Food Safety
Plan of Catalonia
2012-2016

Generalitat de Catalunya

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Presentation

As established in the Health Plan, the ultimate goal of Catalonia's health policy is a longer and healthier life for its citizens, regardless of social or economic status. Interministerial policies are enacted through the Public Health Agency of Catalonia in order to implement the public health care, biomedical research and health protection actions necessary to meet this end.

It is within this sphere of interministerial policy where the food safety policy is developed, as although it is largely a health policy, it also seeks to protect the legitimate interests of consumers and of Catalonia as a whole. This far-reaching policy covers the entire human food chain, from primary sector production through to the actual moment of consumption, and various public and private bodies are involved in its application.

Social expectations are becoming increasingly concerned with the application of a common approach to improve the efficacy and efficiency of the actions of public authorities, the generation of synergies and the integration of all the parties involved. In order to meet these needs, Catalonia has opted to implement an integrated intervention model, in which all the competent authorities act in a coordinated manner, in accordance with common and shared objectives. The Food Safety Plan of Catalonia is one of the most significant instruments in this sense, as it helps guide the joint actions of the various public administrations, forming a frame of reference. With the 2012-2016 Food Safety Plan of Catalonia new life has been breathed into the application of the principles of cross-organisational working, coordination and cooperation with a view to making further progress towards the consolidation of an integrated public food safety intervention model. The plan also represents a learning environment, allowing the situation and the expected results to be periodically evaluated within the context of a continuous improvement cycle.

This new food safety plan for 2012 to 2016 has been developed with the participation of all the Catalan public administrations with responsibilities in the field of food safety, in addition to food chain operators, consumers and other stakeholders. It is an instrument designed to further the strategy defined and specified in the first food safety plan, implemented in 2007, as the experience we have gained in the years since then indicates that we are on the right track.

This new document will serve as the strategic reference point for public intervention in food safety in Catalonia over the course of the next five years. Its application should be heralded as major progress in food safety in Catalonia within the context of continuous improvement and innovation in a field that is not only of great importance to the health of the population, but also to Catalonia's image and economic standing on the international stage.

Boi Ruiz
Minister of Health

Presentation

As one of the main pillars of the economy, the agri-food industry is of great strategic importance to the future of Catalonia. Agriculture, livestock farming, fishing and forestry occupy more than three-quarters of the territory and directly contribute to the maintenance and improvement of the natural environment, the consolidation of the population in the territory, and the promotion of a production sector that is proving to be resistant to the current financial crisis. Mention also must be made of the development of our agri-food industry, which thanks to a tremendous increase in exports in recent years has made Catalonia one of Europe's leading agri-food clusters.

Given the decisive role of the agri-food industry within Catalonia's agricultural sector, the ministry's policy is designed to not only integrate but also support the closely interrelated agricultural and agribusiness sectors. This policy can be summarised in three lines of action: a new boost to the primary sector, taking advantage of the strength of our agribusiness; the application of food quality and safety policies that favour the marketing of our products to the benefit of an increasingly competitive food industry; and the implementation of a strong rural development policy, allowing us to diversify the rural economy, improve the quality of life if its inhabitants and generate new opportunities for them.

Our aim is to support the people, companies and entrepreneurs in these sectors by fostering their development and modernisation, increasing their potential and committing to quality, innovation and internationalisation.

The Catalan agri-food industry, which is at the cutting edge both in Spain and in Europe, represents a strategic sector for the Catalan economy and a key factor in its territorial balance. Catalonia's enterprising spirit has led its agriculture to evolve towards intensification practices that not only increase both the production and value of food, but also generate significant employment opportunities throughout the agri-food chain.

The Catalan food industry model is based on the safety, traceability, diversity and quality of its products, the improvement of trade opportunities, the differentiation of the quality and origin of these products, the protection and promotion of traditional and local products, the consolidation of quality certification, and the strengthening of mechanisms to inspect and assure the quality of agri-food products. The 2012-2016 Food Safety Plan of Catalonia, which has been duly approved by the Government of Catalonia, is a basic tool in the context of this policy and is a fundamental reference point for our actions in permanent collaboration, coordination and communication with the rest of the parties involved in food safety in Catalonia, such as food chain operators, other government ministries, local administrations, and the general public.

Josep Maria Pelegrí i Aixut
Minister of Agriculture, Livestock, Fisheries, Food and the Natural Environment

Contents

Introduction

The 2007-2010 Food Safety Plan of Catalonia was not only the first comprehensive food safety plan to be applied in Catalonia, but also one of the first to be implemented anywhere in the world. It was a far-reaching and ambitious project that represented a qualitative leap forward, offering a new strategic approach and constituting a global frame of reference for the intervention of the various bodies with responsibilities in the area of food safety in Catalonia.

The 2007-2010 plan was developed in compliance with Law 20/2002, of 5 July, on food safety, superseded in 2009 by Law 18/2009, of 22 October, on public health, article 43 of which reintroduced the requirement to establish the Food Safety Plan of Catalonia under conditions almost identical to those already established in Law 20/2002. However, it should be noted that the law on public health establishes a validity period of five years for the Health Plan and for the Food Safety Plan, making it necessary to extend the time scale to 2016 instead of 2014 (the year established for the specific objectives contemplated in 2007). This minor change does not affect the application and monitoring of the plan and is perfectly in line with the parameters of the goal-oriented planning methodology on which it is based.

The design of the plan was based on the combination of two tried and tested methodologies, goal-oriented planning and risk analysis, which were determining factors in the definition of the structure and content of the 2007-2010 plan.

Goal-oriented planning is used in a wide variety of public and private spheres and basically consists of defining the objectives and the actions to be implemented to achieve them, enabling the subsequent evaluation of the results of these actions, the application of suitable corrective measures and the generation of a permanent improvement cycle. For its part, risk analysis is the benchmark methodology applied in food safety both in Europe and internationally. It consists of three basic components: risk assessment, risk management and risk communication.

These methods are the basis of what we could call a risk governance model in the specific area of food safety, which must be taken into account in order to achieve increasingly higher levels of efficacy and efficiency. The term governance is a contemporary political science neologism used to describe management processes in complex spheres that fundamentally refers to the capacity of public authorities to serve the public. The European Commission, in its communication 'Governance and Development', defines it as "the rules, processes, and behaviour by which interests are articulated, resources are managed and power is exercised in society". A key element in this context is the way in which public functions are undertaken, resources are managed, and regulatory powers are exercised. "Today governance is generally used as a basic measure of quality and performance of any political/administrative system" (subsection 4 of the European Commission's 'Governance and Development' communication, 2003).

Strict adherence to the aforementioned goal-oriented planning and risk analysis methods in conjunction with the knowledge gained over the years in Catalonia

in relation to food safety gave rise to an extensive document, whose content and doctrine determine what an integrated food safety intervention system should be. Thanks to the experience we have gained in recent years, we can see that its content remains valid and it can continue to be the benchmark document in the global strategy to be applied to food safety in Catalonia in the coming years.

However, peculiarities that may be regarded as virtues, such as exhaustiveness, thoroughness and orthodoxy in the application of the goal-oriented planning and risk analysis methods, could represent an obstacle to its practical application. The exhaustiveness and theoretical and flexible approach that were sought for the first plan resulted in an extensive document that, although useful as a reference manual, presented difficulties in terms of its application as an executive document.

Considering that the 2007-2010 plan is still a good reference document in relation to objectives, doctrine, principles and lines of action, the challenge for 2012-2016 was to produce a much more succinct executive document that would clearly and concisely specify the actions to be taken in this new period.

Goal-oriented planning dictates that the objectives should be contemplated in accordance with a time scale of eight or ten years. In this context, the 2007-2010 plan set its objectives for 2014, with 2016 now being adopted in the new plan in order to comply with Law 18/2009, of 22 October, on public health, establishing that plans of this type are to have a validity period of five years. This is the reason why the objectives of the 2012-2016 plan are the same as those established in the first plan. Similarly, the spheres of intervention, the actions to be taken, the reasons and theoretical rationale were already addressed in the first document.

The experience gained over the last few years indicates that no major changes in approach are needed and that it is advisable to continue working on the spheres of intervention already included while centring efforts on the consolidation, improvement and/or expansion of activities that are now under way. The idea, therefore, is to exploit existing margins for improvement and specify the interventions to be carried out in this new period.

Evolving from a system of multiple bodies to an effective integrated system is not an easy task that can be completed in just a few years. The application of the principles and criteria contemplated in the Food Safety Plan of Catalonia must lead us to an integrated, modern and effective food safety system that provides the public with the necessary guarantees. The aim of the 2012-2016 plan is to serve as an executive instrument to make progress in this direction and exploit existing margins in a cycle of continuous improvement and adaptation to the situation at all times.

I Context and Guidelines

Evolution of the Context

The first and second chapters of the 2007-2010 Food Safety Plan of Catalonia provided an overview of its context and guidelines. The content and reflections contained in the document continue to be valid for this new period. However, for the 2012-2016 period it is necessary to make express reference to the rapid evolution of the sociodemographic, scientific, environmental and economic context in which public policies in all spheres in general and food safety in particular are to be developed.

Both Catalonia and the rest of the European Union are undergoing significant demographic changes that are tending towards accentuation. The ageing of the population, associated with increased life expectancy; the reduction of the birth rate; the increase in immigration and diversity; the concentration of the population in urban areas; macroeconomic, technological and manufacturing changes; and changes in lifestyle, including food behaviour patterns, are some examples. In this sense, increasingly more attention is being paid to the relationship between diet and health, not only with regard to exposure to food hazards, but also its influence as a risk factor in diseases associated with diet, such as obesity and elevated or abnormal levels of lipids in the blood.

The global demand for food is predicted to show substantial growth in the coming years. The increase in the population and its quality of life will be the determining factors of this upsurge. At the same time, there will be a marked increase in the amount of agricultural land used for the production of biofuels, in direct competition with food production. Moreover, it is probable that food production will be influenced by the consequences of climate change, and cultivation techniques will have to be modified to adapt to climate variations and changes in the distribution and behaviour of pests, animal disease and plant blight.

The incorporation of sustainability throughout the entire food chain must be seen as a basic element for guaranteeing a safe, eco-efficient economy, based on efficiency in resource consumption and the minimisation of impacts on the environment and health.

Improved productivity in accordance with sustainability criteria is a key element to meet all these socio-environmental challenges, demanding the application of high-yield production methods and requiring the application of new technologies and innovative solutions, and major transformations in the way food is produced and distributed. These changes can directly affect, both positively and negatively, the safety of products, biodiversity, the environment and public perception.

Furthermore, scientific progress in the assessment of risks and the improvement of analytical techniques are causing agents that only a few years ago were impossible to detect or were unknown to be added to the list of problems to be managed.

The globalisation of the food industry means that food consumed in Catalonia can come from anywhere in the world and can access the European market via border

inspection points in any one of the Member States of the European Union. Food and its associated risks are no longer limited by borders. What was previously subject to regional management measures must now be understood to be a problem that could potentially affect the entire world. This means that we have to pay attention to all available sources of information and any incident that might arise anywhere in the world, however far away it might initially seem.

Changes are also expected to take place in consumer attitudes. The public is becoming increasingly well-informed thanks to the strong impact of the Internet as an information and communication system. We have more and more information at our disposal and there will be a growing demand for information and transparency from companies and public administrations. There will also be increased awareness in matters such as animal welfare, the environment, the use of biotechnologies, the composition of food, and their effects on health. Accountability to the public and the availability of reliable information will be significant elements of communication policies in this new scenario.

All these factors will undoubtedly engender new challenges with regard to the assessment, management and communication of food safety risks, requiring swift adaptation to them.

The organisational, institutional and political framework must be capable of adapting to meet all these new demands. Catalonia already has a network of specialist organisations with vast experience and the capacity to adapt to meet any challenges that might arise in the field of food safety. The application of the 2007-2010 plan enabled the consolidation and strengthening of risk management interventions undertaken by the ministries responsible for the environment, agriculture and livestock, public health and consumer affairs, and by local administrations, adding to the experience these organisations already had. Evaluation, institutional coordination and communication activities have been strengthened since the creation of the Food Safety Agency of Catalonia.

Despite the strength of the public system, to which we must add the efforts of the operators of all the food sectors, there is still room for improvement. It is necessary to raise food safety evaluation, management and communication to the highest levels of excellence and adapt them to the variable and dynamic context we are currently immersed in. The 2012-2016 Food Safety Plan of Catalonia must serve as a frame of reference to provide the integrated and shared vision required to respond to current and future needs in food safety.

Importance of the Agri-food Sector in Catalonia

Beyond the clear objective of guaranteeing safe and quality food, it is necessary to consider the importance of the agri-food sector in a global context and as a competitiveness factor. To illustrate the decisive weight of the agri-food sector in Catalonia it is sufficient to quote a few figures. The agricultural and livestock industry and the food processing industry account for around 4% of Catalonia's gross domestic product (GDP) and 2.4% of the working population. If we add the food wholesale and retail industry and the HORECA (hotel, restaurant and catering) sector to this, the proportion in terms of GDP is 5.9% (based on 2007 data). It must be taken into account that this is produced in a global context in which the service sector accounts for two-thirds of GDP.

