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The Australian Alternative Protein Industry

A report for the Future Food Hallmark Research Initiative

21 May 2020



Supermarket display of Alternative Protein Products
Image courtesy of J Lacy-Nichols 2020

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1. Methodology

This report offers an initial mapping of the Australian Alternative Protein (AP)¹ sector based on an analysis of publicly available documents, reports and websites. Company and retailer websites were searched for product details (see Appendix A and B for full datasets). All pages of company websites were searched and claims about the benefits of APs were downloaded and thematically analysed (see Appendix C for full dataset). Additionally, the websites of Food Frontier, meat industry associations and Australian regulators were searched to identify statements about alternative proteins. All websites and links were current as of April 2020.

2. Companies and products

As of February 2020, we identified 16 AP companies in Australia (see *Appendix A: Company details*). 13 companies use plant-based technologies, two (Heuros and Vow) are working on cell-cultured technology and one company (Qponics) is working on algae. Heuros is working on developing non-animal growth factors for the cell-cultured/biotech AP industry but has not yet launched any products. The other 13 AP companies have a range of different plant-based products that mainly imitate beef and chicken (Table 1). See also *Appendix B: Products and ingredients*.

Table 1: Plant-based Australian AP companies and products

Company	Meat substitute						Main protein ingredients					
	Beef	Chicken	Pork	Duck	Seafood	Misc	Wheat	Soy	Pea	Rice	Konjac	Mushroom
Coco & Lucas Kitchen	X	X					X					
Fable Food						X		X				X
Farm Foods Australia	X								X			
Harvest Gourmet	X							X				
Herb and Sons	X	X	X					X	X			
Made With Plants	X	X					X	X				
Next!	X		X					X				
PlantAsia			X	X	X		X				X	
Soulfresh	X	X	X				X		X			
The Alternative Meat Co	X						X	X	X			
Unreal Co.	X	X						X	X	X		
v2food	X							X				
Veef	X							X				

These products differ in their technical complexity. Most are mince-based products, however there are also products that imitate cuts of meat and in one case (PlantAsia) whole prawns (Table 2).

¹ For consistency, we refer to the constellation of products/industry as ‘alternative proteins’ recognising that there are many terms.

Table 2: Categories of Australian AP products

Category	Mince-based		Simple cut		Complex cut	
Beef	Mince (8) Patty (11) Sausage (4) Meatballs (2) Meatloaf (1)		Sliced (1)			
Chicken	Mince (1) Patty (2) Nuggets (2) Sausage (1) Balls (1)		Sliced (9) Breaded (3)			
Pork	Sausage (2)		Sliced (1) Pulled (1)		Bacon (1)	
Duck			Sliced (1)			
Seafood					Prawns (1)	
Misc.			Braised (1)			

3. Claimed benefits

AP companies made a range of claims about the benefits of their products (Table 3), including the problems with conventional meat production as well as the benefits of AP products for: the environment, nutrition, animal welfare and food security. In addition to highlighting the ways in which their products were better than conventional meat, AP companies also reassured consumers that their products tasted like meat. In these claims, companies discuss their products in relation to conventional meat products, presenting them as simultaneously better than and similar to meat.

Companies also discussed the growing demand for their products and the implied economic benefits of supporting Australian made products. Some companies explicitly or implicitly acknowledged consumer concerns about processing, highlighting the various ways that their products were natural. Finally, some companies discussed their visions for how the AP industry could disrupt the current status quo. See *Appendix C: Claimed benefits of Alternative Proteins (companies)* for the full dataset.

Few companies provided evidence or data to support their claims, with the exception of v2food and The Alternative Meat Co. v2food referred to the Eat Lancet Report (1) and an unspecified publication from Food Frontier in its explanation of the issues with current meat production. The Alternative Meat Co referenced the

websites of several animal rights and environmental organisations (Vegan Australia (2), PETA (3), LiveKindly (4) and EarthSave (5)) as well as a Roy Morgan article about the rise of vegetarianism in Australia (6) as the sources for its statistics on the environmental impact of meat production and consumption.

Table 3: Claimed Benefits of AP (companies)

Themes	Conventional meat	Environment	Nutrition	Animal welfare	Food security	Taste	Economic	Natural	Disruption
Coco & Lucas Kitchen	X		X [#]	X			X	X [%]	X
Fable Food	X	X	X	X		X		X	X
Farm Foods Australia		X		X		X	X [§]	X	X
Harvest Gourmet			X			X	X	X	X
Herb and Sons			X [#]				X		
Heuros							X	X	
Made With Plants		X [*]	X	X		X	X	X	X
Next!			X			X			
PlantAsia		X [*]	X	X		X	X	X	X
Qponics	X	X	X		X		X		
Soulfresh		X	X	X		X	X	X	
The Alternative Meat Co	X	X	X	X		X	X		X
Unreal Co.		X	X	X			X	X	X
v2food	X	X	X		X	X		X	X
Veef				X		X	X	X	
Vow	X	X	X	X	X	X	X	X	X

* Only discuss sustainable packaging

Only display the Health Star Rating logo on the front-of-pack label

% The claim “All our ingredients are real foods” likely refers to the company’s meat products, not AP products

§ The claim “we have strong agricultural roots and are proud of our Australian heritage” likely refers to the company’s meat products, not AP products

3.1. Conventional Meat

Six companies discussed the issues with conventional meat production and consumption. Most highlighted the environmental issues associated with current meat production, including: factory farming, intensive farming, deforestation, land degradation, biodiversity loss, habitat destruction, greenhouse gas emissions, water use and land use. Both v2food and Qponics noted that increasing population growth and demand for protein presented risks for global food security or protein deficiencies. In addition to the environmental issues with conventional meat production, Fable Food and Vow implied a degree of irresponsibility and selfishness in their criticisms, referring to the “reckless pursuit of profit” (Fable Food) and “bend[ing] nature to our hungry will” (Vow).

3.2. Environmental Claims

Eight companies made environmental claims about their products, however most claims were generic: “sustainable...minimal environmental impact...feel-good ingredients” (Fable Food), “planet-friendly...treading lightly upon the planet” (Soulfresh), “environmentally friendly” (The Alternative Meat Co), “sustainable from

the beginning” (Vow), “compassion towards...the environment” (Unreal Co.) and “more environmentally sustainable” (Farm Foods Australia).

v2food’s claims revolved around the protein ingredient (legumes) in its products: “When legumes are grown, they take carbon dioxide and nitrogen out of the atmosphere and can fix it into the soil. By consuming v2food products in place of animal meat products you are reducing your carbon footprint with every bite.” In addition to “making a significant difference” to climate change, the company also noted the benefits of “revitalised soil” and “sustainable land use.”

Qponics’ claims also revolved around a specific protein ingredient (algae by-products), however its claims positioned algae as not only superior to animal protein, but also to plant proteins made from “terrestrial crops.” The company noted that “marine algae do not require freshwater or existing arable land to be commercially farmed,” and they “grow faster and offer significantly higher annual protein yields per hectare than terrestrial crops such as soybean, pulse legumes, and wheat.”

3.3. Nutrition claims

11 companies made nutrition claims about their products. These included specific nutrient content claims:

- [good source of] protein (Harvest Gourmet, Made With Plants, PlantAsia, Soulfresh)
- [good source of] fibre (Harvest Gourmet, Made With Plants, PlantAsia)
- [good source of] iron (Soulfresh, v2food)
- Cholesterol free (Made With Plants, Next!, PlantAsia, Soulfresh, v2food)
- Low in fats/saturated fats (Made With Plants, Next!, Soulfresh, v2food)

Fable Food and Qponics made specific health claims about the benefits of mushrooms (“the ancient magic of the mushroom...incredible nutrition, their ability to cure disease, restore gut flora, and open minds... used in Chinese medicine for 1000’s of years”) and algae (“non-allergenic plant-based protein with balanced amino acid profiles...[contains] polyphenols...which can impart health benefits to the consumer”).

Some companies emphasised the nutritional equivalence of animal and plant proteins, or even the improved nutrient profiles: “[our] products have the same protein and iron levels to their meat equivalents, so you can enjoy the same benefits...It has all the taste, protein and iron of its meat equivalents with none of the bad stuff – like cholesterol” (Soulfresh), “we’ve developed v2 to be as nutritious as meat...we’ve been able to mimic the great qualities of meat - namely its great taste and high protein, iron and B vitamin content - while slashing cholesterol and adding in the goodness of dietary fibre” (v2food), “seitan can contain more protein per gram than animal-based meats” (Made With Plants). Vow (a cell-based company). Vow (using cell-based technology) claimed that it could “blend multiple cell types to create better...nutritional profiles than any animal could.”

3.4. Animal welfare claims

10 companies referred to animal welfare, however these claims were often brief and generic: “promoting animal welfare” (The Alternative Meat Co) “cruelty free” (Veef), “animal-free” (Soulfresh), “compassion towards animals” (Unreal Co.), “A tasty story, with animals as characters, not dishes” (Fable Food) or the “impact of factory farming on...animals” (Coco & Lucas Kitchen). Only two companies referred to their

products as “vegan” (Soulfresh) or “vegan friendly...certified by Vegan Australia” (Farm Foods Australia). Both Made With Plants and PlantAsia explicitly supported veganism, and Unreal Co. noted that its company was “staffed by a team of passionate vegans.” The Alternative Meat Co made the only specific claim about the potential benefits of alternative proteins for animal welfare: “1 single person could save 200 animals per year just by living on a plant-based diet,” citing an article from PETA (REF).

3.5. Food security claims

Only three companies discussed food insecurity or protein shortages as a justification for alternative proteins. v2food referred to the “demands of 10 billion people” and the need to “feed a rapidly growing population,” while Qponics noted the potential for an “uncontrollable global protein deficiency before 2050.” v2food presented “plant-based foods” as the solution to “feed[ing] 10 billion people with the resources of one earth.” Similarly, Vow envisioned a “post-scarcity” food system that “requires no compromise to provide everyone on earth with delicious, highly nutritious food.” Notably, these companies focused on increasing the availability of protein, not the question of access or affordability, which are equally if not more important issues when addressing food insecurity.

3.6. Taste claims

11 companies made claims about the taste of their products. The most common theme was the similarity to meat and the idea that “you won't believe it isn't meat!” (Soulfresh), “Chick'n Chunks will have you fooled!” (Next!), “Formulated to look, cook and taste like real meat” (The Alternative Meat Co) and “v2 is designed to look, cook and taste like meat - not the legumes we get the protein from” (v2food). They also spoke about the similarities in how they could be cooked or prepared. “Whether you throw it on to your BBQ or into the pan, it sizzles and looks like the real deal. It sears beautifully outside, remaining juicy and tender inside” (Harvest Gourmet), “cooks, sizzles, and tastes like fresh rasher bacon” (Next!) and “Eaty even looks the part, sizzling proudly on the BBQ” (Soulfresh). Some companies explained the role of specific ingredients in imitating the taste and texture of meat: “Mushrooms have the same natural umami flavours that help make meat so appealing” (Fable), “The canola and chopped coconut oil tenderizes the burger for a rich taste” (Harvest Gourmet), “we've discovered the specific amino-acids that are responsible for that awesome meaty taste” (v2food). Harvest Gourmet also discussed the use of specific ingredients to achieve a similar appearance to meat “the canola and chopped coconut oil tenderizes the burger for a rich taste and helps give the raw burger the realistic marbled fat appearance of raw beef mince.” While most companies tried to position their products as familiar to consumers in taste and eating experience, Vow took a different approach, claiming instead that their “repertoire of ingredients” could be used to create “exciting new exotic meats or blend multiple cell types to create better flavours, textures or nutritional profiles than any animal could.”

