

*Short Communication***SOME ASPECTS OF SOUTH AMERICAN BEEF EXPORT TO THE CZECH REPUBLIC**

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The aim of this article is to explain the background of studies concerning microbial, chemical and organoleptic changes in imported Argentina beef in the course of its shelf life (4 months). Therefore, some aspects influencing trade of South America beef with Europe are discussed. The influence of epizootic situation in South America countries on meat export, together with statistical evaluation of exported meat quantity and numbers of plants approved by EU authorities for export are discussed. Beef consumption from 1990 until present compared to other kinds of meat in the Czech Republic is reported. The latest quality definitions and agro/food legislations acting world-wide, in the EU and at the current Czech national level are stated. Nowadays, only the following South American countries are entitled to export beef to the Czech Republic: Brazil, Argentina, Paraguay, Uruguay and Chile.

Keywords: South American beef; epizootic situation; quality definitions; agro/food legislation

INTRODUCTION

Consumers' interest in availability of good quality beef on the market created favourable conditions for its import from South America. In connection with demand of wholesome meat in trade, the European Scientific Committee for Food (1996) instituted a multidisciplinary approach to risk analysis, which consists of risk management, risk assessment and risk communication.

On world-wide level it is Codex Alimentarius (1998), which since the foundation of the WTO (World Trade Organization) increased its relevance. Since that time food standards have more compelling character. The role and responsibilities were recorded in the Agreement on Sanitary and Phytosanitary Measures in addition to already existing Technical Barriers of Trade (TBT). The agreements include all kinds of measures and are aimed at protecting human health while keeping fair trade. TBT agreement includes all technical regulations and covers any subject from transport safety to shape of food cartons. It is also very important for overseas transports.

European food policy is to build market in foodstuffs without trade barriers, while maintaining public health and consumer protection. Therefore the EU (European Union) has adopted a legislation for common agriculture policy and harmonization legislation for the internal market. In the Czech Republic, two major laws to protect public health and food safety are Act 110/1997 Col. concerning foods and tobacco products, and Act 166/1999 Col. amended in valid version 289/2009 Col.

Amongst the most important South American beef exporting countries belong Brazil, Argentina and Uruguay

(Maso CZ on-line, 2006). These countries as well as Paraguay and Chile import beef to the European Union. It is controlled by means of regulations, directives and national legislations as mentioned above. Selection of producers is mainly influenced by epizootiological, epidemiological and hygienic situations of particular countries, together with some other specific parameters. Inspections "from farm to fork" in exporting countries by DG SANCO (Directorate General for Health and Consumer Affairs) are executed. Inspection includes intravital influences on meat, GMP (Good Manufacture Practice), GHP (Good Hygiene Practice), HACCP (Hazard Analysis and Critical Control Points) and ISO (International Organization for Standardization) norms observations in exporting establishments transport to the Europe included.

Except for the above basic norms, standards serving to "private trade marks" as BRC (British Retail Consortium) or in Germany created IFS (International Food Standard) are used. Variations for logistic (IFC Logistic, BRC for Storage and Distribution), wholesale (IFS Cash and Carry) and some others were created. All of them were derived from HACCP and GMP directed more to technological requirements, and ISO norms (22000 and 9001), directed more to management.

Epizootic situation in South American exporting countries has a great influence on their economical situation. Brazil, Argentina and Paraguay had to take severe measures especially against FMD (Food and Mouth Disease) which negatively influenced beef export from all these countries (Maso CZ on-line, 2007; redakce APIC, 2008). Argentina for that reason exported world-wide 133 000 tons of beef meat in 2001, which was about 52% less than

in 2000. Beef export represented 267 millions USD in comparison with 700-900 millions USD in previous years. In 2000, Chile was the main country for Argentina's export in South America (about 30 000 tons). In 2002, Chile due to uncertain epizootic situation in Argentina started to lower import quotas (Knight, 2002). In accordance with FAO statistics, in 2004 beef prices on international market increased and become the highest since last 8 years (12% increase). This fact also influenced beef consumption (Maso CZ on-line, 2004).

In 2004, the Czech Republic imported 9483 tons of beef and veal meat (FAOSTAT, 2009). Regionization as a tool facilitating international meat trade enabled Brazil, Chile, Uruguay, Paraguay and Argentina to export beef to the EU. Particularly in Brazil 70 enterprises from 9 of the 26 Brazilian States namely: São Paulo, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Goiás, Rio Grande do Sul, Espírito Santo, Paraná and Santa Catarina are entitled to export packaged beef meat to the EU. Similar situation is in Chile, Uruguay, Paraguay and Argentina where there are 34 of 116 regions in total from which the export to the EU countries is permitted. The same applies to the enterprises approved for export to the EU in accordance with DG Sanco requirements. In 2009, about 1830 farms contributed to breeding of export beef in Brazil (Europa, 2009).

In Figure 1, consumption of beef in comparison with other types of meat in the Czech Republic in the last twenty years is recorded (ČSÚ, 2009). Figure 2 shows meat production in Czech Republic in the last twenty

years (ČSÚ, 2010). Great differences are attributed not only to traditions and habits of "Czech" cuisine. Price and quality of meat play a prominent role as well. Until recently, quality of Czech origin beef was far from selected meat needs. For these and other reasons South American beef has been considered to be the best on the market. The livestock is grazed on the pastures of Pampas; its meat is 100% natural, very juicy, delicate, it has distinctive colour and flavour. It contains less fat, cholesterol and provides high content of minerals and proteins. The livestock is not bred in stressing environment of enclosures, and growth promoters are inhibited.

In the last two decades, more precise definitions for meat quality have been developed. Deming (1993) stated that "a product or service possesses quality if it helps somebody and enjoys a good and sustainable market". Crosby (1979) described quality as "complying with clear specifications". Within the ISO standards (ISO, 1998), the term of quality is used in the context of "achieving sustained consumer needs and expectations within organizational environment commitment to continual improvement of efficiency and effectiveness". Generally, the definitions for quality can be summarized as "quality is meeting or exceeding consumers' expectations".

Several other authors also defined intrinsic and extrinsic attributes (e.g. Poulsen et al., 1996). Intrinsic attributes were described as characteristics that are part of the physical product, whereas extrinsic attributes are determined with marketing efforts.

South American beef is imported to the Czech Republic

Figure 1: Consumption of meat in terms of "with-the -bones" weight (annual per capita average) in last two decades in Czech Republic (ČSÚ, 2009) (courtesy of ČSÚ, 2011)