With net sales, in 2010, of some €18.842bn, the agri-food industry is an essential element of the Catalan industrial complex (20.1%). The processing of food and drink has become the leading industrial sector in terms of net sales, closely followed by the chemical industry and the manufacturing of transport materials. The agri-food sector is also significant in terms of jobs, employing some 75,593 people (ranking first in the industrial sectors) throughout the territory at almost 3,000 establishments with salaried employees (third position). But the importance of the sector goes beyond Catalonia. In Spain as a whole, Catalan agri-food sales also occupy a dominant position, above all the other autonomous communities, both in terms of sales (22.9% of the global total) and the number of workers (20.8% of the total).

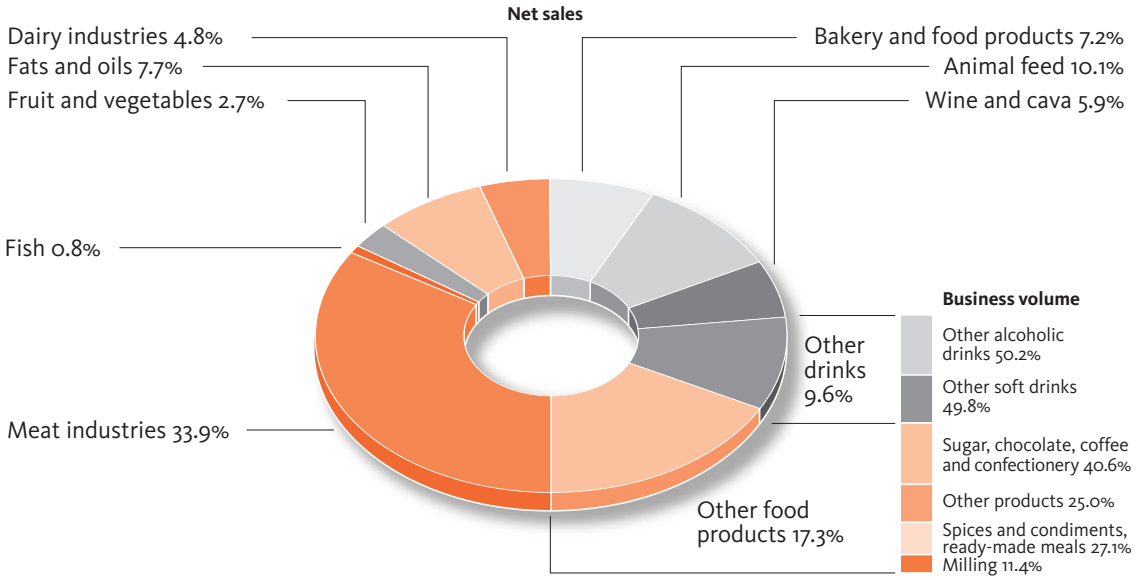
Basic agribusiness data

	Spain (S)	Catalonia (C)	C/S (%)
Net sales of the total industry* (€bn)	414.038	93.523	22.6
Net sales of the food and drink industry (€bn)	82.317	18.842	22.9
Food and drink industry/total industry (%)	19,9	20,1	
People employed in the total industry* (in millions)	2.134	465	21.8
People employed in the food and drink industry (in thousands)	364	76	20.8
Food and drink industry/total industry (%)	17,1	16,3	
Establishments in the total industry	3.763.229	27.177	0.7
Establishments in the total food and drink industry	35.008	2.694	7.7
Food and drink industry/total industry (%)	0,9	9,9	

* Not including construction.

** Sources: Spanish National Institute of Statistics (INE) and the Statistical Institute of Catalonia (Idescat).. Industrial Survey (Idescat) and Industrial Survey of Companies (INE) 2011.

Sectoral structure of the Catalan agri-food industry



Source: Idescat (2011).

The solid food group is clearly larger than the drink group, and meat production is the largest sector within food, accounting for almost 34% of the total.

As a whole, primary processing companies account for more than two-thirds of total production in the subsector. The primary processing subsector, with more than two-thirds of the companies, employs 53% of the workers in the sector and accounts for 60% of net sales. The greater significance of the activities in the secondary processing sector in terms of employment (47%), although not in terms of production (less than one-third), is explained by the high labour requirements of certain specialities and the mechanisation difficulties of certain processes.

The meat processing sector is the largest in the Catalan food industry. Its net sales account for more than a third of the total of the sector, with employment approaching 40% of the total. Moreover, if we add the dairy industry (4.8%) and the animal feed industry (10.1%) the total is 48.8% of net sales. In terms of establishments, however, it is exceeded by the bread and baked goods industry. The next largest sector after meat is the other food products industry, with 17.3% of net sales.

A cluster can be defined as a geographic concentration of interrelated economic activities that are strengthened by their proximity. According to 2006 data from the European Cluster Observatory (CSC) of the Stockholm School of Economics, Catalonia is among Europe's leading agri-food areas.

The agri-food sector is also significant in terms of exportation, third only to the chemical and car industries. According to Idescat data, in 2012 (January-November) Catalonia exported goods to the value of €53.783bn, representing an interannual increase of 5.3%. By activity branch, the increases in the food and drink industry (13.1%), the agriculture, livestock, game, forestry and fishing sector (10.5%), the

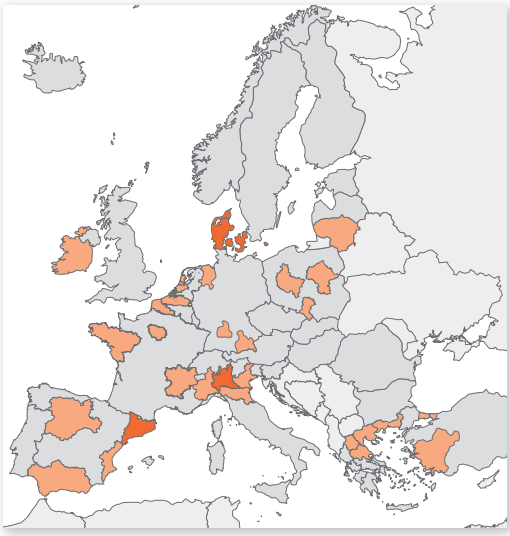
machinery and mechanical equipment (7.6%) and motor vehicles industry (7.3%) should be noted. The agri-food sector accounts for around 11.4% of Catalonia's total exports.

Ranking of agri-food clusters: Catalonia, Europe's leading region

Taken together, the primary agricultural processing and food processing industries consolidate Catalonia's position as Europe's leading agri-food region. Catalonia is Europe's leading agri-food region, closely followed by Lombardy.

The importance of Catalonia's primary processing industries, which complete the cluster effect, should be noted.

Regions and jobs	Agricultural industries	Food industries	Total agri-food industries
• **Catalonia (Barcelona)**	**26.434**	**103.066**	**129.500**
• Lombardy (Milan), Italy	15.293	107.806	**123.099**
• Denmark, Denmark	10.740	76.203	**86.943**
• Andalusia (Seville), Spain	28.247	51.801	**80.048**
• Emilia-Romagna (Bologna), Italy	9.438	63.745	**73.183**
• Flemish Region (Antwerp), Belgium	6.562	64.903	**71.465**
• Brittany (Rennes), France	2.840	67.830	**70.670**
• Veneto (Venice), Italy	8.488	62.162	**70.650**
• North Holland (Amsterdam), the Netherlands	20.973	45.787	**66.760**
• Pays de la Loire (Nantes), France	2.944	61.321	**64.265**



The value of Catalonia's leadership is enhanced by its relationship with its population, as even though it is third in terms of population it is first in terms of jobs in the agri-food sector.

Lombardy: 9.5 million people
Andalusia: 8 million people
Catalonia: 7.1 million people
Denmark: 5.2 million people

The observatory also takes into account the size of the industries. The three most competitive regions according to the size of their food processing industries are Catalonia, Lombardy and Denmark, which are in fact the top three in the ranking

Source: the European Cluster Observatory (CSC) of the Stockholm School of Economics (2006).

Reference should also be made to the importance of tourism because of its relationship with food safety. The quality and safety of the food that tourists consume in Catalonia directly affect its image and prestige, not only in terms of tourism and the hotel industry, but also globally. Catalonia is the top tourist destination in Spain and among the leading destinations in Europe. Tourism is one of the main elements of the image that Catalonia projects to the rest of the world and one the main sources of its wealth. It accounts for 11% of GDP and has an impact of €13.470bn on the Catalan economy, generating more than 180,000 jobs. Almost 24 million tourists visit Catalonia each year, 15 million of them from outside Spain.

Consumption is also a significant economic variable due to its importance in terms of the gross domestic product (GDP) and because it is an indicator of the well-being of the public. According to Eurostat data, Europeans spend 14.4% of their outgoings on food consumption. The products with the highest consumption volume in the Catalan shopping basket are fresh fruit and vegetables, alcoholic drinks, and milk and dairy products, followed by meat and meat products.

Total food consumption in Catalan homes

Products	Food consumption
Eggs	54.2
Meat and processed meat products	387.4
Fish products	191.5
Milk and dairy products	714.4
Bread, biscuits, pastries and confectionery	315.3
Cocoa and chocolate	21.2
Coffee and other infusions	12.1
Rice, pasta and pulses	93.4
Sugar	24.8
Oils and fats	92.3
Fresh fruit and vegetables	1,311.5
Processed fruit and vegetables	96.8
Potatoes	177.5
Nuts and dried fruit	20.6
Ready-made meals	107.7
Wine and cava	90.1
Beer	106.8
Other alcoholic drinks	15.1
Soft drinks (including fruit juice)	895.8
Others (olives, sauces, honey and other products)	139.1

In millions of kilograms.

Source: Consumption panel of the Spanish Ministry of the Environment and Rural and Marine Affairs

These figures are just some examples of the role the agri-food sector plays in meeting the strategic challenges facing Catalonia, such as competitiveness, territorial balance, social cohesion, and the penetration of international markets, which demand the commitment of society as a whole and a relationship management approach for the corresponding policies.

Background and Initial Situation

One of the main elements necessary to prepare and monitor a strategic plan is the availability of information systems to determine the situation over time by means of quantitative indicators. Since 2005 information has been periodically compiled by means of the preparation of an annual report on food safety in Catalonia.

The information collected in these reports has enabled the periodic analysis of the food safety situation in Catalonia and the monitoring of the food safety plan.

There is room for improvement in the collection, management and analysis of this information, but we currently have sufficient information to have an overview and analyse the results, which are of great use in terms of strategic planning and monitoring. Accordingly, in 2011 a report was issued on the assessment of the results of the 2007-2010 plan. Without reproducing its entire content, some data can be cited to illustrate the evolution of the main indicators established in the plan in recent years and the initial situation of the 2012-2106 plan. It should be taken into account that sudden changes are not common in food safety, progressive evolution over time with some oscillations being the norm. This is why the results and trends observed in recent years are a good indication of the current situation and its future evolution.

Without going into too much detail, as a monographic study on the analysis of the food safety situation has already been published, from the analysis of the information available in recent years we can extract certain data and conclusions to help us to understand the general situation of food safety at the start of the 2012-2016 plan.

Foodborne diseases

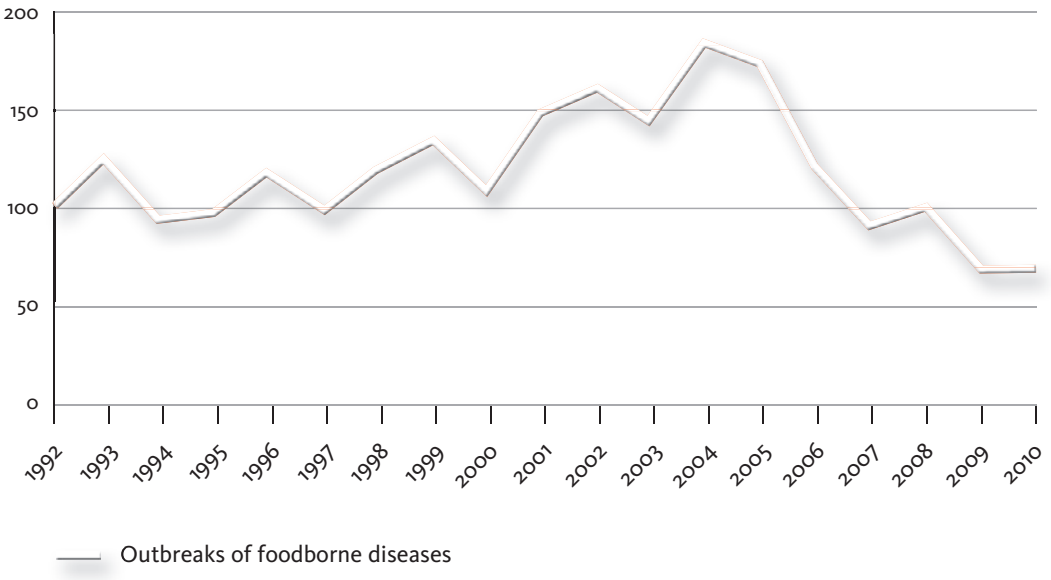
The main problem in relation to food safety in Catalonia continues to be biological risks, the cause of practically all diagnosed foodborne diseases. They are normally mild cases with very low mortality rates. In recent years the number of outbreaks of foodborne diseases and affected people has been following a downward trend.

