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Case Report

The Story of a Failed Food Safety Management, Whistleblowing, and Governance

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Introduction

From the outset, it should be noted that this chapter aims to learn lessons from a case of failed whistleblowing and to highlight its potential in risk management and governance, in this specific case, food safety and public health.

Over the past few decades, the management of food safety in the commercial sector has significantly improved. Although the incidence of foodborne illness remains high, outbreaks involving industrially produced food are relatively uncommon [1-4]. However, when they do occur, they put the health and lives of many people at risk and provoke a wave of indignation.

It is generally accepted that there is no such thing as zero risk in food production and that accidents can happen despite all measures taken. However, when these incidents are caused by negligence in food safety management, they cause outrage. Depending on how the media treats the information, the incident may turn into a scandal. As stated by Colin Doeg, "When a disaster strikes, it is the media treatment of the event that largely determines whether an organization has a problem or a full-blown crisis" [5].

The two undermentioned outbreaks of E. coli associated with products from a multinational food company, Nestlé, are cases in point. In this chapter, we will examine how failures in management of these cases and following up on the reports of a whistleblower - me - led to these outbreaks or engaged the responsibility of a multinational food company and the public health/regulatory authorities.

I will comment on them from the perspective of my personal experience at Nestlé, where I worked from 2000 to 2010 as the company's Food Safety Manager, working under the Director of Quality [6]. I personally witnessed Nestlé's involvement in the 2009 incident in the United States, as well as other incidents.

The problem will be considered from the broader perspective of failures in management and governance that ultimately led to these tragic events. As the former Nestlé CEO, Peter Brabeck-Letmathe, used to say: "The management of food quality and safety depends on the quality of management" [7].

The Tale of 2 Outbreaks

EHEC outbreak linked to Nestlé Buitoni Pizzas (March 2022)

In March 2022, the French authorities reported an outbreak of enterohemorrhagic Escherichia coli (EHEC) bacteria linked to the consumption of Nestlé Buitoni brand Fraîch'Up pizzas. Reportedly, in this incident, 56 people - 1 adult and 55 children - became seriously ill. At least 47 suffered from Hemolytic Uremic Syndrome (HUS), a severe complication of E. coli infection that can lead to kidney failure. Two children, aged 2 and 8, died [8]. As these numbers include only the very severe cases, it is believed that the number of people who suffered from a gastroenteritis infection in this outbreak is much higher and may amount to several hundred [9].

In addition to the public health consequences, the outbreak caused significant economic and reputational damage to the company. Nestlé Buitoni is a major brand, selling between 150,000 to 200,000 frozen pizzas daily worldwide. In France, a pizza is sold every 2 seconds. By the end of July 2022, four months later, sales of frozen pizzas in supermarkets had fallen by 34.2%. Sales of fresh pizzas were also affected, falling by 9% [10]. Pizzas were also recalled from 23 European and African countries [11]. As a consequence of this incident, the Caudry pizza factory was closed for months and a year later sold out [12]. Victims claimed around 250 million euros. Due to a confidentiality agreement, the final settlement is not known [13]. In France, the company's reputation has been significantly damaged.

Several factors aggravated the negative perception of the event [10,14,15]. The fact that:

1. A famous and trusted brand, Nestlé Buitoni, was involved;

2. The outbreak affected mainly children, with two fatal cases;

3. The outbreak was a repeat of another event caused by the same company, with a similar cause and similar mistakes (see below). Also, in 2013, Nestlé Buitoni was involved in a scandal where horsemeat was used instead of beef [16,17];

4. There were visible signs of poor hygiene and unsanitary conditions in the Caudry factory, where the pizzas were made [18];

5. Reportedly, complaints from workers about factory hygiene and other problems were ignored [14,19];

6. The senior Management was slow to react and provide explanations and apologies [20,21], and

7. Communication was considered poor and led the media to fill their space with the reports of blowers whistleblowers and critics.

The outbreak was one of the worst in French history. These factors and the poor management of the crisis gave the media plenty of ammunition to turn the event into a major scandal. However, all the attention has been focused on the management of food safety in Nestlé's Caudry factory. In my experience, the incident is the result of a series of failures at all levels of the chain of command, extending from Nestlé's food safety management and internal whistleblowing system through regulatory control to civil society. The event at the Caudry factory is just one link in this chain of failures.

To date, two years after the outbreak, the public authorities have still not published an official report, and there is no formal explanation as to where and how the pizzas became contaminated or what the root cause of the outbreak was. Nestlé Management has attributed the outbreak to contamination of the flour used in the production of the pizzas [22].

