

Australia's cultivated meat industry is open for business

Vow's approval, regulatory outcomes and opportunities looking forward

Kim Tonnet, Head of Regulatory Affairs at Cellular Agriculture Australia | June 2025

Behind: Vow's cell-cultured Forged Parfait served on kaya toast.

In a landmark moment for the region, Food Ministers have aligned with Food Standards Australia New Zealand's (FSANZ's) approval of Vow's cultivated quail. After submitting its application in January 2023, Vow is now cleared to sell across Australia. This follows Vow's earlier approval of its cultivated quail in March 2024 by Singapore's Food Agency (SFA).

***A note on language:** From here on, we adopt the qualifying term 'cell-cultured' for product descriptions as this is the term FSANZ has used in the titles of Standards 1.5.4 and 3.4.1 and Schedule 25A of the Australia New Zealand Food Standard Code, ensuring clarity and consistency of language. It should, however, be noted that 'cultivated' is the preferred term across the APAC region, as agreed upon in a [Memorandum of Understanding](#), signed by 36 industry stakeholders in 2022. It is also the most commonly used term by the industry globally.

This approval is noteworthy because it is:

- The first approval of cell-cultured meat not only in ANZ, but in the Southern Hemisphere.
- The fourth jurisdiction globally to allow cell-cultured meat for sale for human consumption, following approvals in Singapore (2020), the United States (2023) and Israel (2024).
- The second jurisdiction (after the U.S.) to grant approval through a dedicated regulatory pathway designed specifically for cell-cultured foods, opting to no longer rely on the existing Novel Foods Framework.

Cellular Agriculture Australia (CAA) applauds Vow for their commitment, capability and perseverance over more than two years of scientific review and regulatory engagement – this approval is no small feat.

Congratulations must also go to FSANZ, the agency responsible for developing food standards, for its role in establishing Vow's cell-cultured quail as safe to eat by local consumers.

Importantly, this approval reflects Australia's commitment to supporting innovation whilst maintaining its reputation for evidence-based and rigorous food safety standards. It also provides a valuable proof point that our regulatory system is indeed fit-for-purpose to support the future of our food supply.

The food safety approval process

At the time of writing, foods produced using new and emerging technologies, such as Vow's cell-cultured quail, need to be assessed by FSANZ to establish their safety prior to market entry. The application process is a significant undertaking for any applicant, particularly resource-constrained start-up companies. **Vow's approval process is summarised on page 2** below.

The information and safety data requirements outlined in FSANZ's Application Handbook (for what was a novel food application) are extensive and Vow dedicated regulatory and laboratory resources to develop and submit its initial [dossier](#).

As FSANZ progressed its assessment of the new cell-cultured food, it identified a need for further safety data, which resulted in Vow expanding its own regulatory team and engaging regulatory consultants, Vireo Advisors, to meet these requirements and conduct additional analyses through specialist analysts such as Charles River Laboratories.

Vow's cell-cultured quail: food safety approval process



Behind: Vow's cell-cultured *Forged Gras* served in a wagyu steak bagel

It has been a rigorous and prolonged process, but one that ultimately reinforces the safety and credibility of cell-cultured foods entering the ANZ markets. The rigour and transparency of FSANZ's process have positively influenced the evolution of food safety regulatory systems in other jurisdictions. For instance, FSANZ and Vow have been invited as ongoing contributors to the UK's Food Standards Agency cultivated meat regulatory sandbox.

FSANZ and Singapore's Food Agency (SFA) collaborated to share information and align on findings relating to Vow's application so as to reduce duplication and improve efficiencies.

Key regulatory outcomes

FSANZ was receptive to industry feedback, which contributed to their informed decision-making. Throughout the compulsory pre-market assessment of Vow's cell-cultured quail, CAA spearheaded industry consultation through our Industry Working Group on Regulation and beyond, taking a leading advocacy role on behalf of the sector through direct consultation with FSANZ and formal submissions.

New Standards for cell-cultured foods

FSANZ has opted to introduce new Standards for cell-cultured foods to the Australia New Zealand Food Standards Code (the Code). This development marks a major milestone for Vow and the broader cell-cultured meat industry.

In our submission to the first public consultation, CAA (backed by the broader industry) expressed its support for the development of a dedicated regulatory pathway for cell-cultured meat. The introduction of the new Standards defines and clarifies the requirements for future applicants, reducing uncertainty and delays, thereby streamlining the approval process.

We commend FSANZ for its leadership and for the depth of technical expertise required to develop this new framework.

Scope of the Standard: Definition of 'cell-cultured food'

FSANZ has limited the current definition to the following sources: livestock, poultry, game, seafood or an egg or an embryo of these, excluding other emerging cell-cultured foods (such as those of plant origin like coffee or cacao). This will dictate the scope of products captured under the new Standards.