More than 80% of the outbreaks in which the causal agent has been identified are associated with a specific group of agents: *Salmonella, Staphylococcus aureus* and norovirus.

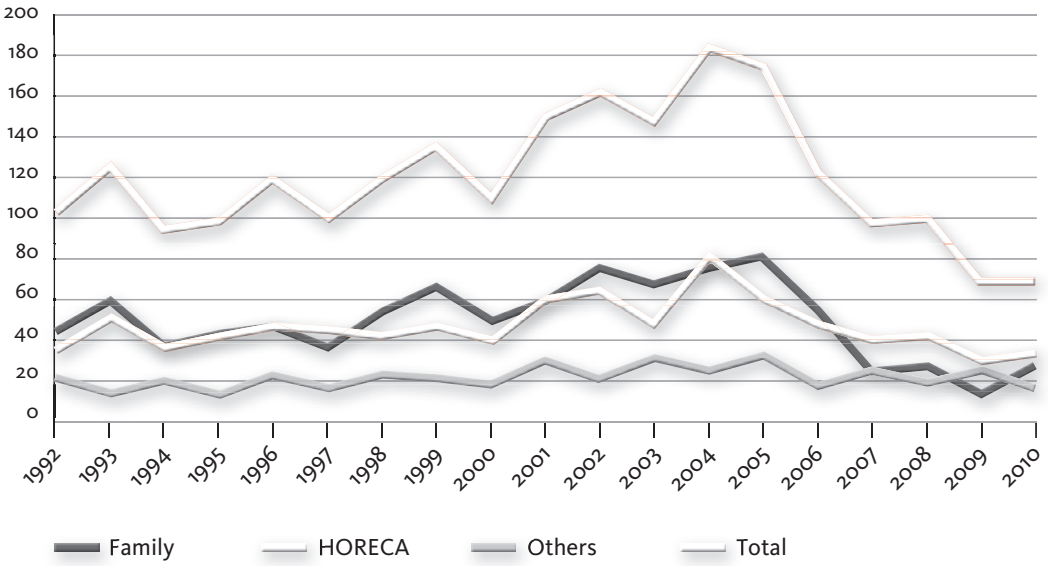
Outbreaks of foodborne diseases reported in Catalonia are associated with specific scopes of the final phases of the food chain, mainly the family or domestic scopes, which accounted for 45.1% in 2006, 27.8% in 2007 and 30% in 2008. Activities in

which food is prepared and served directly for consumption in situ or for take away, especially in the HORECA sector, accounted for 39.4% in 2006, 44.4% in 2007 and 48% in 2008.

Evolution of the number of foodborne disease outbreaks, 1992-2010



Main areas of foodborne disease outbreaks reported in Catalonia, 1992-2010



Source: Ministry of Health.

The incidence rate of foodborne diseases requiring individual notification is low. However, it must be taken into account that some diseases are not exclusively transmitted this way, such as brucellosis, in which direct contagion among livestock and veterinary professionals is significant.

The available microbiological notification data shows that in the majority of cases the incidence rate of the diseases is not high, with the exception of those caused by *Campylobacter*, *Salmonella* and rotavirus, which are agents to which special attention must be paid.

Considering the seriousness of the disease and the strong association of the transmission of the agent with food, express mention must be made of microbiological notifications due to *Listeria monocytogenes*, even though the number of cases is low.

Microbiological notification in Catalonia.
Agents capable of causing foodborne diseases, 2004-2010

Agents	2004	2005	2006	2007	2008	2009	2010
Nontyphoidal *Salmonella*	3,790	2,415	2,079	2,045	2,111	2,441	1,693
S. typhi/paratyphi	12	14	16	32	14	25	19
Shigella sonnei	52	51	47	36	29	40	41
Shigella flexneri	20	25	25	35	30	44	30
Shigella spp	9	5	13	11	10	12	19
Campylobacter jejuni	2,941	2,193	2,636	3,175	2,758	2,953	2,434
Campylobacter spp	543	246	341	425	547	543	446
Yersinia enterocolitica	24	23	26	47	42	32	22
Enterotoxigenic *E. coli*	1	6	2	8	4	1	8
Vibrio spp	11	1	3	0	0	3	1
Vibrio parahaemolyticus	—	—	5	0	4	1	0
Vibrio cholerae	—	—	2	0	1	2	0
Rotavirus	1,047	1,002	1,483	1,590	1,410	1,536	1,363
Adenovirus	140	51	175	199	165	179	189
Listeria monocytogenes	94	55	56	51	68	79	69
Hepatitis A virus	60	54	85	439	42	66	30
Brucella	18	9	8	6	6	6	6

Source: Ministry of Health.

Prevalence of hazards in food and exposure of the population

From analyses performed on food we can conclude that rates of compliance with applicable regulations are high in global terms. However, a greater prevalence of microbiological hazards is observed in certain raw foods, varying according to the type. The agents with the highest prevalence are *Bacillus cereus, Salmonella, Campylobacter, Yersinia enterocolitica, Staphylococcus aureus* and norovirus in certain raw foods. This problem is concentrated in groups of foods that are consumed cooked, which means that the risk is largely mitigated.

It is important to note that the data from analytical surveillance programmes matches the data that can be obtained from information exchange and alert systems. The pathogens in circulation in Catalonia are, then, the same as those in the rest of Europe. The biological agents most reported to the European alert system from 2007 to 2010 were histamine in fish products; parasites in fish; *Listeria monocytogenes* in fish, meat and meat products; Salmonella in fish, meat and meat products; *Campylobacter* in meat and meat products; and indicator microorganisms in fish products.

Biological hazards in food: general rates of compliance, 2006-2010

Hazards	2006	2007	2008	2009	2010
Biological hazards in food[1]	93.5%	96.8%	95%	96.8%	96.7%
Biological hazards in food[2]	95%	95%	99%	97%	100%

Sources: 1. Analytical food surveillance programme of the Health Protection Agency.
2. Analytical food surveillance programme of the Barcelona Public Health Agency.

Available studies on dietary exposure to contaminants show levels that are below the safety levels established by the World Health Organisation. In addition to the data summarised in the table below, more detailed information can be found in the studies carried out in recent years available on the ACSA website (*http://www.gencat.cat/salut/acsa*).

Evolution of the estimated* ingestion of contaminants, 2000-2006

Contaminant	2000	2006	Trend	Safety level
Arsenic (As)	42.42 µg/day	39.62 µg/day	–	150µg/day
Cadmium (Cd)	15.66 µg/day	17.19 µg/day	+	25 µg/day
Methylmercury (Hg)	8.03 µg/day	12.60 µg/day	+	16 µg/day
Lead (Pb)	27.51 µg/day	20.63 µg/day	–	250 µg/day
PBDE (polybrominated diphenyl ethers)	97.30 ng/day	75.45 ng/day	–	Not set
PCN (polychlorinated naphthalenes)	45.78 ng/day	7.25 ng/day	– –	Not set
PCDE (polychlorinated diphenyl ethers)	41.04 ng/day	51.68 ng/day	+	Not set
PCDD/F (dioxins and furans)	95.41 pg WHO-TEQ/day	25.67 pg WHO-TEQ/day	– –	70-280 pg WHO-TEQ/day
PCB (polychlorinated biphenyls)	150.1 pg WHO-TEQ/day	52.40 pg WHO-TEQ/day	– –	70-280 pg WHO-TEQ/day
PCDD/F+PCB	245.53 pg WHO-TEQ/day	78.07 pg WHO-TEQ/day	– –	70-280 pg WHO-TEQ/day
PAH	8.42 µg/day	12.04 µg/day	+	Not set
HCB	166.2 ng/day	71.62 ng/day	– –	11,200 ng/day

Source: Cohort study on the chemical contamination of food in Catalonia (2005-2007).
Toxicology and Environment Health Laboratory, Rovira i Virgili University and Toxicology Research Group, University of Barcelona, commissioned by the Food Safety Agency of Catalonia.

*Ingestion estimated for a man weighing 70 kg.

Chemical hazards in food: general rates of compliance, 2006-2010

Hazards	2006	2007	2008	2009	2010
Chemical hazards in food [1]	95.3%	93.5%	97%	99.8%	99.6%
Chemical hazards in food [2]	96%	97%	98%	98.6%	98.7%

Sources: 1. Analytical food surveillance programme of the Health Protection Agency.
2. Analytical food surveillance programme of the Barcelona Public Health Agency.

Analyses performed to detect and quantify chemical hazards provide general rates of compliance (percentage of compliance with respect to the total number of checks carried out) that are also high, but some problems are observed with regard to certain additives and contaminants.

Within the additives group, the main irregularities refer to sulphur dioxide (sulphites) and nitrates and nitrites. With regard to contaminants, heavy metals, polycyclic aromatic hydrocarbons (PAHs) and acrylamide in certain products are the main problems. However, irregularities found with respect to these chemical hazards would not be relevant in a varied and diversified diet, considering that when levels are found to be above the legally established limits corrective measures are applied by the competent authorities, including the withdrawal of the affected products from the market.

With regard to pesticide residue, according to data from official analytical surveillance programmes, in 2006 and 2007 there was a reduction in the rates of compliance, which in 2006 decreased to 87.7% and in 2007 to 85%. This situation is probably related to regulatory changes made in 2006, when the authorisation of a significant number of active principles that had been legally used until that time was revoked. Following this transition stage, there was a return to the levels of compliance of previous years, exceeding 99.9%. The results of the analytical surveillance programme of the Barcelona Public Health Agency should also be noted as they present rates of compliance above 95%, indicating a certain level of variability depending on the time and place of the sample taking.

In the area of medical residue in food products of animal origin, the rates of compliance are very high, in excess of 99%, and have been stable for some years.

Similarly, in the case of biological hazards, if we compare the available data in Catalonia with that of the European Rapid Alert System for Food and Feed (RASFF), we can see that they match in terms of the main hazards detected. Certain additives like sulphites, heavy metals like mercury, contaminants like polycyclic aromatic hydrocarbons and pesticide residue are the most frequent causes of the alerts and notifications communicated via the RASFF in recent years.

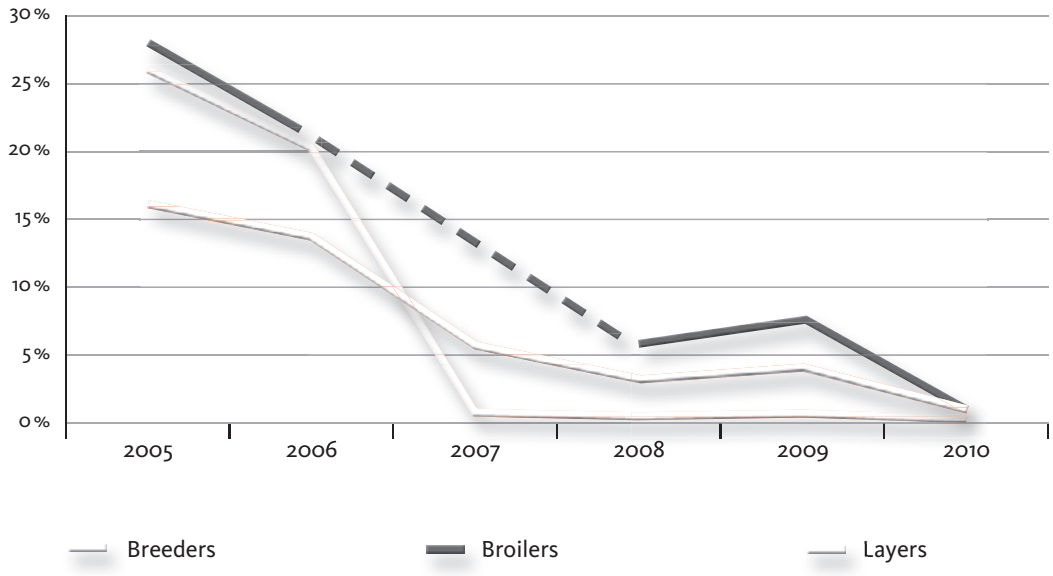
In the area of animal health and with regard to zoonotic diseases, the available data indicates a positive evolution in relation to the control of diseases that are

still present in Catalan livestock and subject to control programmes. Diseases like tuberculosis and bovine brucellosis have compliance rates in excess of 98-99%, whereas in the case of ovine and caprine brucellosis they are slightly lower at around 98%, according to 2010 data. The incidence of zoonotic diseases in animals slaughtered at abattoirs is low. In any case, they should not suppose an imminent risk to health given the unacceptable meat inspection and disposal measures applied at abattoirs. This data concurs with the low incidence in humans, according to the available data, of diseases like brucellosis, hydatidosis and other zoonoses.

