The Council of Europe defines a whistleblower as “any person who reports or discloses information on a threat or harm to the public interest in the context of their work-based relationship, whether public or private.” The term reports refers to internal reporting within an organization or enterprise, while the term discloses refers to reporting to an outside authority or to the public.1

I heard the term “whistleblowing” for the first time sometime in the early 2000s when I was working as the food safety manager in a multinational food company. I remember that at a weekly department meeting, the director of the department shared an article on the subject and asked rhetorically, “I wonder if we are blowing the whistle often enough?” At that time, I did not know that one day, I would end up as a whistleblower in the company. It is this professional and personal experience that has prompted me to write this article. However, this is not about my case, but the bigger issue of whistleblowing and what it means for society.

In recent years, with the revelations of Bradley Manning and lately those of Edward Snowden, whistleblowing has become controversial because it is alleged that national security or interests have been compromised. However, the phenomenon is not new, and there have always been individuals who have gone against widely held beliefs to reveal information of critical importance to society. Although in the early days they were not seen as whistleblowers, they were, like Cassandra, not always appreciated or heard. For certain individuals, the term whistleblower has a negative connotation (e.g., a snitch or tattletale); yet, most whistleblowers have high ethical and moral characters and many have suffered great mental, physical and economic hardships to render this service to society.
WHISTLEBLOWING

In the area of public health, one notable early whistleblower was Ignaz Semmelweis (1818–1865), a physician working in Vienna. I learned of his story when I started working at the World Health Organization (WHO) as a food safety scientist in the early 1990s. Semmelweis had recognized that the high maternal mortality rate in Viennese hospitals due to puerperal fever was caused by the lack of handwashing by doctors who had previously performed autopsies. He even discovered an effective intervention of washing hands in carbolic acid (phenol). However, his insight was ignored, perhaps because his peers were resistant to change or simply disliked criticism. This story was told to me by the then-director of the department of food safety at the WHO, Dr. Fritz Käferstein, who compared it to the situation of food safety that had yet not received the recognition that it has today. Back then, even WHO member states and donor agencies were not very supportive of the nascent food safety program. Infant diarrhea and, generally, diarrheal infections, such as cholera, were attributed to contaminated water, but not food.1 2 So each time we were confronted with the lack of appreciation for food safety by our fellow public health colleagues, Fritz Käferstein would cite Semmelweis’s story.

Although, at that time, we did not see our efforts of alerting and campaigning for food safety as “whistleblowing,” in hindsight, we were also on some kind of whistleblowing journey. Despite our continuous attempts to draw attention to the scientific evidence, food safety remained an afterthought at best. Unfortunately, it required a succession of food safety crises (bovine spongiform encephalopathy, dioxins, deadly foodborne disease outbreaks, such as *Escherichia coli* O157 infections) and resulting trade disruptions to bring about a radical change in the public perception and a realization by governments of the importance of food safety to health and to food supply.

Misperceptions

There are different reasons for whistleblowers to be negatively perceived.

1. Some individuals have obtained their information through illegal means, like a hacker who steals data
2. The information they reveal may undermine national security or interests
3. Some whistleblowers are motivated by revenge against an employer or by personal gain
4. Whistleblowing may be reminiscent of political denunciations and collaboration with repressive states

There may also be psychological reasons for feeling resent-

As the French mathematician and philosopher Blaise Pascal (1623–1662) stated, “As men are not able to fight against death, misery, ignorance, they have taken it into their heads, in order to be happy, not to think of them at all.” A situation often represented by the three wise monkeys embodying the principle of “see no evil, hear no evil, speak no evil.”

Whatever the reason, the reality is different. In fact, not only do whistleblowers render a great service to society, but also they often do it at the price of a huge personal sacrifice. Once, an officer working in a governmental organization who learned about my story as a whistleblower told me, “Lady, you are paying a high price for letting us learn the truth.” Therefore, the courage and sacrifice of whistleblowers should be valued and praised rather than denigrated and despised. Most importantly, it is the message rather than the messenger that should be the focus of the employer, and if that is not the case, at least of the responsible regulatory authorities.

