

KEYNOTE SPEECH

食のハラール性と食習慣・認証・技術
—グローバル化と近代化のさなかで—
**Food Halalness in Globalization and Modernization: Food Habits,
Authentication and Technology**

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Abstract

The globalization of the world economy and improvements in food processing technologies have made the issue of halalness so complex that even Muslims have difficulties in distinguishing what is halal and what is not. The rules concerning halalness of foods are seemingly clear according to Islamic law. However, the border line between halal and haram is sometimes obscure, and people often have different opinions and different attitudes toward certain foods according to their sects, schools of law, personal believes, and backgrounds. Amid growing interest in Muslim markets in Japan, an overview of food halalness encompassing a broad range of perspectives is urgently needed.

Nowadays, there are many halal certification bodies that check and certify the halalness of commercial products in response to requests from Muslim consumers who want to use modern factory products or eat in various restaurants without hesitation. Especially in South-East Asian countries where many Muslims are living in multi-religious environment, there have occurred many problems concerning interfusion of non-halal material to so-called "halal" products, both intentional and unintentional. Therefore, it is also necessary to develop new food analysing technologies to detect non halal materials.

However, it is difficult to integrate definition of religious term 'halal' globally because Muslim consumers' recognition toward halalness is not uniform. There are also non-muslim people who need precise information of ingredients, such as vegetarians, Hindus, Jewish and those who have food allergy.

What is urgently needed is a synthetic information system to provide precise information on critical ingredients in a food in both religious and physical terms, so that consumers can choose themselves depending on their own needs.

Keywords: food habits, halal certification system, food analysing technologies, information system

SESSION 1 FOOD HABITS AND HALAL CERTIFICATION SYSTEMS

Presentation 1

自由貿易の潮流の中でのハラール制度

The Relationship between Halal Systems and Free Trade Regime

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Abstract

Halal system is sometimes considered as trade barriers by companies of non-Islamic countries in the following points. It is because Halal system works as a de-facto regulation in Islamic countries, although it is not a law. First, Halal systems are not internationally harmonized. Second, Halal systems are not written or not opened to public in many Islamic countries. Third, Halal systems include rules which companies of non-Islamic countries cannot cope with. The function of trade barriers will increase with expansion of trade between the economically growing Islamic countries and non-Islamic countries. Trade dispute on Halal system might arise under the global free trade regime.

SESSION 1 FOOD HABITS AND HALAL CERTIFICATION SYSTEMS

Presentation 2

Food Habits, Islamic Law and Halal Certification System

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Abstract

Food habits is influenced by many factors . The factors are personal, social, psychological, marketing and environmental, economic/income, cultural, as well as religious. Many religious certainly has dietary concepts, including Islam. Islamic teaching does not only regulate about food but it is more than that, it is a way of life for its adherence. So, Islamic dietary concept is only part of it.

In general everything is permitted for human's use and benefit. Nothing is forbidden except what is prohibited either by a verse of the Qur'an or an authentic and explicit Sunnah of the Prophet Muhammad (pbuh). This rule Shari'ah (Islamic law) brings freedom for people to eat and drink anything they like as long as it is not haram (prohibited).

In turn, If we talk about food in Islam, there are some terminologies that not only apply for food but also for other actions or deeds namely Halal (lawful), haram (unlawful), sunnah (encouraged) and makrooh (discouraged) and subhat/mashbooh (suspected).

Therefore, personally, if a muslim will eat food, the food that is consumed will be categorized into these 5 groups of status. There are some food is considered as halal food, but also it could be a haram, sunnah, makrooh, or subhat food

For a fresh food like fruit such as banana, apple, melon, watermelon, they are categorized as halal food. But if the fruits will be processed into processed food or drink like apple juice, the status will be subhat (suspected). Why? Because, we have to know what material or processing aid that used in the processing step.