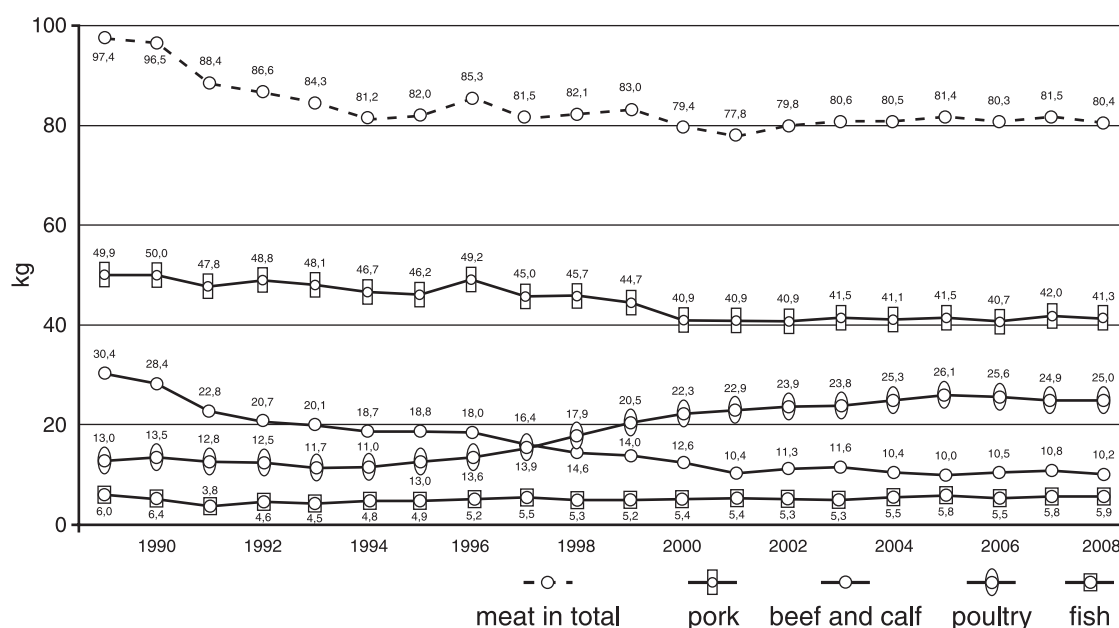
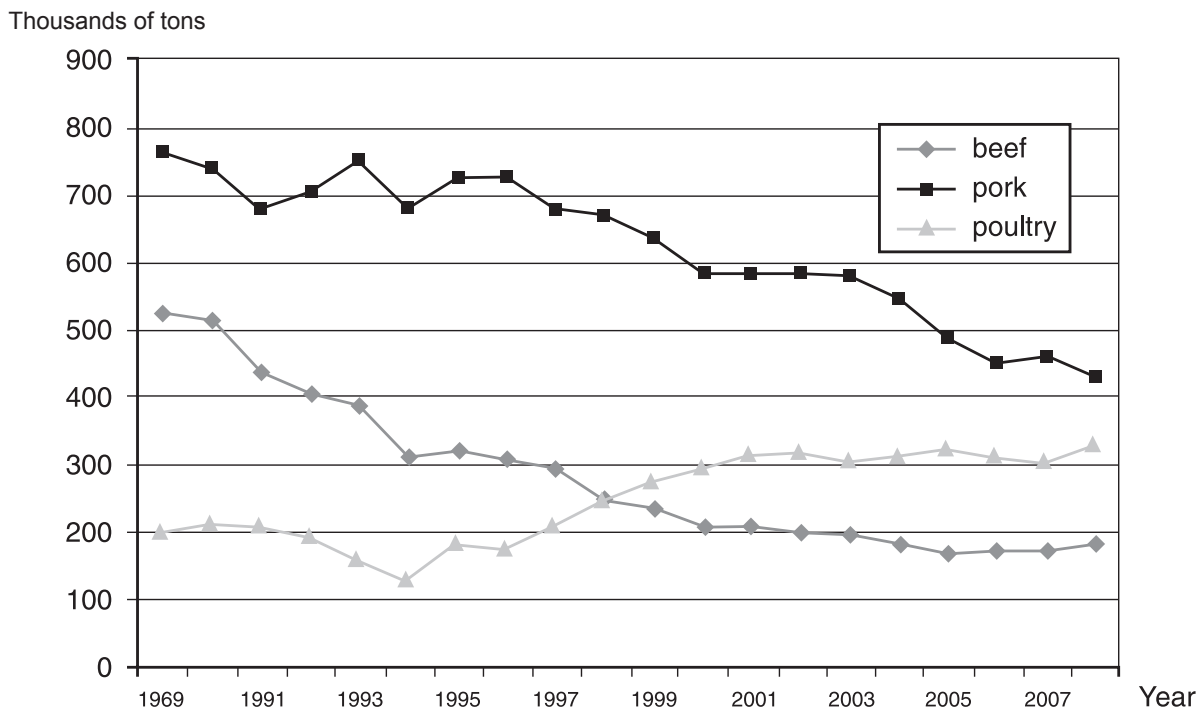


Figure 2: Meat production in thousands of tons of live weight in Czech Republic in last two decades (ČSÚ, 2010) (courtesy of ČSÚ, 2011)



lic by several companies. Among some of them belong for example XO Foods, Animalco, Nestar, Nowaco and IFC Food. The shelf life of vacuum packed cuts is four months after packaging.

The aim of this article is to provide information on the background of starting South American meat microbiological, chemical and physical examinations.

CONCLUSIONS

In the Czech Republic, records on beef imports from South American countries have been kept and stored only for the last 10 years. As to legislative requirements on quality on agro/food products, systems act on different levels: Codex Alimentarius, GMP, HACCP, ISO, community legislation in the EU i.e. Regulation (EC) 136/2004, Regulation (EC) 136/2004, Regulation (EC) 852/2004, 853/2004, 854/2004, Regulation (EC) 206/2010 from 12th of March abolishing Decision 79/542 EC, particular agreements as BRC, IFS and dual agreements between EU countries and the developing countries.

Czech legislation concerning imports and transits of meat has been harmonized with the EU one. It is represented by Act 166/1999 Col. in valid version, Decree 375/2006 in valid version and Decree 37/2003 about veterinary inspection of imports of products from third countries changed by Decree 259/2005, to name some of

them at least. Vacuum packed beef cuts from the South American countries reach the Czech Republic via the EU ports, as after joining the European Union the only boundary veterinary check point is Prague airport dealing with consignments of personal nature or meat samples (Rothbauer, 2010).

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