

Piotr Kafel¹⁾

1) The Department of
 Quality Management,
 Cracow University of
 Economics, Cracow, Poland
 piotr.kafel@uek.krakow.pl

FOOD QUALITY PRODUCTS IN EU COUNTRIES

Abstract: The article presents food quality regulations in EU countries. There is a description of traditional and regional products registered in the European Community in accordance with the requirements of Regulations 509/2006 and 510/2006 and Regulation 1151/2012. The issues such as: product registration, product certification and market protection of high quality food products were described in the paper. Moreover, quality management and food safety issues in high quality food schemes were discussed.

Keywords: Food quality, EU Regulation 1151/2012, traditional and regional products, foodstuff, food labeling, PDO, PGI, TSG, ISO 9001, ISO 22000

1. INTRODUCTION

Factors that have influence on the quality of food are very wide. Quality of food can be defined taking into consideration such aspects as: safety (hazard free), nutritional values, sensory values and convenience. Figure 1 demonstrates food quality definition aspects.

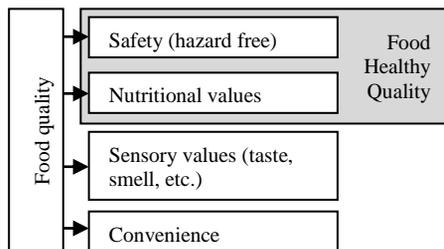


Figure 1. Food quality definition aspect [1]

Producers and retailers are interested in the quality of their products. Moreover, marketing departments in food companies try to convince customers that their products characterize high quality. In the article are described European Community high quality food programs in accordance with the requirements of Regulation (EC)

1151/2012 and Regulation (EC) 834/2007.

2. THE PROPOSED APPROACH

In EU countries, some aspects of food quality such as safety are obligatory. All food producers have to meet the criteria of food safety. Other criteria that have influence on quality of food are in most cases voluntary. Figure 2 shows the factors that influence the food quality.

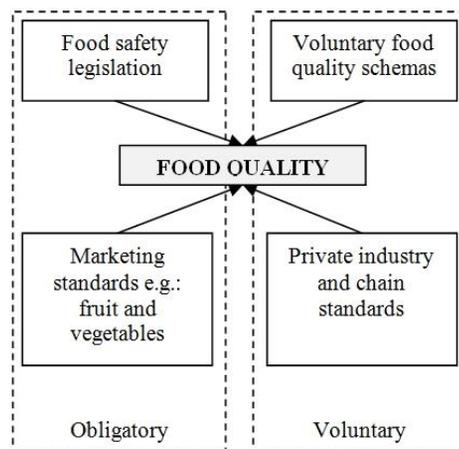


Figure 2. Criteria that have influence on quality of food.

Food safety issues are described in numerous of EU regulations. Most important are:

- General food law Regulation (EC) no. 178/2002.
- Horizontal legislation: Regulation (EC) no. 852/2004.
- Vertical legislation: Regulation (EC) no. 853/2004.

According to those requirements, companies have to introduce the principles of Good Hygienic Practices (GHP), Good Manufacturing Practices (GMP) and HACCP system. This will allow to sort out all issues relating to the hygienization and observance of basic principles of food production [2].

Further obligatory EU low regulations in the field of food quality are presented in table 1.

Table 1. EU Food safety legislation topic.

Further food safety legislation
<ul style="list-style-type: none"> - Microbiological criteria for foodstuff. - Harmful organisms including Phytosanitary Certificate, - Packaging, - Food Contact materials, - Food contaminants, - Plant protection products (PPP) and Pesticide Residues, - Food Irradiation, - Food Supplements, - Flavourings, - Food additives, - Novel food and Novel food ingredients, - Genetically modified food and feed, - Labelling, presentation and advertising of foodstuff.

3. GENERAL FOOD INFORMATION REQUIREMENTS

Consumers assess the quality of the products based on labelling, presentation

and advertising of foodstuff. In order to protect consumers some requirements are obligatory. General food information requirements in EU countries are describe in Directive 2000/13/EC and Regulation (EU) No 1169/2011. Due to the transitional period, both documents are considered in this paper. Key points of Directive 2000/13/EC ([3],[4]) are:

- 1) Consumers get all the essential information on composition, manufacturer, storage methods and preparation, etc.
- 2) Applies to foods delivered as such to the consumer or to restaurants, hospitals, canteens and other mass caterers.
- 3) Food labels must be indelible and easy to see, understand and read, with some particulars appearing in the same field of vision.
- 4) Substances known as allergens must always be indicated on the label.
- 5) Labels must indicate the quantity of certain ingredients as a percentage of the final product (Quantitative Ingredients Declaration - QUID).
- 6) Producers and manufacturers can give additional labelling information, if it is accurate and does not mislead the consumer.
- 7) Prohibits claims on any food that it prevents, treats or cures a human disease.

