

FACTFILE: GCE NUTRITION & FOOD SCIENCE

CONTROLS AND LEGISLATION



Controls and legislation

Learning outcomes

- Examine the work of the European Food Safety Authority (EFSA) in relation to risk assessment and food safety.
- Demonstrate knowledge and understanding of the key principles of EC regulations No. 852, 853, 854/2004 (Food Hygiene Package).



About the EFSA

- Their role is to assess and communicate on all risks associated with the food chain.
- EFSA advice serves to inform the policies and decisions of risk managers. A large part of EFSA's work is undertaken in response to specific requests for scientific advice.
- They also undertake scientific work on its own initiative, so-called self-tasking.
- EFSA advice frequently supports the risk management and policy-making processes e.g. the process of adopting or revising European legislation on food or feed safety, deciding whether to approve regulated substances such as pesticides and food additives, or developing new regulatory frameworks and policies, for instance in the field of nutrition.
- EFSA is not involved in these management processes, but its independent advice gives them a solid scientific foundation.
- Through its risk communications activities EFSA seeks to raise awareness and further explain the implications of its scientific work.
- EFSA aims to provide appropriate, consistent, accurate and timely communications on food safety issues to all stakeholders and the public at large, based on the Authority's risk assessments and scientific expertise.



EFSA's scientific workflow process

1. Receipt of Request

EFSA's advice informs the policies of risk managers – so EFSA carries out much of its work in response to requests from the European Commission, European Parliament and EU Member States, as well as initiating its own scientific activities.

2. Assessment

EFSA's main task is to carry out scientific risk assessments. The evaluation stage is the main part of the risk assessment workflow. It is carried out by scientific experts tasked to deliver opinions on specific issues.

3. Adoption & Communication

Risk communication is part of EFSA's mandate. EFSA makes all of its scientific advice publicly available through its website and seeks to raise awareness and explain its findings to all interested parties.

Risk assessments and food safety:

- EFSA's risk assessment work contributes to improving food safety in Europe and to building public confidence in the way risk is assessed.
- Risk assessment is a specialised field of applied science that involves reviewing scientific data and studies in order to evaluate risks associated with certain hazards.

Examples of their work:

These included Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE), the safety of food additives such as aspartame, allergenic food ingredients, genetically modified organisms (GMOs), wild and farmed fish, pesticides, and animal health issues, including Avian influenza.

EFSA also undertakes scientific work on its own initiative particularly in fields such as emerging risks where scientific knowledge and approaches are continually evolving e.g. harmonization of risk assessment methodologies - the development of a harmonised approach to compare the risks posed by substances with the potential to cause cancer, and providing advice on the biosafety of antibiotic resistant marker genes.

Communicating on risks associated with the food chain based on EFSA's scientific advice is also a key part of EFSA's mandate.



The key principles of EC regulations No.852, 853, 854/2004

This regulation lays down general rules for food business operators on the hygiene of foodstuffs, taking particular account of the following principles:

- (a) primary responsibility for food safety rests with the food business operator;
- (b) it is necessary to ensure food safety throughout the food chain, starting with primary production;
- (c) it is important, for food that cannot be stored safely at ambient temperatures, particularly frozen food, to maintain the cold chain;
- (d) general implementation of procedures based on the HACCP principles, together with the application of good hygiene practice, should reinforce food business operators' responsibility;
- (e) guides to good practice are a valuable instrument to aid food business operators at all levels of the food chain with compliance with food hygiene rules and with the application of the HACCP principles;
- (f) it is necessary to establish microbiological criteria and temperature control requirements based on a scientific risk assessment;

(g) it is necessary to ensure that imported foods are of at least the same hygiene standard as food produced in the Community, or are of an equivalent standard.

The general and specific hygiene requirements for food businesses cover the following:

- design/construction and layout of food premises
- structural condition and maintenance of food premises
- provision of sinks, for washing food and washing equipment and hand washbasins with hot and cold running water
- provision of adequate drainage
- provision of ventilation
- provision of adequate lighting
- provision of toilets and lobbies
- cleanliness of food premises
- training of food handlers
- protecting food from a risk of contamination
- pest control arrangements
- personal hygiene of food handlers
- condition and maintenance of equipment
- provision of potable water
- arrangements for disposing of food wastes



Hazard analysis and critical control points (HACCP)

Food businesses have to operate a food safety management system based on the HACCP principles, which seek to:

1. Identify any hazards that must be prevented, eliminated or reduced to acceptable levels.
2. Identify the critical control points at the steps at which control is essential to prevent or eliminate a hazard or to reduce it to acceptable levels.
3. Establish critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards.
4. Establish and implement effective monitoring procedures at critical control points.
5. Establish corrective actions when monitoring indicates that a critical control point is not under control.
6. Establish procedures which shall be carried out regularly to verify that the measures from one to five above are working effectively.
7. Establish documents and records to demonstrate the effective application of the measures from one to six above.

? Revision Questions

1 What is the main role of the European Food Safety Authority (EFSA)?

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2 What is involved in a risk assessment in relation to food safety?

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3 a) What are the key principles of the EC regulations No. 852, 853, 854/2004?

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b) Design a revision mind map on the key principles and HACCAP.

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