Pandora's Box on the Shelf? Halal Certification, the GMF Marketplace and the Muslim Consumer bouzenita@squ.edu.om

Anke Iman Bouzenita¹ Hemmy Kirsten² Bronwyn P. Wood ³

Abstract

The paper outlines halal certification reliability and consumer attitude towards it generally. It reveals some of the issues the halal industry faces in terms of its credibility. As difficulties to develop halal certification standards persist even with conventional food stuffs, the paper goes on to question the possible integration of genetically modified food (GMF) into the halal market. It investigates different Islamic legal mechanisms and their suitability to evaluate GMF and its halal status. The paper then sheds some light on the GMF marketplace and the need for labelling from a consumer rights perspective. It concludes that the Muslims' global purchasing power should translate into more influence taking with regard to more Islamically compliant production, processing and labelling on a wider scale.

Keywords: Halal Certification, GMF, Halal Market, Muslim Consumer, Islamic Law

¹ Ph.D. (Islamic Studies), Associate Professor, Head of Islamic Bioethics Research Group, Department of Islamic Sciences, College of Education, Sultan Qaboos University, Oman

² Ph.D. (Creative Writing), Assistant Professor, College of Arts and Social Sciences, Sultan Qaboos University, Oman Email: kabadji@squ.edu.om

³ Ph.D. (Marketing), Assistant Professor, Department of Business Administration, College of Business and Economics, United Arab Emirates University, Email: bwood@uaeu.ac.ae

Introduction

Islam is global in scope. With over 1.56 billion believers, or nearly one quarter of the world's population, there are literally Muslims in every corner of the globe. The European Muslim population has grown by 140% in the past ten years and outpaces that of non-Muslims. In the United States there are over 2.6 million Muslims, which represent 0.8% of the overall population, according to the Pew Foundation. This means that the Islamic consumer is also everywhere (Oxford Forum Report, 2010). These population increases point not only to the purchasing power of Muslims—which is estimated by Reuters as \$560 billion for Islamic food products—but also to the challenges concerning Muslim preferences for products and services (Power 2018).

No matter their location, Muslims adhere to Sharia, the framework that enmeshes religious belief with private, public, and political life. While the basic tenets of Islam are uniform, legitimate difference of opinion may exist in detailed legal rules that are subject to interpretation. In addition, Muslims are not homogenous in their approaches, awareness and observation of these rules. Companies that have an interest in serving the Muslim market, then, must weigh the implications of how various Muslim consumers approach halal foods.

Halal Food and Certification (Mal) practices Halal which means lawful, legal, legitimate or permitted (Borzooei & Asgari 2013) is part of Sharia and influences perception, attitudes and behavior in Muslim food purchase and consumption (Hanzaee & Ramezani 2011). Halal practices regarding food include food preparation (often referred to as dhabiha or zabiha), which dictates that animal slaughter must be conducted in a way that results in a quick and innocuous death. The animal's jugular and carotid arteries must be severed with a sharp knife to attain maximum blood flow, and quickest and least painful death. Food must not be wasted, and animals must not be killed unnecessarily. Food products may not contain additives that are not clean and must maintain this level of cleanliness during all stages of production, including processing, packaging, storage, transportation, and transaction. Sharia/Halal compliance also applies to food products, which may not contain additives that are not "clean" during processing, packaging, storage, transportation, or transaction. Halal products must not come in contact with foods that are not halal. All transactions surrounding the finances of the food must be with Islamically permissible funds (Boulanouar, 2015). Halal, therefore, is a holistic concept of a process, rather than a snapshot at an animal's point of death or any other step in the critical pathway from birth to plate (Alserhan et al 2018; Wood and Al Azri, forthcoming, 2018).

This, given the industry of Halal food production in predominantly non-Muslim, capitalist countries like the United States, has significant implications. To insure uniformity of standards for Halal accreditation, many countries have established institutions specifically for Halal certification such as: Halal Certification Europe (HCE), The Islamic Food and Nutrition Council of America (IFANCA), Department of Islamic Development of Malaysia (JAKIM), and The Indonesian Council of Ulama (MUI) (IFANCA 2018).

According to Shariff and Lah (2014), Halal Certifying Organizations (HCOs) are critical in quality assurance of products represented as Halal. As mentioned, under Sharia Halal includes the entirety of the production process, from raw materials sourcing and purchasing to product consumption. Companies awarded with Halal certification are endowed with consumer faith regarding the authenticity of the product in accordance with Islamic guidelines and principles (Zailani et al. 2010). Studies conducted in France, Malaysia and Pakistan found that Halal certification on food packaging provides significant customer assurance that the product is fit for consumption for a Muslim (Salman & Siddigui 2012) and that the label alone is a symbol or indicator of safety, quality and cleanliness (Nawai et al. 2007).

