50 years of Food Safety in the European Union

1957–2007

European Commission
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European Commission
Health & Consumer Protection Directorate-General
European lifestyles are vastly different today than they were half a century ago – and so too are the patterns of food consumption. Long gone are the days of rationing, predominantly local production, limited preservation and labour-intensive preparation. Today, EU citizens are accustomed to choice, convenience, quality, and competitive prices when it comes to the food they buy. Public appreciation of the complex processes involved in getting food from the farm through the factory to the table is greater than ever before. And so too is the general awareness of the safety risks that can arise at any point in the food chain if appropriate precautions are not applied. Therefore, the primary expectation of European consumers today is that the proper measures are in place to ensure that food sold in the EU is safe to eat.

In parallel to the changes in consumer behaviour and demands, the past half a century has seen a revolution in the way that food is produced, processed and marketed. The food chain system in place today is almost unrecognisable from that of the 1950s. With each decade, science and technology have driven agriculture and the food industry forward, while globalisation has introduced new products, new competition and new concerns.

EU food safety policy has evolved and adapted in line with these changes. New techniques in farming and the food industry required new regulatory approaches to be looked at. With every new challenge or threat that emerged, an effective and proportionate response had to be developed. The result is a solid body of legislation and complementary provisions, encompassing the whole of the animal and human food chain, “from farm to fork”.

But how did we get to where we are today? This book takes a closer look at the social and economic developments across Member States over the last 50 years, and the impact that they have had on consumers and the food industry. The main food safety concerns of each decade are outlined, as is the EU response. Finally, each chapter concludes with a broad overview of some of the main themes that have helped shape EU legislation on food safety. Essentially, this book aims to provide a snapshot of how the EU has moulded its provisions around fundamental developments in society over the last five decades, to reach the point whereby European consumers can now rely on some of the highest food safety standards in the world.

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In the quest for lasting peace, and to help spur on economic and social recovery, six countries joined together to form the European Coal and Steel Community in 1951. Six years later, they signed the Treaty of Rome which established the European Economic Community (EEC). The EEC facilitated the free circulation of goods between Member States and made food products from across borders easier to obtain.

During the 1950s, the production and storage of food still relied largely on traditional methods. Domestic farming was commonplace, with many families keeping their own chickens and cows, as well as growing their own vegetables.

Few homes had refrigerators, so larders and storerooms were used to keep goods fresh. Although dried and canned foods were already commonplace, there were none of the elaborate preservation methods of later years, so consumers ate fruit and vegetables in season.

After the Second World War, Europe moved towards economic recovery. But it did not happen overnight. Plagued by ongoing shortages, national governments set about securing the food supply.
Since a lot of food could not be kept for long, European citizens tended to shop daily and in local stores. Although rationing had officially finished at the end of the forties, products were not always available. Consumers relied largely on local produce so an individual’s daily diet was less varied than it is today.

Each Member State had its own recipes and distinctive style of cooking.

The majority of food products were not transported across great distances, as preservation techniques remained simple and transport networks were limited. For example, animals could be slaughtered in the vicinity of the butcher’s shop where the meat was then sold.

Despite these echoes from the past, the first signs of modernity in food production, storage and sales started to appear in the 1950s. For instance, while in this decade over 20% of people were working on the land in the EU-6, the introduction of labour-saving machinery heralded the start of the industrialisation of animal agriculture. Fifty years later only slightly more than 5% of the adult population would be doing the same level of labour intensive work in the EU-25.

Retired veterinary surgeon André Dupont remembers an epidemic in Belgium in the 1950s before he qualified as a vet:

“A trainload of animals were transported from Belgium to Italy and on arrival they were showing foot-and-mouth symptoms. They hadn’t left the train but there were outbreaks of disease all the way along the route the train took.”

1957

TV commercials are authorised in Italy and Germany

The first TV adverts in Italy form part of a programme called Carosello consisting almost exclusively of commercials and performed by children. It was aired on the 3 February, 1957. To advertise Motta confectionary products, a boy sings Qué sera sera.

1957

First supermarket in Belgium

The opening of the first supermarket in Belgium (Place Flagey, Brussels, December 18, 1957). Photos © Archives Groupe Delhaize
In the 1950s, food producers were primarily concerned with the quantity of goods they needed to supply in order to overcome post-war scarcity. There were no standard food safety measures in place across Europe at that time. Instead, national governments introduced and enforced their own rules.

In the absence of strict and uniformly applied animal health procedures, livestock was exposed to a higher risk of disease than it is today. Bovine tuberculosis (TB), for example, was prevalent across Europe in the 1950s. Factors contributing to the spread of the disease were the close confinement of cows in poorly ventilated cowsheds and a lack of standard checks on cattle. As commercial pasteurisation had yet to be widely introduced, tuberculosis was frequently passed on to humans through dairy products.

Foot-and-mouth disease (FMD) is another example of a serious animal health problem in the 1950s. In 1952, a worldwide epidemic of FMD occurred; an epidemic that had a huge economic impact. In France, for example, 340,000 farms were affected by outbreaks. Largely prompted by the devastating losses caused by this disease in the early 1950s, compulsory mass vaccination of cattle against FMD was introduced in Europe during the 1950s and 1960s. This saw the number of outbreaks fall from almost one million between 1951 and 1955 to about 30,000 between 1966 and 1970.

The 1950s also witnessed a higher incidence of parasitical infection, such as trichinosis (Trichinella spiralis) in pork. This was largely due to the way animals were raised and slaughtered without suitable controls or inspections being carried out.

Foot and Mouth Disease

The European Commission is an active partner of an organisation for Foot-and-Mouth Disease, which was set up in 1954 under the Food and Agriculture Organisation to coordinate cooperation between the countries of Europe.
Did you know?

- Intensively reared beef production uses over 33 times as much energy as pasture beef production to produce the same quantity of meat. Now that’s intense!
- In the 1950s, the French ate 2.5 times more potatoes than they do today.
- One in five people across the EU worked in farming.

**Animal welfare**

The way in which animals were reared began to change to more intensive production.

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**Dishes from Europe**

**FRANCE**

**Coq au vin**

Chicken, wine, lardons and garlic are the main ingredients in this slow-cook traditional French dish. According to legend, Julius Caesar’s chef was the first to produce this dish, using a rooster presented to Caesar by the Gauls.

**GERMANY**

**Sauerkraut**

Finely sliced fermented cabbage, often served as an accompaniment to boiled meat or sausage. Sauerkraut provided a vital source of vitamin C and other nutrients during the winter, especially before frozen foods and imports became the norm.
Established in 1982, the Animal Disease Notification System registers and documents important animal diseases. National authorities responsible for animal health must use the system to notify each other and the European Commission of outbreaks of contagious animal diseases.

The overriding concern with regard to food in the 1950s was security of supply as Europe recovered from the war. Therefore, animal disease outbreaks were particularly devastating, as they could mean fewer animal products for an already depleted market. In addition, animal diseases (such as tuberculosis) and parasites (such as Trichinella) were common and serious threats to human health in the 1950s. For these reasons, improving animal health became vitally important, and so standard veterinary procedures and practices began to be developed with this goal in mind. As the link between the wellbeing of animals and their overall health has become more apparent over the last decades, EU animal welfare legislation has also emerged and evolved.

Through the decades, Europe has had to tackle a wide array of different animal diseases. These have ranged from large-scale epidemics, such as foot-and-mouth disease and avian influenza, to less destructive but endemic diseases such as bovine brucellosis. As pathogens clearly do not respect borders, an animal disease outbreak in one part of the EU is a potential threat to all Member States. Therefore, a harmonised approach has been taken in addressing animal health problems.

Since the 1960s, the EU has laid down rules to protect animals against a wide range of diseases and to ensure that animal products meet safe standards. These measures have been important both in ensuring the safety of food of animal origin and in reducing economic losses incurred through outbreaks. The rules have been developed, revised, updated and added to as necessary over the years, and a solid body of veterinary legislation is now in place. Some laws outline a general approach to maintaining healthy animals, for example strict rules on animal feed and veterinary requirements. Others focus on preventing, monitoring, controlling and eradicating animal diseases, as well as on responding to serious outbreaks. Particular attention has also been given to zoonoses – animal diseases which are transmissible to humans – and there are a number of specific rules on the monitoring and reduction of zoonotic animal diseases such as Salmonella.