That is why, it is necessary, some groups of people involved, in order to determine the clearness of status wether this processed food will be categorized as halal food or haram food. The process of determining the status of halalness is called as halal certification. In Indonesia, halal certification is done and organized by MUI. There are two groups of people involved in the halal certification. The first group is people with technical expertise. They know about processing of food technically. So, if the group audits a company that applies halal certification, they will observe whether the company meet the halal requirement technically. The first group will make a report to another group or the second group. The second group is people with expertise of Islamic law. The second group is also called ulama or Islamic scholars. The second group will make a judgement whether some products are halal based on the first group report of audit.

Keywords: Muslim, Food, Halal Certification

SESSION 1 FOOD HABITS AND HALAL CERTIFICATION SYSTEMS

Presentation 3

**非イスラム国におけるムスリム・フレンドリー・サービスの発展
—日本を事例として**

**The Development of Muslim Friendly Service in Non Islamic Countries:
The Case Study of Japan**

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Abstract

訪日旅行市場で東南アジアからのムスリム観光客の増大が著しくなっている。LCC 就航と東南アジアでの中間所得層の増加が要因だ。また、イスラム経済が急速な伸びを見せる中で、大学や企業でもムスリム留学生の招致やイスラム圏からの人材の採用が増加してきている。

ムスリムの受け入れに関して外せないのがハラール対応（イスラム法の戒律に従って処理・加工・輸送・保存された食品を提供するサービス）や礼拝場所の提供であり、日本でも行政や民間企業、NPO がいち早く、イスラム圏からの観光客や留学生、ビジネスマンに向けて、パンフレットやウェブを通じて情報提供を始めている。

本報告では、ムスリム対応の最前線にいるアクターへの聞き取り調査を通じて、日本におけるムスリム対応の受け入れ側の現状と課題を考察していく。

SESSION 1 FOOD HABITS AND HALAL CERTIFICATION SYSTEMS

Presentation 4

Halal in Chinese Food Culture

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Abstract

This paper aims to describe the impact of modern systematization of halal upon non-Muslim societies. The case in point is halal in the Chinese food culture, in particularly, of the Hui people in Mainland China.

With today's increasing global migration, Muslim population, the expanding middle class and halal market, there is increasing global awareness of halal issues, not only in the countries and areas which Muslims are minority also in Muslim countries where halal is natural fact. Halal is a norm of behavior for Muslims which covers the whole of everyday life. Concerning to the current state of halal, now two contrary dynamics is on; expansion and convergence. Expansion: adding to the original meaning of halal, lawful or permitted, various positive values such as hygiene and healthy are attached. Convergence: systematization of halal control such as halal certification applying religious and science technology, seeking unified halal standard and all. The diversity of halal consciousness and practices in everyday life among individuals, ethnic group, areas and countries sometimes bring bewildering situation to both of Muslim/non-Muslim consumer and service providers; how to know certain products and services are really halal, how can trust the halal mark on products or restaurants, and how to guarantee the halalness of them. There are efforts in dealing with the diversity and the gap between localized halals and international standards.

This paper takes these gaps not as difficulty but as richness and possibility of human agency, asks how systematizing halal affects everyday life in the global era. It will illustrate dynamism of the concept of halal, qingzhen (清真) in Chinese, through exploring fluctuation of point of focus defining halal by actors such as Hui people, religious specialist and local government and their negotiation of practical uses. In the case of systematization of halal in Mainland China, there are two points; First, official involvement to halal was conducted within the category of ethnic policy. Second, increasing economic motivation and food safety administration accelerates needs of the negotiation between localized halal and internationally accepted level of halal regulation. The latter is reinforced, in particular, through promoting international connection with halal related organization in foreign countries. Meanwhile, Voices from Hui people suggests that they seek honesty (誠信) of service providers rather than halal control by regulations.

