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FOOD STANDARDS AGENCY

1st August 2008 Reference:

Dear Sir/Madam,

CHEMICAL CONTAMINANTS IN FOOD.

This is the latest edition of our letter that brings those interested in developments in relation to food contaminants, including chemical migration from food contact materials, up to date. We report in this letter on developments in relation to:

- the working group meeting on 7th July on mycotoxins;
- inorganic environmental contaminants;
- process contaminants;
- regulatory issues in England and clarification of an item reported in our last letter in relation to Scotland;
- research on chemical migration from materials and articles in contact with food.

MYCOTOXINS

All the following points were discussed at the working group meeting held on 7th July 2008.

Room 4c, Aviation House, 125 Kingsway, London WC2B 6NH
Tel: 020 7276 8399 Fax: 020 7276 8717 E-mail: benjamin.nketiah@foodstandards.gsi.gov.uk

Draft Maximum Levels for Total Aflatoxins in Almonds, Hazelnuts and Pistachios

This has been forwarded to the Codex Alimentarius Commission (CAC) for adoption (maximum level of 10 µg/kg for 'ready to eat' and 15 µg/kg for 'further processing'). It is expected that Codex will adopt these maximum levels in the near future and therefore EU legislation will need to be amended accordingly. Discussions at the Working Group centred around whether or not to amend legislation to all nuts or just for those nuts that were agreed at Codex and also whether a separate limit for aflatoxin B1 is still required, as Codex limits agreed are for total aflatoxins.

Although this issue will be discussed in further detail at subsequent meetings, any comments or data on aflatoxin B1/total are welcome and should be sent to the mycotoxins contact above.

High risk list (Article 15.5 of Regulation 882/2004)

Article 15.5 of Regulation (EC) No. 882/2004 makes provision for a list of foods to be subject to increased official controls. These are foods that are considered to have a high known or emerging risk of being unsafe.

A copy of the draft Regulation implementing rules for import controls for these high-risk feed and food products of non-animal origin was made available through an update posted by the Agency on its website in December on Official Controls. Another update was published earlier this month and the latest version of this Regulation contains a draft list of high risk food and feed products of non-animal origin (in appendix 1). The update can be found at:

http://www.food.gov.uk/multimedia/pdfs/offcupdatejul08.pdf.

Discussions at the Working Group meeting held on 7 July 2008 focussed on the presence of Basmati rice on the high risk list. Consideration is being given to keeping white rice on the list and have higher limits for brown rice, on the basis that brown rice contains levels higher than the current limits (2 and 4 ug/kg), and the levels in

milled product are reduced substantially (due to the husk being removed). However, this issue will be discussed in more detail at a later date.

Any comments on the list relating to mycotoxins as well as other chemical contaminants are welcome. Industry and enforcement stakeholders are invited, to particularly comment on the costs and other impacts associated with undertaking the increased controls on these products that will be necessary.

Contact: Jonathan Briggs: jonathan.briggs@foodstandards.gsi.gov.uk; Tel. 020 7276 8716

T2 and HT2 Toxins

During discussions at the Fusarium Forum held on 9 – 11 January 2008 and further Working Group meetings, a number of issues were raised which are listed below. The Commission is therefore seeking information on the following:

- levels of T-2 and HT-2 toxins found in cereals (different cereal species)
- correlation of the presence of T-2 and HT-2 toxins with the presence of other Fusarium-toxins
- factors involved in the development of *Fusarium langsethii* and the formation of T-2 and HT-2 toxins
- sources of/causes for observed regional differences in occurrence of T-2 and HT-2 toxins in cereals (not only climatic conditions, but also other factors related to agricultural practices)
- current possibilities to mitigate the risk for presence of T-2 and HT-2 toxins in cereals and management measures to reduce/avoid presence of T-2 and HT-2 toxins
- fate of T-2 and HT-2 toxins during processing
- levels of T-2 and HT-2 toxins in different cereal products (for human consumption and for feed)
- availability of analytical screening and confirmatory methods of analysis for detecting T-2 and HT-2 toxins in cereals and cereal products at the levels of relevance
- information on ongoing investigations, objectives of these investigations, preliminary results etc

Based on these discussions, it was decided that the introduction of limits would be postponed until after the next Fusarium Forum; expected to be held in January 2009. This will allow collection of more data while continuing with discussions in order to allow for better informed negotiations.

