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FOOD STANDARDS AGENCY

7th September 2009 Reference:

Dear Sir or Madam,

Food Contaminants – Update Bulletin September 2009.

I am pleased to issue the third bulletin of this year on issues concerning chemical contaminants in food.

This bulletin provides information on key activities and contacts within the Agency in England, Wales, Scotland and Northern Ireland.

We continue to have a busy year and there is quite a lot to report to you since the last bulletin just about 3 months ago in June. The summary of news items overleaf will help you to identify subjects of particular interest. Clicking on the bookmark will direct you straight to the section that you are interested in.

Finally, the Agency is in the course of restructuring to improve the delivery of our current strategic priorities and help us to meet the challenges of the future. We will keep you advised of any changes to key contacts and, in the interim you should expect to see business as usual, although please do contact us if you have any concerns.

Yours faithfully

Jillian Spindura
Head of Incident Prevention & Chemical Risk Management 'A & B'

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Summary

In this edition we have news on:

Section	Subject	Link
Chemical Migration from Food Contact Materials (Policy and Legislation)	IP Letter: September 2009 – Food Contact Materials and Articles	http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902780419.htm
Chemical Migration from Food Contact Materials (Science)	The 49th Working Party Meeting	http://www.food.gov.uk/science/ouradvisors/foodcontact/.
	Survey on Metal Migration from Food Packaging	http://www.food.gov.uk/science/surveillance/surveymulti200405/surveycontactmaterials/
	Research Report on Active and Intelligent Packaging	http://www.foodbase.org.uk/

	Published	
Nitrates	Limits in Spinach and Lettuce	
Process Contaminants	Commission Working Group on Environmental Contaminants	
	EFSA Report on Monitoring of Furan Levels in Food and Beverages	http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902573862.htm
	FSA Survey News	http://www.food.gov.uk/science/surveillance/fsisbranch2009/survey0309
	3-MCPD Ester Result	
Mycotoxins	Commission Regulation (EC) No. 1881/2006 as regards aflatoxins	
	Commission Regulation (EC) No.	

	1881/2006 as regards ochratoxin A	
	Commission Regulation (EC) No. 401/2006 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs	
	Commission Decision 2006/504/EC	
	Commission Guidance Document on Official Controls for aflatoxins	
	Review of Fusarium	

	toxin maximum limits in Commission Regulation (EC) No. 1881/2006	
	Nicotine in Mushrooms	http://www.pesticides.gov.uk/food_safety.asp?id=2778

Key contacts within the teams in London are:

Food Contact Materials –Chemical Migration:
Dr Karen Barnes (Scientific Research and Surveys);
Richard Sinclair (Policy, Legislation and EU negotiations);

Mycotoxins
Jonathan Briggs;

Organic Chemical Contaminants
Dr. David Mortimer (including Environmental Permitting Programme, Nitrates);

Inorganic Contaminants
Kara Thomas;

Process Contaminants
Nina Webber.

Key contact within Northern Ireland
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Local Authority Unit
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Contaminants, Hygiene, Additives & Shellfish Branch
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Food Standards Agency Wales
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Food Contact Materials (Policy and Legislation)

IP Letter: September 2009 - Food Contact Materials and Articles

The European Food Safety Authority (EFSA) has published its Guidelines for industry on the submission of a dossier for its safety evaluation of 'active' and 'intelligent substances in materials and articles intended to come into contact with food. The Guidelines were adopted by EFSA's expert panel on food contact materials, the CEF Panel on 21st July 2009, following a public consultation and published on 14th August 2009. The Guidelines are also available at the EFSA website address at:

http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902780419.htm

Summary

Regulation (EC) No. 450/2009 on active and intelligent materials and articles intended to come into contact with food, lays out an authorisation process for the use of new active or intelligent substances in food contact materials. The purpose of these guidelines is to give guidance to applicants wishing to obtain such an authorisation for active and intelligent materials and articles in accordance with the provisions laid down in Regulation 450/2009. It also provides details on the administrative and technical data required and on the format of applications for evaluation by EFSA.

Any questions in relation to the Guidelines should be addressed to EFSA direct.

Food Contact Materials (Science)

The 49th Working Party Meeting

The document recording the annual review of current research projects by the Working Party, as mentioned in the June letter, was published on 20/08/2009. It is available at: http://www.food.gov.uk/science/ouradvisors/foodcontact/.

Survey on Metal Migration from Food Packaging

As previously announced, the Agency has a 4 year rolling programme of surveys on migrants from food contact material and articles. In May 2008 the Scientific Opinion of the Panel on Food Additives, Flavourings, Processing Aids and Food Contact Materials on the '*Safety of aluminium from dietary intake*' established a Tolerable Weekly Intake (TWI) of 1 mg/kg body weight/week. The safety of aluminium from all dietary sources was considered. The major route of exposure to aluminium is through food. One potential source of contamination of the food with aluminium is via

migration from food packaging or from food contact articles used during food processing, preparation or consumption. Aluminium is found in a variety of food contact materials. These include: tubes for pastes; cooking utensils; colourants for coatings; adhesives; polymers; paper/paperboard; laminates (e.g. juice cartons); foils; trays; cans; and lids/caps.

