Meeting

Final minutes of the 29th March 2022 meeting

Meeting of the Committee at 10:00 on 29th March 2022 on Microsoft Teams

Present

Chair:	Prof Alan Boobis

COT Members:

Dr Phil Botham

Ms Jane Case

Dr Stella Cochrane

Dr James Coulson

Dr Rene Crevel

Dr Caroline Harris

Professor Gary Hutchison

Professor Thorhallur Ingi Halldórsson

Dr Sarah Judge

Dr Gunter Kuhnle

Dr David Lovell

Professor Shirley Price

Dr Mac Provan

Ms Juliet Rix

Dr Michael Routledge

Dr Cheryl Scudamore

Dr Natalie Thatcher

Professor Mireille Toledano

Dr Simon Wilkinson

Professor Philippe Wilson

Prof Paul Haggarty	SACN Liaison
Prof John O’Brien	Science Council Liaison

Food Standards Agency (FSA) Secretariat:	FSA Scientific Secretary
	Ms Claire Potter
	Mr Barry Maycock
	Dr Barbara Doerr
	Dr Alex Cooper
	Mr Michael Dickinson
	Dr Joseph Shavila
	Ms Emma French
	Ms Rhoda Aminu
	Ms Sabrina Thomas
	Dr Gail Drummond
	Ms Chara Tsoulli
	Ms Cleanncy Hoppie
	Ms Jocelyn Frimpong-Manso
	Ms Sophy Wells
	Dr Gaetana Spedalieri
	Mr Thomas Hornsby
	Mr Lawrence Finn
	Dr David Gott
	Mr Shaddad Saleh
	Dr Emily Hudson
	Dr David Kovacic
	Alexander Smith

UK HSA Secretariat:	Ms Britta Gadeberg	UK HSA Scientific Secretary
Invited Experts and Contractors:	Dr Ruth Bevan	IEH
Assessor	Prof Tim Gant	UKHSA
Assessor	Ms Frances Hill	BEIS
Assessor	Ms Susannah Brown	UKHSA
Assessor	Ally Crowther	HSE – Item 6
	Anest Muller	HSE-Item 6
Assessor	Mr James Smith	HSE= Item 6
Assessor	Ms Rachel Elsom	OHID- Items 4,9
Observers	Dr Emma Bradley	FERA
	Dr Stephen Ruckman	TSG consulting
	Prof Christer Hogstrand	Kings College, Dept of Nutritional Sciences

FSA and other Officials:	Dr Amie Adkin	FSA
	Ms Aisling Jao	FSA
	Ms Catherine Cleland	FSA
	Tasila Mwale	FSA
	Ms Anne Gravett	FSA
	Ms Elli Amanatidou	FSA
	Ms Victoria Balch	FSA
	Ms Tahmina Khan	FSA
	Dr Ovnair Sepai	UKHSA
	Mr Will Munro	FSS
	Ms Krystle Boss	FSS
	Ms Marianne James	FSS
	Ms Helen Nakeeb	UKHSA
	Ms Kerry Broom	PHE
	Ms Ruth Coward	DEFRA

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Announcements

1. The Chair welcomed Members and other attendees.

2. Members were informed that this would be the last COT meeting for Dr Rene Crevel and Dr Caroline Harris as their terms of appointment have expired. They were thanked for their valuable contribution to the Committee over the last 10 years and wished well for the future.

Interests

3. The Chair reminded those attending the meeting to declare any commercial or other interests they might have in any of the agenda Items.

Item 1: Apologies for absence

4. Apologies were received from Cath Mulholland and Olivia Osborne of the Secretariat.

Item 2: Draft Minutes from the meetings held on 8th and 10th of February 2022 (TOX/MIN/2022/01 and TOX/MIN/2022/02)

5. There were no comments and the minutes from both meetings were accepted as an accurate record.

Item 3: Matters arising from the meeting held on 8th of February 2022

Matters arising from previous meetings

6. The campaign to recruit new Members to the FSA Scientific Advisory Committees including COT ended on 13th February 2022. A number of applicants were interviewed and it is anticipated that a new Member can be appointed to the Committee.