SESSION 2 FOOD HALALNESS AND TECHNOLOGY

Presentation 1

HALAL FOOD ISSUES IN INDONESIA

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Abstract

INTRODUCTION: Halalanthoyyiban is a concept for halal food safety in Islam. Halalanthoyyiban composed of 2 pieces of words that come from Arabic, namely; Halal and Thoyyib. Halal has meaning "lawful" or "permissible" and Thoyyib has meaning "Wholesome" (safety, cleanliness, nutritious, quality, authentic). The term of Halalanthoyyiban not only covers food and drink, but also to all matters of daily life. When it comes to halal food, most people think of meat foods only. However, Muslims must ensure that all foods, particularly processed foods, pharmaceuticals, and non-food items like cosmetics, are also halal. Frequently, these products contain animal by-products or other ingredients that are not permissible for Muslims to eat or use on their bodies. Indonesia is country with the largest Muslim population in the world. At this moment has a lot of issues for halal food, among other concerns; Syariah (Islamic religious law) and halal food laws in Indonesia, Experts and equipment for the analysis of halal food, drugs and cosmetics and Certification of Halal Food. **OBJECTIVE:** To obtain the best solution in order to contribute thoughts for the legislature, production processes, quality assurance/quality control for Halal Food safety and halal certification process in Indonesia. **ANALYSIS OF ISSUES:** When the observation is based on the analysis of SWOT (Strength, Weakness, Opportunity and Threaten). "Strength" Indonesia is country with the largest Muslim population in the world. Indonesia also has a huge potential for natural sources of food, medicine and cosmetics, Where there are different types of dishes and natural products from around 285 Ethnic groups who's potential to be developed into halal Food, drug and cosmetic. "Weakness" Law enforcement because legislation for food, drug and cosmetic that concerns to halalanthoyyiban is not good enough. Skills experts and laboratory equipment for analysis in the field of halal for food, drug and cosmetics is not adequate. Understanding of halal food by Indonesian Muslims still low. "Opportunity" Indonesia is the largest market segment of halal food in the world and fastest growing, therefore still a few manufacturers that take part in the halal food industry. "Threaten" Adulteration and fraud against halal Food Safety that sourced from within the country and abroad **CONCLUSION:** Required there are legislation in accordance with the law Syariah and fits with sciences and Indonesian nation needs. Required to prepare experts for the analysis of halal products by establishing Post-graduate Faculty for analysis of food, drug and cosmetic. Needed some good laboratories for analysis halal products to obtain halal certificates, etc.

SESSION 2 FOOD HALALNESS AND TECHNOLOGY

Presentation 2

DNA クロマトグラフィーを利用した肉製品の種同定 Animal Species Identification in Meat Products Using Printed DNA Strip Technology

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Abstract

Meat adulteration have been an inevitable practice for centuries. The high demand over supply had always attracted adulterators and favoured salers over consumers. Around the world, adulterators are using several fraudulent techniques like inter and intra- species substitution including wild species instead of domestic ones or chicken and pork in beef sausage or horse meat instead of beef or goat meat instead of mutton etc... The incidence of such fraudulent scandal events destabilized the food market. Consumer protection against such practices according to personnel preference, social codes and religious rules is becoming a necessity. In this respect, we developed a new method to detect meat adulteration based on DNA fingerprints. In fact using DNA printed strip arrays, we could detect the presence or absence of seven animal species (beef, chicken, turkey, mutton, proc, horse, water buffalo)' DNA, and this range is expected to include more species.

The developed technology can detect the adulteration with high sensitivity which is 64 fold greater than electrophoresis / EtBr detection system. Moreover, the test can be performed within 5 minutes only, after PCR product preparation, with minimum exposure to hazards risk.

