

SOME PROBLEMS OF MEAT AND MEAT PRODUCTS' DISTRIBUTION AND MARKETING

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Abstract:

Trade with goods must be conducted so as to maintain the quality characteristics of products along the entire circuit. Meat and meat products may undergo various changes in their way from producer to consumer due to certain internal and external factors acting on products. It is important to maintain an optimal level of these factors in order to maintain their quality. The physical - chemical and microbiological features, hygiene of storage areas may adversely affect the quality of these products. Other problems that can occur are those related to import of products, meat marking, or labeling of meat products. All these issues will be approach in the pages of this paper.

Key words: *meat, meat products, trade, marketing, import, labeling, quality, storage*

JEL Classification: *Q13, K32, L66, Q18*

Introduction

While conservation, the meat is exposed to a series of transformations, partly determined by the essential change occurred by the decease of the animal, and partly by the action of the external factors (temperature, humidity, air circulation, activity of micro-organisms etc.). Here are some transformations that improve the sensorial characteristics and the alimentary value of the meat (normal transformations): muscular rigidity, maturation and, for some meat categories, marinating.

Once Romania has adhered to the European Union, our country has to respect the rules and norms imposed by it, the European Union becoming mandatory in our country, too. Reaching a high level of life and human health level is one of the fundamental objectives of legislation in the alimentary domain, including the objective of accomplishing the free circulation of the alimentary products within Community.

1. Hygienic conditions of meat alimentary products

By Regulation (EC) no. 852/2004, the European Parliament and the Council establish general norms regarding the hygienic of the alimentary products, that must be respected by everybody who gets in contact with the aliments within the aliments' technical-economic circulation (Reg. (EC) *No 852/2004*). Some alimentary products may specifically compromise the human health and it is necessary to establish certain norms of hygiene. It is, especially, the case of the alimentary products of animal origin to which there have been observed micro-biological and chemical risks.

Within the common agrarian politics, there have been adopted numerous directives in order to establish some specific health norms to produce and include on the market the products aligned in the list stipulated by annex I of Romania's adherence treaty to the European Union. These healthy norms have reduced the obstacles in the

trade exchanges with the respective products, which contributed to the internal market accomplishing, ensuring at the same time a high level of the public health protection (Zahiu, L., 2004).

In what regards the public health, these norms stipulate common principles, especially in what concerns the responsibilities of the producers and of the competent authorities, requirements in the structure domain, organization and hygienic for units, procedures of authorizing these units, requirements in the domain of depositing and transport and salubrity brands. These principles constitute a common base for the production of alimentary products of animal origin under hygienic conditions and allow the simplification of the existing directives.

Taken into consideration as a whole, these elements underline the necessity of a total transformation of the hygienic specific norms stipulated by the existing directives. Transformation has as main objective ensuring a high level of protecting the consumer in the domain of aliments safety, especially by imposing the same norms for the operators in the alimentary sector in the whole Community and ensuring the well functioning of the internal market, of the animal origin products, in order to contribute to the accomplishing of the common agrarian politics.

The European are not applied to the primary production destined to use in private households or preparing, manipulation and deposit of the alimentary products in the households in the scope of private consumption. Moreover, in case of direct supply of the final consumer or of local detailed trade, in small quantities, with primary products or with certain meat types by the operator in the alimentary sector that produces these aliments, it is necessary that the national legislation protects the public health, the close relation between the producer and the consumer being taken into consideration.

The member states should dispose of a certain margin, to expand or limit the application of the requests stipulated by the present regulation for the detailed trade activities. Still, the member states may limit their application only if they consider that the requests stipulated by the Regulation (EC) no. 852/2004 are enough to touch the objectives in the domain of aliments 'safety and in case in which the supply with alimentary products of animal origin of a unit by a detail selling unit represents a marginal, localized and restricted activity. This supply should, therefore, represent only a small part of that unit's activities; the units supplied this way should be situated on its immediate proximity and the supply should be restricted only to certain types of products or units.

