

Factsheet on Roundtable for Novel Food Regulations 2023

To encourage international conversations on the safety assessment of novel foods, Singapore has held the Roundtable on Novel Food Regulations annually at SIAW since 2019. The Roundtable is a multi-stakeholder platform to discuss challenges in safety assessment and explore opportunities to advance the regulatory approach while encouraging food innovations.

This year, SFA's Roundtable for Novel Food Regulations, a by-invite only event, will be held on 30th Oct 2023, with an estimated 250 participants. The Roundtable will bring together key stakeholders from the industry, research community, and food safety regulators from around the world to continue conversations that are important for ensuring the safety of the novel food.

Last year's Roundtable brought up the importance of developing standards for novel foods, especially in aspect of safety assessments This year's Roundtable will bring in experts to speak on risk assessments of various types of novel food and will also provide an opportunity for participants to share their ideas on how stakeholders can work together to develop standards in— (i)cell-cultivated meat and seafood, (ii)food ingredients from precision fermentation, and (iii)microbial proteins. Brief descriptions of these novel food categories are as follows:

- i. Cell-cultivated meat and seafood (also known as cultured meat and seafood): These refer to meat developed from animal cell culture (e.g., tissue engineering). The process to produce cultivated meat involves growing animal cells, such as chicken or shrimp, using culture media. Some companies are also looking into the growing of cells onto edible "scaffolds" to produce products that resemble the shape and texture of meat. An example of cultivated meat is Eat Just, Inc.'s cultivated chicken, which was allowed to be sold in Singapore as an ingredient in their nugget's product since December 2020.
- ii. Food ingredients from precision fermentation: These are food ingredients made using microorganisms that have been modified to serve as microbial cell factories that convert sugars and other simple chemical substances into more complex food ingredients, such as proteins and flavour compounds. The food ingredient to be consumed undergoes a purification process to remove the microorganisms. Examples of such foods include milk proteins, vanillin (molecule chiefly responsible for vanilla fragrance), and heme (molecule that contributes to the taste of meat) made using various yeast and bacteria species.
- iii. **Microbial proteins:** These are collections of microbial cells that are directly consumed for their protein content. Microbial proteins can be derived from fungi, yeasts, microalgae, and bacteria. Some microbial proteins, such as spirulina and yeast extract, are not novel foods as they have a history of human consumption. On the other hand, microbial proteins made using organisms do not have a history of human consumption are considered as novel foods.

These discussions will contribute towards advancement of internationally accepted standards of novel food while facilitating food innovations. Such conversations will also bolster consumers' confidence in novel foods.



Annex – Agenda for the Roundtable for Novel Food Regulations 2023

Time (UTC +8)	Presentation Topic	Speaker
1400 – 1405 hrs	Opening remarks	Dr Lee Kim Tan, Director-General, Food Administration & Deputy CEO, Singapore Food Agency
1405 – 1415 hrs	Risk assessment of cell- cultivated meat and seafood	Dr Jo Anne Shatkin, President, Vireo Advisors, LLC
1415 – 1425 hrs	Risk assessment of food ingredients made using precision fermentation	Dr Vince Sewalt, Head of Scientific & Public Affairs, IFF Global Regulatory Affairs, International Flavors & Fragrances
1425 – 1435 hrs	Risk assessment of food made using biomass fermentation	Prof. William Chen, Michael Fam Endowed Chair Professor in Food Science and Technology, Nanyang Technological University
1435 – 1500 hrs	Break	
1500 – 1600 hrs	Breakout group discussions on safety assessment checklist for: • Cell-cultivated meat • Precision fermentation • Biomass fermentation	Facilitators within each breakout group to guide discussions and consolidate perspectives
1600 – 1615 hrs	Break	
1615 – 1700 hrs	Panel discussion – Moderated by Dr Lee Kim Tan Facilitators will share key points from breakout session for discussion. Audience members may be invited to bring up points for panel discussion.	Panellists: Dr Jo Anne Shatkin Dr Vince Sewalt Prof. William Chen Dr Masami Takeuchi, Food Safety Officer, Food and Agriculture Organization of the United Nations Dr Eunju Lee, Director of Novel Food Division, Korea Ministry of Food and Drug Safety Prof. Rick Mumford, Deputy Chief Scientific Advisor & Deputy Director for Science, UK Food Standards Agency Dr Michelle Catlin, International Coordination Executive, US Department of Agriculture's Food Safety and Inspection Service