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第一回食のハラール性に関する国際シンポジウム—東南アジア地域における食のハラール性

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 Toyyib 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.