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CC/2022/07

COMMITTEE ON CARCINOGENICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Follow up to horizon scanning – July 2022

Introduction

1. This paper presents the standing follow up to the last full horizon scanning held in November 2021 outlining the topics identified during that discussion and an update on topics being considered by IARC and the EU Scientific Committees.

Topics from COC horizon scanning 2021

2. Below are the topics already on the list and discussed at the horizon scan in November 2021:

- Maintain a watching brief on factors affecting cancer susceptibility including shift work, stress and other lifestyle factors and how that might affect assessment of chemicals and carcinogenicity
  - This was discussed at the joint COC-COM meeting on 2nd March 2022
- Consider an update to guidance on assessment of nanomaterials, possibly as a joint activity across COC, COM and COT
  - Recent COM guidance on nanomaterials was provided for information at the joint COC-COM meeting on 2nd March 2022
- Gain awareness of the potential effects of antibiotics and antivirals on the microbiome
- Consider a joint discussion with COM on thresholds for in vivo mutagens and whether there is new information subsequent to the 2010 COM opinion
- Endocrine disruption and the link with carcinogenicity, acknowledging that endocrine disruption is also a COT remit
- Impact of chemicals on potential for metastasis or progression of cancer, in particular with respect to the Hallmarks of Cancer and linking to the tumour microenvironment topic

- Communication of cancer risk and how COC should be involved with this, especially with the move away from a yes/no decision on whether a substance is a carcinogen, and ensuring consistency in describing risks, possibly starting with a landscape review of terminology across a number of Committees (FSA and UKHSA) and led by Lay Members
- Ensuring appropriate considerations are made to acknowledging diversity in the population especially where there might be differences in risk between different groups

Joint horizon scanning topics

3. On 24th -25th November 2020, the COC and COM held a joint meeting to which COT members were also invited, and one of the discussion items was joint horizon scanning. From this discussion, the following topics were agreed and the Secretariats will consider how to progress these either as joint topics or which Committee might lead on these:

    - Use of toxicogenomics/omics technologies in toxicity testing
    - PBPK modelling – a COT workshop was held in December 2020.
    - Next generation sequencing
    - Further exploration of microplastics/microparticles and their composition – also linking with COMEAP
    - Development of a dynamic cancer risk model, including consideration that pre-cancer effects are assessed as 'general' toxicity pathways, and other influencers on cancer/toxicity risk (e.g. shift work)
    - Knowledge sharing across the three Committees, including impacts of EU Exit
    - Consideration of uncertainty, use of uncertainty factors and margins of exposure – noting this also links with other activities.

4. On 2nd March 2022, the COC and COM held a joint meeting to which COT members were also invited. From the discussions during this meeting, the following topics have been identified and the Secretariats will consider how to progress these either as joint topics or which Committee might lead on these:

    - Guidance on exposure assessment
    - Progression of cancer risk modification work, including quantification

COM and COT horizon scanning topics

5. The Committee has previously requested sight of the COM and COT horizon scanning activities. There is no update since the last COC meeting.

Work following EU Exit and Transition

6. The Committee has asked to be kept up to date on relevant activities following EU Exit and the end of the transition period.

7. UK Government and the Devolved Administrations are currently in the process of developing the UK Chemicals Strategy. The Chemicals Strategy is a commitment in the 25 Year Environment Plan, (published in 2018 (Defra- page 100)), which will set the direction for UK Government's management of chemicals and provide a framework for future policy decisions.

8. The Strategy will outline the UK's overall priorities and approach to chemicals management to enable decisions, for example restrictions under UK REACH, to reflect our broader approach to managing chemicals (including PFAS and Endocrine Disrupting Chemicals) and enable external stakeholders to view these decisions as part of a wider strategic approach.

9. The Chemicals Strategy intends to be a UK joint/cross-government Strategy. Members of the working group responsible for developing the strategy also include representatives from Defra, UKHSA, HSE, EA, BEIS, DIT and the Devolved Administrations.

10. The external stakeholder engagement phase of the Chemical's Strategy development has now begun. It was kickstarted by a ministerial round table lead by Jo Churchill MP (former Defra Parliamentary Under Secretary of State) held on 27th April 2022. A series of stakeholder workshops have been and will be held over Spring-Summer 2022 to help inform the forthcoming strategy. These will explore a range of policy themes, including actions to address priority chemicals issues, managing chemicals throughout their life cycle, regulation and sustainable chemistry. The governments expert committees, including COT, COC, COM & HSAC, have been invited via their Chairs to participate in the workshops; along with UK-wide external associations and organisations including from NGOs, industry, Thinktanks, charities, and academia.