The evolution of the incidence of bovine spongiform encephalopathy enables us to predict that we are in a regression phase of the disease after an inflection point in 2003, when the highest number of cases (19) was registered. The data is showing a progressive decrease, with one case in 2008 and no cases in 2009 or 2010.

The prevalence of *Salmonella* at farms is the main area in which intensive work must continue, even though a downward trend has been observed. The graph below shows this trend.

Evolution of the prevalence of Salmonella, 2005-2010



Source: DAAM

Moreover, more studies on the prevalence in animal populations of other agents capable of causing foodborne diseases in humans, such as *Campylobacter,* should be undertaken. A study carried out in Catalonia in 2006 showed prevalences of up to 86.9% in the caecums of investigated birds. The reduction of this prevalence is undoubtedly a challenge for the future.

Without going into too much detail, we can refer to other spheres where the available data shows a favourable situation. Accordingly, the data on the quality of water and mollusc production indicates that there is systematic surveillance with a low incidence rate. With regard to the area of animal feed, the analyses show high rates of compliance: over 99% for chemical hazards and around 95% for microbiological hazards.

Level of compliance with health and safety regulations applicable to food chain activities

The data related to compliance with regulatory health and safety conditions that are applicable to food chain activities is not yet complete because the development of efficient information systems in these spheres is complex. Based on the available data, which corresponds to the food industries, it is possible to estimate that more than 98% of the establishments are in a medium to very high situation in relation to compliance with hygiene and installation conditions. With regard to self-assessment, in 2006 more than 80% of the establishments were in a low compliance situation, which was reduced to 65.69% according to 2008 data, representing progress in this important sphere. In general, an increasing trend is observed in the level of compliance, which is very high in large companies. Moreover, any irregularities found are corrected quickly or are not considered serious, as can be deduced from the fact that less than 2% of inspections result in fines.

Furthermore, the risk is assessed in accordance with various parameters, such as the production volume of the company, the type of product, and distribution, enabling the intensity of the assessments in activities with the highest risk to be increased.

Major efforts have been made to foster self-assessment in the primary sector, as borne out by recently implemented programmes such as the surveillance of hygiene conditions of farms and the results of compliance with conditionality in the primary sector. Conditionality is a set of management requirements in the area of public health, animal and plant health, the environment and animal welfare, in addition to good agricultural and environmental conditions, to be observed by the beneficiaries of certain direct subsidies from the Common Agricultural Policy (CAP) whose activity is agriculture and/or livestock, and the beneficiaries of certain rural development subsidies in accordance with European Union regulations.

Issues related to food safety

This group includes issues that directly or indirectly affect food safety in general, in addition to the perception and interests of the consumers and of society as a whole, but without posing a direct health risk. Accordingly, it includes aspects such as labelling, presentation, advertising and composition, animal health and the conservation of fishing resources.

Rates of compliance in animal welfare are variable, ranging from 68% in poultry to 96% in cattle. However, the majority of irregularities found are related to documentation and not the condition of the animals. In this sphere, major efforts have been made in recent years to improve training, information, research and official assessments by means of coordinated animal welfare programmes.

In the area of animal welfare, in relation to animal diseases that cannot be transmitted via food, in recent years there have been no epizootic outbreaks that might affect public trust. Moreover, a highly favourable situation has been observed with respect to diseases such as bovine leucosis, contagious bovine pleuropneumonia and Aujeszky's disease.

With respect to the conservation of fishing resources, a rate of compliance of 90% has been observed according to data from recent years.

With regard to the labelling, composition and presentation of food in retail establishments, a rate of compliance of 90% according to 2010 data has been observed. However, the results of the latest inspections indicate that despite the high level of compliance in the labelling of food, there are specific sectors where it is still necessary to make progress, such as the case of the fresh fruit and vegetables, beef, and fresh fish sectors, where the rate of compliance is 40.6%.

Public perception

The latest available data is based on perception studies from 2007 to 2009, concluding that although there is not a lack of general public trust, there is a demand for effective official control mechanisms and a lack of knowledge of the existing ones. There is scant knowledge of the importance of hygiene measures and health risks and the good practices to be applied.

Another major conclusion drawn from these studies is that in public perception, issues related to the labelling and composition of food in terms of nutrition and health are becoming at least as important as those related to food safety and the presence of hazards.

A challenge for the future is the development of quantitative indicators in the sphere of public perception and knowledge. Nevertheless, recent monographic studies are now available on the Food Safety Agency of Catalonia's website.

Strategic Orientation

The strategic orientation of the Food Safety Plan of Catalonia was already developed in the 2007-2010 plan, where it is presented in great detail. The basic elements that define it are provided below.

Vision, Mission and Aims

Strategic planning is based on the definition of a vision, a mission and a number of aims to guide the design and structure of the plan in relation to the definition of spheres of intervention and objectives.

VISION of the Food Safety Plan of Catalonia

- A food chain in which health hazards and other related problems are eliminated or reduced to acceptable levels by means of effective systems established through participation and consensus, which are implemented in a coordinated and complementary manner by the participants in each one of its stages, from primary production through to consumption; while the competent authorities verify in an efficient and coordinated manner compliance with the established standards and ensure they are met; and in which a sensitive and well-informed public has complete trust due to the credibility of the implemented evaluation and management systems.

MISSION of the Food Safety Plan of Catalonia

- Maintain a high level of food safety in Catalonia, acting as an indicative instrument and frame of reference to define, in collaboration with all the participants in the food chain, including consumers, the objectives and interventions to be developed by Catalan public administrations and the monitoring and evaluation systems.

This mission can be broken down into the following aims:

AIMS of the Food Safety Plan of Catalonia

1. Prevent diseases related to food and reduce their incidence and prevalence to the lowest levels that can be reasonably expected.
2. Prevent or reduce to the lowest levels that can be reasonably expected or to acceptable levels the exposure of the public to agents capable of causing foodborne diseases.
3. Maintain a high level of trust in the Catalan food safety system among the people of Catalonia and other countries.
4. Maintain a high level of protection in relation to the interests of the public in areas and issues related to food safety, such as the health, nutrition and welfare of animals; plant health; and the quality of the products from the food chain.
5. Maintain a high standard of fair trading principles where food safety is concerned.

Within the framework that defines the mission, vision and aims there are other key strategic orientation elements that should be stated, as summarised in the chart below.

Fundamental elements of the strategic orientation

1. Provide a general framework for the identification of problems and needs.
2. Guide the concerted action of public administrations towards specific and shared results.
3. Provide an organised, coherent and integrated set of activities and services to cover the entire food chain.
4. Facilitate the work in a transversal and intersectoral manner, based on the principles of transparency and participation.
5. Specify the commitment of the public administrations responsible for food safety.
6. Improve management and public service based on the principles of sustainability, quality and efficiency.
7. Foster the collaboration and cooperation of all the participants in the food chain.
8. Evaluate the results in order to move towards continuous improvement.

Strategic planning and operational execution as essential elements of an efficient and integrated food safety system

The food safety plan establishes the objectives and monitoring indicators as well as the interventions or actions to be applied in the areas of evaluation, management and communication in food safety.

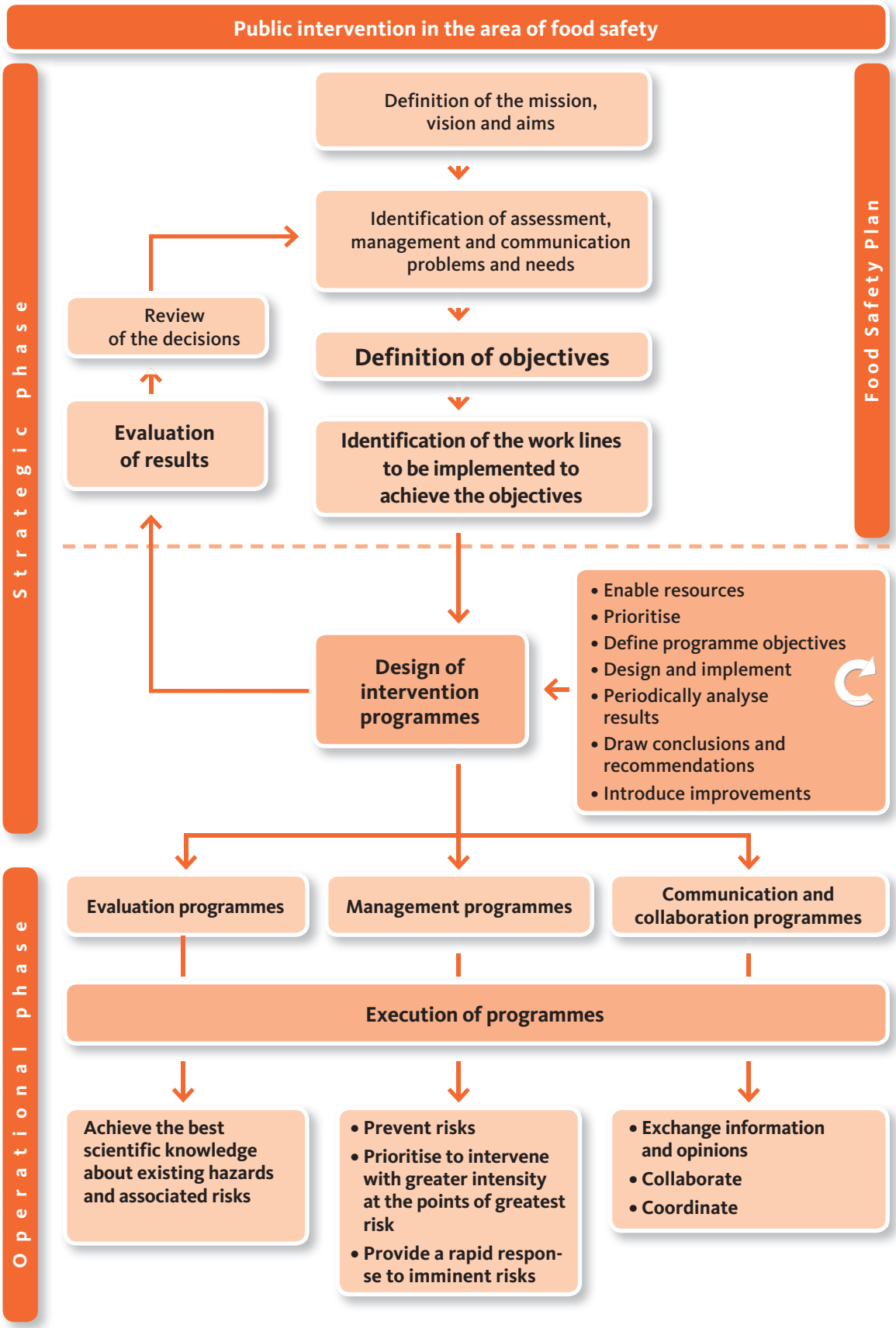
Risk assessment actions are oriented towards achieving the best possible knowledge of risks in order to place it at the disposal of those responsible for managing these risks and the rest of the participants in the food chain.

Risk management is oriented towards the minimisation of the identified risks by means of the promotion of good practices among the participants in the food chain and the application of official surveillance and control measures. The basic pillars of risk management are prevention, the prioritisation of the most relevant risks and rapid response in order to eliminate any products or practices that might suppose a risk.

Risk communication consists of the interactive exchange of information and opinions between all those involved in relation to everything associated with food safety, and is strongly associated with communication, collaboration and coordination among all those involved.

The food safety plan only covers the strategic part of an intervention and evaluation cycle and accordingly requires operational deployment in the form of programmes, activities and intervention systems, which is to be undertaken by the official bodies responsible for food safety. It should be noted that the words programme, activity and system are used in the document to refer to intervention actions. The annex to this document identifies the bodies responsible for these interventions and provides a brief description of their structure and functions. It is a highly diverse set of organisations, the food safety plan being the frame of reference for their actions in this field. Only with decisive action in relation to the implementation of intervention programmes, undertaken in a coordinated and complementary manner with the rest of the competent bodies, will it be possible to consolidate an integrated and efficient food safety intervention system.

The diagram below summarises the logical sequence and the continuous improvement cycle to be generated both with regard to the strategic phase and the operational phase of public intervention in food safety in Catalonia.


