



# FOOD SAFETY AND THE INVOLVEMENT OF THE ENTIRE SUPPLY CHAIN



## **Cécile Viry**

### **Business & Application Manager at Christeysns**

Executive MBA @ ICN Business School + Ingénieur chimiste @ ENSCM Montpellier

ICN Business School, Executive MBA 2018 - 2019

Ecole Nationale Supérieure de Chimie de Montpellier, Ingénieur chemistry 2000 - 2003

Next June 7 is the World Food Safety Day (WFSD), an unmissable event that has been celebrated over the last two years, and this year it is even more important, in the wake of the health crisis that we are now experiencing. The United Nations pronounced this date as a magnificent opportunity to help prevent, detect and manage food-borne risks, contributing to food safety and human health.

We must all be aware of the importance of Food Safety, from governments to food producers and consumers. An entire value chain that has remained unaffected by the coronavirus. The European Food Safety Authority (EFSA) acknowledges that there is currently no evidence

that food is a likely source or route for transmission of the virus. According to Marta Hugas, chief scientist at EFSA, “experiences from previous outbreaks of related coronaviruses, such as the coronavirus causing severe acute respiratory syndrome (SARS-CoV) or the coronavirus causing the Middle East respiratory syndrome (MERS-CoV), show that transmission through food consumption did not occur. There is currently no evidence to suggest that this novel coronavirus is any different in that regard.” Scientists and authorities around the world are monitoring the spread of the virus and no cases of foodborne transmission have been reported. This is why EFSA has not been involved in the response to the COVID-19 outbreaks.

## WHAT IS FOOD SAFETY?

According to Food and Agriculture Organisation (FAO), a person, household, community, region or nation is said to be food secure when all its members have, at all times, physical and economic access to acquire, produce, obtain or consume sufficient amounts of safe and nutritious food to meet their dietary needs and food preferences so that they can lead dynamic and healthy lives.

Security exists if four conditions are met:

- Adequate food supply and availability.
- Stability of supply without fluctuations or shortages depending on the season or year.
- Access to food or the ability to purchase it.
- Good quality and safety of food

To quote Maria Neira, former president of the Spanish Food Safety Agency, there are things that we do not even realise. Few people think, in front of a dish of fish, vegetables, meat or fruit, that there is a whole process behind. Not only to fish it, plant it, raise it or process it, but also to protect the food, to make it safe and suitable for consumption, following strict controls. It is the absence of food safety that jumps to the present time, raises media interest, worries the citizen and generates social alarm.

The commitment of both public institutions (European Commission, State Members of the Union, Regional and Local Authorities) and the productive, industrial and distribution sectors is essential to achieve these levels of food safety.

In Article 25 of the Universal Declaration of Human Rights, food security is seen as “the right of everyone to a standard of living adequate for his or her health and well-being and, to sufficient and safe food”.

Moreover, national administrations recognise the right to health protection and require the public authorities to safeguard public health by means of preventive measures, as well as to promote health education.

Likewise, regional authorities and those of each of the Member States of the European Union are responsible for protecting the health of consumers and ensuring food safety. Therefore, the current food market in the European Union has established control tools that increasingly improve the safety of the food we consume.

In this sense, we also have the responsibility as consumers to play a very relevant and active role in achieving food safety, informing ourselves properly about the food to be consumed, handling it and preserving it in order to prevent food poisoning, ...

## FOOD HAZARDS

Regarding the safety of ready-to-eat foods, the health hazards to which a food is exposed from its origin must be considered, as these will determine its safety at the time of consumption. Within these hazards, we can find physical hazards through unwanted elements in food (bones, plastics, etc.), chemical hazards (chemical traces in fruits, fish...) and biological hazards produced by microorganisms. The latter can have a high incidence at this time of year with the increase in temperatures.

Food poisoning occurs when a microorganism reaches the food and the conditions are right for its proliferation, i.e. it finds suitable temperatures and nutrients for its development. Hence the importance of proper training in food handling. A disease can be caused by the ingestion of bacteria or viruses carried in food (infection), by toxins previously formed in the food (poisoning) or by parasitic forms at specific stages of their evolutionary cycle (infestation).