As Islam is not a new religion, but capitalism and globalization are fairly recent trends comparatively, it is not the religion that drives Halal marketing, but the consumer who does. Global standard accreditation bodies such as ISO will not certify halal goods as the designation is religious, a sphere into which they do not delve (Hashim, 2010). Many food chains previously unthinkable for the Muslim consumer are now proudly advertising their Halal products. Consumers perhaps trust in the labeling and find it a relief to encounter fast foods that are prepared according to Sharia (Ali et al. 2013), but what led to the labeling—even with HCOs doing the certifying—is not always unambiguous. Often, HCOs are private entities, motivated by profit and unregulated by governments in most countries, a situation of which many Muslim consumers are unaware (Hashim, 2010). IFANCA, one of the world's leading Halal certifiers, makes regular and concerted updates to its *decertification* process. Currently on its list is Libanais, a popular Lebanese-American restaurant and bakery chain, well-known for its halal meals and sweets. According to IFANCA, the corporation has failed to renew its certification since September 2017, and thus is technically not Halal-certified. However, a visit to several of its U.S.-based restaurants during the period of January 2018-June 2018 revealed that the entire restaurant menu is still advertised as Halal-certified.

In the production of meat in large food corporations in the United States, such as McDonald's, animals are killed by an automated process, and are frequently stunned just before the time of their death. McDonald's Corporation has recently responded to allegations from six animal protection groups for the treatment of its animals pre-slaughter as well as its slaughter methods. As of March 2018, McDonald's remained embroiled in controversies that included several practices of concern to the Halal consumer, including supply chain chickens being bred to grow quickly and to excessive size, causing the chickens to have heart attacks, broken necks and legs, and other deformities. These injured chickens then are housed in massive warehouses until the time of slaughter (MFA National Research Group, 2017). McDonald's claimed a Halal menu for 12 years in the United States, particularly in areas like

Dearborn, Michigan with large Muslim populations, but removed Halal claims from all of its menus after settling a lawsuit in 2013 which claimed that pork products could be found in the French fries, and alleging the chicken not to be Halal. While McDonald's does not have Halal certification on any of its products in the United States, it has been certified in many Muslim-majority countries elsewhere. Given the uniformity of this megacorporation's supply chain, one has to wonder about the technicalities of its Halal practices anywhere. In addition, no matter where one consumes McDonald's, what is known is that McDonalds and other United States corporations participate in clever marketing, where 100% beef means that any part of the animal can be used, including tendons and eyes, and that chicken patties and chicken nuggets are derived from more than 20 ingredients—including preservatives and chemical additives—as well as chicken parts. Whether or not that is Halal depends on how *tayyib* is interpreted in relation to halal. The terms halal (halāl) and tayyib (tayyib) are usually mentioned in combination in the Qur'an (Qur'an 2:168; 5:6; 5:88; 5:69; 16:114). While this can be understood as but an additional emphasis, as halal is naturally always tayyib (good), many contemporary contributions on halal food choose tayyib, often translated to explain as "wholesome" as an additional qualifier to halal; i.e. whatever is not 'wholesome", cannot be authentically halal (Alzeer J, Rieder U, Abou Hadeed K 2018). Whichever stance one takes in this discussion, Islamic law does give a lot of attention to detail and the permissibility of different steps of transaction so as to declare the end product as permissible (halal). Given the labor and monopoly practices and rights violations for which a corporation like McDonald's is known, the question for consumers can also be extended to the Halal of its business practices. Is the McDonald's burger served in Dubai Halal if the business transactions that led to its production in lowa are haram?

Countries and certifying bodies differ in their opinions related to these practices, and having differing standards poses problems for global consumers attempting to make both informed and permissible choices. Two Cadbury products certified as halal in both Malaysia and the United Kingdom were found to contain pork gelatin and were pulled from shelves initially only in Malaysia amid a huge public outcry that, owing to social media protests, did impact Cadbury and most certainly influenced its global promise to do better (Cadbury 2015, Kamal 2014). That certification is not global and that the technicalities are not agreed upon by various HCOs must be of grave concern to the Halalobservant consumer.