If you would like to submit information on the above points or data on T2 and HT2 toxins, which you think will assist during negotiations of setting maximum levels, please send it to:

Contact: Jonathan Briggs - jonathan.briggs@foodstandards.gsi.gov.uk; Tel. 020 7276 8716

Guidance Document for Competent Authorities for the Control of Compliance with EU Legislation on Aflatoxins

It is intended that an updated version of the guidance document will be placed on the Commission website in the next few weeks. We will notify interested parties as and when a published version of the document becomes available. Any comments on the revised document should be sent to Jonathan Briggs (contact details above); discussions on the document will continue on an ad hoc basis.

Updates:

- **Commission Decision 2007/563/EC on special condition for import of almonds and derived products originating in or consigned from USA and**
- **Commission Decision 2008/47/EC approving the pre-export checks carried out by the United States of America on peanuts and products for aflatoxins**

An updated list of USDA approved laboratories, sample signatures and analysts permitted to perform the analysis on these products has been released and will be included in the revised version of the Commission Guidance Document. Details of these can be obtained from the Agency on request, please contact Jonathan Briggs (as above).

Clarification of Commission Decision 2006/504/EC (as amended) on aflatoxins

The Commission, on request, provided clarification on article 5 of Commission Decision 504/2006 which states, '15 maximum days begin from when a consignment is *offered* for import and physically available for sampling'. This statement intends to ensure that the 15 maximum days begin from when all relevant documentation is available and a consignment is physically available for sampling.

The Agency would encourage all businesses intending to import commodities subject to this Commission Decision to ensure that all required documentation is present together with the consignment or in advance of it, clearly cross-referenced to

the consignment for which it is valid. This will ensure that there is minimal delay and disruption to the import of these commodities.

Businesses are reminded that health certificates are only valid for import of foodstuffs into the Community no later than four months from the date of issue of the health certificate. In addition, the documentary check must take place at the point of first introduction into the territory of the Community, for example where it is intended for forward transit under official control to a designated point of entry.

Contact: if you have any further enquiries on this issue, please e-mail them to: mycotoxins@foodstandards.gsi.gov.uk

ENVIRONMENTAL CONTAMINANTS (INORGANIC)

Amendments to Regulation (EC) No. 1881/2006 regarding maximum levels of certain heavy metals in foodstuffs

Amendments have been made to EC Regulation 1881/2006 and certain revisions have been made regarding maximum permitted levels for certain contaminants. Following discussions at the Standing Committee on the Food Chain and Animal Health, Toxicology Section on 11 April 2008, these changes have been adopted and Commission Regulation **(EC) No 629/2008** was published on 3 July 2008. The link to this Regulation is

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:173:0006:0009:EN:PDF.

Heavy metals in certain species of fish and mushrooms

Details on the amendments to Commission Regulation 1881/2006 regarding maximum limits for cadmium and lead in fungi and some minor changes to cadmium and mercury limits in fish are as follows.

- The three common species of mushroom - *Agaricus bisporus* (common mushroom), *Pleurotus ostreatus* (Oyster mushroom), *Lentinula edodes* (Shiitake mushroom) will have MLs of 0.3 mg/kg for lead and 0.2 mg/kg for cadmium. For all other species of mushroom, there is no ML for lead and a 1 mg/kg limit for cadmium.

- The cadmium limits for certain species of fish have been changed as follows: Mackerel 0.1 mg/kg (old limit 0.05 mg/kg), bullet tuna 0.2 mg/kg (old limit 0.05 mg/kg) and anchovy 0.3 mg/kg (old limit 0.1 mg/kg). Two species of fish will have higher limits for mercury - kingklip and pink cusk eel (old limits 0.5 mg/kg) will have maximum levels of 1.0 mg/kg for mercury.