Public intervention in the area of food safety
Food Safety Plan
Strategic phase
Definition of the mission, vision and aims
Identification of assessment, management and communication problems and needs
Definition of objectives
Identification of the work lines to be implemented to achieve the objectives
Review of the decisions
Evaluation of results
Design of intervention programmes
• Enable resources
• Prioritise
• Define programme objectives
• Design and implement
• Periodically analyse results
• Draw conclusions and recommendations
• Introduce improvements
Operational phase
Evaluation programmes
Management programmes
Communication and collaboration programmes
Execution of programmes
Achieve the best scientific knowledge about existing hazards and associated risks
• Prevent risks
• Prioritise to intervene with greater intensity at the points of greatest risk
• Provide a rapid response to imminent risks
• Exchange information and opinions
• Collaborate
• Coordinate

The prioritisation of objectives and the definition of indicators, a strategic orientation instrument

Another element that defines the strategic orientation of the food safety plan of Catalonia is the classification of the objectives and of the indicators used for its monitoring and evaluation. This classification is also important in terms of understanding the general focus and structure of the plan, which has changed slightly with respect to the 2007-2010 plan with the aim of making it simpler and more practical.

The World Health Organisation (WHO) defines foodborne diseases (FBD), also known as foodborne illnesses, as those that, to the extent of our current knowledge, can be attributed to a specific food due to the presence of a food hazard. This concept refers both to diseases caused by biological agents and those produced by toxins of all types. An infection is when ingested pathogenic agents are developed in the host and cause a disease; food poisoning is when the disease is produced by a toxic substance present in the ingested food, whether biological or chemical in nature.

All food safety plans must primarily be oriented towards preserving the health of the public in relation to foodborne illnesses. For this reason it is necessary to set health objectives as the primary objectives. However, indicators of foodborne diseases, even though they are useful for assessing the situation, do not have an absolute value nor can they provide a global vision in of themselves due to their complexity and the multiple factors to be taken into account. There are other parameters that need to be considered to completely cover food safety. All the available data and indicators must be coherently ordered and analysed with a logical sequence that enables them to be studied and interpreted considering the spheres that currently comprise food safety and establishing an order based on a priority criterion. The groups of parameters that enable the establishment of food safety objectives and indicators are presented below in order of priority. They all have their own separate limitations, which is why it is advisable for the food safety plan to cover them as a whole.

Incidence of foodborne diseases in the population. They are the most direct indicators of the level of food safety. However, given that it is difficult to have complete information, it is necessary to complement the information with other indicators and to carry out studies that enable deeper understanding. So, for example, it is difficult to have information about long-term diseases caused by chemical hazards to which people have been exposed via food and about the importance of food in relation to other sources of exposure. Similarly, complete information is not available about biological hazards causing individual cases or outbreaks with a low number of affected people that are not clearly apparent and are dispersed in time and space. Moreover, limiting the monitoring of the food safety situation to morbidity and mortality data would not only be incomplete but would also not enable work to be done in the proactive and preventive dimension provided by the data on exposure to hazards and on their prevalence in food or previous phases of the food chain.

Public perception and trust. It is a very important group of indicators, given that the public must not only be safe, but also perceive that it is. In this group there are some

difficulties obtaining qualitative indicators, as specific studies are required to have the necessary information, often resulting in the need to work with qualitative indicators.

Public exposure to food hazards. This group of indicators is located on a lower level than the previous ones in terms of importance. It is especially useful in the case of chemical risks, in which chronic exposure and long-term effects with major interactions come into play with other factors with which it is not possible to establish direct correlations between the disease and the cause. Specific and relatively expensive studies are required to determine the levels of exposure, which is why it is difficult to obtain extensive and annually updated information about all the existing hazards.

Prevalence of hazards in foods placed at the disposal of the public. It refers to the presence of hazards when food is placed at the disposal of the consumer, normally in a retail establishment. The indicators in this group do not necessarily correspond to the level of exposure of the public nor do they enable direct extrapolation. So, for example, in the case of biological hazards in fresh food, thermal treatments and hygiene measures applied in preparation and cooking partially or totally eliminate these hazards, in such a way that exposure is produced when these measures, especially thermal treatment, have not been applied correctly. In the case of chemical hazards, even though in general they are more stable in cooking processes, exposure levels and the possibility of causing adverse effects to health are determined by the concentration of the hazard and the total amount ingested within the context of total diet in the long term. However, it is accepted as a general principle that a low prevalence (presence and concentration) of hazards and compliance with the legally established maximum limits are associated with less exposure and, therefore, with a higher level of safety.

Prevalence of hazards in previous phases of the food chain. In a similar manner to the case above, the indicators in this group do not enable a direct extrapolation of the levels of exposure of the population, but they are useful indicators of the situation in each stage and enable the determination of possible sources of the hazards that might finally reach the consumer via food. Although there are barriers prior to consumption that favour the reduction of the presence and concentration of hazards, there is no doubt that minimisation in previous phases of the food chain is associated, to a greater or lesser extent, with the reduction of the prevalence in the food placed at the disposal of the population and, consequently, with the exposure of consumers. So, for example, it follows that a low prevalence of pathogens like Salmonella or Campylobacter in food-producing animals will contribute to a low prevalence of these agents in subsequent phases of the food chain. This is why this group of indicators must be taken into account in the evaluation of the general situation.

Level of compliance with food health and safety regulations applicable to the activities of the food chain. As with the two previous groups, it is not possible to establish a direct correlation between levels of compliance with health and safety regulations and the incidence of disease or exposure levels. However, the health and safety conditions to be complied with by food chain operators in accordance with applicable regulations in relation to facilities, processes, self-assessments and employee training, among others, are designed to prevent the presence of hazards in food chain products or reduce them to acceptable levels. Accordingly, a high level of compliance must be theoretically associated with a high level of safety. For this reason, compliance level indicators must be considered as useful references to determine the situation, even though they must be suitably dimensioned. In order

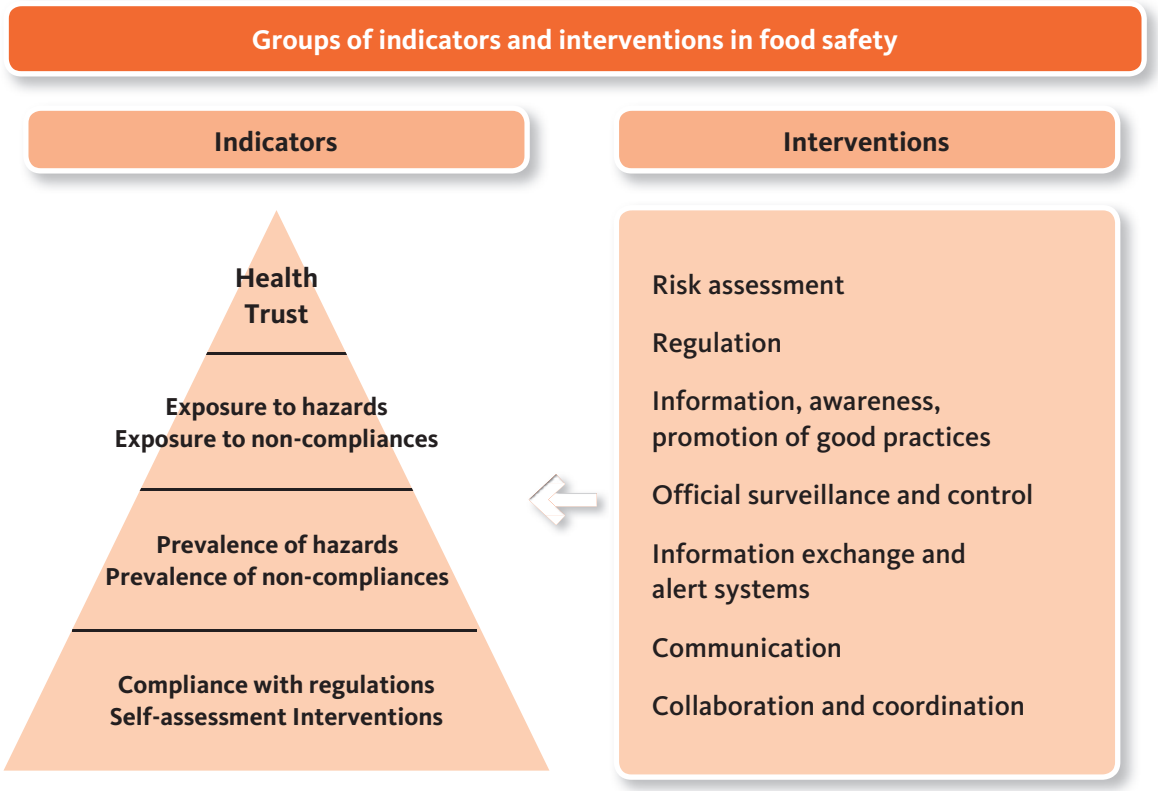
to contextualise these indicators it is necessary to take into account that, with the exception of certain conditions that might be considered critical, the vast majority of health and safety conditions provide a level of safety when taken together, while their significance is relative when treated separately. So, non-compliance with a part of the conditions not considered critical should not necessarily mean a complete breach of the safety levels.

Level of compliance with regulations on issues that do not affect food safety. This group of indicators covers all issues that do not directly affect the safety or health of the consumers but do affect their trust or perception, in addition to the protection of their interests and the correct operation of the markets. This refers to irregularities in labelling, composition, quality, differentiated denominations, the labelling of GMO content, information about the origin, especially with regard to whether it is from the European Union, and nutritional and health claims, among others. The data necessary for these indicators can be obtained from official control programmes or from surveys carried out to this effect, but complaints and queries lodged with public administrations and consumer associations can also be a good source of information.

The diagram on the next page summarises the logical sequence of the aforementioned objectives and indicators. The elements at the bottom of the pyramid contribute to compliance with those at the top, in such a way that, in order to achieve high levels of public health and trust, it is necessary to achieve lower levels of exposure both to food hazards and regulatory breaches (quality, labelling, etc.). This low exposure is determined by a low prevalence of hazards and breaches in the food placed at the disposal of the consumers and, evidently, in previous phases of the food chain. Compliance with regulations, and especially those related to self-assessment, decisively contributes to achieving these objectives, which is why they form the base of the pyramid, but they are also important as a basic condition to enable food produced in Catalonia to access the European and international markets in conditions of equality and without obstacles.

To the right of the pyramid there is a summary of the main actions and interventions that can be implemented in order to influence the evolution of the indicators over time.

The periodical analysis of food safety in Catalonia is essential for the evaluation of the results of the global policy and for constant improvement in terms of risk management. The application of an information collection and results analysis system based on classification in order of priority can be very useful to achieve a better understanding of what food safety means and to more effectively focus management and communication measures.


Groups of indicators and interventions in food safety
Indicators
Interventions
Health
Trust
Exposure to hazards
Exposure to non-compliances
Prevalence of hazards
Prevalence of non-compliances
Compliance with regulations
Self-assessment Interventions
Risk assessment
Regulation
Information, awareness, promotion of good practices
Official surveillance and control
Information exchange and alert systems
Communication
Collaboration and coordination

II Objectives and Interventions 2012-2016

Objectives and Interventions 2012-2016

The spheres for which the plan must define objectives and interventions have been established based on the aims and in accordance with the risk analysis procedure.

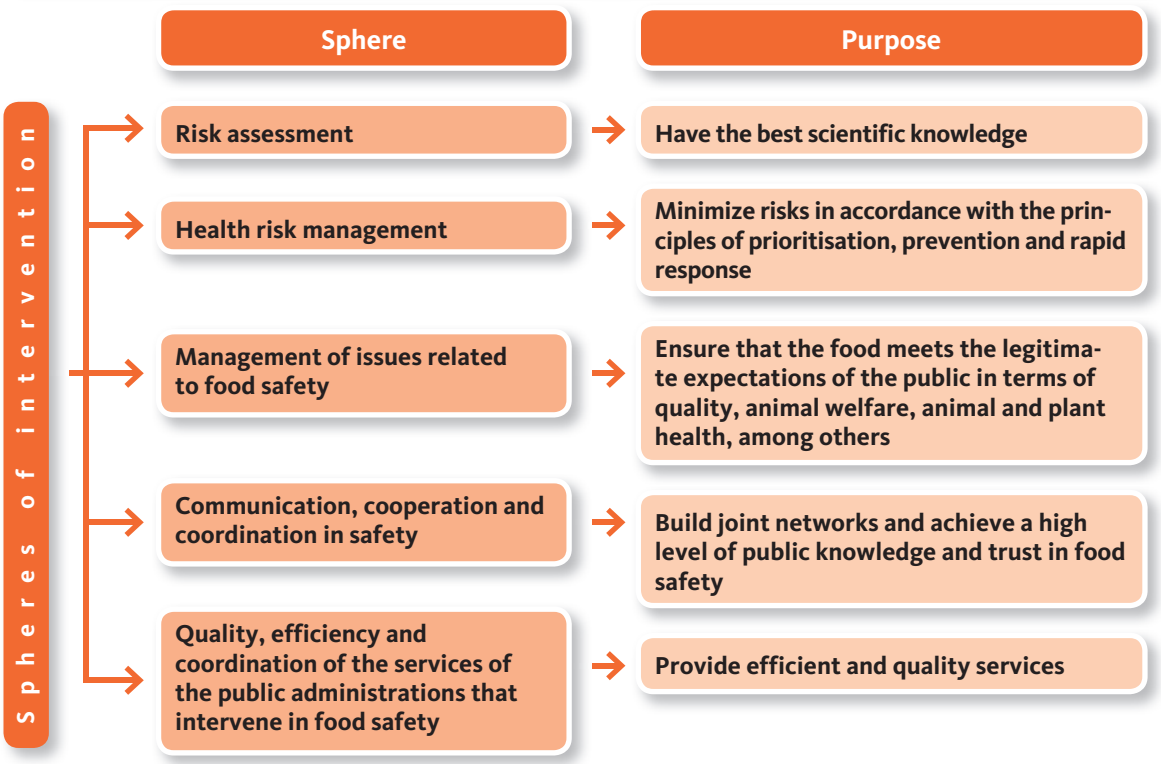
Two major areas are proposed: the area of risk analysis, which includes objectives and interventions in risk assessment, management and communication; and the area of cooperation, efficiency and coordination, which proposes objectives and interventions aimed at improving the quality, efficiency and coordination of the activities of the public administrations involved, in addition to collaboration and cooperation with all the participants in the food chain.