3.7. Economic claims

12 companies discussed the economic benefits of AP products for both the Australian economy as well as their own company. Companies promoted their products as “Australian owned” (Veef) and “Australian made” (The Alternative Meat Co, Herb and Sons), with Veef claiming that “you're supporting a small Australian business with a big heart.” Some companies also pointed to locally sourced ingredients: “Locally sourced from our

Australian farmers and growers” (Coco & Lucas Kitchen) and “AUSTRALIAN NATIVES: A new kind of cultivated meat company” (Vow). Companies also discussed the market opportunities for AP products: “Australia is the third-fastest growing vegan market in the world” (The Alternative Meat Co), “Plant-based alternatives to animal protein is one of the fastest growing segments of the food market” (Qponics), “the demand for meat alternatives is growing every day” (Harvest Gourmet), “The fact that major retailers such as Woolworths are making space for plant-based proteins – in the meat section, no less – signals a fundamental change to the way Aussies think about meat...We know the demand for tasty plant-protein will continue to grow” (Made With Plants) and “plant-based proteins are also becoming a rapid area of growth and popularity” (Plant Asia). Other companies alluded to their commercial ambitions: “We aim to become leaders in the plant-based food industry” (Unreal Co.), “We are developing this technology to produce cultivated meat on a commercial scale” (Heuros). Qponics explained its “co-production” business model where it produced a high-value omega-3 product “to ensure farm profitability” and a low-value “protein rich by-product.” This alludes to some of the potential economic challenges that ingredient suppliers might face in supplying the AP industry with plant proteins.

3.8. Natural claims

12 companies discussed the “naturalness” of their products, with the most common claim being non-GMO (six companies), as well as the absence of artificial additives (e.g. colours, flavours, preservatives, or MSG) (Coco & Lucas Kitchen, Harvest Gourmet, Soulfresh, v2food and Veef). Some companies presented their products as minimally processed: “lovingly handmade” (Coco & Lucas Kitchen) or “as minimally processed as possible...shiitake mushrooms make up 2/3 of the ingredient list” (Fable Food). Heuros specifically identified the technologies it did not use, for example foetal bovine serum, genetic engineering and pluripotent stem cells. Others sought to downplay the technology or processing involved in the creation of alternative proteins, for example Made With Plants claimed to have “gathered the best ingredients that nature has to offer, then applied a little innovation.” Similarly, Vow simplified the process of “cellular agriculture” to four steps, including step three: “we encourage those cells to grow and differentiate in exactly the same way they would naturally.” v2food took a slightly different approach, acknowledging that the term “processed” is often “synonymous with products that have had all the goodness stripped from them to make something at low-cost that lasts a ridiculously long time” but arguing that they do “the minimum amount of processing we can to enhance the nutrition and taste of the meat we make, and nothing more.” In effect, the company sought to justify its processing and differentiate it from other forms of processing intended, for example, to increase shelf life rather than nutrition.

3.9. Disruption claims

10 AP companies discussed the various ways that their products could disrupt the status quo, often using the language of “revolutionising” the meat category (Farm Foods Australia, Harvest Gourmet, v2food) or in the case of Vow “literally inventing new food.” Some spoke of the AP industry in terms of a journey or adventure: “join us on our journey, and discover” (Harvest Gourmet), “on a journey” (Fable), “An adventure to scour the

earth like a cellular-level Indiana Jones, prospecting for earth for unique textures, flavours and sensations, without the harm” (Vow).

Companies differed in how they explained the mechanisms of change. Some companies focused on the power of individuals to change their diet: “I believe it’s within everyone’s power to look for better ways of doing things. A meat-free meal once or twice a week can have a tremendous impact” (Coco & Lucas Kitchen), “inspire customers to make the right changes for a healthier life” (Unreal Co.) and “easy access to tasty vegan food can empower all of us to make more sustainable choices every day...Every time you choose to eat a vegan meal, you’re benefiting the planet and our animal friends, and we believe that means everyone can make a difference” (Made With Plants, PlantAsia). Alongside these claims about consumer-led change was the caveat that these changes would be easy and convenient: “Make your own plant-based meats in your very own kitchen” (Unreal Co.), “easy access to tasty vegan food” (Made With Plants, PlantAsia), “[make] plant-based eating more convenient and enjoyable” (v2food) and “consumers should have more variety in their dietary proteins without having to compromise” (Farm Foods Australia). The implicit mechanism of change is consumer sovereignty, where “change occurs if enough individual people change their behavior” (7).

In addition to dietary changes, some companies also discussed changes in the marketplace, for example the availability of APs in mainstream retailers and restaurants: “The fact that major retailers such as Woolworths are making space for plant-based proteins – in the meat section, no less – signals a fundamental change to the way Aussies think about meat” (Made With Plants). Here too, some companies noted that AP products were not designed to replace meat, but to offer an alternative: “In the not-too-distant future, we believe that a plant-based alternative for every product will be readily available at your local grocery store” (Made With Plants) and “This is not about getting rid of meat. We understand many Australian farmers are already using sustainable farming techniques to produce high quality animal meat in a way that is environmentally sustainable. We are about adding another option to the mix” (v2food).

Again, Vow offered a more radical vision of moving away from agriculture entirely: “Our vision is to leapfrog traditional agriculture completely...A ‘Digital’ approach to food will set us free from the physical constraints of agriculture... In our unconstrained future there are no limits to the thousands of different species we can draw upon” (Vow).

4. Support for the AP industry

Several factors have created a supportive environment for the emergence and growth of an AP industry in Australia including investments from domestic and foreign sources, partnerships with research groups and advocacy and lobbying on behalf of the industry.

4.1. Financial investments and partnerships

The Australian AP industry grew in 2019, with the launch of three new companies and several new plant-based products in restaurants and retailers, as well as received investment from both domestic and foreign sources (Figure 1).

Figure 1: 2019 AP company and product launches

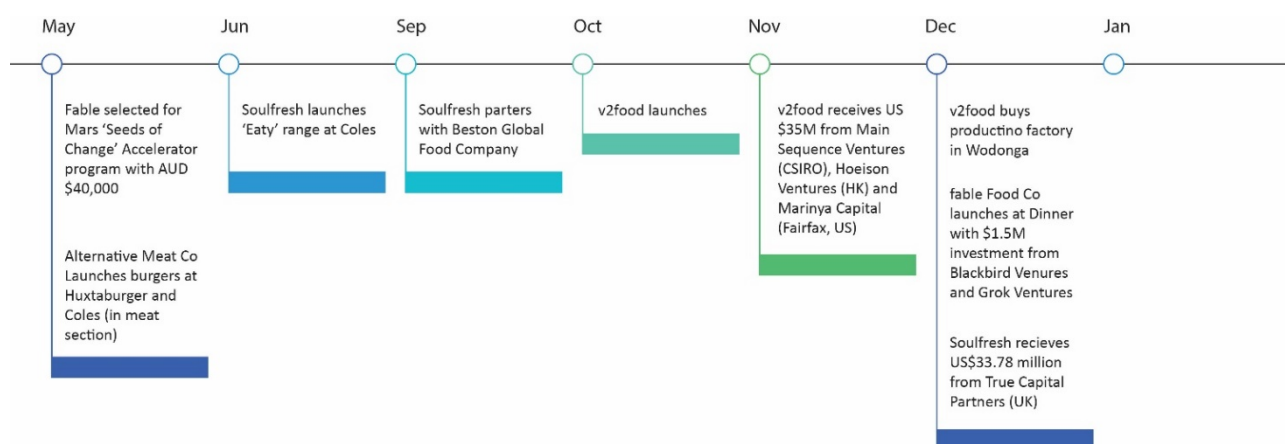


Table 4: Australian research groups working on AP

Organisation	Project
CSIRO	CSIRO partnered to start v2food; R&D to create pea protein; LCA (8)
University of Queensland	Qponics (an algae farming company) is an affiliate company with the Algae Biotechnology Group at the School of Agriculture and Food Sciences at UQ (co-founder and Chief Scientific Officer Prof Peer Schenk is the lab head, the chief technical officer is a visiting scholar at the lab. Qponics announced in September that it would supply the AP ingredient industry with its high protein bioproducts (9, 10).
University of Queensland	UQ researchers have partnered with Motif FoodWorks (US) for in-vitro analysis of oral processing to improve the texture of APs with an explicitly commercial focus (11)
University of Technology Sydney	University of Technology Sydney researchers have founded Vow Meats, working on lab-grown kangaroo meat (12). They make the claim that lab-grown meat can democratise choice: “We’re interested in exploring and bioprospecting a whole vast array of different animal sources, to understand what are the best flavours, the best nutrition profiles, and the best food experiences that are out there” (9)
University of Melbourne	<u>Future Food Hallmark Research Initiative</u>

4.2. Advocacy

The loudest supporting voice is the think tank Food Frontier, who advises AP companies and investors as well as governments. Food Frontier discusses the environmental and health cases for APs but focuses more on the business case for APs (including their integration into the existing Australian food industry). Food Frontier has published several reports analysing the economic potential for an Australian AP industry (13-16). Three key themes are:

- Opportunities for export:** Food Frontier notes that both Australia and New Zealand are “well-placed” to export to Asia because of their free trade agreements (17). The organisation used this as part of its engagement strategy with US-based Memphis Meats (cell-culture AP) to persuade them to come to Australia (13). MLA has also noted the export focus for APs and refers to this as a potential avenue for peaceful cohabitation of the two industries (AP and conventional meat). AP companies (e.g. v2foods

(18)) also refer to opportunities for export, however this is often couched in the terms of “feeding the world” (19).

- **Jobs and growth:** “A diversified protein sector offers Australia new industrial opportunities and job creation across a variety of fields” (15)
- **Cooperative opportunities with “conventional” agriculture:** the Food Frontier reports highlight opportunities for partnerships with the domestic horticultural/crop sector that produces AP ingredients (e.g. legumes and grains), also with biotechnology, digital ag (14, 15).

5. Critics of Alternative Proteins

The Australian meat industry (especially the livestock and red meat industry) have had a mixed response thus far. Meat and Livestock Australia (MLA) and the Red Meat Advisory Council (RMAC) speak about the risks and opportunities that a growing AP industry presents to the Australian meat and livestock industry.

Alternative proteins came onto MLA’s agenda in 2018, featuring in their *State of the Industry* report, which questioned whether rising demand for meat in the developing world provided challenges for the AP industry (20). However, in its 2019 report the organisation had shifted its position, discussing the potential for APs to address global food security, noting the “demand for protein is growing significantly and traditional production will need to be supplemented by non-animal based sources” (21).

