Science Council Report of Project 'Artificial Intelligence Applications in Food Safety and Authenticity'

Recommendations to the FSA

In this guide

In this guide

- 1. <u>Food Standards Agency Science Council Report of Project 'Artificial Intelligence Applications in Food Safety and Authenticity'</u>
- 2. Authors, Acknowledgements and Declarations of Interest
- 3. Executive Summary
- 4. Recommendations to the FSA
- 5. Introduction
- 6. Methodology
- 7. Results and Discussion
- 8. Conclusions
- 9. Appendix A: Workshop Case Study Briefing Document
- 10. Appendix B: Workshop Participant List
- 11. Appendix C: Workshop Case Study Responses
- 12. References

1. Publish Guidance on Responsible Use of AI to Assure Food Safety and Regulatory Compliance

The FSA should provide guidance for Food Business Operators (FBOs) making clear that AI must act only as a decision-support tool, with humans retaining accountability. AI outputs should remain transparent and explainable to underpin regulatory compliance and ensure safety-critical decisions are not delegated to AI agents of dependent systems. Food businesses should be aware of limitations and work with suppliers to ensure tools are fit for purpose.

2. Establish Ongoing Monitoring of Al Systems and Potential Impacts

The FSA's Strategic Insight Team should regularly monitor AI adoption by Food Business Operators and its impacts across the food system, providing early warning of risks and ensuring regulatory responses remain proactive.

3. Promote Data Assurance, Validation, and Standards Alignment

The FSA should continue its promotion of data quality, provenance and standards (including data and cybersecurity) to help realise fair, auditable AI and, including the promotion of measures to ensure SMEs and smaller FBOs are not disadvantaged.

4. Support the Development of Standards and an Industry-Led Code of Practice for Assuring AI in Food Safety

The FSA should promote the development of test and validation standards for Al systems and a Code of Practice to food businesses, technology suppliers, standards bodies, potentially acting as a convenor to ensure alignment with regulatory expectations and wider assurance frameworks.

5. Engage with Broader Regulatory and Policy Perspectives

The FSA should collaborate with other UK and international regulatory authorities and government agencies to align governance, ethics, and auditability standards, drawing lessons from industries with advanced AI regulation.

6. Commission Research on Human Behaviour and Interaction with AI in Food Safety Contexts

The FSA should advocate for behavioural research that studies how FBO workers and directors engage with AI, addressing issues such as overreliance, trust, and cognitive bias to inform better training, guidance and governance.