EHEC outbreak linked to Nestlé Toll House cookie dough (USA 2009)

During June - July 2009, in a multi-state outbreak of E. coli O157:H7 in the USA, seventy-seven people between the ages of 2 and 65 were reported ill. Thirty-five were hospitalized, and ten developed Hemolytic Uremic Syndrome (HUS). One of the victims continued to suffer from the infection and died a few years later, possibly due to the sequelae of the disease [23,24].

The outbreak has been linked to "Nestlé Toll House refrigerated cookie dough" produced at the Nestlé Danville, Virginia factory. On 18 June 2009, Nestlé stopped production of the cookie dough, and one day later, on 19 June, they recalled 3.6 million packages of cookie dough [24].

On 29 June 2009, the US Food and Drug Administration confirmed that Nestlé Toll House prepackaged refrigerated cookie dough was the source of the outbreak. Subsequent investigation identified flour as the likely source of the cookie dough contamination [24].

On 7 July 2009, after implementing an ingredient, product, and environmental testing program, Nestlé was able to restart production. The labeling was also revised to warn of the risk of consuming uncooked cookie dough. In January 2010, Nestlé changed the product design to introduce heat-treated flour to produce the cookie dough [25,26].

Understanding the Food Safety Management System

One model for explaining the current food safety management system in the food manufacturing setting is to present it in terms of three lines of defense (Figure 1) [27,28]:

1) Basic hygiene practices, widely commented on in the media in the context of the outbreak in France;

2) The application of a specific safety management system, known as the Hazard Analysis and Critical Control Point (HACCP) system. This is the very system that, when applied correctly, can prevent incidents such as those reported here [29]; and

3) An internal verification system, including self-control.

In addition, there are external verifications, i.e., regulatory controls and audits carried out by distributors or certification bodies.

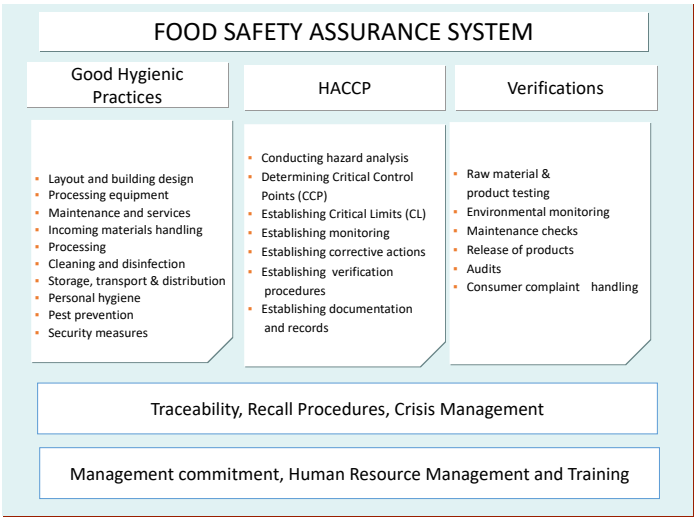

Figure 1: Food Safety assurance system.

Readers unfamiliar with food safety management need to understand that while general hygiene in factories is an essential condition for ensuring food safety, it is not sufficient as they do not specifically target the risks associated with an ingredient or an operation. For this reason, since the mid-1990s, worldwide,

regulatory authorities have required the application of a scientific risk-based system, known as HACCP [30,31]. Under this system, the risks associated with raw materials and operations are identified in advance, during the design of the product, and measures to control them are devised. These measures can be implemented at any stage from production up to the point of consumption. As a result, they may even include measures that consumers must take. In such cases, food producers are responsible for providing adequate instructions or any necessary warning.

Training, traceability, product recall, and crisis management are other measures that support the system. It is also recognized that good food safety management requires a strong commitment from top management.

In principle, in the food industry, we have a solid food safety management system, with multiple consumer protection mechanisms. Therefore, incidents involving industrial food products are relatively rare. On the other hand, when they do occur, they are often the result of a series of failings (Figure 2). James Reason, the British expert on organizational accidents, compares a safety system riddled with failures to a cheese with holes. He coined the situation 'Swiss Cheese'. He explains that some accidents happen as a result of series of lapses in the system of management and governance [32].

James reason's review of incidents in different sectors shows that, while often the people working at the end of the chain of events are held responsible for incidents, the cause can sometimes be attributed to management failings [32].