MLA and RCMA noted that cell-cultured APs were not currently a threat, and there was an opportunity to differentiate with claims about “naturalness”(21, 22). MLA spokesperson noted “If you look at research, it (non-meat “meat”) doesn’t appeal to most people (and) it goes against the trends we are observing around the world towards natural, whole foods. This is heavily processed food”(22). Similarly, MLA noted that lab meat “asks consumers to accept not a substitute, but an artificial replication”(23). MLA argued that standards of identity (e.g. use of the term “beef” or “meat” to describe APs) were a more “pressing threat” posed by plant-based APs (20, 21). This suggests that the debate over the relative benefits of APs versus animal meats may play out on product labels and in marketing campaigns.

MLA noted that it was important that industry controls the messages and reporting on sustainability (for example via its [Good Meat](#) website) to ensure that they were not “imposed” on the industry (24). An interesting development to watch is the ongoing review and proposed restructuring/unifying of the existing red meat industry associations (25). The Green and White papers both noted that several issues (including APs) have challenged the industry’s “clean and green” credentials and social license to operate (25, 26). One of the Green Paper’s proposals was to rebrand as Food Protein Australia (26). Interestingly, AP ingredient supplier Qponics (producing algae by-products) questions the sustainability of some of the supply chains underpinning plant-based proteins, asking whether “producing more and more soybeans for sustainable meat is really going to solve the sustainability problem” (9).

More direct opposition to the AP industry has come from associations representing farmers and ranchers, for instance the Cattle Council of Australia (23), Australian Farmers (27), and Australian Dairy Farmers, who have

an petition to Ministers McKenzie and Colbeck about [Truth in Food Labelling](#). The campaign argues that “we support choice, we just want honest labelling” (27).

In addition to push back from the meat and livestock sectors, APs also face criticism from nutritionists who claim that APs (especially plant-based burgers) are highly processed foods (28-30). This line of argument is also promoted by right-wing think tank Center for Consumer Freedom in the US (31), which has developed a website ([CleanFoodFacts.com](#)) to promote this message. Thus far, this debate has primarily played out in the United States.

6. Governance issues

FIAL’s 2019 report noted that governance could drive or constrain adoption of APs, such as through dietary guidelines, regulation of biotechnology or pricing carbon emissions, water, and other resources (32). The report proposed actions for the Australian government to explicitly enable the AP industry: R&D funding, grants and tax incentives, as well as ensuring that standards of identity “ensure a level playing field for new food products and market entrants” (32).

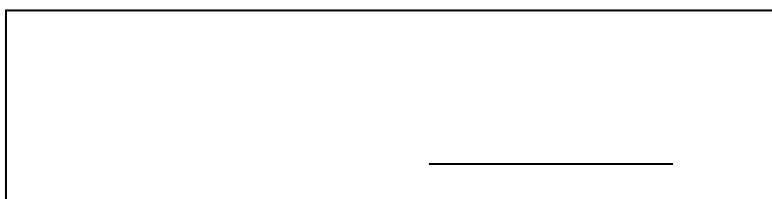
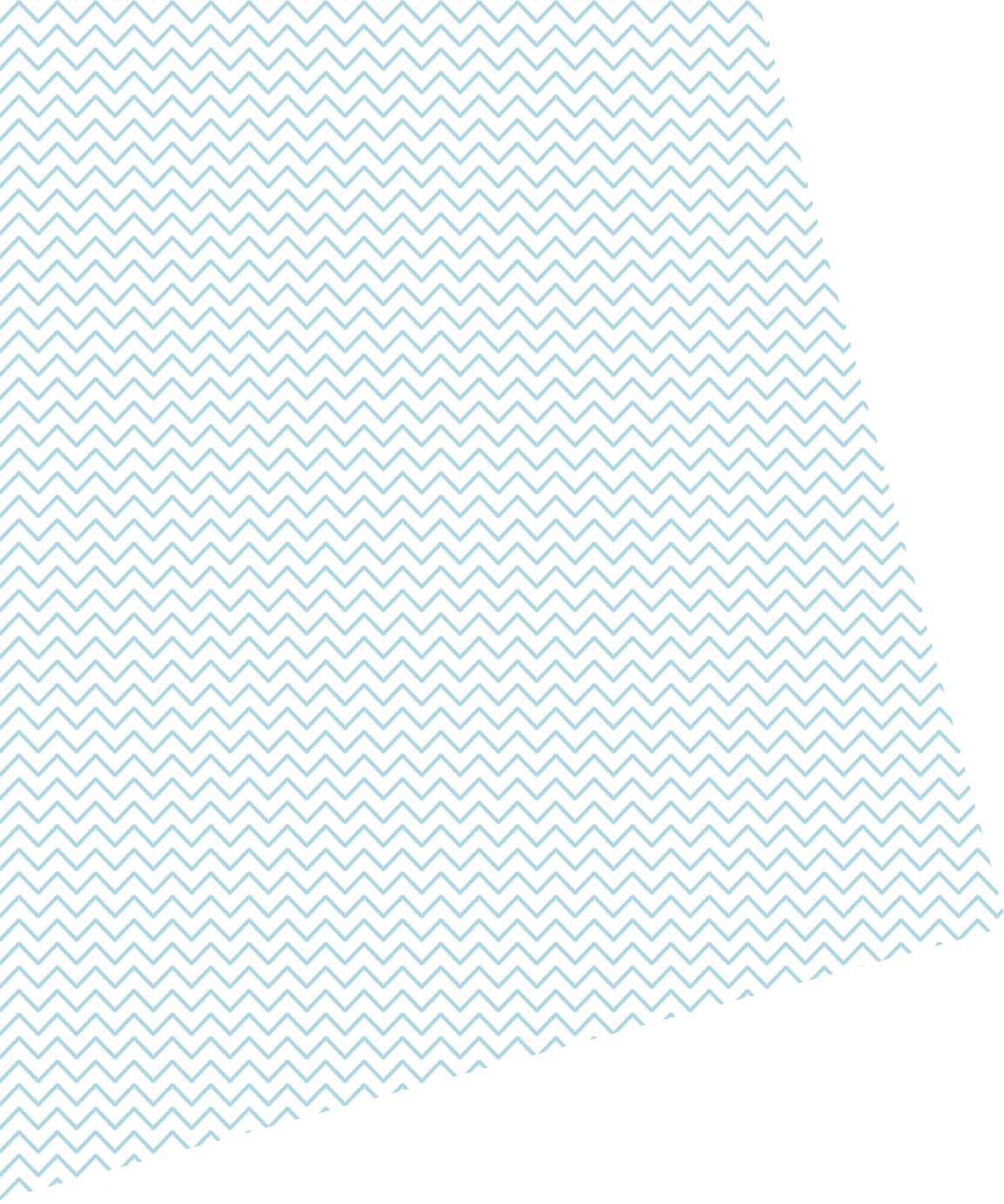
Thus far, most of the debate in Australia has focused on labelling, specifically the use of milk, meat, chicken or other terms to refer to APs. In 2018, the Ministerial Forum on Food Regulation considered an item on “misleading descriptions for food” (including dairy and meat) and requested that the Food Regulation Standing Committee develop an options paper. Food Frontier presented to the Forum in 2019. The Forum’s most recent communique (November 2019), noted plans to develop a policy guideline to “adequately differentiate ‘synthetic’ animal products from their natural or conventional equivalents”(33).

In September 2019, FSANZ added a section on “[Cell-based meat](#)” under food issues. This discusses possible standards needed for cell-based meats and notes that while Australia does not yet have permissions or requirements, the US, EU, Israel, China, Japan, the Netherlands and Singapore are in the process of developing regulatory frameworks.

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Appendix A

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Appendix A: Company details

Appendix A: Company details

Some companies do not have a website or disclose their location

Company/brand	Sector	Location	Owner	Website
Coco & Lucas Kitchen	Plant-based	Condell Park, NSW		https://www.cocoandlucas.com.au/
Fable Food	Plant-based	Sunshine Coast, QLD		https://fablefood.co/
Farm Foods Australia	Plant-based	Breakwater, VIC		https://www.farmfoods.com.au/nextgen2/
Harvest Gourmet	Plant-based		Nestlé	https://www.harvestgourmet.com.au
Herb and Sons	Plant-based		Coles	n/a
Heuros	Cell-culture	Brisbane, QLD		https://www.heuros.com/
Made with Plants	Plant-based	Double Bay, NSW		https://www.madewithplants.com.au/
Next!	Plant-based			https://www.futurefarmco.com/next-plant-based-meat
PlantAsia	Plant-based	Double Bay, NSW		https://www.plantasia.com.au/
Qponics	Algae	Eight Mile Plains, QLD		https://qponics.com/
Soulfresh	Plant-based	Laverton North, VIC		http://eatynomeaty.com/
The Alternative Meat Co	Plant-based	Berkeley Vale, NSW	Life Health Foods Australia	https://altmeatco.com/
Unreal Co.	Plant-based	Croydon, VIC		https://unrealco.com.au
v2 food	Plant-based	Sydney, NSW		https://www.v2food.com/
Veef	Plant-based	Kuluin, QLD	Fënn Foods	https://veef.com.au/
Vow	Cell-culture	Sydney, NSW		https://www.vowfood.com/



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Appendix B: Products and ingredients






Appendix B: Products and ingredients





Some companies do not publicly disclose their ingredients.





Company	Product	Category	Ingredients	Primary protein source	Product Image
Coco & Lucas Kitchen	Meatless cottage pie	Beef mince	plant based beef mince (20%) [water, wheat protein, wheat flour (gluten), soy protein (soy), corn starch, vegetable oil, thickener (461, 500), yeast extract, sugar, dehydrated vegetables (mushroom, onion), salt, red beet extract, spices (pepper, ginger), fruit extract, malt extract (gluten), natural flavourings, acidity regulator (300)]	Wheat	
Coco & Lucas Kitchen	Spaghetti Vegie-nese	Beef mince	plant based beef mince (20%) [water, wheat protein, wheat flour (gluten), soy protein (soy), corn starch, vegetable oil, thickener (461, 500), yeast extract, sugar, dehydrated vegetables (mushroom, onion), salt, red beet extract, spices (pepper, ginger, nutmeg), fruit extract, malt extract (gluten), natural flavourings, acidity regulator (300)]	Wheat	
Coco & Lucas Kitchen	beefless patties, sweet potato mash & veggies	Beef patty	plant based beef patties (28%) [water, wheat protein, wheat flour (gluten), soy protein (soy), vegetable oil, yeast extract, thickener (461), salt, sugar, dehydrated vegetables (mushroom, onion), salt, red beet extract, spices (pepper, ginger), fruit extract, malt extract (gluten), natural smoke flavouring]	Wheat	
Coco & Lucas Kitchen	Butter Chickenless & Basmati Rice	Chicken pieces	plant based chicken (20%) [water, wheat protein, wheat flour, wheat gluten, wheat starch (gluten), soy protein (soy), vegetable oil, Rice Flour, thickener (461), salt, yeast extract, sugar, dried onion]	Wheat	





