



FoodDrinkEurope

Comments on the EFSA draft opinion on Acrylamide

10 December 2014

FoodDrinkEurope:

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FoodDrinkEurope

Role: Represent the food and drink Manufactures at EU Level

- **National federations (26, including 3 observers)**

E.g.: FDF (UK), ANIA (FR), BLL (DE), PFPZ (PL), FederAlimentare (IT), FIAB (SP), etc.

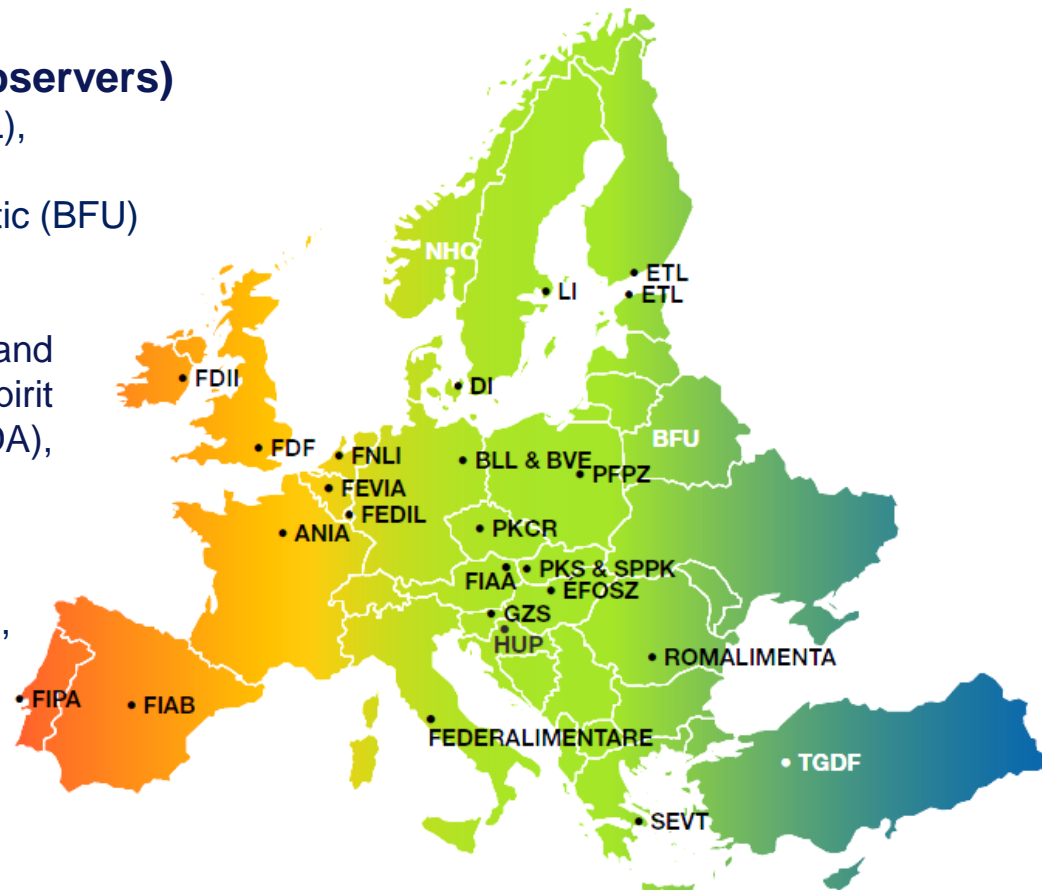
Observers: Turkey (TGDF), Norway (NHO), Baltic (BFU)

- **European sector associations (25)**

E.g.: Meat sector (Clitavi), Chocolate, Biscuits and Confectionary (CAOBISCO), Snacks (ESA), Spirit drinks (spiritsEUROPE), Dairy products (EDA), Soft drinks (UNESDA), etc.

- **Major food and drink companies (18)**

E.g.: Coca-Cola, Cargill, Danone, Kellogg, Mars, Nestlé, PepsiCo, Ülker, Unilever, etc.