Update on activities of UK Scientific Committees and Groups

11. An update on work undertaken by the FSA Joint Expert Groups and the OPSS Scientific Advisory Group for Chemical Safety of Non-Food and Non-Medicinal Consumer Products was provided at the joint COC-COM meeting on 2nd March.

12. An update on other FSA Scientific Advisory Committees is provided to COT at each meeting, the latest copy is attached in Annex A.

Upcoming IARC meetings

13. IARC have three upcoming meetings on their website with respect to the Monograph series (https://monographs.iarc.who.int/iarc-monographs-meetings/):

- Meeting 133 (28 February-7 March 2023) is on:
  - Anthracene (CAS No. 120-12-7)
  - 2-Bromopropane (CAS No. 75-26-3)
  - Butyl methacrylate (CAS No. 97-88-1)
  - Dimethyl hydrogen phosphite (CAS No. 868-85-9)

- Meeting 134 (6-13 June 2023) is on:
  - Aspartame (CAS No. 22839-47-0)
  - Methyleugenol (CAS No. 93-15-2)
  - Isoeugenol (CAS No. 97-54-1)

14. IARC also have a workshop jointly with the National Cancer Institute on "Epidemiological bias assessment in cancer hazard identification" on 17-22 October 2022.

Upcoming EU Scientific Committee topics

15. The agenda and minutes of recent EU Scientific Committee on Consumer Safety (SCCS) meetings are presented in Annex B. SCCS has working groups on:

- Cosmetic Ingredients (last meeting 31/05-01/06/2022),
- Nanomaterials in Cosmetic Products (last meeting 09/06/2022), and
- Methodologies (last meeting 07/06/2022).

16. The agenda and minutes of recent EU Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) meetings are presented in Annex C. SCHEER has working groups on:

- Cobalt in toys (last meeting 21/03/2022),
- Electromagnetic fields (EMF) (last meeting 19/05/2022),
- Draft Environmental Quality Standards for the Water Framework Directive Priority Substances & groundwater quality standards (last meeting 06/07/2022), and
- Titanium dioxide in toys (last meeting 12/04/2022).

17. The European Food Safety Authority has a substantial body of work across its Scientific Committee and Panels. More detail is available here: https://www.efsa.europa.eu/en/science/scientific-committee-and-panels. EFSA currently has open consultations on a number of substances, and also on methodological questions. The full list of open consultations is here:

https://connect.efsa.europa.eu/RM/s/publicconsultation and expected upcoming consultations are here: https://connect.efsa.europa.eu/RM/s/publicconsultation?PublicConsultation2__c-filterId=00B1v000009eNnNEAU .

Questions for the Committee

18. Members are asked to consider the list of topics from 2021 and subsequently, and other aspects summarised and in particular:

    a. Are there any additional topics of interest or importance which the COC should consider for future horizon scanning?

Secretariat
July 2022

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CC/2022/07 Annex A

COMMITTEE ON CARCINOGENICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Follow up to horizon scanning – July 2022

Updates on activities of other Scientific Advisory Groups:
Other FSA Scientific Advisory Committees (TOX/2022/43)

Secretariat
July 2022

TOX/2022/43

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

Update on the work of other advisory committees - for information TOX/2022/33

Paper for Information

Secretariat
July 2022

Scientific Advisory Committees (SAC) Summary of recent activities

This document summarises the recent activity of the FSA's Scientific Advisory Committees (SACs). We highlight topics discussed at the most recent meeting and agenda items for the next meeting.

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Committee	**Recent activity**	**Further Information**
Science Council	**Updated: 5th** July 2022 **Last open meeting:** 23 June 2022 • The Chair presented a summary of the Science Council's activity over the last 6 months.	**Chair:** Professor Sandy Thomas