Coco & Lucas Kitchen	Chickenless rendang & jasmine rice	Chicken pieces	plant based chicken (20%) [water, wheat protein, wheat flour, wheat gluten, wheat starch (gluten), soy protein (soy), vegetable oil, Rice Flour, thickener (461), salt, yeast extract, sugar, dried onion]	Wheat	
Fable	Fable	Braised meat	Mushroom (65%), Coconut Oil, Isolated Soy Protein (non GMO), Sugar, Modified Tapioca Starch, Gluten free Soy Sauce, Yeast Extract, Salt, White Pepper, Black Pepper	Mushroom, soy	
Farm Foods Australia	Simply Better Foods plant-based mince	Beef mince	Rehydrated Pea Textured Protein, Water, Vegetable Oil, Starches (Potato, Tapioca), Fibre, Dehydrated Vegetables (Garlic, Beetroot), Thickener (Methylcellulose), Carrageenan, Yeast Extract, Natural Flavours, Pepper, Salt, Burnt Sugar (150a).	Pea	
Farm Foods Australia	Next Gen2	Beef patty	Rehydrated Pea Textured Protein, Water, Oils (Coconut, Vegetable), Potato Starch, Thickeners (461,407), Maltodextrin, Plant Fibre, Pea Protein, Natural Flavours (Maize, Onion), Yeast Extract, Dehydrated Vegetables (Beetroot), Burnt Sugar (150a), Salt, Sunflower Oil.	Pea	
Farm Foods Australia	Simply Better Foods plant-based burgers	Beef patty	Rehydrated Pea Textured Protein, Water, Oils (Coconut & Vegetable), Potato Starch, Thickeners (461, 407), Maltodextrin, Plant Fibre, Pea Protein, Natural Flavours (Maize, Onion), Yeast Extract, Dehydrated Vegetables (Beetroot), Burnt Sugar (150a), Salt, Sunflower Oil, Vitamin E.	Pea	






Harvest Gourmet	Incredible Burger	Beef patty	Water, Soy Protein (18.5%), Vegetable Oils, Wheat Gluten, Flavours, Stabilizer (Methylcellulose), Vinegar, Vegetable Concentrates (Beetroot, Carrot, Red Capsicum), Garlic, Salt, Malt Extract (Barley), Black Pepper, Spirulina (Concentrate).	Soy	
Herb and Sons	Beef-Free Mince	Beef mince			
Herb and Sons	Beef-Free Chevaps	Beef sausage			
Herb and Sons	Beef-Free Sausages	Beef sausage	water, plant protein (soy, pea), canola oil, coconut oil, flavour (natural flavouring, salt, sugar, yeast and yeast extract, vegetable powder, beetroot powder, spices, herbs and spive xract), thickenr (451, 401), preservative (234)	Soy, pea	
Herb and Sons	Chicken-Free Schnitzel	Chicken (breaded)			






Herb and Sons	Chicken-Free Garlic Balls	Chicken balls			
Herb and Sons	Chicken-Free Kiev	Chicken kiev			
Herb and Sons	Chicken-Free Nuggets	Chicken nuggets			
Herb and Sons	Pork-Free Bratwurst	Pork sausage			
Made With Plants	Meatballs & mash	Beef meatballs	Mashed Potato & Cabbage (43%) [Potato (28%), Soy Milk (Filtered Water, Soy Protein, Corn Maltodextrin, Vegetable Oils, Sugar, Minerals (Calcium, Phosphorus, Magnesium), Acidity Regulators (332, 450), Antioxidant (300), Vitamins (B12, D2, A, B2, B1), Natural Flavour), Coconut Cream, Cabbage (4%), Salt], Mushroom Sauce (34%) [Water, Mushrooms (8%), Coconut Cream, Onion, Tapioca Flour, Red Wine, Dijon Mustard, Canola Oil, Garlic, Yeast Extract, Umami Liquid, Salt, Pepper, Parsley], Plant-based Meatballs (23%) [Plant-Based Mince	Soy	

			(Water, Textured Vegetable Protein (Soy Flour, Colour (Caramel I)), Vegetable Oil, Yeast Extract, Thickener (Methylcellulose), Stabiliser (Guar Gum), Corn Starch, Salt, Spices]		
Made With Plants	Chilli non carne	Beef mince	Chilli Non Carne Sauce (57%) [Plant-Based Mince (17%) (Water, Textured Vegetable Protein (Soy Flour, Colour (Caramel I)), Vegetable Oil, Yeast Extract, Thickener (Methylcellulose), Stabiliser (Guar Gum) Salt, Spices), Water, Red Kidney Beans, Diced Tomatoes (Tomatoes, Acidity Regulators (330, 509)), Red Capsicum, Tomato Paste (Acidity Regulators (330)), Onion, Red Wine Vinegar, Spices, Canola Oil, Celery, Chipotle Pepper in Adobe Sauce, Garlic, Coriander, Salt, Tapioca Flour], Rice (43%) [Rice, Water, Rice Bran Oil]	Soy	
Made With Plants	Stroganoff	Beef pieces	Pilaf Rice (51%) [Rice, Water, Canola Oil, Salt, Spices], Stroganoff (49%) [Plant-Based Strips (17%) (Water, Wheat Gluten, Canola Oil, Yeast Extract, Liquid Smoke, Stabiliser (Guar Gum), Salt, Spices), Mushrooms (7%), Water, Soy Milk, Coconut Cream, Onion, Tomato Paste, Dijon Mustard, Tapioca Flour, Canola Oil, Herbs, Spices, Umami Liquid, Yeast Extract, Red Wine, Salt, Worcestershire Sauce Powder]	Wheat gluten	
Made With Plants	Katsu curry	Chicken (breaded)	Plant-based Butter Chicken (54%) [Plant-Based Mince (20%) (Water, Textured Soy Protein, Canola Oil, Cocoa Butter, Yeast Extract, Thickener (Methylcellulose), Stabiliser (Guar Gum) Salt, Spices), Coconut Cream (8%) (Coconut Extract, Water, Stabiliser (Guar Gum)), Diced Tomatoes (7%) (Tomatoes, Acidity Regulators (330, 509)), Tomato Paste (Acidity Regulator (330)), Water, Onion, Tapioca Flour, Canola Oil, Herbs, Spices), Salt], Rice (46%) [Rice, Water, Rice Bran Oil]	Soy	
Made With Plants	Butter chicken	Chicken pieces	Plant-based Butter Chicken (54%) [Plant-Based Mince (20%) (Water, Textured Soy Protein, Canola Oil, Cocoa Butter, Yeast Extract, Thickener (Methylcellulose), Stabiliser (Guar Gum) Salt, Spices), Coconut Cream (8%) (Coconut Extract, Water, Stabiliser (Guar Gum)), Diced Tomatoes (7%) (Tomatoes, Acidity Regulators (330, 509)), Tomato Paste (Acidity Regulator (330)), Water, Onion, Tapioca Flour, Canola Oil, Herbs, Spices), Salt], Rice (46%) [Rice, Water, Rice Bran Oil]	Soy	

Made With Plants	Thai green curry	Chicken pieces	Rice (43%) [Rice, Water, Rice Bran Oil], Thai Green Curry (40%) [Water, Plant-Based Mince (11%) (Water, Textured Soy Protein, Canola Oil, Cocoa Butter, Yeast Extract, Thickener (Methylcellulose), Stabiliser (Guar Gum), Salt, Spices), Coconut Cream, Onion, Green Capsicum, Sugar, Green Curry Paste (1%), Lime Juice, Canola Oil, Umami Liquid, Herbs & Spices, Tapioca Flour, Salt], Vegetables (17%) (Green Beans, Bamboo Shoots (Acidity Regulator (330)), Capsicum)	Soy	
Made With Plants	Meatloaf	Beef mince	Plant-based Meatloaf (80%) [Water, Textured Soy Protein (25%) (Defatted Soy Flour, Colour (Caramel I), Defatted Canola Oil, Cocoa Butter, Yeast Extract, Potato, Mushroom, Leak, Tomato, Thickener (Methylcellulose), Stabiliser (Guar Gum), Corn Starch, Salt, Spices)], Glaze (20%) [Concentrated Tomatoes (contains 181g of tomatoes per 100ml), Sugar, Water, Salt, Thickeners (Cornflour (from Wheat), Pectin), Food Acids (Acetic, Citric), Glucose Syrup, Colour (Caramel III), Concentrated Vinegar, Naturally Brewed Cider Vinegar, Tamarind Paste, Yeast Extract, Apple Extract, Clove, Nutmeg, Onion, Pepper, Garlic, Spice & Herb Extracts, Spices]	Soy	
Next!	Bacon Style Strips	Bacon	Water, Soy-bean Oil, Non-GMO Textured Soy Protein (Non-GMO Soy Protein Isolated, Wheat Starch, Wheat Protein, Calcium Carbonate, Calcium Sulfate), Non-GMO Soy Protein Isolate, Modified Starch (Acetylated Distarch Phosphate), Salt, Yeast Extract, Sugar, Vegetable Extract (Pea Extract, Carrot Extract), Flavors (Soy-bean Oil, Medium Chain Triglycerides, Water, Flavoring Substances, Rapeseed Oil, Maltodextrin, Starch Sodium Octenyl Succinate, Smoke Flavoring, Silicon Dioxide), Hydrolyzed Vegetable Protein, Protease (Maltodextrin, Transglutaminase), White Pepper, Colorant (Calcium Carbonate, Calcium Sulfate, FD&C red 40).	Soy	
Next!	Chick'n chunks lightly seasoned	Chicken pieces	Water, 27% soya protein concentrate, sunflower oil, salt, flavoring, spices, vinegar, acid (lactic acid).	Soy	


Next!	Chick'n chunks original	Chicken pieces	Water, 27% soya protein concentrate, sunflower oil, salt, flavoring, spices, vinegar, acid (lactic acid).	Soy	
PlantAsia	Roast Duck	Duck pieces	Wheat Protein (Gluten), Vegetable Oil, Vegetarian Seasonings, Dark Soy Sauce, Light Soy Sauce, Sugar, Salt.	Wheat	
PlantAsia	Roast Pork	Pork pieces	Wheat Protein (Gluten), Vegetable Seasonings, Sugar, Salt, Permitted Food Colouring (E102)	Wheat	
PlantAsia	Prawns	Prawns	Konjac, Salt, Sugar, Vegetarian Seasonings, Curdlan (5%), Permitted Colouring (E160c)	Konjac	

Soulfresh	Italian beef meatballs	Beef meatballs			
Soulfresh	Gourmet beef burgers	Beef mince			
Soulfresh	Gourmet beef snags	Beef sausage			
Soulfresh	Peanut-free chicken satay	Chicken pieces		Wheat, pea	
Soulfresh	Sticky chicken teriyaki	Chicken pieces			

