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Technology

Food

## — Exclusive

## Lab-grown quail headed for diners' plates in 2024

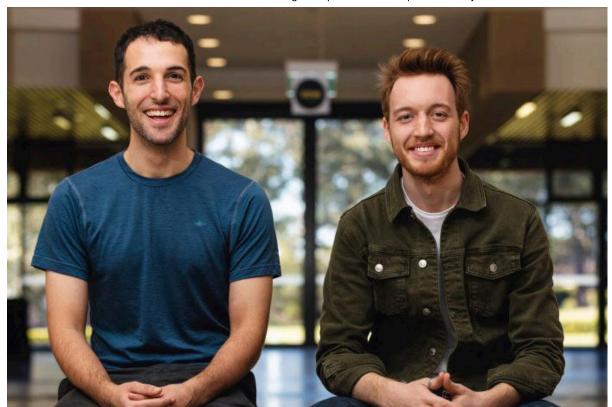
## Yolanda Redrup Reporter



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Vow Food has become the first cell-based meat player in Australia to begin the regulatory approval process with Food Standards ANZ, in the hopes of having lab-grown quail on diners' plates in 2024.

The company, which in November raised \$US49.2 million (\$73.1 million) from Blackbird Ventures and Prosperity7 Ventures, has no intention of competing with Aussie farmers, instead developing cell-based meats that are healthier and tastier utilising cells from animals such as rabbits, kangaroo, alpaca, goat, mice and water buffalo.



Vow co-founders George Peppou and Tim Noakesmith are a step closer to commercialising their cell-based meat.

The business is one of a growing number of cell-based and alternative meat start-ups in Australia. Another start-up, Magic Valley, is developing cell-based meat products, while Canberra-based Nourish Ingredients is developing synthetic fats and oils to replicate the taste, texture and smell of meat, to be used in plant-based alternatives.

[https://web.archive.org/web/20230227023823/https://www.afr.com/companies/agriculture/hkbillionaire-backs-aussie-fake-animal-fat-start-up-in-45m-round-20221019-p5brlj]

Vow co-founder George Peppou said the company had been given a precise approval timeline by the regulator, and all going to plan the start-up will find out if it has the support of Food Standards ANZ by May next year.

The process of approval for a novel food process is a lengthy one, he said, involving an in-depth review by the regulator and public consultation. After this, the regulator will make recommendations on the safety of the product and if it should be added to the food standards code. Ultimately, that decision will be made a panel of ministers from each state and territory.

"When it comes to food regulations, Australia is seen as a world leader with a forward-thinking regulator," Mr Peppou said. "[Food Standards ANZ] have been helpful and consultative. They're seen as a very thoughtful, transparent and very straightforward regulator to work with.

"They are publishing on their website the executive summary of what we're submitting for approval. It's the first public discourse for cell cultured meat in Australia, and I'm sure it's going to lead to some interesting emails over the next few weeks."

Food Standards ANZ (FSANZ) said in a statement it would assess the "chemical, nutritional, microbiological and dietary exposure" of the quail meat, as well as Vow's production process.

"The food sector is seeing rapid innovation and change in products and markets globally. FSANZ's primary role is to ensure a safe food supply so Australian and New Zealand consumers can be confident the foods they choose to buy are safe to eat," a spokeswoman said.

A former chef, Mr Peppou co-founded the company with Tim Noakesmith in 2019, after the pair were introduced by fellow food tech innovator Nick Hazel from V2food. There are about 40 companies developing cell-based meats around the world, including Memphis Meats in the US and Mosa Meats in the Netherlands.

After taking an almond-sized biopsy from an animal, capturing cells from muscle parts that are eaten in food, the cells are then placed in an environment that replicates being inside the animal and fed a solution that gives them the necessary nutrients to grow.

It takes about four weeks to develop, but including the "harvesting" process, Mr Peppou said the whole process take about two months.

## Last year the company opened a factory in Sydney's Alexandria,

[https://web.archive.org/web/20230227023823/https://www.afr.com/technology/the-new-factory-making-meat-that-s-illegal-to-eat-20220930-p5bm7l] the largest of its kind in the southern hemisphere, where at top capacity it will be able to produce 30 tonnes of cell-based meat each year.

The business opened the factory despite still not having legal approval to sell its products.

Its first products it brings to market, Mr Peppou said, will only be available to restaurants, and will carry a high price point.

Over time though, it hopes to establish larger factories that will let it produce its products at a greater scale, and bring the price down to \$50 to \$100 per kilogram.

"To start, we'll really be focused on restaurants and adventurous foodies. We've spent a lot of time with chefs, particularly in Singapore and increasingly Australia ... they're excited about being a participant in designing a new category of food," Mr Peppou said.

"We bring them samples and get feedback on things to improve.

"Then we want to get bigger again, and eventually get the price point closer to that of meat in the supermarkets."

Eventually, Mr Peppou hopes Vow products will have enough public acceptance to be featured on supermarket shelves, but he expects this will be at least five years away.

The company is further progressed through the regulatory process in Singapore and expects to begin selling in this market before Australia.

From the community, he is expecting two types of response in the public review – questions from scientists around the safety of the product, which Mr Peppou said he welcomes, and resistance from traditional meat farmers.

"There will be some resistance, or discomfort, with the idea that there are these new types of ways of producing meat," he said.

"There will be some emotional responses saying this is bad for faming, whereas it's complimentary."

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