

Critical and Emerging issues in Food Safety and Quality – Republic of Macedonia

Critical issues are those that are the most pressing ones, and as such need to be addressed and considered as priorities. They can be known issues that are actually present/already occurring or even recurring. They can also be completely new or emerging. With the word “issues” is meant either hazards/challenges or opportunities or even trends that might have an impact on food safety and quality.

Emerging issues are those that are new, unexpected, or can cause change in the status quo. Many factors inside and outside the food production system(s) could directly and/or indirectly lead to emerging issues in food safety and quality.

Examples of “drivers of change” that could lead to emerging issues

- **Globalization of trade:** Food safety must be considered within a global context that is dynamic and evolving as part of the globalization process: increased international trade, more integrated markets, more rapid adoption of new technologies, increased market concentration, and information transfer, can all have important implications (both positive and negative) in food safety.
- **New distribution channels**
Increase in online retailers will eventually get to the food retail market; are there any food safety risks that might arise from such a change of the retail market, where the local store might be replaced with automated warehouses and logistics in distributing it to the end consumer?
- **Economic factors:** budgetary pressures on national governments to improve efficiencies and reduce spending on national food safety systems; the ability/ willingness of food enterprises to implement adequate food safety measures; trends in food adulteration and food fraud; fluctuation of food prices. All these, and many other economic factors can impact on food safety at different levels.
- **Climate change:** Climate change, perhaps the most compelling environmental issue of our time, can affect patterns of occurrence of food safety hazards. Indeed international commitment to address environmental issues has a significant impact on agricultural development strategies and on food safety
- **New technologies:** The increasing role of new and emerging technologies in food production, post-harvest treatment, processing, packaging and sanitary treatment is also significant in the context of food safety and more globalised food trade.
- **Scientific progress:** Technical and scientific innovation has multiple impacts on food safety and its management. More sensitive detection methods are providing new tools for investigating and indeed discovering new food safety hazards. Recent advances in food safety related sciences give us a better understanding of food-borne disease, and the role played by some food contaminants in the etiology of some pathologies and disorders.
- **Urbanization:** With the global population growing there is a sustained trend of migration from rural to urban areas. Cities (and surrounding areas) are increasingly becoming places where food is produced (i.e. urban and peri-urban agriculture). This plays an important role in how people procure food, what people eat, the nature of food traded and the interactions among food systems, people and the environment.
- **Regulatory landscape**
The regulatory landscape is changing with an increased importance on bilateral or multilateral treaties, emergence of private standards etc that can affect the food supply chain.
- **Public attention to food safety:** Increasing public awareness of food safety hazards, concern over hazards to health attributable to food hazards and reduced confidence in the ability of current food supply systems to manage food safety risks are additional factors to be considered in the food safety evolving context. At the same time food insecurity – an extreme manifestation of a large and growing wealth disparity within countries and among countries – remains a pressing global concern with important implications for decision-making on food safety at all levels.

Please note that the above are just some examples of drivers and the list is not complete. In responding to question #1 please consider these and any other broad drivers that you think could lead to emerging issues in food safety and quality.

1 - Identification of critical and emerging issues

Please identify what you believe to be the 3-5 most **critical issues** related to Food Safety and Quality, from **present to the next 2 - 5 years**.

- 1) Internet trading
- 2) Economic factors
- 3) New technologies
- 4)
- 5)

Please identify what you believe to be the 3-5 most important **emerging issues** related to Food Safety and Quality **in the next 2 to 5 years**.

- 1) Emerging zoonoses
- 2) Climate change
- 3) Urbanization
- 4)
- 5)

2 - For each issue you have identified above please provide a **short explanation**¹ (1 or 2 paragraphs)

Critical issues

1. **E-commerce** of food is a diverse and complex operation and one in which most countries strive to take part. As consumers look to reduce time, effort and energy, online food shopping will also continue to grow in the future. Since Internet traders which are food business operators according to EU Legislation are often not registered and therefore are not known to food control authorities, consumers can be easily misled into buying unsafe products, products with unknown origin. This is especially applicable in case of food supplements, novel food ingredients and for food for specific nutritional purposes.

2. **Control of food safety** and quality encompasses a broad number of factors. Since food safety authorities in many developing countries have limited resources (financial and human) they are often put in a position to must select the areas in which they will set standards. For example a monitoring plan for control of residues, GMO monitoring, etc. can be drafted, but not implemented, due to limited funds.

3. Sustainability issues as well as dynamic markets all demand introducing **new technologies** in the food industry. Manufacturers want to bring new or improved products to market faster and more efficiently which leads to using new technologies in the food production, like usage of hormones in meat production, GMO food, irradiated food etc. But, not always these products are safe, authorized, proper dosimetry is used in the treatment and labeled, so the consumer's health can be put in danger or consumers can be misled.

¹ In providing a **short explanation** of 1 -2 paragraphs please briefly explain: 1) why you selected that issue (i.e. on what basis - information/data, knowledge or assumption - you made that choice) and 2) the expected and/or actual impacts of the issue (whether the impact would be sector-specific, affect only some sub-populations or countries/regions, whether it would be related to public health or trade etc)

Emerging issues

1. **Emerging animal diseases and zoonoses** - zoonotic diseases caused either by apparently new agents, or by previously known microorganisms, appearing in places or in species in which the disease was previously unknown or eradicated. It may lead to a situation where competent authorities and other involved parties are not able to pose proper measures or actions to be taken for control or eradication of a certain emerging disease, causing waste of time, further spreading of a disease and economic damage.

2. **The climate change** has a number of possible implications for human health as well as animal health and welfare, one of which could be the safety of food. Climate change is helping pests and diseases that attack crops to spread around the world. Rising global temperatures as well as floods are making this problem worse. Climate change may affect the incidence of foodborne and animal diseases. Increases in temperature and humidity and extreme weather conditions may enable better survival/growth of foodborne pathogens and pathogens causing diseases in animals. Similarly, warmer temperatures in summer and milder winters may increase the abundance of pests such as insects which can influence the spread or transmission of foodborne pathogens. Due to the above mentioned, climate change can have a negative impact on food sustainability, particularly in developing countries.

3. **Urbanization** – In spite of the fact that organic food production is becoming more and more popular, with the global population growth there is a sustained trend of migration from rural to urban areas and cities (and surrounding areas) are increasingly becoming places where food is produced (i.e. urban and peri-urban agriculture). All this can lead to production of unsafe food due to contaminated water, soil and air.