FOOD SAFETY

EU food safety policy aims to protect human health and consumer interests, and to foster the smooth operation of the single market. In recent years, a paradigm shift broadened food safety objectives to include climate change-induced food insecurity. The EU ensures that standards are adhered to in the areas of feed and food-product hygiene, animal health, plant health, food-borne zoonotic diseases and prevention of food contamination. The EU also regulates labelling for food and feed products.

LEGAL BASIS

Articles 43, 114, 168(4) and 169 of the Treaty on the Functioning of the European Union.

GENERAL BACKGROUND

In the wake of a series of human food and animal feed crises (e.g. the bovine spongiform encephalopathy (BSE) outbreak and the dioxin scare), EU food safety policy underwent substantial reform in the early 2000s. This has led to the development of the ‘Farm to Fork’ approach, which seeks to ensure a high level of safety at all stages of the production and distribution process for all food products marketed within the EU, whether produced within the EU or imported from non-EU countries. This body of legislation forms a complex and integrated system of rules covering the entire food chain, from animal feed and health, through plant protection and food production, to processing, storage, transport, import and export, and retail sales. The EU upholds high food and feed safety standards, yet food and feed safety incidents still occur. The EU, together with national authorities and the European Food Safety Authority (EFSA), has a robust system to detect and respond to these safety issues. These rules will be further developed, applying a ‘one health’ approach in the context of the Commission’s ‘Farm to Fork’ strategy, which was presented in 2020 as part of the European Green Deal, and aims to align food production with environmental conservation.

ACHIEVEMENTS

A. General legislation

A 2002 framework regulation lays down the general principles and requirements of EU food and feed law and takes into account the ‘precautionary principle’ (2.5.1). The regulation set out a risk assessment approach and established general traceability provisions for food and feed. It introduced the rapid alert system for food and feed, allowing Member States and the Commission to exchange information rapidly and to coordinate their responses to health threats caused by food or feed. It also established...
EFSA, which is tasked with assessing and providing information on all risks related to the food chain. After a fitness check, and in response to the European Citizens’ Initiative on glyphosate, the EU reviewed its general food law to improve the transparency of EFSA’s risk assessments and the independence of the underlying scientific studies and to improve cooperation with Member States on providing experts and data. The Commission also set out to review other key pieces of legislation in the areas of novel foods, genetically modified organisms (GMOs), pesticides, food contact materials and food additives to bring them into line with the revision of the general food law and to boost transparency.

B. Hygiene of foodstuffs

The EU aims to ensure food hygiene from farms to consumers. In April 2004, as part of the ‘Farm to Fork’ approach, a new legislative framework, known as the ‘Hygiene Package’ (Regulation (EC) No 852/2004), was adopted addressing the hygiene of foodstuffs, laying down specific hygiene rules for food of animal origin and putting in place a Community framework for official controls on products of animal origin intended for human consumption. The Community framework also lays down specific rules for fresh meat, bivalve molluscs, milk and milk products. The package puts the responsibility for the hygiene of foodstuffs directly on the various players in the food chain through a self-regulating system using the method of hazard analysis and critical control points, which is monitored by means of official controls that must be conducted by the competent authorities. The annexes to the regulation were updated in March 2021. Regulation (EC) No 852/2004 was amended several times in order to enforce hygiene practices to prevent allergens, facilitate safe food redistribution and enhance food safety awareness among establishment employees.

Regulation (EC) No 178/2002 on the general principles of EU food law adds rules for traceability. If a food poses a health risk, businesses must promptly withdraw it from the market, inform users and alert the relevant authority.

C. Food contamination

Food contamination may occur naturally or result from cultivation practices or production processes. Regulation (EU) 2023/915, which replaced the previous Regulation (EC) No 1881/2006, came into force in May 2023 and focuses on establishing maximum levels for various contaminants present in food. To protect public health, maximum levels for contaminants in both animal and plant-based food such as nitrates, heavy metals and dioxins are established and regularly reviewed. Residues in foodstuffs might also originate from food-producing animals that have been treated with veterinary medicines or exposed to pesticides or biocidal products. Maximum residue limits are set and updated periodically. No foodstuffs containing unacceptable quantities of contaminant substances may be marketed in the EU.

