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Food hygiene – flexibility in traditional and small meat establishments

Nedjeljko Karabasil^{a,*}, Tamara Boskovic^b, Mirjana Dimitrijevic^a, Dragan Vasilev^a, Vlado Teodorovic^a, Nevena Ilic^a, Vesna Djordjevic^c

^aFaculty of Veterinary medicine – University of Belgrade, Bulevar oslobođenja 18, 11000 Belgrade, Serbia

^bMinistry of Agriculture and Environment, Veterinary Directorate (Food Safety Unit), Nemanjina 22-26, 11000 Belgrade, Serbia

^cInstitute of Meat Hygiene and Technology, Kacanskog 13, 11000 Belgrade, Serbia

Abstract

Republic of Serbia has a large capacity for the production of meat and meat products. Large majority of establishments are low capacity with local significance. In Serbia there is common appreciation of traditional meat products and almost every region in the Republic is known for some of the traditional products. This paper emphasizes need of defining possible flexibility rules and/or derogations to the national regulations and guidelines for traditional meat products and small-scale producers for the compliance with food safety rules.

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1. Introduction

Serbia is a relatively small country but with a long tradition in production of meat and meat products. Meat production in Serbia reflects the primary production - the most common slaughtered animals are pigs and therefore

* N.Karabasil. Tel.: +381-11-2685-653; fax: +381-11-2685-653.
E-mail address: nedja@vet.bg.ac.rs

the most common type of consumed meat is pork¹. Beef is very valued from the consumer point of view while poultry meat is an important source of animal proteins, with a growing trend in production. Out of almost 1,000 establishments approved to produce and place the meat and meat products on the local market², the large majority of them are low capacity with local significance. Republic of Serbia has a large capacity for the production of meat and meat products, but the extent of the actual utilization of the most establishments is mainly below installed capacity. The meat sector employs a significant number of people and hence, in line with the legislation changes and available legal opportunities, there is a need for implementation of appropriate actions, in particular for “small” producers and those who maintain the production of traditional products, enabling them to fulfil new regulatory food hygiene requirements.

2. Serbian food hygiene regulations

The food safety system in the Republic of Serbia is based on principles established in the EU Food Law³: the responsibility of the food and feed business operators; traceability of food; and risk analysis. Main Laws, which are the backbone of the whole food safety system in the Republic of Serbia, are the following: Law on Veterinary Matters⁴; Law on Food Safety⁵; and Animal Welfare Law⁶. The Law on Food Safety defines the general conditions for safety of food and feed, duties and responsibilities of food and feed business operators, rapid alert system, emergency measures and crisis management, food and feed hygiene and quality. The purpose of this Law is to provide a high level of protection of human life and health and protection of the consumers’ interests, including food trade, as well as the health of plants and environmental protection. The Republic of Serbia has adopted general and specific rules on food hygiene which are partially/mostly in line with EU “Hygiene Package”^{5,7,8,9}. Within the Food Safety Law there is a legal basis for adoption of regulations covering: food hygiene requirements applied to the direct supply of consumers with primary products in small quantities; derogations from general and specific food hygiene requirements relating to small food business operators, taking into account that such deviations, may be prescribed in the case of application of traditional methods in certain stages of food production and distribution, as well as in the cases where food business operators are located in areas with special geographic limitations.

3. Good hygiene practice and flexibility rules in traditional and small establishments

The requirements placed upon manufacturers nowadays require them to monitor trends in the field of hygiene, to interpret regulatory requirements, of which there are plenty and constantly-issued new ones, plus new technology, equipment etc. Small food business operators have scant access to human resources, which is vital to be able to accompany all of the above trends and requirements. Usually, personnel in such systems, performing basic operations in the production process, do their jobs well, but often do not have sufficient education and knowledge to be able to take full part in the development of a food safety system. Very often, the documentation accompanying the system of good manufacturing practices, good hygiene practices and HACCP principles is complicated and full of phrases and terms which are unclear and confusing to staff, and especially for those in small systems, where they are not qualified enough, or at all. That could create a fear of the unknown and seems complicated, and instead of putting the system in order and providing traceability, often further complicates the conditions in the system. Therefore, it is important that the minimum documentation and records are primarily those really necessary, easily presented to staff in small collectives and help them through the implementation of appropriate training. The main problem is often a lack of material resources, training for HACCP and expertise.

There are many definitions of the traditional food products, as a highly subjective and complex concept, hard to define. However there are some common distinctions that have been researched in many projects and one of the possible complete descriptions would be “*A traditional food product is a product frequently consumed or associated to specific celebrations and/or seasons, normally transmitted from one generation to another, made with care in a specific way according to the gastronomic heritage, with little or no processing/manipulation, that is distinguished and known because of its sensory properties and associated to a certain local area, region or country.*”¹⁰. In Serbia there is common appreciation of traditional meat products and know-how. Every region in the Republic of Serbia is known for some of the traditional products; these are mainly meat (“Uzicka prsuta”, “Petrovska klobasa”, “Sjenicki sudzuk”, “Sremski kulen” and etc.). Those that are listed in the Registry of Registered Geographical Indications in

the Institute of Intellectual Property¹¹ might be the starting point for the list from which the possible derogations could be required. When it comes to traditional meat products in the Republic of Serbia, there are two dominant groups: *fermented meat products* and *dried meat products*. Both groups are very attractive, for domestic consumption and for tourists. In Serbia, producer associations exist, but they are not enough to be fully engaged to become service to their members, as well as a strong driving force in terms of requirements to the state.

