

## FOOD SAFETY HALAL PRODUCTS VERSUS ORDINARY PRODUCTS WITH NO RELIGIOUS PROVISIONS

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### **Abstract**

*Every person, every family, even every society has its own type of food. Between humans and his nutrition there is a close relationship, depending on many factors such as: dietary habits, age, religion, income, social status and group affiliation. The influence of religion on food consumption manifests itself differently from one nation to another, from one individual to another, depending on the type of religion and the degree of confidence of every individual who follows its religious percepts. The "halal" concept is a criterion for quality and food safety, which consists of a set of principles, standards and rules that must be applied and followed throughout the production process and supply chain, along with the HACCP system allowing monitoring all industrial transformation processes of materials and identification of the deviations that could make the food unfit for consumption. The purpose of this paper is to present an analysis of checkpoints throughout the technological process for obtaining halal meat products compared to the traditional, classical food products, to obtain the safest finished products.*

**Key words:** food safety, halal, meat products, religious percepts.

### **INTRODUCTION**

Every person, every family, even every society has its own type of food. Between humans and his nutrition there is a close relationship, depending on many factors such as: dietary habits, age, religion, income, social status and group affiliation. A major influence on food consumption is represented by the lifestyle of a person, expressed in the activities, interests and its opinions (Dindyal, 2003).

The influence of religion on food consumption manifests itself differently from one nation to another, from one individual to another, depending on the type of religion and the degree of confidence of every individual who follows its religious percepts. From this point of view there are some religions „poor” in terms of the foods restrictions, which do not specify dietary restrictions, but there are religions that forbid „the believers” to eat certain foods or food categories.

Also, there are strict specifications on some food, which although in a first phase are fit for human consumption, under certain conditions, they may become unsuitable for the population consumption (Bonne and Verbeke, 2007).

A quite high issue for public health is represented by food customs and tastes, transmitted by tradition from generation to generation and which are almost impossible to change from one generation to another.

In the context of free movement of goods and people, the population is surprised every day with new food varieties, new ways of preparing raw materials as well as new raw materials used for preparing food (Al-Qaradawi, 1993).

According to the latest studies in the field, the eating habits are changing more slowly than other more visible aspects of culture, such as language or clothing. There are also cases where eating habits are kept strictly following a feeding system imposed by religion affiliation, for example halal food for Muslims and kosher for Hebrew (Regenstein et al., 2003).

Moreover, the existence of the "halal" term on food, is an element of credibility and undeniable value by both the finished product and raw materials, ingredients and technological processes applied for obtaining it. From that flow a series of consequences, from increased consumer confidence for the product and manufacturing company, through the care it gives to the consumer by guaranteeing the

quality of the product purchased. The compliance of halal meats to religious provisions, indirectly informs the consumer that together with conventional systems for monitoring food safety and halal meat quality is undeniable.

The "halal" concept is a criterion for quality and food safety with reference to the physico-chemical, microbiological characteristics of a food, but also of all stages of production, processing, storage, transportation and marketing of a food. It allows monitoring of all industrial transformation and identification of the non materials that could make the food unfit for consumption (Grunert, 2005).

The specific case of halal meat chain, it provided a set of principles, standards and rules to be applied and followed throughout the production process and supply chain, using HACCP as a system to ensure safety and quality for halal. The compliance with such standards is certified by applying a distinctive label for halal.

## **MATERIALS AND METHODS**

Ensuring the quality of meat and meat products, the more that for halal, is a very important problem, due to potential contamination at any stage of a technological flow, in addition to normally factors incriminated and there is a risk of cross-contamination with pork or food haram. For this reason, the preventive system of potential hazards and risks analysis HACCP (Hazard Analysis and Critical Control Point), should be complemented and adapted to the requirements of halal meat (Lund, 2002).

Usually, the system guarantees the highest levels of food safety of the products obtained by applying the seven principles that form a stepwise approach in identifying potential hazards that would result in non-compliances during the flow of obtaining foods.

Lately, the food safety has become an approach much larger, from the origins and quality of raw materials, animal welfare and good practice in the food industry, including growth, feeding, transporting and slaughtering animals, until to obtain products and by- animal, processing, distribution and marketing of finished products (Verbeke, 2005). Therefore

we are witnessing an expansion of the surveillance system HACCP food from the enterprise to the entire food chain from breeder animals and to the end consumer (Ali, 2010).

To produce a safe and quality meat halal, during the technological flow can be identified the control points (CP), indispensable to the HACCP plan (Riaz et al., 2004).

CP1 – Hygiene and sanitation of spaces and equipment. Hygiene, sanitation, sanitation and food security are needed in preparing halal foods. This includes various aspects of personal hygiene, clothing, workplace equipment for slaughtering animals and food processing or manufacturing. Halal food must be prepared, processed, packaged, shipped and stored in a way that they meet sanitary and hygienic requirements of the Codex Alimentarius General Principles on Food Hygiene and other relevant Codex standards. Food safety systems must prevent foreign materials contamination of food with plastic, glass or metal splinters, dust, harmful gases or fumes and unwanted chemicals (Codex Alimentarius, 2003).