Moreover, there are rules pertaining to food contact materials such as materials for transporting or processing food, as well as packaging materials and kitchen or tableware. A framework regulation, amended in 2019, lays down the general requirements for all relevant materials and articles, ensuring that these materials do not transfer their components into food at levels harmful to human health. Specific EU measures containing more detailed provisions may be adopted for the 17 food
contact materials (all materials and articles intended to come into contact with food) and articles listed in Annex I thereto. Regulation (EC) No 2023/2006 outlines the good manufacturing practice standards for materials and articles intended to come in contact with food. In relation to plastics, for example, restrictions on the use of Bisphenol A have been introduced for use in plastic infant feeding bottles. In 2011, the EU consolidated its regulations on plastics used in food contact materials into a unified document (Regulation (EU) No 10/2011). In September 2022, the Commission adopted new rules on the safety of recycled plastic materials and articles intended to come into contact with food.

D. Food labelling

The legal framework on the labelling of foodstuffs is designed to guarantee consumers access to clear, comprehensible and reliable information on the content and composition of products in order to protect their health and best interests. For instance, allergens, such as soya, gluten or lactose, must be clearly indicated on the packaging. The main novelty of the new regulation on the provision of food to consumers, applicable since December 2016, is the requirement for producers to indicate the presence of allergens in non-packaged foods, e.g. in restaurants and canteens. Producers must also indicate the origin of unprocessed meat (for certain types of meat other than beef, which already has to be labelled for origin) and the presence of food imitations, such as vegetable products replacing cheese or meat. Specific provisions on origin labelling set out the details, requiring (with some exceptions) the indication of the place of rearing and place of slaughter of pre-packaged fresh, chilled and frozen meat of swine, sheep, goats and poultry.

The labelling, presentation or advertising of food must not mislead consumers. There are clear rules for authorised nutrition and health claims (such as ‘low fat’ or ‘high fibre’ or statements about a relationship between food and health) established by Regulation (EC) No 1924/2006. Such claims must be based on scientific evidence and can be found in a public EU Register of Health Claims.

A 2013 regulation on food for specific groups, updated in 2021 and in March 2023, abolishes the concept of a broad category of ‘dietetic’ food in favour of rules for specific vulnerable groups of consumers such as infants and young children, people with special medical conditions and those on energy-restricted diets for weight control.

E. Substances added to food

Food additives, food enzymes or food flavourings – also known as ‘food improvement agents’ – are substances added intentionally to foodstuffs to perform certain technological functions such as colouring, sweetening or preservation. Rules are in place governing the authorisation procedure, conditions of use and labelling of these substances. In accordance with EU laws, food additives must receive authorisation before being used in food products. After receiving approval, these substances are listed in the EU register of allowed food additives outlined in Regulation (EC) No 1333/2008 regarding food additives, which also outlines the conditions under which they can be used. This Regulation also created a comprehensive list of approved food additives for the Union, which was fully disclosed in Regulation (EU) No 1129/2011. The same is true for food supplements such as vitamins and minerals, which may be added
to food in order to enrich it or emphasise its particular nutritional character, provided that they figure on specific lists of permitted substances and their permitted sources.

**F. Animal and plant health**

EU rules include general provisions on the surveillance, notification and treatment of infectious diseases and their vectors in order to ensure the safety of the food chain. The original legislative framework for the organisation of official controls was established to ensure the verification of compliance with feed and food law and animal health and welfare rules. In May 2013, the Commission presented a legislative package including proposals on animal health, plant health, plant reproductive material and official controls. The package provided a more risk-based approach to the protection of animal health, aiming to increase the efficiency of official controls in order to avoid food crises and cases of fraud as much as possible. The resulting new EU Animal Health Law (regulation on transmissible animal diseases), adopted in March 2016 and applicable from April 2021, focuses on the prevention and eradication of animal diseases by clarifying responsibilities and ensuring early detection and control. Regulation (EU) 2016/429 consolidates numerous legal provisions on animal health into a unified legislation. It establishes guidelines for preventing and managing diseases that can be transmitted between animals or from animals to humans.

The new plant health regime (regulation on protective measures against plant pests – Plant Health Law) aims to protect crops, fruits, vegetables and forests against the entry or spread of plant pests or diseases. It also aims to enhance import checks for plants from non-EU countries and standardise plant passports, while expanding the range of plants requiring passports for planting. It became applicable for the most part from December 2019, together with the new regulation on official controls, which also covers plant health and animal by-products.