Soulfresh	Thai green chicken curry	Chicken pieces			
Soulfresh	Gourmet chicken snags	Chicken sausage			
Soulfresh	Gourmet pork snags	Pork sausage			
Soulfresh	Smokey pulled pork	Pulled pork			
The Alternative Meat Co	The Alternative Mince	Beef mince	Water, Vegetable Protein (29%) (Soy, Wheat , Pea), Vegetable Oil, Stock Powder, Pea Fibre, Tapioca Starch, Vegetable Gums (Xanthan, Carrageenan, Guar), Thickener (Methyl Cellulose), Natural Colours (Beet, Caramel I, Paprika Extract), Salt, Parsley, Pepper, Natural Flavour, Vegetable Extract.	Soy, wheat, pea	

The Alternative Meat Co	The Alternative Burger	Beef patty	Water, Vegetable Protein (25%) (Soy, Wheat, Pea), Vegetable Oil, Stock Powder, Pea Fibre, Thickener (Methyl Cellulose), Natural Colours (Beet, Caramel I, Paprika), Natural Flavours, Salt, Herbs and Spices (Pepper), Vegetable Extract.	Soy, wheat, pea	
The Alternative Meat Co	The Alternative Sausage	Beef sausage	Water, Vegetable Protein (19%)(Soy, Wheat, Pea), Vegetable Oil, Casing (Calcium Alginate), Sautéed Onions, Thickeners (Methyl Cellulose, Guar Gum, Xanthan Gum, Carrageenan Gum), Stock Powder, Pea Fibre, Tapioca Starch, Herbs and Spices (Pepper), Natural Colours (Beet, Caramel I, Paprika Extract), Natural Flavours ,Salt, Vegetable Extract.	Soy, wheat, pea	
Unreal Co.	Meaty mix savoury grill	Beef mince	Protein [Soy, Rice], Fibre [Bamboo, Methylcellulose], Herbs and Spices [Salt, Garlic, Onion, Cacao, Fenugreek seeds, Chilli, White Pepper], Potato Starch, Natural Yeast Extract, Natural Vegan Beef Flavour, Maltodextrin, Sugar	Soy, rice	
Unreal Co.	Italian beefy	Beef patty	Water, Protein [Soy, Rice, Pea], Herbs & Spices 14% [Onion, Salt, Garlic, Paprika, Thyme, Chives, Oregano, Cinnamon, Parsley, Pepper], Fat [Canola, Coconut], Starch [Corn, Tapioca, Potato], Vegan Egg Replacer [Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar]], Fermented Rice Powder, Vegan Beef Flavour, Colour [Beet], Citric Acid, Potassium Sorbate	Soy, rice, pea	
Unreal Co.	Mighty cheesy	Beef patty	Water, Protein [Soy, Rice, Pea], Vegan Cheese [Water, Coconut Oil, Modified Potato Starch, Sea Salt, Modified Tapioca Starch, Vegan Flavour, Sorbic Acid, B-Carotene], Fat [Canola, Coconut], Starch [Corn, Tapioca, Potato], Nutritional Yeast, Chickpeas, Flavours [Salt, Garlic, Onion, Paprika, Oregano, Cinnamon, Parsley, Pepper, Fermented Rice Powder, Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar], Colours [Beet]	Soy, rice, pea	

Unreal Co.	Mighty italian	Beef patty	Water, Flavours [Onion, Salt, Garlic, Paprika, Thyme, Chives, Oregano, Cinnamon, Parsley, Pepper], Protein [Soy, Rice, Pea], Fat [Canola, Coconut], Starch [Corn, Tapioca, Potato], Nutritional Yeast, Chickpeas, Fermented Rice Powder, Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar], Colour [Beet	Soy, rice, pea	
Unreal Co.	Mighty original	Beef patty	Water, Protein [Soy, Rice, Pea], Fat [Canola, Coconut], Starch [Corn, Tapioca, Potato], Nutritional Yeast, Chickpeas, Flavours [Salt, Garlic, Onion, Paprika, Oregano, Cinnamon, Parsley, Pepper], Fermented Rice Powder, Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar], Colours [Beet]	Soy, rice, pea	
Unreal Co.	Chick'n schnitzel	Chicken (breaded)	Water, Protein [Soy, Pea, Rice], Starches [Corn, Potato, Rice], Fats [Canola, Coconut], Vegan Chicken Flavoring, Sugar, Vegan Egg Replacer [Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar]], Fermented Rice, Nutritional Yeast, Herbs and Spices [Black Salt, Smoked Paprika, Black Pepper, Sage, All Spice, Basil, Oregano, Saffron], Citric Acid, Potassium Sorbate	Soy, pea rice	
Unreal Co.	Meaty Mix gently seasoned	Chicken mince	Protein [Soy, Rice], Fibre [Bamboo, Methylcellulose], Potato Starch, Natural Yeast Extract, Natural Vegan Chicken Flavour, Maltodextrin, Salt	Soy, rice	
Unreal Co.	Chick'n nuggets	Chicken nuggets	Water, Protein [Soy, Pea, Rice], Starches [Corn, Potato, Rice], Fats [Canola, Coconut], Vegan Chicken Flavoring, Sugar, Vegan Egg Replacer [Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar]], Fermented Rice, Nutritional Yeast, Herbs and Spices [Black Salt, Smoked Paprika, Black Pepper, Sage, All Spice, Basil, Oregano, Saffron], Citric Acid, Potassium Sorbate	Soy, pea rice	

Unreal Co.	Chick'n burger	Chicken patty	Water, Protein [Soy , Pea, Rice], Starches [Corn, Potato, Rice], Fats [Canola, Coconut], Vegan Chicken Flavoring, Sugar, Vegan Egg Replacer [Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar]], Fermented Rice, Nutritional Yeast, Herbs and Spices [Black Salt, Smoked Paprika, Black Pepper, Sage, All Spice, Basil, Oregano, Saffron], Citric Acid, Potassium Sorbate	Soy, pea rice	
Unreal Co.	Chick'n sliders	Chicken patty	Water, Protein [Soy , Rice], Starches [Potato, Rice], Fats [Canola], Vegan Chicken Flavoring, Sugar, Vegan Egg Replacer, Nutritional Yeast, Herbs and Spices, Citric Acid, Potassium Sorbate	Soy, rice	
Unreal Co.	Chick'n pieces	Chicken pieces	Water, Protein [Soy , Pea, Rice], Starches [Corn, Potato, Rice], Fats [Canola, Coconut], Vegan Chicken Flavoring, Sugar, Vegan Egg Replacer [Maltodextrin, Fibre [Bamboo, Methylcellulose], Gums [Xanthan, Guar]], Fermented Rice, Nutritional Yeast, Herbs and Spices [Black Salt, Smoked Paprika, Black Pepper, Sage, All Spice, Basil, Oregano, Saffron], Citric Acid, Potassium Sorbate	Soy, pea rice	
v2food	Rebel Whopper	Beef patty	Rebel Patty (Water, Soy Protein, Vegetable Oil, Thickeners (461, 1442) Flavours (Including Glutamic Acid (620)), Dextrose, Caramel Colour (150c), Antioxidants (300, 307), Smoke Flavour) [1]	Soy	
Veef	Veef smoky BBQ	Beef patty	Water, Textured Vegetable Protein (25%) (Defatted Soy Flour, Caramel Colour 150A), Canola Oil, Cocoa Butter, Yeast Extract, Thickener (Methylcellulose), Smoked Flavour, Salt, Stabiliser (Guar Gum) and Spices.	Soy	



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Appendix C: Claimed benefits of Alternative Proteins (companies)

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Claimed benefits by company

Themes	Conventional meat	Environment	Nutrition	Animal welfare	Food security	Taste	Economic	Natural	Disruption
Coco & Lucas Kitchen	X		X [#]	X			X	X [%]	X
Fable Food	X	X	X	X		X		X	X
Farm Foods Australia		X		X		X	X ^S	X	X
Harvest Gourmet			X			X	X	X	X
Herb and Sons			X [#]				X		
Heuros							X	X	
Made with Plants		X [*]	X	X		X	X	X	X
Next!			X			X			
PlantAsia		X [*]	X	X		X	X	X	X
Qponics	X	X	X		X		X		
Soulfresh		X	X	X		X	X	X	
The Alternative Meat Co	X	X	X	X		X	X		X
Unreal Co.		X	X	X			X	X	X
v2food	X	X	X		X	X		X	X
Veef				X		X	X	X	
Vow	X	X	X	X	X	X	X	X	X

Conventional Meat

Stakeholder	Conventional Meat
Coco & Lucas Kitchen	After learning about the impacts of systemised agriculture and factory farming on health, the environment and animals, I felt compelled to make some adjustments.
Fable Food	the challenge is, there are some major issues with how we produce and consume meat today. For us, this comes before the reckless pursuit of profit. Our goal is for our products to be the most responsible plant based meat products available and we're continually looking for ways to make our products even better....our intentions are pure and we will work hard to get there
Farm Foods Australia	
Harvest Gourmet	
Herb and Sons	
Heuros	
Made with Plants	
Next!	
PlantAsia	
Qponics	The United Nations predicts that by 2050 the world's population will reach 9.8 billion, consuming 50% more protein than today. Animal production has increased four to five-fold since 1961 to meet the ever-increasing demand for protein, but at least 45% of the world's 14 million square kilometres of agricultural land is already used for livestock feed production.
Soulfresh	
The Alternative Meat Co	global green house gas emissions 51% due to livestock and their by product 13% due to transport (road, rail, air & marine) Australian land mass 57% used to graze beef, sheep & Dairy 3.5% used to grow plan foods [https://www.veganaustralia.org.au/impact_of_a_vegan_agricultural_system_on_land_use] 1 beef burger = 2,500 litres water = equivalent to showering for 2 months [http://www.earthsavve.org/environment/water.htm] there is no planet B
Unreal Co.	

v2food	<p>Animal agriculture is a leading cause of deforestation, land degradation, biodiversity loss, and habitat destruction worldwide, and the conventional farming of livestock is responsible for an estimated 14% of all human-induced greenhouse gas emissions, with beef being particularly carbon-intensive (Food Frontier).</p> <p>if we were to keep eating meat at current rates, the Eat Lancet report predicts we'd need another whole planet to grow the animals necessary to meet this demand when the world's population hits 10 billion in 2050. So we're facing a future in which billions of people are going to need sustainable, nutritious meat to eat, but we're not going to be able to do this with animals alone. v2 exists to give the planet a way to get that meaty taste we love from plants rather than animals.</p>
Veef	
Vow	<p>There's heat and passion over animals, monoculture, intensive farming and the industry we've created that bends nature to our hungry will. These are all symptoms of an 'Analog' approach. These anxieties are perfectly justified but won't go away until we tackle the root cause. Our desires, tastes, aspirations and demands for food are simply too much for this planet's constraints.</p>

