Friday 13 August 2021

Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600
AUSTRALIA

Re: Definitions of meat and other animal products

Food Frontier thanks the Committee for the opportunity to provide a submission to this Inquiry. We trust you will consider this submission's context as part of a growing dialogue about the opportunities that alternative proteins, including the plant-based meat alternatives of focus in this Inquiry, present for Australia.

Who we are

To start, we'd like to introduce Food Frontier. We are the independent think tank and expert advisor on alternative proteins in Australia and New Zealand. We are a not-for-profit funded by grants and donations, which allows us to engage in our work without external influence.

Our work focuses on building understanding about the economic, environmental and public health benefits of alternative protein industries such as plant-based meat and cellular agriculture, and enabling leaders to engage with them. Our team of food, agriculture, research and policy professionals has worked across meat and livestock sectors, including with Australian Pork and Elders, as well as organisations empowering millions of farmers worldwide, global FMCG and retail companies. This collective experience brings a detailed understanding to our work of the important role agriculture plays in Australia and around the world.

About the sector

Alternative proteins represent a growing agri-food sector worldwide, though many plant-based alternative products have been sold in our nation for decades. In Australia, soy milk has been available for over 50 years, while Sanitarium's 'nut meat' has been on shelves since 1912.

Increasing global demands are fueling growth in the alternative proteins sector. If consumption patterns of nations such as Australia (typified by high consumption of meat and low intakes of fruits, vegetables and grains) were adopted around the world, experts have warned by 2050 we would require the resources of up to seven planets.[1] Companies around the world have recognised this requires a greater diversity of protein sources in our food supply. From leading FMCG

corporations, to small local start-ups, to global meat conglomerates, companies continue to join the alternative proteins sector, introducing a steady stream of new products to meet this demand.

In Australia, sales of plant-based meat alternatives grew 46% in FY20, while the volume of plant-based meat manufactured locally increased 70% from FY19 to FY20. Products made by Australian companies now make up more than half (56%) of the category in major retailers. Leading local companies - from those founded by chefs, to food industry pioneers to traditional butcher families - have spoken about their desire to use more Australian plant protein ingredients in their products This represents a significant opportunity to add value to Australia's agriculture sector, alongside traditional animal protein industries.

The emergence of new protein industries in recent years has been reflected in global reports on upward growth and huge investment. Australia specifically, as a net-exporter of premium, sought-after agri-food products, is in a prime position to grow new protein industries and exports alongside existing ones. Even as Western countries reduce meat consumption, on a global scale demand for meat is growing, indicating there will continue to be markets for Australia's traditional protein offerings alongside new ones. This submission seeks to set the record straight: both emerging and traditional protein industries will be needed to meet that demand.

New economic and agricultural opportunities for Australia

Australia has the right mix of agricultural capacity, commercial appetite, research capability and infrastructural know-how to be an international leader in the alternative proteins sector. Our nation is a global leader in food and agriculture, boasts world-class R&D capabilities, and enjoys close proximity and direct trade channels to the world's most populous region, Asia.

It is Asia where the greatest rise in demand for meat is coming from, driven by population growth and rising disposable incomes. Globally, demand for meat is projected to increase 73% by 2050.[2] Demand for plant-based meats in key export markets like China and Thailand is also projected to rise significantly by 2025.[3]

This indicates real opportunity for Australia in both conventional and new protein industries.

There is strong evidence of the continual and growing appetite for Australia's high-quality protein products in international markets, as we have seen demonstrated over the 50+ years since Australian agricultural exports overtook domestic consumption, largely driven by the traditional meat industry. As a net exporter along with our neighbours in New Zealand, our nation can and should leverage existing trade channels and the strength of our premium reputation to increase the overall volume and value of our protein exports with new, value-added products like plant-based meats.

In the global market, alternative proteins offer a largely untapped economic opportunity for countries that move swiftly to capture market share. Investment in alternative proteins is being made at all levels – from governments[4,5,6] to meat giants[7] to investors including Bill Gates and Jeff Bezos tipping investment in plant-based meat in 2020 to US$1.54 billion globally.

Around the world, global FMCG companies and meat producers from Nestlé to JBS to Monde Nissin have joined the alternative proteins sector through acquisitions of existing companies, new brand launches and investments in the plant proteins supply chain. In Australia, Food Frontier research found that more than $85M was invested in alternative proteins companies in 2020.

