



Thursday 12th August 2021

Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

rmat.sen@aph.gov.au

PROPERTY RIGHTS AUSTRALIA

Property Rights Australia Inc Submission into Definitions of meat and other animal products

Property Rights Australia (PRA) was formed in 2003 to protect the property rights of those unfairly targeted by the *Vegetation Management Act 1999*. We are a non-profit organisation of primary producers and small businesspeople mostly from rural and regional Queensland who are concerned about continuing encroachments on the rights of private property owners. The organisation was formed to seek recognition and protection of the rights of private property owners in the development, introduction and administration of policies and legislation relating to the management of land, water and other natural resources. Set up in South West Queensland, PRA's membership now extends across most states and multiple major rural industries. PRA is not affiliated with any political party.

Standard Definition of Meat

The Cambridge English Dictionary defines meat as "the flesh of an animal when it is used for food".

Addressing the Terms of Reference

- a. *The potential impairment of Australian meat category brand investment from the appropriation of product labelling by manufactured plant-based or synthetic protein brands, including:*
 - i. *the use of manufactured plant-based or synthetic protein descriptors containing reference to animal flesh or products made predominately from animal flesh, including but not limited to "meat", "beef", "lamb", and "goat"; and*
 - ii. *the use of livestock images on manufactured plant-based or synthetic protein packaging or marketing materials.*

All manufactured meat, whether it is plant based, insect based or cultured, while trading off "meat" credentials make claims about superior environmental benefits for the planet and superior health benefits. All such claims

CHAIRMAN - Joanne Rea || Vice Chairman – Jim Wilmott || TREASURER – Shay Dougall
SECRETARY – Dixie Nott
BOARD MEMBERS - Dale Stiller, Neville Stiller

have been disputed by scientists working in those fields, but the spin of international environmental groups and their foot soldiers has demonstrated that they are capable of destroying industries without robust evidence.

Plant based products are already in the supermarket with the "meat" product it is mimicking the most prominent part of the label with labels showing "plant-based" at a fraction of the size and a lighter colour, and a harder to read font on most packaging.

The genetically modified "cultured" meat in particular has never even considered using a name which does not contain meat with suggested terms such as "clean meat," "in vitro meat," "artificial meat" and even "alt-meat". Collectively, a number of US states and EU countries have been passing laws saying that only foods made of animal flesh should be allowed to carry labels like meat, steak, sausage, jerky, burger, hamburger, hot dog or dog, rib, rack, patty, mince, bacon, crumbles, nuggets, meat pie, lamb pie, goat pie, pork pie, chicken pie, chicken skewers, kiev, duck, stroganoff or plurals of such terms.

As well as meat products, added to the banned list for manufactured protein need to be words usually used to describe how animals are raised such as "wild", "free range", "cage free" and other such definitions.

This list is not exhaustive.

Pictures of animals should also not be permitted on packaging nor in advertising. Neither the use of a less prominent or lighter colour nor a harder to read or smaller font, should be permitted for the "plant-based" part of a label or advertising in comparison to the "meat" descriptor.

Property Rights Australia believes Australia, as opposed to separate US states and separate EU countries, should cover every base from the outset.

Health

New research is showing the health benefits of red meat to be substantial. It also shows that claims about saturated fat at normal levels of consumption of unprocessed meat have been highly exaggerated and that the spotlight for unhealthy consumption is now on polyunsaturated fats and vegetable oil.

Orthopaedic surgeon Dr. Gary Fettke told an attentive audience at Beef 2021 that, "The demonisation of red meat has nothing to do with science"¹.

"When he started seeing more and more complications from lifestyle diseases and diabetes, and needed to do 'too many avoidable partial and complete amputations', Dr Fettke says he came to realise the central role that sugar and refined carbohydrates in combination with inflammatory seed oils were having on metabolic health." Dr.. Fettke added,

"History has us at our healthiest from a metabolic aspect when our diets were predominantly animal based," Dr Fettke said.

"Plant-based foods do not easily cover the essential amino acid requirements for protein intake.

"Generally, plant-based diets require supplementation for at least vitamin B12 and iron.

"It's almost not fair to compare beef and rice. To get the protein in 200 grams of beef you need to eat nearly a kilogram of rice, and still you would be missing the micronutrients."

Plant-based diets are generally carbohydrate dense. With the deficiency issues of protein, fats, and micronutrients, an excess intake generally follows, he explained.