Background

- In April 2002, authorities, food industry, caterers and consumers were surprised by the unexpected finding that many heated foods contained significant levels of acrylamide.
- Acrylamide is a common reaction product generated in a wide range of cooking processes, which has been present in human foods and diets probably since man has cooked food.
- Immediately following the initial announcement, the food industry within the EU took action to understand how acrylamide is formed in food, and to identify potential routes to reduce consumer exposure.
- From the onset of the acrylamide issue, the efforts of many individual food manufacturers and their associations have been exchanged and coordinated under the umbrella of the FoodDrinkEurope, to identify and accelerate the implementation of possible steps to reduce acrylamide levels in foods.
- This led to the creation of the acrylamide toolbox and so-called pamphlets for various sectors as well as the recognition of the acrylamide toolbox at Codex Alimentarius level.

choice

Background - Examples of tools stipulated in the FoodDrinkEurope Acrylamide Toolbox :

Variety/agronomics of crops	Process control
<ul style="list-style-type: none">▪ Asparagine content▪ Sugar level▪ Storage/handling	<ul style="list-style-type: none">▪ Temperature/time▪ Moisture content▪ Use of food improvement agents▪ Enzymes (e.g. asparaginase)▪ Additives/technical aids

Detailed comments on the EFSA draft opinion - Abstract

- Both in the abstract and the summary product categories with the 'highest levels' are highlighted; these are not always the products which contribute the largest amounts to dietary intakes.
- Equal emphasis within the abstract and summary to those product categories which have been calculated to contribute significant amounts to dietary intake should be provide.
- We also believe that the recommendations presented on Page 192 (Lines 7369 to 7380) are very important and should receive greater emphasis within the abstract and within the summary.
- We support the further collection of accurate data on consumption in relation to diet contribution and would welcome a clearer indication which reflects this distinct contribution of different food categories.

Detailed comments on the EFSA draft opinion - Summary

- Both in the summary and the abstract (5-23) product categories with the ‘highest levels’ are highlighted; these are not always the products which contribute the largest amounts to dietary intakes it is important that equal emphasis within the abstract and summary to those product categories which have been calculated to contribute significant amounts to dietary intake.
- Recommendations presented on Page 192 (Lines 7369 to 7380) should receive greater emphasis within the abstract and within the summary.
- Calculations performed in lines 72-75 do not appear to be about loyalty to a particular brand, but loyalty to a particular product category under the terminology “potato crisps”.
 - Our understanding is that the analysis compares intakes calculated on the basis that all potato crisps consumed are “made from fresh potatoes through continuous process”, with intakes calculated assuming all potato crisps that are consumed are “made from potato dough”. "Brand" does not appear to play any role here. This would also appear to be the same with the coffee intake calculations.
- It is suggested the title of this section to reflect more closely reflect the calculations

Detailed comments on the EFSA draft opinion - Assessment

Reference has been made to industry activities.

It is to note that:

- The brochures mentioned are available in 23 European languages
- Industry has contributed to important DG research or national research programmes, such as Heatox (<http://heatox.org/>), and Prometheus(<http://www.eusem.com/body/CS/EUproj/PROMETHEUS.htm>) as well as a project to control asparagine in wheat. Other efforts concern cooking instructions to help consumers reducing their exposure to acrylamide(www.goodfries.eu); which is available in 28 languages

Detailed comments on the EFSA draft opinion – Previous Risk Assessments

- Reference has been made to the Danish DTU publication - indicating that it was found that 'For adults, the food category contributing most to the intake was potato products, followed by coffee and cocoa. ...'. This may suggest that cocoa has been identified in Denmark to be a major contributor. But when reading the original Danish report, it says in more detail the contribution from potato products is 'followed by coffee and cocoa at 30 % of which coffee contributes the most.'
- Our suggestion: "For adults, the food category contributing most to the intake was potato products, followed by coffee and cocoa, of which according to the DTU publication coffee contributes the most".

Detailed comments on the EFSA draft opinion – Occurrence and patterns of AA in food

- For clarity it is important to use consistent terminology throughout the draft Scientific Opinion e.g. there should be a clear and consistent differentiation between 'French fries' and 'potato crisps'.
- The section 'Food Description' (page 32 onwards, lines 1197 onwards) already include detailed descriptions of the categories. However looking at the bulk of the draft Opinion the terms 'French fries/potato chips', 'potato chips' or 'chips', are frequently used, and therefore when reading the text it is not always clear to which type of product the authors are referring.
- A specific example is within the section on 'intake assessment' which includes the terms 'chips', 'potato chips' and 'hot chips' - all of which we presume in the context of the section most probably refer to 'French fries'.
- It is suggested to use the term 'potato chips' within the text, extra care should be taken to clarify whether the reference is to 'Potato Crisps' or else to 'Potato Fried Products'.
- For clarity we would suggest that where 'Potato Fried Products' are referenced as a standalone category, they should be referenced as 'Potato Fried Products (except potato crisps and snacks)'. The definition be mentioned under this section.

