**Three Experts Describe How Alt Protein Will Go Mainstream**

If you visit your local supermarket today, you’ll find a small selection of plant-based products on one end of the meat fridge. The range is small, and these products still have an air of novelty about them, but that’s all changing. In fact, by the year 2040, it’s estimated that around [60%](https://www.theguardian.com/environment/2019/jun/12/most-meat-in-2040-will-not-come-from-slaughtered-animals-report) of the protein we eat will come from plants or laboratories.

Perhaps surprisingly, traditional meat companies are a significant part of that change. Companies like Cargill have been throwing money at cellular meat ventures such as Memphis Meats and Aleph Farms, contributing to an overall [$5 billion](https://gfi.org/press/record-5-billion-invested-in-alt-proteins-in-2021/) in investment for alternative protein-based meats in 2021.

Things are changing on a consumer level too. In 2020, Woolworths Group chair Gordon Cairns admitted the Group had seen a [60% increase](https://www.foodanddrinkbusiness.com.au/news/report-australian-plant-based-protein-sector-doubles-in-a-year) in alternative protein sales on the year earlier.

The point is that alternative protein is happening, and fast. So even if it doesn’t eclipse traditional meat sales by 2040, it will certainly play a more central role in our diets. It’s just a question of how this transformation takes place, and how the industry will look in the future.

We wanted some answers, so we spoke to three experts. These are people work in alternative protein in one way or another and spend a lot of time thinking about the future. They shared their thoughts on where we’re headed.

**The alt protein options are practically limitless**

Professor Michelle Colgrave, Future Protein Mission Lead at Australia’s national science agency, CSIRO, in Brisbane, says that in the future supermarkets could have a protein section rather than a meat section.

“Supermarkets will offer a diverse range of protein sources,” she explained. “From plants to protein made from fungi and yeast, as well as products fortified with protein from algae, seaweed, and insects.”

Nick Hazell, CEO of v2food (which produces plant-based meat substitutes) agrees that animal products won’t disappear from fridges “but will be more expensive, niche and more focused on steaks and whole cuts.”

Both Colgrave and Hazell say there will also be a greater emphasis on transparency around sourcing, nutrition and sustainability.

“This info could be available via QR codes or ratings systems,” Colgrave suggests. “Such codes will define where the protein was produced, when and how it was made.”

Brett Wiskar, Chief Future Officer for Wiley (a company that designs manufacturing facilities for both animal and plant-based proteins) emphasises that this move towards sustainability won’t stop at packaging information. He thinks it will extend to the packaging itself, which will be made from biodegradable plastics.

He also suggests that by 2040 supermarkets will be selling uncooked cellular meat products with long shelf lives on their unrefrigerated shelves, which he admits “might feel like an out there concept.”

“These will be ambient temperature cellular meat products that are 'grown' in sterile bioreactors and pumped into sterile packaging,” he says, explaining that “no external biological matter means no bacteria, eliminating microbial growth.”

**What’s holding consumers back?**

Hazell’s daytime job is to get more customers, which is all about figuring out what’s holding back consumers. And according to him, success is all about taste and price.

“Consumers will buy plant-based if it tastes better and is cheaper than animal-based meat,” he says.

Colgrave agrees with him, but thinks taste is the deciding factor. “Taste is king,” she says simply. “These foods must be delicious without compromise. Sure, the nutritional attributes are important, but taste is the top priority.”

For Wiskar, taste and price are stumbling blocks thrown up by a larger issue: technology.

He points out that the technology behind alternative protein is new and we can expect to see refinement.

“The tech still needs to solve the cellular meat challenges and find cleaner, neater ways to extract protein from plant material,” he says.

**Local manufacturing is the key to growth**

Both Hazell and Colgrave agree that a lack of Australian manufacturing capabilities and ingredient-sourcing is slowing the growth rate for alternative protein.

“The cost of scale manufacture is enormous, and a single protein extraction plant can cost $400M,”
Hazell says. “Although the [Modern Manufacturing Initiative](https://www.industry.gov.au/news/the-modern-manufacturing-initiative-opens-funding-for-national-manufacturing-priority-areas) grants are a good example of where government is beginning to recognise the problem.

Wiskar acknowledges problems with Australia’s supply chain capabilities but believes that essentially the market’s potential will be unleashed when alternative protein is cheaper than traditional meat.

“When you can get four convincing alt-protein burgers for $12 and the meat ones are $15 and the guests at your Grand Final BBQ can’t tell the difference - the flood gates will open.”

**The meat industry will need to respond**

Despite the show of meat companies investing in alt protein, Wiskar says others are trying to stamp out an industry they consider a threat.

“They're the ones who think the government or Meat & Livestock Australia or retailers should ‘do something’. That something might be ban it, legislate to protect the term ‘meat’, or simply tax it out of existence. In the end some of these people will adjust and others will suffer at the hands of change.”

He adds that the meat companies who adopt alternative protein production as a viable additional revenue stream will be the ones to thrive.

“Taste profile, export potential, cost, and value-adding are not new challenges to the traditional protein industry, so they are well-placed to capitalise on growing consumer demand. They can, and should, be exploring the opportunity here.”

Colgrave too acknowledges there are perceptions of new products as a threat but insists the world’s population is expanding so fast that it necessitates different sources of protein.

“Traditional proteins like meat and fish will likely continue to be a staple in many people’s diets. So rather than viewing new protein products as a threat, we must see them as complementary to meet the looming protein gap as the global population rises,” she says.

This too is the tone Hazell adopts when asked about the meat industry’s response to his company’s products. He insists that plant-based and animal protein are two sides of the same coin and that the mission is simply to feed the world.

“I would like the meat industry to focus on the one thing that unites us all,” he says. “How to make sustainable food for the while planet.”

“That’s truly the problem that needs to be tackled, now.”

-END-