Each year, the EU approves programmes for the eradication and monitoring of various animal diseases, based on sound scientific evidence. These programmes are focused in particular on diseases that are endemic in certain areas in Member States. For 2007, €199 million has been pledged to support 145 programmes, which include measures such as vaccination, testing of animals, treatment of diseases and compensation for culling. These programmes have already successfully contributed to greatly reducing the incidence of several diseases in the EU, including rabies and tuberculosis.
For certain animal diseases, particularly those which are highly contagious or have high mortality rates, there are mandatory control measures which must be applied if an outbreak is even suspected. These can range from movement restrictions around the outbreak area, vaccination, increased bio-security measures, to the compulsory culling of animals if necessary. As these measures are clearly laid down in EU legislation, Member State authorities know exactly what must be done in the event of an outbreak and can therefore respond quickly and decisively in a fully harmonised manner.

Animal welfare is an issue to which the EU devotes a considerable amount of effort and attention, as part of its overall animal health strategy and in response to ethical concerns. The EU has been developing animal welfare legislation for over 30 years, starting in 1974 with rules aimed at preventing the needless suffering of animals at slaughter. Since then, laws have been developed on a broad range of issues ranging from the welfare of animals during transport to on-farm requirements for specific species. Respect for the five basic freedoms (freedom from discomfort, from hunger and thirst, from fear and distress, from pain, injury and disease, and the freedom to express natural behaviour) is the fundamental principle underlying the EU’s measures on animal welfare.

In 2006, the Commission adopted an Action Plan on the Protection and Welfare of Animals 2006-2010. This action plan sets out concrete measures to be taken over the coming years, and aims to ensure that animal welfare is addressed in the most effective manner possible, in all EU sectors and through EU relations with third countries.

EU animal health legislation is in constant evolution. It has to keep up with the latest developments in farming, science and technology, and respond to modern consumer demands. EU rules are, in principle, in line with international standards of the World Animal Health Organisation (OIE). EU veterinary legislation must be able to rise to the challenge of new and emerging diseases, and fine-tune its approach to persistent problems in this field. The Community Animal Health Policy 2007-2013 is now being carefully shaped and developed. Among the driving principles foreseen for the new policy are greater disease prevention, risk-based prioritisation and even better controls. It will be a policy better adapted to an enlarged EU of 27 Member States, which operates in an increasingly complex global market.

The Standing Committee on the Food Chain and Animal Health

The Standing Committee on the Food Chain and Animal Health (SCFCAH), formerly the Standing Veterinary Committee (SVC), is made up of representatives from each Member State and is chaired by the European Commission. It was set up as a consultation body and to provide assistance in developing measures related to animal health and food safety. The Commission can adopt certain measures if it gets the backing of the Committee, or in emergency situations the Commission can provisionally adopt measures pending agreement in the Committee within 10 working days.
On the up

Leaving behind the struggles of the post-war years, the sixties saw rising incomes across the European Union. Unemployment rates in Western Europe fell from an average of around 3% in the 1950s to 1.5% in the 1960s. Increased wealth meant more travel for leisure purposes and holidaymakers started to flow across borders, marking the start of a massive future trend.

Citizens experienced different ingredients and cuisines while abroad and this had an impact on their own culinary habits. Newly-discovered international dishes began to appear alongside national classics on European dinner tables, as tourists brought ideas home with them.

The sixties also witnessed more permanent moves, with southern Europeans like the Greeks, Portuguese and Italians relocating in large numbers to northern countries such as Belgium, Germany and the Netherlands. Aspects of the Mediterranean diet were introduced into northern diets.

In addition, the 1960s saw a large wave of immigrants flow into the EU from other countries, bringing with them their own food traditions. For example, Turkish cuisine spread throughout Germany and the döner kebab, a meat sandwich invented by Turkish immigrants in Berlin, was to become one of the nation’s most popular fast foods.

1963
Codex Alimentarius

The Codex Alimentarius was set up in 1963 as a joint instrument of the United Nations Food and Agriculture Organisation and the World Health Organisation. Its primary mission is to protect the health of consumers and to ensure fair practices in international food trade, by developing common food safety standards.

Photo © FAO
Meanwhile over in France, North African visitors contributed to French culinary culture with couscous, spices and sweet desserts. The selection of foods on offer in EU countries expanded and consumers were now sampling crêpes, curries, exotic fruits and different breads.

It was not only the food that people were eating that was undergoing change. It was also how they were buying, cooking and eating it. The “self-service” store really took off in this decade: in West Germany alone numbers catapulted from 0 in 1948 to well over 30,000 in 1961.

As the way in which food was sold began to evolve, so too did the way it was preserved and presented. Food was increasingly pre-packed and so the role of packaging became more important. Not only did it have to catch the consumer’s eye and be instantly recognisable, but it also played a crucial part in keeping food fresh and safe.

**At this time...**

“Fridges had appeared in the fifties but became widespread in the sixties. To preserve certain foods, we sterilised them and put them in jars, in particular jams (to keep for one or two years) and fruit compotes (which would keep for up to three days). We went shopping several times a week and bought fresh produce daily. Dairy products, like butter, went rancid after 10 days, or even a week, even in the fridge, whereas now they keep for months!”

Madame Huque, Housewife in France during the 1960s.

**Good advice**

“To provide good meals for the whole family, you must start by getting the best out of the resources on offer at your home, garden and farm (in the country), markets and shops (in town). You must therefore learn to buy and store products.”

Taken from “Cooking over the months”, a cookery guide free with every purchase of a Frigidaire.

**1964**

**One-millionth migrant worker**

In 1964 the German magazine Der Spiegel devoted its cover to a Portuguese worker called Armando Rodriguez, hailed as the one-millionth migrant worker to enter the country and greeted in Cologne with an official welcome and the present of a motorbike.

**1966**

In 1966, 130 million tourists were moving between countries in Europe, with Spain alone receiving 15 million visitors.

**1967**

Launch of fresh pasteurised milk.
As the food on the average European’s plate faced a longer and more complex journey to get there, the chances of unwanted bacteria and other harmful organisms finding their way into products increased. With hygiene systems and microbiological testing less developed than they are nowadays, food poisoning posed a greater threat to consumers’ health.

1960s

Food Safety Issues

**Bacteria**
- *Salmonella*
  - Eggs

- *Escherichia coli* (E. coli)
  - Undercooked meat

- *Clostridium botulinum*
  - Improperly canned foods

- *Listeria monocytogenes*
  - Unpasteurised milk

- *Staphylococcus aureus*
  - Ham

**Parasites**
- *Trichinella spiralis*
  - Undercooked pork

**Viruses**
- *Hepatitis A virus*
  - Shellfish

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1961

**Food preservation**

Food was being treated in innovative ways in order to extend and improve its preservation. In 1961, the World Health Organisation urged research into the potential health impact of irradiated food.
Did you know?

- More people began eating outside the home: in 1960, the motoring club and Jolly Hotel chain opened around 30 roadside restaurants in Germany and Italy.

Dishes from Europe

**1964**

*Intra-Community trade*

In 1964, the first legislation on animal health entered into force: Council Directive 64/432 on animal health problems affecting intra-Community trade in bovine animals and swine, and Council Directive 64/433 on health conditions for the production and marketing of fresh meat. The new rules harmonised regulations across Member States, such as laws on testing for tuberculosis.

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**BELGIUM**

*Waterzooi*

A classic stew of either fish or chicken, made with cream, vegetables, herbs, eggs and butter. Its name comes from the Flemish "simmering water", reflecting the way that it is cooked.

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**ITALY**

*Pasta col ragù*

Ragù is a sauce of meat, tomatoes, onions, garlic, herbs and other flavourings, which is eaten throughout Italy. It is thought that Marco Polo introduced pasta to Italy from China in the 1200s, but it is through Italian cooking that pasta has become a worldwide phenomenon.

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**1962**

*Common Agricultural Policy*

As the EU’s founding members emerged from a decade of food shortages, they searched for a sustainable food supply solution. This resulted in the Common Agricultural Policy (CAP), which came into force in 1962. To begin with, the CAP subsidised production of basic foodstuffs to promote self-sufficiency and food security. Its role has developed over the years, however, to encompass other issues such as food safety and the environment.
The 1960s was a decade of visible change, with evermore modern techniques emerging for processing, preserving, packaging, storing and transporting food. At domestic level, a rise in home refrigeration and an increase in consumer purchasing power saw a change in shopping and eating habits in the EU. In order to meet the rising demand for easy-to-prepare, processed food, large-scale manufacturing grew and the chain of production expanded. While this enabled the needs of the mass market to be met, it also meant that there were more instances in which food safety problems could arise. Food contamination in one processing plant could affect dozens, hundreds or even thousands of people. Responsible production, good hygiene practices and careful controls were clearly imperative. Therefore, a whole body of EU legislation has been developed over the decades to ensure that food production, processing and distribution meets with the highest possible food safety standards. This has helped to make EU food supplies among the safest in the world.