While testing for the aluminium levels in foodstuffs data for other trace elements will also be obtained, these are: arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel and selenium. These elements were selected by the Agency to provide important concentration data for exposure calculations.

The survey is expected to begin on 01/09/2009. Further details on on-going surveys on chemical contaminants from food contact materials and articles can be viewed at:

http://www.food.gov.uk/science/surveillance/surveymulti200405/surveycontactmaterials/

Research Report on Active and Intelligent Packaging Published

In August the Agency published a report entitled '*Identify chemicals specific to active and intelligent packaging on the market and the extent to which they migrate into food, through laboratory based research*' (A03062) on 26/08/09. This built on an earlier Agency-funded project (A03039), a desk-based study on UK trends in active and intelligent packaging, which looked at future experimental needs to measure the chemicals that could migrate into food from such packaging.

The latest project involved an overview of commercial active/intelligent systems currently on the market, obtaining manufacturer information on each sample type. 25 samples were subjected to an analytical screening procedure to identify and quantify the chemicals that made up the active or intelligent component. Where substances were identified in the screening procedure for which the migration limit (or other restriction) had the potential to be exceeded, migration tests into appropriate simulants and foods were undertaken. The efficacy (i.e. whether the samples behaved in the way that could be expected by the consumer) of 10 samples was investigated. Final reports can be viewed at the Agency's open access repository, *foodbase*: http://www.foodbase.org.uk/. However this repository is a work in progress. If you cannot find this report, or any other you wish to read, please contact Zahi Sulaiman:

(Tel: 020 7276 8540 - email: zahi.sulaiman@foodstandards.gsi.gov.uk)

Nitrates

Commission proposals for permanent increases to the existing limits for spinach and lettuce laid down in Commission Regulation 1881/2006 emerged at the end of last year, as the temporary derogations (permitting the UK, and some other Northern European countries, to exceed these maximum limits for fresh lettuce and spinach grown and intended for consumption on their own respective territories) came to an end. However, these increased limits for nitrate levels are unlikely to come into force until late 2009 and, in the meantime, UK enforcement authorities have been made aware of the position and are recommended to take a pragmatic and proportionate approach to the enforcement of nitrate limits.

The proposed changes are likely to include:

- relaxing (increasing) the maximum nitrate limits for fresh spinach to 3,500 mg NO_3/Kg (to apply all year, no seasonal differences)

- relaxing (increasing) the existing nitrate limits for fresh lettuce(non-iceberg) to 5,000 mg NO_3/Kg (winter protected), 4000 mg NO_3/Kg (summer protected) & 3,000 mg NO_3/Kg (summer outdoor), with no changes to current level for winter outdoor

- Introducing a maximum nitrate limit for rocket (rucola; *Eruca sativa*) of 5,000 mg NO_3/Kg

- No changes to current nitrate limits for preserved, deep-frozen or frozen spinach or iceberg lettuce

The Commission should submit these proposals to the Standing Committee for endorsement during Autumn 2009, once some outstanding minor details have been finalised.

Any comments you may have on the above issues will be welcome.

For further information or to submit comments or data on nitrates, please contact Valerie McFarlane at: valerie.mcfarlane@foodstandards.gsi.gov.uk

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Process Contaminants

Commission Working Group on Environmental Contaminants

The Commission held a one-day meeting of its working group on 15 June 2009. Process contaminant issues discussed were:

- *Acrylamide*

  The recently published EFSA monitoring report on acrylamide was discussed at the working group meeting. Most Member States were of the opinion that it was time to consider further risk management measures and target levels for some commodities were mentioned as an option. The EFSA report was seen as very useful, however, there were some doubts about the tentative exposure assessment and about the comparison of 2003-2006 data with 2007 monitoring data due to the possible difficulty to compare likes with likes.

- *3-MCPD esters*

  The Commission reported on the ongoing activities on 3-MCPD esters. This included the ILSI workshop in collaboration with the European Commission which took place in February 2009 to identify research needs. Further information on this workshop can be obtain from the following link: http://www.ilsi.org/AboutILSI/PRESENTATIONS.htm

- *MCPD Information Database*

  An EC/EFSA proposal was presented for a project database on 3-MCPD esters (MCPD information base) The aim is to facilitate the sharing of past, present and future information on 3-MCPD esters research activities in order to ensure that progress is made in addressing the various data gaps The database will be published either on the EFSA or on the SANCO webpage in the autumn.