In the Regulation (EU) No 1169/2011 which will be applied in EU countries from 13 December 2014, the general rule concerning fair information practices will not change. According to the article 7, food information shall not be misleading, particularly [5]:

- as to the characteristics of the food,
- by attributing to the food effects or properties which it does not possess,
- by suggesting that the food possesses special characteristics when in fact all similar foods possess such characteristics, in particular by specifically emphasizing the presence

- or absence of certain ingredients and/or nutrients,
- by suggesting, by means of the appearance, the description or pictorial representations, the presence of a particular food or an ingredient, while in reality a component naturally present or an ingredient normally used in that food has been substituted with a different component or a different ingredient.

4. CMO - MARKETING STANDARDS

Launched in 1962, the Common Agricultural Policy (CAP) is a partnership between agriculture and society, between Europe and its farmers. Its main aims are [6]:

- To improve agricultural productivity, so that consumers have a stable supply of affordable food.
- To ensure that EU farmers can make a reasonable living.

Common agricultural policy includes, in particular, a common organisation of agricultural markets (CMO) which may, take various forms depending on the product. Products that are in CMO have to meet specific quality and labeling criteria.

Due to the CMO, country of origin labelling is currently mandatory for certain products such as beef, fish, honey, olive oil and fresh fruit and vegetables. In other cases, it currently only becomes mandatory when its absence might mislead consumers as to the true origin of the product. Under the new rules (Regulation (EU) No 1169/2011), the mandatory indication of country of origin or place of provenance is extended to the meat of pigs, sheep, goats and poultry [7].

In Regulation 1234/2007 use of marketing standards is regulated. Marketing standards may concern products such as:

- olive oil and table olives,

- fruit and vegetables,
- processed fruit and vegetables,
- bananas,
- live plants.

According to Regulation 543/2011 general marketing standard and specific marketing standards for the fruit and vegetables are described. The products of the fruit and vegetables sector which are intended to be sold fresh to the consumer, may only be marketed if they are sound, fair and of marketable quality and if the country of origin is indicated.

Minimum quality requirements are included in general marketing standard. Products according to this standard shall be:

- intact,
- sound; products affected by rotting or deterioration such as to make them unfit for consumption are excluded,
- clean, practically free of any visible foreign matter,
- practically free from pests,
- practically free from damage caused by pests affecting the flesh,
- free of abnormal external moisture,
- free of any foreign smell and/or taste.
- The condition of the products must be such as to enable them:
 - to withstand transport and handling,
 - to arrive in satisfactory condition at the place of destination.

Specific marketing standards contain requirements for [8]:

- apples,
- citrus fruit,
- kiwifruit,
- lettuces, curled leaved and broad-leaved endives,
- peaches and nectarines,
- pears,
- strawberries,
- sweet peppers,
- table grapes,
- tomatoes.

5. PRIVATE INDUSTRY AND CHAIN STANDARDS

Implementation of private industry and chain standards is very popular among the food chain organizations. Most common standards accepted in EU countries operating in food sector are ISO 9001, ISO 22000, BRC and IFS systems and GlobalGAP.

Quality and safety management standards cover several/all stages of the food chain – from farm to fork, for example: ISO 9001 and ISO 22000 standards. Other are designed for one stage of a food chain e.g. GlobalGAP for primary production at the farm level) [9].

The benefits of implementation and certification of quality management standards are well described in literature e.g.: [10-14]. In most cases, implementation and certification of management standards influence in higher quality of product. For example, one of the goals of ISO 9001 is repeatability of production. Implementation of ISO 22000 or BRS, IFS standards usually improves food safety. In any case, certified management systems mainly to improve management. As far as food declarations are fulfilled, improvement of food quality is not obligatory in management system.

Producers usually put on package information about certified management standards. In consumers opinion marks/information like: “ISO 9001, ISO 14001, ISO 22000, HACCP” are well recognized and perceived as a confirmation of the high products quality. In fact, in some cases it is consumers overinterpretation.

Private industry and chain standards implementation and certification are voluntary in use. Nevertheless, in some cases without those systems it is impossible to operate in the market or to mark products in some conformity assessment schemes.

6. FOOD QUALITY PRODUCTS IN EU SCHEMES

Efforts to improve food quality have been part of EU agricultural policy, from the development of wine quality labelling in the 1980s onwards. Nowadays main Community quality schemas are:

- organic farming products,
- protected geographical indication (PGI),
- protected destination of origin (PDO),
- traditional specialty guaranteed (TSG).

Organic farming is an agricultural system that seeks to provide the consumer, with fresh, tasty and authentic food while respecting natural life-cycle systems. To achieve this, organic farming relies on a number of objectives and principles, as well as common practices designed to minimize the human impact on the environment, while ensuring the agricultural system operates as naturally as possible. In the EU, these rules are laid down in Council Regulation (EC) No 834/2007 [15].