- A footnote has been added stating that tree nuts are not covered by the maximum level for cadmium in fruit (0.05 mg/kg).

These changes will enter into force from 23 July 2008 (20 days following its publication).

Heavy metals in food supplements

The Commission has introduced Maximum Limits (MLs) for heavy metals in food supplements. The maximum limits for food supplements as defined in Article 2 of Directive 2002/46/EC will be: Lead - 3 mg/kg, cadmium - 1 mg/kg (non-seaweed based) and 3 mg/kg (supplements consisting exclusively or mainly of dried seaweed or of products derived from seaweed) and mercury - 0.1 mg/kg. These levels will be applicable to the products as sold.

The Regulation specifies that the new MLs in food supplements will apply from 1 July 2009 to allow more time for implementation.

EFSA scientific opinion on arsenic and request for data

Arsenic occurs naturally in a wide range of foods at low levels and its toxicity is dependent on the chemical form in which it is present. The organic form is less harmful but the inorganic form is known to cause cancer. The European Commission has requested the European Food Safety Authority (EFSA) to evaluate the risks to human health related to the presence of arsenic in foodstuffs (including drinking water). On the basis of the scientific opinion of EFSA, the Commission will consider risk management measures, including setting of maximum levels for arsenic in foodstuffs.

In order to estimate exposure to arsenic by various population groups and carry out risk assessments, EFSA has issued a request for recent data on arsenic levels in foodstuffs. Data is being sought on levels of arsenic in various foodstuffs (rice and rice-based products, cereals, fish and seafood, seaweed, root vegetables, mushrooms, tea and food supplements) as well as drinking water. As rice-based products are often used in weaning foods for infants, exposure of infants to arsenic is of great importance and will be included in the assessment.

Data on the occurrence levels of arsenic will help to formulate the UK's position and ensure that where new limits are introduced, these are set at proportionate levels so that consumers are protected without placing an unnecessary burden on industry.

Please send all available data from January 2003 to November 2008 on the levels of total arsenic (and inorganic arsenic or organic arsenic species if available) in various foodstuffs. EFSA has set the **closing date for the data submissions on arsenic on 14 November 2008.**

EFSA scientific opinion on lead

The maximum levels for certain contaminants (including lead) in foodstuffs are set by Regulation (EC) No. 1881/2006 and these levels continue to be constantly reviewed. The European Commission has therefore requested EFSA for an updated scientific basis for risk management purposes.

EFSA has therefore issued a call for data on the occurrence of lead in foodstuffs.

http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1178713260950.htm

The **closing date for submission of data is 5 September 2008**. These data will be compiled and assessed to be used in the exposure assessment of the opinion.

Summary of calls for data on heavy metals

Arsenic: Data are required on the levels of total arsenic (and inorganic arsenic or organic arsenic species if available) in various foodstuffs including baby foods and drinking water. Please send all available data from January 2003 to November 2008 **before 30 October 2008.**

Lead: Data required by EFSA on the levels of lead in various foodstuffs. Please send recent data on the levels of lead **before 31 August 2008.**

For further information or to submit comments or data on Inorganic Contaminants:

Contact: Christina Baskaran - christina.baskaran@foodstandards.gsi.gov.uk. Tel 020 7276 8704.

PROCESS CONTAMINANTS UPDATE

Process Contaminants Meeting

A meeting was held for process contaminants stakeholders at the Food Standards Agency in Aviation House on 18 June 2008. The meeting provided a means of updating stakeholders on previous and current research and an open forum for discussion of the research findings and possible future research. The highlight of the meeting was the information on the current survey of process contaminants in food. It is envisaged that the next process contaminants meeting will be held in six months time.

