July 2018 Stakeholder update on rapidly developing policy on food contaminants

Mycotoxins and plant toxins

Mycotoxin Forum 2018

The European Commission organised a stakeholder forum from 14 - 15 May 2018 with the aim to discuss the issues and challenges in preventing and reducing mycotoxin contamination in cereals and cereal products in feed and food. Participants included experts from Member States' Competent Authorities, the European Food Safety Authority (EFSA) and academia along with industry partners from the various interested sectors.

Representatives from EFSA gave presentations on recent scientific opinions on mycotoxins including those present in modified forms. Progress and results from two Horizon 2020 projects funded by the EU in this area - MyToolbox and MycoKey were also presented. Industry stakeholders from around Europe also made several presentations on their efforts to prevent, reduce and monitor mycotoxins in food and feed. A lot of monitoring data were presented as well as mitigatory activities to reduce mycotoxin levels.

The UK cereal industry gave two presentations, highlighting their work and the specific challenges faced by the UK cereal supply chain. Common themes and challenges across the workshop included climatic conditions, balancing food safety mitigation factors with environmental impacts (e.g. soil erosion), analytical issues (availability of methods and standards) and also availability of plant protection products (pesticides/herbicides) some of which are being phased out.

These will be taken into consideration by the Commission and Member States when discussing future risk management measures for mycotoxins in food and feed.

Ochratoxin A

The European Commission carried out a targeted consultation of European trade associations on possible maximum levels (MLs) to be set for certain foods which currently do not have an ML. Several responses were received from stakeholders in the dried fruit, nuts, snacks, tea, herbs and spices sectors.

Some Member States had concerns whether the EFSA opinion on OTA might be outdated. Therefore, if recent studies indicate a need to do so, EFSA will carry out a re-evaluation to update the risk assessment.

Erucic acid

Following a targeted stakeholder consultation, the following MLs for erucic acid in oils and fats are being considered:

Vegetable oils and fats* 20 g/kg

Infant formulae and follow-on formulae* 4 g/kg
Mustard as a condiment (whole weight) 35 g/kg

*the maximum level refers to the level of erucic acid, calculated on the total level of fatty acids in food.

It was acknowledged that certain oils will not be able to achieve this ML and based on the evidence sent to the Commission it was proposed that borage oil, camelina oil and mustard oil be exempted from these MLs.

Ergot alkaloids

As mentioned in the April 2017 update, discussions have continued on setting maximum levels (MLs) for ergot alkaloids in cereal-based products. Initially, MLs will be discussed for milling products (barley, wheat, oats, spelt and rye). Following stakeholder feedback that suggested MLs may not be achievable by some whole grain flours and given there is no legal definition for whole grain products, the Commission is looking at how this can be considered as a separate category.

Any further data on ergot alkaloids in whole grain flour and bran would be useful to inform the discussions.

Alternaria toxins

Discussions on managing possible risk from the presence of Alternaria toxins are continuing following EFSA's assessments for alternariol (AOH), alternariol monomethyl ether (AME), tenuazonic acid (TeA) and tentoxin (TEN). Although there are no specific toxicity data for these mycotoxins, in the case of AOH, AME and TeA, dietary exposure estimates could exceed the threshold of toxicological concern (TTC). Therefore, as a precaution, setting of MLs or guidance levels are being considered for the following categories which may be major contributors to dietary exposure:

Tomato purée
Tomato juice
Sunflower seeds
Tree nuts
Cereals grains and cereal derived products
Cereal based foods for infants and young children
Ready to eat soups (before reconstitution)

Citrinin in red yeast rice supplements

There has been wide support for lowering the current ML of 2000 μ g/kg to 100 μ g/kg for food supplements based on rice fermented with red yeast Monascus purpureus.

Pyrrolizidine alkaloids in honey, tea, herbal infusions and food supplements

Following the EFSA's conclusion that there is a possible concern for human health related to the exposure to pyrrolizidine alkaloids (PAs), discussions on appropriate risk management measures for their presence in food continue. Proposals include setting MLs or action levels for PAs in teas, herbal teas, plant-based food supplements and honey.

Some initial data from monitoring carried out by a Member State indicate that PAs could be present in dried culinary herbs. Any data on the occurrence of PAs in culinary herbs would be useful to inform future discussions.

Tropane alkaloids

Following the publication of EFSA's dietary exposure assessment to tropane alkaloids, it was concluded that some population groups – especially infants, toddlers and children could exceed the safety guideline levels for atropine and scopolamine. Since higher concentrations of atropine and scopolamine can be found in buckwheat, millet, sorghum, tea and herbal infusions, cereal bars and spices as well as some corn products, regulatory measures such as setting of MLs are being considered for these categories in addition to the existing MLs for processed cereal-based foods and baby foods for infants and young children, containing millet, sorghum, buckwheat or their derived products.

