Annual Science Update from FSA's Chief Scientific Adviser

FSA 25/06/07 - Report by Professor Robin May

1. Summary

1.1 This is my fifth annual report to the Board as the Food Standards Agency's Chief Scientific Adviser (CSA), and, as ever, I welcome the opportunity to reflect on the last 12 months in the role.

2. Introduction to the Role of the CSA

2.1 To recap, my role as the FSA CSA is essentially threefold:

- to provide high level assurance about science within the FSA (including the work of our independent Scientific Advisory Committees), offering independent challenge and advice to the Board, Executive and the organisation more widely.

- to maintain strong links with CSAs in other government departments as well as key external stakeholders, representing FSA's interests in the wider (inter)national landscape and ensuring that the organisation benefits from the most up to date scientific findings from other fields.

- to act as an ambassador and communicator of science both within the FSA and across government, industry and consumer groups.

2.2 This is an independent report reflecting on science within the FSA as well as the science and evidence landscape across government, the UK and the wider world. Below, I discuss some of the ups and downs of the last 12 months and highlight ongoing and future challenges. I make a number of recommendations and emphasise some key areas of focus for the next year and beyond.

2.3 Most of these recommendations are operational in nature and therefore largely for the Board to note. However, in some cases they would imply either an elevated level of risk for the organisation or a level of strategic redirection. I have specifically highlighted these more substantive recommendations in Annex 1.

2.4 The coming year will be my final one in this role, with my term as CSA ending in summer 2026.I have enjoyed the role enormously and, of course, share the organisation's ambition to ensure a strong field of candidates for the position in due course. Given that recruitment timelines can be lengthy, especially for candidates who (like myself) may wish to take up the role as a secondment, I have recommended that the recruitment campaign for my successor be launched around autumn of this year. I would like to take this opportunity to encourage prospective

applicants to reach out to myself or other FSA colleagues in order to learn more about the role ahead of the formal recruitment process.

3. Progress on Last Year's Recommendations

3.1 In my report of last year I made 24 recommendations. These fell into five main areas: a) Scientific Advisory Committees (SACs), in particular around conflicts of interest, recruitment and transparency, b) increased use of other regulator's opinions for market authorisation, c) STEM training and recruitment, d) long-term 'legacy' plans for PATH-SAFE and e) future-facing research in areas such as artificial intelligence and ultraprocessed foods.

3.2 Progress in implementing these recommendations was reported in the Annual Science Report to the Board last autumn. Since then, I have been particularly pleased to see the continued improvements to the SAC system and the embedding of PATH-SAFE infrastructure within the wider UK biosurveillance strategy. Similarly, the programme of regulatory reform has largely addressed my recommendations around market authorisations, although I think there is more that can be done in this area (see paragraph 4.11 below). However, it has proven harder to implement some of my recommendations around STEM training and future-facing research, largely as a result of the significantly reduced funding landscape over the last twelve months. With the outcome of the Spending Review now only a few weeks away, I very much hope that FSA will be allocated the necessary resource to follow through on some of those recommendations in the near future.

4. The FSA's Science System and Partnerships

Science Engagement

4.1 Science is a collaborative effort and close engagement with partners is particularly critical for a small organisation such as FSA.A central part of my role is therefore to build and maintain strong relationships with key science stakeholders and to that end I have undertaken a number of meetings and visits over the last year, which are documented in Annex 2.

4.2 I would like to take this opportunity to thank all of those who have taken the time to facilitate these visits, which are invaluable in providing 'first hand' insight into science and innovation developments of relevance to the FSA. For example, discussions during the visit to the University of Bath have helped shape our work on cell-cultivated products and precision fermentation whilst conversations with colleagues at the University of Bristol provided invaluable information about the impact of emerging technology in the meat and dairy sectors.

4.3 I have also very much appreciated hearing directly from a range of businesses regarding challenges they have faced within the wider regulatory environment, as well as their constructive suggestions about improvements that could be made. One recurrent theme is the complexity of seeking approval for innovative products that may fall under multiple regulatory jurisdictions or industry standards. Improved information sharing and joint approaches to regulation are topics that are being actively considered within the Government's regulatory reform agenda and I look forward to working closely with CSA colleagues in other departments to help steer more efficient and less burdensome approaches to joint regulation in the future.