Process Contaminants Survey

The first year of results obtained from the FSA survey on process contaminants in foods are due to be published, in the near future in a Food Surveillance Information Sheet (FSIS) which will be available on the FSA website.

The FSIS will contain analytical results of the products sampled in 2007 for acrylamide, ethyl carbamate, furan and 3-MCPD (3-monochloropropanediol),

The acrylamide data will provide a clearer picture of the levels of acrylamide in those foodstuffs that are known to contain high acrylamide levels and/or contribute significantly to the dietary intake of the whole population and of specific vulnerable groups such as infants and young children. The acrylamide and furan data will be submitted to the European Food Safety Authority (EFSA). EFSA will collate results from other Member States for future risk and consumer exposure assessments.

Research Project on acrylamide

The final report on 'Mechanism of the formation of acrylamide in cooked foods and factors affecting its formation during thermal heating' has been published. This project investigated the mechanism of the formation of acrylamide in cooked foods and the factors affecting its formation during the thermal process. The final report is available from the Agency's Information Centre and can be obtained from the Enquiry Desk, Information Services, Food Standards Agency (tel: 020 7276 8181/8182 or email: infocentre@foodstandards.gsi.gov.uk)

Acrylamide colloquium

The Acrylamide colloquium on acrylamide "Acrylamide carcinogenicity – new evidence in relation to dietary exposure" was held in Tabiano, Italy, in May 2008.

The overall conclusion was that the latest evaluation of acrylamide carried out by JECFA and agreed by EFSA, which states that there may be human health concerns associated with acrylamide exposure and recommends a re-evaluation, was still relevant. However, additional data are expected to become available within the next year that may reduce uncertainties and hence may call for a revision of the risk assessment advice.

JECFA plans to carry out a risk assessment on acrylamide in September 2009. Information on the colloquium can be found at:

http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1178694670469.htm

A full report of the colloquium will be available later in 2008.

ENVIRONMENTAL CONTAMINANTS

Dioxins and dioxin-like PCB's.

On 18 June, a limit for dioxins plus dioxin-like PCBs of 25 pg WHO-TEQ /g fresh weight in fish liver was added to Section 5 of Commission Regulation (EC) 1881/2006 by means of an amendment (565/2008). This came into force on 1 July.

Discussions are continuing with regard to the setting of limits for non dioxin-like PCBs in the food groups already subject to limits for dioxins and dioxin-like PCBs, but progress is relatively slow. Limits for dioxins and both dioxin-ilke and non dioxin-like PCBs in foods for infants are still being considered, with strong views being expressed both for and against. The current UK position is that limits are not necessary.

A full review of the existing limits for dioxins and dioxin-like PCBs is expected to begin before the end of 2008. The Commission has indicated its intention to propose a single set of limits for total toxic equivalent quantity (TEQ) and to make use of the new 2005 WHO-TEFs (toxic equivalency factors). The review will make use of a large database being compiled by the European Food Safety Authority (EFSA) from test results from individual Member States. EFSA is currently examining the quality of the data provided.

Sunflower oil from Ukraine

The temporary ban on the import of sunflower oil from Ukraine, imposed by means of Commission Decision 2008/433/EC following discovery of contamination with mineral oil, has been lifted. New control measures proposed by Ukraine have been accepted by the Commission with support from Member States. Additional checks, the details of which are still being finalised, will be carried out on consignments entering Europe. Food safety experts are satisfied that there has not been any risk to public health as a result of this contamination incident.

For more information, or to make any representations on any of these issues:
Contact: David Mortimer – e-mail david.mortimer@foodstandards.gsi.gov.uk
Telephone 020 7276 8731.

REGULATORY DEVELOPMENTS

Guar Gum (Scotland)

In the Chemical Contaminants Update Letter for May 2008 we advised that Commission Decision 2008/352/EC, had been partially implemented into Scottish law by the Guar Gum (Restriction on First Placing on the Market) (Scotland) Regulations 2008 which came into force on 5 May 2008. The Commission Decision imposed special restrictions on imports of guar gum originating in or consigned from India due to the risk of contamination by pentachlorophenol (PCP) and dioxins,.