Small business operators should have more features, a flexible approach to the application of regulation, and somewhat less stringent requirements in the structure, facilities and equipment, without compromise of hygiene requirements. Also, according to the category of the establishment, the sampling frequency for microbiological sampling and testing should be accommodated to the facility and production. Traditional production often involves a small number of people in the system, usually in rural areas of the country. Frequently, there are one, two or three persons, sometimes more, very often family members, covering all processes. Requirement for a traditional product, obtained by traditional techniques, under appropriate conditions of traditional production, means it is necessary to include the number of staff and any flexibility from the requirements of Hygiene package. Traditional meat products are usually prepared during the winter months, to benefit from low temperature for processing the meat, and with the aim of finishing the ripening in the spring and early summer when products are ready for consumption¹². In addition to these parameters, the amount of produced products should also be a criterion for the classification of establishments. This is not an easy task, since most households that participate in production of traditional products mainly produce these products for their own use, although some produce sufficient quantity to sell it in the local market directly to consumers. As a limit, in addition to the number of employees and staff involved in the production process (e.g. two persons), the amount of produced products should also be one of the parameters. What should also be considered in the light of traditional products and their further promotion is the labeling. These products should have appropriate labels, which will clearly indicate that it is a traditional product. Also, depending on the capabilities and abilities of producer associations, as well as being a good move, the possibility of a wider recognition of the product could be made by designation, which would further confirm the quality of the product (value added for better product recognition).

Flexibilities for small scale establishments may be regulated to: construction, layout and equipment. This in itself sounds broad and general, so there is a need to define appropriate regulations with clear objectives and interpret the conditions that could be related to differences at small food business operator level. Laws and regulations sometimes are not easy to read and interpret, and small producers, as has already been pointed out, have limitations when it comes to staff resources and competence in terms of complicated terminology. In that light, it is necessary to develop and publish a *Guideline for the application of hygiene rules in small food business operators*, which should be written in simple and accessible language, according to the future bylaws that are to be adopted¹². Also, there would be no doubt about performing the official controls, in facilities where the flexibility principal is implemented. The law should clarify what Food businesses operators are covered by flexibility of the hygiene rules.

The Food Safety Law, as well as other regulations of the hygiene package mentioned above, put an obligation for all food business operators to implement the rules in accordance with the new trends, good manufacturing practices and good hygiene practices and on the principles of HACCP. However, when it comes to small operators, there is a lack of recourses/options when it comes to multidisciplinary analysis and knowledge of the area to correctly comprehend the potential risks. A possible solution could be to make a model HACCP plan for different product groups, starting with a hazard analysis, aiming to establish the typical CCP, critical limits, monitoring, corrective action, verification and documentation^{12,13,14}. Therefore, the sometimes complicated HACCP system could be adapted to small producers, with pointed importance focused on the safety aspect of the product. In small systems, keeping records is particularly problematic. The small numbers of people in a company, who perform multiple operations at the same time, often have virtually no knowledge nor time to devote to the interpretation of complicated, long, incomprehensible procedures or instructions. To solve this problem, the small producers have to make log entries that would represent the basic parameters that would be conducted by the enrolled operator and would include everything to ensure the traceability of processes and products. For some manufacturers, it is necessary to leave the possibility of applying good manufacturing practices and good hygiene practices in the facility, without the need for development of the HACCP plan, but under the condition that the perceived hazard analysis and risk assessments are made. In such a system, controlling the basic parameters of preservation, such as temperature, which should be monitored appropriately, must be insisted upon. If we want to keep this approach we

have to take into consideration the number of employed persons (the limit could be one or two people), because only in such a system would there be justification for such an approach.

In general, hygiene conditions are better in industrial production. Use of brining salt, pepper extracts, sugars, starter cultures and artificial casings, improve safety of the process. However, sausage produced in such a manner, in its sensory and other quality indicators, differs significantly from traditionally-produced sausage, and cannot be considered as original, traditional product. Traditional production procedures of domestic sausage remain only in smaller producers (crafts, households), but standard food business operators can produce traditional products as well, using traditional techniques. Possible derogation points are e.g.: meat cutting (equipment - wooden surfaces for meat cutting), smoking (equipment - smoking box outside the objects and open furnace), room (layout - one room and time separation of processes like cutting and processing or slaughtering, cutting and processing), suitable closet for chemicals (layout) and etc.

4. Recommendation

There is a need to support the maintenance of production of traditional products in small production facilities. The main objectives should be adoption of the Guideline of Good Manufacturing and Good Hygiene Practice and HACCP in small food business production and traditional meat production. It should cover minimum tasks that food business operators have to achieve in the food processing in a hygiene manner and this guide has to focus in developing a special production diary, which would include the basic records of daily procedures. For very small systems and traditional production, one should not insist on complete HACCP, but the control of the critical points has to be implemented in the production, without compromising the requirements of hygiene. Small food business operators and producers of traditional products should be enabled to register their production, and, while fully respecting all requirements pertaining to conditions and under control, produce traditional products in their households/holdings. Regional associations of small producers of traditional meat products would be very beneficial in regard to establishing their own standards, defining production and quality of meat products in all its segments. Producer associations should be strengthened and have potential to communicate with the government and ministries and initiate possible flexibility which is possible within Food Safety Law through National measures.

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