Environment

Stakeholder	Environmental
Coco & Lucas Kitchen	
Fable Food	sustainable We'll provide maximum nutritional value and minimal environmental impact. Feel-good Ingredients
Farm Foods Australia	Our delicious range of plant-based mince and burgers provide that alternative whilst replicating the taste and texture of meat products whilst being more environmentally sustainable.
Harvest Gourmet	
Herb and Sons	
Heuros	
Made with Plants	The boxes for our ready-meals and meat-free Meat Loaf are made from cardboard, which can be recycled. Our products are heat-sealed in a serving tray to ensure the best possible freshness – but we're always on the lookout for ways to make our products more sustainable! Our team is committed to continually enhancing our business practices, to ensure our products are sustainable and ethically sourced.
Next!	
PlantAsia	The boxes for our plant-based proteins are made from cardboard, which can be recycled. Our products are vacuum-sealed to ensure the best possible freshness – but we're always on the lookout for ways to make our products more sustainable!
Qponics	While increasing availability of plant-based meat alternatives may provide some respite on demand for animal meat products, it increases demand for protein sourced from terrestrial crops. Marine microalgae and macroalgae assimilate carbon dioxide using the sun's energy, generate 50% of the planet's oxygen and are at the base of marine food webs. They grow faster and offer significantly higher annual protein yields per hectare than terrestrial crops such as soybean, pulse legumes, and wheat. Marine algae do not require freshwater or existing arable land to be commercially farmed, preserving resources required for conventional food crops. drought-proof farm Marine microalgae farming has huge potential in plant-based alternative protein production. These microscopic plant-like cells produce

	vegetarian protein at more than 20 times the annual productivity per hectare of soybeans and chickpeas, without the need for freshwater. [4]
Soulfresh	We have created an entirely new, nutritious, low-impact, planet-friendly, animal-free BBQ classics and Ready-to-Eat Meals range that can do everything meat does but much better – because it ain't meat at all! We're about treading lightly upon the planet while still giving you something that is amazingly close to actual meat.
The Alternative Meat Co	Environmentally friendly
Unreal Co.	The company was founded on the principles of compassion and sustainability Compassion: Towards animals, the environment, the needs of our customers and their families. Why so much bloody plastic in your packaging? All current Unreal Co. products are packaging in plastic, and we agree that we could do a lot more to benefit our environment. However, since launching the Chick'n Range into our product family, we have switched our plastic trays to Polypropylene #5, which is a food-safe plastic that is more easy to recycle. The product's label is made from cardstock, which is also a fully recyclable material. This leaves us to the plastic wrap. This unfortunately cannot be degraded or recycled, but we are looking into packaging methods that will not require this form of wrapping. Since all Unreal Co. products are chilled or frozen, there are even less alternatives to choose from. So, Unreal Co. packaging is over 99% recyclable by volume, but it is not yet degradable. Rest assured that we are in the process of researching fully degradable packaging options, so we'll share an update when we find the right solution.
v2food	sustainable revitalised soil, reduced footprint, sustainable land use We're on a mission to feed our planet in a way that takes care of our planet. Food version 1 just isn't good enough. We need a version 2 for our own health and for the health of the planet. We're using the latest science from CSIRO to make plant-based food that tastes great and satisfies the needs of a rapidly growing global population. Environmental sustainability is a complex topic but we're committed to leading the charge towards sustainable nutrition. One of the most significant ways we can tackle the issue is by sequestering carbon from the atmosphere. When legumes are grown, they take carbon dioxide and nitrogen out of the atmosphere and can fix it into the soil. By consuming v2food products in place of animal meat products you are reducing your carbon footprint with every bite. Climate change is an enormously complex issue, and we're under no illusions that plant-based meat is the only solution for the challenges our world is facing. But it can make a significant difference. v2 is on a mission to support sustainable agriculture in the way we grow and make our products. Here's the main points: Legumes grow. These little powerhouses take carbon dioxide out of the atmosphere, put nutrients back in the soil, and release oxygen for us to breathe.

	<p>Win!</p> <p>“Food is the single strongest lever to optimize environmental sustainability on Earth.” That’s the opening line of the Eat Lancet Report on planetary health; penned by over 30 world-leading scientists. We didn’t skim-read it, we built a company around it.</p> <p>v2food is designed to fit perfectly on the EAT Lancet Planetary Health Plate (pictured on this page).</p>
Veef	
Vow	SUSTAINABLE FROM THE BEGINNING: Freeing ourselves from the constraints of old.

Nutrition

Stakeholder	Nutrition/health
Coco & Lucas Kitchen	[3.5 HSR logo]
Fable Food	<p>They stumbled upon a wise mushroom farmer who disclosed to them the ancient magic of the mushroom. Their incredible nutrition, their ability to cure disease, restore gut flora, and open minds, were just some of the extraordinary things they discovered.</p> <p>healthy mushrooms aren't just ridiculously tasty, they're incredibly nutritious too. They've been used in Chinese medicine for 1000's of years, and thankfully, the Western world has now caught up to the benefits of this amazing food.</p> <p>We'll provide maximum nutritional value and minimal environmental impact.</p>
Farm Foods Australia	
Harvest Gourmet	<p>Everything that goes into our Incredible Burger is about ensuring you get to enjoy a delicious and nutritious meat-free meal. The Harvest Gourmet Incredible Burger is made from plant proteins, soy and wheat helping deliver not only the juicy texture of meat but also a good source of protein and fibre.</p>
Herb and Sons	[1.5-3.5 HSR logos]
Heuros	
Made with Plants	<p>Source of fibre</p> <p>High protein</p> <p>Some of the biggest and strongest animals on Earth eat a 100% plant-based diet!</p> <p>Seitan is protein rich, while remaining low in carbohydrates, cholesterol and saturated fats. In fact, seitan can contain more protein per gram than animal-based meats!</p> <p>This plant-based ingredient is high in protein, low in fat and contains essential amino acids.</p> <p>Our products offer a good source of vital nutrients, including protein and dietary fibre. Our entire range of ready-made meals has achieved a health star rating of 3.5 stars.</p> <p>We're proud to offer Aussies a quality range of plant-based foods – all of which are high in PROTEIN. Like you, we enjoy a variety of tasty proteins in our diet, and we believe protein is an important part of Australia's food culture.</p>

Next!	<p>CHOLESTEROL FREE</p> <p>DAIRY FREE</p> <p>Next! plant-based meats are cholesterol free, low fat</p>
PlantAsia	<p>Good source of protein</p> <p>cholesterol free</p> <p>[4.5 HSR logo--Duck</p> <p>[4 HSR logo pork, prawns]</p> <p>Our products offer a good source of vital nutrients, including protein and dietary fibre. Our entire range of plant-based proteins has achieved a health star rating of 4.0+ stars. We encourage our customers to add their favourite vegetables and fresh ingredients, to enjoy a balanced and wholesome Asian-style meal.</p>
Qponics	<p>They [algae] can play a significant role in the provision of non-allergenic plant-based protein with balanced amino acid profiles. Furthermore, they evolved in harsh environments, often exposed to high oxidative and free-radical stresses, which has led to the development of natural protective systems, such as the production of pigments (e.g. carotenes, chlorophylls, and phycobiliproteins) and polyphenols (e.g., catechins, flavanols, and phlorotannins), which can impart health benefits to the consumer.</p>
Soulfresh	<p>Eaty has all the taste, texture and sizzle of meat, with none of the bad stuff like cholesterol - you won't believe it isn't meat!</p> <p>We have created an entirely new, nutritious, low-impact, planet-friendly, animal-free BBQ classics and Ready-to-Eat Meals range that can do everything meat does but much better – because it ain't meat at all!</p> <p>good source of protein</p> <p>cholesterol free</p> <p>It has all the taste, protein and iron of its meat equivalents with none of the bad stuff – like cholesterol (perfect for the Looking After My Health'atarians).</p> <p>Does Eaty have the same amount of protein as meat? For each of the Eaty BBQ Basics and Ready-to-Eat Meals you will find the products have the same protein and iron levels to their meat equivalents, so you can enjoy the same benefits!</p> <p>We then supplement it with iron and B12 to create a comparable nutritional profile of their meat equivalents, without the high levels of saturated fats.</p>
The Alternative Meat Co	<p>High plant protein</p> <p>healthy plant-based diet</p>

Unreal Co.	<p>The health of our customers comes first, always! Our products are designed to nourish adults and children alike.</p> <p>All products in the Unreal Co. Chick'n range are free from garlic, onion, leek, shallots, and chives....This makes the Chick'n range safe for low-fructose diets, and for our friends who's spirituality rules out these ingredients.</p>
v2food	<p>healthy</p> <p>We've worked hard to match the good things from meat (eg. iron, zinc, vitamin B12 and protein) and added good things like fibre from plants.</p> <p>good source of fibre, iron and protein, no cholesterol</p> <p>We've worked with CSIRO scientists to mimic both the taste and the nutrition of animal meat, but with added dietary fibre and no cholesterol. Our sodium content is part of the reason v2 tastes so good! As it currently stands, 100g of v2 mince represents less than 14% of your recommended daily intake for sodium.</p> <p>With the top scientists at CSIRO, we've developed v2 to be as nutritious as meat with added nutritional value from plants. That's why v2 has protein, iron and vitamin B12 just like animal meat but with a good dose of plant fibre, no cholesterol, and lower saturated fat than beef.</p> <p>The way we see it, we've been able to mimic the great qualities of meat - namely its great taste and high protein, iron and B vitamin content - while slashing cholesterol and adding in the goodness of dietary fibre. We're all about maximising the health of our customers and our planet.</p>
Veef	
Vow	<p>This library forms a repertoire of ingredients that we can use to create both exciting new exotic meats or blend multiple cell types to create better flavours, textures or nutritional profiles than any animal could.</p>

Animal welfare

Stakeholder	Animal welfare
Coco & Lucas Kitchen	After learning about the impacts of systemised agriculture and factory farming on health, the environment and animals, I felt compelled to make some adjustments.
Fable Food	A tasty story, with animals as characters, not dishes. Ethical This is why we produce delicious tasting meat without animals We'll produce meat alternatives that tastes like they're from animals, without harming the animals. Feel-good Ingredients
Farm Foods Australia	All of our plant-based products are certified by Vegan Australia Our range of products are made from plant-based ingredients that and do not contain gluten or soy, are non-GMO and are vegan friendly.
Harvest Gourmet	
Herb and Sons	
Heuros	
Made with Plants	At its heart, veganism is a harm reduction model. People who maintain a vegan lifestyle seek to eliminate, as far as practical, all forms of animal cruelty or exploitation. Made With Plants is proudly brought to you by a team of dedicated vegans.
Next!	
PlantAsia	At its heart, veganism is a harm reduction model. People who maintain a vegan lifestyle seek to eliminate, as far as practical, all forms of animal cruelty or exploitation.
Qponics	
Soulfresh	Vegan animal-free food
The Alternative Meat Co	Promoting animal welfare 1 single person could save 200 animals per year just by living on a plant-based diet [https://www.peta.org.au/news/how-many-animals-saved-vegan-2016/]

Unreal Co.	The company was founded on the principles of compassion and sustainability Compassion: Towards animals, the environment, the needs of our customers and their families. the company is staffed by a team of passionate vegans.
v2food	
Veef	without the added preservatives, gluten + cruelty free.
Vow	We take a small harmless sample from an animal