Science Infrastructure, Resourcing and Partnerships

4.4 This is a very challenging time for science. The well-publicised constraints on public funding mean that science budgets within FSA and across many of our research partners are under pressure. Scientific research is expensive and, whilst absolutely critical in the long-term, often lacks the immediacy of more 'operational' demands on resourcing.

4.5 As I have said in previous reports, maintaining scientific capability during times of financial challenge relies on even stronger partnerships and collaboration, working closely with others on areas of mutual interest and looking to more diverse funders for financial support. To that end, I am delighted that we have been able to not only maintain but grow our science function over the last twelve months, supported by funding from new initiatives such as the cell-cultivated products sandbox and innovation hub (discussed at theprevious Board meeting) and the expansion of our biosurveillance work, supported by the Integrated Security Fund. This will provide funding of £1M over 2025-26 to advance work instigated under PATH-SAFE, continuing our partnership with Defra and Food Standards Scotland (FSS). This includes work on deploying the pathogen genomic platform, improved surveillance for STEC and work to pilot the use of onsite diagnostics.

4.6 We are also major partners in a number of initiatives funded by research organisations such as UKRI, including the Food Safety Network, transdisciplinary networks in antimicrobial resistance and theSALIENT studieson consumer behaviours.These initiatives are not only an excellent way to deliver invaluable research at a lower cost to the FSA, but they also forge lasting partnerships with organisations that can provide long-term benefits in terms of training and expertise.

4.7 Given that, I have **recommended that the FSA look to bolster research capabilities both through existing partnerships and by seeking new ones over the next 12 months**. I think there would be merit in exploring two areas in particular:

- Consider whether other organisations would be interested in providing resource to work jointly with us on some of our flagship social science studies. For instance, we carry out a regular Food and You 2 survey to provide insight into consumer opinions, but there is the potential to ‘do more with less’ by partnering with other organisations. For instance, other organisations may well be interested in participating in this survey if they were able to add a handful of questions of their own.

- Consider issuing ‘industry challenges’, perhaps with a partner such as Innovate UK, in order to stimulate innovation in key technical areas such as sampling and surveillance or data analytics.

It is important to emphasise that both approaches would need to be approached with care, in particular to ensure the FSA’s long history of transparency and accountability is not jeopardised by specific partnerships. However, other public sector bodies or government departments might be natural partners in areas such as consumer research, providing more robust support for research without risking the FSA’s independence.

Scientific Advisory Committees

4.8 The FSA’s Scientific Advisory Committees (SACs) are a critical element of the organisation’s science system, providing independent expert advice on issues ranging from foodborne disease outbreaks to market authorisations. Often there is a relatively small pool of individuals with a particular expertise that is fundamental to FSA activities: for instance, in toxicology or animal physiology. Since SAC members are appointed for fixed terms in order to maintain independence and challenge, ensuring a strong pool of qualified applicants to our yearly SAC recruitment exercise is a key priority for both the CSA and wider science team.

4.9 Given that, I was very pleased to see the record number of applicants for SAC membership that we received this year and the fact that we have managed to appoint to almost all of the vacancies we had advertised for (see Annex 3).I would like to set on record my thanks to the SAC team within FSA, who expended huge efforts in ensuring vacancies were well advertised and in handling the very large number of applications.

4.10 Although this is a positive step, I remain concerned about the resilience of the SAC system going forwards for a number of reasons:

- Firstly, the increasing volume and complexity of market authorisation requests has meant that some SACs now receive an annual workload far in excess of the nominal workload specified in their terms of reference.

- Secondly, the increasingly high profile of government science advice has resulted in intense media scrutiny of SAC activities. It is absolutely right and proper that SAC members, as public appointees, are held to the highest standards of transparency and responsibility. However, in some cases members have been targeted on social media or found themselves the subject of unwarranted media investigation based on openly declared interests that are unrelated to the work they undertake for the FSA.

- Thirdly, several administrative and financial challenges, such as tighter restrictions around the right to work in the UK and heightened cost of travel, have made it increasingly difficult to engage SAC members from other countries.