The section of the 2007-2010 Food Safety Plan of Catalonia on the management of health risks was divided into four subsections: general food safety conditions, biological hazards, chemical hazards and adverse reactions to food. Even though it is an interesting formal classification from the theoretical perspective, this compartmentalisation contributes to the fact that the resulting document is complex and voluminous. With the aim of preparing a more concise and simpler executive document, the content of these sections has been reduced to a single subchapter on the management of health risks in the 2012-2016 Food Safety Plan of Catalonia.

This structure responds not only to simplification needs, but also to the fact that the objectives, the indicators and the interventions in the area of health risk management can be understood to be a continuous and interrelated whole. For similar reasons, considering the strong interrelationship and complementarity they present, the chapters on food safety communication and on the collaboration and cooperation of the participants in the food chain have been restructured to form a single chapter.

Similarly, the classification of the various spheres of intervention into two major sections, ‘risk analysis’ and ‘cooperation, efficiency and coordination’, has been discarded. They are maintained as a theoretical reference but not reflected in the structure of the document in order to reduce its complexity as far as possible.

Simplified diagram of the spheres of intervention of the Food Safety Plan of Catalonia and main associated purposes



In accordance with this scheme, the objectives and the interventions or programmes to be applied to achieve them by 2016 are defined below. Next to each intervention the main body responsible (or main bodies, in the case of shared responsibility) is identified by means of the following abbreviations:

ACA: Catalan Water Agency

ACC: Catalan Consumer Affairs Agency

ACSA: Food Safety Agency of Catalonia (specialist area of the ASPCAT)

∑ACSA: Food Safety Agency of Catalonia in collaboration with the rest of the public entities involved.

AL: local administrations

ASP: Catalan Public Health Agency (ASPCAT)

ASPB: Barcelona Public Health Agency

ARC: Catalan Waste Agency

DAAM: Ministry of Agriculture, Livestock, Fisheries, Food and the Natural Environment

DENS: Ministry of Education

DINT: Ministry of Home Affairs

DTES: Ministry of Territory and Sustainability

With regard to the attribution of responsibilities for the interventions, two clarifications must be made:

Barcelona Public Health Agency, within its territorial area, has the food safety competencies that correspond to local government while being responsible for interventions that in the rest of Catalonia correspond to the Ministry of Health through the Public Health Agency. Interventions assigned to the Catalan Public Health Agency and to the local administrations correspond to Barcelona Public Health Agency in the territorial area of the city of Barcelona.

Considering their interadministrative dimensions, the interventions attributed to the ACSA in the plan must be undertaken with the collaboration of all the administrations involved in each case and other institutions such as universities and scientific bodies like the Institute of Agri-food Research and Technology (IRTA), the Animal Health Research Centre (CReSA) and the Poultry Health Centre of Catalonia (CESAC). Accordingly, when the ACSA is identified as responsible for an intervention of the plan it is the body responsible for its promotion and coordination in collaboration with the rest of the institutions involved.

1 Risk assessment

Have the best scientific knowledge.

Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
Food risks			
O-001	Determine the hazards related to food in Catalonia, the risk to the public, the causal factors and the available management options from the scientific perspective.	Studies to evaluate associated health risks in the food chain.	Available
Issues related to food safety			
O-002	Determine existing problems in Catalonia with respect to issues related to food safety, their magnitude, the causal factors and the available management options.	Risk assessment studies in the area of issues related to food safety.	Available

Interventions

Number	Intervention	Responsible bodies
Food risks		
I-001	Set up the ACSA scientific committee and the groups of experts necessary to meet the risk assessment needs at all times.	ACSA
I-002	Consolidate and expand the database of experts in order to form ad hoc groups of experts when necessary.	ACSA
I-003	Continue preparing and expanding studies on the exposure of the public to food hazards.	ACSA
I-004	Continue fostering the preparation and expansion of risk assessment studies in collaboration with research centres, incorporating emerging fields, such as predictive microbiology, climate change and the study of new organisms entering our environment.	ACSA
I-005	Organise periodic work sessions with experts to analyse areas of interest to food safety.	ACSA
I-006	Prepare studies on the epidemiological situation of human foodborne diseases in Catalonia, involving health care services in this research.	ACSA-ASP

Interventions (cont.)

Number	Intervention	Responsible bodies
I-007	Foster the preparation of a comprehensive map of food chain hazards and place it at the disposal of all the participants in the food chain.	ACSA
I-008	Foster studies on the assessment of risks associated with the initial phases of the food chain, such as irrigation, soil, fertilisers and agricultural practices.	ACSA, DAAM, ACA
I-009	Continue fostering the preparation of updated studies on the food habits of the public.	ACSA
I-010	Continue providing scientific and technical support to risk management bodies.	ACSA
Issues related to food safety		
I-011	Guarantee that all sectors of the food chain and consumers are represented in the commissions and working groups of the ACSA.	ACSA
I-012	Continue organising period work sessions with representatives of all the sectors involved in food safety and with consumers, with the objective of analysing problems concerning issues related to food safety, seeking solutions and preparing reports and recommendations.	ACSA

2 Health risk management

Minimise risks in accordance with the principles of prioritisation, prevention and rapid response

Biological risks. Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
Foodborne diseases caused by biological agents			
O-003	Reduce the incidence of foodborne diseases.	Number of outbreaks Incidence	Reduction Reduction
O-004	Reduce the incidence of foodborne diseases in the HORECA sector.	Number of outbreaks Incidence	15% reduction Reduction
O-005	Reduce the incidence of foodborne diseases in the sphere of canteens in schools, old people's homes and other especially sensitive groups.	Number of outbreaks Incidence	25% reduction Reduction
O-006	Reduce the incidence of foodborne diseases in the domestic sphere.	Number of outbreaks Incidence	Reduction Reduction
O-007	Minimise the incidence of other biological foodborne diseases.	Number of outbreaks Incidence	Low incidence Low incidence
Presence of biological hazards in the food chain			
O-008	Minimise the presence of biological hazards in all the phases of the food chain.	Rates of compliance with applicable regulations and/or internationally recognised benchmarks.	>95%
Transmissible spongiform encephalopathies			
O-009	Absence of bovine spongiform encephalopathy (BSE) in the human and animal food chains.	Epidemiological situation and rates of compliance with BSE risk management measures.	Compliance with the requirements to classify Catalonia as a BSE-free region.
O-010	Absence of the causal agent of scrapie in the human and animal food chains.	Epidemiological situation and rates of compliance with scrapie management measures.	Compliance with the requirements to classify Catalonia as a scrapie-free region.

Chemical and physical risks. Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
Exposure to foodborne chemical agents and diseases caused			
O-011	Minimise the public's exposure to chemical hazards in their diet.	Rates of compliance in terms of overall diet with internationally recognised benchmarks.	> 99%
O-012	Maintain the absence of foodborne disease outbreaks caused by chemical agents.	Number of outbreaks.	0
Presence of chemical and physical hazards in the food chain			
O-013	Minimise the prevalence of chemical hazards in all the phases of the food chain.	Rates of compliance with applicable regulations and/or internationally recognised benchmarks.	> 95%
O-014	Minimise the presence of physical hazards in the final phases of the food chain.	Rates of compliance of the self-assessment systems with respect to physical hazards.	> 95%

Adverse reactions to food. Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
Adverse reactions to food			
O-015	Contribute to minimising the exposure of people sensitive to components of food that cause a type of adverse reaction, facilitating choices suitable to their needs.	Rates of compliance of the labelling and the composition of food with applicable regulations.	> 95%

General food safety conditions. Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
General conditions			
O-016	Food chain activities must be undertaken under conditions that enable food hazards to be controlled in order to prevent them, eliminate them and/or reduce them to acceptable levels. Note: this section includes those that are broken down below which, given their importance, are treated separately..	Rates of compliance with regulatory conditions not considered to be critical.	Rising trend
Self-assessment			
O-017	The owners of food chain companies must guarantee that the processes under their responsibility are subject to self-assessment systems that enable food hazards to be controlled in order to prevent them, eliminate them and/or reduce them to acceptable levels.	Proportion of companies implementing self-assessments. Rates of compliance with regulatory conditions.	> 95% Rising trend
Traceability			
O-018	The owners of food chain companies must guarantee that the processes under their responsibility are subject to traceability systems that comply with applicable regulations.	Proportion of companies implementing traceability systems. Rates of compliance with regulatory conditions not considered to be critical.	> 95% Rising trend
Staff training			
O-019	The owners of food chain companies must guarantee that their staff receive suitable training in the activity to be carried out and ensure that they comply with work standards and instructions to guarantee food safety.	Proportion of companies implementing staff training. Rates of compliance with regulatory conditions not considered to be critical.	> 95% Rising trend
Waste			
O-020	The owners of food chain companies must guarantee that the waste generated by their activities is managed in such a way that it does not suppose a risk.	Proportion of companies implementing waste management systems. Rates of compliance with regulatory conditions not considered to be critical.	> 95% Rising trend

Interventions

Number	Intervention	Responsible bodies
Regulatory framework		
I-013	Continue **studying needs in terms of regulations,** interpretation criteria and improvement proposals within the framework of existing working groups and commissions	DTES, DAAM, ASP, AL, ACSA
Information, awareness raising and promotion of good practices		
I-014	Continue implementing and improving **information and awareness raising systems** aimed at participants in the food chain: production, marketing, the consumption of wild game, retail, HORECA, primary production, the food industry and the domestic sphere.	DTES, DAAM, ASP, ACC, AL, ACSA
I-015	Foster **awareness and dissemination** actions, especially those aimed at owners of food preparation and service companies, in terms of hygiene aspects and adverse reactions to food.	ASP, ACC, AL, ACSA
I-016	Continue fostering the creation of **Good Hygiene Practice Guides** (GHPG) with a view to covering all non-industrial sectors, including HORECA.	∑ACSA
Official control and surveillance of regulatory compliance		
I-017	**Maintain official controls,** scheduled in accordance with the risks, with suitable regularity and periodicity, and incorporate a system to quantitatively assess the level of regulatory compliance (rates of compliance) with general hygiene conditions, self-assessment, traceability, staff training and waste management in the following spheres of intervention:	
	- Surveillance and control of farms.	DAAM
	- Surveillance and control of livestock farms	DAAM
	- Surveillance and control of animal feed production establishments.	DAAM
	- Surveillance and control of food industries.	ASP
	- Surveillance and control of HORECA establishments.	ASP, AL
	- Surveillance and control of retail establishments.	ASP, AL
Environmental surveillance and control of agents with a bearing on food safetya		
I-018	Maintain systems for the authorisation and control of activities that **affect the environment.**	DMHA
I-019	Maintain systems to control **emissions and air quality.**	DTES
I-020	Maintain systems to control **water quality and emissions.**	ACA
I-021	Maintain systems to control the **correct management of waste.**	ARC
I-022	Maintain and improve systems for the ecopathological surveillance of **wild animals** and game in addition to coordination between the various agents involved.	DAAM
I-023	Maintain the coordinated system for the surveillance of the **Ebro river** and of the food in its area of influence.	ACA, DAAM, ASP

Interventions (cont.)

Number	Intervention	Responsible bodies
Surveillance and control in the primary phase		
	Agricultural production	
I-024	Assess the risks associated with any surveillance and control actions that might be necessary with regard to irrigation, fertilisers, agricultural soils and other agricultural production factors that might suppose a risk to food safety.	DAAM, ACA, ASP
I-025	Foster good agricultural and postharvest practices specifically aimed at the prevention and control of mycotoxins.	DAAM
I-026	Maintain a system to register phytosanitary application equipment.	DAAM
	Plant health and phytosanitary products	
I-027	Maintain systems to monitor, control and eradicate plant pests.	DAAM
I-028	Expand the surveillance and control of the production, marketing and use of phytosanitary products.	DAAM
I-029	Expand the surveillance and control of phytosanitary products at source.	DAAM
I-030	Implement a plan of action to reduce the risks of the use of pesticides and their effects on human health and the environment in accordance with Directive 2009/128/EC.	DAAM
I-031	Maintain systems to train and inform users of pesticide products.	DAAM
I-032	Maintain the phytosanitary warnings system.	DAAM
I-033	Continue fostering the activity of plant defence groups.	DAAM
	Animal health products	
I-034	Expand the surveillance and control of the production, marketing and application of veterinary medication in food-producing animals.	DAAM
I-035	Maintain the veterinary medication alert management system.	DAAM
I-036	Maintain medication residue control systems at livestock farms.	DAAM
I-037	Maintain coordination between DAAM, ASP, ACSA, the judicial system and the police on the illegal use of substances in animal production.	ACSA, DAAM, ASP, DINT

Interventions (cont.)

