



From mad cows to melamine: reliable food safety testing

The food in European supermarkets today comes from all over the world; we have more choice than ever thanks to the Single Market. But in case of a food crisis, are all countries prepared to work together and react jointly? Who is making sure that common food safety standards and reliable test methods can be applied throughout the whole of Europe? Scientists at the Joint Research Centre play a key role in ensuring that our food is safe to eat.



DID YOU KNOW:

- That on average Europeans consume 97 kg of meat per year.
- That more than ten million tests for BSE were carried out in the EU in 2008 alone.

Melamine crisis

In 2008 a serious food crisis broke out in China as it was discovered that children had died and hundreds of thousands of people had fallen ill after consuming milk products contaminated with melamine. While the EU does not import milk or other dairy products from China, it does import processed foods such as biscuits and chocolate, which could contain milk powder. A swift and co-ordinated reaction was thus necessary to ensure the safety of food products sold everywhere in Europe.

As part of its rapid response, the EU decided that all products from China containing more than 15% of milk as an ingredient must be checked for the melamine chemical. Products containing dangerous levels had to be destroyed immediately.

Europe's laboratories have since had to test many foodstuffs coming from China for the presence of melamine. The European Commission's Joint Research Centre (JRC) played a vital role in support of national labs by setting up a website to gather information and review detection methods. The JRC also launched an evaluation programme for laboratories to see how effective they are in testing for the dangerous chemical.

Mad Cow Disease – testing the tests

Scientists at the European Commission played a crucial role in bringing an end to the BSE-crisis, one of the most serious food crises in recent European history, during which many European consumers felt it was unsafe to eat beef.



Several test methods for BSE existed prior to the last crisis but the quality of these tests had to be assessed and the protection of consumers throughout Europe guaranteed. Scientists at the JRC set up a programme to 'test the tests', evaluating 29 different tests between 1999 and 2009 for BSE and scrapie, another disease affecting sheep and goats. Twelve tests were approved for use within the EU. Restrictions on the exports and sales of beef could be lifted once strict regulations had been put in place and reliable testing was ensured. Over the years following the crisis, the number of BSE cases in Europe dropped rapidly and today we can again be confident that our meat is BSE free.

Want to know more: www.jrc.ec.europa.eu/research4u