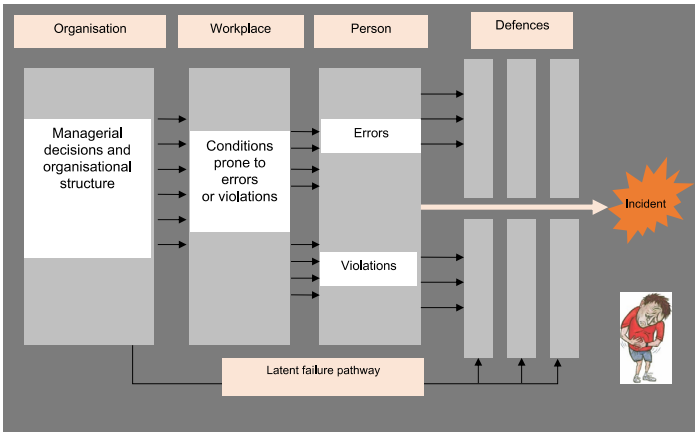

Figure 2: The result of a series of failings.

This leads us to the first shortcoming in overall food safety management, namely that a root cause analysis of outbreaks is rarely carried out. Outbreak investigations are often closed just after the incriminated product has been identified, recalled, and corrective measures eventually applied. However, in the absence of a root cause analysis, that is, an investigation and analysis of the underlying management failures that led to the operator's failures, the real problems may persist and, over time, lead to further incidents, possibly elsewhere, with other products. [33]. These deeper factors related to management failures are called "latent failures", as opposed to operator failures, which James Reason calls "active failures" [32,34]. Latent failures cause a vulnerability of the system without necessarily having an immediate impact. Consequences often appear with some delay. Therefore, senior management is rarely held accountable (Figure 2).

Food Safety Management in Nestlé during the Honeymoon Period

I joined Nestlé in 2000 as Assistant Vice President, responsible for global food safety, at the insistence of Nestlé's Global Quality Director for two years [6]. At the time, I had been working at the World Health Organization (WHO) as a senior scientist for some ten years. There, I was responsible for the surveillance and prevention of foodborne diseases. In this capacity, I gained extensive experience in the measures required throughout the food chain, from those aimed at producers to the training of domestic and professional food handlers in homes and food service establishments, respectively.

I also assisted governments with regulatory control, particularly in further development and implementation of the HACCP system. Through working relationships with leading regulatory authorities, food companies, and non-governmental organizations, as well as by studying consumer behavior and perceptions, I acquired a good understanding of food safety management from the broad perspective of regulatory requirements and consumer expectations worldwide.

My years at WHO coincided with a period when we had to struggle to raise awareness of the importance of food safety. It was only after a number of food safety crises and scandals, such as the crisis of Bovine Spongiform Encephalopathy (BSE), or dioxin, as well as the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (SPS measures), that the world began to recognize the importance of food safety and to strengthen management systems [28,35]. Against this backdrop, as mentioned above, I was recruited as Assistant Vice President, in charge of food safety.

While, on paper, Nestlé had a sound food safety management system, and the Quality Manual adequately covered the requirements, implementation left much to be desired. Very early on, I began to notice a wide range of shortcomings in food safety management [6]. Some of these, particularly those related to basic hygiene, had already been reported by 2 of my predecessors.

These included:

i) The quality of the people appointed to manage food safety, whether in terms of their expertise or ethics;

ii) The adequacy of personnel;

iii) The reporting system where advisors also acted as auditors;

iv) Procedures i.e., the lack of a validation process for hazard identification and control measures;

v) Violations of food safety principles or negligence in hygine and food safety management;

vi) The company's food safety culture, including a proactive and transparent approach to food safety management.

These issues, formulated here in general terms, resulted in countless problems, leading to weekly food safety or quality incidents and sometimes to major crises. For example, the lack of expertise of some of our managers prevented them from identifying hazards and/or implementing adequate control measures. The newly required system of food safety management, that is, the HACCP system, necessitated a particular knowledge of hazards in foods. The lack of personnel meant that, even if the professionals were competent, the tasks requested were not feasible, leading to sometimes sloppy work. This was particularly the case when implementing the HACCP system, the primary tool for ensuring safety. This system required much research and an in-depth knowledge of hazards and their controls.

However, the company's food safety culture was perhaps the overarching problem hampering a proactive, professional approach to food safety management. It was at the root of all kinds of other deficiencies. One example of an organizational culture having a negative impact on food safety was management by fear, where staff risked being reprimanded if they asked questions or queried the status quo [36,37].

I experienced this first-hand when Nestlé France's Quality Director, referred to hereafter as RS, got angry when I asked whether it was permissible in France for workers on a culinary production line to enter the toilets in their overall work clothes. He reprimanded me, telling me bluntly that changing such a practice would be costly for the company, and that I had no right to raise such a question. He was concerned about the financial consequences, while I was worried about the possible risks, as certain pathogens - such as EHEC - could cause infections at very low contamination levels. I firmly believed that in risk management, such a culture is wrong: all potential risks needed to be raised, assessed, and if confirmed, controlled. He held a grudge on this issue for years, as the point was raised again some years later in the context of the internal inquiry on my harassment, as a fault I would have allegedly committed.