4.11 These challenges, combined with a relatively small pool of individuals with relevant expertise, present a significant risk for future functionality of some SACs. With that in mind, I **have recommended the FSA take additional steps in order to increase SAC resilience for the future**. Specifically:

a) a resilient SAC system relies on a steady stream of high-quality expert applicants. This, in turn, depends on the visibility and attractiveness of the SAC roles. I think there is more that could be done to improve SAC visibility within relevant expert communities, particularly in specialist areas such as toxicology, genomics, microbiology and food processing. In particular **I suggest that FSA ensures regular representation at the leading meetings of professional societies** in those key areas, with FSA presenters (or research partners) including a slide on the role of FSA SACs to encourage applications.

b) the organisation has already made changes to simplify and reduce the number of routine market authorisation requests that are dealt with by many of our SACs. **I have recommended that we extend this approach, ensuring that we are making maximal use of SAC expertise** and not occupying their time with questions that could be effectively answered by experts within FSA. In some cases this may require a slightly increased risk appetite (to have the confidence to take decisions internally, rather than sense-check them with SACs to be on the safe side) and therefore we need to ensure that officials feel empowered to make such decisions with the full support of senior colleagues.

c) as part of the FSA's programme of regulatory reform, risk assessment teams have started to make use of other regulator's opinions (OROs) and an Abbreviated risk assessment process (ABBs) for low risk, routine market applications. Having now proven its value, **I suggest that we expand this approach across most product applications** and consider formalising it within the application process (e.g. by enabling applicants to link a previous positive decision on their product from another regulator to the application itself).It is important to note that this will, by definition, reduce the number of products that are assessed 'end-to-end' within FSA, but in my view the increase in risk that would accompany a greater reliance on evidence from other regulators is marginal and would be outweighed by the considerable efficiency benefits.

SAC Commissioning

4.12 In December 2024, the Board requested clarification of mechanisms by which "*Science Council and Science Advisory Committees feed into or are commissioned to inform risk evaluation on innovative or unevaluated food technologies*'.

4.13 By definition, the commissioning process varies depending on the nature of the risk being considered. For instance, commissioning of SAC advice would be very different for a market authorisation application or an active foodborne disease incident. In all cases, however, issues are triaged to identify high priority, non-routine issues that need greater levels of scrutiny and assurance and consideration by and independent SAC, rather than being dealt with by relevant officials 'in house'.

4.14 In addition to active commissioning by FSA teams, SACs can also raise topics for Committee consideration that they feel are relevant and important to the work of the organisation. This approach is best exemplified by the Science Council, whose 'strategic' function relies heavily on the ability of their members to highlight future issues that may not otherwise come to the FSA's attention.

Science Council

4.15 Science Council is the senior 'strategic' Science Advisory Committee within the FSA. Its primary role is to provide expertise across a wide remit, guiding FSA strategy and highlighting future challenges and opportunities for the organisation.

4.16 Over the last 12 months, working closely with the Science Council Chair, John O'Brien, we have sought to integrate Science Council expertise more widely across teams within the FSA and to facilitate a more two-way interaction, rather than a formal 'report and response' approach.

4.17 As an example, in March 2024 the Science Council held a workshop with external experts and FSA colleagues to select 50 key research questions on the 'future of food safety'. These questions were then considered separately by the FSA Executive Management Team (EMT) and Board to select priority areas. The Science Council Chair then held a session with Board and EMT members to discuss shortlisted topics and identify the top three, which have now been developed into 6-month projects by the Council, providing an 18-month rolling pipeline. The first project workshop (considering the impact of emerging technologies on food safety) takes place on 9 June and I look forward to updating the Board on its findings and any recommendations arising from it in due course.

4.18 In parallel, we have taken steps to ensure greater access to Science Council expertise (either as a whole Council, or as individual members) within individual FSA teams. One example of this is the work being undertaken by communications colleagues to develop a framework for dealing with mis/disinformation (see paragraph 5.5), in which Science Council members will be providing expert advice on both the approach and its suitability for stakeholders.

4.19 Overall, it is my view that this revised way of working has brought significant benefits to the FSA and has maximised the value of the combined expertise that is available to the organisation through Science Council, something that will be particularly valuable as we seek to navigate some of the challenges and opportunities that lie ahead, highlighted in section 5 below.

Supporting Innovation

4.20 The last twelve months have seen rapid development for the FSA in several areas of food innovation. Specifically, two significant financial awards to the organisation from the Department of Science, Innovation and Technology have funded the establishment of our 'Cell Cultivated Products Sandbox' and, more recently, the 'Innovation Hub', both of which were discussed at the March Board meeting earlier this year.