The traceability of the alimentary products is a fundamental element to guarantee the aliments 'safety. The operators in the alimentary sector who are responsible for a unit subjected to authorization according to the present regulation should respect the general norms stipulated by Regulation (EC) no. 178/2002 and, at the same time, to get ensured that all the products of animal origin that are introduced on the market have a salubrity label of the aliments or an identification mark.

It is necessary that the alimentary products imported in the Community are conform with the general requests of the Regulation (EC) no. 178/2002 or conform with the standards equivalent with those in the Community. The Regulation defines certain hygienic requests specific for the alimentary products of the animal origin imported in the Community.

There must be stipulated a certain flexibility to allow going on with the traditional methods in all stages of the production, handling or distribution of alimentary products, as well as in what concerns the structural requests imposed to the units. Flexibility is quite important for the regions subjected to some specific geographical

constraints, including the ultra-periphery regions. Still, flexibility should not compromise the objectives of the alimentary hygiene domain. Moreover, because all the aliments produced conform to the hygiene norms will normally benefit of a free circulation regime in Community, it is necessary that the procedure that allows the member states to apply certain flexibility to be totally transparent.

In all the stages of production, handling or distribution, there are interactions of the operators in the alimentary sector, including the sector of animals' alimentation, as well as links between the considerations in the domain of animal health, animals' well being and public health. There should therefore be a communication between the different parts that take part to all the processes of the alimentary chain, starting with the primary production and ending with the detailed selling.

The operators in the alimentary sector introduce on the market the products of animal origin produced in the Community only if they have been prepared and manipulated exclusively in the units that respect the conditions in the Regulation (EC) no. 852/2004 and annexes II and III of Regulation (EC) no. 853/2004.

Operators in the alimentary sector do not introduce on the market any products of animal origin worked down in a unit subjected to authorization in case in which it does not have: either a salubrity brand applied according to the Regulation (EC) no. 854/2004; or, when the Regulation does not stipulate the application of a salubrity brand, an identification brand applied according to the stipulations in annex II section I of Regulation 853/2004. The identification brand on an animal origin product may be approved only if it has been produced according to the in force rules. The lots of animal origin products destined to marketing must be accompanied by certificates and other documents to attest the provenience and quality of the respective products.

Cutting and boning of the meat must take place under certain hygienic conditions, in order to obtain quality products, under proper hygienic conditions. If the hygienic norms and the temperature conditions of the room in which these operations take place are not conform with the in force rules, the meat may suffer not wanted processes and modifications of the quality, thus becoming improper for human consumption.

Meat deposit and transport

Immediately after the sacrifice of the animal, the meat must be refrigerated in the abattoir in order to ensure, in all parts of the meat, a temperature not higher then 3 C degrees for the edible organs and 7 C degrees for the other types of meat, following a curve to ensure a continuous decrease of the temperature.

While refrigerating, there must be ensured a proper ventilation to avoid any condensation at the surface of the meat. The meat must reach the mentioned temperature and to main it before depositing it and while depositing as well as while transporting it. While deposit and transport, the exposed meat must be separated by the packaging meat, unless it is deposited or transported in different moments or in a way that the package and way of depositing or transport cannot represent a source of contamination for the meat.

Non-respecting of deposit and transport rules of the alimentary products of animal origin leads to alteration of the sensorial, physic-chemical and microbiological properties of the products, which results in processes and modifications of their quality.

2. Conditions regarding the products of animal origin in the European Union

The import of products of animal origin destined to human alimentation may be done under the conditions presented in figure 1.

The products of animal origin must be accompanied while imported by health certificates issued by official veterinary doctors from the conveyance place, to attest the fulfillment of the sanitary veterinary established by the competent authority, according to the legal stipulations, as well as declaration of conformity and/or quality certificate, both emitted by the producer. These products must present specific organoleptic characteristics and physical-chemical parameters declared in the technical specification and mentioned in the conformity declaration or quality certificate, documents emitted by the producer, which accompany every transport.

Figure 1

Conditions for importing the products of animal origin in the European Union

Imports of products of animal origin	From member states or a part of their territory, from which the imports are not forbidden for reasons of sanitary police;
	From third countries or a part of their territory, from which the imports are not forbidden for reasons of sanitary police;
	From third countries which are included on the list of the countries approved for export in the European Union;
	From unities in the third countries written on the official lists approved for export in the European Union;
	From third countries whose veterinary services may guarantee the respecting of the sanitary demanding, at least equivalent to those established by the directives of the European Union;
	They are accompanied by health certificates according to the models established, which prove that the products correspond to the in force legislation's stipulations.