While the definition appears limiting, FSANZ has indicated a willingness to update the definition as further cell-cultured food applications are received.

Increased flexibility in labelling requirements

The new Standards will require either the term 'cell-cultured' or 'cell-cultivated' to be used in product labelling, with the chosen term required to be used consistently in the statement of ingredients and the food name (if the food is represented as from the animal source).

CAA called for the single mandated term ('cell-cultured') proposed during the first public consultation phase to be expanded to also permit the term 'cell-cultivated'. This represents a significant advocacy win for the industry, providing flexibility for manufacturers and facilitating international regulatory harmonisation, given that other jurisdictions, like Singapore, permit the term 'cultivated'.

Easing of requirements for cell line suppliers

In its second call for submissions, FSANZ proposed to regulate the suppliers of cell lines (for cell-cultured food) as food businesses, which would require them to have a documented food safety program.

CAA advocated that these suppliers are already following Good Cell and Tissue Culture Practice (GCCP) 2.0. Following further targeted consultation (including CAA and the industry, inclusive of cell line producers), FSANZ has confirmed that cell line producers do not require documented food safety programs, recognising the existing and well-understood safety measures referenced above, therefore minimising additional regulatory burdens on cell line suppliers.

Reduced costs and timeline for future applications

Vow's ANZ regulatory approval journey has been longer than initially anticipated, with the Application submitted in January 2023 and finalised more than 2 years later, in June 2025. This is slower than the SFA's timeline and, if maintained, risks start-up companies reaching the end of their 'runway' before products reach the market.

It has also been a very expensive process. In addition to the cost of preparing the application, FSANZ charged approximately AUD 180,000 to conduct its assessment under its cost recovery framework. In some other markets, such as the U.S. and Canada, regulator assessment fees do not currently apply. Extended timeframes and high costs are partly a function of FSANZ's limited resourcing as compared with other jurisdictions ([source, p 25](#)), a situation about which stakeholders (including CAA) are repeatedly calling out as a barrier to innovation.

However, the good news for applicants with ambitions to sell cell-cultured food in ANZ is that future applications will likely progress quicker (e.g. 12-18 months) and at lower cost (approximately AUD 90,000) than Vow's market-leading experience. This is because future applications will likely be processed as 'high-level general procedures' rather than under the more complex 'major procedure' designation used for Vow's initial application.

Below: Vow's cell-cultured *Forged Parfait* served with steak





Above: Vow's cell-cultured *Forged Gras*

The need for more consumer research

Vow's application also highlighted the importance of prioritising consumer perception and education well in advance of products being made available for sale. As part of its assessment, FSANZ appropriately requires evidence from peer-reviewed research published in well-established scientific journals to inform food safety-related decisions.

Globally and in ANZ, there remains a shortage of local, high-quality, up-to-date research on perceptions of cellular agriculture technologies and products and related terminology, particularly for labelling.

There is an opportunity for industry and regulators to align on research gaps and coordinate to increase the availability of high-quality, localised consumer research that could inform future regulatory decisions and ensure the industry's alignment on clear and consistent use of language.

Australia: an emerging destination for cultivated meat innovation

Together, Vow's approval and the advocacy outcomes outlined above represent a major gain for the sector and will likely enhance the appeal of the ANZ market amongst international cellular agriculture companies seeking approvals.

While the U.S. Food and Drug Administration (FDA) has developed a regulatory framework for cell-cultured foods, the political environment in the U.S. has created uncertainty for businesses, and there is speculation that U.S. food regulations may also be subject to change. European (EFSA) and Japanese (MHLW) regulators are still evolving their assessment approaches. The Korean food regulator (MFDS) has made some progress, but few applications have been submitted and none have been finalised.

As previously mentioned, FSANZ and the SFA are known to have collaborated on initial cell-cultured meat applications, which may benefit future applicants seeking approvals to gather data applicable to both jurisdictions.

Importantly, FSANZ has an exemplary reputation, and Asian regulators have high regard for the agency and its decisions. With our regulatory framework now 'tried and proven,' the stage is set for Australia to become a global destination for cell-cultured meat innovation and as a 'gateway to Asia'.

While the approval process has presented challenges, Australia and New Zealand are fortunate to have a reputable regulatory agency that is proactively engaging with future food innovations and receptive to industry input as it adapts its framework in response to a changing food system.

Seeking regulatory support?

CAA looks forward to supporting future ANZ applications and invites any interested parties to reach out for assistance.

CAA is currently in the process of updating its existing [Regulatory Resource Hub](#) in line with the changes to the FSC for cell-cultured foods. The Hub includes a suite of tailored online learning materials, including dossier templates and step-by-step guidance on Australia's food safety regulation framework for cultured foods, as well as foods produced using gene technology.

[Learn more](#) or get in touch:
kim@cellagaaustralia.org