Food security

Stakeholder	Food security
Coco & Lucas Kitchen	
Fable Food	
Farm Foods Australia	
Harvest Gourmet	
Herb and Sons	
Heuros	
Made with Plants	
Next!	
PlantAsia	
Qponics	Unless significant changes in protein farming practices occur, the combination of population growth, insufficient arable land, increasing demand for plant-based protein and climate change will inevitably lead to an uncontrollable global protein deficiency before 2050.
Soulfresh	
The Alternative Meat Co	
Unreal Co.	Meaty Mix is ideal for long-term storage in your pantry, hiking bag, caravan, boat, or bunker!
v2food	<p>How can we feed 10 billion people with the resources of one earth? We realised we'd need a version 2 of food. That's the challenge that led to the inception of v2food.</p> <p>We're on a mission to feed our planet in a way that takes care of our planet.</p> <p>Why do we need plant-based meat? The world's population is growing and globally, we are eating more meat, and the version 1 of our food system will not be able to sustain the demands of 10 billion people in a way that takes care of our planet. We need a version 2 of the food system and our vision is to be part of that solution to feed our planet in a way that takes care of our planet.</p>

	<p>v2food is on a sustainability mission to feed a rapidly growing population with the resources of one planet. We believe we can achieve this goal with plant-based foods for all those who enjoy the great taste of meat. v2 is a way to get that awesome taste in a nutritious meal that's good for the planet.</p> <p>So we're facing a future in which billions of people are going to need sustainable, nutritious meat to eat, but we're not going to be able to do this with animals alone.</p> <p>We want to see a future where quality nutrition remains affordable and sustainable for all.</p>
Veef	
Vow	<p>At VOW, we are living into a future we see inevitable, post-scarcity, where a food system exists that requires no compromise to provide everyone on earth with delicious, highly nutritious food of the highest imaginable quality.</p>

Taste

Stakeholder	Taste
Coco & Lucas Kitchen	
Fable Food	<p>...amazing texture, umami flavours, and ability to make an incredible base for creating delicious, meaty food heavenly slow-cooked meat alternatives</p> <p>Meat is delicious. One of life's greatest pleasures is biting into a juicy burger or getting elbow deep into a tantalising bolognese, curry or stew. We get it.</p> <p>Umami meaty goodness sans meat.</p> <p>Mushrooms have the same natural umami flavours that help make meat so appealing.</p>
Farm Foods Australia	<p>Want a burger that satisfies like red meat but... isn't? The NextGen2 burger delivers all of the benefits of red meat without sacrificing on taste, texture or flavour.</p>
Harvest Gourmet	<p>Can't believe it's plant based! Whether you throw it on to your BBQ or into the pan, it sizzles and looks like the real deal. It sears beautifully outside, remaining juicy and tender inside.</p> <p>What is the Incredible Burger made from?</p> <p>Everything that goes into our Incredible Burger is about ensuring you get to enjoy a delicious and nutritious meat-free meal. The Harvest Gourmet Incredible Burger is made from plant proteins, soy and wheat helping deliver not only the juicy texture of meat but also a good source of protein and fibre. Our burger also contains natural plant extracts – beetroot, carrot, and capsicum – that help create the look of a beef burger before, during, and after cooking. The canola and chopped coconut oil tenderizes the burger for a rich taste and helps give the raw burger the realistic marbled fat appearance of raw beef mince. The garlic, vinegar, seasonings and natural flavours complement to provide a mouthwatering meaty taste. This really is a plant based burger that delivers on the taste and juicy texture of a meat burger whilst providing the nutritional benefits of plant based proteins.</p>
Herb and Sons	
Heuros	
Made with Plants	<p>You don't need to be a veteran vegan to enjoy Made With Plants, because it's based on the flavours that we all know and love That's why our chef has combined quality ingredients with the flavours and sensations of your favourite homestyle foods.</p> <p>Tender plant-based mince meets caramelised onions, hearty potatoes and sweet, juicy apples. A rich, homestyle glaze combines the flavours of tomato and garlic - with a hint of brown sugar. This tasty, no-fuss meal will bring your loved ones together.</p>

	<p>This clever plant-based protein is very versatile to cook with, and can be adapted to suit the flavours and textures of many different cuisines.</p> <p>TSP has a naturally neutral flavour, making it an excellent meat alternative for an endless variety of dishes!</p> <p>The flavours we create are those you already know and love – think Butter Chicken, Chilli Con Carne and Beef Stroganoff. We’ve mindfully chosen these names to make it easier for everyone to understand what flavours to expect, and we’re unapologetically reinventing these classic favourites to be 100% Made With Plants.</p>
Next!	<p>NEXT! has perfected the world's first plant-based bacon that looks, cooks, sizzles, and tastes like fresh rasher bacon. Crispy, smoky perfection.</p> <p>The NEXT! Chick’n Chunks will have you fooled! The experience is overwhelming from its sumptuous texture and mouthfeel – every bite is a pleasure.</p>
PlantAsia	<p>Take your tastebuds on a journey</p> <p>Whether your style is spicy, saucy, sweet or sour - the possibilities are endless with PlantAsia. Just combine our Roast Duck, Roast Pork or Prawns with fresh ingredients, to enjoy a mouthwatering meal that's made your way!</p> <p>We visited the traditional marketplaces of Kuala Lumpur, and were inspired by the flavours and sensations of authentic Malaysian street food. Our masterstroke was bringing home plant-based proteins that recreate the rich, aromatic flavours of Asia - all from the comfort of your own kitchen. Whether it's peking duck, barbeque pork or chilli prawns - cooking with PlantAsia makes it easy to savour your favourite Asian inspired meals.</p> <p>With its rich, complex flavour and golden colour, our 100% plant-based Roast Duck can be savoured in a vast range of Asian inspired dishes. Every day's a holiday with this sweet and succulent Roast Pork, made from quality plant-based ingredients. With a crispy outer fillet and tender, plant-based meat - simply add fresh ingredients for a mouthwatering meal that's made your way!</p>
Qponics	
Soulfresh	<p>Eaty has all the taste, texture and sizzle of meat, with none of the bad stuff like cholesterol - you won't believe it isn't meat!</p> <p>Eaty even looks the part, sizzling proudly on the BBQ next to whatever snag the Meat’atarian bought along.</p> <p>Eaty is made from natural flavours and plant proteins which we use to create the same texture and taste as meat.</p> <p>Eaty BBQ Classics Range and Ready-to-Eat Meals are delicious and convenient!</p> <p>We’re about treading lightly upon the planet while still giving you something that is amazingly close to actual meat.</p>
The Alternative Meat Co	<p>Formulated to look, cook and taste like real meat, with this ‘beefy’ range you won’t miss out on your favourites!</p> <p>Mince is so versatile – everyone has their favourite recipe. Grab a pack of our meat-free mince and recreate that bolognese or lasagne – you won’t be disappointed!</p>
Unreal Co.	

v2food	<p>tasty</p> <p>With the best food scientists on our side, we've identified the building blocks of meat's flavour. Turns out, you don't need to get them from animals.</p> <p>meaty texture, cooks like meat, awesome taste</p> <p>We've looked deeply at over 100 years of research from CSIRO to really understand the flavour of meat. In doing so, we've discovered the specific amino-acids that are responsible for that awesome meaty taste. So we broke out the drawing board and used the latest science to produce those amino-acids without the use of animals.</p> <p>Food version 1 just isn't good enough. We need a version 2 for our own health and for the health of the planet. We're using the latest science from CSIRO to make plant-based food that tastes great and satisfies the needs of a rapidly growing global population.</p> <p>It looks, cooks and tastes like animal meat and can be used in all instances that animal meat would be used.</p> <p>Marley Spoon specialises in easy-to-follow, flavour-filled recipes that hero seasonal, locally sourced produce. So what better way to experiment with an exciting new ingredient and add some delicious plant-based recipes to your repertoire than with a ready-to-go meal kit delivered straight to your door? ...The chefs have trawled back through the recipe archives to find the customer favourites that traditionally use beef or pork mince, and have given them a v2 makeover.</p> <p>Oh, so you're a veggie burger. Nup. Veggie burgers taste like the vegetables they're made from - think falafel or potato patties. v2 is designed to look, cook and taste like meat - not the legumes we get the protein from.</p>
Veef	<p>For people who love real food</p> <p>Our burger patties are about to welcome you into a delicious sustainable new world of robustly flavoured, protein-filled, plant-based food</p> <p>Created by an award-winning chef – who just so happens to be vegan – with help from his plant-fuelled family, these smoky, easy-to-cook patties boast a deliciously crisp outside and a satisfying umami flavour within.</p> <p>At last, a meat-free option that's better than the real thing</p>
Vow	<p>This library forms a repertoire of ingredients that we can use to create both exciting new exotic meats or blend multiple cell types to create better flavours, textures or nutritional profiles than any animal could.</p>

Economic

Stakeholder	Economic
Coco & Lucas Kitchen	Locally sourced from our Australian farmers and growers
Fable Food	
Farm Foods Australia	2017: begin development of Plant Based protein alternatives We value being a good company to work with and for we have strong agricultural roots and are proud of our Australian heritage, we have courage to be our best and do the right thing.
Harvest Gourmet	As a result of the growing Flexitarian trend, and the call for a transition from animal to plant based protein, the demand for meat alternatives is growing every day.
Herb and Sons	Australian made
Heuros	We are developing this technology to produce cultivated meat on a commercial scale
Made with Plants	We are excited to be part of the growing plant-based community in Australia, and will continue to monitor and review our pricing for competitiveness. We know the demand for tasty plant-protein will continue to grow, and we're thrilled to be part of this evolving market within Australia. Australians are changing the way they think about meat, and we know that many people today are choosing to their get their protein from plants. Australian made Did you know the meat department is traditionally one of the most profitable categories within a grocery store? The fact that major retailers such as Woolworths are making space for plant-based proteins – in the meat section, no less – signals a fundamental change to the way Aussies think about meat!
Next!	
PlantAsia	We are excited to be part of the growing plant-based community in Australia, and will continue to monitor and review our pricing for competitiveness. Thanks to some very clever chefs and their culinary innovation, plant-based proteins are also becoming a rapid area of growth and popularity. Australians are changing the way they think about meat, and we know that many people today are choosing to their get their protein from plants.