Number	Intervention	Responsible bodies
	Animal feed	
I-038	Maintain systems to authorise and register animal feed production establishments and dealers.	DAAM
I-039	Maintain the animal feed control plan.	DAAM
I-040	Maintain the animal feed alert management system.	DAAM
I-041	Maintain the system for the surveillance and control of animal by-products not intended for human consumption.	DAAM, ARC
	Livestock production	
I-042	Maintain the surveillance and control of the quality of raw cow's milk.	DAAM
I-043	Maintain the livestock farm registration system.	DAAM
I-044	Maintain the surveillance and control of livestock farms.	DAAM
I-045	Maintain the system for the surveillance and control of the identification and registration of animals.	DAAM
I-046	Enhance and improve the systems for the documentation, surveillance and control of animal movements, fostering the use of IT systems.	DAAM
I-047	Maintain the systems for the surveillance and control of the management of livestock manure.	DAAM, ARC
	Animal health	
I-048	Maintain the systems for the surveillance, combating and eradication of foodborne animal diseases and especially those related to *Salmonella, Brucella* and TSE.	DAAM
I-049	Continue fostering the activity of livestock health defence groups.	DAAM
I-050	Maintain the control of biosafety measures at farms and during animal transportation.	DAAM
	Fishing and aquaculture	
I-051	Maintain the surveillance and control of the quality of water, molluscs and toxic phytoplankton.	DAAM
I-052	Maintain the surveillance and control of dioxins in fish.	DAAM
I-053	Maintain the control of the accompanying documentation for seafood.	DAAM
	Conditionality	
I-054	Continue linking the receipt of economic aid for operators in the primary phase to compliance with food safety conditions within the framework of European regulations on conditionality.	DAAM

Interventions (cont.)

Number	Intervention	Responsible bodies
Surveillance and control in the transformation and distribution phase		
I-055	Maintain the food industry registration system with prior authorisation when necessary.	ASP
I-056	Maintain the surveillance and control system for food industries based on risk.	ASP
I-057	Maintain the assessment and auditing system for self-assessment procedures.	ASP
I-058	Maintain the surveillance and control system related to adverse food reactions.	ASP, ACC
I-059	Maintain the surveillance and control system of the public water supply.	ASP
I-060	Reinforce the surveillance and control of the physical safety of food, integrating them into the evaluation and auditing of the self-assessment procedures.	ASP
I-061	Maintain a high level of surveillance of food safety aimed at especially sensitive population groups (baby food and other special food).	ASP
I-062	Maintain the plan on research into chemical residues in food.	ASP
I-063	Maintain the system for the rapid exchange of information and food alerts.	ASP
I-064	Maintain the health inspection system for animals slaughtered for human consumption, including game.	ASP
I-065	Maintain the surveillance system for transmissible spongiform encephalopathies in animals for human consumption.	ASP, DAAM
I-066	Maintain the inspection system for fish and aquaculture products.	ASP
I-067	Implement a specific system for the surveillance and control of food from outside Catalonia, with special emphasis on food from outside the EU.	ASP, ACC
I-068	Implement a specific system for the official surveillance and control of the production, marketing and use of auxiliary manufacturing elements (additives, aromas, technological aids and materials in contact with food).	ASP, ACC

Interventions (cont.)

Number	Intervention	Responsible bodies
Exchange of information and management of alerts		
I-069	Strengthen the rapid information exchange and food alert systems, incorporating other agents such as epidemiological services, local administrations and associations, in order to improve the efficiency of the system.	ASP
I-070	Improve and strengthen the communication, collaboration, coordination and control systems and protocols to guarantee that the owners of food chain activities inform the competent authorities and take necessary measures when they detect a food safety problem, including withdrawal from the market and consumer information where necessary.	ASP, AL, ACSA
I-071	Maintain rapid information exchange and food alert systems that include consumer information and associations of people affected by food allergies and intolerances.	ASP
Surveillance and control in the retail and HORECA phase		
I-072	Implement an integrated and coordinated system to promote good practices, surveillance and control of food retail establishments and HORECA establishments.	ASP, AL
I-073	Maintain the surveillance and analytical control system for the biological safety of food placed at the disposal of consumers.	ASP, AL
I-074	Maintain the surveillance and analytical control system for the chemical safety of food placed at the disposal of consumers.	ASP, AL
Epidemiological research and outbreak management		
I-075	Improve the systems for the notification, research, collection and analysis of information about foodborne diseases in order to enhance knowledge of etiology, contributing factors and other data of interest with a view to improving management and prevention.	ASP

3 Management of issues related to food safety

Ensure that the food chain meets the legitimate expectations of the public with respect to quality, animal welfare, and animal and plant health, among others

Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
Quality			
O-021	Food products and food chain operators must comply with the quality levels established in applicable regulations so that consumers can exercise their right to make consumption decisions in accordance with their needs and based on reliable information.	Rates of compliance with applicable regulations.	Rising trend
Animal welfare			
O-022	Food chain activities must be developed in such a way as to prevent food-producing animals from being subjected to unnecessary pain or suffering.	Rates of compliance with applicable regulations..	Rising trend
Animal health and feed			
O-023	Food chain activities must be carried out under suitable animal feed and health conditions and must comply with applicable regulations.	Incidence and prevalence of notifiable diseases in food-producing animals. Rates of compliance with applicable regulations.	Decreasing trend and/or maintenance of low incidence. Rising trend
Plant health			
O-024	Food chain activities must be carried out under suitable plant health conditions and must comply with applicable regulations.	Incidence and prevalence of notifiable diseases in food-producing plants. Rates of compliance with applicable regulations.	Decreasing trend and/or maintenance of low incidence. Rising trend

Interventions

Number	Intervention	Responsible bodies
Information, awareness raising and promotion of good practices		
I-076	Continue working on **awareness and information** actions for operators and the public about matters related to food safety	
	Animal welfare	DAAM, ACSA
	Animal health	DAAM, ACSA
	Plant health	DAAM, ACSA
	Agri-food quality	DAAM, ACSA
	GMO	DAAM, ACC, ACSA
	Composition, labelling and advertising	DAAM, ACC, ACSA
	Sustainability	DTES
Official surveillance and control		
I-077	Maintain the surveillance and control system for **agri-food quality and the combating of fraud.**	DAAM
I-078	Maintain the **integrated production** control system.	DAAM
I-079	Maintain the **ecological production** control system.	DAAM
I-080	Maintain control systems for **differentiated quality marks.**	DAAM
I-081	Maintain the **traceability and labelling** control system for products with specific regulations in this respect, such as beef, fruit and vegetables, olive oil, honey and fish.	DAAM, ACC
I-082	Maintain the system to control **the labelling, presentation, advertising** and accompanying documentation of **marine resources.**	DAAM
I-083	Maintain the **animal welfare** control system.	DAAM, ASP
I-084	Maintain the systems for the surveillance, combating and eradication of **non-foodborne animal diseases.**	DAAM
I-085	Maintain the system for surveillance, official **control** and combating and eradication measures in the area of **plant health.**	DAAM
I-086	Maintain the system for the surveillance and **control** of compliance with applicable regulations in the area of **genetically modified organisms** (GMO).	DAAM, ACC
I-087	Maintain the system for the official **control** and surveillance of the composition of food and the veracity of the information placed at the disposal of the public by means of **labelling and advertising.**	ACC, AL
I-088	Implement a specific official surveillance and control system in the area of **nutritional and health claims in labelling and advertising.**	ASP, ACC
I-089	Maintain the system to control the conservation and management of **fishing resources.**	DAAM
I-090	Maintain **information exchange** systems in the area of matters related to food safety.	DAAM, ASP, ACC, AL, ACSA

4 Communication, cooperation and coordination in food safety

Build joint networks and achieve a high level of public knowledge and trust in food safety.

Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
O-025	Maintain a high level of public knowledge and trust in food safety and all matters related to it.	Results of specific studies.	Rising trend
O-026	Achieve a public perception of food risk that is balanced, coherent, proportional to the general context and based on scientific information.	Results of specific studies.	Rising trend
O-027	Achieve and maintain a high level of cooperation and coordination in food safety among all the participants in the food production chain, including consumers, economic operators, scientists and intervening administrations.	Proportion of food chain sectors involved in exchange and participation systems.	> 95%

Interventions

Number	Intervention	Responsible bodies
Dialogue and participation		
I-091	Keep the identification of all the **sectors participating** in food safety and their representatives up to date.	ACSA
I-092	Maintain the **working groups and commissions** created in the ACSA as permanent multilateral mechanisms for the exchange of information and dialogue between the various participants in the food chain.	ACSA
I-093	Expand the number of permanent work commissions in order to cover **all the stages and sectors of the food chain,** including HORECA, with a view to creating permanent forums for analysis and the fostering of improvements.	ACSA
I-094	Promote sectoral and intersectoral initiatives and agreements oriented towards the **coordinated management** of food safety subjects.	∑ACSA

Interventions (cont.)

Number	Intervention	Responsible bodies
I-095	Maintain **information systems** and improve the quality of data and exchanges between all those involved in food safety.	DTES, DAAM, ASP, ACC, AL, ACSA
I-096	Foster the **participation of the public and of the operators** in food safety, maintaining channels that enable the communication of information, proposals and suggestions.	DTES, DAAM, ASP, ACC, AL, ACSA
I-097	Work with **associations of victims of adverse reactions** to food, assess information, detect needs and foster the application of additional risk management measures where necessary.	ACSA, ASP, ACC
I-098	Continue fostering the role of **consumer associations** throughout the risk analysis process, including food safety training and information.	∑ACSA
I-099	Improve systems for **relations with the scientific and political communities** with periodic work sessions that are fully integrated into the global communication system on food safety.	∑ACSA
Knowledge and information		
I-100	Prepare studies to investigate the level of **knowledge, perception and trust** of the public in the area of food safety, including quantitative indicators of these parameters.	∑ACSA
I-101	Maintain and strengthen the **Food Safety and Media (SAM) Platform** as a communications channel between experts, public administrations and media professionals.	∑ACSA
I-102	Continue preparing and disseminating **informative and educational material** with the participation of the various parties involved and, especially, scientists, experts and representatives of the consumers.	ACSA, DTES, DAAM, ASP, ACC, AL
I-103	Continue **disseminating information** that is useful, coherent, integrated, understandable and reliable on: - Scientific reports and management policies. - Health and safety measures to be applied in the home and business spheres. - Actions of public administrations and private entities in the field of food safety. - Other matters that favour a high level of knowledge in subjects related to food safety.	ACSA, DTES, DAAM, ASP, ACC, AL
I-104	Maintain and improve food safety **consultation and complaint services.**	ACSA, DTES, DAAM, ASP, ACC, AL
I-105	Continue working to integrate basic knowledge of food safety into **primary and secondary education** and, especially, everything related to production systems, food risks and dietary risks.	ACSA, ASP, AL, DENS

Interventions (cont.)

Number	Intervention	Responsible bodies
I-106	Continue informing and collaborating with **opinion leaders** so they can communicate true, scientifically proven, understandable and useful information about food safety, especially the following groups: - Educational system personnel. - Health care professionals. - Retail and HORECA professionals. - Information professionals. - Representatives of consumer associations.	ACSA, ASP, ACC, DENS
I-107	Work in the area of **social networks,** considering their active role in risk communication.	∑ACSA
I-108	Promote **initiatives and agreements** with food industry **business associations** so they can actively participate in the area of food safety communication.	∑ACSA
I-109	Continue promoting **initiatives and agreements** with **consumer associations** aimed at active participation in the area of food safety communication.	∑ACSA
Crisis management		
I-110	Strengthen the mechanisms established for the **response protocol** in the event of **food crises.**	∑ACSA

5 Quality, efficiency and coordination of the services of the public administrations that intervene in food safety

Provide efficient and quality services.