¹ <https://www.farmonline.com.au/story/7252439/red-meat-under-attack/>

If you don't take in the nutrients, you are prone to eating more and more carbohydrates to get the protein and micronutrients. That carbohydrate load over time has health consequences for many. Yet one would almost need a search and rescue party to find meat in modern-day dietary guidelines, according to Dr Fettke."

*

Whatever the claims, research shows that meat-based burgers and plant-based protein which mimic them are not substitutes for one another. Although manufactured product labelling shows similar amounts of proteins, micro-nutrients and metabolites vary hugely between the two. Some of the hard science, without making judgments about which is the superior product emphasises that nutritionally, the two are not interchangeable. If we are considering global effects, the labelling must not lead third world consumers to believe that the products can nutritionally substitute for one another.

"Despite apparent similarities based on Nutrition Facts panels, our metabolomics analysis found that metabolite abundances between the plant-based meat alternative and grass-fed ground beef differed by 90% (171 out of 190 profiled metabolites; false discovery rate adjusted $p < 0.05$). Several metabolites were found either exclusively (22 metabolites) or in greater quantities in beef (51 metabolites) (all, $p < 0.05$). Nutrients such as docosahexaenoic acid (ω -3), niacinamide (vitamin B3), glucosamine, hydroxyproline and the anti-oxidants allantoin, anserine, cysteamine, spermine, and squalene were amongst those only found in beef. Several other metabolites were found exclusively (31 metabolites) or in greater quantities (67 metabolites) in the plant-based meat alternative (all, $p < 0.05$). Ascorbate (vitamin C), phytosterols, and several phenolic anti-oxidants such as loganin, sulfurol, syringic acid, tyrosol, and vanillic acid were amongst those only found in the plant-based meat alternative. Large differences in metabolites within various nutrient classes (e.g., amino acids, dipeptides, vitamins, phenols, tocopherols, and fatty acids) with physiological, anti-inflammatory, and/or immunomodulatory roles indicate that these products should not be viewed as truly nutritionally interchangeable, but could be viewed as complementary in terms of provided nutrients. The new information we provide is important for making informed decisions by consumers and health professionals. It cannot be determined from our data if either source is healthier to consume."²

"A commercially available plant-based alternative closely matches the Nutrition Facts panel of beef (Fig. 2), and to consumers reading nutritional labels they may appear nutritionally interchangeable. Nonetheless, food sources have considerable complexity and contain a wide variety of nutrients (e.g., phenols, anti-oxidants, peptides, amino acids, fatty acids, biogenic amines etc.), the majority of which do not appear on nutrition labels, but can have potential health implications. Important nutritional differences may exist between beef and novel plant-based alternatives; however, this has not been thoroughly assessed."³

There can be no doubt however, that the vitally important nutrients, iron and B12, which are readily available in red meat, can only be available in plant-based protein as additives. How available they will be to the body is debatable.

Environmental Considerations

The headliner in many of the "save the planet" arguments is Methane.

² <https://www.nature.com/articles/s41598-021-93100-3#Abs1>

³ <https://www.nature.com/articles/s41598-021-93100-3#Abs1>

One of the best qualified commenters on the effects of livestock agriculture on our planet is Dr. Frank Mitloehner, University of California Davis, who has revealed, and continues to reveal some of the unscientific claims made against livestock.⁴

The amount of greenhouse gases emitted by livestock was erroneously calculated and recorded in a 2006 FAO report. The harm caused by that report is ongoing with environmental groups still spinning it in spite of scientists like Dr. Mitloehner trying to put forward the facts. The percentages of GHGs in a system such as the US and Australia are very small. They are almost always overstated. Also overstated is the relative strength of methane in comparison to CO₂ and the fact that it is a closed cycle that has been operating for millennia. According to Dr. Mitloehner the just released IPCC report has some good news on the Methane front. The news is not a surprise to those of us who have been following the issue.

On 10/8/21 Dr. Mitloehner tweeted,

"Ch7 pg123 'Expressing methane emissions as CO₂ equivalent emissions using GWP-100 OVERSTATES the effect of constant methane emissions on global surface temperature BY A FACTOR OF 3-4 [...] while understating the effect of new methane emission source by a factor of 4-5'."⁵

Even science organisations love to talk about the negative impacts on the planet when they have a conflict of interest. For example, they ignore the effects on the planet and often human rights, in the growth of some crops. Monocultures, pesticides, and genetic modification do not get a mention.