However, one of my main concerns about Nestlé's practices was that anyone who spoke out risked severe reprisals, depending on who was exposed. I made this observation the hard way. In 2002-2003, I discovered that RS, the Nestlé France's Quality Director; had marketed a cookie for infants aged eight months, while many parents reported that their child had choked on the product and only survived thanks to their intervention [37,38]. The parents recounted some pretty dramatic situations: "our baby turned blue", "we had to turn the child over", etc. I also noted that the competing company only recommended baby cookies from the age of one and a half years. This age difference gave Nestlé a marketing advantage. Naturally, I had to write formally to management to ask for the situation to be corrected. I recommended reformulating and adapting the product to infants of 8 months or increasing the consumption age. Later, I discovered that this problem had been known to the company for years, but nothing had been done about it. A few years later, I paid a high price for my action.

This was not the only food safety violation that I witnessed. Problems abounded, and my time was often wasted on firefighting and crisis management. Another prominent example was that infant formula specifications were established without validation. Validation process is essential to ensure that measures taken for managing a hazard are indeed effective. In the context of specifications, it means ensuring that products essential element, such as micronutrients, comply with regulatory and health standards. This meant that in some countries, infant formula in violation of regulatory standards were sold. In some factories the list of issues was long and included all kind of lapses such as poor maintenance or hygienic engineering, invalid hazard analysis or monitoring programmes. However, more disturbing was the fact that Nestlé's corporate culture was such that correcting certain failings was not straightforward and required a relentless fight by food safety professionals or an adverse event such as a regulatory notice.

For example, shortly after joining the company, I asked for validation of the HACCP system but met fierce resistance. Infant formula specifications gave me another opportunity to raise the validation issue, but my request was ignored, until the infant formula products of another company lacked vitamin B_1, as a result of which 2 infants died a 15 of others suffered from neurologic and cardiac symptoms of beriberi illness [39,40]. This prompted Nestlé to validate its specifications for infant formula. Nevertheless, in spite of this experience, in Nestlé, infant formula that violated regulatory standards of iodine and some other micronutrients were sold in China.

This led the Chinese regulatory authorities to impose a recall [41-44], and market share plummeted [45]. In this incident, RS, the Director responsible for infant cookies was also involved, as he had been promoted to head the Product Technology Center for

infant formula, where specifications had to be validated.

Such situations frequently occurred and covered every type of problem, from allergens to microbial hazards, chemical contaminants, and emerging issues. My job was to advise, define policies, and give instructions, but it often turned into a fight to impose ethical and professional management of food safety. My situation was made all the more difficult by the fact that I had no job description, and the scope of my responsibilities was unclear [6]. In a giant food company like Nestlé, with a wide range of products and where I observed shortcomings on all fronts, my potential accountability was broad, and my tasks were endless.

This situation also put me at odds with others, as when I took action, I was told I was not responsible, but when adverse events occurred, I was asked to respond and explain. I remember one incident involving pet food. Before that event, the management had told me that I was not responsible for that sector and their technical team would manage the safety of their products. But, when an incident occurred in Venezuela in 2005, where hundreds of pets died of aflatoxin poisoning, I was asked to explain the instructions I had given to the plant [46,47]. A team headed by the Deputy Director of our department had audited the factory a few months before the incident, but they had failed to see the ongoing violations. Yet they were never held responsible. It was only by good fortune that I and my team had given the necessary instructions and were cleared of any fault.

In such cases, particularly when a problem widely affected food products, I suggested informing the regulatory authorities and asking for their opinion on the risks associated with the products. It was essential to decide together on appropriate actions. Sometimes, the authorities demanded that products be recalled. Nestlé management didn't like this approach. In one case, where I recommended reporting an allergen mislabeling to the Australian authorities, who then requested that the products be withdrawn, I raised the ire of management. It should be noted that this lack of transparency and Nestlé management's reluctance to report problems to the authorities led to a major fraud scandal in 2024. Nestlé was treating its mineral water for contaminants in violation of French and European regulations, and concealing this from consumers, who believed they were buying pure spring water [48,49].