Consumer Trust and Confusion Consumer confusion around Halal certification has been illustrated by Bansal and Zahedi (2015) and McQuilken (2010) in their studies showing that with lack of uniformity comes a lack of consumer trust. There have been many past studies on Halal related to HCOs and customer confidence (Mohamed et al. 2008; Muhamad et al, 2017), religious identity and food (Hirschman & Touzani 2016); non-Muslim impact on Halal food (Ahmad et al. 2013), and Halal certification (Verbeke et al. 2013; Marzuki & Hazudin 2015).

The issue of halal certification has proven very thorny given the different legal regulations concerning animal preparation in the different halal food producing nations. Different Muslim countries are prepared to accept different 'compromises' to the Sharia and, as mentioned, with many HCOs privately run, these compromises can seriously challenge the trust and confidence of the Muslim halal food seeking consumer. In addition, the majority Muslim countries are net halal food importers, making the issue a very important one even for Muslims assuming themselves 'safe' within a Muslim majority context. This offers an opportunity for Muslim majority countries to advocate for, and specifically require, strict and suitable halal standard maintenance from the suppliers to their food chain. Muslim majority counties, in particular, are well-placed to develop clear standards and through consumer numbers and order volumes to turn the ambiguity in this area around.

Consumers have taken steps in several cases in terms of brand and product boycotts (Mohamed and Mizerski, 2013). There have been regular and sustained boycotts of brands such as Coca Cola which sustain heavy profit losses and share price drops as a result, given simply the number of Muslim consumers worldwide.

Genetically Modified Food – How halal can it be? Obviously, Halal certification globally reveals a number of difficulties even with regard to conventional food. The introduction of genetically modified food stuffs in the global food market generally and the global Halal food market particularly leads to additional complications. Genetically Modified Food (GMF) for human consumption has been controversially discussed for its health, environmental and economic implications. It is therefore timely to discuss the specific impact of GMF to Muslim consumers, with regard to the halal status of GMF, i.e. its compliance with Islamic dietary rules, on a narrow scale; as well as broader implications for Muslim consumers.

GM farming was adopted in the US in 1995 (Cornell 2002) and with over 150 million hectares of the world acreage now sown with GM crops (FAO 2018) and 86% of US corn, 94% of soy and 93% of canola oil being GM in 2013 (Henderson 2013), the early claim that '60-70% of processed foods contain at least one ingredient from a GE plant' (Cornell 2002)_must necessarily be grossly exceeded today. The debate is widespread, with some countries strongly GMO free in terms of crops (e.g. New Zealand), but obviously still susceptible through imports of packaged foods. It is currently bordering to the impossible to avoid the consumption of certain GMFs in highly processed foods, such as soy and maize, due to its widespread usage.

Apart from environmental and health risks posed by the research, production and consumption of GMF, Muslim consumers are concerned about its halal status. The possibility of *combining* genetic material or enzymes derived *from non-halal organisms* or substances, such as pork, dogs, mice, birds and animals of prey, or non-permissible waste products, is a reality. Previous research into the Islamic legal tools to evaluate the status of GMF with combined genetic material from halal and non-halal sources (Bouzenita 2010) have yielded the following results:

1) The often quoted tool of *istihālah*, "the change of a substance or transformation of its reality into a different reality" (Ibn ^cĀbidīn 1994, 1:520), has been described by the scholars of Islamic law, the Fuqah $ar{a}$ ' with regard to (nonalcohol transforming permissible) into (permissible) vinegar. Decisive here is that the rationale (*cillah*) for prohibiting alcohol, its intoxicating quality, is not to be found in vinegar. The tool of istihalah has been used to declare porcine derived gelatin as halal (Shah and Yusof, 2014), disputably, as the reason for the prohibition of the pig (^cillah), its impurity, cannot be isolated or specified in the genetic material. For the same reason, istihālah cannot be used to permit merging halal with non-halal organisms. Genetic material of an unlawful substance or organism shall be treated as pertaining to the original substance (^cayn) and shall assume the same rule as the substance of origin itself. Even if we suppose that the particular characteristic that renders something prohibited can be genetically isolated (which may never be achieved), other problems remain, such as the impermissible usage of and benefitting from non-halal substances (Bouzenita, 2010).