Objectives

Time scale: 2016

Number	Objective	Indicators	Criterion
0-028	The interventions of public administrators in the area of food safety must respond to the principles of quality, impartiality, efficiency, transparency, coordination, consistency, proportionality and legal certainty.	Rates of compliance with quality standards.	> 95%

Interventions

Number	Intervention	Responsible bodies
Quality of the interventions		
I-111	Maintain the **information systems, registers and databases** necessary for suitable intervention in the food chain.	DTES, DAAM, ASP, ACC, AL, ACSA
I-112	Place this **information at the disposal** of official control bodies, food industries and the general public.	DTES, DAAM, ASP, ACC, AL, ACSA
I-113	Continue preparing the **annual report** on the situation of food safety in Catalonia and the report on the analysis of the situation, including conclusions and recommendations.	DTES, DAAM, ASP, ACC, AL, ACSA
I-114	Continue preparing the food safety plan **monitoring report** and improve the monitoring of the objectives of the plan by means of quantitative indicators.	DTES, DAAM, ASP, ACC, AL, ACSA
I-115	Continue fostering the role of **local administrations** in food safety and the exercise of their responsibilities in this area.	AL, ASP, ACSA
I-116	Strengthen the intervention programmes and systems with the formal and documented application of **quality** criteria (see the quality criteria chart), and the quality of official control laboratories.	DTES, DAAM, ASP, ACC, AL, ACSA
I-117	Improve the **information systems** of the programmes.	DTES, DAAM, ASP, ACC, AL, ACSA

Interventions (cont.)

Number	Intervention	Responsible bodies
I-118	Prepare an **annual report on the results** of each programme or system, specifying the activities undertaken, the results obtained in relation to the proposed objectives, the type and number of cases of non-compliance and the applicable corrective measures, the conclusions and, where applicable, the improvement measures to be applied to the programme in future editions.	DTES, DAAM, ASP, ACC, AL, ACSA
I-119	Foster the application of systems **to evaluate public policies** in the sphere of public safety.	DTES, DAAM, ASP, ACC, AL, ACSA
Coordination		
I-120	Maintain systems **for coordination with the state and European institutions** responsible for food safety.	DAAM, ASP, ACSA
I-121	Maintain **interministerial and interadministrative coordination** working groups to analyse and monitor the status of the situation and to agree coordinated actions.	∑ACSA
I-122	Maintain mechanisms for coordination, the analysis of results and the implementation of improvements in the area of the **audits that European institutions,** other countries and other international bodies might carry out on Catalonia in the area of food safety.	DTES, DAAM, ASP, ACC, AL, ACSA
I-123	Maintain **institutional cooperation and coordination** with security forces and tax authorities in relation to issues that might constitute a crime in the area of food safety.	DTES, DAAM, ASP, ACC, AL, ACSA
Training and information of agents		
I-124	Continue **diagnosing needs** and maintaining training and information systems for the personnel of public administrations so they are permanently qualified to carry out their functions.	DTES, DAAM, ASP, ACC, AL, ACSA
I-125	Continue improving **access to useful information** for the personnel of the bodies that intervene in food safety issues in general and especially official control programmes and results.	DTES, DAAM, ASP, ACC, AL, ACSA
Supervision and evaluation		
I-126	Reinforce and expand the systems for the supervision, evaluation and **auditing of official controls** and other interventions in food safety in order to check their efficacy and compliance with quality criteria with a view to adopting measures for continuous improvement and innovation.	DTES, DAAM, ASP, ACC, AL, ACSA
Transparency and public information		
I-127	Continue placing at the disposal of the **public updated information** that is easy to understand on interventions carried out in food safety and their results.	DTES, DAAM, ASP, ACC-AL, ACSA

Quality criteria of the intervention programmes in the area of food safety

Food safety intervention programmes must have the following elements defined:

1. Competent authorities and units, functions and tasks.
2. Objectives to be met by means of a coherent, exhaustive and integrated approach and the directives and standards established on the regional, state and European scales and in the Food Safety Plan of Catalonia.
3. Documented standardised procedures describing the activities to be developed, the organisation, the techniques and the procedures used.
4. Priorities based on risk classification and the most effective procedures, and the identification of the phases of the production processes to be prioritised.
5. Consistency and frequency in accordance with the identified risks, experience and applicable regulations, especially in the case of official control programmes.
6. Responsibilities and instructions to which the participating staff must adhere.
7. Systems for coordination and mutual assistance between participating authorities and units.
8. Necessary material, human and financial resources.
9. Available regulatory framework and criteria applicable within the framework of the programme.
10. Specific training of the personnel responsible for the execution of the programme.
11. Activity and results registration systems.
12. Procedures to provide information about and guarantee the rights of the stakeholders, especially in the case of official control programmes.
13. Criteria for the interpretation of results, decisions and actions to be applied; measures to correct irregularities and problems observed in official controls.
14. Performance indicators with respect to the effectiveness of and adaptation to the planned objectives.
15. Procedures for the supervision, evaluation and verification of the efficacy of the programmes.
16. Modification, adaptation and improvement mechanisms based on new legislation, the appearance of new problems, organisational changes, official control results and other interventions, EU directives, scientific discoveries, etc.

III Annex

Official bodies responsible for the execution of the interventions established in the Food Safety Plan of Catalonia

The Food Safety Plan of Catalonia identifies the objectives to be achieved and the interventions to be carried out by the public authorities with responsibilities in the area of food safety. The bodies responsible for the execution of the interventions of the plan pertain to various public administrations and intervene in the various phases of the food chain within the sphere of their respective competencies. The public bodies responsible for the execution of the plan, and their functions, are briefly described below.

Government of Catalonia

Ministry of Health

The bodies within the Ministry of Health include:

The **Catalan Public Health Agency** (ASPCAT), whose main functions are the epidemiological surveillance of foodborne diseases and epidemic outbreaks, and the design and implementation of programmes to protect and promote health.

ASPCAT includes the **Directorate for Health Protection,** whose functions are the promotion of good practices and official controls within the framework of the prevention of effects that could be harmful to public health produced by the presence of chemical, physical and biological agents in the environment and in food.

The **Food Safety Agency of Catalonia** (ACSA), which is a specialist area of the ASPCAT, is responsible for the evaluation and communication of health risks related to the food chain, in addition to the strategic planning and coordination of the actions of the competent public administrations. It fosters the collaboration and participation of all those involved in food safety, such as production sectors, consumer and user organisations, and scientific and research centres.

The programme execution activities of the ASPCAT in the territory are undertaken by its territorial services with the analytical support of the public health laboratories, which analyse water, food and other substrates.

Ministry of Agriculture, Livestock, Fisheries, Food and the Natural Environment

The bodies within this ministry include:

The **Directorate-General for Agriculture and Livestock,** which is responsible for the control and promotion of improvements to agricultural, livestock and agri-food production, in addition to the control of animal and plant health. This directorate-general is organised into the following subdirectorates-general:

The **Subdirectorate-General for Agriculture,** which is responsible for the evaluation, analysis and orientation of agricultural production; the promotion and control of integrated agricultural production and ecological agricultural production; in addition to the promotion and official control of plant health, including everything related to the official control of the production, marketing and use of phytosanitary products.

The **Subdirectorate-General for Livestock**, which is responsible for the promotion of the improvement and official control of livestock production and animal health, including everything related to the production, marketing and use of veterinary medication.

The **Directorate-General for Food, Quality and Agri-food Industries** is organised into the **Subdirectorate-General for Agri-food Transference and Innovation,** with functions in the area of technological innovation and research, advice, training and laboratories in relation to agri-food products; and the **Subdirectorate-General for Agri-food Quality and Industries,** whose functions are to prepare and propose policies and strategies on food planning, quality and agri-food industries. It is responsible for the promotion of the quality of agri-food products and official control of compliance with the regulations on quality, in addition to the combating fraud in the agri-food sphere.

The **Directorate-General for Fishing and Maritime Affairs,** which carries out the official control and planning of maritime fishing, marine resources and protection of the coast, aquaculture and shellfishing.

The **Directorate-General for the Environment and Biodiversity,** whose functions are the undertaking of studies and the formulation of proposals related to the conservation, management and improvement of natural heritage; the minimisation and control of impacts on the environment, protected spaces and the protection of animals; the coordination of environmental surveillance, control and inspection actions; and the promotion of actions to prevent infractions and for advice and public awareness in order to foster behaviour that respects the environment.

This directorate-general includes the Hunting Activities Area, which is responsible for planning and management in the area of game, and the Continental Fishing Area, whose functions are the planning and management of fishing and fish farms in continental waters.

The Institute of Agri-food Research and Technology (IRTA) is responsible for research and development functions, including technology transfer, the publication of research results and the supply of information about the progress of research and development projects.

The **Poultry Health Centre of Catalonia** (CESAC) is the result of a collaboration agreement between the Ministry of Agriculture, Food and Rural Action of the

Government of Catalonia, the Catalan Poultry Federation (FAC) and various cooperatives. It is responsible for the analysis, diagnosis and issuance of technical reports related to poultry diseases.

The **Interprofessional Dairy Laboratory of Catalonia** (ALLIC), which is responsible for the analysis, diagnosis and issuance of technical reports related to milk and dairy products, and has agreements with various Catalan and state administrations.

The main functions of the **Catalan Institute of Vines and Wines** (INCAVI) are to promote and foster improvement in areas related to wine products in relation to research and the promotion of improved knowledge and consumption; study and research processes, techniques and materials; foster the specialisation, professional recycling and training of technicians and professionals; in addition to product inspection, control and traceability functions.

The **Training Centre for Agricultural and Rural Studies** (CFEA) is responsible for providing lifelong training for the civil servants of the Ministry of Agriculture and Rural Action in the areas of administrative organisation and quality of service; agricultural, livestock and fisheries production; agri-food industry and quality; European Union policies; and rural development and technology transfer.

Official control activities are performed by the **Territorial Services of the Ministry of Agriculture, Livestock, Fisheries, Food and the Natural Environment,** which are supported by the livestock health laboratories at Lleida, La Seu d'Urgell and Vic, and the plant health and agri-food laboratories at Cabrils.

Ministry of Enterprise and Labour

The Catalan Consumer Affairs Agency, currently attached to the Ministry of Enterprise and Labour, is responsible for the official control of the information and safety of products and services provided for consumers and users; the detection and control of fraud, incomplete or misleading information, false advertising and the use of abusive clauses; informing and advising consumers and users about their rights and how to exercise them; promoting training for consumers and users as well as economic agents; the promotion of mediation and arbitration; institutional relations and direct public participation through consumer and user associations and economic and social agents.

Ministry of Territory and Sustainability

The bodies within this ministry include:

The **Directorate-General for Environmental Quality,** which is responsible for ensuring the rational use of environmental resources and for coordinating official controls of activities that have an impact on the environment, as well as the surveillance, prediction and control of air quality and protection of the atmosphere.

The **Directorate-General for Environmental Policies** is responsible for defining the environmental and sustainability policies applicable to the plans and programmes of the Government of Catalonia and fostering the process of the Strategy for the Sustainable Development of Catalonia, in order to promote the incorporation of international sustainable development objectives and criteria into sectoral policies.

The Catalan Water Agency (ACA), which is responsible for the preparation and revision of water programmes and projects; the control of water facilities and the qualitative and quantitative aspects of the public water supply; the control, surveillance and inspection of the basic water network and related facilities, surface water and groundwater resources, and any spills that might affect surface water, groundwater and maritime waters; the control of water contamination by means of the establishment of emission limit values and quality objectives in relation to the affected environment; in addition to the coordination of the actions of the competent authorities in relation to water supply and treatment in Catalonia.

The Catalan Water Agency laboratory, which is located in Barcelona, provides analytical support for the official control activities.

The Catalan Waste Agency, whose functions include the promotion and execution of waste management programmes. Through its Industrial Area, the agency is also responsible for studies related to waste management; actions to promote industrial waste minimisation and recycling; the evaluation of projects for public and private waste management facilities; the control of the activities of waste management companies and all industrial activities relating to waste production and management; waste identification, analysis and classification; and the promotion and control of the suitable treatment of contaminated soils through its laboratory in Barcelona.

Local Administrations

In compliance with the provisions of Law 18/2009, of 22 October, on public health, and Legislative Decree 2/2003, of 28 April, approving the revised text of the Law on municipal and local government in Catalonia, in the area of food safety, local administrations are responsible for managing health risks arising from environmental contamination and, particularly, health risks concerning water for public consumption and food products in retail trade, the HORECA sector (direct sale of prepared foods to consumers, with or without home delivery), and local production and transport.

Some supramunicipal local bodies, such as provincial and regional councils, are also responsible for coordinating and providing technical, legal and financial support to assist local councils in the development of official control programmes concerning public health and consumer affairs.

Special mention should also be made of the **Barcelona Public Health Agency,** which carries out the functions of a local administration within the city of Barcelona, as well as those that in the rest of Catalonia correspond to the Ministry of Health: epidemiological surveillance and the protection and promotion of health. Through **the Institute for Food Safety and Health** (ISAS) it carries out the official control of food processing and distribution activities at industrial facilities, central markets, retail establishments and restaurants, including street establishments. Other important services include its laboratory, which provides chemical and microbiological analyses for the agency, the Government of Catalonia and Barcelona City Council; **the Public Health Observatory,** which is responsible for epidemiological surveillance; and the **Directorate for Environmental Surveillance Services.**