

One Hundred Cases just the Tip of the Iceberg?

.... and "BSE – an almost forgotten threat returns"

Headlines such as these cropped up in the press again at the start of the year.

In December, the first case of BSE in America, from a cow that originally came from North America, cast attention once again on this almost forgotten topic.

As a result, the export market for American beef products practically came to a standstill, with around 90 % of the exports, especially the Asian market, blocked.

According to the State Department of Agriculture in Washington, only 20,500 of 35 million heads of cattle slaughtered in 2003 were tested for BSE before the meat from these animals was sold. Moreover, only animals which were no longer able to move were actually tested, as this lack of mobility is a possible symptom of mad cow disease. Even then, not all animals with these symptoms were tested. Every year, more than 200,000 such cows are delivered to America's abattoirs and, as already mentioned, only 20,500 animals are tested! It is not clear from the information available whether or not these 'downers' actually enter the food chain.

At the beginning of January, there was another BSE scandal in Germany: Alexander Müller, Permanent Secretary at the Ministry of Consumer Affairs in Berlin stated that the meat from 611 untested cows was available on the market until 30.09.2003. A further 374 cows were exactly 24 months old on the day of slaughter, so that it had been arguable whether testing was compulsory in those cases. It is not yet clear whether that will be the final number of cattle which were not tested for BSE, as the press announces new and higher figures every day.

The Federal Government believes that this slip-up can be attributed to illegal activities, as countless animals are slaughtered, without any supervision of meat hygiene. The aim is presumably to save money, but it is ultimately at the expense of the consumer. A new EU Directive in force since the beginning of 2001 prescribes that the brains of all cattle which are more than 30 months old have to be tested after slaughter before the meat is put up for sale.

Germany applies that condition even more stringently and according to national legislation, all slaughtered cattle which are more than 24 months old have to undergo a BSE test.

Bavaria immediately announced more severe enforcement and, together with Lower Saxony, launched a recall action for canned meats and sausage products. The start of a new electronic BSE monitoring system should put paid to these problems, according to Werner Schnappauf, Minister of Consumer Affairs. There are plans to expand the cattle database in Munich, a central register for all information for Germany, so that more than 37 million individual data items are permanently available and the system issues an alert if it fails to receive news of a BSE test for an animal within 14 days of slaughter.



If these unsatisfactory circumstances are to be improved in the interests of the consumer, stricter monitoring of all slaughtered cattle is essential. Just because BSE had more or less disappeared from the daily papers prior to this new scandal does not mean that the BSE problem had been resolved.

Our RIDASCREEN® Risk Material Test (R6701) plays an important part in the analysis process for the detection of risk material (CNS) in processed meat and sausage products. The RIDASCREEN® Risk Material 10/5 Test (R6703) is suitable for identifying risk material (CNS) in or on raw meat and on contaminated surfaces. For immuno-histochemical and immunoblot procedures, we offer three monoclonal antibodies (mAb L42, mAb P4 and mAb V5B2) for the identification of prion protein.

For more information please contact your local distributor or visit our homepage: www.r-biopharm.com.

Allergen Labelling

Risk from Hidden Allergens



Food such as peanuts, eggs, almonds and milk can trigger life-threatening allergic reactions in allergy sufferers even in very low concentrations. This is particularly problematic in processed foods, where the composition is sometimes highly complex. For allergy sufferers, this means a higher risk of consuming allergenic substances. Unintentional contamination during storage or production also poses problems.

Traces of nuts, for example, could get into nut-free chocolate, which is made on a production plant that has previously been used for nut chocolate.

Statutory Regulations

Manufacturers are not yet obliged to state the „ingredients of the ingredients“ on packaging if these account for only a slight proportion of the weight. This means, for instance, that pasta may contain protein, although the consumer does not realise it. Pursuant to the new Directive EC 2003/89 (amendment of Directive EC 2000/13), this "25% rule" no longer applies. In other words, the label will have to state the individual substances, which make up compound ingredients, even if they account for less than 25% of the final product.

According to the new Directive, the **main allergens such as gluten/gliadin, eggs, peanuts, hazelnuts, almonds, soya, sulphite, milk and lactose** have to be stated on the label. Until now, there were no limit values specified for allergens, with the exception of 10 mg/kg for sulphite. The permitted levels are based on the latest scientific findings about the threshold values, which can trigger an allergic reaction.

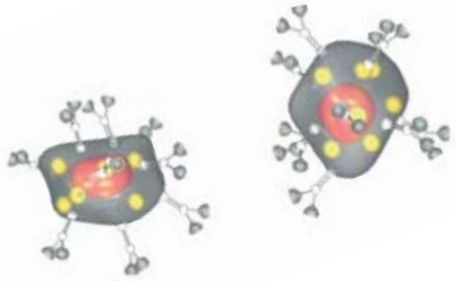
Stating all ingredients on the label ensures full transparency and boosts the consumers' confidence. The practical results will be available on the shelves of the retail trade in 2005, as the amended EU Directive has to be transposed into national law by this time.