The first EU food hygiene rules, which were adopted in 1964, were limited to requirements for fresh meat. Over the decades, however, further hygiene legislation was developed and implemented for other food groups, including eggs, milk products, poultry meat, fishery products and game meat. The introduction of hygiene rules undoubtedly had an impact on helping to boost the level of food safety in the EU by preventing, eliminating or reducing contamination of food with harmful bacteria, parasites, chemical substances and unwanted debris such as glass particles. For example, the bovine tuberculosis eradication schemes that have been implemented in the Member States for several decades now have resulted in a tremendous reduction in the incidence of TB in cattle. This has led to the elimination of an important source of contamination for humans. The presence of other pathogens in meat, such as larvae of tape worms, has been reduced enormously through intensive meat inspection procedures carried out by veterinarians and trained inspection staff.

EU legislation was added to and amended, in line with scientific and technological developments, so that by the mid-1990s there was a comprehensive set of Directives on food hygiene for specific food types. While these laws were an important part of ensuring food safety, they were often regarded as complex and cumbersome by those who had to apply them. Therefore, the Commission began to reflect on how to improve the hygiene legislation so as to heighten consumer protection and also clarify and simplify the rules which food producers had to follow.

The publication of the Commission’s White Paper on Food Safety in 2000 marked an important milestone for EU policy in this area. In this paper, the Commission outlined an entirely new approach to EU food safety legislation. One of the main principles set out in the White Paper was that EU food safety rules should apply “from farm to fork”. This means that every single step in the food production chain – from farming to retail – is covered by EU food safety legislation. More responsibility was placed on food operators for ensuring that products reaching EU consumers were safe for consumption.

The Hazard Analysis and Critical Control Points

The Hazard Analysis and Critical Control Points (HACCP) principles must be applied by all food operators (except primary producers) under EU hygiene legislation. HACCP is a system which enables food operators to identify potential food safety hazards and actively control them at critical points in the production and distribution chain. This entails careful monitoring of different factors (for example, temperature and/or moisture levels) at specific junctures. Timely corrective action can then be taken if something goes wrong and there is deemed to be a food safety risk.
The White Paper paved the way for a complete overhaul of EU food hygiene legislation. In 2004, the “Hygiene Package” was adopted, replacing the numerous hygiene Directives with a harmonised, simplified and comprehensive set of rules on hygiene which were to apply at every stage of the food chain. This legislation, which entered into effect on 1 January 2006, laid down general rules on food and feed hygiene, as well as specific hygiene rules for food of animal origin.

Among the changes introduced through the Hygiene Package was the requirement that everyone in the food industry carry out self-checks and follow the HACCP principles (see side box). This is to ensure that there is no lapse in food safety at any point of production. Food and feed operators must be registered and are fully liable if unsafe food or feed is found on the market. Imported products must meet the same high standards as EU goods under the updated hygiene rules, and regular checks are carried out at the EU borders to verify this (see p.29).

In addition to the hygiene legislation, new rules also entered into force in January 2006 on food and feed controls. Controls are essential in ensuring that EU food law is fully complied with, and that products put on the EU market meet the required safety standards. The Official Food and Feed Controls Regulation aims to establish harmonised EU control systems, with clearly defined tasks for the national authorities. In tightening the control requirements, detailing the tasks that must be completed and clarifying the division of responsibility, the Commission intends to secure uniform and effective food safety controls throughout the EU.

An important piece of legislation to complete the EU hygiene rules relates to microbiological criteria. Food is often susceptible to contamination by microorganisms such as bacteria during its production. Microbiological criteria can therefore be used to check whether the presence and level of certain microbes will affect the safety of the final food products. Under EU legislation, microbiological criteria are set for certain bacteria, such as Salmonella and Listeria, in the main food categories e.g. meat, fish, dairy products, ready-to-eat foods, fruit and vegetables. By laying down safety criteria for the main bacteria which can be found in food, the aim is to reduce the number of food-borne illnesses contracted in the EU. This legislation was also important as it harmonised the measures across the EU, replacing the diverse legislation in all Member States.

These wooden cooking utensils are prone to harbouring micro-organisms (mould, saprophytes, pathogens, etc.) in their micro-pores, which then make their way into food.
In 1973, six became nine as the European Union underwent its first enlargement, welcoming Denmark, Ireland and the United Kingdom. An important step forward was taken for European democracy when, in 1979, the first direct elections to the European Parliament were held.

This was a decade when some segments of European society were eager to improve their lifestyles and adopt habits associated with success. Some people were breaking with tradition and dining out rather than preparing family meals at home. With more working women than ever before across Europe, school and work canteens, along with restaurants, provided a useful alternative to home-cooked fare. Even those eating at home spent less time in the kitchen preparing food. Ready-prepared foods such as instant mashed potatoes or canned soup became increasingly popular, offering a quick and easy solution to busy lives. A growing number of households owned fridges, meaning that products could be kept longer. In parallel, the growth of car ownership made it easier for consumers to do weekly bulk shopping, driving to the supermarket rather than visiting local shops daily.

With new products appearing, packaging also continued to evolve. Plastic increasingly replaced classic paper wrappings, and some packaging was specially designed for new products. In the 1970s, around 10% of milk in Europe was UHT (ultra-high temperature), a long-life alternative to sterilised milk. This needed a special protective layer in its packaging to stop it going bad.

**1973**

**Expansion of supermarkets**
In the 1970s, the German discount store ALDI expanded internationally, while, in 1973, the first LIDL opened its doors to the public. In the same year, Carrefour moved out of France to open its first outlet in Spain.
Frozen food started to take off. Novelties such as frozen pizzas and gateaux made their way onto EU shelves. These products could be stored for even longer and typically required little or no preparation whatsoever – for the first time, a whole meal could be produced simply by turning on the oven.

Imports from outside the EU continued to rise, while food operators were taking increased advantage of the internal market. New rules were adopted to bring down barriers between EU Member States, with the “Cassis de Dijon” case representing an important milestone in the history of intra-Community trade.

In 1973, the worldwide fuel crisis meant that deliveries of many goods were interrupted, leading to shortages in the supply of certain food products, such as sugar, in Europe. This showed just how dependent Europe had become on imports and served as a reminder of at least one benefit of the “home-grown” produce of the past.

1978
Chèques-restaurant
In 1978, chèques-restaurant were accepted in 80 000 restaurants in France.

1979
The Cassis de Dijon case
In 1979, the European Court of Justice gave its ruling on the Cassis de Dijon case. It arose when a German firm was refused permission to import a consignment of Cassis de Dijon liqueur because of its low alcohol content that rendered it incompatible with German legislation. The German authorities stated that they banned this product to protect the health of consumers – but the European Court ruled that a food product lawfully produced and marketed in one Member State should be able to circulate freely throughout the Internal Market. The principle of mutual recognition became central to EU Food Law and, following the case, a new approach was developed. This was officially introduced in 1985 with the publication of “Completion of the Internal Market: Community Legislation on Foodstuffs”. The EU restricted rules on foodstuffs to provisions justified by the need to protect public health, to provide consumers with information, and to ensure adequate controls.

At this time...

“Packaging materials and package shapes underwent an enormous evolution. In the field of frozen foods, much effort was dispensed on rendering them more convenient to use. High temperature short-time processing of liquids was used in culinary fields and for milk.”

Brian Suter, Head of R&D Nestlé during the 1970s.
For the first time, security of supply was no longer an issue and worries about food started to take a new form. In 1971, the EU established harmonised hygiene requirements for the treatment of poultry meat in slaughterhouses, storage and transportation. The EU also laid down health rules for imports of cattle, swine and fresh meat, and made the inspection of meat for *trichinella spiralis* mandatory.

As a back-up measure in the event of any problem, in 1979 the EU set up a Rapid Alert System for Food and Feed. This aimed to provide the responsible authorities in Member States with an effective way of exchanging information when there was a risk to public health from a food or feed product. It also enables communication on measures taken to ensure food safety.

In addition to the direct threat of disease from food products, a link between unhealthy eating and premature death started to develop in the public’s mind during the 1970s. In 1975, the EU set up the European Foundation for the Improvement of Living and Working Conditions, whose studies included issues related to food, nutrition and exercise.
DENMARK

Leverpostej

Pork liver is formed into a paste with herbs, salt and pepper. It is then put into a loaf pan and baked in an oven. This paté is sliced and spread on dark rye bread, often topped with corned beef or pickled vegetables.

IRELAND

Boxty

A pancake made using the staple Irish ingredient – potatoes. Grated potatoes are mixed with flour, buttermilk and sometimes eggs, and then griddled on a pan. It is often served with the Irish blood sausage “black pudding” and bacon.

Did you know?

- 70% of the money spent on some frozen foods goes not towards the food content but towards costs incurred by production, processing and storage.
By the 1970s, more large-scale farming and new technological developments meant that farmers relied to a greater extent on chemicals to protect their crops. Pesticides played an increasingly prominent and important role in modern agriculture. However, the threat that they posed to humans, animals and the environment when used improperly meant that strict rules and controls needed to be developed to ensure that the risks of pesticides did not outweigh their benefits. At the same time, food additives and flavourings started to become an integral part of the modern food chain as localised production declined and large scale manufacturing grew. Manufacturers needed help in prolonging shelf lives and making processed food more tasty and attractive. However, these chemicals had to be carefully regulated to ensure that they did not adversely affect human health. For that reason, a whole body of EU legislation has been built up to regulate additives and flavourings. Sometimes, as a result of certain production, packaging or storage processes, or due to environmental conditions, contaminants have been unintentionally released into food. Therefore, strict EU measures have also been developed to minimise the risks that these can pose to food safety and human health.

PESTICIDES

The first EU rules on pesticides were adopted in 1976. These set maximum residue levels (MRLs) for pesticides in fruit and vegetables i.e. the highest amount of pesticide residue allowed to be found on these foods. In 2005, a new EU regulation on residues of pesticides in food was adopted and is due to enter into force in 2008.

When it comes to regulating the authorisation and use of pesticides in the EU, the European Commission’s first aim is to fully protect human and animal health and the environment. Since 1991, any active substance used in plant protection products must be specifically approved at EU level. Unless an active substance has been scientifically evaluated and approved at EU level, it cannot be used or sold in any Member State. In 2006, the European Commission proposed tightening these rules in a new Regulation on plant protection products, in line with the latest scientific and technological developments. The aims of the Regulation are, among other things, to set up a stricter and more efficient authorisation procedure for active substances, enhance controls on the use of pesticides and reduce the amount of testing on animals.

Around the same time that the new Regulation will enter into effect, the Commission will be completing an ambitious review of all old active substance. The review aims to ensure that active substances which were already being sold before the current authorisation system applied, meet the same high safety levels as are now required under EU law. Over 1 000 active substances will have been evaluated by the time the review is over, and hundreds will be removed from the market.
Food additives and flavourings are intentionally added to food, to improve their texture, appearance or flavour, or to keep them fresher for longer. While these chemicals can help to improve the final product that reaches the consumer, they need to be carefully regulated to ensure that they do not pose any risk to human health. Therefore, strict EU rules have been developed in this field. All food additives must be individually **authorised at EU level** before they can be used in foodstuffs and there are **set limits** on the extent to which most food additives may be used in a particular food. Prior to authorisation, a food additive must first be evaluated by the European Food Safety Authority (EFSA) to ensure that it is safe for human consumption. It must also be shown that the additive in question performs a necessary function e.g. to colour, sweeten or preserve food, and that its use both benefits and does not mislead the consumer. There are also **detailed rules on the labelling** of food additives, and their presence and category (e.g. anti-oxidant, preservative etc) must always be indicated on food packaging, either by name or E-number.

Food flavourings, which are used to give taste and/or odour to food, are dealt with under separate EU legislation to food additives. The rules define categories of flavourings, such as natural and synthetic flavouring substances, plant extracts and smoke flavourings. In addition to general rules for flavouring use, the legislation covers labelling requirements and the establishment of maximum levels for certain flavourings. Following an extensive evaluation programme, the European Commission will establish a positive list of flavourings and, thereafter, only the substances on that list will be allowed for use in food.

**CONTAMINANTS**

When it comes to food contaminants, EU legislation stipulates that food containing an unacceptable level of any contaminant cannot be put on the market. There are also **maximum levels** set for some contaminants of greatest concern to EU consumers, either due to their toxicity or their potential prevalence in the food chain. These include aflatoxins, heavy metals (such as lead and mercury), dioxins and nitrates. EU maximum residue levels are also set for pesticides, by EFSA, and veterinary medicines in food, by EMEA (European Agency for the Evaluation of Medicinal Products). The levels are set on the basis of scientific advice provided by EFSA. Member State authorities are responsible for sampling food products, to ensure that they comply with the legislation. For imported foodstuffs, the country of origin is responsible for compliance with EU legislation, and this is controlled at the EU borders and on the market.
The 1980s was another decade of international and social change, which was again reflected in Europe’s eating habits. The European Union took in three new southern members during the 1980s – Greece in 1981, Spain and Portugal in 1986 – bringing a much more Mediterranean flavour to the food ingredients and varied cuisine of the expanding bloc.

Major world events also left their mark, serving as a reminder that countries were not isolated and that national developments could have far-reaching consequences. The 1986 Chernobyl nuclear disaster in the territory of the former Soviet Union left the soil around the fall-out area contaminated for several years. Its effects were seen as far away as Norway and the UK, where radioactivity was detected in milk, mushrooms and vegetables.

The seismic geo-political shift signalled by the fall of the Berlin Wall in 1989 opened up new panoramas for food too. Fast food outlets began to spread into Eastern Europe – as, ultimately, would the EU itself.

Meanwhile, across the world, big-name food brands were crossing borders and going global, with products from across continents having influence on international markets.

Society was changing fast in the 1980s and time-saving convenience was the order of the day. In numerous countries, there was a rise in the number of young, single people with their own homes, while for many in the workplace, life was busier than ever.
The microwave oven – a relatively new culinary phenomenon – became an essential feature in many households for its sheer convenience and speed. It put an end to the need to defrost frozen foods for hours before cooking and helped to accelerate the growth of pre-packaged, ready-to-cook convenience foods.

Dining away from home was also becoming more common. In 1985 in West Germany, a full 20% of a household’s food budget was spent on eating out. In 1988 in France alone, 10,000 workplace restaurants dished up more than 500 million meals – a phenomenon which could be partly explained by the growing number of working women.

Meanwhile, farming reached a crisis point in Europe in the 1980s, with over-production leading to the infamous surpluses dubbed “butter mountains” and “wine lakes”. The need to redress such problems would later prompt a series of reforms to the EU’s Common Agricultural Policy, and a shift to thinking more about the quality, as opposed to just the quantity, of food produced. Reflecting this trend, food companies began to target the health and ethical aspects of food production in their marketing.

**At this time...**

“The hormones case marked a big leap forward in public interest in food safety and in the rearing of animals for food,” says Jim Murray, Director of BEUC (The European Consumers’ Organisation).

He feels this was very likely a turning point in consumer attitudes and recalls the boycott in France. Mr Murray explains, “The event caught the public imagination, not on the same scale, but in the same way as BSE.”

**1985**

**Eating out**

In West Germany, a full 20% of a household’s food budget is spent on eating out.

**1986**

**Chernobyl**

The Chernobyl nuclear disaster left the soil around the fall-out area contaminated for several years.
Food scares in the 1980s made food safety an issue of growing public concern. In 1980, the Italian media linked cases of premature sexual development and aging in infants with the consumption of baby foods that contained a veal extract with high concentrations of a particular growth hormone. In response, Italy and three other Member States subsequently banned the use of this hormone in beef production. An EU ban followed in 1981 and, four years later, the import of all hormone-treated meat was completely prohibited.

The 1980s also saw a number of highly publicised food-borne disease outbreaks in Europe. For example, in 1988, a number of Salmonella cases occurred in the UK, linked to eggs and dairy products consumed at public gatherings and institutions. The UK Department of Health issued a warning to the British consumers against eating raw eggs as a public safety measure. However, the UK Minister of Health had to resign when she went one step further and publicly announced that she thought the majority of British eggs to be Salmonella infected.

During the 80s, there were also reported cases of botulism in tinned mushrooms and soup in Italy, shrimps in France and hazelnut yoghurt in the UK, while a virulent new type of E. coli bacteria (O157:H7) was recognised as a food safety threat for the first time in 1982. Over the years, and particularly in more recent decades, the EU has made tackling Salmonella and other food-borne diseases a top priority. In addition to specific legislation on zoonoses, which sets out measures to monitor and reduce the incidence of these diseases, strict hygiene rules aim to reduce their occurrence through the food chain to the greatest extent possible (see p.16 and p.17).

1985

Safer beef

The EU banned the use of growth hormones in beef production.
The year 1986 brought even more troubling developments. BSE – or Bovine Spongiform Encephalopathy – was first diagnosed in cattle in the UK. Before the end of the 80s, there would be over 10,000 BSE cases in the UK, while Ireland would become the second Member State to report the disease. In 1989, the EU placed restrictions on exports of live cattle and beef from the UK to other Member States. As more became known about this new disease, and as it began to be reported in other Member States, the EU introduced a whole body of legislation to tackle BSE and protect consumers (see p. 34).

The 1980s was by no means all bad news, however. EU consumers were enjoying greater choice and variety in food than ever before. A large contributor to this was the boom in bilateral and regional trade agreements from the mid-1980s, which facilitated more imports of foodstuffs which often could not be produced in any great quantity in the EU. The EU was also developing strong trading relations with developing countries, and is now the largest importer of food products from the developing world. In the previous decade, the landmark Lomé Convention had been signed with the African, Caribbean and Pacific (ACP) countries. This gave these countries preferential access to the EU market for a whole range of products including many foodstuffs. Items such as tropical fruits, spices and new types of grains were pouring into Europe and becoming a more regular part of the EU citizen’s diet.

In the mid-1980s, tropical fruits and spices became part of the average European’s diet.

Did you know?

- In 1988, the EU-15 imported €6.4 million of agricultural products from the ACP (African, Caribbean and Pacific) countries, almost 3 times as much as they exported to this region.

Dishes from Europe

**GRECE**

*Tzatziki*

Used as either an appetiser or accompaniment to meat or fish dishes, tzatziki is traditionally made by combining two ingredients used by Greeks since ancient times – yoghurt and olive oil – with cucumber and garlic.

**SPAIN**

*Paella*

Rice, saffron and olive oil are the three main ingredients of this traditional Spanish dish, which also contains vegetables, meat and/or seafood. It is often prepared in vast quantities at mass gatherings such as festivals and families.
The 1980s saw the world become increasingly “globalised” in terms of food trade, with more products crossing not only national but also continental boundaries. Major global food brands became a regular fixture on the shelves of European supermarkets, while fast-food outlets continued to spread across Member States. Imports from developing countries were also on the increase, particularly as the African, Caribbean and Pacific (ACP) countries took advantage of the beneficial trade terms agreed under the Lomé convention. At the same time, a number of food crises, such as the veal hormone scandal in Italy and Salmonella in the UK, served as a reminder of the potential risks food could pose to public health. The EU recognised that the same high standards of food safety must be met by all operators, both within Member States and also in countries wishing to export to the EU. A strong body of legislation on imports has been built up, with clearly defined responsibilities for operators. The EU has also set up a control system to perform border checks and carries out inspections in third countries, making sure that the high standards in food safety expected by EU consumers are being met by all.

The EU is the largest food importer in the world, and also the largest exporter of foodstuffs, especially processed goods. As European consumer demand for more diverse food has grown consistently over the decades, so too have EU imports of raw goods such as tropical products, fruit and vegetables, oilseed and oil, coffee and grains. In economic value, Brazil, USA, Argentina, Turkey and China are the main exporters to the EU, but products come from more than 200 countries. This wide range of foodstuffs entering the EU from all over the world has been made possible by a harmonised, efficient and universally accepted system of import controls.

In 2005, the EU imported over €56.8 billion worth of food and live animals. This included €17.8 billion worth of fruit and vegetables, €13.7 billion of fish, crustaceans and molluscs, €4.2 billion of meat and €723 million of dairy products and birds’ eggs.

A fundamental principle laid down in the General Food Law is that food products exported to Europe must comply with EU food law or be equivalent to goods produced in the EU in terms of hygiene and safety standards. The EU employs a number of different approaches to ensure the highest possible level of safety in the food it imports. There is an authorisation procedure for third countries wishing to export food of animal origin to the EU and countries must be approved by the European Commission before they can export various food commodities to Member States. The Food and Veterinary Office (see box) is in charge of inspecting these exporting countries and their establishments to ensure that the required rules and standards are being respected. If they are not, sanctions can be imposed, including the possible suspension or suppression of the exporting licence for the entire country or the susceptible products.

To help developing countries meet EU food safety standards, training sessions are organised by the European Commission under the “Better Training for Safer Food” initiative (see p.17). These sessions are organised all over the world to help officials to understand and enforce EU food safety rules for products that are exporting to the EU. The training covers topics such as EU import standards for specific food products, animal health controls and the Rapid Alert System for Food and Feed (RASFF).

Annual trends in EU trade by product 2005 – Value in €million
Source: Eurostat

<table>
<thead>
<tr>
<th>Food and live animals 56 849</th>
<th>Live animals 608</th>
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<tbody>
<tr>
<td>Meat and meat preparations 4 186</td>
<td>Dairy products and bird’s eggs 723</td>
</tr>
<tr>
<td>Fish, crustaceans, molluscs 13 667</td>
<td>Cereals and cereal preparations 2 587</td>
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<tr>
<td>Vegetables and fruit 17 765</td>
<td>Sugars, sugar preparations, honey 1 958</td>
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<tr>
<td>Coffee, tea, cocoa, spices 7 918</td>
<td>Feeding stuff for animals 5 865</td>
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EU imports of food and live animals 2005 – % total value

<table>
<thead>
<tr>
<th>Live animals 1%</th>
<th>Meat and meat preparations 8%</th>
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</thead>
<tbody>
<tr>
<td>Dairy products and bird’s eggs 1%</td>
<td>Fish, crustaceans, molluscs 25%</td>
</tr>
<tr>
<td>Cereals and cereals preparations 5%</td>
<td>Vegetables and fruit 31%</td>
</tr>
<tr>
<td>Sugars, sugar preparations, honey 4%</td>
<td>Coffee, tea, cocoa, spices 14%</td>
</tr>
<tr>
<td>Feeding stuff for animals 11%</td>
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The Food and Veterinary Office (FVO)

The Food and Veterinary Office, based in Grange, Ireland, forms part of the Directorate-General for Health and Consumer Protection and supports the EU’s objective to protect public health. It carries out inspections in the areas of food safety, animal health and welfare and plant health to check that effective national control systems are in place and that EU standards are being met – both by producers within Member States and by third country exporters. In 2006, the FVO carried out 255 inspections, of which 68% concerned Food Safety. If any threat to consumers is identified during an inspection, the EU may take legal action to prevent trade, take legal action against a Member State or ban imports from a third country.

Most food products of animal origin coming from third countries can only enter the EU through a **Border Inspection Post (BIP)**, where their conformity with EU standards and general safety is checked. The BIPs are approved following inspections by the Food and Veterinary Office and agreement by the Member States. They are managed by the national authorities of the Member State in which they are based. At the BIP, products go through an inspection process whereby official veterinarians check the documentation and identity markers and then submit the products to random safety tests. If there is any doubt about the safety of a product, further checks are carried out. If the problem is confirmed, the consignment is denied entry to the EU. When a food of animal origin is cleared for import, a **Common Veterinary Entry Document** is issued, meaning this product will be able to circulate freely inside the EU, regardless of which Member State it started in. There are solid systems in place at EU level to ensure that products remain traceable.

There are also strict EU rules for plant imports. For example, certain plants and plant products must be accompanied by a phyto-sanitary certificate and are subject to a compulsory health, identity and documentary checks before being allowed into the EU. In addition, food of non-animal origin which is known or suspected to pose higher risk to human health is subject to an increased level of controls when it reaches the EU.

When developing its own food safety rules, the EU also aims to achieve international consensus on such standards, particularly among countries wishing to export to the EU. In this context, the EU works closely with international bodies and organisations on food safety matters. The aim is to promote constructive international trade relations, while also ensuring fair trading conditions and the protection of EU consumers. Within the framework of the World Trade Organisation, an international agreement on **Sanitary and Phyto-Sanitary (SPS) measures** has been reached. This SPS agreement seeks to prevent veterinary and food safety issues being used as excuses for creating barriers to international trade.

The EU also maintains close ties with three global organisations that are used as the reference for all food related matters: **Codex Alimentarius** develops international food safety standards; the **OIE** (World Animal Health Organisation) is the reference for animal health related issues; and the **International Plant Protection Convention** deals with matters related to plant health and plant products. In addition, the EU has signed bilateral SPS agreements with a number of its trading partners.

The EU has strict requirements, rigorous controls and solid procedures to help guarantee that food and feed products imported from third countries are safe for the consumer. The aim is to encourage and facilitate exports to the EU, while preserving the high level of food safety that European citizens have come to expect.
1990s

Oh, for an easy life!

With so much to be finalised before the completion of the single market in 1993, the start of the decade was a busy time for the EU. Preparations were underway to secure the free movement of goods, services, people and capital. As part of this process, rules needed to be harmonised in order to ensure consistent high standards in the production, transport and sale of food across Europe.