CP2 – The animals which follows to be slaughtered. They must be from a species that has been accepted and grown under specific conditions halal. Are not accepted as halal, the animals that feed on dirt or own milk (Bergeaud-Blackler, 2005). These animals must not take contact with others animals or foods considered haram, which would entail non-halal animal.

CP3 – Animal welfare. The humane treatment of animals before, during and after slaughter must be assured. Boarding, during transport, from landing, until the time of slaughtering, the animals should not be stressed or suffer ill-treatment. It is also forbidden sharpening the knife in front of the animal or an animal to assist in cutting other.

CP4 – The stunning of animals. Is an technological operation which is not prohibited, nor is freely accepted. Some Muslim followers recommends not apply and another part are agree with stunning, applying only in certain exceptional circumstances. However, when applied, the Muslim halal inspector, who supervise the slaughtering (control and monitoring), must verify that the stunning operation is carried out in accordance with approved methods. Stunning method used must

be reversible, must not kill or cause permanent physical harm to the animal, must not cause permanent brain damage and must not penetrate or break the animal's head.

CP5 – Slaughter instruments. The knife used to slaughter must be well sharpened so that the animal does not feel pain when animal are bleeding. Slaughtering must be done once for each animal and the action slaughter is considered correct, permissible, as long as the slaughtering knife is not high on the animal during slaughter (must remain in constant contact with the animal).

CP6 – The butcher. It must be a healthy Muslim who fully understand the fundamental rules and conditions relating to the killing of animals in Islam. Animals during slaughter, butcher will not be dressed in ihram (clothing worn during the pilgrimage).

CP7 – Slaughter method. It must perform by cutting the the windpipe, esophagus, jugular vein and carotid artery, in one motion using a sharp knife, without reaching the cervical spine. As a secondary requirement, the butcher would positioned the animal to Mecca.

CP8 – The invocation. Simultaneously with cutting the great vessels, trachea and esophagus, the butcher recites the invocation to confirm that the sacrifice is done in the name of Allah, for its glorification and while respecting the religious provisions.

CP9 – The packaging. Halal food must be properly packaged using packaging materials that are not made of materials that are hard or processed or manufactured using equipment that is contaminated or considered dangerous. The packaging must be done in a clean and hygienic and in good health.

CP10 – The labeling. The materials they are made of used tags in direct contact with the product must not be harmful to health and may not be realized from raw materials which were declared prohibited. Information available on the label must contain all information necessary to identify the product and ensure the quality and wholesomeness of the food.

CP11 – Storage, sale and service of products. All halal food, which are stored, displayed, sold or served must be classified and separated at each stage in order to prevent cross-contamination of raw materials, auxiliaries or materials that are non-halal. All units

refrigeration and other storage rooms must be part of a constructive plan approved by the competent authority for halal slaughter. During storage, transportation and marketing of halal meat products must be physically separate from non-halal. The equipment used in all operations should be dedicated exclusively to the production of halal.

## RESULTS AND DISCUSSIONS

In recent times there has been a growing demand for halal food, which triggered the increasing of food chain stores and expanding supply specific profile. The uncertainty about the new food is manifested for those who do not know the halal food too.

To ensuring the consumer confidence and further winning their trust in these products is done primarily an correct information to the consumer on the product that it intends to acquire, but uncertainty stops him to do.

The association between different systems of food safety, which supervise the compliance of innocuousness for these products, and rules emerging from religious precepts which impose rules and more stringent, from the acceptance of animals for slaughter, may represent challenges for the younger generation who it is open to new things and after this, winning a large number of consumers for halal products.

Some risks and hazards of the HACCP plan are removed from the start when applying him for a halal product this system. For example, the biohazard represented by *Trichinella spiralis* in pork products, can not be considered in case of food halal, because pork is unacceptable as halal, and the slightest suspicion of contamination, causes a halal food to become non-halal. The examination of animals before slaughter is doubled by the obligation to respect the religious requirements (Aldeeb, 2001).

## CONCLUSIONS

Ensuring the safety of food supplied to the consumption population, remains one of the priorities absolutely necessary to be fulfilled, regardless of religious conception that govern the buyers.

Along with the food safety management system HACCP, the provisions specific religious

cultures, bring more support in ensuring health and consumer satisfaction.

A properly system for processing, packaging and labeling, make known to the buyer all the information it needs and could lead to uniform market food consumption, that can meet both the provisions of religious and those related to sanitation and food safety.

An sales market with safe food for population can be obtained by summing and applying all provisions, which have ultimate beneficiary food, no matter their religious or veterinary domain.

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