Analysis

In order to satisfy the new legal requirements, the food industry needs analytical methods to identify and quantify these allergens. The test systems available from R-Biopharm are based on immunological methods such as ELISA or DNA detection by means of PCR and enzymatic analysis. The ELISA test kits are extremely user-friendly and have undergone successful international testing:

- "AOAC-RI Approval" for RIDASCREEN®FAST Peanut
- international ring test by the Prolamin Working Group for RIDASCREEN® Gliadin

If you are interested in our allergen assays please contact your local distributor or visit our homepage www.r-biopharm.com.



SCOOP Report

Fusarium Toxins

In 2001, the European Commission organised a SCOOP (Scientific Cooperation) task to collect data on the occurrence of Fusarium toxins in food and assessment of the dietary intake by the population of EU member states. The aim of this study was to investigate the percentages of different food types, which would exceed the proposed maximum levels for DON, HT-2 +T-2, fumonisins and zearalenone.

The final report is available from the Commission: <http://europa.eu.int/comm/food/fs/scoop/index-en.html>. This information will allow the Commission to ascertain whether the proposed maximum limits for these toxins are achievable and to determine the suitability of the food groups to which the proposed levels apply.

The R-Biopharm group manufacture a range of immunoaffinity columns and ELISAs for determination of Fusarium toxins including DON, HT-2 + T-2, fumonisins and zearalenone. Methods are available for many different foods types and cover a wide range of detection levels in compliance with the EC proposed maximum limits.

About our Products

RIDA®COUNT – the test sheet that counts for you

Our patented solution for hygiene monitoring and food control

To meet the increasing demands in routine microbiological analysis, R-Biopharm offers an interesting new answer – the RIDA®COUNT test sheets. These sheets have the following benefits: easy handling, long shelf life, and minimum space requirement for storage and incubation.

A unique patented fibre layer provides for new types of applications. Fast, and safe contact tests / swab tests for checking surfaces, and the direct incubation of filters, facilitate routine analysis. RIDA®COUNT absorbs any liquids applied such as deluting media for food samples. A covering film prevents any leakage of sample solution.

RIDA®COUNT provides a combination of hygiene monitoring and microbiological product checks in a simple, safe, and economic way.

The product range includes the following test sheets:

- RIDA®COUNT Total, R1001, 100 determinations (AOAC-RI, Licence No. 011001)
- RIDA®COUNT Coliform, R1002, 100 determinations
- RIDA®COUNT Yeast & Mold, R1003, 100 determinations
- RIDA®COUNT Salmonella, R1004, 100 determinations
- RIDA®COUNT Staph. Aureus, R1005, 100 determinations



For more information please contact your local distributor.



RIDASCREEN®FAST Aflatoxin Total (R5202)

In January, our RIDASCREEN®FAST Aflatoxin Test, Art. No. R5202 was replaced by RIDASCREEN®FAST Aflatoxin Total Test. The article number remains the same. The differences refer to the antibodies used (specificity), the standard range and thus sensitivity and the incubation periods. The standard range of the new test covers 4 - 50 µg/kg (ppb) instead of the former 1.7 - 45 µg/kg (ppb). The initial incubation period for standard, enzyme conjugate and antibody solution has been reduced from 10 to 5 min.

Following the relevant studies, the assay was approved by „Grain Inspection, Packers and Stockyards Administration“ (USDA / GIPSA) – the competent authority of the State Department of Agriculture of the United States of America – for testing for aflatoxin in grain and feed materials, certificate no. FGIS 2003 - 101.

If you are interested in our RIDASCREEN®FAST aflatoxin assay please contact your local distributor or visit our homepage www.r-biopharm.com.

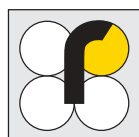


New Application Note for RIDASCREEN® Ochraplate (R1304)

R-Biopharm AG has developed a new extraction method for analysis of wine using RIDASCREEN® Ochraplate. RIDASCREEN® Ochraplate is a new ELISA format for the detection of ochratoxin A in highly pigmented and complex food samples. The test uses immunoaffinity columns (included in the kit) for sample clean-up prior to quantitative detection of ochratoxin A

by ELISA at levels between 2.5 and 40 ppb. The kit is also suitable for analysing other complex samples including green, roast and instant coffee and dried fruit. Application notes are available on request.

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Trade Fairs and Conferences



- March 8 - 9, 2004** GDCh South-West Regional Conference, Würzburg
- March 25 - 26, 2004** Rapid Methods Europe 2004, Grand Hotel Huis ter Duin, Noordwijk aan Zee, Netherlands
- May 11 - 14, 2004** Analytica 2004, Munich
- May 17 - 21, 2004** XI International IUPAC Symposium on Mycotoxins and Phycotoxins, Maryland, USA
- July 5 - 6, 2004** Food Allergens, International Fresenius Conference, Mainz

A sideevent „Allergen Determination with ELISA“ will take place on 7th July 2004 at R-Biopharm in Darmstadt (located 40 km from Mainz). Delegates will have the possibility to practically work with ELISA test systems. For further information please contact 0049-6151-8102-92 or e-mail to: s.lindeke@r-biopharm.de.

The next R-Biopharm^{news} will be published during the II. quarter 2004

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