2) The tool of istihlāk (extreme dilution), where a substance is mixed with another one in a way that causes its inherent characteristics to vanish: If a small quantity of impure and impermissible substance is mixed with a large amount of permissible substance, and the mixture shows no properties of the impure substance as regards taste, color, or smell, it becomes permissible for usage and consumption (Hammād, 2004, 26). This tool has been used by the Fugah \bar{a} ' to assess the permissibility of rather accidental mixing of substances, such as mice falling into liquids (Bouzenita, 2010, 17), they have not been used to validate an intentional combination or large scale industrial production as would happen in GMOs. In addition, the notion of a 'minimal substance' or 'small amount' may be misleading. Due to the role of a gene, enzyme or protein in the organism, we can hardly speak of a minimal substance; it is part and parcel of its structure. There is a huge difference between (accidentally) mixing liquids and (intentionally) changing a living organism's genetic blueprint, thereby bringing about a new organism that is unprecedented.

3) According to some scholars, the meat or other products (milk, eggs) of an animal feeding on impure food (*al-jallah*) may be consumed after a specified period of confinement (Bouzenita, 2010, 18f) The case can, however, not be transferred to GMF either. Impure food remains in the animal's system for a certain period of time and then disappears, it does not cause any mutation in the genetic blueprint. More complications exist with regard to the ownership of the gene and assessment of the new organism. The preceding has shown the difficulty of working out an analogy between GMOs and known cases of mixing between pure and impure substances.

Combination between halal organisms. Superficially, there may be no impediment against consuming GMFs for Muslim consumers, provided no material from non-halal sources is involved. The Muslim consumer may not thereby acquire a sinful act. The Islamic principle of warding off harm (There shall be no harm nor reciprocating harm) needs to be given preference here. Substantial changes in the DNA of consumables may lead to (undiagnosed) allergies and multiple other long-term health implications on the consumer. On a holistic scale, the advocated rationale of producing GMF to fight hunger and provide food for the masses needs to be questioned. As far as the production of GMF is concerned, it may lead to a change in the ecological unforeseeable balance with consequences. It is not comparable to traditional forms of agriculture and animal husbandry, such as grafting and selection. From an Islamic point of view, we may have a case for inducing an impermissible change in the creation of Allah (swt). On a larger scale and beyond the schematic application of narrowed down juristic tools, questions concerning the nutritional value of GMF as compared to authentic food (Bouzenita, 2010) need to be asked as well as the definition of halal status. The bigger picture to assess food as halal needs to involve raising and treatment (of animals, feed and living conditions as well as ways of slaughtering, the contemporary highly industrialized ways of farming and breeding may not comply with the original idea of halal and tayyib at all. The reference to the maqāşid or higher objectives of the Sharia, in this case, follows a commonly perceivable pattern, apt to serve a commodification (here: instrumentalisation) of Islamic concepts.

GMF Labelling – A (Muslim) Consumer Right Currently, just 64 countries worldwide require GMFs to be labelled (http://www.justlabelit.org/right-to-know-

center/labeling-around-the-world/), with only Saudi Arabia, of the GCC countries, listed. However, other sources show most countries of the GCC to require GMF labelling (ie, 'contains GMO') (FAO 2018), although reference to some countries, like Oman specifically, has been difficult to find. To provide some clarity for Oman, examination of food imports show the majority come from other GCC countries, but with some constituent products (eg maize) coming from a known GMO source, the USA (OEC 2018). Two recent studies from UAE show consumers do examine food labels in the majority of cases (86%) (Muhammad, S., Sherif, S., & Gheblawi, M. 2010), although they do not read all the information provided on them. Particularly processed foods can hardly be free from GM, given the ubiquitous usage of soy and corn.

Based on the Prophetic Sunnah, any consumer has a right to know what he or she is buying. In the well-known hadith narrated by Abu Hurayra, the Prophet (pbuh) admonished the food vendor who had hidden the faulty part of his merchandise, on which the rain had fallen, under the better quality one and referred to this action as deceit (Muslim, hadith no. 102). It follows that the consumer has a right to know what he or she purchases and eats. A well-known principle in the Islamic law of transactions is that non-specification of the contents of any merchandise, or intended ambiguity about it is not permissible. With regard to food, this would apply to ingredients, genetically modified constituents, and halal status. *Conclusion*

Firstly, efforts should be made by Muslim bodies in the Islamic world particularly not only to enforce and supervise stricter and less ambiguous Halal certification standards, but also to enforce labeling of GMFs in imported foods and raise consumer awareness. Muslim majority countries, as net Halal food importers, have an enviable opportunity to help Muslim consumers worldwide to consumer halal and pure food, consistent with the Islamic Sharia.