Claims that meat is unsustainable based on the amount of agricultural land it takes up are specious and irrelevant. This is an argument that has been promoted by international green organisations and drummed into the public's collective heads as significant. Much of the broadacre production is carried out on areas that are not suitable for arable agriculture.

Some landholdings are part of a sustainable system where crops and livestock are rotated improving fertility and carbon storage.

Cellulose, the major component of our grazing lands is not convertible by humans to nutrition. Domestic livestock are ideal cyclers of this material, and our ruminant animals convert it beautifully into a nutritious food high in accessible iron, vitamin B12 and a plethora of micronutrients which are difficult to replace.

All and any claims made that land will be freed up for vegetables or plant-based protein as promoted by ubiquitous green groups should not even be considered by science-based institutions. More than 60% of the world's agricultural lands are too steep, rocky, infertile, inaccessible, or arid to support efficient crop-based agriculture.

Management of these landscapes is essential to assist in control of what has proven to be a massive fire hazard. The environmental groups have conveniently blamed climate change, moved on to leveraging the resultant destruction into fundraising, and are firmly in denial about the role of neglect and mismanagement in the extent and intensity of the 2019-20 fires.

The goal of many of those advocating on behalf of manufactured protein is to totally do away with livestock. Those broadscale areas which are not suitable for arable agriculture will not help feed the global population.

⁴ <https://theconversation.com/yes-eating-meat-affects-the-environment-but-cows-are-not-killing-the-climate-94968>

⁵ <https://twitter.com/GHGGuru/status/1425951955109572608?s=20>

They will just become more neglected “unbroken forest” which according to the NSW Inquiry into the 2019-20 fires was, along with drought, the cause of the intense fires of that season.

Claims of prevention of global deforestation are also specious. Satellite imagery clearly shows that forests, fed by high levels of CO₂ at a global level, are increasing. There is also the new realisation that not all forests are GHG emission sinks all of the time and that some actually emit methane.

The contribution of old growth forests to greenhouse gas reduction has been hugely overestimated with more cycling of CO₂ occurring in a rapidly growing young forest.

Green groups market that a move to an entirely plant-based diet would offer improvements to health and the environment. They are based on narrow assessments, and not cognisant of the vast array of different systems and the contribution that many make to both human nutrition and environmental health.

More harmful to the environment than the use of pasture for the grazing of livestock are many of the monocultures that arise from dependence on plant-based protein. Such monocultures destroy biodiversity and have negative impacts on necessary pollinators such as bees. These impacts are usually blamed on chemical use but in the case of some short-flowering monocultures their death is often by starvation.

Such monocultures are all heavily dependent on pesticides and/or genetic modification.

Some of the claims such as some presented to the Food Summit in Rome are just plain fanciful.

Conversion to algae or insects on a huge scale will simply result in environmental impacts being shifted from one sector to another without the learned knowledge and research that thousands of years of traditional grazing and agriculture has accumulated.

Other Industries

- a. *The implications for other Australian animal products impaired from the appropriation of product labelling by manufactured plant-based or synthetic proteins.*

The dairy industry has long claimed that the only true milk comes from an animal. As with any nutritional comparison between beef or other meat and alternative plant-based protein, there is no nutritional equivalence with deficiencies sometimes made up for with additives.

We support the dairy industry in their efforts to have “milk” from non-animal sources and other manufactured sources not labelled as milk.

Additives

- b. *The health implications of consuming heavily manufactured protein products which are currently being retailed with red meat descriptors or livestock images, including:*

- i. *consideration of unnatural additives used in the manufacturing process; and*
- ii. *consideration of chemicals used in the production of these manufactured protein products.*

The additive to plant-based protein which gives it a “meat” flavour and allows it to claim that it is high in iron is heme.

“The novel “heme” colorant is produced in genetically engineered (GE) yeast and is modeled on a protein found in the roots of soybeans. The ingredient is also referred to as genetically engineered “heme,” soy

leghemoglobin. It is the color additive Impossible Foods uses to make its plant-based burger appear to "bleed" as if it were beef."⁶

"FDA approved soy leghemoglobin even though it conducted none of the long-term animal studies that are needed to determine whether or not it harms human health," said Bill Freese, science policy analyst at the Center for Food Safety (CFS)."

