Roundtable on Novel Food Regulation 2025

3 Nov 2025, 2 – 5.30 pm (GMT +8)

Marina Bay Sands Expo & Convention Centre (Melati Ballroom, Level 4)

Executive Summary

Introduction

The Singapore Food Agency (SFA) organised the 6th Roundtable on Novel Food Regulations ("Roundtable") on 3 November 2025. The Roundtable is an international platform for regulators, the industry, academics, and key stakeholders in the novel food ecosystem to share best practices and experiences on safety and regulatory aspects of novel foods, as well as to identify opportunities for collaboration. Roundtable 2025 focused on navigating the path to commercialisation, future outlook for novel food safety assessment, and the evolving roles of different stakeholders in the novel food ecosystem.

Proceedings

The Roundtable began with a fireside chat where regulators and industry representatives shared key lessons and insights from an example case of the pre-market approval process. This was followed by technical presentations from key stakeholders including the Bezos Centre for Sustainable Protein, Nurasa, the UK Food Standards Agency (FSA), and China's Center for Food Safety Risk Assessment (CFSA). These presentations covered academic research initiatives, platform approaches to commercialisation, regulatory innovations, and international regulatory developments. The Roundtable concluded with a panel discussion that brought together diverse perspectives from industry, regulators, academia, and international organisations on future priorities and next steps.

Key Points Raised on the Fireside chat: Pre-Market Approval Process and Commercialisation Pathway

- Industry representatives emphasised the importance of selecting jurisdictions based on regulatory openness to innovation and established novel food frameworks. Early consideration of consumer acceptance and stakeholder coordination was identified as crucial for successful market entry.
- Collaborative regulatory assessment approaches, where companies consent to information sharing between agencies, demonstrated significant benefits in terms of productivity and efficiency whilst maintaining confidentiality protections.
- Companies should prepare themselves for the transition from regulatory approval to market commercialisation as it involves numerous challenges beyond safety assessment, including consumer education, supply chain development, and achieving commercial viability.

Key Points Raised on Future Safety Assessment Approaches

- Strong support was expressed for developing New Approach Methodologies (NAMs) whilst ensuring validation and international harmonisation. Industry representatives emphasised the need for active engagement with regulators and staying current with technological developments.
- Academic institutions highlighted their dual role in developing safety platforms using existing methodologies and creating innovative approaches such as AI toxicokinetic modelling to support food safety assessment.
- The importance of multi-level collaboration was stressed, with calls for industry to provide researchers access to novel food products and real safety data to enable comparison and validation of NAMs.

Key Points Raised on International Collaboration

- Participants recognised the critical importance of considering implementation feasibility in low- and middle-income countries, which may have limited access to advanced assessment technologies and methodologies.
- International committees such as JECFA and Codex Alimentarius were identified as key platforms for establishing food safety standards, with strong encouragement for continued academic contribution of method validation and scientific evidence.
- The need for balanced, data-driven frameworks through continued stakeholder engagement and evidence sharing was emphasised across all participant categories.

Conclusion

The Roundtable successfully demonstrated the maturation of the novel food ecosystem, with clear evidence of progress from early regulatory frameworks to practical commercialisation challenges. Participants recognised the importance of maintaining collaborative approaches whilst addressing emerging challenges in safety assessment methodologies and international harmonisation.

Key outcomes include renewed commitment to developing validated NAMs, strengthening multi-stakeholder collaboration between academia, industry, and regulators, and ensuring equitable access to innovative food technologies across different economic contexts. The discussion highlighted the evolution from purely safety-focused assessments toward broader considerations of nutritional impact, consumer acceptance, and sustainable commercialisation pathways.

Full Meeting Report

The Singapore Food Agency (SFA) organised the 6th Roundtable on Novel Food Regulations ("**Roundtable**") on 3 November 2025, 2 – 5:30 PM, at the Marina Bay Sands Expo and Convention Centre. The Roundtable is an international platform for regulators, the industry, academics, and key stakeholders in the novel food ecosystem to share best practices and experiences on safety and regulatory aspects of novel foods, as well as to identify opportunities for collaboration.

2 There were approximately 240 in-person participants, including representatives from governmental and intergovernmental agencies, members of the industry, the research community, and advocacy groups.

Fireside Chat– Navigating the Path to Commercialisation

3 The Roundtable began with a fireside chat which brought together representatives from Food Standards Australia New Zealand, Singapore Food Agency, and Vow to discuss the journey to receive pre-market approval. The session was moderated by Dr Ong How Chee from SFA.

Panellist	**Organization**
Dr Nick Fletcher	Food Standards Australia New Zealand (FSANZ)
Dr Ong How Chee	Singapore Food Agency (SFA)
Mr. Andrew Janis	Vow

4 The key points raised by the participants were:

i. Safety by design during the research and development stage is more effective than implementing safety measures after product development.
ii. Careful consideration of application timing and ensuring manufacturing process maturity is important, as further modifications during an application could lead to additional delays in the approval process.
iii. Realistic application timelines with stakeholders are essential, as unrealistic timelines could lead to additional unpredictability during the approval process.
iv. Establishing a regulatory affairs department or engaging regulatory consultants helps in developing comprehensive dossiers.
v. Early consideration of consumer acceptance and stakeholder coordination is crucial for successful market entry.
vi. The transition from regulatory approval to market commercialisation involves numerous challenges beyond safety assessment, including consumer education, supply chain development, and achieving commercial viability.
vii. Regulators serve as collaborators in the pre-market approval process, validating safety assessments conducted by companies rather than acting as barriers to industry entry.
viii. Collaborative regulatory assessment approaches, where companies consent to information sharing between agencies, demonstrate significant benefits in terms of productivity and efficiency whilst maintaining confidentiality protections. Such sharing also helps reduce the risk of divergent processes and contributes to international alignment.

