Editorial

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With the demand for good and healthy food, its availability in sufficient quantities and year round, conveniently packaged and sold in supermarkets, with an acceptably long shelf-life, and appealing taste and appearance, more and more foods and food products are being traded around the world. Globalisation and consumer demands require new processing and distribution strategies, which bear new risks and challenges for the safety of foods and feeds.

Ensuring that these foods are of high quality and safe to eat when they reach the consumer requires reliable food analysis techniques. Recent food scares such as melamine, dioxin, BSE, Salmonella and E. Coli outbreaks, Listeria monocytogenes, Acrylamide, Avian influenza, Sudan red, Ochratoxin, and others have emphasized the importance of protective legislation and powerful analytical test systems to ensure safety of foods.

In recent decades, safety and economical concerns have been the main driving forces for the development of rapid methods as well as the birth of a multitude of companies providing these technologies to industry and government. The need for rapid intervention for managing product tampering, bio-terrorism, and food contamination outbreaks have also led to the development of faster methods. Rapid tests help industries in determining the effectiveness of food safety measures (e.g. in hazard analysis of critical control points - HACCP), legal compliance as well as achieving logistical and operational goals while saving time and investments in complex instruments and staff qualifications. In some cases they also reduce costs. Other drivers for the development of rapid methods in manufacturing have been the small sample size and quantities, portability of test systems, national and international regulations, and the potential universal use.

There is always, however, for the laboratory the required aspect of proving that the method works, that it is fit for purpose, gives indeed equivalent results to the reference method and can be used with confidence in the user's laboratory. In addition rapid test methods are often like a black box to the operator, who does not need to be highly qualified and who often lacks understanding of the underlying concept of the test method and its associated pit falls.

Harmonisation in this area is a challenge, but it is a necessary one, if rapid methods should reach an internationally accepted standard by certification through an international standardization body at a passable cost. Validated rapid methods are indeed a realistic option, some currently used methods have already reached general acceptance. Organizations and networks such as ICC and MoniQA may play a vital role in this standardization process in the field of food analysis.

In this second issue of QAS – Quality Assurance and Safety of Crops & Foods you will find several position papers prepared by the various MoniQA working groups, which outline the different challenges in assuring the reliability of rapid methods and comparability of analytical results when testing for various food contaminants and fraud. A paper on melamine in dairy products as spontaneous food crisis in late 2008 is contrasted by several papers on mycotoxins, a persistent issue in foods and feeds with rising relevance with climate change.

I hope the papers in this issue of QAS will stimulate discussion and new approaches for better and safer food.

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