Assessment of EFSA's vitamin D tolerable upper level (TUL) for 6-12 month-olds (TOX/2022/17)

7. No interests were declared.

8. At the December 2021 meeting, a discussion paper entitled "Vitamin D exposure levels in formula fed infants" (TOX/2021/62) was presented to the COT. This paper gave an estimate of infant exposure to vitamin D from consumption of infant formula products (only) following the change in the regulation, where the minimum vitamin D content in infant and follow-on formulae was doubled from 1 to 2 µg per 100 kcal. However, the COT noted that this exposure assessment did not take into account other dietary sources of vitamin D, and therefore requested a further exposure assessment from the Secretariat.

9. The requested exposure assessment was presented at the February 2022 meeting (TOX/2022/01). The Committee noted that in Table 2 of the paper, which presented estimates of chronic infant exposure to vitamin D from consumption of food and infant formula/follow-on milk, based on the new regulation, there were no exceedances of EFSA's tolerable upper level (TUL) of 25 µg/person/day for infants aged 4 - <6 months at the maximum exposure level. However, there was an exceedance of the TUL for infants aged 6 - <12 month at the maximum exposure; but this would not have exceeded the revised EFSA TUL of 35 µg/person/day which was established by EFSA in 2018, specifically for 6 - <12 month-olds. The COT asked the Secretariat to summarise EFSA's rationale for increasing their TUL from 25 to 35 µg/person/day for 6 - <12 month-olds, so it could be reviewed by the COT.

10. Members considered paper TOX/2022/17 provided helpful detail on the evaluation conducted by EFSA.

11. Members discussed the lack of data regarding vitamin D levels in breast milk in the UK in the paper. They commented that it would be useful to have some information on breast milk, even if the data were not UK-specific. There were multiple EU populations where these data were available, and which might be similar to the UK population. It was also commented that there were a number of randomised-controlled trials looking at the effects of administering vitamin D to mothers and monitoring the effects in breastfeeding infants, such as Hollis et al. (Pediatrics 136(4): 625-34, 2015), and Oberhelman et al. (Mayo Clin Proc 88(12): 1378-87, 2013), which provided useful information when trying to determine the variation in vitamin D intakes in infants where an increasing number of mothers may be taking supplements at different levels. The Secretariat questioned whether Members were interested primarily in the parent compound or in the metabolite. It was noted that this would depend upon what the available survey data had taken into account and on the levels of parent compound in breast milk.

12. Overall, Members agreed that until more data were provided on the levels of vitamin D in breast milk, they could not determine whether the new minimum vitamin D content in infant formulae would lead to excessive vitamin D exposure in infants, or whether the current UK Government guidance on vitamin D supplementation in infants might need updating.

Updated EFSA guidance on the Benchmark Dose Approach

13. The Committee was informed of a meeting held between interested COT, COC and COM Members to discuss the recently published draft updated EFSA guidance on the Benchmark Dose Approach; the most notable change being a move to use a Bayesian rather than frequentist approach in the modelling.

14. In the discussion it was highlighted that the guidance on modelling took more account of statistical issues, rather than the underlying biology. It was noted that the benchmark dose was considered by EFSA to be scientifically more advanced than the NOAEL/LOAEL approach.

15. Members were informed that the Secretariat was collating the notes from the meeting which would be forwarded to EFSA ahead of the deadline on the 12th April Members should send any additional comments to the Secretariat by the 6th April 2022 deadline.

JEGS update

16. The committee was updated on the current work of the various joint expert groups (JEGs).

FCM JEG

17. The Food Contact Materials (FCM) JEG have assessed additional information provided for a dossier in review and as a result require further information from the applicant.

18. The interim statement on ocean bound plastics along with the call for evidence was published on 21st March 2022.

AEJEG

19. Two opinions from the Additives, Enzymes and other Regulated Products JEG (AEJEG) were on the agenda for this meeting.

20. The AEJEG was in the process of evaluating their first full dossier for an extract from blue microalgae (Galdieria sulphuraria) and had requested further information from the applicant including further testing.

21. A series of steviol applications had been received and were under review along with 3 applications for the extension of use for egg analogues: one of which had been referred to the Advisory Committee on the Microbiological Safety of Food (ACMSF) due to concerns regarding the use of the antibiotic nicin, and antimicrobial resistance. Two applications would be presented at the next JEG meeting. The last quarter of the year was expected to be busy for the AEJEG, who would be evaluating 10 applications for smoke flavourings which require renewal of their authorisations.

