are important in making it clear of their sources.

Good hygiene practices as the main element in the manual focus on the importance of premises that are kept clean and tidy. The workers who handle food must follow strictly the workers' ethical code and GHP in ensuring that the food is clean and not contaminated.⁵⁸

The manual has also been stated clearly that food manufacturers need to have halal assurance system to avoid the contamination of products and danger posed to consumers. The system covers aspects of transportation that meet all the safety criteria in assuring the quality of products so that there is no mixing of halal and non-halal products.⁵⁹ The vehicles used must be specified and appropriate in order to ensure that the products are clean and free from any form of contamination.⁶⁰

Halālan Tayyiban Elements in the Reference Standards

In determining halal food, the standards and guidelines employed by JAKIM are observed to be adhering to the principles of Islamic laws. The concept of *halālan tayyiban* is incorporated in determining the procedures of halal food in Malaysia. It is translated into a reference standards that is currently practised

^{57.} Ibid.

^{58.} Jabatan Kemajuan Islam Malaysia, Manual Prosedur Pensijilan Halal Malaysia, Semakan Ketiga.

^{59.} Ibid.

This matter is stated clearly within the clause "4.6 Storage, transportation, display, sale and servings of halal food" in MS 1500: 2009 (Halal Food— General Requirements) Third Revision.

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in Malaysia's halal certification. ⁶¹ Hence, a major impact is the existence of a platform toward the understanding of the halal food concept and *tayyib* that is parallel to the Islamic laws among communities especially in Malaysia.

Generally, there are four elements in the Manual Procedure of Malaysian Halal Certification that fulfil the need of *halālan tayyiban* practices which are the verification of the sources of ingredients used, the food safety and quality control, the implementation of halal assurance system and the control of regulation compliance. Hence, the manual enables food manufacturers to follow and achieve the needs of the concept of *halālan tayyiban* and simultaneously, enhances food safety assurance. However, the four elements need to be strengthened continuously so that there is no flaws in the implementation.

Besides, the food industry plays a crucial role in monitoring the environment, ensuring maintenance, regulating management of waste product, conducting audit and handling consumers' complaints.⁶³ The laws and regulations are enforced and implemented continuously in assuring the halal status and the safety of foods. Hence, the quality of foods can be enhanced with the focus given to aspects of food safety.⁶⁴

The expectation that food producers will implement GMP is commonly recognised in many developed countries, but there are also additional particular rules for exporters wishing to enter international markets, such as those for high-risk procedures of uncooked meats to avoid food poisoning in canned food.⁶⁵

^{61.} Sazelin Arif and Safiah Sidek, "Application of Halalan Tayyiban in the Standard Reference for Determining Malaysian Halal Food," 116–128.

^{62.} Khairul Anuwar Mustaffa, et al., "Manual Prosedur Pensijilan Halal Malaysia," 1–16.

^{63.} Yasmine Motarjime and Hubb Lelieveld, Food Safety Management: A Practical Guide for Food Industry (X: Elsevier, 2014), 4.

^{64.} A. Rohr, et al. "Food Quality and Safety – Consumer Perception and Public Health Concern," *Food Control* 16 (2005): 649–655.

Daniele Giovannucci and Morton Satin, Food Quality Issues: Understanding HACCP and Other Quality Management Techniques. A Guide to Developing Agricultural Markets and Agro-Enterprises (Washington, DC: World Bank, 2000).

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HACCP has been added into The Codex Alimentarius, which is currently required for many food manufacturing businesses in Europe and the United States. Its application in export manufacturing processes implies the aspects of professionalism and safety that are typically needed in foreign trade transactions.⁶⁶

Each reference standard has its own focus. Although the HACCP system is proven in producing foods that are fit and safe for consumption, the system cannot ensure the quality of hygiene. ⁶⁷ GMP on the other hand, is a system that covers the elements that exist in the HACCP. There are activities added to this system that are relevant to hygiene factors such as management of pest control and water treatment. ⁶⁸ In the procedure of halal food compliance, food safety is covered together with other standards that are needed in halal certification. It is clear that the concept of *halālan tayyiban* that is applied in the reference standards of halal in Malaysia include the aspects of food safety.

Under the 4.4.2 clause, for example, MS1500 states clearly the role that should be concerned by the manufacturers of halal food. ⁶⁹ Although MS1500 mentions the management of waste and the use of food additives that are permissible, there are no specific amount of the substance that is explained in detail or considered as accepted. This is because the amount of food additives also contributes to the food safety and quality. Therefore, this matter should be given ample attention when the audit process is being carried out.