"This includes studies for cancer, reproductive impairment and other adverse effects called for by FDA's Redbook, the Bible of food and color additive testing. We find this to be all the more troubling because a number of potential adverse effects were detected in a short-term rat trial: disruption of reproductive cycles and reduced uterine weights in females and biomarkers of anemia, reduced clotting ability and kidney problems."⁷

Those who love to talk about the adverse health effects of red meat are, more often than not, referring to the effects of processed red meat. However, they are more than happy to talk about the health benefits of manufactured protein when some of the ingredients and additives have not yet stood the test of time. They also have a very high salt content, one of the common criticisms of overly processed foods of all categories. These comments are by no means exhaustive.

1.(e) any related matters.

The alternate agendas which are driving this scramble to promote alternative protein are of concern.

Those who would see global adoption of a fully plant-based diet to "save the planet" and feed the expected population growth are setting the globe on a sure road to starvation.

Some of the third world countries which are wholly dependent on a plant-based diet are a microcosm for the absolute devastation and starvation which hits such communities from natural disaster such as drought and sometime flood. It is common under such conditions to lose 100% of food production capacity. Rarely would every single livestock animal be lost.

Even in so-called developed countries arable agriculture relies on irrigation, a commodity which is becoming rare in Australia.

In California at present, almond trees are being pulled from the ground because of drought and an irrigation water shortage.

The positives of an integrated system of crops and livestock, or the use of largely useless land for the conversion of cellulose to nutrition dense animal protein are not recognised.

Specious and fanciful arguments for this wholesale disruption to the food system make it into fara such as the United Nations Food Systems Summit⁸ where reasonable facts and debate should prevail. Instead, jingoistic minorities are gaining mainstream traction to try to overturn a proven set of food production systems.

Their fanciful ideas will never feed the planet.

⁶ <https://www.foodsafetynews.com/2021/02/lawsuit-challenges-fda-approval-of-additive-that-makes-impossible-burger-bleed/>

⁷ Ibid.

⁸ <https://www.beefcentral.com/news/farmers-concerned-about-anti-meat-un-talkfest/?fbclid=IwAR20oWHk2S41FmWSUtmgQ5rJL6vvCEjq08js0EIRPSVzZT4LGgNPhq8irT4>

Misleading Labels and Misinformation

The law in general is not keeping up with events as they occur with the ACCC only able to prosecute companies whose labels or advertising is misleading.

At present the ACCC are loath to believe that the labelling is confusing despite evidence that consumers do return product because they believed at the time, they were purchasing an animal-based product. Most labels have the "meat" descriptors in a font which is many times larger than the "plant-based" descriptor.

It is not the companies however, who are the greatest source of misinformation in the quest to have a plant-based diet replace an animal-based diet. The constant targeting of particular industries by green groups, and, increasingly, animal welfare groups who present untrustworthy hypotheses as truth does enormous harm to many worthwhile businesses and industries. These unscientific claims must be stopped, by the law if necessary. They have already seen off the vast majority of the native timber industry and caused a severe shortage in this country. The same outcome must not be allowed in other industries.

Conclusion

We have seen industry bodies approach other challenges by environmental organisations such as "sustainability" and others in a diffident manner and a spirit of co-operation and compromise. This approach does not work with such groups and industry always loses more than it gains.

This issue is not one to be diffident about.

Manufactured protein products have attracted huge funding by some of the world's largest companies for research, development, and "marketing" not all of which is honest. Claims which include huge percentages by which greenhouse gases are being reduced in comparison to conventional agriculture need to be substantiated. Not only do they just need to be substantiated but kept up to date both as industries make improvements and as science adjusts the significance of figures such as the equivalence of gases such as Methane.

Far from being a struggling start-up industry the alternative protein market has investors such as Tyson Foods in the US and in Australia, Woolworths supported by CSIRO research has a subsidiary devoted to the plant-based market. This is just the tip of the iceberg.

Many are relying on denigrating livestock as a major selling point.⁹

Property Rights Australia supports not allowing any products not sourced from the flesh of animals being commonly called "meat" in any or all of the iterations by which such products are known.

Property Rights Australia is prepared to answer any further questions put by the committee.

⁹ https://www.weeklytimesnow.com.au/agribusiness/nourish-ingredients-v2-nutriv-csiro-backs-vegan-food-startups/news-story/4b41c6028c54b0cb80891c62e4f1c6bd?fbclid=IwAR3VG-vLwzNI1qc-B0CGWViI8O_n2LfTCKCJFlTqfrvq5NDfd4XdgVgNdU

Regards

Joanne Rea

Joanne Rea
Chair