AFFAJEG

22. The Animal Food and Feed JEG were aiming to complete the evaluation of 3-NOP at their next meeting which was taking place on April 19th. Some opinions on previous dossiers will be evaluated by the group and three dossiers on new applications will be evaluated.

Item 4: Third draft statement on the effects of excess Vitamin A on maternal health (TOX/2022/18)

23. No interests were declared.

24. This item is part of the ongoing work on nutrition and maternal health focusing on maternal outcomes during pregnancy, childbirth, and up to 24 months after delivery being conducted by the Scientific Advisory Committee on Nutrition (SACN) with the COT advising on the effects of chemical contaminants and excess nutrients in the diet.

25. Vitamin A was first considered in discussion paper TOX/2021/44 at the September 2021 COT meeting; first and second draft statements setting out the views of the Committee were presented to the COT in December 2021 and February 2022 respectively. The Committee made a number of requests for further clarification which had been addressed in the third draft of the statement presented in paper TOX/2022/18.

26. The Committee questioned the value of including the Mawson and Croft (International Journal of Environmental Research and Public Health 2019, **16**: 3543) paper about the hepatic metabolism of vitamin A and rubella, which included discredited hypotheses, but decided that it should remain in the final statement. The Committee had substantial reservations about this study but agreed it should be included for completeness and transparency regarding the available literature. The Committee had not commented on the likeliness of the hypothesised association between vitamin A and rubella, but had commented on the discredited association between vaccines and autism made by the study authors.

27. Members made a number of suggestions for minor changes to the wording of the statement and agreed that the statement could be cleared by chair’s action.

Item 5: Discussion paper on the potential risk to human health of tumeric and curcumin supplements – following a recent product survey

(TOX/2022/19)

28. Dr Stella Cochrane declared a non-personal specific interest as her employer Unilever produce and sell products containing turmeric. It was agreed this did not prevent her contributing to the discussion of this item.

29. Turmeric has been widely used for imparting colour and flavour to food, and in Indian and Chinese traditional medicine as a remedy for the treatment of inflammation and other diseases for centuries.

30. Many of the proposed pharmacological properties of turmeric have been attributed to curcumin, a compound naturally present within turmeric rhizomes. Properties proposed include antioxidant, analgesic, anti-inflammatory, antiseptic, anticarcinogenic, chemopreventive, chemotherapeutic, antiviral, antibacterial, antifungal and antiplatelet activities.

31. Due to its purported health benefits, the consumption of curcumin/turmeric supplements is increasingly popular. However, a number of reports of hepatotoxicity linked to the consumption of curcumin supplements were reported in Italy. Turmeric was discussed by the Committee in September 2019 in paper TOX/2019/52 with first and second draft statements being considered in December 2019 (TOX/2019/74) and March 2020 (TOX/2020/13) respectively.

32. During discussions in September 2019, Members concluded that, given the past reported contamination issues with turmeric supplements, there would be value in commissioning chemical analysis of turmeric supplements available on the UK market.

33. Paper TOX/2022/19 presented the findings of a recent survey of turmeric supplements. The survey of 30 products was undertaken by Fera Science Ltd. All samples were analysed for the curcuminoids: curcumin, bisdemethoxycurcumin (BDMC) and demethoxycurcumin (DMC) as well as the black pepper derived alkaloid, piperine; and a comprehensive analysis of 69 trace elements which included the heavy metals lead (Pb), mercury (Hg), arsenic (As) and cadmium (Cd).

34. Members advised that where the recent EFSA opinion on tetrahydrocurcuminoids was briefly discussed in the paper, more detail may be needed in any subsequent statement to provide further context for these compounds. However, it was noted that although they may naturally occur in turmeric supplements, these transformation products of curcuminoids would

potentially be covered by the novel food authorisation process, if isolated and used in supplements.

35. It was noted that in the section regarding the lead content of the supplements surveyed, the discussion after Table 6, should have referred to BMDL1 rather than BMDL10; further clarity over why this BMDL value was being used as a comparison against potential Pb exposure from taking the supplements analysed would be useful.

36. Members discussed the potential need to look further into supplements that have unusual or novel contents such as synthetic curcuminoids or where there were curcuminoids within nanoparticles, these products often claimed to have greater absorption. Further information such as market size and usage of these different types of supplements would be helpful if that could be obtained.