Whistleblowing is and should be seen as a civic action. A true whistleblower is motivated by moral purposes and professional integrity and whistleblowing should not be denounced because of the ill-perceived actions of a few. Considering today’s globalized food supply, illegal behavior, reckless risk taking or willful negligence can take on huge health and trade dimensions, as experienced with the melamine adulteration of milk powder and the horse meat scandal. Whistleblowing provides an important approach in meeting the daunting challenges of food safety in modern society. Against a rising tide of fraud and corruption, whistleblowing is perhaps one of the most important lines of defense.

Regulations

In recognition of the above, many countries are introducing laws and regulations to encourage and protect whistleblowers from unfair treatment by their employers. Some countries, such as the U.S., even provide whistleblowers with financial incentives in cases of significant economic fraud.

“….a whistleblower as ‘any person who reports or discloses information on a threat or harm to the public interest in the context of their work-based relationship...”’
Regrettably, these do not apply to other values of society, for example, health, environment, human and animal well-being.

The Council of Europe has prepared a recommendation on the subject.1 With regard to protection of whistleblowers, it stipulates that “whistleblowers should be protected against retaliation of any form, whether directly or indirectly, by their employer and by persons working for or acting on behalf of the employer.” Such retaliation might include dismissal, suspension, demotion, loss of promotion opportunities, punitive transfers and reductions in or deductions of wages, harassment or other punitive or discriminatory treatment.2,3

“Despite our continuous attempts to draw attention to the scientific evidence, food safety remained an afterthought at best.”

In the United Kingdom, the Public Interest Disclosure Act (1998) protects workers from detrimental treatment or victimization from their employer if, in the public interest, they expose wrongdoing.4 In implementing the act, the UK Food Standards Agency has extended the protections to workers in the food industry, whether or not the information is confidential and whether or not the wrongdoing occurs in the UK. Qualifying disclosures include a criminal offense, the breach of a legal obligation, a miscarriage of justice, a danger to the health and safety of any individual, damage to the environment and deliberate concealment of information related to any of the aforementioned five matters.

In the United States, a series of laws has been enacted to protect employees who blow the whistle on food safety violations. For instance, under the U.S. Food and Drug Administration, the Food Safety Modernization Act (2011) has provisions against retaliation toward whistleblowers by food businesses.5,6

France has also developed a number of regulations to protect whistleblowers in relation to corruption, as well as for public health and safety. Among these are Articles 2013–316 of the Code of Labour (2013) relating to the independence in scientific expertise in public health and environment, as well as Article L 4133-1 for protection of whistleblowers in businesses.7,8

Switzerland is also in the process of regulating whistleblowing. However, the proposed law under discussion in parliament is limited to clarifying the procedures without considering protection of the whistleblower from retaliatory measures by the employer. Unfortunately, as currently drafted, such a law will serve to protect the reputation of businesses with little regard for the problems of whistleblowers. Under such conditions, as explained below, it is unlikely that any employee would dare to expose wrongdoings, no matter how grievous.

There are also a number of other countries (e.g., Luxembourg, Slovenia and Hungary) that have legislation for protection of whistleblowers, but some are more limited in scope to anticorruption, or they do not have in place an infrastructure to handle such complaints.

The Impasse of Whistleblowers

In some countries, regulations require that employees should report their observations first internally to their own management and, in case there is no follow-up or satisfactory response, to report their concerns to regulatory authorities. However, a common problem for whistleblowers is that employers often ignore the reports and do not follow up the issue. Instead, they subject the whistleblower to retaliatory measures, such as psychological harassment, transfer or dismissal. At times, even regulatory authorities fail to investigate. This was my personal experience.