## OCCURRENCE OF MICROORGANISMS IN FOOD

Generally speaking, the factors responsible for the presence of microorganisms in food are: inadequate temperature during storage, incorrect handling, cross-contamination (occurs when raw and cooked food is handled without proper separation and distinction of utensils), insufficient cooking and lack of cleanliness. In this sense, it is essential that the correct hygiene protocols are developed, implemented and controlled by the right personnel. In European Union, for example, the most frequent food poisonings are those produced by pathogenic bacteria such as *Campylobacter*, *Salmonella* and *E. Coli*, commonly present in raw foods of animal origin, such as meat, poultry, milk and eggs. According to a report published by European Centre for Disease

Prevention and Control (ECDC) and EFSA, *Campylobacter* and *Salmonella* are responsible, approximately, for over 94% of human zoonoses. Also relatively frequent are diseases caused by *Staphylococcus*, found in the nose, throat and wounds of handlers, which can be transmitted to food by improper hygiene. Special consideration is given to *Listeria*, which is extremely serious for people belonging to risk groups.

Within this framework, there is a system of alert networks coordinated by the different national food safety agencies for the detection and immediate action in the event of a food safety problem.



## INTERNATIONAL FOOD SAFETY ALERT NETWORKS

### 1. The Rapid Alert System for Food and Feed (RASFF)

National contact points for the European alert network. Coordinate all actions on national territory affecting foodstuffs including notifications communicated at European level. These notifications may be triggered by hazards detected in national products distributed to other countries or by hazards detected in products distributed in a certain country and coming from other EU Member States.

### 2. International Food Safety Authorities Network (INFOSAN).

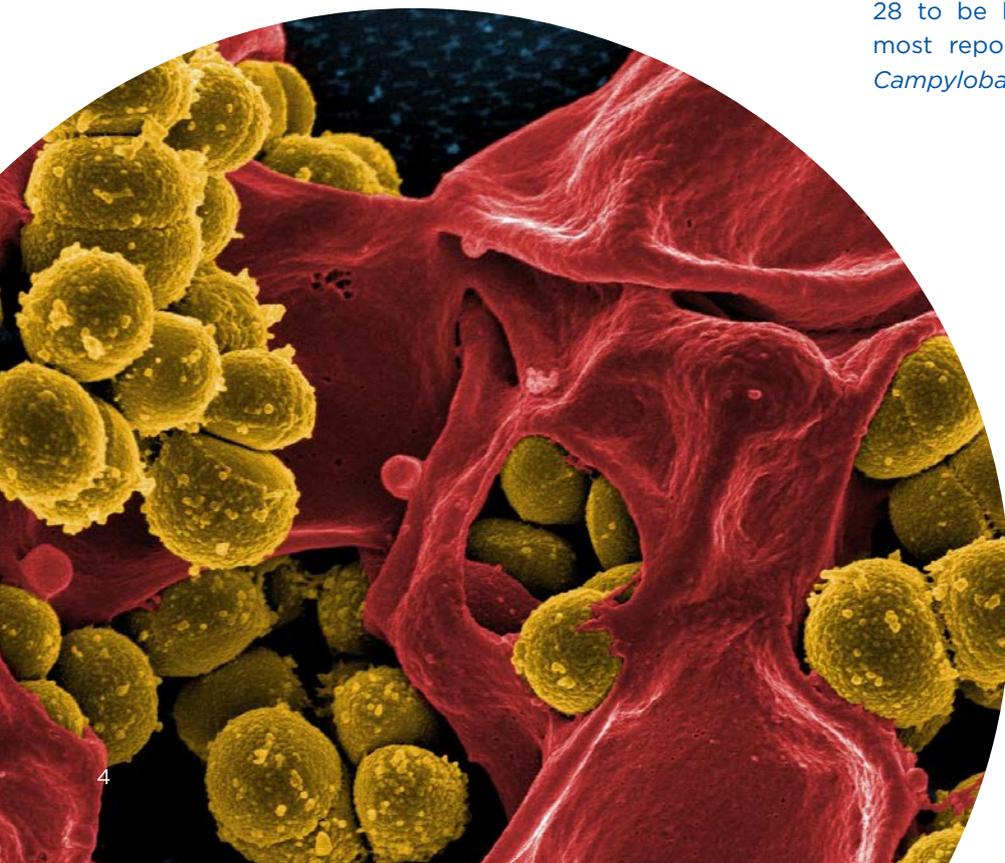
The FAO of the United Nations / World Health Organization (WHO) coordinate at national level actions related to food alerts involving products distributed outside the EU, always in close cooperation with the authorities of the relevant Community alert network RASFF.

