



Listeriosis: A wake-up call?

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The foodborne disease, listeriosis, caused by ingesting food contaminated with infectious doses of *Listeria monocytogenes* has caused 164 deaths in South Africa and has resulted in 872 confirmed cases at the time of going to print. I wrote a while back that it is the “worst documented listeriosis outbreak in global history,” and it shows no signs of abating, particularly as the source has as yet not been found.

So how did this outbreak happen and why now?

This is a complex question and this article is not intended to necessarily provide answers. It does, however, highlight certain important points with the purpose of stimulating further discussions, hopefully leading to coordinated actions related to food safety activities in all sectors, particularly government and industry.

The World Health Organisation (WHO) estimates that 600 million people – almost

one in ten in the world – fall ill after eating contaminated food and 420 000 die every year. We also commonly state that there is no zero risk in life and the same is certainly true for food safety.

Unsafe food creates a vicious cycle of diarrhea and malnutrition, threatening the nutritional status of the most vulnerable. Food safety is therefore inextricably linked to food security, an issue that still affects millions of people in South Africa.

So, who is responsible for providing safe food to the consumer? There are in fact three groups/pillars responsible for ensuring that food is safe at the point of consumption:

- Government with the responsibility of protecting public health and ensuring fair practices in food trade. Food safety should be made a priority by governments as they play a pivotal role in developing policies and regulatory frameworks as well as establishing and implementing effective food safety systems that ensure that food producers and suppliers along

the whole food chain operate responsibly and supply safe food to consumers.

- The food industry (in the broader sense) with the responsibility of producing food that is safe for human consumption.

Food can become contaminated at any point of production and distribution, and the primary responsibility lies with food producers. Food producers and suppliers along the whole food chain must operate responsibly, comply with regulations and supply safe food to consumers. Yet a large proportion of foodborne disease incidents are caused by foods improperly prepared or mishandled in food service establishments, markets, hotels and the like.

- Consumers form the third pillar and not all consumers understand the very important roles they must play, such as adopting basic hygienic practices when buying, transporting food home, preparing and storing food to protect their health and that of their families. While the Foodstuffs, Cosmetics and

Disinfectants Act 54 of 1976 states that the sale, manufacture and importation of food that is unfit for human consumption is prohibited, the Act should be supported by appropriate regulations.

No requirements

As things stand, there are no regulated requirements for testing for *Listeria monocytogenes* in ready-to-eat foods, which are most often implicated in listeriosis outbreaks.

Typically R692 (Regulations Governing Microbiological Standards for Foodstuffs and Related Matters) would contain mandatory requirements for testing above-mentioned foods.

The revision of this regulation began in 2016, not only to include requirements for *Listeria monocytogenes*, but also to revise existing requirements and reformatting the regulations to reflect the modern risk-based approach used in many other countries.

However, revision of this regulation has not been completed.

Besides the mandatory Certificate of Acceptability issued by the department of health covering basic hygiene requirements, the next set of regulations to manage food safety are contained in R908, Regulations Relating to the Application of the Hazard Analysis and Critical Control Point System (HACCP). However, R908 is not mandatory for all sectors of the food industry; it is only mandatory for peanut sorting/grading facilities and peanut butter manufacturers. Consequently, the implementation of HACCP and HACCP-based systems is essentially voluntary in South Africa.

This is not the case for most developed

countries, where a HACCP-based food safety management system (FSMS) is a regulated requirement for all food business operators. Is it perhaps time to make HACCP implementation mandatory for other high-risk sectors?

Industry level

At industry level, the reality in South Africa is that many customers require their suppliers to have a certified HACCP-based FSMS in place.

The certification body providing certification should also be accredited by the South African National Accreditation System (SANAS) or similar accreditation body affiliated to the International Accreditation Forum (IAF). When a FSMS is implemented correctly, it is supported by appropriate microbiological testing as verification that the FSMS is effective.

In addition, customers often have their own list of specific requirements, many of which include microbiological testing, which differ depending on the risk associated with the product/ingredient supplied i.e. reflecting a modern risk-based rather than a hazard-based approach.

All food handlers in the catering environment require adequate training in appropriate handling of food as well as formal supervision to ensure that good hygiene practices are understood and implemented continuously i.e. maintaining a food safety culture.

Consumer awareness campaigns are essential to inform the consumer of his/her contribution towards ensuring safe food. Such awareness campaigns should be developed and conducted in a partnership between government and civil

society.

South Africa has a fragmented food control system in that the department of health (DoH), department of agriculture forestry and fisheries (DAFF) and the department of trade and industry (DTI) all have mandates related to food control activities.

A number of projects conducted in South Africa since 1997, supported by organisations such as the Food and Agriculture Organisation (FAO) and the World Bank have highlighted the weaknesses in the system and have emphasised the lack of a national food safety policy.

Framework

It is recognised that a national food safety policy and action plan provide a framework within which to enhance coordination among the different departments and bring together fragmented initiatives and actions in the area of food safety. A well-conceived national food safety policy would clearly describe the roles of the three different pillars i.e. governmental agencies, the food industry and consumers, as well as establish mechanisms for cooperation and the means for dealing with existing and emerging food safety challenges. In August 2014, a National Policy on Food and Nutrition Security (NPFNS) was gazetted by DAFF, in which food safety is mentioned.

This was followed by a very ambitious Food and Nutrition Security Implementation Plan in December 2014. However, both the NPFNS and