- *Glycidolesters*

  The conclusions of the of the German risk assessment body (BfR) on glycidolesters were presented.

  Glycidolesters were found in vegetable oils, in particular palm oils and in products made of vegetable oils, e.g. infant milk. Little is currently known about glycidolesters, their toxicity, pathways of formation, bioavailability in humans, etc. A research project will be launched by Germany in autumn 2009 on toxicokinetic aspects, similarly to the toxicokinetic study for 3-MCPDesters. Research on

analytical aspects will also continue as for the moment no quantitative method is available. Further information can be obtained from the following link

http://www.bfr.bund.de/cm/245/initial_evaluation_of_the_assessment_of_levels_of_glycidol_fatty_acid_esters.pdf

- *Ethylcarbamate*

  The Commission presented the draft Commission recommendation on ethyl carbamate (SANCO 5396/2009). The recommendation refers to stone fruit spirits and fruit marc spirits and combines a Code of Practice with a monitoring recommendation covering the reporting years 2010-2012. Some comments received with respect to the Code of Practice and will need more detailed evaluation. The recommendation will be re-discussed and, if agreed in the next Expert meeting, could be presented to the October SCoFCAH for endorsement.

EFSA Report on monitoring of furan levels in food and beverages.

The European Food Safety Authority has produced a report on the result of the monitoring of furan levels in food and beverages following its call for scientific data to be collected on heat treated commercial foodstuffs, particularly during 2007 and 2008, as provided in "Commission Recommendation 2007/196/EC on the monitoring of the presence of furan in foodstuffs" of 28 March 2007.

The report contains furan occurrence data collected between 2004 and 2009 and also contains an initial exposure assessment based on the data collected.

A summary and full copy of the report can be found on EFSA's website at:
http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902573862.htm

FSA Survey News

Process Contaminants Survey 2008
The second year of results obtained from the FSA survey on process contaminants in foods have been published in a Food Surveillance Information Sheet (FSIS) which is available on the FSA website.
The results are from the second year of a three-year rolling programme measuring the occurrence and levels of acrylamide, and three other chemicals, i.e 3-MCPD (3-monochloropropane-I,2-diol) and its esters, furan and ethyl carbamate, produced during processing of food.

Occurrence and levels for all of the process contaminants surveyed were in line with results from previous research and surveys carried out in the UK and internationally. Based on previous risk assessments, the occurrence and levels found do not increase concern about the risk to human health. Further information on the FSIS can be obtained from the following link:

http://www.food.gov.uk/science/surveillance/fsisbranch2009/survey0309

Results for the 2009 survey are scheduled to be published in May 2010.

3-MCPD ester results

The FSA used the opportunity provided by the process contaminants survey to investigate the levels of 3-MCPD esters present in food samples which had already been acquired as part of the 2008 survey. A total of 90 samples obtained from the 2008 survey were selected from groups 1-10 (group 7 is excluded). Sample selection was based on products known potentially to have the highest levels of refined oils as part of the ingredients or those known to have been prepared in refined oils. Results of the findings were dispatched to brand owners on the 25th of August 2009. A full report on the findings will be published in the autumn.

Mycotoxins

Commission Regulation (EC) No. 1881/2006 as regards aflatoxins

The draft amending legal text is still under discussion. As previously reported via our Interested Parties' letters, maximum limits for oilseeds are incorporated in the draft legal text with limits of 2 ppb for aflatoxin B1 and 4 ppb for total aflatoxin. Oilseeds for further processing are also included with limits of 8 ppb and 15 ppb for aflatoxin B1 and total aflatoxin respectively. In both cases, application of the limits does not apply for oilseeds [and groundnuts] for crushing for refined vegetable oil production.

The draft text under discussion also includes the revision of maximum limits for tree nuts and in particular the possibilities for the inclusion of Brazil nuts, all tree nuts or only hazelnuts, almonds and pistachios as agreed at Codex. It is proposed that separate maximum limits for B1 will be retained for the immediate future but that this will be kept under review.

It is possible that negotiations will be concluded at the next Expert Working Group on Agricultural Contaminants, which is currently scheduled for September and a subsequent vote in early autumn.

Commission Regulation (EC) No. 1881/2006 as regards ochratoxin A

The issue of setting maximum limits for ochratoxin A in spices was discussed at both Expert Working Group on Agricultural Contaminants on 8 June and 15 July. A draft amending legal text is currently under discussion, which includes a maximum limit in spices of 30 ppb, which would be applicable from 1 July 2010. In addition, the current draft wording proposes a review to take place before 1 July 2012 with a view to establishing a level of 15 ppb, to reflect the application of good practice to prevent ochratoxin A formation, unless food business operators can demonstrate that this lower level is not achievable by applying good practice.
A category for mixed spices that includes any of those cited in the annex is also proposed for ochratoxin A, as well as aflatoxins.
Maximum limits for liquorice root (20 ppb) and liquorice extract (80ppb) are also proposed as part of the amending text under discussion.