Source: Adaptation upon Sanitary Veterinary Norm of 13 July 2001

The micro-biological and toxicological parameters of the animal origin products imported must be situated within the exigencies of the in force legislation (Reg. (EC) No 1441/2007).

At the same time, the products must be protected in bags of decomposition and transport to ensure their integrity and maintain at an optimal qualitative level. Each bag of decomposition and transport of the products must be identified, according to the in force legal stipulations, by labels on which there must be written, in the Romanian language, the origin country, the producer unit, the product name, the data of fabrication and expiration, the conservation temperature, and in what concerns the adapted products, the ingredients they contain. In the case of the alimentary adjuvant, besides naming the ingredients, their proportion will also be specified on the label.

The animal origin products must bear the health brand. The health brand applied on the pork meat also guarantees the trychinelo-scopycal exam with negative result. On the health certificate there must be mentioned the date of fabrication/freezing and the temperature of the product.

Each transport of animal origin products arrived at import is accompanied by an original veterinary certificate or another original document. The veterinary doctor does the following (Reg No 882/2004): the control of the certificates, of other veterinary documents or other documents, in order to determine whether the established guarantees are adjusted; the control of identity to get ensured that the products correspond with the information on the certificates or accompanying documents;

This procedure contents:

a) when the animal origin products arrive in containers, the checking that the seals fixed by the official veterinary doctor from the conveyance place are intact, and the information mentioned on them correspond to those written on the document or on the accompanying certificate;

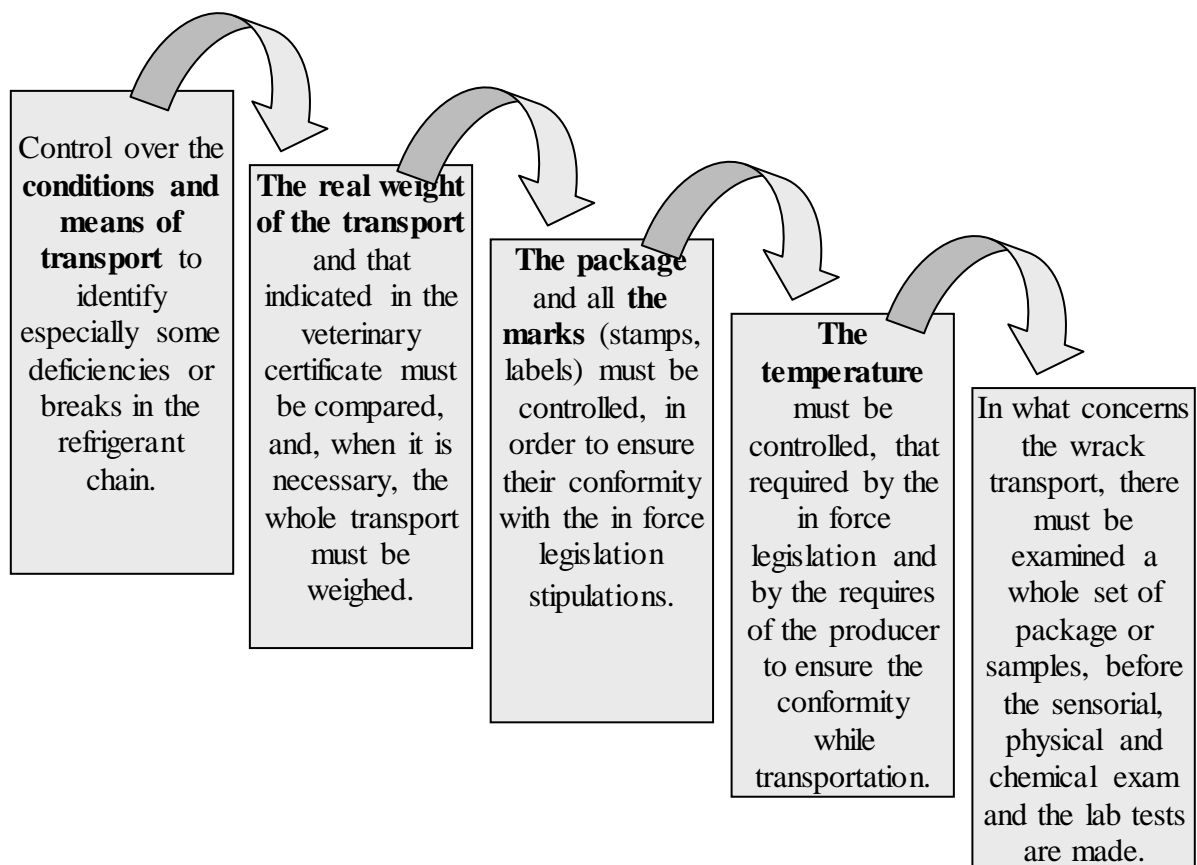
b) for all the animal origin products, the control that the stamps, official marking and of health that identify the origin country or unit are present and conform with those on the certificates or documents;

