

HALAL FOOD INTEGRITY: CONCEPTUAL PRINCIPLES AND ANALYTICAL SOLUTIONS

Garnyk L., PhD, Assoc. Prof., Doctoral Student

Sherstyuk O., PhD in Tech. Sc.

Vice Director of “MC Kvertimed-Ukraine” Ltd
Kharkiv Petro Vasylenko National Technical University of Agriculture

Shapran E., Dr. of Engineering, Prof.

Head of Commercial, Trade and Entrepreneurship Activity Department
National Technical University “Kharkiv Polytechnic Institute”

Meanings of “Halal” (allowed) described in Quran and Sunnah more than 1400 years ago. We can find approximately seven verses in Quran in which “Halal” standards have been explained and Hadiths provide further explanation importance of these principles. Their interpretation represented in well-organized and systematic form is called “Islamic Fiqh” (jurisprudence) that today defined core values and principles of “Halal” Certification and Accreditation, have already been complied and explained according to Quran and Sunnah centuries ago. Started within recent few years institutionalization of “Halal” industry in Ukraine was caused by essential need to discover new sectors of domestic and foreign market segments that are related with investments in development of its agrarian and food industry sectors. Nowadays interest to consuming “Halal” food comes from Muslims and non-Muslims because they both think that it is safer to purchase natural and healthy products. Besides that, focus on shelf life and freshness needed for food causes why “Halal” food industry is very attractive for business. But in Ukraine “Halal” certification also has a lot of controversial aspects like uncontrolled by government on national level so-called “Halal” certification centers, who have not any recognition from foreign “Halal” certification bodies or their associations like: JAKIM (Islamic Development Department) – Malaysian certification body; GIMDES (Association of Inspection and Certification for Food and Material Needs) – Turkey; GCC (Gulf Cooperation Council); ESMA (Emirates Authority for Standardization and Metrology) – UAE; CEN (European Committee for Standardization); IHI Alliance (International Halal Integrity Alliance); SMIIC (Standards and Metrology Institute for Islamic Countries); WHS (World Halal Council); WHFC (World Halal Food Council) and others. According to results of Ukrainian “Halal” certification centers monitoring, most of them can’t provide high quality consulting or certification services due to lack of proficiency, certified equipment and practical experience in this field on their staff. But consumers should be

confident that every aspect of food, including the ingredients, processing and handling, is done meeting requirements. “Halal” food must be free from forbidden components such as pork, alcohol, genetically modified or harmful synthetic ingredients. Today laboratories and certification authorities (centers) use different kinds of measurements can help ensure food quality: chromatography instruments to measure vitamins and nutrients; thermal analysis and infrared instrumentation to characterize food properties and detect differences from previous lots, ensuring conformance; measurements of potential radioactive contamination with liquid scintillation counters warns against inadvertent exposure; LIMS and electronic notebooks, moving toward the paperless laboratory and keeping data organized and safe. Also ability to control and provide safe and nutritious food becomes today main issue for Ukrainian industries as like as tourism, hospitality, hotels and restaurants. Certified laboratories traditionally have different kinds of analytical instrumentation like: commercial infrared, gas chromatograph, atomic absorption spectrometers, high performance liquid chromatography system and inductively coupled plasma mass spectrometer. Traditionally to ensure “Halal” food integrity most of restaurants, supermarkets, hotels as like as custom staff use porcine detection kits to provide rapid screening for pork that may be present in other types of raw meat or food products. This method allows to make on-the-spot testing for processed or raw meat, and provides quick results with high sensitivity, before sending samples to the laboratory. Screening kit detect only “positive” or “negative” result (maintain sensitivity 0.5% pork in processed meat and 0.05% pork in raw meat yields a positive result) and doesn’t provide numerical concentration of the pork contamination that might be observed. That is why in world practice certifying agencies, contract laboratories, and food manufacturers will find this method as helpful in assessing the purity of meat products.

This method also should be useful for European and Ukrainian companies who are interested in trade with Muslim countries. But today essential issue for Ukraine is implementation procedures of governmental control under activity and validation of international accreditation of domestic “Halal” certification centers due to growth during recent decades in Europe and in Ukraine Muslim population and level of “Halal” food consumption, that is caused not only by demographic factors as like as traditional for these communities high fertility rate. Political, socio-economic and cultural changes in the world today make more initial influence on changes in segmentation of domestic and international food markets as like as on consumers behavior and food preferences among people who belong to Muslim community and even those, who has other faith.