Another difficulty is that the whistleblower may be obligated to report to the very person(s) responsible for the failure. Such a situation inevitably leads to retaliatory measures to silence the whistleblower; this is particularly a problem if a senior manager is involved. Also, under present workplace conditions, a whistleblower typically has to assess the importance of a wrongdoing alone without any outside support. This also means that the whistleblower assumes the consequences of reporting the events. Where colleagues also are aware of the situation yet remain silent, the whistleblower may be too intimidated to report, out of fear that he/she may be misjudging the risk or the importance of the wrongdoing, or there may be another hidden or misunderstood explanation for his/her observations.9

To encourage employees to come forward with their observations, laws for protection of whistleblowers should consider the risks and consequences for employees and include effective sanctions against employers who retaliate. Also, governments should provide legal assistance for the employees to help them take their case to the courts of justice, where necessary. Furthermore, people who suspect a wrongdoing but cannot provide direct evidence for their concern, or whose information cannot be validated, should not be penalized in any way for raising the issue, particularly if this takes place in the workplace.

Application to Food Safety and Risk Management

Since ancient times, food fraud (sometimes referred to as economically motivated adulteration) has been a concern. Although motivated by financial gain, this sometimes impacts the safety of products. Recent examples of adulteration are chili with the carcinogen Sudan red, sunflower oil with mineral oil and milk with melamine.10 Importantly, with the increased international trade in food and the globalization of

Reprinted from Food Safety Magazine, June/July 2014, with permission of the publishers.© 2014 by The Target Group • www.foodsafetymagazine.com
the food market, these events have taken a much broader dimension; when they occur, the consequences can be far-reaching and devastating. For instance, in 2008 melamine was used to mask the adulteration of milk in China and infant formula made from the contaminated milk resulted in kidney damage in over 300,000 infants, with 54,000 of these infants hospitalized and 13 deaths. In 2012, Jiang Weisuo, the man who first alerted authorities to what would become the melamine-tainted milk scandal, was murdered in the city of Xi’an.\textsuperscript{12}

Detecting unpredictable fraudulent practices is almost impossible through conventional approaches, such as product testing; this further highlights the importance of whistleblowing. However, there are other reasons that underscore the need for whistleblowing. One is the corruption of the systems meant to ensure the safety of food products. For example, extra bonuses or promotions are given in exchange for silence and not reporting food safety problems to management. Another reason has to do with structural deficiencies; for instance, when auditors (internal or external) are in the position of a conflict of interest and subsequently downplay deficiencies or turn a blind eye to gaps or weaknesses of a system they are meant to review. Scientific biases and conflicts of interest are also concerns with experts involved with the risk assessment of biological and chemical hazards in food or technologies used to produce foods.

Some structural and organizational deficiencies may be difficult to characterize as a public health threat and henceforth to denounced, the reason being that their consequences for the safety of products may not be immediate, but rather more long-term in nature, and the prospect of an adverse event happening may not be definite. Examples of such situations are appointments made on the basis of nepotism rather than professional skill or experience, staff working under unrealistic time frames or under duress, neglect in training personnel for their job and/or insufficiently supervising them, downplaying deficiencies, carelessness or inconsistency in communication or in general having unresponsive or slow management systems. Such deficiencies are referred to as “latent failures” (Figure 1).\textsuperscript{12,14} A company’s culture based on fear, and which discourages reporting and/or fails to follow up internal reports, constitutes perhaps one of the worst kinds of latent failures. It deprives an organization of opportunities to anticipate adverse events and to take early actions to nip the risks of accidents in the bud. Such situations have been the root cause of many serious accidents in the food industry and others, for example, Snow brand, Toyota and British Petroleum.\textsuperscript{15,16} In Switzerland, Nestlé openly acknowledged this management problem. In its book, \textit{Transformational Challenge: Nestlé 1995-2005},\textsuperscript{16} the following quote appears:

\textit{The unwillingness to report negative events fully and swiftly up the chain of command may be a vestige of the past culture at Nestlé, a culture in which admitting mistakes was not exactly good for your career, and in which internal criticism was “not the done thing.” The culture of learning from mistakes is not yet as widespread as it is in the aviation industry, where even the smallest incident is analysed and evaluated to prevent repetitions.}

To increase profits and create value for shareholders, some companies may cut back on expenditure and investments in food safety, as the added value of such investments is not always visible to consumers and does not constitute a selling point. Such decisions lead to increased risk of organizational failures. A case in point is the policy of a well-known food company to link the bonuses of its managers to a lack of incidents and product recalls, thereby discouraging its managers from reporting incidents or recalling contaminated products. Financial crises may of course exacerbate the situation.