37. The Secretariat agreed to look further into the results on other metal concentrations generated as a result of this recent survey, in addition to the heavy metals considered in the discussion paper.

38. The Committee suggested some revisions to the emphasis of the discussion and conclusions on heavy metal contamination causing toxicity when discussing past incidents relating to turmeric supplements. A conclusion on the incident where several reports of hepatotoxicity linked to the consumption of curcumin supplements had been reported in Italy could be considered, as there was no evidence for heavy metal contamination in this incident.

39. Members requested further clarity when discussing hepatitis arising from drugs, to distinguish acute and chronic effects, and direct from idiosyncratic effects. Furthermore, when discussing idiosyncratic drug hepatotoxicity (IDH), to be clear that it is very much drug specific, i.e. many drugs can cause increases of ALT concentrations and the majority will not cause IDH.

40. Members requested some further detail be included regarding allergic IDH, in particular to explain why some people develop allergic IDH and others do not.

41. Members noted that the literature had not been reviewed since the topic had been last discussed by the Committee in 2020. This could be particularly relevant regarding the toxicokinetics of curcuminoids with adjuvant compounds such as piperine since the recent literature suggested that piperine levels in supplements may not increase the bioavailability of curcuminoids as previously thought.

42. It was suggested that further clarity be provided in the background section to link up the commentary describing turmeric supplements as a novel food and the approved use of curcumin as a food additive.

43. Members were informed that a further discussion paper or draft statement would be presented to the committee addressing the points discussed.

Item 6: Evaluation of the potential approaches to mixture risk assessment for future REACH assessments (TOX/2022/20)

44. Professor Alan Boobis was a member of the Euromix consortium, an EU Horizon 2020 project, as well as a number of other relevant projects. It was agreed he could continue to participate and chair the item. No other interests were declared.

45. This paper presented a report by the Environment Agency and the UK Health Security Agency on potential approaches to mixture risk assessments for use under UK REACH assessments. The focus of the report was to discuss the risk assessment of unintentional mixtures and the proposal by the EU of use of a mixture assessment factor (MAF) as a pragmatic measure under EU REACH.

46. The Committee discussed the benefits and disadvantages of a MAF approach. Members noted that the idea of a MAF started with ecotoxicology, where the predicted no-effect concentration (PNEC) was based on a low effect that is environmentally acceptable, rather than a level considered to be without adverse effect, such as human health based guidance values (HGBVs). Therefore, there was a greater need to consider potential mixture toxicity in ecotoxicology.

47. The Committee discussed whether there was sufficient data to use as evidence for not requiring a MAF as concluded in the report, as a lack of data might suggest a precautionary approach. While this position was noted, there was evidence in the report that even when there is co-exposure to a number of chemicals, often only a small number of chemicals (typically 2 or 3) drive any potential risk where practical measures have been taken. It was queried whether there was sufficient evidence for co-exposures to multiple chemicals and the need for a MAF to apply across all chemicals.

48. It was suggested that the findings from a European Food Safety Authority (EFSA) report considering potential combined exposure to multiple pesticides, should be included in the report as it found that even when large numbers of pesticides were grouped for combined risk assessments, the risk was still # driven by a small number of compounds and the total exposure was found not to be of concern. It was also suggested that the example of air pollution should be included as it is a mixture that affects human health and the environment. Air pollution mixtures can be used to work back to the individual chemicals and whether they are working additively or synergistically.

49. The UK was embracing an evidence and risk-based approach to regulation of chemicals, but it was considered that a MAF was a precautionary hazard-based approach as it does not use lines of evidence for its application. A member had attended a workshop on advanced materials and highlighted that there were issues with defining chemicals and mixtures, especially in deciding whether to use a risk or hazard-based approach.

50. The Committee discussed whether it was necessary to apply a MAF to all chemicals. There was some evidence that a MAF could possibly be applied to specific classes, e.g. chemicals with endocrine disrupting properties, but for other effects the health-based guidance value (HBGV) should be sufficient without a MAF. Alternatively, it was suggested that a MAF be applied to chemicals as a precaution, but once data or evidence were available then it could be removed. It was suggested that New Approach Methodologies (NAMs) could be used to close some of the data gaps. Further consideration could be given to the Maximum Cumulative Ratio (MCR) approach, recognising that only a few chemicals were responsible for any potential mixture effect, and once these were below their HBGVs, there was unlikely to be a risk from any possible mixture.