	• The CSA updated the Council on his recent activity and discussions (including the Annual Report for Food Standards, Civil Service headcount reduced, Precision Breeding Bill, alternative proteins). • An update on Working Group 6 on Food Safety and Net Zero Carbon (including final draft of the interim report). • Updates from Science Council members attending Scientific Advisory Committees (SACs). **Next open meeting:** 8 December 2022	**Secretariat:** sciencecouncil@food.gov.uk **Website:** https://science-council.food.gov.uk/
Advisory Committee for Social Science (ACSS)	**Updated:** June 2022 **Last meeting:** 26th Jan 2022 (8th plenary, open session). Key agenda items: • FSA updated on key projects within the Analytics Unit, including new work programmes: Behavioural Trials and Wider Consumer interests • Updates on working group activity • A proposal for an economics working group was discussed. • Update from Prof. Sandy Thomas on working group outputs from the Science Council, and recruitment. • Strategy team presented the emerging FSA strategy and the ACSS secretariat reported an initial assessment of how well ACSS expertise, and the FSA social science research plan, address key strategy topics. Minutes and papers are available on the website. **Working group highlights:**	**Chair:** Professor Susan Michie **Secretariat:** acss@food.gov.uk **Website:** https://acss.food.gov.uk/

	• The *Climate Change and Consumer Behaviour* working group held a second stage workshop with stakeholders in February, as part of their work exploring the impact of changes in consumer behaviour motivated by climate change concerns. A full report is anticipated for publication in July. • The *Assurance* working group are supporting the development of a 'good science' quality assurance toolkit to support the production of high-quality research. • The *Kitchen Life 2* working group continues to support the research project Kitchen Life 2. • The *Wider Consumer Interests* working group continues to support this new ARI, informing the recent publication: UK Public's Interests, Needs and Concerns Around Food. • Terms of reference for a new working group supporting the economics function in the FSA analytics unit, have been agreed. The **next open meeting** of the ACSS will be 20th July 2022.	
Advisory Committee on Novel Foods and Processes (ACNFP)	**Updated**: June 2022 **Last meeting**: 8th June 2022 • Tetradenia riparia (Iboza), a traditional food from a third country was reviewed for the first time. Several aspects of the food and its production were highlighted as having insufficient information to complete an assessment. These will be highlighted to risk managers for consideration on whether reasoned safety objections should be raised triggering further review. • 2 dossiers from the same applicant; Lacto-N-fucopentaose I (LNFP-I) and 2'-fucosyllactose (2' FL) mixture (LNFP-I/2'-FL) and 3-	**Chair:** Dr Camilla Alexander-White **Secretariat:** acnfp@food.gov.uk **Website:** https://acnfp.food.gov.uk/

	Fucosyllactose were reviewed for the first time, with the first requiring a request for more info and the latter progressing to an opinion draft. • The Mung Bean protein dossier returned for further assessment with a request for further information regarding outstanding issues on allergenicity being advised once again. • Two previous protein applications; Barley Rice and Mung bean were reviewed once again. A request for opinions to be drafted for both was advised. The Committee subsequently evaluated the approach to opinions for Novel Foods seeing that these 2 opinions will the first of opinions to be drafted since the UK's departure from the EU. • The application for Calcidiol was evaluated for the third time with data not sufficient to progress the application. Further information requested. • The annual report for 2021 was also discussed with conclusion that re-evaluation was needed in how data is presented so as to capture the full extent of work covered with the commencement of assessing full applications again. • The Science Council reported on areas identified that would be relevant to the ACNFP and their future assessment work on Food Safety and Net Zero Carbon. • Under AOB, an agreement was sought to formally appoint the Chair for the GM/GE sub-group. Dr Andy Greenfield who was put forward by the Secretariat and members of the ACNFP asked for comments or objections; none were raised, and he was subsequently welcomed as the Chair of the GM/GE subgroup.	

	Next meeting: 7th September 2022	
Advisory Committee on the Microbiological Safety of Food (ACMSF)	**Updated**: 8 June 2022 The Committee's last meeting was on 09 February 2022. The issues they considered include: Pathogen Surveillance in Agriculture, Food and the Environment (PATH-SAFE): The committee received a presentation and discussed this project commissioned to track foodborne pathogens and antimicrobial resistant microbes in all four nations of the UK. Food Standards Agency's Kitchen Life 2 Project. The committee was updated on the FSA's ongoing study on food safety behaviour in kitchens. 100th Meeting of the ACMSF – Reflections. Members reflected on the work of the committee over the years and had a forward look discussion on future work areas. UK Food Security Report 2021 (published in December 2021). The committee discussed this report focussing on chapter related to foodborne disease and incidents. FSA surveys on frozen breaded/battered chicken products. The committee was updated on the survey of Salmonella, E. coli and antimicrobial resistance (AMR) on frozen part-cooked breaded or battered products at retail sale in the UK and social science survey on consumer handling of frozen breaded products. This item was considered in closed session.	**Chair:** Professor Bill Keevil **Secretariat:** acmsf@food.gov.uk **Website:** https://acmsf.food.gov.uk/