The aim was to allow consumers to be confident that, whether products came from their own country or abroad, the same high level of food safety was assured. In 1992, the Treaty of Maastricht established the European Union, which expanded three years later to include Austria, Finland and Sweden, bringing the total membership up to 15 nations.

The 1990s saw cooking re-emerge as one of Europe’s most popular leisure activities. This trend was encouraged by the appearance of “celebrity chefs”, with their own TV slot or programme, known equally for their personality as for their talent in the kitchen.

However, the popularity of cookery shows and a revival in interest in home-cooking did not hamper the spread of fast-food outlets across Europe, and their numbers continued to rise.

Large discount stores also grew in number in the 1990s and attracted shoppers who were interested in low-cost products. At the other end of the scale, smaller convenience stores made a reappearance in town centres – although they scarcely resembled their ancestors. Rather than selling just basic goods, the new convenience stores were now offering items such as pre-prepared meals, ready-washed fruit and vegetables and quick-cook sauces. Indeed, amongst those Europeans looking for convenience, such time-saving products were met with great enthusiasm.

1995
Supermarket choice
One major European supermarket chain estimated that the number of food items in a typical retail store had increased from 550 in 1954 to more than 10 000.
Celebrity chefs

In Finland, after 4 years of appearing on a daily morning show, Jyrki Sukula launched his own programme “Kaikilla maustella” in 1996. This marked the start of an extremely successful career, which included cooking against the clock in “Kokkisota”.

Following a number of international food safety scares, Europeans started to reflect more deeply on how their food was produced. Whether it was for health reasons or due to animal welfare concerns, the 1990s saw a marked rise in the popularity of a vegetarian diet. Meanwhile, food manufacturers were making it easier to obtain certain essential nutrients from new sources, as many foodstuffs, such as milk and breakfast cereals, began to be fortified with additional vitamins and minerals.

Differences in diet still manifested themselves between the countries of the EU. Saturated fat, found mostly in foods from animals and some plants, is the main dietary cause of high blood cholesterol which increases the risk of heart disease. The intake of saturated fat was higher in Northern and Western Europe than elsewhere, while Spain, Italy and Greece were getting much more of their energy from fruit and vegetables.

In addition to EU produce, food imports continued to make an important contribution to Europeans’ diets, as well as being extremely popular. For example, total EU banana imports in 1995 had a value in excess of €2 billion. Many of the countries from which the EU was now buying products were developing countries, whose economies benefited greatly from their (often preferential) trade relations with the EU. For example, the EU absorbed the bulk of key food exports from the African, Caribbean and Pacific (ACP) countries, and in 1998 alone ACP agricultural imports to the EU totalled almost €8.5 billion.

1995

Time spent at the table decreases

A survey in France indicated that time spent each day eating at the table decreased from two hours 30 minutes in 1965 to one hour 20 minutes (INSEE).

At this time...

“I remember the BSE crisis and various other meat scandals during this decade. Because of this, I think people stopped eating beef, and so did I. It was also a time when working hours were certainly not getting any shorter!”

Ingrid Nitsche, Lawyer in Austria during the 1990s.
The 1990s saw a considerable shift in consumers’ perceptions of food. BSE, or “mad cow disease”, had been identified for the first time in cattle in Europe just a few years earlier. However, it was in the 1990s that the extent of the problem became very apparent as cases of the disease were reported in 9 Member States for the first time in this decade, as well as further cases emerging in the UK and Ireland. The link between BSE and the feed given to cattle, and subsequently between infected meat and the fatal Creutzfeld Jakobs disease (vCJD) in humans, caused great public concern with regard to how food was produced. Citizens began to question what they were really eating and how much confidence they could have in the products that they were being sold.

As more information became available on BSE and vCJD, the European Commission devoted a huge amount of time and resources to ensuring that every possible measure was taken to protect human and animal health. A series of strict EU measures was put in place to combat this disease, and was reviewed and updated in line with latest scientific advice.

A ban on feeding meat and bone meal (MBM) to cattle, sheep and goats was introduced in 1994, which later became a total ban on processed animal protein being given to any animal farmed for food production. Specified risk materials (SRMs) such as the spinal cord, brain, eyes, tonsils and intestines have to be removed from cattle, sheep and goats throughout the EU, and there are very strict standards for the treatment of waste from these animals. Where there is a positive case of BSE found in an animal slaughtered for human consumption, the animal and those slaughtered before and after it must be destroyed, as must all the cattle born and reared with the BSE infected animal. Very strict surveillance measures to detect, control and eradicate BSE were also laid down at EU level.

Thanks to these measures, the number of positive BSE cases began to decline from the mid-1990s and have fallen dramatically over the past decade. The Commission continues to monitor the BSE situation very closely, adapting the measures as necessary and always keeping the protection of EU consumers as the first priority.

However, BSE was not the only food safety scare to raise public alarm in the 1990s. In 1999, for example, dioxins (cancer-causing compounds) were found in animal feed in Belgium. The problem then spread to Belgian food produced from animals which had eaten the contaminated feed. Many affected animal and food products had to be withheld or withdrawn from the market and destroyed, while temporary restrictions were imposed on the trade in meat and dairy products. In response to this episode, the EU started to work on a long-term solution to reduce the presence of dioxins in feed and food.
EU citizens were demanding that more visible and effective measures be taken to protect them from eating products that could seriously affect their health. They needed to see an even more proactive, effective approach being taken with regard to food safety and consumer protection if they were to regain confidence again in the food being sold in Europe. Communication was identified as being as important as risk assessment and the Commission stepped up its work in keeping authorities and the public fully informed.

At EU level, the 1990s saw the establishment of two new entities which would make a significant contribution to raising the level of food safety across Europe. In 1997, the Food and Veterinary Office was established as a successor of the former “veterinary inspection unit” to carry out inspections to ensure a compliance with EU food safety and animal health rules (see p.29).

A major landmark in the history of food safety in the EU was reached in 1999. Within the European Commission, the previously dispersed food units merged to form a part of the Directorate-General for Health and Consumer Protection. This enabled a separation of tasks between those responsible for ensuring food safety, animal health and welfare and plant health, and those in charge of agriculture and food markets. Not only did this help to prevent any possible conflict of interests between those regulating the markets and those guarding food safety, but it also meant that far more resources were now being given at European level to ensure that the food reaching EU consumers was as safe as possible. Ever since it was created, DG Health and Consumer Protection has continued to grow and today has around 800 staff, working in the areas of food safety but also health and consumer protection. Since it was set up, DG Health and Consumer Protection has worked to develop and implement a solid body of EU food safety legislation, and is continually working to ensure that the highest possible levels of food safety are met in the EU.

Did you know?

- In France, annual per capita consumption of frozen foods, especially ready-prepared meals, increased from 2 kilos to 37 kilos between 1965 and 1995 (Secodip).

Dishes from Europe

FINLAND

Graavilohi

Raw fish (such as salmon or trout) is cured in a mixture of salt, sugar and fresh dill. Traditionally it is served with a dill and mustard sauce, and crispbread.

AUSTRIA

Wiener Schnitzel

A thinly-sliced piece of veal, dipped into flour, eggs and breadcrumbs and fried in butter or lard. Traditionally, Wiener schnitzel is served with potato salad and a slice of lemon.
The 1990s saw many changes in the way consumers both purchased and prepared their food. Choice was the byword, from different ways of shopping and dining to the vast selection of products on offer. Yet, in terms of food production and consumption in the EU, the 1990s was to be remembered principally for one major food crisis. It was in this decade that a probable link was identified between BSE and the human variant CJD. This marked a turning point in the history of food safety, as the EU reacted to events and revolutionised its approach to ensure the protection of consumer health into the future. Existing systems to ensure food safety were updated and developed, while the EU created a new agency to provide scientific advice. To enable any food safety risks to be rapidly identified and isolated, the EU has introduced compulsory traceability and labelling systems to be implemented by all operators. This means that all food products can be traced to their source, while consumers are given as much relevant information as possible to make informed decisions when buying food.

TRACEABILITY

The establishment of the Internal Market in the EU saw the end to border controls, quarantine procedures and other restrictions on the movement of animals between Member States. A new approach had to be found, therefore, to ensure that animal health was not compromised by cross-border movements. A system was needed to help prevent and contain infectious animal diseases wherever they occurred in the EU and to ensure the traceability of animal and animal products for animal and public health reasons. Therefore, EU legislation on the traceability of livestock was developed, starting with minimum requirements for the identification and registration of animals. Rules were also laid down for animals being transported from one Member State to another, requiring the animals to be accompanied by the appropriate health certification and be inspected by an official veterinarian in the Member State of destination.