As the community of Muslim consumers worldwide is a huge market with an unneglectable economic power and their pleasure (or displeasure) is of acute interest to profit seeking multinationals, an opportunity continues to exist for the community of consumers themselves to lobby governments and HCOs as well as exercise their right to 'vote with their dollar' to generate pressure on corporations, regulating bodies and HCOs with regard to the purity of their food pathways. Several authors have noted how neglected the needs and requirements of this vast consuming group are, and how necessary it is for corporations to start taking some notice of them (Alserhan and Alserhan, 2012; El-Bassiouny, 2014). The Gulf countries alone import some 78 % of their food. In 2010, the GCC countries imported food products for USD 25.8 billion, and are expected to spend some 53.1 billion USD on such imports in 2020 (www.salaamgateway.com). It is timely that this purchasing power translates into more influence taking with regard to more islamically compliant production, processing and labelling on a wider scale.

References

Abû Fâris, Mhuammad ^cAbd al-Qâdir (2007). Al-Mabsût fÎ fiqh al-Mu^câmalât. Dâr al-Nafâ'is li-l-nashr wa l-tawzĨ^c.

- Ahmad, N. A., Tunku Abidah, T. N., & Abu Yahya. M. H. (2013). A Study on Halal Food Awareness among Muslim Customers in Klang Valley. In Proceedings, Fourth International Conference on Business and Economic Research. March 2013.
- Ali, M. H., Tan, K. H., & Makhbul, Za. M. (2013). Mitigating halal food integrity risk through supply chain integration. *Asia Pacific Industrial Engineering and Management System*, 44, 0–9.
- Alserhan, B. A., Wood, B. P., Rutter, R., Halkias, D., Terzi, H., & Al Serhan, O. (2018). The transparency of Islamic hotels: "Nice Islam" and the "self-Orientalizing" of Muslims? *International Journal of Tourism Research. 20*(4), 475-487.
- Alserhan, B.A, & Alserhan, Z.A. (2012). Researching Muslim consumers: do they represent the fourth-billion consumer segment? *Journal of Islamic Marketing*, *3*(2), 121-138.

- Alzeer J, Rieder U, Abou Hadeed K (2017). Rational and practical aspects of Halal and Tayyib in the context of food safety. *Trends in Food Science and Technology*, 71, 264-267. Retrieved from https://doi.org/10.1016/j.tifs.2017.10.020
- Bansal, G. & Zahedi, F.M. (2015). Trust violation and repair: The Information privacy perspective. *Decision Support Systems.* 71, 62-77.
- Borzooei, M & Asgari, M. (2013). 'Establishing a global halal hub: In-depth interviews', *International Journal of Academic Research in Business and Social Sciences, 3*(10), 169-181.
- Boulanouar, A. W. (2015). Islamic marketing and branding: thinking outside the box. *International Journal of Islamic Marketing and Branding*, 1(2), 123-130.
- Bouzenita, A.I. (2010). Islamic legal perspectives on genetically modified food. *American Journal of Islamic Social Sciences*, *27*(1), 1-30.
- Cornell Cooperative Extension's Genetically Engineered Organisms Public Issues Education (GEO-PIE) #1 (2002). Genetically Engineered Foods in the Marketplace Project. Retrieved from https://scholarworks.iupui.edu/bitstream/handle/1805/812/GE%20foods%20in%20the%20marketplace. pdf?sequence=1
- Dearborn Patch, (2013). Retrieved from https://patch.com/ michigan/dearborn/mcdonald-s-to-pay-700k-indearborn-halal-meat-lawsuit
- El-Bassiouny, N. (2014). The one-billion-plus marginalization: Toward a scholarly understanding of Islamic consumers. *Journal of Business Research*, *67*(2), 42-49.
- Food and Agriculture Organization of the United Nations. (2018). FAO GM Foods Platform Retrieved from http://www.fao.org/food/food-safety-quality/gm-foods-platform/browse-informationby/country/country-page/en/?cty=ARE
- Hammâd, Nazīh (2004). Al-Mawwâd al-Muḥarramah wa al-najisah fi al-ghidhâ' wa al-dawâ' bayna al-naẓariyah wa l-taṭblq. Beirut, Dâr al-Qalam. Retrieved from http://www.justlabelit.org/right-to-know-center/labeling-around-the-world/
- OEC. (2018). Retrieved from http://atlas.media.mit.edu/en/profile/country/omn/
- Hanzaee, K. H., & Ramezani, M. R. (2011). Intention to Halal Products in the World Markets. *Interdisciplinary Journal of Research in Business, 1*(5), 1-7.