^{66.} Ibid.

^{67.} Faridah, M. S., "Pensijilan 'Good Hygiene Practices' (GHP) untuk Industri Makanan di Malaysia—Satu Cadangan." *Buletin Teknologi Makanan* 2 (2005): 53–39.

^{68.} Ibid.

^{69.} The MS1500: 2019 document states that halal food manufacturers shall implement measures to: a) manage and inspect raw materials, ingredients and packaging materials before processing; b) manage waste effectively; c) store harmful chemical substances safely and appropriately; d) prevent physical, biological and chemical contamination of food; and, e) prevent excessive use of permitted food additives.

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The halal logo, HACCP and GMP are forms of certification in proving that a product is safe. The confidence of consumers will be enhanced if they are able to make an excellent choice in selecting the best products. With the regulated laws and regulations, this would create awareness among the manufacturers of their responsibility in producing goods that are halal and tayyib rather than focusing on making profits alone.

The Way Forward

To position food safety in halal certification through the combination of several reference standards in practices of halal compliance as being discussed has demonstrated the importance of aspects of *tayyib* in the food production. The practices of these reference standards are closely related to the food quality assurance that indirectly give added value. It is crucial that Muslim manufacturers are encouraged to be aggressively involved in the food industry.⁷⁰

In ensuring the production of quality and safe products are achieved, there are challenges in sustaining a system of food safety enforcement that is effective and trusted by all communities. Thus, it is imperative that further studies be conducted in investigating the extent of quality assurance aspects and the safety practices of other countries so that halal food is assured to be continuously safe, of good quality and healthy at the international platform.

In addition, consumers' awareness on regulations and laws of food safety has to be inculcated as a driving factor among the food operators in upholding the implementation of a standards. Indeed, consumers' awareness is one of the motivations for the food manufacturers in obtaining the halal and food safety.⁷¹ Besides, the certifications not only gain consumer

^{70.} Zawanah Muhammad, et al., "Halal: Antara Tuntutan Agama dan Strategi Ekonomi," *Jurnal Penyelidikan Islam* 21 (2008).

^{71.} Suhaiza Zailani et al., "Drivers of Halal Orientation Strategy among Halal Food Firms," *British Food Journal* 117, no. 8 (2015): 2143–2160.

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trust in food safety, but also allow producers to streamline and control the process of product quality efficiently.⁷² The high level of awareness and demand on halal food put pressure on manufactures to adjust to the needs of the halal ecosystem.⁷³

Previous halal studies have identified the possibility in the lack of halal awareness and understanding among the workforce regarding the halal concept particularly from the aspects of sources, raw materials, processing and storage. As a result, halal training courses are essential for improving and providing new skills in the halal management system and *shari'ah* knowledge.

Human capital training and planning must be done appropriately for the halal industry players so that they are equipped with knowledge, halal competencies and skills. Hence, they will be more competitive in the halal food industry as well as portraying a positive halal image and perception.⁷⁵

Conclusion

Indeed, the application of the concept of *halālan tayyiban* that is translated in the Malaysian Halal Certification is crucial for the halal food industry. It requires a detailed assessment of the status of halal, hygiene, safety, health and quality of ingredients in food products. The development of halal food standards in Malaysia is intended to unite all regulations and guidelines on food and beverages to be a standard that has to be referred to

Nolila Mohd Nawia and Nurul Izati Mohd Nasir, "Consumers' Attitude Toward the Food Safety Certificate (FSC) in Malaysia," *Journal of Food Products Marketing* 20, (2014):140-150, DOI: 10.1080/10454446.2014.921879.

^{73.} Suhaiza Zailani et al., "Drivers of Halal Orientation Strategy among Halal Food Firms," 2143–2160.

^{74.} Ernest Cyril de Run and Lau Wee Ming, "Will Those Targeted Pay More? The Issue of Halal Logo," in *Reading in Marketing: An Islamic Perspective*, ed. Osman Mohd Zain, 2nd Edition (Gombak: IIUM Press, 2011), 161–174.

^{75.} Hanini Ilyana Che Hashim and Sariwati Mohd Shariff, "Halal Supply Chain Management Training: Issues and Challenges," *Procedia Economics and Finance* 37 (2016): 33–38.

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by all food manufacturers. Meeting all the certifications enables food operator companies to penetrate into the international market. ⁷⁶ In a nutshell, the reference standards not only assure the food quality and safety in the market, but also serve to allay any doubts the public have as well as provide answers that guide the consumers' choice in food consumption.