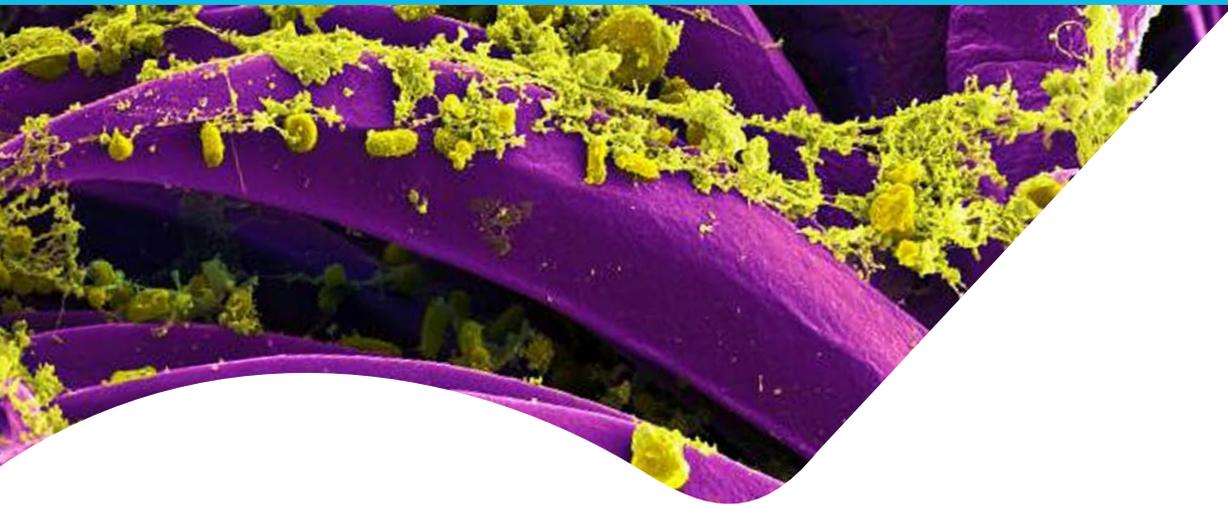
These networks make it possible to keep a constant surveillance of any risk or incidence which, related to food, may affect the health of consumers. The fundamental objective of this system is to ensure that the products available to consumers are safe and do not present any risk to their health.

To achieve this objective, the main basis is the rapid exchange of information between the different competent authorities, food businesses and consumers, thus enabling appropriate action to be taken on those foodstuffs that could have an impact on consumers' health.

Some of the alerts that have been produced recently are listed below:

- Alert for the presence of anisakis in anchovies in vinegar from Spain. 8th May 2020.
- March 2020. Several European countries issued around 100 warnings about *Salmonella* in chilled and frozen poultry from Poland.
- Alert for pizzas and pizza bases sold on the Internet. 13rd February 2020.
- Alert for dairy products with possible risks for human health. 11st February 2020.
- Presence of *Listeria monocytogenes* in duck and foie gras block medallions from Spain. 10th January 2020
- Alert for *Listeria monocytogenes* contamination of a batch of the product Mini Blinis produced in France. 12th November 2019
- Further information on the alert for *Listeria monocytogenes* in several meat products from Germany. 25th October 2019.
- Alert concerning *Listeria monocytogenes* in several meat products from Germany. 18th October 2019
- Market withdrawal of certain batches of raw cow's milk cheese from France. 8th October 2019
- Market withdrawal of certain batches of raw cow's milk cheese from France 3rd October 2019
- Belgium registered 571 outbreaks of food poisoning last year, causing 2,475 people to become ill and 28 to be hospitalized, with *Salmonella* being the most reported agent, followed by *Norovirus* and *Campylobacter*.





## ANTIMICROBIAL RESISTANCE

Regarding antimicrobial resistance, WHO recognizes that infections caused by foodborne bacteria are increasingly difficult to treat. The latest data on humans, animals and food show that a large proportion of *Salmonella* bacteria are multi-resistant (resistant to three or more antimicrobials), with further resistance to increasingly high concentrations of specific antibiotics.

As far as *Campylobacter* is concerned, sixteen out of nineteen countries have reported very high or extremely high percentages of resistance to these antibiotics. This conclusion is included in the latest report on antimicrobial resistance in zoonoses by the ECDC and the EFSA, which also shows some positive trends in the animal sector. Antimicrobial resistance is a serious threat to global animal and public health and requires global action,” says Marta Hugas.

Food safety is everyone’s business, especially in these times. We cannot put the focus only on the Coronavirus and forget about pathogens such as *Salmonella*, *Listeria* or *Campylobacter* which with the increase of the temperatures in summer tend to proliferate.

So, let us all ensure that food is safe. All actors involved in the food supply chain must be fully aware of the measures they must take to ensure food safety. And one of the most important links is that of hygiene. This is vital to avoid possible poisoning, often caused by cross-contamination and poor hygiene in facilities.

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**CHRISTEYNS**

FOOD HYGIENE

For more information, please contact:

Afrikalaan 182, B - 9000 Gent

**T** + 32 9 223 38 71

**E** [info@christeyns.com](mailto:info@christeyns.com)

**CHRISTEYNS.COM**