4.21 From a scientific perspective, both initiatives represent an excellent opportunity to support innovative developments that have the potential to provide major benefits in terms of dietary health, sustainable food production and consumer choice and I have been delighted to see the rapid progress and collaborative approach during the first few months of this work. However, these are complex, fast-moving fields. Ensuring that our risk analysis process is underpinned by the best available science, we will need to remain in close contact with international partners and potentially consider new ways of working that enable swift consideration of newly-emerging evidence. To that end, **I have recommended that the FSA takes several steps to strengthen its ability to respond swiftly to innovative development by**:

a) establishing formal collaborative arrangements with comparable international regulators(e.g. in New Zealand or Canada) to jointly consider specific technical areas.

b) assessing whether a 'modular' approach to risk assessment, which is being considered as part of our Cell Cultivated Protein (CCP) sandbox, might be more widely applied to the market authorisation process as a whole.

c) holding regular meetings between key players in the (food) innovation landscape with the express purpose of identifying products under very early-stage development that might ultimately require FSA approval.

The PATH-SAFE Programme

4.22 As the Board is aware, earlier this year, the four-year cross-government PATH-SAFE programme drew to a close. This programme was unique in both scale and complexity and I would like to take this opportunity to formally acknowledge the enormous contribution of the FSA team who have overseen the programme. In my experience, it is very rare for a programme of this scale to end on budget and with such a high rate of delivery on the component projects, which is testament to the programme team's hard work. A brief summary of the programme's achievements is included in Annex 4.

4.23 Broadly speaking, there are two types of output from PATH-SAFE. One set are straightforward 'answers' which are already being integrated into policy – for instance, projects which investigated the prevalence of antimicrobial resistant pathogens on sheep at slaughter or in raw pet food. The other type of output is much longer term – for instance, creation of the pathogen genomic database that enables rapid matching of human, animal and environmental strains. The impact of these, longer-term, projects will be measured over years rather than months and will depend critically on continued support and engagement with the wider infectious disease community. To that end, **I am recommending that FSA continues to engage closely with relevant stakeholders who may be able to build on the pioneering work of PATH-SAFE** . In particular, initiatives such as the National Biosurveillance Network are likely to be critical partners to maximise the impact of PATH-SAFE infrastructure. Likewise, I have been encouraged to see the close engagement of several UKRI-funded Transdisciplinary Networks on AMR with the PATH-SAFE team, and I strongly encourage FSA to remain closely involved with these partnerships and others in order to maximise the legacy of the PATH-SAFE programme.

4.24 Although PATH-SAFE was designed as a fundamental discovery programme, some of its findings are likely to have direct policy implications. For instance, more detailed understanding of foodborne pathogen carriage rates on different livestock species have implications for sampling and surveillance. Similarly, it would be valuable to consider PATH-SAFE work on technology readiness in the context of official controls. As the programme findings are finalised and published over the next 6-12 months, I have therefore **recommended that science and policy colleagues jointly consider PATH-SAFE outputs that may have direct 'operational' relevance for FSA and could be incorporated into our ongoing programme of regulatory reform**.

5. The Wider Science System

The International Context

5.1 The last 12 months have seen huge international upheaval. Science is a global endeavour which relies heavily on international collaboration and I therefore share the concerns of many other scientists about developments in recent months that make such collaboration more difficult. In particular, the withdrawal of the United States from the World Health Organisation and the unprecedented reduction of federal support for major centres of scientific excellence such as the Centres for Disease Control, the Food and Drug Administration and the National Institutes of Health represent very significant threats to the resilience of the global science system as a whole.

5.2 Whilst there is clearly very little that FSA can do to influence domestic science investments in other countries, I think it is important to recognise the impact that such international changes will have on our own ability to access the best possible science and, consequently, to consider routes by which we may be able to mitigate these impacts. I have therefore **recommended that FSA actively seeks to identify dependencies on international data and infrastructure that may be threatened in the current international climate**(e.g. data flows from INFOSAN, domestic sampling and surveillance programmes that may impact on import risk assessments, etc) and considers how best to mitigate those risks in the near future.

5.3 The challenging international science landscape also raises concerns about the availability of evidence to underpin some areas of FSA work. As one example, the recent rapid review on ultraprocessed foods identified a number of critical research questions that were, at the time, being addressed at the National Institutes of Health, but those programmes are now in jeopardy. I am therefore recommending **that FSA works closely with other government partners to identify critical research areas where the UK may need to 'step up' and/or increase collaboration with other international partners in order to deliver on research priorities**. Whilst it is beyond FSA resource and remit to step in to this research gap, it is nonetheless very much in the organisation's interest to ensure that other partners seek to tackle this question with some urgency.

Science Mis/Disinformation

5.4 A concerning development in recent years has been the rise of actively 'anti-science' rhetoric in a number of areas. Fuelled, in particular, by social media, factually incorrect stories can spread swiftly leading to, at best, confusion and, at worst, harmful changes in behaviour.

5.5 This risk was exemplified last year, when false information regarding the methane-suppressing animal feed supplement 3-nitrooxypropanol (3-NOP, or Bovaer) circulated online and was then amplified by a small number of social media users with large numbers of followers. This led to significant confusion and consumer concern and a large number of enquiries to the FSA's communications team.

5.6 The organisation responded swiftly, working with partners such as the Science Media Centre to ensure clear public messaging about the safety of this product and to explain both our risk assessment process and our role in continuing to monitor food and feed safety after a product reaches market.

5.7 Nonetheless, this episode highlighted the need for FSA to ensure it has robust measures in place to respond to deliberate or inadvertent misrepresentation of the scientific evidence that underpins food safety decisions. To that end, I am very pleased that colleagues within the communications team will be working on guidelines for responding to mis/disinformation over the coming months. Both I and members of FSA's Science Council will be closely involved in this work to ensure that the organisation is in the strongest possible position to maintain its role as a

trusted, evidence-based regulator when similar ‘fake news’ stories arise in the future.

Future Challenges and Opportunities

5.8 Over the last year, the FSA has shown itself to be nimble in the face of change and well-equipped to tackle emerging challenges, including those that were entirely unexpected. However, the year ahead will hold many new challenges and **I therefore recommend that the organisation prioritise consideration of several areas over the coming months, including**:

a) the impact of rapid changes in global patterns of (food) trade, e.g. as a result of the imposition of tariffs or new trade agreements. In particular, it will be important to consider changing probabilities of foodborne disease, food allergies and other risks if food businesses rapidly switch supply chains between different producer countries, so that this can be swiftly implemented in our approach to sampling and surveillance of imports.

b) the role of FSA regulatory areas in the broader government ambition to increase domestic food production and improve agricultural sustainability. It will be important, for instance, to consider our role in helping to safely and efficiently regulate developments such as vertical farming or highly-localised supply chains for public procurement.

c) ensuring the highest standards of animal welfare. There are a number of technology developments (in some cases supported by government research investments) that offer significant welfare advantages. For instance, the use of AI-based image analysis to monitor animal welfare, the switch to robotic milking machines in dairy production, and the use of ‘Demonstration of Life’ protocols to reduce suffering during non-stun slaughter. Whilst many of these areas are led by other government departments, such as Defra, FSA’s role as a regulator puts it in a powerful position to encourage rapid adoption of such technologies. I would encourage the organisation to use its strong science function and consumer focus to help ensure the effective implementation of these advances; for instance, in understanding and resolving behavioural or regulatory barriers to uptake.

d) the rapid development of ‘functional’ food and feed. The huge expansion in research into the human and animal microbiome is resulting in similarly rapid growth in so-called ‘functional foods’, which are designed to impact directly on animal physiology or to stimulate or suppress particular microorganisms in the gut for health benefit. At present, the regulation of these foods falls between FSA (food safety) and Department of Health and Social Care (DHSC)/Medicines and Healthcare Products Regulatory Agency (MHRA) (health/medical claims), although in the case of animal feed additives the FSA considers both the safety and efficacy claims. This is a very rapidly expanding area of science with huge potential for positive impacts but also for ‘pseudoscience’ that could mislead consumers. I recommend the FSA i) gives consideration to applying for specific funding (in a similar way to the CCP sandbox) to work with other departments on this topic and ii) produces a clear ‘explainer’ document for both businesses (to explain the regulatory regimes that they will need to apply through) and consumers (to clarify the science behind such products).Of note, the INFORM hub at the University of Reading has recently produced an ‘evidence explainer’ for probiotics, including some functional foods, which provides an excellent model for this kind of transparent evidence reporting.

6. Conclusions

6.1 I am very pleased to be able to say that, overall, the FSA’s science function is in a very strong position. This has been a challenging but exciting year, with major developments in a number of scientific areas. The coming year is not likely to be any less challenging, given the ongoing complex international landscape, significant resource constraints domestically, and the ever-accelerating pace of food innovation. However, I remain confident that the science ‘infrastructure’ within the organisation is robust and that the expertise and commitment of my scientific

colleagues will enable the FSA to tackle these challenges effectively and thus continue to ensure that UK consumers can have full confidence that their food is safe and what it says it is.