Last but not least, this study could help contribute to the survival and well-being of Muslim in Malaysia pertaining to the halal food industry as well as encourage the halal culture among the non-Muslim communities through the principles of food safety that are embedded in the concept of halālan ṭayyiban.

^{76. `}Jacques Trienekens and Peter Zuurbier, "Quality and Safety Standards in the Food Industry, Developments and Challenges," *International Journal of Production Economics* 113, no.1 (2008): 107–122.

Norkumala binti Awang / TAFHIM 14 No. 2 (Dec 2021): 27-51

References

- Ann Wan Seng. *Kamu Apa Yang Kamu Makan*. Sungai Buloh: Kemilau Publika, 2013.
- Apnizan Abdullah. "The Difference between Halal and Halalan Tayyiban." New Straits Times. https://www.nst.com.my/opinion/columnists/2018/04/357046/difference-between-halal-and-halalan-toyyiban. Accessed 14 April 2018.
- de Run, Ernest Cyril and Lau Wee Ming. "Will Those Targeted Pay More? The Issue of Halal Logo." In *Reading in Marketing: An Islamic Perspective*. ed. Osman Mohd Zain, 2nd ed. Gombak: IIUM Press, 2011.
- Danley, Sam. "Three Technologies Transforming the Food Technology." *Food Business News*. https://www.foodbusinessnews.net/articles/18000-three-technologies-transforming-the-food-industry. Accessed 22 February 2021.
- Department of Standards Malaysia. MS1500: 2019 *Halal Food General Requirements*, Third Revision. Cyberjaya: Department of Standards Malaysia, 2019.
- Elistina Abu Bakar. "Undang-Undang Pengguna dalam Konteks Halalan Toyyiban di Malaysia." In *Halalan Thoyyiban Perspektif Malaysia*. eds, Nurdeng Deuraseh, Russly Abdul Rahman, Shuhaimi Mustafa, Jamilah Bakar and Dzulkifly Mat Hashim. Serdang: Universiti Putra Malaysia, 2013.
- Emi Normalina Omar and Harlina Suzana Jaafar. "Halal Supply Chain in the Food Industry-A Conceptual Model" in *IEEE Symposium on Business, Engineering and Industrial Applications*. Langkawi, Malaysia: IEEE. (2011): 384–389.
- Faridah, M. S. "Pensijilan "Good Hygiene Practices" (GHP) untuk Industri Makanan di Malaysia –Satu Cadangan." *Buletin Teknologi Makanan* 2 (2005): 53–39.
- Giovannucci, Daniele and Morton Satin. Food Quality Issues: Understanding HACCP and Other Quality Management Techniques. A Guide to Developing Agricultural Markets and Agro-Enterprises. Washington, D.C.: World Bank, 2000.

The Application of Food Safety Concept

- Hadi Akbar, Alina A.R., S.K. Muhammad and M. H. M. Yusop. "Incorporating Islamic Values and Shariah Compliance on Malaysian Standard Related to Food Industry." *Online Journal Research in Islamic Studies* 1, no. 3 (2014): 69–86.
- Hanini Ilyana Che Hashim and Sariwati Mohd Shariff. "Halal Supply Chain Management Training: Issues and Challenges." *Procedia Economics and Finance* 37 (2016): 33–38.
- Hayati @ Habibah Abdul Talib, and Khairul Anuar Mohd Ali. "An Overview of Malaysia Food Industry: The Opportunities and Quality Aspects." *Pakistan Journal of Nutrition*, 8, no.5 (2009): 507–517.
- Hazard Analysis Critical Control Points. Accessed 6 January 2017. https://myagri.com.my/2017/01/analysis-critical-control. Accessed 11 Nov. 2020.
- Jabatan Kemajuan Islam Malaysia. *Manual Prosedur Pensijilan Halal Malaysia*, Semakan Ketiga. Selangor: Firdaus Press, 2015.
- Jabatan Standard Malaysia. MS1480: 2019 Food Safety According to Hazard Analysis Control Point (HACCP) System, Second Revision. Cyberjaya: Jabatan Standard Malaysia, 2019.
- Jabatan Standard Malaysia. MS1514:2009 Good Manufacturing Practice for Food, First Revision. Cyberjaya: Jabatan Standard Malaysia, 2009.
- Ibn Kathīr, 'Imād al-Dīn Abī al-Fidā' Ismā'il. *Tafsīr al-Qur'ān al-Azīm*, vol. 1. Beirūt: Dār al-Rayyān li al-Ṭibā'ah wa al-Nashr wa al-Tawzī', 2004.
- Kementerian Kesihatan Malaysia, Bahagian Keselamatan dan Kualiti Makanan. http://fsq.moh.gov.my/v6/xs/page.php?id=210. Accessed 15 Oct. 2020.
- Khairul Anuwar Mustaffa. "Developing Halalan Tayyiban Concept in Malaysia's Food Industry." *Halal Journal* 3 (2019): 97–108.
- Khairul Anuwar Mustaffa, Joni Tamkin Borhan and Mohd Roslan Mohd Nor. "Manual Prosedur Pensijilan Halal Malaysia Sebagai Suatu Aplikasi Memenuhi Keperluan Konsep Halalan Tayyiban: Suatu Analisis." *Online Journal* of Research in Islamic Studies 4, no.1 (2017): 1–16.

