

Fast, cheap melamine detector duo will outfox dairy frauds

December 16 2008

(PhysOrg.com) -- Two easy-to-use new ways of detecting melamine on the production line are reported in the Royal Society of Chemistry's *Chemical Communications*.

Responding to the recent tragic incidences of illness and death in China following melamine contamination in dairy products, two separate techniques will allow fast and simple detection of the poison.

The new mass spectrometry techniques could be adapted to provide on-site "kits" which would require little training to use.

Melamine, commonly used as a fire retardant and a plastic resin, was added to milk during processing to artificially boost its apparent protein content.

David Muddiman, professor of mass spectrometry at North Carolina State University, Raleigh, US, describes the techniques as "marvellous examples of how innovative, direct analysis ionisation methods, when coupled with mass spectrometry have the ability to address contemporary problems facing the world. They have removed all the major obstacles allowing for mass spectrometry not only to compete, but to take the lead in these types of analyses."

Articles:

1. L Zhu, G Gamez, H Chen, K Chingin, and R Zenobi, Chem.

Commun., 2009, DOI: 10.1039/B818541G

[www.rsc.org/Publishing/Journal ... cle.asp?doi=b818541g](http://www.rsc.org/Publishing/Journal...cle.asp?doi=b818541g)

2. G Huang, Z Ouyang and RG Cooks, Chem. Commun., 2009, DOI: 10.1039/B818059H

[www.rsc.org/Publishing/Journal ... cle.asp?doi=b818059h](http://www.rsc.org/Publishing/Journal...cle.asp?doi=b818059h)

Provided by Royal Society of Chemistry

Citation: Fast, cheap melamine detector duo will outfox dairy frauds (2008, December 16)
retrieved 2 February 2023 from

<https://phys.org/news/2008-12-fast-cheap-melamine-detector-duo.html>

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