51. Members discussed whether or not the MAF should be applied to the point of departure or during the exposure assessment. It was noted that an advantage of applying a MAF to the derived no-effect level (DNEL) was that it can be communicated through the supply chain so downstream users can also account for mixture effects.

Item 7: First draft Statement on the potential risks from cadmium in the maternal diet (TOX/2022/21)

52. No interests were declared.

53. This item is part of the ongoing work programme of work on nutrition and maternal health focusing on maternal outcomes during pregnancy, childbirth, and up to 24 months after delivery being conducted by SACN with the COT advising on the effects of chemical contaminants and excess nutrients in the diet.

54. A list of chemicals was drawn up by SACN in 2020 and discussed by the COT at the September 2020 meeting where it was agreed that cadmium was one of the contaminants that should be prioritised.

55. Cadmium was first considered at the December 2021 meeting (TOX/2021/60). The Committee discussions were set out in the draft statement presented in Annex A of TOX/2022/21. This included additional information on a) exposures in subpopulations, especially with regard to certain food groups such as rice, b) non-dietary cadmium sources, such as smoking as well as potential direct/indirect and synergistic/additive effects of cadmium and c) the role metallothionein plays in the body and particularly in the placenta, where applicable. Information was included in Appendix B to the statement on the breakdown of subpopulations in the Total Diet Study (TDS).

56. A research paper on cadmium toxicokinetics was attached as Annex B to the paper. This was currently unpublished, but Members were asked to consider whether the contents were relevant to its assessment of cadmium.

57. Members suggested paragraph 10 should be rearranged to separate out the effects and kinetics sections. Clarification of some of the measurements was needed in paragraphs 13 and 14, which covered excretion and effects on bone respectively and in paragraph 15, further details were needed on the doses used in the acute toxicity studies.

58. It was noted that the Ponderal Index should refer to length rather than height.

59. The Committee requested more information be included on the potential effects of cadmium in utero and to give an indication of the levels of cadmium

exposure in paragraph 28, which discussed a study an epidemiological study of cadmium and developmental effects.

60. Members queried if the benchmark dose of cadmium was likely to be re-examined by EFSA, but this was considered unlikely.

61. The Committee discussed the reserved paper in Annex B – the minutes if this section of the item are reserved and will be made available once this paper is published.

Item 8: Updated discussion paper on the bioavailability of nicotine and other ingredients from the use of oral nicotine pouches and assessment of risk to users (TOX/2022/21)

62. Professor Alan Boobis declared a continuing interest as Chair of the working group on ISO/TC 126, relating to an intense smoking regimen for conventional cigarettes, and as an independent expert member of the WHO Tobacco Products Advisory Group. He and Professor Shirley Price declared involvement in the MHRA work on e-cigarettes and the Tobacco and Related Products Regulations (TRPR, 2016). It was agreed that these interests did not prohibit Professors Price and Boobis from taking part in the discussion. No other interests were declared.

63. Paper TOX/2022/21 presented an updated version of the initial paper on oral nicotine pouches discussed by the Committee in May 2021 (TOX/2021/22), providing the additional information requested, namely: a table of pharmacokinetic parameters for different product types, the IARC conclusions on oral tobacco products, a summary of health-based guidance values (HBGVs) for nicotine and available information on irritancy and local effects at the site of use.

64. It was noted that nicotine pouches were not covered by the TRPR 2016 in the same way as e-cigarettes, despite both containing tobacco-derived nicotine, as e-cigarettes had been specifically added to the Regulations. Nicotine pouches were covered by the General Product Safety Regulations (GPSR) (2005).

65. While there were age restrictions on purchasing nicotine pouches, this would not prevent children and teenagers obtaining them. Therefore, the Committee should consider that there may be deliberate exposure among those under 18 years of age, as well as accidental exposure. The Committee noted that

this age group may be at particular risk if they do not follow guidance on use given by the manufacturers.

66. Members acknowledged that there was inconsistency in how manufacturers report the ‘strength’ of nicotine pouches. In addition, there were potential discrepancies between labelled and measured nicotine content. They noted concern over the potentially misleading use of the term ‘tobacco-free,’ since the nicotine in the pouches was often derived from tobacco. Members considered that the term ‘tobacco-derived’ may be more accurate, and would reflect any potential for carry-over of other tobacco-related compounds.