Norkumala binti Awang / TAFHIM 14 No. 2 (Dec 2021): 27-51

- M. Mufizur Rahmana, Mst. Minara Khatuna, M. Hasibur Rahman and Nazma Parvin Ansary. "Food Safety Issues in Islam." *Health, Safety and Environment* 2, no. 6 (2014): 132–145. doi: 10.14196/hse.v2i6.144.
- Mohamed Syazwan Ab Talib, Abu Bakar Abdul Hamid and Mohd Hafiz Zulfakar. "Halal Supply Chain Critical Success Factors: A Literature Review." *Journal of Islamic Marketing* 6, no. 1 (2015): 44–71. doi: 10.1108/JIMA-07-2013-0049.
- Musfirah Syahida Mohamad, Saadan Man and Mohd Anuar Ramli. "Keselamatan Makanan Menurut Perspektif Islam: Kajian Terhadap Pengambilan Makanan Berisiko." *Jurnal Figh* 12 (2015): 1–28.
- Mustafa 'Afifi Ab. Halim, Mohd Mahyeddin Mohd Salleh, Mohd Izhar Ariff Mohd Kashim, Azlin Alisa Ahmad and Norhaslinda Nordin. "Halal Pharmaceuticals: Legal, Shari'ah Issues and Fatwa of Drug, Gelatine and Alcohol Contribution/Originality." *International Journal of Asian Social Science* 4, no. 412 (2014): 1176–1190.
- Nazatul Nabila Mohd Jalil, Zalina Zakaria and Nursyamimi Zawani Mohd Shoid. "Kesaksamaan Prinsip-Prinsip Keselamatan Produk Sebagai Sebahagian dari Aspek 'Halālan Tayyiban' Dengan Prinsip-Prinsip Syariah." *Jurnal Syariah* 27, no. 3 (2019): 435–458.
- New Straits Times. "Food Poisoning Cases Increase by 3.2 Per Cent Last Year." https://www.nst.com.my/news/nation/2020/09/621583/food-poisoning-cases-increase-32-cent-last-year. Accessed 3 September 2020.
- Nolila Mohd Nawia and Nurul Izati Mohd Nasir. "Consumers' Attitude toward the Food Safety Certificate (FSC) in Malaysia." *Journal of Food Products Marketing* 20, (2014):140–150. doi: 10.1080/10454446.2014.921879.
- Nik Maheran Nik Muhammad, Filzah Md Isa and Bidin Chee Kifli. "Positioning Malaysia as Halal-Hub: Integration Role of Supply Chain Strategy and Halal Assurance System." *Asian Social Science Journal* 5, no. 7 (2009): 44–52.