In December 2005, in a crisis in which Nestlé infant formula products were contaminated with traces of a chemical (isopropylthioxanthone), migrating from the packaging ink, my boss, the Quality Director, asked for the recall of contaminated infant formula products [50]. Following this event, referred to as the ITX crisis, the management dismissed my boss and decided to link bonuses to product recalls [51]. This meant that a manager who withdrew products from the market would be penalized. In the context of Nestlé's organizational culture, this policy had a negative impact on food safety management, as it encouraged managers not to recall products when they could cover up a problem. It also discouraged managers from testing products so as not to be forced to recall a possibly contaminated product. This policy may explain Nestlé's reluctance to verify and monitor its products for melamine. Even though, after the first pet food incident in the US in 2007, Nestlé was aware of the risk, particularly in China, the source of wheat gluten adulterated with melamine. It may also have contributed to my moral harassment because, when necessary, I recommended that food safety problems be reported to the regulatory authorities. Sometimes, this led to product recalls.

Despite the situation, I worked tirelessly to solve problems and strengthen food safety management at Nestlé and was commended for my work. My performance was consistently rated "above" or "well above" » expectations. The account of my achievements is beyond the scope of this article. In a nutshell, during my time, I improved many aspects of food safety management in Nestlé, including strengthening competencies, managing numerous crises, and redesigning the Nestlé food safety management system.

Internal Reporting and Retaliation

In 2006, following the ITX crisis, a new Quality Director was appointed to head the department, becoming my superior. To my misfortune, he was RS, the former Quality Director at Nestlé France, whom I had confronted in several cases of food safety violations [6].

He then initiated a process of sustained and persistent psychological harassment and mobbing, which, over time, grew in intensity. Whether as part of his harassment or simply his management style, he began to break off the communication between members of staff, move experts out of our department, and bring in new but less competent or visionary professionals, to discard the Quality Manual that was the key guidance material, and to cancel previous work procedures. In short, he destroyed all the achievements and management principles established in the past, particularly those I had fought for, such as consumer instructions, HACCP system, crisis management, etc.

One of the particular weaknesses of my colleagues in charge of food safety was their expertise in identification of hazards linked to raw materials, because each raw material can potentially be contaminated by dozens of different hazards and identifying these is not always straightforward. To overcome this difficulty, I had designed a database on the hazards associated with raw materials. He stopped its development and updating.

In his mismanagement, he targeted me, obstructed and sabotaged my work. He even went to the extent of giving wrong instructions contrary to food safety management principles. For example, in a

video, he said that it was unnecessary to check raw materials for chemical contaminants because suppliers controlled them, while most of our incidents were due to contaminated raw materials. He also planned to market a product that all our departments considered dangerous and contrary to public health advice at the time. In court, he explained his action by the fact that he does not care about science and scientists, and that he takes his information from the cookbook Larousse Gastronomique [6]. It was as if he had a grudge against the company and the principles that the food safety professionals of the time were defending, such as the HACCP system, which he qualified as the "Quack Quack" of the World Health Organization [52]. The working environment was very strange. His harassment resulted in everyone being silenced, and the only thing one could hear walking down the corridors or entering the offices was a deafening silence. Occasionally, colleagues would come to my office and, in hushed tones, criticized his management and my harassment, but no one dared to speak up.

As the head of food safety, I had to report a situation of imminent risk for the company as our department, which was the company's cockpit for food safety management, was not functioning correctly. From my experience with foodborne disease outbreaks and incidents in aviation and other risk-prone sectors, I could see the risk for the company. Not only were we not improving the flaws in our management, but we were even regressing. By not reporting the situation, I would have failed in my professional responsibility and been liable for a possible adverse event. Later, during my whistleblowing, I discovered that little importance is attached to food safety managers. A statement made in court by the Director of Research and Product Development is very telling. As he confirmed that he was aware of the problems I was experiencing, but did nothing, the judge asked him on a scale of 1 to 10 how important the food safety manager was to him. He replied: 4 to 5.

So, in a leap of faith, while respecting the hierarchy and company culture, I reported the failings in food safety management and my personal harassment to all levels of the company, that is the 2 successive Directors of Operations, Director of Risk Management, Human Resource adviser, Director of Human Resources, Director of Finance, Compliance Manager, Director of Corporate Governance [6,53].

All to no avail. Instead of addressing my food safety concerns, Nestlé senior management supported my mobbing and psychological harassment, a treatment which felt like torture to me. Overall, over four years, while continuing to fulfill the responsibilities of my senior position, my superiors stripped me of my projects and prerogatives, dismantled my team, humiliated me, isolated me, slandered me, denigrated my opinion, blocked my instructions, withheld information, spied on me, threatened me, forced me into impossible or humiliating jobs and they did all this and more without any regard for the implications of the situation [54,55].

In due course, this dysfunctional situation led to major adverse events. Firstly, on two separate occasions, two children choked to death on sausages unsuitable for very young children. Later, after my dismissal, other children also suffered [37,56]. From the very first case, I advised that specific guidelines be sent to our operations on providing appropriate instructions to consumers, a guidance which was lost by discarding our Quality Manual and our other instructions. RS ignored this recommendation.

