

THE HORSEMEAT INCIDENT: IMPLICATIONS FOR FUTURE STRATEGIES IN FOOD ANALYSIS

Paul Brereton^{1*}

¹ Food and Environment Research Agency, Sand Hutton, York, YO41 1LZ

*Corresponding author - E-mail: paul.brereton@fera.gsi.gov.uk , Phone: +44 1904 462000

On 15 January 2013 the Food Safety Authority of Ireland reported data on a surveillance study on the speciation of meat products. Included in the study were 27 beef burger products, 10 of which tested positive for horse DNA. These results had far reaching consequences for the European food industry and regulatory authorities as subsequent testing demonstrated that this was not a localised problem but affected many parts of Europe. The resulting loss of consumer confidence in the meat industry and retailers has had major implications for the companies caught up in the incident and for the European food supply in general. In particular it has elicited a major reappraisal of the need for food testing; identified the need for better understanding and monitoring of food supply chains, as well as a great deal of debate about where food fraud sits within what is largely at present, a food safety dominated regulatory framework. The incident also emphasised the lack of a formal network of expertise that stakeholders could call on for advice and expertise in food authenticity. This was emphasised in the considerable confusion about the interpretation of the results of DNA analysis and identified the need for quantitative methods and multi-species methodology. On a larger scale the incident has transformed the food chain agenda. There is now a focus on demonstrating 'food integrity' to the consumer with concomitant transparent assurance of food safety, quality and authenticity attributes. It is clear that the burden of this assurance will fall on the food industry. In the short term this means an increase in testing but it is unclear how this can be sustained in its present form. New analytical strategies are needed that can provide more cost effective verification measures for the food industry. The challenges posed to food analysts will be discussed together with possible solutions that could provide step changes in the way we analyse our food.

Keywords: *food safety, food authenticity, food analysis, food integrity, food assurance*