Ecosystem Support for Novel Foods

5 Following which, there were two presentations highlighting the available support in Singapore's ecosystem for novel food developments:

i. Role of academia in the novel food ecosystem by Professor Zhou Weibiao, National University of Singapore
The Bezos Centre at the National University of Singapore presented their comprehensive approach to sustainable protein research, focusing on plant-based proteins, macroalgae, and cell-cultivated meat whilst prioritising nutrition, safety, and consumer behaviour considerations.

The Centre's role in bridging academia, industry, and regulators was emphasised, along with their focus on addressing key challenges including scaling up, achieving price parity, and delivering consumer-acceptable taste profiles in alternative proteins.

ii. Industry Platform Approach by Mr Samson Lee, Nurasa
Nurasa presented their platform model for accelerating novel food commercialisation, focusing on bridging the gap between research and market-ready products through support for scaling, regulatory navigation, and consumer adoption challenges.

Updates on Novel Food Regulatory Framework

6 The Roundtable the proceeded with presentations from Food Standards Agency, United Kingdom (FSA) and China National Center for Food Safety Risk Assessment (CFSA) on the novel food regulatory framework in different countries.

i. Regulation Enabling Breakthroughs in the UK Food System by Dr Daniel Lloyd, FSA
FSA presented their efforts on developing a regulatory framework for cultivated meat, covering the full pathway from application and risk assessment to authorization. To support innovation alongside robust safety oversight, the FSA launched the Innovative Food Guidance Hub as a centralized platform for regulatory guidance on novel foods. Cell-cultivated products pose specific regulatory challenges as they involve both novel foods and processes, requiring clarification on safety risk identification, application of existing legal frameworks, and stakeholder communication.

Through its regulatory sandbox programme, FSA is collaborating with industry and academia to gather scientific evidence, co-design regulatory solutions, and develop targeted guidance, particularly on nutrition and allergenicity hazards. FSA emphasized that there will be no fast-track approvals and that legislative amendments may be needed to support future policy implementation.

FSA emphasized the importance of clear communication of regulatory expectations, contributions to international standard-setting efforts, and continued work to address outstanding technical questions that may influence future authorization pathways

ii. Novel food regulations in China by Dr Wang Jun, CFSA
CFSA provided an overview of China's novel food regulatory framework and approval process for novel foods, overseen by the CFSA under the National Health Commission (NHC). Applications must be supported by safety assessment materials in accordance

with China's Food Safety Law and relevant NHC guidance. Foods with a documented history of production and sale of at least 30 years may qualify as traditional dietary items. The approval process follows defined timelines, with an initial acceptance decision issued within five business days and a final determination — approval, rejection, or termination — typically made within 60 business days.

The presentation also outlined scientific data requirements for novel food applications and recent developments related to products derived from synthetic biology. CFSA classifies such products into purified products, composite products, and products containing dead or live microorganisms, with safety assessments focusing on potential microbial residues and newly introduced genetic material. While cultivated meat has not yet been approved in China, ongoing in-house research and testing are being conducted to strengthen safety evaluation approaches for emerging novel foods.

Panel Discussion– Future Outlook of Novel Food Safety Assessment

7 The Roundtable concluded with a panel discussion with representatives from industry, academia, international organisation, and advocacy groups to discuss future outlook of novel food safety assessments. This session was moderated by Dr Tan Lee Kim from SFA.

Panellist	**Organization**
Dr Masami Takeuchi	Food and Agriculture Organization of the United Nations
Ms Mirte Gosker	The Good Food Institute, APAC
Dr Vincent Sewalt	International Flavours and Fragrances Inc.
Prof Zhou Weibiao	Bezos Centre for Sustainable Protein, National University of Singapore
Dr Tan Lee Kim	Singapore Food Agency

8 Key points raised by the panellists include:

i. Past collaborative efforts have led to emerging frameworks and outputs, such as FAO publications on novel foods and the Safety Assessment of Media Ingredients (SAMI) framework.
ii. Robust safety assessment remains essential, and frameworks must balance scientific rigor with practical implementation to avoid being unnecessarily conservative.
iii. Regulatory frameworks should support innovation while maintaining confidence in safety determinations; overly permissive systems could undermine trust, whereas overly restrictive systems could slow beneficial innovation.
iv. Important to align on common definitions and expectations of safety, with frameworks tailored to different types of novel products and evolving alongside technological advances.
v. New approach methodologies (NAMs) could accelerate safety assessment, but rigorous validation is critical to ensure reliability, reproducibility, and consumer protection.
vi. Validation of new methods requires multi-level collaboration among academia, industry, and international scientific bodies, supported by peer-reviewed research and shared datasets.

vii. Collaborative initiatives that bring together regulators, industry, and academia can improve efficiency, reduce duplication of effort, and promote shared understanding of safety assessment approaches.

Acknowledgement

9 SFA thanks all participants, presenters, and panellists for their valuable contributions and insights shared at this Roundtable. The continued engagement and collaboration demonstrated throughout the session reinforces the importance of multi-stakeholder approaches to advancing novel food safety and regulation.

10 SFA looks forward to continued support from stakeholders and will maintain engagement with interested parties to develop standards, guidelines, and recommendations that ensure novel food safety whilst facilitating innovation and fair international trade practices in this rapidly evolving sector.