In 2007, we experienced our first melamine outbreak, in which hundreds of pets died from eating melamine-contaminated pet food products. Melamine was an adulterant that, in China, was added to wheat gluten to falsify its protein content. I was of the opinion that after every incident in which a company learns of a new risk in the food supply, the company should check its other products, especially when the risk is high. I had done so before with other issues, such as prohibited antibiotics, but this practice had also met with the opposition of RS and some other managers [50].

In the case of melamine, RS decided to ignore this principle, presumably in order not to find any contamination and therefore be forced to issue a recall, which would have impacted senior Management bonuses. As a result, a year later, in 2008, Nestlé was implicated in a second melamine poisoning, this time in China, with infant formula [57,58]. Some 300,000 infants were reportedly intoxicated, and several died. Officially, the outbreak was attributed to products of the company Sanlu [49,59,60-62). Nestlé products were also contaminated, but Nestlé claimed that the level of contamination was low and, therefore its products were not considered as the culprit of the intoxication. However, an internal email indicates otherwise, reporting high levels of melamine contamination in infant formula products marketed in South African countries [63]. In any case, the control of products was a precautionary measure necessary to provide evidence that Nestlé products are safe. If Nestlé had monitored its products as required by the principles of crisis management and I had advised in a guideline for management of chemical contaminants that RS had blocked, Nestlé would have been able to detect the contamination of its products and report it [50,64]. A major outbreak could have been avoided or limited. This is the minimum social responsibility one can expect from a responsible food company [37].

I was under the mistaken impression that, in the event of an incident, management would realize my concern and accede to my request for an audit, but this was not the case. As I became a witness to their negligence, the harassment only increased. Two months after my last report to the Director of Operations on the faulty situation, we experienced one of the worst microbial outbreaks in Nestlé's history. It was the Nestlé Toll House EHEC

cookie dough incident mentioned above. Our operations had failed to identify EHEC as a potential hazard in flour and thus to devise adequate control measures such as heat treatment of flour or clear warnings to consumers that, for safety reasons, cookie dough should not be consumed raw, a practice not uncommon among American consumers.

As a last resort, I decided to refer the matter to the CEO. However, when senior management got wind of my plans, the Director of Corporate Governance launched an investigation into my harassment, which turned out to be fake, as later confirmed by the Swiss Court [65].

As an act of harassment or to hide me from FDA investigators, management had already, before the outcome of the investigation, removed my name from the organization chart. This prompted me to seek legal advice with my litigation insurance. The legal counsel that I consulted immediately confirmed the mobbing and moral harassment that I was experiencing in the context of whistleblowing and took my defense. Shortly after a letter from my legal counsel requesting a meeting with the CEO, I was sacked, without management ever having accepted my proposal to audit our department for its food safety management. My dismissal was motivated by my differences of opinion on food safety management with my superior, RS. As we will learn, he was a man of poor ethical values.

Whistleblowing

Following my dismissal in 2010, I was faced with two interrelated issues: firstly, the mismanagement of food safety, which posed a risk to public health, and secondly, the personal harassment and mobbing that left me devastated. They affected my credibility and reputation and killed my career. In the process, I also discovered that mobbing of staff, particularly food safety professionals, not only undermines the health and livelihoods of employees, which in itself is a public health issue, but is also a threat to food safety management. On the one hand, it prevents employees from doing their jobs, and on the other, it creates a culture of fear and silences employees [55,58,68].

As management had refused to audit our food safety management, I did not have sufficient information or an independent assessment of the irregular situation I was facing or its seriousness, or any explanation for management's silence. The Swiss legal system did not allow me to disclose company information. Given the uncertainty of the situation, I decided to adopt a prudent strategy, namely, to take legal action for mobbing and moral harassment, which was already ascertained by my litigation insurance and other legal experts.

So, in 2011, I filed a lawsuit against Nestlé, which turned out to be very complicated because my litigation insurance turned its back. I had to fight against it as well as Nestlé's Pension Funds, which all allied themselves with Nestlé [55]. I discovered that Nestlé's legal advisor was an eminent professor of employment law and an expert judge who trains future lawyers. He had much influence on the system. Yet he denied any wrongdoing and took disconcerting positions.

Nevertheless, after a long, costly, and complex legal battle that lasted 13 years, I won against Nestlé in 2023 [55,65]. The Court ordered Nestlé to pay part of my lost income, which, considering imposed taxes and the expenses incurred, did not cover my actual financial losses, not to mention the suffering, health, family, and social damage I have endured. My career was lost forever [55]. Despite harsh words condemning Nestlé's senior Management for its role in my harassment, the false investigation, and the failed whistleblowing, no-one was sanctioned in any way, be it with criminal or financial penalties or disciplinary measures. Some have even benefited from professional or social advancement [36,37].