Following the BSE crisis, in an effort to reduce the threat of the disease and reassure consumers, specific rules on the traceability of cattle were laid down. The EU requires group identification for all animals, while mandatory individual identification was introduced for bovine animals, and later for sheep and goats too. The animals are individually traceable from the moment they are born to the moment of slaughter, and from there the traceability continues with their products along the food chain.

All food and feed products and their ingredients must also be fully traceable at every stage, from production to processing to distribution. Since the late eighties, it has been mandatory for all food products to have batch numbers to identify them in case they need to be recalled by the manufacturer, packers or producers. However, it was with the 2002 General Food Law that the rules were really tightened and reinforced, ensuring that all food, feed and animals for food production were traceable from “farm to fork”. This requires everyone involved in the production, manufacturing and sale of food and feed to keep detailed records and have good knowledge of where the food that they dealt with came from and went to. Being able to identify the origin of feed and food is crucial in protecting consumers, particularly when a food safety problem is detected with a particular food or feed product on the market. Traceability allows the full and rapid withdrawal of any food suspected to pose a threat to public health, and enables consumers to be given accurate information on the action to take with these products.
LABELLING

The first harmonised EU legislation on food labels was adopted in 1979, setting up common labelling requirements applicable to all foodstuffs. The legislation covers the compulsory information that has to be included on all labels, such as the name of the product, the list of ingredients, the use-by date of the product, any special conditions of use and the name and address of the manufacturer. This framework legislation on labelling was revised several times over the years. The last revision made it mandatory for the presence of potential allergens (such as nuts, cow’s milk, mustard, shellfish and fish) to be indicated on the list of ingredients. This framework directive also sets the fundamental principles underlying EU food labelling legislation, i.e. any mandatory information given on a foodstuff label must be understandable, legible and must not mislead the consumer. However, the market reality has shown that these principles are not always applied, which is why the Commission has decided to bring forward proposals before the end of 2007 to review this framework directive.

The aim of the revision is to ensure that the information provided on labels is useful to the consumer and in line with the above-mentioned principles. The new legislation should also be modernised so as to be able to adapt to a constantly changing market. The Commission also intends to review the rules on nutrition labelling before the end of 2007, which apply specifically to the nutritional information (such as energy, protein, carbohydrates or fat content) provided on labels.

In 2006, new legislation on Health and Nutrition Claims was adopted to stop false or misleading claims from being used in the labelling and marketing of food. Under the regulation, the EU only allows claims such as “low in fat”, “high in fibre” or “a good source of calcium” to be used if science demonstrates that they are true and can be substantiated. Moreover, only foods that fit a certain nutritional profile will be allowed to carry health or nutrition claims. For example, a food that is high in fat, sugar and salt will not be allowed to promote the fact that it may be a good source of calcium or other nutrients. EU law ultimately aims to ensure that the information being given on food labels is reliable and accurate. Both this Regulation and the review of the Nutrition Labelling Directive aim, amongst other things, to contribute to the EU’s efforts to tackle the rising obesity levels in Europe. Better and more reliable information on food labels will help to facilitate properly informed nutritional choices on the part of EU consumers.

EU rules are also laid down for food intended for particular nutritional uses, such as dietetic and infant food, food for sports people or foods for special medicinal purposes. The labels of these products must carry more detailed information on their composition and/or more comprehensive instructions of use than conventional foods.
The EU took in a total of 12 New Member States in the first decade of the 21st century, through two separate enlargement processes. This increased the total area of the EU from around 3.2 million km² to 4.4 million km² and brought the population up from 375 million to over 490 million.

With the EU comprising 27 Member States, the cuisine on offer became even more diverse as new countries brought more recipes.

This period was also incredibly significant in economic terms, as euro notes and coins became the new currency for a total of 13 EU countries.

Health and diet were factors that many consumers now took into account when doing their weekly shopping. The result was a significant increase in the sales of what were perceived to be “better” foods. Evermore consumers opted for semi-skimmed milk over the full fat variety.

Meanwhile, even in northern Europe olive oil began to be used instead of butter or sunflower oil. Studies revealed numerous potential health benefits of such a change, including a reduction in levels of harmful blood cholesterol.

“Nouvelle cuisine”

“Despite the influence of the EU accession and more imported products, traditional dishes remain dominant as far as the Bulgarian diet is concerned. These include kebabcheta and kjufeta (grilled and fried meatballs) and shopska salata (a salad of tomatoes, cucumbers, peppers and Bulgarian white cheese).”

Simeon Chenev, Bulgarian Policy Adviser in the 2000s.
Europe became even more of a melting pot when it came to food choices and dietary habits. The southern European countries were exerting an influence over their Nordic cousins, with vegetables, rice, pasta and juice appearing in greater quantities on northern menus. At the same time, in Mediterranean countries there was an increase in the consumption of meat and dairy products and a decrease in the traditional consumption of cereals and wine.

In terms of food and drink production, the EU was exporting more than it imported by the turn of the century, with a trade surplus of €4.5 billion in 2005. While the production of food “peaked” in terms of quantity, strong concerns persisted and grew in relation to intensive farming. These related to both the quality of the final product and questions regarding the welfare of animals. As a result, a “counter-movement” emerged, with organic fruit and vegetables, free-range eggs and alternatives to dairy such as soy milk continuing to rise in popularity.

Despite some health-conscious tendencies in people’s food choices, it was in the 2000s that a new public health concern related to food became very apparent. It was not only the EU that was expanding – so too was the average European waistline. It was estimated that over 200 million adults were overweight or obese in the EU – over half the adult population.

**Female life expectancy at birth**
1960-2004, Europe (selected EU countries)

**Male life expectancy at birth**
1960-2004, Europe (selected EU countries)

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**Did you know?**

- In Western Europe, 15 years ago the average meal preparation time was one hour. Now it is 30 minutes.
- Europeans are getting taller! Between 2002 and 2005, the average height increased in most Member States and the EU median is now 169.9 cm. Over the same period, the average weight increased by 0.5kg: from 71.7kg in EU-15 in 2002 to 72.2kg in EU-25 in 2005.

**2007**

**Packaged food and soft drinks**
In 2007, sales of packaged food and soft drinks in the New Europe (the 8 Eastern European countries which acceded to the EU in May 2004, plus Cyprus, Malta and, from the beginning of 2007, Romania and Bulgaria) are outstripping growth in the Old Europe by a considerable margin.

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Milk

The EU dairy market produced 1 million tonnes of semi-skimmed milk powder compared with just 820 000 tonnes of whole milk.
As food production became ever more complex, market choices ever wider and media focus on food issues ever greater, consumers developed heightened interest in what they were eating and became more alert to issues related to food safety. However, an EU survey revealed that the issues of greatest concern in consumers’ minds were not always those which were of greatest risk to their safety – for example, over half felt it likely that they would be injured in a car crash, which is statistically inaccurate.

It was with the start of the new century that the EU really pushed forward in building up its food safety legislation and infrastructure. In 2000, the European Commission published a **White Paper on Food Safety**, which underlined the importance of ensuring the highest possible standards of food safety and proposed a radical new approach to achieve them. It set out over 80 separate actions related to food safety controls, consumer information and imports.

In 2002, this became a reality as the EU’s **General Food Law** entered into force. This laid down the fundamental principles for food safety in Europe. It also introduced the “farm to fork” approach, i.e. the application of good food safety practices and controls at each and every point in the food chain and the necessity for food to be traceable right back to its original source. The General Food Law provided a solid base upon which further important food safety rules, such as the so-called “Hygiene Package” (see p.17), were then built at EU level. By the mid-2000s, a very solid body of EU food safety legislation was in place.

The European Commission was very aware, however, that drawing up and adopting legislation would not in itself be enough to ensure safe food for consumers. Full and proper implementation of the rules was crucial. The FVO (see p.29) plays an important role to this end, with its inspections and follow-up on non-compliance. However, much also relies on the national control authorities to ensure that EU food safety measures are consistently well implemented. With that in mind, the EU launched an initiative entitled **“Better Training for Safer Food”** (see p.17).

**A new approach**

“The year 2000 marked an important development for food safety in the EU, with the adoption of the Commission’s White Paper. This set out an innovative new approach for EU food safety policy, integrating it into every step of the food chain. It is largely thanks to this “farm to fork” approach that European consumers can rely today on one of the highest levels of food safety in the world.”

Paola Testori Coggi,
Deputy Director General for Health and Consumer Protection, European Commission.
At this time...