**G. Legislation on animal feed and feed labelling**

Feed business operators have to make sure that all stages of production, processing and distribution under their control are in line with the EU rules for animal feed hygiene and have to guarantee full traceability. This includes imports and exports of feed from and to third countries. Farmers are required to keep the risk of biological, chemical and physical contamination of feed, animals and animal products as low as reasonably achievable when feeding food-producing animals. A specific directive sets maximum limits for undesirable substances in animal feed, including heavy metals, and prohibits the dilution of contaminated feed materials. Rules on the labelling and marketing of feed are laid down to ensure a high level of feed safety and, ultimately, of public health protection and to provide adequate information for users and consumers. Provisions on veterinary medicines and medicated feed have been updated by Regulation (EU) 2019/6 and Regulation (EU) 2019/4 respectively.

**H. Novel foods**

Novel foods, i.e. foods not consumed within the EU to a significant degree before May 1997 (e.g. alternative proteins, food supplements, etc.), have to undergo a safety assessment before being marketed in the EU. Since 2018, a new regulation has applied allowing easier access to innovative foods while maintaining a high level of food safety. It introduces a simplified, centralised EU-wide online authorisation procedure for novel
foods and traditional foods from third countries (which are considered novel foods in the EU). Before being authorised by the Commission, EFSA carries out a centralised scientific safety evaluation, defining the conditions for use, their designation as food and the labelling requirements. All authorised novel foods will figure on a positive list. Until specific legislation on food from cloned animals enters into force, such food falls under the scope of this regulation and should therefore be labelled appropriately.

I. Genetically modified organisms (GMOs)

A GMO is ‘an organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination’[1]. Plants may be modified with modern biotechnology, for example, to make them resistant to diseases or to increase their yield. Following the precautionary principle, the EU has set up a strict legal framework for the cultivation or commercialisation of GMOs that are used in food or feed (Regulation (EC) No 1829/2003, Regulation (EC) No 1830/2003, Regulation (EC) No 65/2004, Regulation (EC) No 641/2004). Before any GMO can be put on the market, EFSA, together with the Member States’ scientific bodies, carries out a scientific risk assessment to exclude any danger to either human or animal health and the environment. Upon receiving EFSA’s opinion, the Commission (which may diverge from the opinion) prepares a draft decision granting or refusing authorisation to be voted by qualified majority by an expert committee made up of Member States’ representatives. In case of a ‘no-opinion’, i.e. if there is no qualified majority either for or against authorisation, the final decision lies with the Commission. Any authorised food or feed made from or containing GMOs has to be traceable and clearly labelled as such so that consumers can make informed choices. Member States are allowed to restrict or ban the cultivation of crops containing GMOs on their own territory, even if this is allowed at EU level.

On 5 July 2023, the Commission published a proposal for regulating plants created through specific genomic methods for food and feed purposes. This comes after a process initiated in 2018 when the Court of Justice of the EU ruled that organisms developed through these techniques should be regulated as ‘GMOs’ under Directive 2001/18/EC, the EU’s existing GMO Directive.

ROLE OF THE EUROPEAN PARLIAMENT

In the wake of the horsemeat scandal and other food fraud cases, Parliament called for the mandatory indication of the origin of, in particular, meat used as an ingredient in processed foods. Parliament and the Council agreed on new rules to tighten up official food inspections aimed at improving food traceability and combating fraud. During the negotiations, Parliament managed to strengthen enforcement in relation to fraudulent or deceptive practices. Parliament is also particularly vigilant with regard to threats to consumer health related to cloned animals and nanomaterials or GMOs. It frequently scrutinises and regularly opposes draft proposals for the authorisation or renewal of new genetically modified plants such as maize or soya beans.

Following concerns being raised about the risks posed by the use of the herbicide substance glyphosate in agriculture, in 2018 Parliament set up a special committee to examine the EU’s authorisation procedure for pesticides. During the revision of the general food law aimed at greater transparency throughout the food chain, Parliament fought to ensure that safety studies are published before a product is authorised to be put on the market.

Among other recommendations in its resolution on the ‘Farm to Fork’ strategy of October 2021, Parliament recalled the role of European food legislation in setting global standards for food safety.

In 2022, Parliament commissioned a study on the ‘Independence and transparency policies of the European Food Safety Authority (EFSA)’.

For more information on this topic, please see the website of the Committee on the Environment, Public Health and Food Safety (ENVI).

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