TOX/MIN/2015/02

Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment

Minutes of the meeting held on Tuesday, 17th March 2015 at Jurys Inn, Birmingham.

Present

Chairman: Professor D Coggon

Members: Mr D Bodey

> Prof J Cade Dr R Crevel Dr A Hansell Dr C Harris Prof D Harrison Prof R Harrison Prof B Lake Prof I Morris Prof R Smith Dr J Thompson Prof F Williams

Food Standards Agency (FSA) Secretariat:

Dr D Benford Ms R Acheampong

Ms L Buckley

Dr D Gott Dr D Hedlev Ms F Hill Dr L Kent Mr B Maycock Ms C Mulholland Ms C Potter Mr A Sbaiti Dr J Shavila

Ms F Pollitt

Scientific Secretary

Public Health England (PHE)

Secretariat:

Officials: Dr Sarah O'Rourke Scientific Secretary

Home Office Centre for

Applied Science and Technology (CAST)

Item 4

Dr Penny Bramwell FSA Director of Science, Items 5-10

> Evidence and Research **FSA Statistical Team** FSA Agricultural, Process

> > and Environmental Contaminants Team

Mr Robin Clifford Dr Alan Dowding

	Ms Bhavna Parmar	FSA Scientific Methods and Laboratory Practice Team	
	Ms Rebecca Scrivens	HSE	
Assessors:	Ms Michaela Benton	Health & Safety Executive (HSE)	
Observers:	Ms Barbara Cousin- Colombel	Alsetex	Item 4
	Mr Marc-Antoine Galzin	Alsetex	Item 4
	Dr Norman Gault	Agri Food and Biosciences Institute (AFBI)	Items 5-10
	Mr Emanuel Henriques	Primetake	Item 4
	Dr Marc Kennedy	Food and Environment Research Agency (FERA)	Items 5-10
	Dr Colin McRoberts	AFBI	Items 5-10
	Dr Martin Rose	FERA	Items 5-10

Contents

Item	Paragraph	
1.	Apologies for absence	3
2.	Draft minutes of the meeting held on 3 rd February 2015	4
3.	Matters arising	5
4.	Submissions for the reformulation of nonivamide (PAVA) and 2-chlorobenzylidene malononitrile (CS) as incapacitant sprays – RESERVED BUSINESS	27
5.	Second draft statement on potassium-based replacements for sodium chloride and sodium-based additives	43
6.	Third draft statement on the effects of soya consumption on thyroid status	47
7.	Paper for information: Response to EFSA caffeine consultation	51
8.	Paper for information: FSA Scientific Advisory Committees (SACs) update	52
9.	Any other business	53
10.	Date of next meeting	57

Announcements

- 1. The Chairman, Professor Coggon, welcomed Members and assessors to the meeting.
- 2. The Chairman reminded those attending the meeting to declare any commercial or other interests that they might have in any of the agenda items.

Item 1: Apologies for absence

3. Apologies were received from members: Drs Roger Brimblecombe, Mark Graham and Nick Plant, and Professor Brian Houston. No written comments had been submitted. Apologies were also received from assessors: Professor Tim Gant (PHE) and Sam Fletcher (Veterinary Medicines Directorate, VMD).

Item 2: Draft minutes of the meeting held on 3rd February 2015 – TOX/MIN/2015/01

4. A revised draft of the minutes had been circulated to Members shortly before the meeting. These were agreed subject to minor editorial amendments.

Item 3: Matters arising

Item 3: Matters arising from previous meetings

- 5. Para 6: This item related to the Hansard record of a statement by Baroness Kramer (Minister of State for Transport) from a House of Lords debate in March 2014 on aircraft cabin air, which had not satisfactorily reflected the COT's views. On 12th November 2014, the Chair had written to the Permanent Secretary at the Department for Transport (DfT), copied to Sir Mark Walport (Chief Scientific Adviser to HM Government) to express the Committee's concerns, and asking that, where possible, future briefings for Ministers be checked with the Committee's Secretariat. As there had still been no reply, the Secretariat had contacted the Permanent Secretary's office and forwarded a further copy of the original letter on 12th February 2015. No reply had been received by 12th March, and the Secretariat had therefore contacted the Permanent Secretary again.
- 6. At the beginning of March, the DfT had, however, sent to the secretariat a draft ministerial letter on the same topic. In response, the Chair had suggested a number of revisions, which summarised the advice that had been given by the Committee. However, the final version of a letter sent subsequently had not used the proposed text, and had changed the emphasis. Moreover, a parliamentary answer dated 4 March 2015 had stated that the COT had concluded that there was "no

evidence that fume events are causing ill health in passengers or crew". This was not accurate. The Committee had been clear that fume events did occur and in some cases had caused acute illness. They considered that the illness was unlikely to occur through toxic mechanism, and more likely to be a nocebo effect. However, whatever the underlying mechanism, the illness could be disabling, and there was therefore a continuing imperative to minimise the risk of fume events that give rise to symptoms.