Since then the Official Feed and Food Controls (Scotland) Amendment Regulations 2008 have come into force (on 1 July 2008). These Regulations correct an omission in the Guar Gum (Restriction on First Placing on the Market) (Scotland) Regulations 2008 by adding the Guar Gum Regulations to the definition of "specified feed law" in the Schedule 2 to the Official Feed and Food Controls (Scotland) Regulations 2007. This means that part 2 of the OFFC regulations now applies to the Guar Gum regulations in relation to the exchange of information and the monitoring of enforcement and ensures the verification of compliance with feed and food law.

The Official Feed and Food Controls (Scotland) Amendment Regulations (SSI 2008 No. 218) were signed by the Minister on 4 June 2008 and came into force on 1 July 2008. Hard copies of the Regulations will be available from The Stationary Office: by telephone: 0870 600 5522; or fax: 0870 600 5533; through TSO bookshops in Belfast, Birmingham, Cardiff, Edinburgh, London or Manchester; by e-mail to: customer.services@tso.co.uk; through the TSO website at: www.hmso.gov.uk.

Where guar gum is an ingredient of a Product of Animal Origin (POAO) above the specified percentage, implementation under the Products of Animal Origin (Third Country Imports) (Scotland) Regulations 2007 has been dealt with by the Scottish Government by issue of a Declaration on 21 May 2008, which came into force on the same day. The Declaration can be viewed/downloaded from the following weblink:

http://www.food.gov.uk/multimedia/pdfs/declaration200825.pdf

THE DRAFT CONTAMINANTS IN FOOD (ENGLAND) REGULATIONS 2009

Following the recent adoption of two new European regulations the Agency has been preparing a draft Statutory Instrument (SI) to make provision for their enforcement.

The proposed SI will be known as 'The Contaminants in Food (England) Regulations 2009.

Commission Regulation (EC) No. 565/2008, lays down new limits for dioxins and dioxin-like PCBs in fish liver and came into force on 1 July 2008. Commission Regulation (EC) No. 629/2008, lays down new limits for lead, cadmium and mercury in food supplements and came into force on 23 July 2008. More details of these EC Regulations can be found above in the sections on inorganic and organic contaminants.

Within the proposals contained in this SI we are including so-called 'ambulatory' provisions. Their effect will be to reduce the burden on enforcement authorities and industry by minimising the number of SIs that are required to be made each time there is an amendment to Commission Regulation (EC) No. 1881/2006. This will save those who need to refer to these Regulations having to replace copies of the England regulations every time they have to be changed for even small amendments. An Impact Assessment is being prepared on the draft Regulations which will form part of the consultation package and this will be issued in the near future. The customary notice of consultation will be issued to alert stakeholders at that time and the consultation package will be made available on the Agency's website.

The devolved administrations for Scotland, Wales and Northern Ireland and will carry out similar exercises.

FOOD CONTACT MATERIALS UPDATE

Research Projects

A03053: Monomer and other chemical migrant levels in food grade plastic:

This project aims to investigate the variation of monomer and other chemical migrant levels in different samples of food grade plastics. Further information is available from the Agency's website at:

http://www.food.gov.uk/science/research/researchinfo/contaminantsresearch/contactmaterials/a03prog/a03projlist/a03053/

A03056: Validation of enzyme linked immunosorbant assay (ELISA) for the determination of latex allergens in food contact materials and associated foods:

The profile of allergens in different contact materials was investigated and various methods used to improve the recovery of allergens from foods. An inter-laboratory validation was carried out and the validated method applied to wrappers and foods collected from manufacturing sites. Further information is available from the Agency's website at:

http://www.food.gov.uk/science/research/researchinfo/contaminantsresearch/contactmaterials/a03prog/a03projlist/a03056/

Contact: Edward Potter - edward.potter@foodstandards.gsi.gov.uk , telephone 0207 276 8550.