Opium alkaloids in poppy seeds

EFSA has published its updated opinion on opium alkaloids in poppy seeds and concluded that the existing acute reference dose (ARfD) of 10µg morphine/kg body weight (bw) should also include codeine (by using a factor of 0.2 to convert codeine to morphine equivalents). The ARfD is therefore a group ARfD for morphine and codeine, expressed in morphine equivalents. The group ARfD could be exceeded - most likely for high levels of consumption, or if foods containing unprocessed poppy seeds are consumed. However, food processing steps (i.e. washing, soaking, heat treatment, grinding) may reduce the alkaloid content in raw poppy seeds by 25 - 100% in the final product.

On the basis of the EFSA assessment, further risk management actions will be considered for morphine, codeine and possibly another opium alkaloid thebaine (which could make a small contribution to morphine-like toxicity). Currently, a target level of 10 mg/kg is applicable for morphine in poppy seeds and products containing poppy seeds placed on the market destined for the final consumer.

Fusarium toxins - Deoxynivalenol (DON) and T2/HT2 toxin

Following EFSA's assessments that modified forms of mycotoxins could add to mycotoxin exposure, the Commission has proposed that these are also considered in future risk management measures. Initially the three modified forms of 3- acetyl DON, 15-acetyl DON and DON-3-glucoside would be considered.

Dietary exposures to T2/HT2 toxin could exceed health-based guidance values and therefore regulatory action may be taken to limit consumer exposure. Modified forms will not be included at present.

Environmental and industrial contaminants

Acrylamide

(EU) 2017/2158 establishing mitigation measures and benchmark levels for the reduction of the presence of acrylamide in food has applied to food businesses from 11 April 2018.

The Commission has finalised high-level guidance for food business operators on the application of the legislation, which was endorsed at Standing Committee in June. This will be published shortly on the Commission website. The Commission also plans to undertake future awareness campaigns on acrylamide for both consumers and the food industry.

A future monitoring recommendation on acrylamide levels in foods was also endorsed at Standing Committee. Once the Commission internal procedures are finalised this will be published in the official journal in the autumn. The monitoring recommendation will be addressed to both Member States and Food Business Operators and is intended to gather further information on levels of acrylamide in certain foods of interest. The foods of interest include foods outside the scope of Regulation (EU) 2017/2158 but also includes some foods within scope where it would be useful to get a better understanding of the variation in acrylamide between different sub categories of food. Once published the existing monitoring Recommendation (2013/647) will be repealed.

The Commission will start discussions after the summer break to consider whether it is appropriate to establish maximum levels for acrylamide in foods for infants and young children.

Mercury and methylmercury in fish

A Commission proposal on possible revisions to the maximum levels for mercury in different fish species and maximum level for salt is undergoing internal Commission process. Inter-service consultation will be carried out and formal stakeholder feedback process (four weeks), before being presented for a vote at Standing Committee sometime in the autumn.

3-monochloropropane diol - esters

Discussions continue on the setting of maximum levels for 3-MCPDE. These are process contaminants formed during refining of food oils. Options being discussed are a level of 2500 μ g/kg for all oils, with an alternative option being to split the maximum levels, one for certain named oils at 1250 μ g/kg and the other for all other oils at 3000 μ g/kg. Initial discussions have centred on setting levels for oils however the Commission will then consider whether it is appropriate to set levels for this process contaminant in other foods in which it can be formed.

Perchlorate

Discussions continue on setting maximum levels under 1881/2006 for perchlorate in various foods to replace the existing guidance levels for intracommunity trade.

Furan and methylfurans

The Commission is considering future risk management approaches and the possibility of setting maximum levels for some foods (baby foods initially) and considering what action to take for others, including the possibility of future monitoring of furan and methylfurans in various foods.

Lead

The Commission is considering further lowering the existing maximum levels for lead in baby foods to include:

- · Infant formulae marketed as powder
- · Processed cereal-based baby foods
- Drinks for infants and young children labelled and sold as such
- Drinks for infants and young children to be prepared by infusion or decoction

Discussions are expected to start in the autumn.

Mineral oils hydrocarbons

The reporting deadline for monitoring Recommendation on mineral oils hydrocarbons has been extended with a new deadline set of 1 October 2019 as the sampling guidance has only recently been finalised. The analytical methods guidance being coordinated by the EURL is expected to be completed by summer 2018.

Perfluorooctane sulfonic acid and perfluorooctanoic acid

The publication of the EFSA Scientific Opinion is expected to be published shortly.

Codex Electronic Working Group (EWG) on the revision of the Code of Practice (COP) for the Prevention and Reduction of Lead Contamination in Foods:

The Codex EWG to revise the existing Code of Practice for the Prevention and Reduction of Lead Contamination in Foods (CXC 56-2004) will be chaired by the USA with the UK as co-chair. The revised COP will reflect new information available on measures to reduce lead during agricultural production and food processing and complement other work on lead undertaken by the Codex Committee on Contaminants in Foods (CCCF).

Stakeholders are invited to send in any new information on the prevention and reduction of lead contamination in foods that can be included in the revised COP.

Comments and data:

Please send any relevant information, comments and data to ChemicalContaminants@food.gov.uk