Detailed comments on the EFSA draft opinion – Data submitted by different countries

- FoodDrinkEurope welcomes the recognition and inclusion of the occurrence data that was submitted by industry, comprising data from various sectors.

Detailed comments on the EFSA draft opinion – Description of the occurrence levels - Potato crisps and snacks

- The section 'Food Description' includes detailed descriptions of the categories. However looking at the bulk of the draft Opinion the terms 'French fries/potato chips', 'potato chips' or 'chips', are frequently used, and therefore when reading the text it is not always clear to which type of product the authors are referring.
- For clarity it is therefore important to use consistent terminology throughout the draft Scientific Opinion e.g. there should be a clear and consistent differentiation between 'French fries' and 'potato crisps'.
 - A specific example is within the section on 'intake assessment' which includes the terms 'chips', 'potato chips' and 'hot chips' - all of which we presume in the context of the section most probably refer to 'French fries' (lines 2287, 2317, 2359, 2395, 2820).
- It is suggested that where the term 'potato chips' is used within the text, extra care should be taken to clarify whether the reference is to 'Potato Crisps' or else to 'Potato Fried Products'.
 - For clarity we would suggest that where 'Potato Fried Products' are referenced as a standalone category, they should be referenced as 'Potato Fried Products (except potato crisps and snacks)'.

Detailed comments on the EFSA draft opinion – Impact of processing

The summary of the cited paper of Yuan et al 2014 states that the optimal soaking treatments could effectively reduce the AA content whilst reasonably retaining the sensory attributes of crisps.

- All such research is to be welcomed, and will doubtless be investigated by manufacturers for potential inclusion within the FoodDrinkEurope AA Toolbox.
However, for a technique to be recommended as an effective mitigation tool the research requires evaluation within pilot plants or test runs within a factory to verify whether it delivers measurable reductions, and whether it can be applied successfully under commercial production conditions. Often, it is found that promising new research will have some risks to product attributes and/or inconsistent mitigation results when scaled up and applied within a commercial setting.
- In our initial view, it would appear that the technique as described would be impractical within current commercial settings, and we would also expect to see some major impacts upon the organoleptic properties of the final foodstuffs which the authors perhaps have not been able to consider.
- Given this uncertainty we would suggest that the text should be amended to read "The authors believe that optimal soaking treatments could effectively reduce the AA content while reasonably retaining the sensory attributes of the crisps."

Detailed comments on the EFSA draft opinion – Acrylamide exposure levels across the different population groups

The section on exposure is very interesting and useful to readers.

% contributions to intakes are highlighted for some groups and some products on page 60.

- However, this is an incomplete and selective summary, making it difficult to read.
- It would be very useful to provide a full report of the actual % contributions to exposure for each food group and each population category.

Detailed comments on the EFSA draft opinion – Home-cooking habits and places of consumption

- FoodDrinkEurope believes information, provided in this section, is also very important and should be recognised and emphasised within the abstract and the summary.

Detailed comments on the EFSA draft opinion – Brand loyalty

As mentioned in the summary

- The calculations performed here do not appear to be about loyalty to a particular brand, but loyalty to a particular product category under the terminology “potato crisps”.
 - Our understanding is that the analysis compares intakes calculated on the basis that all potato crisps consumed are “made from fresh potatoes through continuous process”, with intakes calculated assuming all potato crisps that are consumed are “made from potato dough”.
- "Brand" does not appear to play any role here. This would also appear to be the same with the coffee intake calculations.
- We would suggest that the title of this section needs to more closely reflect the calculations that have been undertaken e.g. Loyalty to particular product sub-type or category. This would also require amendment within the Summary .

Detailed comments on the EFSA draft opinion – Hazard identifications and characterisation

In the section on hazard identification and characterisation of numerous studies are reviewed by CONTAM Panel and their conclusions are summarised.

- The Panel's conclusions and discussions frequently appear within the body text rather than as a distinct numbered subsection.
This format means that it is, in some instances, difficult to read and digest the information that is being presented.

Outlook

FoodDrinkEurope and its members to remain on the forefront to mitigate acrylamide

- Updating the FoodDrinkEurope Acrylamide Toolbox with newest scientific and technological developments
- Updating acrylamide pamphlets to reach out to SMEs to put into practice newest mitigation tools
- Applying the ALARA principle
- FoodDrinkEurope members to continue contributing to data collections to demonstrate mitigation efforts