- Hashim, D. D. (2010). Developing a Global Halal Standard. Presentation at the First International Conference on Islamic Marketing and Branding, Kuala Lumpur, 29-30th November, 2010.
- Henderson, A. (2013). The best countries in which to live abroad if you're GMO free. Nomad Capitalist. Retrieved from http://nomadcapitalist.com/2013/06/25/the-best-countries-to-live-abroad-and-gmo-free-nogenetically-modified-food/
- Hirschman, E. C., & Touzani, M. (2016). Contesting religious identity in the marketplace: Consumption ideology and the boycott halal movement. *Journal of Islamic Studies and Culture, 4*(1), 19-29.
- Ibn ^cÃbidÎn, Muḥammad AmÎn (1994). Ḥāshiyat Radd al-Mukhtār ^calā Dar al-Mukhtār Sharḥ TanwĨr al-Abṣār. Beirut: Dār al-Kutub al-^cilmiyyah.

The Islamic Food and Nutrition Council of America, (IFANCA). Retrieved from http://www.ifanca.org

- Kamal, S. M. (2014). Muslim groups declare 'jihad' on Cadbury: claim wider agenda to weaken faith. Malay Mail, 27 May. Retrieved from http://www.themalaymailonline.com/malaysia/article/muslimgroupsdeclare-jihad-on-cadbury-claims-wider-agenda-to-weaken-faith
- Lam, Y & Alhashmi, SM (2008). Simulation of halal food supply chain with certification system: a multi-agent system approach, In Intelligent Agents *and* Multi-Agent Systems, Springer, pp. 259-66.
- Mercy for Animals, Retrieved from http://www.mercyforanimals.org/index.php
- McQuilken, L (2010). The influence of failure severity and employee effort on service recovery in a service guarantee context, Australasian Marketing *Journal*, Elsevier, 18(4), 214-221.
- Mohamed, Z., Rezai, G., Shamsudin, M.N., & Chiew, E. (2008). Halal logo and consumers' confidence: What are the important factors? Economic; and Technology Management Review, *3*, 37-45.
- Mohd Shariff, S. & Abd Lah, N.A. (2014). Halal certification on chocolate products: A case study, Procedia Social and Behavioral *Sciences*, Vol. 121, (349), 104-112.
- Muhamad, N., & Mizerski, D. (2013). The effects of following Islam in decisions about taboo products. *Psychology* & *Marketing*, *30*(4), 357-371.
- Muhamad, N., Leong, V. S., & Md Isa, N. (2017). Does the country of origin of a halal logo matter? The case of packaged food purchases. *Review of International Business and Strategy*, *27*(4), 484-500.
- Muhammad, S., Sherif, S., & Gheblawi, M. (2010). Consumers' attitudes and perceptions of food safety in the United Arab Emirates. *Journal of food distribution research*, *41*(2), 73-85.

- Oxford Forum Report. (2010). The Inaugural Oxford Global Islamic Branding and Marketing Forum. Retrieved from https://www.sbs.ox.ac.uk/sites/default/files/corporate-events/islamic-branding-forum/pdfs/islamicmarketing-forum-report-2010.pdf
- Power, C. (2008). Halal goes global. *New Statesman*. Retrieved from https://www.newstatesman.com/society/2008/06/halal-muslim-industry-islamic
- Daniel, Isaura (2017). Gulf countries import 78% of their food. Retrieved from https://www.salaamgateway.com/en/story/gulf_countries_import_78_of_their_foodsalaam01032017102644
- Salman, F. & Siddiqui, K. (2011). An exploratory study for measuring consumers awareness and perceptions towards halal food in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 3*(2), 639-652.
- Shah, H. & Yusof, F. (2014). Gelatin as an ingredient in food and pharmaceutical products. An Islamic Perspective. Advances in Environmental Biology. Adv. *Environ. Biol., 8*(3), 774-780, 2014.
- Verbeke, W., Sans, P., & Van Loo, E.J. (2015). Challenges and prospects for consumer acceptance of cultured meat. *Journal of Integrative Agriculture, 14*(2), 285-294.
- Wood, B. P. and Al Azri, H, (2019). Halal Service Provision Understated, but not Undervalued: A View from Oman, Routledge Handbook of Halal Hospitality and Islamic Tourism, Editors Michael Hall and Girish Prayag, forthcoming 2018.
- Zailani, S., Krishnaswamy, J., Vengadasan, G, & Premkumar, R. (2012). Sustainable supply chain management (SSCM) in Malaysia: A survey. *International Journal of Production Economics, 140*, 330–340.