“EFSA is the EU reference body for risk assessment in the fields of food and feed safety, animal health and welfare, nutrition, plant protection and plant health. In close cooperation with national authorities and in open consultation with its stakeholders, EFSA provides independent scientific advice and clear communication to the European institutions on existing and emerging risks. Our scientific advice underpins EU food and feed policy and legislation thus contributing to a safe and healthy diet for the European Consumer.”

Catherine Geslain-Lanéelle, Executive Director, European Food Safety Authority (EFSA).

Meeting fresh challenges

“This was a decade of fast-paced innovation in the food sector. New technologies and novel products were raising new questions and presenting more options to the European consumer. The challenge was to keep pace with these changes – to understand their impact and harness their potential benefits, while still ensuring that human and animal health was fully protected. The Commission’s approach is to base each decision firmly on scientific advice and risk analysis, while working closely with stakeholders on each new development to ensure the most effective and proportionate response.”


% of EU citizens and their perception of the likelihood of different risks

2006

Source: Eurobarometer survey on risk perception

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likely</th>
<th>Not likely</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental pollution damaging your health</td>
<td>61%</td>
<td>36%</td>
<td>3%</td>
</tr>
<tr>
<td>Being injured in a car accident</td>
<td>51%</td>
<td>42%</td>
<td>7%</td>
</tr>
<tr>
<td>A serious illness</td>
<td>49%</td>
<td>41%</td>
<td>10%</td>
</tr>
<tr>
<td>The food you eat damaging your health</td>
<td>42%</td>
<td>55%</td>
<td>3%</td>
</tr>
<tr>
<td>Consumer goods (other than food) damaging your health</td>
<td>42%</td>
<td>53%</td>
<td>5%</td>
</tr>
<tr>
<td>Being the victim of a crime</td>
<td>31%</td>
<td>63%</td>
<td>5%</td>
</tr>
<tr>
<td>Being the victim of terrorism</td>
<td>20%</td>
<td>75%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Genetically modified food

The first commercially grown genetically modified food crop was a tomato created by Californian company Calgene called the FlavrSavr. A variant of the FlavrSavr was used by Zeneca to produce tomato paste which was first sold in Europe during the summer of 1996.

Dishes from Europe

CYPRUS

Anthi

Fresh and open courgette blossoms are filled with crushed bulgur wheat or rice or meat mixed with onions and dried mint. The flowers are packed tightly into a saucepan to simmer. They are then left to stand for up to an hour, to ensure they are cool before serving. These are eaten as a light meal or a delicious accompaniment.

POLAND

Barszcz

Beetroot soup with vegetables and sour cream, which can be served as a clear soup with dumplings. National variations on this soup are found throughout Eastern Europe.
The first decade of the new millennium was a time of increased complexity in many respects. The EU underwent its largest Enlargement ever and new Member States exerted fresh influences on the Union, including the introduction of even more culinary choices. At the same time, heightened consumer awareness meant that there were more demands on the EU to provide reassurance regarding the safety – and often also the quality and nutritional benefits – of food products. Meanwhile, ever more in tune with how food was being produced, an increasing number of consumers were giving preference to organic products, ethically-traded food and healthier options in processed food. Alongside this, in the quest for more efficient production methods which could churn out high quality foodstuffs, new technologies were being developed at a breath-taking pace. The number of “novel foods” aiming to corner the EU market grew, while genetically modified products made their first appearance. To make sure that these foods posed no risk to consumer health, the EU introduced specific legislation to ensure that new products could only be placed on the market if they were scientifically proven to be safe.

**NOVEL FOODS**

The turn of the century saw the pace of innovation in the food industry soar. Industry began to experiment with the idea that plants, animals and different food ingredients derived from them could be altered in a way which would improve their nutritional values and improve the efficiency of agricultural and food production. Science, new technology and industrial advances all fed in to the development of foodstuffs that were designed to offer more to the consumer, producer or farmer than their traditional counterparts.

In addition, globalisation meant that new food substances and ingredients, which were used in other parts of the world but were unknown to Europeans, were being introduced to the EU market. As a result, there was a steady growth in previously unknown foods which were often produced using new technological procedures. The traits of these products could not be assumed to be the same as tried-and-tested, conventionally produced foodstuffs in the EU and so their safety for consumption needed to be verified. Therefore, the European Commission drew up a new EU Regulation to govern “novel foods”.

Novel foods are defined as food and food ingredients which were not used for human consumption to any significant degree before the Regulation entered into force in May 1997. Examples of novel foods which have been approved at EU level include “noni juice” (from a tropical fruit) and a number of dairy products with added plant-chemicals (phytosterols) which are thought to help reduce cholesterol.

The Commission was keen to ensure that the novel foods legislation would not stifle progress that could bring benefits to the consumer. At the same time, however, protecting the health and safety of EU citizens remained the top priority. Under EU legislation, novel foods must undergo a safety assessment before being placed on the market. They are only allowed to be used or sold in the EU if they are seen to pose no risk to food safety or human health.
The European Food Safety Authority (EFSA)

EFSA was set up in 2002 and is based in Parma, Italy. Its role is to provide objective and independent advice and clear communication. This is grounded in the most up-to-date scientific information and data available and enables the evaluation and risk assessment of food and feed. EFSA deals with a broad spectrum of issues, including food and feed additives, allergens, animal and plant health, animal welfare, genetically modified organisms (GMOs) and pesticide MRLs.

Genetically modified organisms (GMOs) are plants, animals and micro-organisms whose genetic characteristics have been artificially modified to create a new property. For example, genetic engineering can be used to boost a plant’s resistance to a particular insect or improve the nutritional value of a food. The first GMOs were cultivated in the United States in the mid-1990s and by the end of the decade the Commission was receiving industry requests for GMOs to be authorised for use in the EU under the Novel Foods Regulation.

However, the development and spread of this new gene-altering technology caused concern amongst many EU citizens. People wanted reassurance that GMOs did not pose any risk to human or animal health, and that the cultivation of GM crops would not adversely affect the environment. The Commission therefore devised a strict new body of legislation specifically for GMOs, with a view to protecting human and animal health and the environment in a balanced, risk-based manner. Scientific evaluation and advice became the basis for any legislative decision on GMOs.

In terms of food safety, genetically modified food and feed is principally covered by two Regulations which entered into force in April 2004. The first provides the framework for the **assessment and authorisation** of GM food and feed at EU level. All authorised GMOs are listed on a register available to the public, which is maintained and regularly updated by the European Commission. The second deals with the **labelling and traceability** of GMOs once they have been authorised. Before any GMO can be used or sold in the EU, it must be scientifically assessed and its safety verified. The European Food Safety Authority (EFSA) provides advice to the European Commission which, in consultation with the Member States, has to authorise a GMO before it can be imported, sold, processed or used for research in the EU. All GMO authorisations must be renewed on a ten-year basis.

With regard to the labelling of GMOs, EU rules require all food and feed made from GMOs to be marked with either “this product contains genetically modified organisms” or “produced from genetically modified (name of GM product)”. These labelling requirements also apply to food which was produced from GMOs, even if it no longer contains genetically modified DNA or proteins – for example, oils from GM crops. The only exception to this mandatory labelling is where there is only a tiny trace of GM material present, below a set minimum threshold. A series of traceability requirements are also laid down for anyone involved in the use or handling of GMOs for food and feed. For example, information on the presence, origin and destination of GMOs has to be recorded at every stage of production and marketing, and retained for 5 years. This enables the rapid withdrawal of the product from the market if any problems arise. There is also **separate environmental legislation** in this area, designed to ensure that the deliberate release and use of GMOs in the EU does not pose any threat to the environment or to biodiversity.

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GMOs
Food Safety into the Future

The last 50 years have seen remarkable developments and changes in the production, distribution, preparation and consumption of food across Europe. By and large, consumers have benefited greatly from this evolution and the food supply situation is very different for Europeans today than it was for their counterparts in the 1950s. Nowadays, European citizens not only enjoy a stable supply of food, but also an enormous choice of products which are required to meet very high standards.

However, the past half century has not been without its challenges – from food shortages in the early years to various food crises over the decades. Securing safe, healthy food for what is now a Union of around 490 million citizens has required continual commitment, constant reassessment and an innovative approach on the part of the EU. A solid body of food safety legislation has been set up over the years, along with reliable systems to ensure the protection of human and animal health. Measures have been adapted and improved in line with the latest scientific information and technological developments. The result is that Europeans now enjoy one of the highest levels of food safety in the world.

So where will the EU be 50 years from now? It is almost impossible to imagine the changes that lie ahead. However, one thing is certain. The EU is ready to respond effectively to any future progress and challenges in the field of food safety, just as it has in the past.
European Commission

50 years of Food Safety in the European Union

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