The Application of Food Safety Concept

- Ramalinggam Rajamanickam, Thiyagu Ganesan and Nitya Ravindran. "Perspektif Global Terhadap Perlindungan Pengguna Melalui Undang-undang Keselamatan Makanan." *Jurnal Undang-Undang Dan Masyarakat* (JUUM) 16 (2012): 43–53.
- Al-Rāzī, Fakhr al-Dīn Muḥammad Ibn 'Umar. *Al-Tafsīr al-Kabīr*, vol. 5. Beirūt: Dār al-Fikr, 1994.
- Rohr, A., K. Luddecke, S. Drusch, M. J. Muller and R.V. Alvensleben. "Food Quality and Safety Consumer Perception and Public Health Concern." *Food Control* 16 (2005): 649–655.
- Al-Ṣabūnī, Muḥammad 'Alī. *Rawā'i'al-Bayān Tafsīr Āyat al-Aḥkām min al-Qur'ān*, vol. 1. Beirūt: Dār Iḥyā' al-Turāth al-ʿArabī. 2001.
- Sariwati Mohd Shariff, Saadiah Yahya and Sabariah Mohamad. "Halal Supply Chain Awareness: Initial Case Study in Hong Kong." *Journal of Applied Environmental and Biological Sciences* 6, no. 11S (2016): 64–71.
- Sazelin Arif and Safiah Sidek. "Application of Halalan Tayyiban in the Standard Reference for Determining Malaysian Halal Food." *Asian Social Science* 11, no. 17 (2015): 116–128.
- Schmidt, R. H. and G. Rodrick. *Food Safety Handbook*. New Jersey: John Wiley & Sons, 2003.
- Suhaiza Zailani, Kanagi Kanapathy, Mohammad Iranmanesh and Marco Tieman. "Drivers of Halal Orientation Strategy among Halal Food Firms." *British Food Journal* 117, no. 8 (2015): 2143–2160.
- Syed Fazal Ur Raheem and Marin Neio Demirci. "Assuring Tayyib from a Food Safety Perspective in Halal Food Sector: A Conceptual Framework." *MOJ Food Processing & Technology* 6, no. 2 (2018): 170–179.
- Syed Shah Alam and Nazura Mohd Sayuti. "Applying the Theory of Planned Behaviour (TPB) in Halal Food Purchasing." *International Journal of Commerce and Management* 21, no. 1 (2011): 8–20.

Norkumala binti Awang / TAFHIM 14 No. 2 (Dec 2021): 27-51

- Syuhaida Idha Abd Rahim, Siti Khurshiah Mohd Mansor, Mohd Asmadi Yakob and Noraini Ismail. "Food Safety, Sanitation and Personal Hygiene in Food Handling: An Overview from Islamic Perspective." *International Journal of Civil Engineering and Technology* (IJCIET) 9, no. 9 (September 2018): 1524–1530.
- Al-Ṭabarī, Abī Jaʿfar Muḥammad Ibn Jarīr. *Tafsīr al-Ṭabarī*. Qāhirah: Dar al-Maʿārif, 1958.
- Tieman, M., Jack G.A.J. van der Vorst and Maznah Che Ghazali. "Principles in Halal Supply Chain Management." *Journal of Islamic Marketing* 3, no. 3 (2012): 217–243.
- Tieman, M. and Faridah Hassan. "Convergence of Food Systems: Kosher, Christian and Halal." *British Food Journal* 117, no. 9 (2015): 2313–2327.
- Trienekens, J. and Peter Zuurbier. "Quality and Safety Standards in the Food Industry, Developments and Challenges." *International Journal of Production Economics* 113, no.1 (2008): 107–122.
- Tuah, Yvonne. "Meeting Demands of the Halal Industry." *Borneo Post.* 3 March 2019. https://www.theborneopost.com/2019/03/03/meeting-demands-of-the-halal-industry (accessed 20 Oct 2020).
- Vloreen Nity Mathewa, Ardiana Mazwa Raudah Amir Abdullah and Siti Nurazizah Mohamad Ismail. "Acceptance on Halal Food among Non-Muslim Consumers." *Procedia—Social and Behavioral Sciences* 121, (2014): 262–271.
- Wilcock, A., Maria Pun, Joseph Khanona and May Aung. "Consumer Attitudes, Knowledge and Behaviour: A Review of Food Safety Issues." *Trends in Food Science & Technology* 15, (2004): 56–66.
- World Health Organization. *Estimating the Burden of Foodborne Disease*. https://www.who.int/activities/estimating-the-burden-of-foodborne-diseases. Accessed 28 Oct. 2020.
- Yasmine Motarjime and Hubb Lelieveld. *Food Safety Management:* A Practical Guide for Food Industry. Elsevier, 2014, 4.

The Application of Food Safety Concept

Zakiah Samori, Amal Hayati Ishak, and Nurul Himmah Kassan. "Understanding the Development of Halal Food Standard: Suggestion for Future Research." *International Journal of Social Science and Humanity* 4, no. 6 (2014): 482–486. http://dx.doi.org/10.7763/IJSSH.2014.V4.403

Zawanah Muhammad, Munir Md. Salleh, and Abdul Muhaimin Mahmood. "Halal: Antara Tuntutan Agama dan Strategi Ekonomi." *Jurnal Penyelidikan Islam* 21 (2008).