Annex 1. Summary of Specific Recommendations.

Recommendations that may impact on the organisation's strategic direction or risk appetite and therefore may be of particular interest to the Board, are highlighted in bold.

1. That the FSA look to bolster research capabilities both through existing partnerships and by seeking new ones over the next 12 months (paragraph 4.7)

2. That FSA colleagues from relevant teams attend and present at leading meetings of professional scientific societies in order to maximise recruitment to our scientific advisory committees (paragraph 4.11a)

3. That we extend the use of 'in-house' assessment of market authorisation applications by FSA officials to ensure that SAC expertise is used primarily for the most technically challenging applications. (paragraph 4.11b) **(footnote 1)**

4. That we expand our use of other regulators' opinions (OROs) and abbreviated risk assessment processes (ABBs) to also include more challenging and innovative applications (paragraph 4.11c)*

5. That FSA establishes formal collaborative arrangements with comparable international regulators (e.g. in New Zealand or Canada) to jointly consider specific technical areas (paragraph 4.21a)*

6. That we assess whether a 'modular' approach to risk assessment (currently being considered as part of our CCP sandbox) might be more widely applied to the market authorisation process as a whole (paragraph 4.21b)

7. That FSA establishes regular meetings between key players in the (food) innovation landscape with the express purpose of identifying products under very early-stage development that might ultimately require FSA approval (paragraph 4.21c)

8. That FSA continues to engage closely with relevant stakeholders who may be able to build on the pioneering work of PATH-SAFE (paragraph 4.23)

9. That science and policy colleagues jointly consider PATH-SAFE outputs that may have direct 'operational' relevance for FSA and could be incorporated into our ongoing programme of regulatory reform (paragraph 4.24).

10. That FSA actively seeks to identify dependencies on international data and infrastructure that may be threatened in the current international climate (paragraph 5.2)

11. That FSA works closely with other government partners to identify critical research areas where the UK may need to 'step up' to address research priorities that were previously expected to be delivered by international partners but have now been discontinued (paragraph 5.3)*

12. **Consider priority actions in key emerging areas**, including*

a. Changing patterns of food trade as a result of tariffs (paragraph 5.8a)

b. The FSA's role in supporting enhanced domestic food production (paragraph 5.8b)

c. Effective implementation of approaches with animal welfare benefit, such as the 'Demonstration of Life' protocol (paragraph 5.8c)

d. A more coordinated approach to regulating ‘functional’ food and feed (paragraph 5.8d)

Annex 2. List of Engagements

Table 1. Events

Date	Title of event
12 June 2024	Attendance at The Role of UK National Research Laboratories (Foundation for Science and Technology)
10 July 2024	Food and Drink Foundation Summer Parliamentary Reception
10 September 2024	Attendance at Food Foundation ‘Nourishing the Nation’ event
16 September 2024	Speaker at AMR/Policy event Microbiology Society
20 September 2024	Speaker at Microbe 2024 event
7 October 2024	Attendance at Royal Society of Chemistry ‘Science in Stormont 2024’ event
15-17 October 2024	Speaker at FAO Science Innovation Forum, 'Sowing the Future: Gene editing for agrifood systems'
7 November 2024	Speaker at Oxford Policy Engagement Masterclass
22 November 2024	Speaker at Chartered Institute for Environmental Health Safe Food event
2 December 2024	Attendance at Foundation for Science and Technology ‘How can science and technology contribute to the UK’s Industrial Strategy?’ event
3 December 2024	Attendance at The Royal Society - AI for Science Leaders Breakfast Briefing
3 December 2024	Attendance at DEFRA Christmas Stakeholder Reception (The Royal Society)
17 December 2024	Speaker at Westminster Food and Nutrition Forum ‘Next steps for policy on novel foods and alternative proteins in UK’
14 January 2025	Attendance at The Royal Society Transforming our Future: Engineering Biology’ event
28 January 2025	Attendance at British Science Association ‘For Thought’ event
31 January 2025	Speaker at The Royal Society of Tropical Medicine and Hygiene ‘50thAnniversary Topics in Infection’ event
12 February 2025	Speaker at ‘Analysis 4 Authenticity’ event