Australia's emerging alternative proteins sector is still relatively young but is growing steadily. As it continues to develop, the sector will provide new opportunities for Australian farmers to supply their crops into this value-added supply chain, rather than more volatile global commodity markets. Cropping accounts for more than half (53.2%) of the value of Australia's agricultural production[8] – or $35B – which new protein industries will help grow.

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One example of this is Wide Open Agriculture, a WA-based company that identifies itself as "Australia's leading regenerative food and agriculture company" and currently produces both conventional and alternative protein products. The company recently announced a $1.6M investment in a plant protein processing facility to create plant proteins for foods like plant-based meats from locally-grown lupins, and exploring opportunities to use other Australian-grown pulses, such as chickpeas, lentils and fava beans. Australia Plant Proteins (APP), the first commercial plant protein fractionation facility in Australia, has received a $45.7 million investment from major global agri-food company Bunge, allowing APP to double its output of plant protein isolates by March 2022. Further, Unigrain, a cereal and pulse producer, has recently announced plans to build a plant protein processing and fractionation facility in Smeaton, Victoria.

There are thousands of Australian farmers and many regional communities that stand to benefit from the growth of the plant-based protein sector. The sector is already creating new jobs in regional communities like Wodonga and Horsham, where multi-million dollar plant protein processing and product manufacturing facilities have recently been built.

Plant-based meat products alone are projected to generate nearly $3B in Australian sales by 2030 and provide 6000 full-time jobs (Deloitte Access Economics), while the CSIRO has demonstrated plant proteins represent a $6B opportunity for Australia.[10] From across the supply chain through to the potential multi-billion dollar contribution to the Australian Government's industry-led goal of a $100B food and fibre sector by 2030.

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Meat alternatives are labelled to attract consumers seeking plant-based foods

Clear food labelling is important. All Australians should have access to simple, easy to understand information when purchasing food.

An analysis of the labels on 252 plant-based meat products in major grocery retailers nationwide in July 2021 found:

- 100% of products use one or more terms on the front-of-pack label to indicate they are meat-free
- 85% use two or more such terms, and
- 56% use three or more such terms.[11]

While this Inquiry focuses on the use of animal meat terms to describe plant-based alternatives, the analysis found that 68% of products do not use any such terms in their product names. About a quarter of the category - 26% of products - use a modified animal meat term to indicate they are meat-free, such as "beefy" or "chicken-less", thus describing the products' style.

Only 8% of products use an unmodified animal meat term, and those that do include an average of 2.4 qualifying terms in the product name or elsewhere on front-of-pack.

The Inquiry also considers the use of livestock imagery on plant-based meat alternative products, yet nearly 9 in 10 products do not include any depictions of animals on the front-of-pack label. Of those that do, less than half of them use animal depictions occupying more than 10% of the label.

Further, none of the products use the term "Australian" in their brand or product names, contrary to the suggestion that plant-based meat alternatives are infringing on the IP of Australian livestock producers.

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There is no reliable, quantitative evidence to suggest that there is confusion among consumers about the labelling of plant-based meat alternatives in the Australian market, as underscored in the Australian Competition & Consumer Commission's (ACCC) submission to this Inquiry. A recent consumer survey by the livestock industry attempting to produce such evidence took a questionable approach of briefly flashing a selection of five products with uncommon labelling in

front of consumers, and asking questions about potential purchase behaviour - not about past incidence of actual confusion when purchasing groceries in stores or online.

Nationally representative research by Colmar Brunton has found that consumers understand what they're buying when they put a plant-based meat alternative product in their shopping trolley.[12]

In FY20, grocery sales of plant-based meat alternatives increased by 46% over the previous year.[13] A 2021 University of Adelaide study found that 19.8% of Australians are consciously reducing their meat consumption and a further 5.9% do not consume meat at all.[14] This significant growth in demand shows these foods are selling well, not because people read the labels incorrectly, but precisely because they read them correctly: the unique selling point is the plant-based nature of the products.

We support clear, concise and commonsense labelling

Food Frontier has consistently supported clear, concise and commonsense product labelling in line with the Australia New Zealand Food Standards Code.