As part of this lawsuit, I pointed out the mismanagement of food safety which I witnessed and demanded an explanation from Nestlé. When, through this trial, I became certain that Nestlé had been negligent, I reported the problem to the public health authorities, namely the European Commission, the US Food and Drug Administration and the Swiss and French authorities. They all ignored my warnings. My public report did not arouse much interest either, and NGOs such as consumer organizations and professional associations remained silent. A few of them, such as Multiwatch and Human Rights.Ch, reported on my case [6,55]. Grateful as I am, this support often came late and was too weak to be effective. My vision of a functional society was that the experience of whistleblowers should be examined in depth and that short- and long-term measures should be identified to improve the situation, especially considering that whistleblowers pay a high price for bringing the information to light. Or at least that an opinion be expressed on the events I was reporting. Ignoring their report is a sign of disdain and discredit, and therefore another form of moral harassment, this time by society.

The IUF (the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations) was prepared to help to negotiate an out- of court settlement but that was not my objective. My aim was to have the shortcomings in food safety management duly rectified, and to have my own harassment recognized. On several occasions, Nestlé also sought to negotiate a settlement, but this was always conditional on my silence about their food safety practices, without them acknowledging any wrongdoing. I declined, otherwise I could not have shared my experience here.

However, the media's behavior was the most disappointing aspect and showed Nestlé's power of control over the media. Few

media outlets reported my battle fairly. The vast majority of the mainstream media said nothing. Those who dared to talk about the case treated the information superficially, did not follow up or analyze the significance of the scandalous responses that Nestlé Executives gave in court [6], used words that trivialized the case, or reported it inaccurately [55]. The fact that the CEO was summoned to court was more significant news than the fact that I had won against Nestle and proved his wrongdoing in a retaliation case. None of the scandalous information provided by Nestlé to the court was analyzed for its significance and reported. Some, like the BBC or French TV and radio, literally censured my recorded interviews. In general, media reports were far from giving a true picture of Nestlé's food safety management. A satirical play performed by a small group of artists gives a more representative picture [67].

What was more painful was the fact that the technical media and former colleagues most competent to understand the technical issues remained silent. Neither the authorities nor the media questioned Nestlé's management, not even when I won my case. The GUE/NGL award for journalists, whistleblowers, and defenders of the right to information I received at the European Parliament in 2019 didn't arouse much interest either [54] Only a professional NGO, the Global Harmonization Initiative, shared the information with its members.

Conclusions: A Chain of Failures

As the Iranian poet Rumi said, "you are not a drop in the ocean, but the whole ocean in a drop" [68]. Even if the two outbreaks of EHEC are just a drop in the ocean of misfortune that afflicts our planet, the loss of a child - or the illness of a person suffering from the severe and long-term sequelae of EHEC – is an ocean of sorrow for victims.

Therefore, the outbreaks deserve to be analyzed in depth so as to understand the failures that led to the incidents and to ensure they are not repeated. Failing which, the losses will be in vain and even more painful for the victims and society. These outbreaks also show the importance of whistleblowing and the consequences of harassment for food safety management [58,69].

Analysis of the two outbreaks presented in this chapter reveals certain common features.

In both cases, the raw material, flour, was identified as the likely source of the pathogen. In both cases, the plant did not consider the pathogen a potential hazard in flour. As a result, it failed to put in place a control measure, be it heat treatment of the flour or a warning and adequate safety instructions for consumers. The problem of staff lacking expertise in the HACCP system, here the hazard analysis element, was well known. I had personally raised the issue with the Nestlé management on several occasions. I had proposed a standard training manual and created a raw material database to provide such information to the factories [47]. The first was refused, possibly for economic reasons, and the second was dismantled in the context of my harassment and mobbing.

In both instances, the root cause of the outbreaks could be attributed to a lack of staff expertise or to their poor work in identifying potential hazards associated with flour (Active Failure). However, the root cause of the outbreaks was management's failure to heed my internal reports (Latent Failure). Similarly, my harassment, which included obstructing or sabotaging my work, contributed to Nestlé's involvement in the melamine scandal, fatal child suffocation cases and other incidents. A situation which shows the impact of employee harassment on management of product safety.

For three years before the first EHEC outbreak, I had requested an audit of our services to expose the company's shortcomings in food safety management, particularly the staff's weaknesses in hazard analysis and various violations. My reports on the inadequacy of human resources were also unwelcome and gave a good reason for my harassment. This was repeatedly alluded to by Nestlé in the Swiss Civil Court of the Canton of Vaud.