	Subgroup updates. The subgroups on toxin-producing Clostridia in food, incidents and antimicrobial resistance provided updates on their activities (see draft meeting minutes below). Draft minutes of the February 2022 meeting is available on the committee's website. The committee has recently setup a subgroup on animal feed. Group was established to review risk assessments produced by Animal and Plant Health Agency on the risk of introducing Transmissible Spongiform Encephalopathies (TSEs) into UK livestock from proposed changes to animal feed regulations. This ACMSF subgroup will be disbanded when the Advisory Committee of Animal Feedingstuffs is reactivated. **Information papers sent to members include:** • ACMSF Work plan • Update from other Committees • Items of interest from the literature • Food and You Survey - Wave 3 • Botulism in cattle, sheep and goats literature update (available on request) **Next meeting**: 23rd June 2022 (this will be a horizon scanning workshop).	
Advisory Committee on Animal Feeding stuffs (ACAF)	**Updated: -** **Last meeting:** 27th June 2019	**Chair:** - **Secretariat:** acaf@food.gov.uk **Website:**

		https://acaf.food.gov.uk/
Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT)	**Updated:** May 2022 **Last meeting:** 10th May 2022. Topics discussed included: At their **May** meeting the Committee discussed items including the potential risk from exposure to microplastics by the inhalation route, potential approaches to mixture risk assessment for future UK REACH assessments and a paper introducing a proposed update to the COT statement on the cabin air environment. They also heard a presentation on the regulation of food contact materials. The Committee continued work on draft statements considering the potential effects of vitamin D exposure levels in formula fed infants and children and lead in the maternal diet. • **Next meeting:** 12th July 2022	**Chair:** Professor Alan Boobis **Secretariat:** cot@food.gov.uk **Website:** https://cot.food.gov.uk/
Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC)	**Updated**: April 2022 **Last meeting**: 2 March 2022 Topics on the agenda included: • Hydroxyanthracene derivatives in supplements • Horizon scanning • Annual report • Update to guidance statements including biomarkers, interpretation of cancer risk characterisation and alternative approaches	**Chair:** Professor David Harrison **Secretariat:** COC@phe.gov.uk **Website:** https://www.gov.uk/government/groups/committee-on-carcinogenicity-of-

	Next meeting: 21 July 2022 **Further meetings:** 17 November 2022	chemicals-in-food-consumer-products-and-the-environment-coc
The Committee on Mutagenicity of Chemicals in Food, Consumer Products and the Environment (COM)	**Updated**: April **Last meeting**: 1 March 2022 Topics discussed included: • Review of EFSA opinion on titanium dioxide • Hydroxyanthracene derivatives in supplements • Horizon scanning • BPA • Smoke flavourings • Draft COC guidance statement "The Use of Biomarkers in Carcinogenic Risk Assessment • Draft COC, COM and COT document "How do the Committees evaluate the relevance and reliability of data when assessing a chemical of concern?" **Next meeting**: 9 June 2022 **Further meetings**: 13 October 2022	**Chair:** Prof Gareth Jenkins **Secretariat:** COM@phe.gov.uk **Website:** https://www.gov.uk/government/organisations/committee-on-mutagenicity-of-chemicals-in-food-consumer-products-and-the-environment

Scientific Advisory Committee on Nutrition (SACN)	**Updated**: March 2022 **Last meeting**: 10th November Topics discussed included: • Feeding children aged 1-5 • Nutrition and COVID **Next meeting**: Friday 17th June 2022; **Further meetings:** Friday 11th Nov 2022	**Chair:** Professor Ian Young **Secretariat:** SACN@phe.gov.uk **Website:** https://www.gov.uk/government/groups/scientific-advisory-committee-on-nutrition

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CC/2022/07 Annex B

COMMITTEE ON CARCINOGENICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Follow up to horizon scanning – July 2022

Agenda and minutes of the Scientific Committee on Consumer Safety Plenary meetings 2022-2026 1st and 2nd meetings.

Available: https://health.ec.europa.eu/scientific-committees/scientific-committee-consumer-safety-sccs/sccs-plenary-sessions-2022-2026_en

These papers are attached. They are not being made publicly available for copyright reasons but can be accessed via the link provided.

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Agenda and minutes of the Scientific Committee on Health, Environmental and Emerging Risks Plenary meetings 2022-2026 1st and 2nd meetings.

Available: https://health.ec.europa.eu/scientific-committees/scientific-committee-health-environmental-and-emerging-risks-scheer/scheer-plenary-meetings-2022-2026_en

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