Commission Regulation (EC) No. 401/2006 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs

A draft legal text has been drawn up to reflect the changes under discussion as described above and those agreed at Codex - please see previous Interested Parties' letters for further details. It is intended that the document will be voted on and will come into force at the same time as the changes described above.

Commission Decision 2006/504/EC

A draft legal text has been proposed by the Commission to align Commission Decision 2006/504/EC with the newly adopted Commission Regulation (EC) No. 669/2009. The latter implements Regulation (EC) No. 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin (high-risk list) and amends Decision 2006/504/EC. For more information on this please see http://www.food.gov.uk/foodindustry/regulation/europeleg/euupdates/offcupdate0908.

The draft text is proposed as a Regulation, which would repeal and replace Decision 2006/504/EC. In reviewing the frequency of physical checks currently set out in the Decision, the Commission have assessed the data set available, including information from the Rapid Alert System for Food and Feed, the degree and frequency of non-compliance and any FVO inspection missions that have been carried out. The proposed revised frequencies include:

- Groundnuts from China: Increase from 10 – 20%;
- Groundnuts from Egypt: Maintain at 20%;
- Pistachios from Iran: Decrease from 100 – 50%;
- Dried figs and pistachios from Turkey: Increase from 10 – 50%;
- Hazelnuts from Turkey: Increase from 5 – 10%;
- Almonds from US: Moderate from 5% to random checks.
- In-shell Brazil nuts from Brazil Decrease from 100 – 50%.

Measures for increased control for peanuts from Brazil have been moved to the annex to Commission Regulation (EC) No. 669/2009.

Aside from the measures to align the legislation with Commission Regulation (EC) No. 669/2009, some additional changes are currently proposed, which include:

- Processed and compound foodstuffs to be excluded below 20% inclusion rather than 10%;
- Consignments of foodstuffs not exceeding 20kg to be excluded, as opposed to the current 5kg.

The Agency is currently considering the proposed draft Regulation to inform on negotiations and as part of this is also consulting with Port Health Authorities on the alignment. We would welcome comments from stakeholders on the draft Regulation and the proposed changes to the frequencies.

It is intended that the document will be voted on in the autumn with the aim of it coming into force at the same time as Commission Regulation (EC) No. 669/2009.

Commission Guidance Document on Official Controls for aflatoxins

This will be updated and published in line with the amendments to Commission Regulation (EC) No. 1881/2006, and the corresponding sampling and analysis Regulation, as well as the proposed Regulation replacing and repealing Commission Decision 2006/504/EC. **Please note:** As a correction to the June Interested Parties' letter, Conversion Services will not be removed from the list of establishments able to perform sorting/physical treatment to reduce aflatoxin content, but will only be able to perform sorting and further processing of tree nuts, dried fruit and seeds and not peanuts.

Review of Fusarium toxin maximum limits in Commission Regulation (EC) No. 1881/2006

No further discussions took place at the last Working Group meeting on the review. The Commission has confirmed that it will make a request to EFSA for an updated risk appraisal as regards T2 and HT2 toxins as part of the negotiations on the setting of maximum limits for these toxins. Discussions on T2 and HT2 toxins and the review of current limits for deoxynivalenol and zearalenone are likely to recommence in the autumn.

If you have any queries, wish to submit any data or would like any further information on the above please do not hesitate to contact the Mycotoxins team at the email address below.

Mycotoxins Team
Food Standards Agency
E. **mycotoxins@foodstandards.gsi.gov.uk**

Nicotine in dried mushrooms

The last Interested Parties letter noted that nicotine had been found by the food industry in dried wild mushrooms at levels that exceeded the default Maximum Residue Level (MRL) for pesticides set under EU legislation. Based on EFSA advice, the European Commission had set guideline temporary limits for nicotine levels in fresh and dried wild mushrooms and stated that product above these levels “should not be placed on the market and be withdrawn from the market and safely disposed of”.

The Commission and Member States have now formally agreed a monitoring plan. This will help determine whether the levels found arise from pesticide use, natural background levels or contamination. This will test 1000 samples overall in the EU, allocated according to the volume of produce marketed in each member State. The UK’s contribution to the sampling programme will involve 20 tests of imported wild mushrooms and 4 samples of UK-produced wild mushrooms.

The EU food and drink industries confederation (CIAA) has confirmed that it has put in place its own quality control provisions and has developed an action plan to try to identify the source of nicotine found in wild mushrooms.

The FSA is working closely with the Chemicals Regulation Directorate (formerly the Pesticides Safety Directorate) on this matter. CRD has recently issued a second Information Update on nicotine in mushrooms, which can be found at http://www.pesticides.gov.uk/food_safety.asp?id=2778