Secondly, as with the repeated melamine and choking incidents, the company failed to take on board the lessons of its first outbreak and alert its operations to the risk (37). A measure that should be implemented after each incident or failures detected by auditors.

There is also no evidence that Nestlé validated its warnings or instructions to consumers, a necessary measure required by international standards [70], had Nestlé relied on consumers to inactivate pathogens by heat-treating the product. Such validation should have covered both the duration and temperature of heat treatment to bring a frozen product up to the pathogen-killing temperature and the clarity of the information given to consumers [71].

It should be stressed that, as was proven before the Swiss Court of Justice [65], Nestlé's senior management was complicit in my harassment and the sham investigation that was carried out, in flagrant violation of the Swiss Code of Obligations and Nestlé's Code of Business Conduct [72].

Given the importance of organizational culture in product safety management, it is worth reflecting on Nestlé's ethical behavior and commitment to product safety [66]. To wit, contrary to its internal policies, Nestlé promotes and appoints *i)* an abuser to the position of global Quality Director, *ii)* turns a blind eye to food safety alerts, *iii)* harasses and dismisses its food safety manager for a difference of opinion, *iv)* denies her the food safety audit of her department, *v)* and conducts a bogus investigation into her harassment complaints. It does all this and more without the slightest regret, apology or sanction.

In a letter to the French Minister of Health, while sharing

my negative experience of food safety management at Nestlé and inviting her to examine my experience, I had particularly underlined the need to improve risk communication to consumers through product labeling [73,74].

A review of the reports from inspectors who visited the Caudry plant in 2012, 2014, and 2020 also shows serious shortcomings in the plant's inspection (active failure) [75]. The focus was on general hygiene issues, and little attention was paid to the HACCP system, which is the key system for guaranteeing safety and is recommended by the World Health Organization as an inspection method [76-78]). Nowhere in their report do they comment on how the plant manages and controls EHEC, while from the aforementioned Nestlé cookie dough outbreak in US, authorities should have known about the EHEC risk in flour. Nor did the inspectors note the degree of unhygienic conditions prevailing in the plant, as reported by employees before and after the outbreak, or mention Management's neglect in addressing employee grievances [18].

Nor do we understand how internal Nestlé auditors, certification bodies, and distributors failed to see that E. coli was not on the plant's radar and failed to report employee dissatisfaction with the plant's food safety management and lack of hygiene. I also had a similar experience with the certification bodies. While I was complaining about poor food safety management and harassment, the certification bodies issued a satisfactory report on the situation at the head office, in Vevey, Switzerland. They did not even interview our department, which had a critical function in the company.

On several occasions, I had reported shortcomings in Nestlé's food safety management to the European Commission and to the Swiss, French, and US authorities. To the latter, I clearly stated that, as part of their EHEC investigation for the 2009 outbreak, they should have enquired up to the management level and interrogated me as the company's Food Safety Manager. It's noteworthy that during the ten years that I was responsible for the company's food safety, I was never inspected or interrogated by authorities, even in the event of incidents or crises, which were not uncommon (latent failure).

The failure of the authorities to react, but also the lack of interest shown by consumer organizations, trade unions, parliamentarians, politicians, professional and scientific bodies, certification bodies, the technical and the mainstream media, were all missed opportunities to debate the overall management of food safety in the commercial sector and its strengthening. With regard to the specific practice of Nestlé's management, the company had no incentive to improve its practices because the regulatory authorities turn a blind eye to their violations and, legally, in Switzerland there is no sanction for the management of a company that ignores whistleblowers reports or harasses its staff. In any case, as noted here, the headquarters of multinational companies, like Nestlé, are not subject to any form of regulatory oversight or inspection, even though their management is responsible for and dictates the company's practices. For more on the impact of the legal situation on risk management, see [36,37]. In conclusion, the two outbreaks of EHEC, as well as repeated incidents of melamine and choking that I witnessed in the years 2006 to 2010, inter alia, concurrently with my harassment, resulted from failures in food safety management and whistleblowing at different levels. They also demonstrate the impact of staff harassment on food safety. It will never be possible to say with certainty whether the EHEC outbreaks could have been avoided if my voice had been heard, but we could at least have been sure there would have been no negligence.

In recent years, whistleblowing has gained much recognition, and many countries have passed legislation to protect whistleblowers [79,58]. However, if the objective of employees is reporting and correcting a wrongful situation, but authorities pay no attention to their report, what is the use of whistleblowing, and why should whistleblowers risk their lives?

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