\section*{Whistleblowing: The Backbone of Risk Management}

With the extensive industrialization and commercialization of the food supply, the resources of government authorities will never be sufficient to control the safety of the many food operations and products on the market. Also, end-product testing of products, as a sole measure, can in no way be an effective approach for ensuring food safety for detecting and preventing unknown substances that malevolent people may add to products. Therefore, the trust that we can have in food safety depends very much on the following:

\begin{itemize}
  \item Competence and ethics of professionals working in the food industry
  \item Liberty and authority given to the staff to report deficiencies or unethical practices internally, or to authorities, without being subject to retaliation and punitive measures
  \item Commitment by management to address and follow up on reported food safety issues, including structural problems
  \item Vigilance of food safety authorities in following up and investigating the root cause of deficiencies and incidents up to the highest level of company management
\end{itemize}

\section*{The Way Forward}

The above demonstrates the importance of considering the human factor in food safety and risk management. Although a great proportion of employees are reliable and deserve trust and respect, this cannot be generalized. The scale that the horse meat fraud took before it was actually detected
illustrates the point. Therefore, a national system of food safety management needs to be supported by regulations that achieve the following:

• Make the senior directors of a company, such as the CEO, directly accountable for investigating internal reports and taking appropriate measures
• Severely sanction managers of companies who try to block or do not follow up on internal reports and/or take retaliatory measures (psychological harassment) against those who report failures, deficiencies or malpractices
• Protect whistleblowers from civil and legal suits for disclosing public interest information

“...the courage and sacrifice of whistleblowers should be valued and praised rather than denigrated and despised.”

Additionally, there is a need to provide advice for those whistleblowers who are unsure whether or how to raise a public interest concern. Those who are subjected to retaliatory measures would also need legal assistance and other types of support.

Where a case relates to issues of international interest, the whistleblower should be enabled to take his/her case to international judicial authorities directly without having to go through a national system. A whistleblower who is a victim of retaliatory measures will rarely have the means (time, energy, funds) to go stepwise through the extensive procedures of a national system, particularly if the national judicial system is slow and impeded by powerful multinational businesses/employers with almost infinite resources and power to influence the national system.

Also, as experienced in the case of Edward Snowden, a national legal system, which is itself under scrutiny as a result of a disclosure, is unlikely to fully operate in an unbiased manner, as most governments naturally give priority to their own national interests. Therefore, in such cases, which are likely to increase in light of the increasingly globalized systems of trade, finances and communications, the fundamental question of conflict of interest will have to be taken into account. The smaller the country, the more vulnerable it will be to the influence and the power of multinational companies.

Conclusion

In conclusion, we need to move from merely authorizing whistleblowing to facilitating it so that employees not only dare to come forward with their information, but consider it their moral obligation to do so. In companies where psychological harassment and a culture of fear are exercised, and in countries where there is no protection for whistleblowers, there is little incentive for potential whistleblowers to disclose their concerns, either internally or externally.

Psychological harassment and other retaliatory measures are barriers to whistleblowing. When exercised on an employee, they will have a chilling effect on anyone else who might become aware of a wrongdoing or of a serious food safety issue, and the company will miss the opportunity to control operational risks or improve its system before a serious incident occurs. Failure to remedy this situation comes at the cost of undermining public health, the environment, human rights and social welfare. It will also foster ideal conditions for corruption to thrive. In addition to endangering public health, the cost to the food industry is also significant as the loss of consumer confidence in the food supply will have a detrimental effect on the food industry as a whole. Unless serious efforts are made to address the problems of communication and accountability with respect to food safety and other such fundamental public interest issues, the health, social and economic crises that have been observed in the past will continue to occur with all too frequent regularity.