c) for the canned products, the control regarding labeling and their conformity with the in force legislation stipulations.

The veterinary doctor from the destination place will control the documents, the products' identity, will effectuate a physical control of each transport to ensure that the products satisfy the exigencies of the in force legislation and correspond to exploitation. The physical control must ensure that the products fulfill the exigencies of the in force legislation and correspond to exploitation. The physical control must ensure that the products fulfill the conditions guaranteed from origin, on the basis of the laboratory exam: organoleptic, physical-chemical, residues, pathogens, contaminants.

Regardless the product type, the controls presented in figure 2 must be done when dealing with the animal origin products.

Figure 2
The controls made within the import of the animal origin products



Source: Adaptation upon Sanitary Veterinary Norm of 13 July 2001

The examination must cover, out of a transport, from minimum two pieces/packages to maximum ten. Still, depending on the nature of the product, the veterinary authorities may dispose the extension of the control. In case of the products wrack transported, there must be reaped at least 5 samples from different parts of the

transport. The veterinary doctor reaps samples representative for lab exams of each transport and product category. At the first transport imported from the same country and from the same producer, it is reaped one sample for each of the following: micro-biological exam, physical-chemical exam, biological residues, micro-toxins, heavy metals and radio-activity. The samples are sent to the authorized state laboratory, accompanied by the reaping minutes, the address from the products' possessor and the fiche for the processed products. In case of the live fish import, the veterinary doctor also reaps a water sample from the basin or transport container.

If the results of the complete lab exam correspond, the products with the same origin are subjected quarterly to a micro-biological and physical-chemical exam and annually to a complete lab exam. If the results of the complete lab exam do not correspond, they are subjected to the complete lab exam for the following three transports.

The admission within consumption of the imported products is not conditioned by getting the lab results, if they are accompanied by health certificates issued by official veterinary doctors, which attest the products' salubrity and conformity and if the state veterinary doctor does not detect any irregularities regarding the accompanying documents or some packing, marking or organoleptic deficiencies, on the occasion of expertise the products in the authorized deposit.

The transport of imported animal origin products which do not fulfill the conditions of security for the consumer, attested by lab exams, are withdrawn from consumption on the importer's liability and expenditure. The state veterinary doctor decides their destination. The animal origin products circulate with a sanitary veterinary certificate issued by a veterinary doctor and with a quality certificate emitted by the producer.

3. Marking the meat in the European Union and Romania

The settlement of the meat marking is made by ORDER no. 868 of 06.11.2003 for the modification of the annex of The Order of the ministry of agriculture and alimentation no. 117/1998 to approve the sanitary veterinary Norm regarding the marking and authentication of the fresh meat destined to human consumption.