- 7. Members were concerned that Ministers may not have been accurately briefed regarding the Committee's advice. It was therefore agreed that the Chair would write to the Parliamentary Under-Secretary to raise the problem, and offer a more detailed briefing if wished.
- 8. Para 7: Also in relation to cabin air, it was noted that there had been extensive further communication between the Chair and Mr Ian Panton. A Member reported that she had attended a meeting organised by the Global Cabin Air Quality Executive (GCAQE) on behalf of the COT. She had found that some attendees had misconceptions about the Committee's views, and she considered it important to continue to promote accurate understanding of the COT's position.
- 9. Para 8: The paper on aspartame research was due to be published on 18th March.
- 10. Para 10: The membership of the proposed COT/Committee on Carcinogenicity (COC) subgroup to document how epidemiological evidence was used was being finalised, and arrangements for its meetings would commence soon. Professor Boobis, the incoming COT chairman, would be joining the subgroup.
- 11. Para 12. The European Food Safety Authority (EFSA) Working Group on acrylamide: the Chair had participated in a telephone meeting to advise on epidemiological aspects of this topic.
- 12. Para 19: A draft lay summary of the COT statement on polybrominated diphenyl ethers (PBDEs) in the infant diet had been circulated to members for comment. Dr Ong from the Scientific Advisory Committee on Nutrition (SACN) had provided some suggestions on the text of the statement and, in particular, had suggested that more could be made of data on samples of infant food from outside the UK. However, the Chair considered that it was not possible to draw useful conclusions from these results, which related to a heterogeneous mix of products (only 8 of 42 were infant and follow-on formula). It was expected that the PBDE statement would be published by the end of March.

Item 4: Potential future discussion items – horizon scanning

13. Para 21: There had been recent reports in the news about the publication in the New England Journal of Medicine of results from the Learning Early About Peanut allergy (LEAP) study. Whilst these indicated that early introduction of peanut into the infant diet prevented peanut allergy, the FSA considered it important to review the findings in the context of other new research. LEAP was one of the two randomised controlled trials highlighted for inclusion in a systematic review on the timing of introduction of allergenic foods into the infant diet, which would be considered by the COT when completed. The other trial was the Enquiring About Tolerance (EAT) study which was due to be completed later in 2015. In the meantime, the 2008 COT statement (and related FSA advice) remained in place. The key COT conclusion in 2008 was:

"Overall, the evidence now available does not indicate whether maternal dietary consumption of peanut during pregnancy or lactation is more likely to increase or decrease the risk of sensitisation and allergy to peanut in the child. An effect in either direction is possible, and it is possible that the direction of effect could differ according to the level of intake. Alternatively, there could be no effect at all."

- 14. Members noted that the new research, although it concerned infant rather than maternal consumption of peanut, added weight to the doubts that the COT had voiced, when it changed its advice in 2008, and agreed the importance of reviewing all of the relevant evidence. A Member informed the Committee that the Integrated Approaches to Food Allergen and Allergy Management (IFAAM) group had written to the New England Journal of Medicine urging caution over changes in advice on the basis of a single study.
- 15. Para 25: Toxicokinetic modelling would be discussed further at the COT meeting in May.
- 16. Para 27: One Member had provided a list of biomonitoring studies in progress at the University of Newcastle. Information on ongoing studies and possible funders of such research would be welcome from other Members.
- 17. Para 28: A paper on histamine in cheese would be prepared for discussion at a future meeting.
- 18. Para 30: Information on the microbiome work would be brought to the COT at a future meeting.
- 19. Para 34: One Member had provided a comment on databases accessible via the Royal Society of Medicine website, which provided multiple hits in relation to 'Toxicity & Congeners' and 'Toxicity & Stereoisomers'. These might be of use when considering the toxicity of congeners alone and in combination. This topic would be discussed further in the future.