The Ministerial Forum on Food Regulation has twice reviewed plant-based product labelling. In both reviews, the Forum found current labelling regulations are fit for purpose. The industry-led working group, established by the Minister for Agriculture and which concluded in March 2021, has also considered the issue of plant-based labelling and recommended the development of voluntary industry guidelines.

The Food Standards Code already has clear guidelines that allow the use of widely understood terms such as 'sausages', with terms like 'plant-based' or 'vegetarian' or 'meatless' to communicate that the product does not contain animal meat. This widely used approach is proven to work and is a commonsense and evidence-based formula.

Leading international markets for plant-based meat, including the U.S. and Europe,[15,16] offer many examples[17] where a commonsense approach to labelling legislation has prevailed. In markets like the U.S., where the dollar value of sales of plant-based meat grew 45% and product unit sales increased 36% in 2020,[18] the growing category is successfully meeting market demand with a free market, consumer-centric approach to product labelling. Thriving within their domestic market provides U.S. companies with a critical foundation for international exports.

Australian brands would be at a competitive disadvantage internationally if widely-understood terms are restricted in domestic product labelling. Creating confusion among consumers risks limiting the growth of local companies and jeopardising significant export opportunities.
Leading brands like Beyond Meat, well established in their domestic U.S market, are now moving into key international markets, such as Asia, where Australian companies have also begun exporting, and where demand for plant-based meats is expected to grow. Australian brands must be empowered with the same commercially-focused labelling approach used in markets like the U.S. to be able to thrive domestically, capture the attention of international distributors and compete in the global market.

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Plant-based eating on the rise for health reasons

Plant-based meats are a growing food category in response to rising consumer demand. This includes those seeking to eat more plant-based proteins to meet the recommendations of the Australian Dietary Guidelines or the Australian Heart Foundation, which revised its dietary guidelines in 2019 to recommend Australians get most of their protein from plant-based sources, as well as fish and seafood.[19]

Australians may also be considering the advice of global health authorities in choosing to consume more plant-based proteins as an alternative to certain conventional meats. The association between high consumption of red meat and the development of non-communicable diseases (NCDs) has been studied across generations in multiple locations and populations around the world. Strong evidence from these studies as well as further analysis[20] consistently demonstrates a relationship with high consumption of red meat, particularly processed red meat, to the increased incidence of, and mortality from, NCDs including cancers such as [21,22] colorectal cancer,[23,24] [25,26] cardiovascular disease[27,28,29] and type 2 diabetes mellitus.[30,31,32] Processed meats have been categorised by the World Health Organization (WHO) and the International Agency for Research on Cancer as a Group 1 carcinogen[33] due in part, to high sodium, nitrate and nitrite content and sufficient evidence of carcinogenicity in humans. Red meat was also assessed, and determined as "probably carcinogenic to humans".[34]

Given the links between high consumption of red meat, particularly processed meat, and numerous leading NCDs, various government and non-governmental health and nutrition organisations recommend restricting intake of these foods.[35] The World Cancer Research Fund and the American Institute of Cancer Research recommend consuming no more than 300g of red meat a week on average, and suggest that very little of it be processed. The WHO recommends moderating consumption of processed meat (e.g. sausages, salami, bacon and ham) for cancer prevention.[36]

According to the most recent Australian Health Survey,[37] one third of meat consumed in Australia is non-lean and processed animal meats – the kinds of meats health authorities recommend to limit.

Recent research has shown that when compared like-for-like with conventional meat sausages, burgers and bacon, plant-based meat products are on average nutritionally comparable or superior.[38] Plant-based alternatives offer certain health benefits, like health-promoting dietary fibre and considerably lower saturated fat than equivalent conventional meat products.

Most packaged foods use additives, including both alternative and traditional proteins

As this Inquiry considers the use of additives in plant-based meat products, it's important to also consider that equivalent, processed conventional meat products, such as sausages, bacon, schnitzels and more, use many of the exact same additives.

An analysis of plant-based meat alternatives across the most popular formats found in Australian supermarkets – nearly 100 products in total – found that these products on average contain five additives, while equivalent conventional meat products in Australia on average contain four additives.[39]

The analysis further found that both categories of products most often use additives in the 'emulsifiers, stabilisers, and thickeners' category: the common additives that bind the protein and fat content to make a sausage a sausage, whether made from plant or animal ingredients.