The identification mark must be applied before the product gets out of the unit. Still, it is necessary to apply a new mark on a product only if the package is taken away or its cover or if it is subjected to an ulterior conditioning in another unit, case in which the new mark has to indicate the registration number or that of the authorization of the unit where these operations took place. The mark must be legible and ineffaceable and the letters used must be easily decoded. It must be discernible for the competent authorities. The mark must indicate the name of the country where the unit is situated; it may appear full name or under the form of a two letter code, according to the corresponding ISO standard. In the case of the member states, these codes are: AT, BE, DE, DK, ES, FI, FR, GR, IE, IT, LU, NL, PT, SE and UK. The mark must indicate the number of the unit's authorization. When the mark is posted in a unit situated in the Community, it must be oval and include the abbreviation CE, EC, EF, EG, EK or EY. The mark may be posted according to the way of presenting of different animal origin products, on the material in which it is packed or on the package, or it may be printed on a label stuck on the product, on the material it is packed or on the package. The mark may also be a fixed plaque made of a resistant material.

There are two types of mark: *the health mark* – it indicates the fact that the product corresponds from a hygienic-sanitary point of view and it does not affect the

health of the people who consume them and *the identification mark* – to be able to recognize the type of animal the meat is.

If the package contains sliced meat or comestible organs, the mark must be sampled on a label fixed or printed on the package, so that it may be destroyed when opened. When the baling offers the same protection as the package, the mark may be applied on the baling material.

In what concerns the animal origin products placed in containers for transport or in big packages destined to manipulation, conditioning, or ulterior packing in another unit, the mark may be applied on the exterior surface of the container or package. The animal origin products presented under liquid form, granules or dust wrack transported or wrack transported fish products do not need the identification mark if the accompanying documents contain the information related to the respective products. When the mark is applied directly on the animal origin products, the colors used must make the object of an authorization, according to the European dispositions which readjust the use of acronols for the alimentary products. In figures 3 – 11, the models of health stamps used in marking different types of meat are presented.

Figure 3

The model of the health stamp to mark the meat destined to use in the country.



Figure 5

The model of the health stamp to mark the meat destined to export.



Figure 4

The model of the health stamp to mark the meat of wild quarry destined to use in the country.



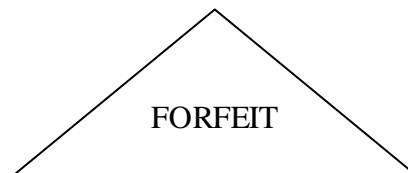
Figure 6

The model of the health stamp to mark the meat of wild quarry destined to export.



Figure 7

The model of the stamp to mark the meat, organs and abattoir sub-products non-corresponding for human consumption



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HORSE MEAT

*Figure 8.
The model of the stamp to
supplementary mark the horse meat*

*Figure 9.
The model of the stamp to supplementary
mark the horse meat destined to export*

*Figure 10.
The model of the health stamp for the meat
of vintage, cryptorchized pigs,
hermaphrodites and bull castrated pigs with
a weight of the chassis bigger than 80 kg*

*Figure 11.
The model of the health stamp for the
meat of poultry coming from birds
under restrictions on animal health
problems.*



Source of figures 3-11: Order 868/2003

3. Labeling the meat and the meat products

Besides the advertising the product function it bears, the label also fulfills an informative role, offering information necessary for the buyer. The meat and the meat products' label must contain information such as (GD 106/2002):

- a. Mentioning the animals species the meat comes from (including the organs);
- b. Denomination of the species for fish, crustaceans, mollusks;
- c. Mentioning the procedures of fabrication or the nature of the used treatments, such as: product on basis of chopped meat; raw-dry product; smoked product; fresh sausages for roast, fresh meat products (boiled); refrigerated product; frozen product; semi-prepared culinary; product on fish basis, specifying the species and the thermal treatment to which it has been subjected (pasteurization, sterilization, roasting, smoking); sterilized product; product obtained by injection.
- d. The information regarding the animal species is not necessary for the meat products made up only of bovine or swine meat, and neither when their traditional name is used. If one of the two species is mentioned in the name the aliment is sold under, the meat proportion must be bigger than 50% of the composition.
- e. It is not necessary to mention the animals species for bacon, rind or blood;
- f. Mentioning the type of membrane used: natural, eatable artificial or non-eatable artificial,
- g. The meat extract and soup which do not come from bovine meat must wear the indication regarding the meat used (for example, extract of pork meat).

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