



## Executive summary

### Thematic priorities in food quality and safety

<b>Deliverable Number*</b>	<b>D4.1 - Report of thematic priorities (hot topics) and structural plan of the established working groups</b>
<b>Organisation name of lead contractor for this deliverable:</b>	<b>NTUA</b>
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\* a deliverable is a formal output produced by a (EU) project

## Content Summary

This document contains an extensive analysis of “hot topics” in the field of food safety and quality. This analysis is based on a literature survey of food hazards and quality challenges, information concerning the available official and non-official analytical and rapid detection methods, regulations and limits set by European legislation, RASFF data, information from EU websites data from standardization organisations as well as other sources of information. Additionally, comments and suggestions from the MoniQA partners were incorporated. The field of expertise of all the MoniQA partners, the methods they use for analyses of food safety hazards or quality characteristics, and their suggestions for the thematic priorities were gathered and evaluated through the distribution of appropriately designed questionnaires.

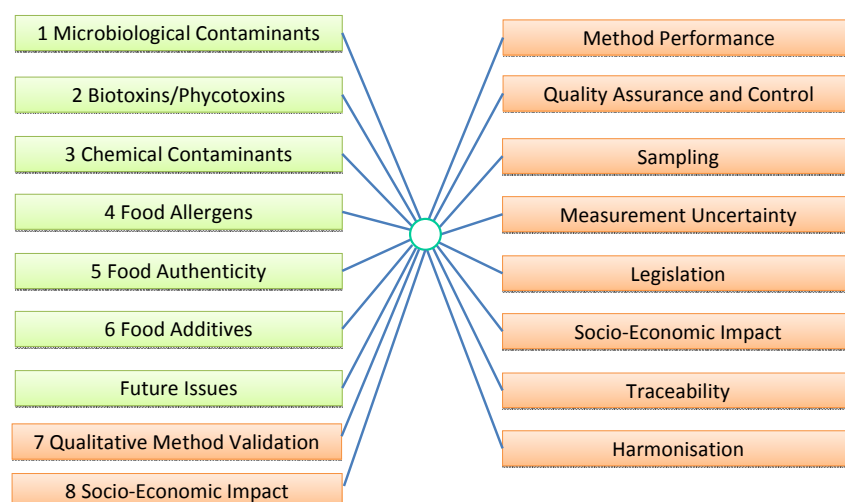
Based on the data collected several thematic priorities were singled out as priority issues for harmonisation activities in the MoniQA project:

- **Microbiological contaminants** are on the top of RASFF notifications, and many of them contain high- risk and severity hazards. Some of them (*Salmonella*, *Listeria monocytogenes*, and *Escherichia coli*) are included in the EU’s legislative microbiological criteria. The need for validation of methods, comparing official methods developed by different standardization organisations, and comparing new/rapid methods with official recognised ones (specifically ISO), were issues that were outlined by most partners.
- **Mycotoxins** are on top of RASFF notifications, too. The recent European legislation sets mycotoxin safety criteria for many foods, and marine bio-toxins (*histamine*, *DSP*, *Azaspiracids*) safety criteria for some foods. For mycotoxins and marine bio-toxins there are several analytical or rapid/new methods, some of them recognized as standard methods. However, the use of different (and possibly not equivalent) standard methods by different laboratories in different countries, results in difficulties in the trade between countries and (possibly) controls by authorities. For plant toxins there are several analytical methods and few rapid/new methods but only one is recognized as a standard method.

- **Food allergens** can be detected by several methods, which require further validation and performance testing. The main gaps are the absence of reference materials and quality control matrices. Test kit manufactures currently produce their own standards and antibodies, leading to disparate results between test kits from different manufacturers.
- **Chemical contaminants** may render food unsafe. European legislation lays down limits for pesticide residues, veterinary medicine residues, heavy metals, and other contaminants. Needs for harmonisation of detection methods and validation procedures arise for several of these contaminants.
- **Additives** may become a hazard if improperly or illegally used. Processing toxicants are newly recognised hazards, and their detection methods need further development and validation.
- **Food authenticity** was selected as a thematic priority among other quality topics because it affects the quality and nutritional value of many foods that are broadly consumed (milk, cereals, vegetable oils, etc.) and has a severe economic impact on trade.
- **Qualitative Method Validation** and **Socio-Economic Impact** were added to that list at a later stage so as to ensure the appropriate coverage of those issues (not covered in this document).

**Working groups for each thematic priority** were formed according to the expertise, interest and infrastructural resources of the partners (established through the above-mentioned questionnaires). These groups evaluated the thematic priorities through draft reports that were communicated to them, and the present report was based on their evaluation. The working groups will form the bedrock of the harmonisation activities conducted on each topic. The following graphic shows an updated matrix of working groups and the issues they are working on, including socio-economic considerations.

## Working Groups



**Participation in the working groups is now open not only to MoniQA partners but also for interested stakeholders if they become associated project partners (see below for more information).**



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## About MoniQA – [www.moniqa.org](http://www.moniqa.org)

MoniQA ("Monitoring and Quality Assurance in the Food Supply Chain") is a Network of Excellence (NoE) funded by the European Commission under the 6th Framework Programme. The Network aims to make food safer by harmonising methods for food analyses. The project is coordinated by the Vienna-based International Association for Cereal Science and Technology (ICC). More than 155 researchers and scientist from 33 international partners from 20 countries are involved in MoniQA.

### Join us!

MoniQA offers associated partnerships for interested organisations, SMEs and institutions.

For more information see the FAQ section on the MoniQA website  
(<http://www.moniqa.org/index.php?id=90440&lang=default>) or contact:

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