SESSION 2 FOOD HALALNESS AND TECHNOLOGY

Presentation 3

HALAL FOOD INTEGRITY AND AUTHENTICATION

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Abstract

Adulteration is the act of intentionally taking the form of substitution of one species for another whereby the food products from one species have been mixed intentionally with either similar substitute ingredient or cheaper species. Issues on adulteration between halal (permissible) and haram (non-permissible) ingredients were highlighted in the foregoing discussion should not be taken lightly. The determination of food authenticity and detection of adulteration are major concerns not only to consumers, but also to industries and policy makers at all levels of the production process. Halal Products Research Institute (HPRI) of Universiti Putra Malaysia (UPM) serves as a one-stop center, through a comprehensive, balanced and multifaceted approach to study all aspects of halal products in national and global levels. Focusing in research and development (R&D) in the halal products industry, HPRI aims to be an excellence research center in halal products, as well as providing professional services in realizing Malaysia as a Global Halal Hub. Among the methods employed to determine the origin of these materials for example gelatins are High Performance Liquid Chromatography (HPLC) and Fourier Transform Infrared Spectroscopy (FTIR). Characterization of thermal behavior of gelatins using other complementary techniques such as Rheometry and Differential Scanning Calorimetry (DSC) were also investigated. Methods of detection of other questionable substances such as alcohol and pig-based products such as meat, fats, skin and hairs were also undertaken. Alcohol and fats were analysed using gas chromatography techniques, skin, feather and hairs using microscopy, whereas for and meat and meat products were analysed using DNA techniques. These techniques are important to facilitate the demands and needs of Muslims all over the world with an increasing awareness in consuming halal food products.

Keywords: Adulteration, Lard, Pork, Halal and Haram, Ingredients

SESSION 2 FOOD HALALNESS AND TECHNOLOGY

Presentation 4

HALAL SCIENCE AND TECHNOLOGY FOR BACKING UP HALAL STANDARDIZATION AND CERTIFICATION IN THAILAND

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Abstract

Halal is nowadays world-widely recognized as a crucial issue of safety focusing on spirituality for Muslims as well as a sign of food quality for non-Muslims. Complexity of current advanced food technology, finally introduces Halal standard to the Halal industry as well as Halal certification from trusted Islamic organization in order to ensure Halalness to the consumers. The implementations of a Halal food safety have been done in several countries, yet they lack empirical studies that make the Halal surveillance conventional. A few official documents regarding Halal are available as compliance guidelines but is not sufficient to ensure the safety of the Islamic faith. In order to fulfill such inadequacy, The Halal Science Center Chulalongkorn University (HSC-CU) has developed a multi-approach-management system so called 'HAL-Q' standing for Halal Assurance and Liability Quality system for organizing GMP/HACCP-principle with scientific-based Halal discipline. The idea of HAL-Q began from considering the Topyib in which are the biological, physical, and chemical hazards; these hazards have already been regulated by the GMP/HACCP; however, the hazard within Islam, Haram, still lacks a regulator within the food safety system.

HAL-Q is introduced in food factories with 6 man-day tasks of integrated Halal-GMP/HACCP/ISO administration with additional Haram hazard throughout the 3-months period. Haram Critical Control Point (Haram CCP) and Control Point (Haram CP) throughout the manufacturing processes and the Haram surveillances of finished goods are documentarily established and evaluated based on the Haram CCP/CP surveillance score of 25 along with the endorsement of Islamic scholars' opinion and with the facilitation of the pre-and post- laboratory parameters, i.e., fatty acids, DNA, gelatin, and ethanol. Cleansing of Najis (filth according to Islamic law) in production line utilizing HSC-CU's Najis cleansing clay liquid is also administered occasionally.

In the past decade, the HAL-Q system has already implemented a total of 247 factories covering about 110,000 workers. The procedure of the implementation has not changed from 4 concepts including 4 preparations, 4 controls, 4 managements and 4 phases. None of the food enterprises have shown a decrease in halal compliance, but instead has shown a remarkable increase in consumer's confidence in food products. The training of the HAL-Q system also occurred abroad; hence, the implementation is replicable. One parameter that might require adapting is the different in parameters between countries; for instance, the Thai limit for the percentage of alcohol volume in food products, which is different in other countries.

Regarding our 2012 Halal surveillance study using laboratory analyses of Haram adulteration in 1,745 doubtful food samples available in Thai market, 13% found sign of Haram contamination but reduced by half to 6% in products with Halal certification while HAL-Q implementation prior to Halal accreditation by Islamic organizations totally eliminated all sign of Haram adulteration. In conclusion, HAL-Q management system clearly shows its efficient compliment to the Halal security assurance and certification compared to the Halal certification alone. This empirical study practically demonstrates profound improvement of the Halal safety security in food enterprises.