It's important to remember that Food Standards Australia New Zealand (FSANZ) determines the safety of food additives and products. This means all foods available for purchase on our supermarket shelves have been deemed safe.

Considering future proteins: cultivated meat and precision fermentation dairy products

The scope of the Inquiry makes note of "synthetic" proteins. This term, which is not commonly used by media, investors or companies working in the alternative proteins sector, refers to foods such as meat cultivated from cells and dairy proteins produced via precision fermentation. These products are still in the R&D phase and are not available on the commercial market in Australia, a process that is expected to take several years.

Cultivated meat and dairy products made through precision fermentation have launched at a small scale in Singapore and the United States, respectively.

If Australia is to follow suit, these products should undergo the same process as any new food product entering the market; through a regulatory pathway considered by FSANZ, which has an existing framework to assess both the safety of foods prior to commercial sale in Australia, and to ensure Australia's food regulatory system enables innovation to remain internationally competitive.

In conclusion, with growing global demand for alternative proteins, will Australia take a global mindset to capture it?

The global expansion of new protein markets will continue, with or without Australia, as countries around the globe seek to feed growing populations, while reaping the economic benefits new sectors offer. We want to see our farmers, regional communities, researchers and businesses succeed, and it's time for all in the supply chain, and those who represent them, to work together to realise our national potential in new protein industries.

Australia is renowned for its world-class food research, production and exports, making us exceptionally well-placed to capitalise on our intellectual and infrastructure assets to lead our region in plant-based food markets.

There is overwhelming evidence showing the diversification of global protein supply is necessary and inevitable to meet rising protein demands, according to the world's top agribusiness[40] [41], sustainability[42] [43] [44] [45] [46] and economic development authorities.[47, 48] [49]

In the UK, the recently launched National Food Strategy recommends substantial changes to UK food policy, including positioning the country at the forefront of the alternative proteins industry. The UK is seeking to garner the sustainability and economic benefits alternative proteins offer, with the strategy noting that a thriving local alternative proteins industry would generate a projected 16,500 jobs (6,500 in agriculture).[50]

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Many leading voices in Australia across science, research, food and agriculture have highlighted the critical role alternative protein industries will play in the future, and the need for our nation to make new investments to remain competitive in a changing global protein market. This shared understanding has led to investment in research, initiatives and policies that demonstrate the need for protein diversification, such as:

- **CSIRO's Future Protein Mission** focusing on helping Australia capture a share of high-growth global protein markets to expand the domestic protein industry by $10 billion over five years;
- **NSW Farmers** internal policy position identifying alternative proteins as 'a new opportunity';
- **The Australian Farm Institute** reinforcing the complementarity and necessity for protein diversification in its 2020 report commissioned by Agrifutures.

These leading Australian organisations recognise that thousands of Australian farmers and regional communities stand to benefit from the growth of the plant-based protein sector.

Rising investment in plant proteins generates opportunities for legume and grain growers, as well as those farmers with mixed livestock and cropping operations. These investments are already bringing jobs to regional Australia, but our nation has yet to harness the full potential of these industries.[52,53] As a country, Australians cannot afford to be distracted by domestic debates over

nomenclature and turn our backs on new export industries that will provide significant economic value and jobs, including in regional areas. It's disappointing to see this emerging sector being pitted as a competitor to traditional livestock industries, when both can co-exist.

Yet it is also clear and encouraging that many across our national science, research, agriculture and food agencies are well informed about the critical role alternative protein industries will play in the future, and the need for Australia to make new investments to remain competitive in a changing global protein market.

There are various discussions currently underway among governments and the private sector to enable investment in regional areas to build this infrastructure. There is also R&D happening across academic institutions to understand the scope of protein-rich crops currently being produced (or with potential to) in Australia that can be future inputs to a high-value plant protein supply chain.

We strongly welcome constructive, evidence-based dialogue that advances this important national conversation, as forward-thinking leaders across food and agriculture work together to seize the multi-billion-dollar opportunity before us. Food Frontier looks forward to presenting the evidence on Australia's exciting alternative protein opportunities to the Senate RRAT committee in person.

Thomas King
CEO, Food Frontier

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