67. The impact of altering the pH on buccal absorption by use of nicotine salts would be different from the effect of using nicotine salts in inhaled products. This would prevent a direct read-across approach, especially as nicotine salts are used in electronic nicotine and non-nicotine delivery systems (E(N)NDS) to reduce the harshness of the product, thereby affecting the amount reaching the lower lungs for absorption.

68. Members acknowledged the importance of considering the local effects, particularly irritation associated with administering nicotine to the buccal mucosa. They added that it would be helpful to include studies evaluating this, including *in vitro* studies or any data from the use of snus in Sweden, if possible.

69. The Committee noted that despite having a similar nicotine content, the pouches could provide higher nicotine exposure compared with conventional cigarettes, both in terms of area under the curve (AUC) and maximum concentration (Cmax). However, it was recognised that people do not tend to deliberately increase their nicotine dose, due to the unpleasant side effects - so called ‘self-titration’.

70. The time to maximum concentration (Tmax) was longer for nicotine pouches than cigarettes, which might affect the acceptability of these products to smokers. The Committee raised concern over smokers feeling the need to supplement nicotine pouches with conventional cigarettes, resulting in dual use, which could maintain nicotine at high concentrations due to differences in Tmax.

71. It was recognised that pouches were available containing a high amount of nicotine, but it was questioned whether such products would be tolerable, unless self-titration occurred. There was concern over the potential effect of accidental exposure with high nicotine content pouches.

72. It was added that the pharmacokinetic profiles (AUC and Cmax) provided for nicotine replacement therapy (NRT) products were flatter than for nicotine pouches, while the Tmax was the same.

73. Members recognised that limited nicotine exposure data from the pouches was available and agreed that there was a need for independent nicotine exposure data from these products.

74. The Committee concluded that there are potentially increased pharmacological effects associated with nicotine pouch use compared with conventional cigarettes, due to the apparent increased AUC and Cmax, but recognised the lack of pharmacological measurements in product users to be able to confirm this. Naïve nicotine users were more likely to experience pharmacological effects from the pouches.

75. Overall, the Committee agreed that more comparative data on nicotine kinetics and exposure, and on pharmacodynamics, was required before it could draw further conclusions on the nicotine from these pouches. This could include: behavioural data on how the pouches were being used; data on the relationship between nicotine content use and blood levels; pharmacological response data; and data on nicotine exposure to compare with the COT's HBGV for nicotine extrapolated to the oral route.

Item 9: Second draft statement on the risk assessment of cow's milk in children aged 1 to 5 years, in the context of plant-based drinks evaluations (TOX/2022/23)

76. No interests were declared.

77. Due to an increasing interest in the consumption of plant-based drinks as an alternative to dairy, particularly in the diets of infants and young children, during 2020 the COT reviewed the potential for adverse effects arising from the consumption of plant-based drinks by young children (aged 6 months- 5 years) who were following a plant-based diet. The drinks that were considered were soya, oat and almond; rice drinks were not reviewed since there is existing advice that these should not be given to young children due to their arsenic content. The statement setting out the views and conclusions of the Committee was published in January 2021. Since SACN were also considering these products from a

nutritional perspective, it was agreed that a joint Working Group should be established to bring the two aspects of the advice together.

78. The Department of Health and Social Care (DHSC) is in the process of conducting an Equalities Analysis covering both the Nursery Milk Scheme and the Healthy Start Scheme which considers equalities issues posed by the current legislation as it pertains both to plant-based drinks, and also to animal milks other than cow's milk. DHSC is keen to ensure that this Equalities Analysis reflects the most up-to-date advice on safety and toxicity issues from COT, and on nutritional issues from the SACN. Hence, this process is currently on hold whilst the joint Working Group considers plant-based drinks.

79. The Committee had agreed during their meeting in July 2021 that the main comparator for plant-based drinks would be cow's milk and that a discussion paper should be produced looking at the potential chemical risks in the consumption of cow's milk to allow a comparison between the chemical risks in plant-based-drinks and cow's milk. The risk assessment was discussed at the COT's October and December 2022 meetings in papers TOX/2021/53 and TOX/2021/58 respectively.