Qponics	<p>The Company is applying the best available technologies to produce high-value nutraceutical and food supplements products and food protein from marine microalgae. These technologies are now integrated into the R&D-scale pilot algae farm, now upgraded to a small and largely automated commercial-scale facility, funded in part by Qponics' \$1 million CRC-P government grant.</p> <p>Cultivating marine microalgae at scale for the exclusive production of low-value per kilogram protein-rich food ingredient products is economically challenging as the cost of operations can readily exceed revenues, even in Australia which has plentiful sunshine and clean tidal rivers to allow cost-effective outdoor raceway pond farming. The solution is to apply the principle of co-production, where a species of marine microalgae is cultivated to extract a high-value product to ensure farm profitability, together with a low-value protein-rich by-product. Qponics is applying this principle to co-produce high-value EPA omega-3 and low-value high-protein biomass by-product from Nannochloropsis on its algae farm.</p> <p>Plant-based alternatives to animal protein is one of the fastest growing segments of the food market, evidenced by the rapid increase in production of soy- or chickpea- based products such as "fishless tuna", "meatless meat" and chicken-free chicken.</p>
Soulfresh	<p>More and more people are looking to add plant-based meals into their week and, whether you are a flexitarian or a vegetarian who wants to enjoy a throwback to some of your favourite meals growing up, Eaty is for everyone.</p>
The Alternative Meat Co	<p>Australia is the third-fastest growing vegan market in the world; with more than two million Australians following a plant-based diet -- and growing [https://www.livekindly.co/australia-vegan-market-growth/] [http://www.roymorgan.com/findings/vegetarianisms-slow-but-steady-rise-in-australia-201608151105]</p> <p>Australian made</p>
Unreal Co.	<p>Unreal Co. belongs to a group of self-funded companies. We specialise in fast: research, development, prototyping and manufacturing, of allergen-aware and gluten-free plant-based foods.</p> <p>We aim to become leaders in the plant- based food industry. Market leadership, thought leadership, and social leadership are the driving principles behind our creations.</p>
v2food	
Veef	<p>they provide the uplifting feeling that comes with knowing you're supporting a small Australian business with a big heart.</p> <p>Australian owned</p>
Vow	<p>AUSTRALIAN NATIVES: A new kind of cultivated meat company.</p>

Natural

Stakeholder	Natural
Coco & Lucas Kitchen	Lovingly handmade no artificial preservatives, flavours or colours If you couldn't find it in your pantry you wouldn't find it in our meals. All our ingredients are real foods. Gluten & lactose free – All natural ingredients – No preservatives No artificial flavours or colours – Made in Australia – Lovingly hand made 100% Aussie meat – Truly recyclable packaging – No GM ingredients Frozen, locked in full of goodness – Contains more than 25% protein
Fable Food	Fable is created using ingredients that are as minimally processed as possible. Fable is based on shiitake mushrooms which make up 2/3 of the ingredient list. we leverage the power of mushrooms to create our meat alternatives, and we keep other ingredients and processing to a minimum.
Farm Foods Australia	Our range of products are made from plant-based ingredients that and do not contain gluten or soy, are non-GMO and are vegan friendly.
Harvest Gourmet	No, we have not added any artificial preservatives to our Incredible Burger!
Herb and Sons	
Heuros	We are growing muscle cells without using foetal bovine serum (FBS), blood products, genetic engineering / modification (GE / GM), recombinant growth factor, pluripotent stem cells, steroids, or antibiotics.
Made with Plants	We've gathered the best ingredients that nature has to offer, then applied a little innovation, to bring you a wholesome range of plant-based foods. Textured Soy Protein (TSP) is versatile, nutritious, and made entirely from soybeans.
Next!	
PlantAsia	At PlantAsia, our protein-rich range is primarily made from Seitan [wheat gluten] and Konjac (a traditional Chinese plant)
Qponics	
Soulfresh	no added MSG no artificial colours or flavours Eaty is made from natural flavours and plant proteins which we use to create the same texture and taste as meat.

The Alternative Meat Co	
Unreal Co.	All Unreal Co. products are GMO-free, however we do not advertise this on our packaging because we haven't been officially certified yet. We routinely survey our suppliers to ensure that we're buying GMO-free, and so far we have been able to source non-GMO versions of all our ingredients. As we partner with the right suppliers and create longer-lasting relationships, we will move to the next step and get our products certified GMO-free.
v2food	The goal with v2 is to bring you plant based meat that tastes like meat. It does require processing to extract the proteins from top quality ingredients to get the taste and nutrition we want. There are no artificial colours, flavours or preservatives in v2 products. Our products are non-GMO. We've been able to get that awesome meaty taste from naturally nutritious legumes. It's true that historically, 'processed' foods have been synonymous with products that have had all the goodness stripped from them to make something at low-cost that lasts a ridiculously long time. But 'processing' in and of itself just means using a process to combine or modify ingredients to get the result you want. For example, you 'process' your food every time you blitz up some pesto or boil some rice. At v2 we do the minimum amount of processing we can to enhance the nutrition and taste of the meat we make, and nothing more. The bottom line is, with animal meat, all the magic of combining protein, amino acids, water and fat to make some tasty meat happens inside the cow. For plant-based meat, you have to look outside the cow for your ingredients, and develop new processes for mixing these ingredients together for the same outcome.
Veef	without the added preservatives, gluten + cruelty free GMO & MSG free
Vow	Cellular agriculture is growing from the source cells of the ingredients we know and love. THE PROCESS: 1. We take a small harmless sample from an animal 2. We isolate the correct cells 3. We encourage those cells to grow and differentiate in exactly the same way they would naturally 4. Those cells are brought together to create rich food products

Disruption

Stakeholder	Disruption
Coco & Lucas Kitchen	It's important to be conscious of what we do and what we eat and to be aware of the impact that our choices make. After all, what's more important than doing our best to ensure future generations enjoy a world that is healthy and thriving? I believe it's within everyone's power to look for better ways of doing things. A meat-free meal once or twice a week can have a tremendous impact and what better time than now to try amazing new products that are tasty, nutritious and planet-friendly.
Fable Food	The story of our story begins with a vegetarian and two mushroom geeks each on a journey to make meat like products for plant lovers. In slowing down, they were able to hear the intelligence that comes from a measured pace.
Farm Foods Australia	At Farm Foods we believe that consumers should have more variety in their dietary proteins without having to compromise. Our delicious range of plant-based mince and burgers provide that alternative whilst replicating the taste and texture of meat products whilst being more environmentally sustainable. Our revolutionary range of 100% meat-free products provides an alternative protein source for those who want to cut down or eliminate their red meat intake that satisfies like the taste of red meat without compromising on texture, protein and mouthfeel and is versatile enough to be used in any dish that traditionally requires meat.
Harvest Gourmet	Our ambition is to revolutionise the meat-free category by bringing excitement to the world of plant-based food, with no compromise on flavour! We want to make exploring this new Flexitarian lifestyle worthwhile. So join us on our journey, and discover INCREDIBLE!
Herb and Sons	
Heuros	
Made with Plants	At Made With Plants, we believe that easy access to tasty vegan food can empower all of us to make more sustainable choices every day. Our products are not made exclusively for vegans – instead, we seek to support anyone who wants to eat a little less meat and simply add more plant-based foods into their weekly diet. Every time you choose to eat a vegan meal, you're benefiting the planet and our animal friends, and we believe that means everyone can make a difference. Our ethos is one of inclusivity – not exclusivity. The Made With Plants range currently includes convenient protein-rich ready meals, along with delicious dairy alternatives. We believe that everyone should be able to enjoy their favourite foods, regardless of dietary needs or lifestyle choices. Our ready-made meals are particularly handy for those occasions when you don't have the energy, ingredients or time to cook – but still want to enjoy a wholesome plant-based meal. We believe that you don't need to be a seasoned vegan in order to switch up for your food choices. In fact, all of us can make a difference by simply reducing the number of meat and dairy-based meals we eat each week. This has enormous benefits for our health, our planet

	<p>and our animal friends.</p> <p>Did you know the meat department is traditionally one of the most profitable categories within a grocery store? The fact that major retailers such as Woolworths are making space for plant-based proteins – in the meat section, no less – signals a fundamental change to the way Aussies think about meat!</p> <p>In the not-too-distant future, we believe that a plant-based alternative for every product will be readily available at your local grocery store. That’s right – one day everything will be Made With Plants!</p>
Next!	
PlantAsia	<p>We believe that everyone should be able to enjoy their favourite foods, regardless of dietary needs or lifestyle choices.</p> <p>At PlantAsia, we believe that easy access to tasty vegan food can empower all of us to make more sustainable choices every day. Our products are not made exclusively for vegans – instead, we seek to support anyone who wants to eat a little less meat and simply add more plant-based foods into their weekly diet. Every time you choose to eat a vegan meal, you’re benefiting the planet and our animal friends, and we believe that means everyone can make a difference.</p>
Qponics	
Soulfresh	
The Alternative Meat Co	available at Coles in the meat chiller
Unreal Co.	<p>Make your own plant-based meats in your very own kitchen.</p> <p>Meaty Mix is so easy to prepare, even kids love making it. Just add water, mix it up, shape it, cook, and eat. With Meaty Mix you can make meatballs, burgers, nuggets, and even roasts.</p> <p>Unreal Co strives to inspire customers to make the right changes for a healthier life, while contributing to making our environment a healthier place that we can share.</p>
v2food	<p>Through our partnership with Marley Spoon, we’re excited to help make delicious, nutritious plant-based eating more convenient and enjoyable than ever before.</p> <p>Like v2, Soul Burger is all about making plant-based foods a delicious, convenient option for all - whether you’re a vegan, carnivore, or something in between.</p> <p>We know that people love the taste of meat and that’s not going to change any time soon.</p> <p>This is not about getting rid of meat. We understand many Australian farmers are already using sustainable farming techniques to produce high quality animal meat in a way that is environmentally sustainable. We are about adding another option to the mix - delicious, nutritious and sustainable meat made by harnessing the environmental and nutritional benefits of plants.</p>

	<p>v2 is on a mission to maximise environmental and human health by revolutionising the meat we eat.</p> <p>We're on a mission to feed our planet in a way that takes care of our planet. To do this, we need to make significant changes to the way we produce and consume food, but that doesn't mean you need to give up the food you know and love.</p> <p>Climate change is an enormously complex issue, and we're under no illusions that plant-based meat is the only solution for the challenges our world is facing. But it can make a significant difference. [blog]</p>
Veef	
Vow	<p>At VOW, our approach isn't to produce the meats we know. We are focused on using cultured meat technology to craft an entirely new category of food. Cultured meat, unlike animal agriculture, isn't limited to the animals that grow fast and breed well in captivity. In fact, any animal with cells is now on the menu.</p> <p>To realise the opportunity of cultured meat we are building a library of cells, from both domesticated and undomesticated species. This library forms a repertoire of ingredients that we can use to create both exciting new exotic meats or blend multiple cell types to create better flavours, textures or nutritional profiles than any animal could.</p> <p>Our vision is to leapfrog traditional agriculture completely. By building a food production system from the cellular level up VOW exists to initiate a change to no longer being constrained by the limits we encounter if we continue to 'work the land'. A 'Digital' approach to food will set us free from the physical constraints of agriculture - making the pleasure of food sustainable for everyone.</p> <p>Today's 'Analog' approach confines us largely to a small subset of animals for food, but we can think bigger. In our unconstrained future there are no limits to the thousands of different species we can draw upon. An adventure to scour the earth like a cellular-level Indiana Jones, prospecting for earth for unique textures, flavours and sensations, without the harm. The 'Digital' approach unlocks all manner of new building blocks, literally inventing new food along the way.</p> <p>Bringing cutting edge approaches to data science, robotic process automation and human centred design, allows us to learn and improve at a speed and scale not previously experienced in traditional food production systems.</p> <p>Right now, the vast majority of meat consumed comes from just four or five animals. This is because we have developed the processes necessary to domesticate and process these particular animals on a mass scale.....The question that we asked ourselves was: What are the odds that these animals contain the tastiest, most nutritionally rich food offerings? [5]</p>