As concluding remarks, I would like to add that throughout my professional career, I have contributed to various scientific and technical aspects of food safety and its management at the international level. I have produced numerous publications and recently two major reference works. Yet today, I consider that my biggest contribution to food safety has been my actions as a whistleblower and reporting my concerns regarding the management of food safety, both internally in the company for which I worked, as well as publicly.

When I started my work in WHO as a scientist, one of the key points that I learned was the importance of the human factor in food safety management. At that time, my focus was on consumers and consumer practice. However, through my experience in industry, I realized the crucial and pivotal role of employees, from the CEO down to the worker on the line.

I learned that too often company policies are merely statements of good intentions without always a serious plan for implementing them. I learned that the management may even violate its own policies, a behavior which sets a very negative model for the entire company and fosters a culture of complacency. It gives the message that integrity does not matter, and puts in motion opportunities for future failures. I learned that in spite of written policies, in some companies or organizations, whistleblowing is still unwelcome, particularly when the interests of the management itself are engaged. As a consequence, critical information pertinent to health and safety may not be revealed. Large food businesses are typically run by businessmen who have a secondary interest in consumer health and nutrition, and professionals trained in food safety are not always those who win the day in key decisions.

Based on my personal experience, those with humanity and concern for their colleagues or fellow citizens are ejected from the system, or at best, remain at the bottom of the...
pyramid of hierarchy. Those who are the most callous and lacking compassion are moved upward in the chain of command. However, the hardest lesson was to realize that those who should be the guardian of public health and who should verify the information put forward by whistleblowers, that is, the regulatory authorities, turn a blind eye and ignore the concerns of the whistleblower. Even worse, in some countries, they enact legislation to oblige employees to be silent, which to a person with moral values is most painful and inhumane; moreover, a whistleblower is at risk of becoming an outlaw.

Predictably, the media is more interested to report on wrongdoers, such as Jérôme Kerviel and Bernard Madoff,20 rather than a whistleblower who sacrifices his/her personal interests, livelihood and even his/her life for the well-being of society, as if violence, greed and malfeasance were more gripping than honesty and integrity.

Another disappointing experience has been the apathy of civil societies and their lack of support for whistleblowers. This vacuum of counterforce in the society leaves the well-being of people at the mercy of unscrupulous individuals. It is a lesson that societies have long known, but for some reason, keep forgetting. To wit, “The price of apathy towards public affairs is to be ruled by evil men.” – Plato

I am grateful to all the colleagues who have reviewed this article and provided valuable comments. Specific thanks to Gerald Moy (retired WHO food safety scientist) and Anna Myers (coordinator of Whistleblowing International Network) for their extensive input in the preparation of this article.

Yasmine Motarjemi, Ph.D., holds an M.Sc. degree in food science and technology from the University of Languedoc, Montpellier, France, and a Ph.D. in food engineering from the University of Lund, Sweden.

References
1. Council of Europe/European Committee on Legal Cooperation. www.coe.int/t/dghl/standardsetting/cdcj/whistleblowers/protecting_whistleblowers_EN.asp?
4. Translation from the French: “Les hommes n’ayant pu guérir la mort, la misère, l’ignorance, ils se sont avisés—pour se rendre heureux—de n’y point penser.”
6. UK Food Standard Agency. food.gov.uk/enforcement/regulation/whistleblowing#.UyLATkKY2y0.
19. Jérôme Kerviel is a French trader who was convicted in the 2008 Société Générale trading loss for breach of trust, forgery and unauthorized use of the bank’s computers, resulting in losses valued at €4.9 billion.
20. Bernard Lawrence Madoff is an American convicted of fraud and a former stockbroker, investment adviser and financier. He is the former nonexecutive chairman of the NASDAQ stock market, and the admitted operator of a Ponzi scheme that is considered to be the largest financial fraud in U.S. history.