Table 2. Site Visits

Date	Place visited
12 August 2024	Moderna and Diamond Light Source
15 – 17 October 2024	FAO Headquarters, Rome
14 November 2024	Yeo Valley and Bristol Vet School
26 November 2024	National Institute of Agricultural Botany (East Malling)
25 February 2025	University of Bath/CARMA
15 May 2025	Fischer Farms, Norwich & the Norwich Science Park/Quadram Institute
16 May 2025	Norfolk Seaweed

Table 3. Media engagements

Date	Engagement
24 September 2024	BBC interview - Caffeine in Supplements
7 October 2024	Science Media Centre and Farming Today interview on FSA CCP announcement
28 October 2024	ITV news interview - Halloween Sweets
5 December 2024	Sky News and Time Radio interview - Bovaer
18 December 2024	Christmas Food Safety Messaging
8 January 2025	ITV news interview on CCP
10 February 2025	Science Media Centre – Methane Reduction in Farm Animals
8 April 2025	Fun Kids Weekly Podcast on Lab Grown Meat

Annex 3. Science Advisory Committee data for the 2024/2025 financial year

Science Advisory Committee	Number of members as of April 2024	Number of posts advertised	Number of members recruited	Number of meetings	Number of papers considered^	Average time (days) contributed per member to support the committee	Cost of running the committee

Science Council	·1 chair ·10 full members	1	1	·4 committee meetings (all closed) ·16 project meetings (all closed)	33	11	£46095
Advisory Committee for Social Science (ACSS) **Data includes the following working groups:** **§Economics working group** **§Assurance working group** **§Wider Consumer Interests working group** **§Research and Evidence working group** **§Understanding Regulatory Change working group**	·1 chair ·9 full members (All working groups have a chair that are members of ACSS)	4	4	·2 committee meetings (all open) ·21 working group meetings (all closed)	28	9	£27442
The Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT) **Data includes the following working groups and subgroups:** **§COT Plant Based Drinks working group** **§COT Guidance working group** **§COT Per- and Poly-Fluoroalkyl Substances subgroup** **§COT Titanium Dioxide$**	·1 chair ·24 full members ·1 liaison member ·6 associate members ·4 co-opted members (All working groups have a chair that are members of COT)	8	8	·8 committee meetings(all open) ·1 Joint COT/COC/COM &meeting (closed) ·1 subgroup meeting (closed) ·4 working group meetings (all closed)	66	7	£105458
Advisory Committee on Animal Feedingstuffs	·1 chair ·14 full members ·1 associate member	4	2	·7 committee meetings (all closed)	109	18	£91004

Advisory Committee on the Microbiological Safety of Food (ACMSF) **§Data includes the following working groups and subgroups:** **§Surveillance working group** **§Incidents subgroup** **§Antimicrobial Resistance subgroup** **§Regulated Products subgroup** **§Listeria subgroup**	·1chair ·16 full members ·8 co-opted members ·7 departmental representatives (All subgroups have a chair that are members of ACMSF, except the Listeria subgroup)	5	4	·3 committee meetings (1 closed, 2 meetings were halfopenand half closed) ·1 horizon scanning workshop (closed) ·2 subgroup meetings (all closed)	24	8	£49000
Advisory Committee on Novel Foods and Processes (ACNFP) **Data includes the following subgroups:** **§ACNFP and COT joint cannabidiol subgroup** **§ACNFP Products of Genetic Technology subgroup**	·1 chair ·25 full members ·3 associate members ·2 co-opted members. (All subgroups have a chair that are members of ACNFP)	4	3	·16 meetings (15.5 closed; 0.5 open) ·1 workshop (closed)	77	13	£131893 (includes £12365 funded by policy)
The Joint Expert Group on Additives, Enzymes and other regulated products **Data includes the following working group:** **§Smoke Flavouring working group**	·1 chair ·7 full members ·5 co-opted members	2	3	·7 committee meetings (all closed) ·13 subgroup meetings (all closed)	35	21	£75260
The Joint Expert Group for Food Contact Materials	·7 full members	3	2	·7 committee meetings (all closed) ·1 site visit	16	17	£39118

Annex 4. Key PATH-SAFE Outputs (Infographic)

1. Recommendations (3,4,5,11,12) bring with them either an elevated level of organisational risk or a have broader strategic implications which the Board may wish to consider.