- Item 5: Second draft statement on the potential risks from hexabromocyclododecanes (HBCDDs) in the infant diet
- 20. Para 40: The lay summary had been circulated to members for comment.
 - Item 6: Second draft statement on the effects of soya consumption on thyroid status
- 21. Para 46: The third draft statement was on the current agenda.
- Item 7: Consultation of the European Food Safety Authority on a Draft Scientific Opinion on the safety of caffeine
- 22. Para 58: The COT's comments on the EFSA draft opinion on the safety of caffeine had been submitted to EFSA, and were provided in paper TOX/2015/13 for information.
- 23. A member of the Secretariat had attended the EFSA stakeholder meeting in Brussels on 5th March and presented the FSA view to the group, which included representatives from Competent Authorities in other Member States, industry, consumer groups and the media. The presentation was based on the COT's views, and was well received by all. A number of points on the draft EFSA opinion were raised by interested parties. Most importantly they sought clarification about the terms of reference for the opinion, as there was some confusion as to why susceptible groups and high level consumers of alcohol and caffeine had not been considered. There had been some media interest with the COT views being quoted. Once comments had been considered and modifications made to the opinion, EFSA would be holding an open plenary meeting of its Panel on Dietetic Products, Nutrition and Allergies (NDA) to adopt the opinion formally.
 - Item 8: Draft manuscript on developmental toxicity and the uncertainty factor for interspecies extrapolation
- 24. Para 67: The paper was being restructured and would be developed further before potential collaborators were contacted.
 - Item 9: Second draft statement on polybrominated biphenyls (PBBs) in the infant diet
- 25. Para 72: The statement was being finalised and a draft lay summary would be circulated to members soon.
- 26. No other matters were raised.

Item 4: Submissions for the reformulation of nonivamide (PAVA) and 2-chlorobenylidene malononitrile (CS) as incapacitant sprays – TOX/2015/10 – RESERVED BUSINESS

- 27. No interests were declared.
- 28. The Chairman welcomed Dr Sarah O'Rourke, an official from the Home Office Centre for Applied Science and Technology (CAST) who was in attendance to advise the Committee.
- 29. This item was reserved business as it contained commercially-sensitive information.

Item 5: Second draft statement on potassium-based replacements for sodium chloride and sodium-based additives – TOX/2015/11

- 43. Dr Crevel declared a non-personal, specific interest and did not take part in the discussion of this item.
- 44. The SACN were reviewing recommendations on the use of potassium-based replacements for sodium chloride and sodium-based additives, and the COT had been asked to consider possible adverse effects of the increased potassium intakes that could occur as a result of widespread use of potassium-based replacements. This topic had been discussed in a number of earlier COT papers, and a first draft statement (TOX/2014/39) had been presented to the Committee at its meeting in December 2014.
- 45. Paper TOX/2015/11 included a second draft statement that took into account the previous COT discussions, and summarised available information on the toxicology of potassium and potential increase in potassium intakes arising from the use of potassium-based replacements.
- 46. Members discussed the second draft statement. They were content with the overall structure but suggested a number of amendments, including the addition of a statement on the potential vulnerability of pregnant women to higher potassium intakes, the inclusion of a list of the food categories used in the exposure assessment, and reformatting of the tables displaying potassium intakes. As the amendments were minor, it was agreed that the statement should be finalised by Chairman's action. A lay summary would be drafted and circulated for comment.

Item 6: Third draft statement on the effects of soya consumption on thyroid status – TOX/2015/12

- 47. No interests were declared.
- 48. At several previous meetings, the COT had considered the potential effects of consuming soya products on various health outcomes investigated in FSA-funded studies. The Committee had concluded that it would be appropriate to produce a COT statement on the possible effects of soya phytoestrogens on thyroid function. A second draft statement had been presented to the Committee in February 2015.
- 49. Paper TOX/2015/12 contained a third draft statement, which had been revised in light of the Committee's discussion in February, and included a table summarising the reported effects of isoflavone exposure on thyroid function in human studies, and additional information about the tabulated studies.
- 50. Members asked that a number of editorial changes be made, and agreed that the statement could be finalised by Chairman's action. A lay summary would be drafted and circulated for comment.

Item 7: Paper for Information: Response to the European Food Safety Authority caffeine consultation – TOX/2015/13

51. This paper was provided for information only.

Item 8: Paper for information: FSA Scientific Advisory Committees (SACs) update – TOX/2015/14

52. This paper was provided for information only.

Item 9: Any other business

53. A member of the Secretariat informed Members that the Veterinary Residues Committee (VRC) had been disbanded. The VRC had been a Department for Environment, Food and Rural Affairs (DEFRA) Expert Committee, which advised the DEFRA and the FSA on the scope and operation of surveillance for residues of veterinary medicines in food, and the significance to consumers of any residues detected. The DEFRA had conducted a review of the VRC in 2014 and had concluded that it was not the most effective way of providing expert scientific advice on veterinary medicine residues. The last official meeting of the VRC had been held on 20th November 2014.

- 54. As a result, the COT might sometimes be asked by the FSA or the VMD for advice about the risks of toxicity from veterinary medicine residues. The COT had occasionally advised on veterinary medicines in the past, as had the Committees on Carcinogenicity (COC) and Mutagenicity (COM).
- 55. Finally, the Chair reminded Members that this was his last COT meeting. He thanked them for their support and contributions during his tenure as COT chair and wished the Committee well for the future.
- 56. No other business was raised.

Item 10: Date of next meeting

57. Date of next meeting – Tuesday 19th May 2015, Conference Rooms 4&5, Aviation House, 125 Kingsway, London, WC2B 6NH