80. The Committee's views were set out in a draft statement which was discussed at the February 2022 meeting (TOX/2022/04). Members comments were incorporated into the second draft of the statement presented in TOX/2022/23.

81. Members agreed that the split of information between the annex and main statement was appropriate for the content of the paper. Members made a number of suggestions on the structure and content of the statement as below.

82. Members requested that 'cow's" or "cows''' milk be consistent throughout the document.

83. Members recommended that the disclaimer in paragraph 12 that that the assessment would potentially not cover individuals who drank milk for protein supplementation, be removed, as this would not be relevant to the age range discussed within this statement.

84. It was noted that in paragraph 15, the document should state that the screening methods discussed were for antimicrobial compounds.

85. Member pointed out that in regard to veterinary medicines, the risk from drinking cow's milk was minimal in general, and not just in relation to isolated

incidents. Paragraph 16 should be revised to reflect this

86. The Committee discussed the preferred wording for describing Margins of Exposure (MOE)s of above 10,000 for genotoxins, the term ‘unlikely to be of concern’ was considered to be most appropriate and would be used in the aflatoxins assessment.

87. When discussing dietary exposures for lead it was requested that the relative contribution of cow’s milk to total lead exposure should be discussed in further detail.

88. The Committee requested an edit to paragraph 65, to indicate that there was evidence in the relevant EFSA opinion that almost all the mercury detected within milk was inorganic in nature.

89. In paragraph 72, it was requested that the conclusions be clarified to reflect that the contribution of cow’s milk to total dietary cadmium exposure was minimal and therefore presented no risk to health. This amendment would extend to the summary tables.

90. For iodine, it was requested that only the COT’s EFSA derived Health Based Guidance Values (HBGVs) would be utilised in the risk statement.

91. Regarding perchlorate, it was requested that it should be made clear that exceedances in both short and long term exposure had been presented in a previous COT statement.

92. The COT requested that for Insulin- like Growth Factor (IGF-1), a statement would be added to note that potential levels of IGF-1 induced via nutritional factors was outside the COT’s remit.

93. The Committee agreed that paragraph 117 should be removed.

94. The Committee considered that the number of non-detects present in the risk characterisation section of aflatoxins should be specified; this would be to provide an indication of the potential effect of left-censored data.

95. For microplastics, the Committee requested that the concluding paragraph would be revised to state that they are ‘not currently known to present a risk for children aged 6 months to 5 years of age.’.

96. The Committee requested that the mention of soy-based drink should be removed from the conclusions.

97. Within paragraph 39 of annex A which considered Polycyclic Aromatic Hydrocarbons (PAHs), it was suggested that there should be an additional search of the literature using broader search terms, to ensure that relevant occurrence data had not been missed.

98. The Committee agreed that the statement could be cleared via correspondence provided no further substantial changes were required in light of the changes suggested by Members.

Item 10: Draft Opinion on the safety of the extension of use of mono- and di- glycerides (E471) for use as a surface treatment of fresh fruits and vegetables (Reserved) (TOX/2022/24)

99. Dr Caroline Harris declared a direct personal interest and was not present for the discussion of this item. No other interests were declared.

100. This item is currently reserved as it covers a draft AE JEG opinion on an application for the extension of use of the additive E471, this is treated as draft policy; the minutes will be published in due course.

Item 11: Opinion on the extension of use of polyglycerol polyricinoleate (Reserved) (TOX/2022/25)

101. Dr Stella Cochrane, Dr Natalie Thatcher and Dr Caroline Harris declared direct personal interests and were not present for the discussion of this item. Professors Maged Younes and Matt Wright were on the EFSA panel re-evaluating polyglycerol polyricinoleate (PGPR) and participated in the discussion but not the conclusions.

102. This item is currently reserved as it covers a draft AE JEG opinion on an application for the extension of use of the additive polyglycerol polyricinoleate, this is treated as draft policy; the minutes will be published in due course.

Item 12: Update on the work of other scientific advisory committees (TOX/2022/09)

103. This paper was circulated for information.

Item 13: Any other business

104. This included a reserved item on the possible formation of a Working Group; the minutes will be published in due course.

Date of next meeting

105. The next meeting of the Committee Meeting will be a hybrid meeting at Mary Ward House, London at 10:30 on the 10th of May 2022 via Skype and Teams.