PDO, PGI and TSG schemes encourage diverse agricultural production, protect product names from misuse and imitation and help consumers by giving them information concerning the specific character of the products [16]:

PDO - covers agricultural products and foodstuffs which are produced, processed and prepared in a given geographical area using recognized know-how.

PGI - covers agricultural products and foodstuffs closely linked to the geographical area. At least one of the stages of production, processing or preparation takes place in the area.

TSG - highlights traditional character, either in the composition or means of production.

Food quality schemes are voluntary in use. The names and scheme logos (Figure 3) can only be used to describe authentic

product corresponding to the specification laid down. The product specification is the key element in the designation of a product name as it establishes the conditions to be observed by all parties thereafter. One part of the specifications relates to food quality.

In this way, the EU schemes identify and protect the names of quality agricultural products and foods. Producers can use protected names and logos, only after meeting the criteria laid down in the specification. According to Regulation 1151/2012, control bodies operating as a product certification bodies or national competent authorities shall carry out PDO, PGI and TSG, verification of compliance with the product specification, before placing the product on the market.



Figure 3. PDO, PGI and TSG logos [17, 18]

7. CERTIFICATION OF PDO, PGI, TSG

Certification bodies should meet the requirements of ISO 45011 or ISO 17065 standards. There are standards for third party product certification bodies. Conformity assessment process of PDO,

PGI and TSG should be developed according to the Guide ISO/IEC 53:2005. Obligatory elements of certificate program are [16]:

- Monitoring of compliance with the requirements set out in the regulations and legal acts and documents referring to them, and in the product specification.
- Control of place of activities of a producer.
- Taking food samples for testing (if necessary), and testing.
- Evaluation of the correct packaging and labeling.

In the process of certification, there is no need to implement management standards. It is obligatory only when, such requirement is stated in the product specifications. In most cases, there are no such records.

8. SUMMARY

EU regulations in the field of food quality take important place in UE policy. The article presents the factors affecting the quality of food. In particular, issues related to: obligatory food quality requirements, general food information requirements, marketing standards and food quality products in EU schemes were presented.

REFERENCES:

- [1] Sikora, T., & Strada, A. (2005). *Safety and Quality Assurance and Management Systems in Food Industry: An Overview*. The Food Industry in Europe, Agricultural University of Athens, Ateny.
- [2] Nowicki, P., & Sikora, T. (2012, May). *Obligatory and voluntary food safety management systems - the up to date review*. 6th International Quality Conference, Kragujevac, Serbia.

- [3] Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs
- [4] Retrieved from: http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/index_en.htm
- [5] Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004
- [6] Retrieved from: http://ec.europa.eu/agriculture/index_en.htm
- [7] Overview of changes to food labelling introduced under the food information Regulation, FSAI, July 2012
- [8] Commission Implementing Regulation (EU) No 543/2011 of 7 June 2011 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors.
- [9] Will, M., & Guenther, D. (2007). Food Quality and Safety Standards as required by EU Law and the Private Industry, GTZ.
- [10] Herzfeld, T., Drescher, L. S. & Grebitus, C. (2011). Cross-national adoption of private food quality standards. *Food Policy*, 36(3).
- [11] Jaxsens, L., Luning, P. A., Marcelis, W. J., van Boekel, T., Rovira, J., Oses, S., ... Uyttendaele, M. (2011). Tools for the performance assessment and improvement of food safety management systems. *Trends in Food Science & Technology*, 22(1).
- [12] Kafel, P., & Sikora, T. (2012, May). *Quality management systems benefits and their influence on financial performance*. 6th International Quality Conference, Kragujevac, Serbia.
- [13] Karipidis, P., Athanassiadis, K., Aggelopoulos, S., & Giompliakis, E. (2009). Factors affecting the adoption of quality assurance systems in small food enterprises. *Food Control*, 20(2).
- [14] Mensah, L. D., & Julien, D. (2011). Implementation of food safety management systems in the UK. *Food Control*, 22(8).
- [15] Retrieved from: http://ec.europa.eu/agriculture/organic/organic-farming/what-organic_en
- [16] Program akredytacji jednostek certyfikujących produkty tradycyjne i regionalne w odniesieniu do wymagań normy PN-EN 45011:2000, DAC-06, Polish Center for Accreditation.
- [17] Commission Regulation (EC) No 1216/2007 of 18 October 2007 laying down detailed rules for the implementation of Council Regulation (EC) No 509/2006 on agricultural products and foodstuffs as traditional specialities guaranteed
- [18] Commission Regulation (EC) No 628/2008 of 2 July 2008 amending Regulation (EC) No 1898/2006 laying down detailed rules of implementation of Council Regulation (EC) No 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs