The Labelling and Marketing of Plant-based Alternatives to Meat and Meat-based and Dairy products

Industry Working Group

Discussion Paper

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Executive Summary

The Plant-based Alternatives Labelling and Marketing Working Group was established to investigate and provide an industry view on whether the current labelling and marketing requirements (including imagery) of plant-based alternatives to meat and meat-based products and dairy products (plant-based alternatives) can be improved.

To ensure a targeted and balanced approach, members from each sector (meat, dairy, grains, horticulture, farming, food manufacturers and alternative protein research) and supermarkets were represented on the working group. Given the broad representation, there were diverse perspectives resulting in some debate of the problem. Ultimately, the working group agreed to set out to address the absence of specific industry guidance for the labelling and marketing of plant-based alternatives to assist consumers to be clearly informed as to their nature, composition and nutritional value.

Definitions used

For the purpose of this document, the following definitions are used:

- Plant-based alternatives - alternatives to meat and meat-based and dairy products that are produced with plant-based ingredients that may claim to have the texture, flavour, appearance, nutrients or other characteristics associated with meat and meat-based or dairy products but do not contain animal-derived ingredients.
- Meat – meat is referring to whole meat from the flesh of an animal, including chicken, beef, pork, etc.
- Meat-based products – meat-based products includes processed meats including sausages, patties, mince, ham, salami, etc.
- Dairy products - refers to products derived from milk as per Food Standards Code, Primary Production and Processing Standard for Dairy Products, Standard 4.2.4, including fat and protein derivatives this includes products such as milk, cheese, yoghurt, butter, ice-cream, including plain and flavoured varieties, regular and reduced fat etc.
- Nature - the nature of a food or beverage product, specifically whether the food product is plant-based or animal-derived in nature
- Composition - what the food or beverage product is made from or derived from (e.g., milk, beef, chicken, soy based, pea protein based)
- Nutritional value - the contribution of a food or beverage to the nutrient content of a diet as a proportion of energy intake, such as, the essential nutrients (protein, fat, carbohydrates, minerals, vitamins) available by consuming the food.

The working group is not designed to support one food sector over the other

The working group acknowledged both the plant-based alternatives and meat and dairy sector make contributions to the Australian economy. The meat and dairy market is an established and still growing economic contributor. The plant-based alternatives market is growing and caters to

a range of consumer preferences. It also makes an economic contribution. Both will be a part of achieving the Agriculture 2030 target of growing agriculture to a $100 billion industry by 2030.

In Australia, the red meat and livestock industry alone contributed $28.5 billion of domestic and export sales in 2018-19 (Meat and Livestock Australia, 2020). In addition to this, the chicken meat industry contributed $7.9 billion to Gross Domestic Product (GDP) in 2017-18 (AgriFutures Chicken Meat, 2020), the pork industry contributed more than $5.2 billion to GDP in 2015-16 (Australian Pork Limited, 2017) and the dairy industry generated $4.8 billion in 2019-20 (Dairy Australia, 2019). These figures of demonstrate the significance of the meat and dairy industries to Australia's economy.

The plant-based alternatives sector also make an important contribution to Australia's economy, with $150 million spent on plant-based meat alternatives in 2018-19, with sales forecast to reach $3 billion and generate 6,000 jobs by 2030 (Food Frontier , 2019). Plant-based soy and almond milk are worth $247.1 million, with revenue increasing at an annual rate of 8.3% through 2019-2020 (IBIS World, 2021). It is evident that both plant-based alternatives sector and meat and dairy sectors make contributions to the Australian economy, and each food product should be able to participate fairly in an open, honest and transparent competitive market.

Finding 1: The meat and dairy industries deliver significant economic benefit which will continue to grow. The plant-based alternatives industry is also continually increasing its economic contribution. The labelling and marketing framework should fairly facilitate the growth of both sectors.

The current labelling framework

The working group noted that current requirements prevent plant-based alternatives from using meat or dairy terms exclusively on their labelling or in advertising. Plant-based alternatives can however use meat or dairy terms with qualifiers – for example 'plant-based meat', 'chicken-free chicken' or 'dairy-free soy milk'. There are no restrictions on terms like burger, mince or steak which describe the utility rather than the composition of the product. Most working group members accepted that there should not be restrictions on the descriptions of the utility of the product but considered that further consideration was required around the appropriateness of how the product was described. Consumers should receive accurate and easy to understand information on the nutritional benefits and ingredients of the products they are purchasing. Australia and New Zealand fair trading and food laws require that labels do not misinform consumers through false, misleading, or deceptive representation.

Finding 2: The working group did not see a need to restrict words describing the utility of the product. However, the working group considered that food labelling and marketing should accurately describe the product and use terms that are truthful. The working group agreed that labelling and marketing should not mislead consumers over what the product contains or its purported nutritional equivalence or similarity with other products.

Identifying between plant-based alternatives and meat and dairy products

The working group discussed whether Australian consumers were able to identify between plant-based alternatives and meat and dairy products. A range of evidence, including published and un-published surveys and reports, were put forward by working group members in support of their various positions about whether consumers are being misled. Working group representatives noted that the nature of this evidence and the assessment criteria for its inclusion into this report meant that there are perceptions of limitations about the validity of the conclusions that these studies provide. Nevertheless, this evidence provides insights into the views of working group members and is discussed further below.

Meat and dairy representatives raised concerns that plant-based alternatives using terms commonly used for meat and dairy cause consumer confusion. The meat and dairy representatives highlighted their concern through surveys in Australia with a focus on nutritional equivalence, as well as a 2018 IPSOS (global leader in market research company) population survey of 2,010 US adults which found up to 32% of respondents associated plant-based products with dairy milk. Furthermore, there have been consumer complaints made directly to meat industry associations in recent years, including the Australian Chicken Meat Federation, Australian Pork Limited and the Australian Meat Industry Council over the use of animal-based terms.

Plant-based alternative representatives raised that there is little evidence of consumer confusion, citing a study commissioned by Food Frontier from Colmar Brunton in 2019 using a nationally representative sample (N = 1131) that found that 91% of Australian consumers surveyed have never mistakenly purchased a plant-based alternative thinking it was the meat or dairy counterpart and vice versa[1]. Of the 9% of Australian consumers who have mistakenly purchase the wrong product, the study states that they were more likely to be vegetarian or vegan mistakenly purchasing products with animal derived ingredients.

Plant-based alternative representatives stated that it is in the best interest of plant-based alternative manufacturers to clearly indicate and advertise the plant-based origin of their products given the rising consumer demand for these alternatives. It is noted that the target consumer for these products is purchasing their products because of the plant-based nature. Plant-based alternatives producers use the terms such as ‘meat’ or ‘milk’ as they aim to appeal to consumers who are seeking a plant-based alternative that claim to have similar utility or taste to meat and meat-based and dairy products while not wanting or being able to consume these products.

[1] 1131 Australian respondents were recruited via an online database (NZ sample was 1128), with a nationally representative sample of age, gender, location, household structure. The research was conducted via survey and collected data on various areas of interest including how attitudes and triggers differ amongst age groups, locations and gender, how well the term plant-based is understood, which claims are important to drive purchase, whether current labelling allows consumers to correctly identify vegan, vegetarian food, among other areas.

While most representatives conceded that most consumers know that plant-based dairy alternatives do not come from a cow and plant-based meat alternatives do not come from animals, significant concern was expressed that the way that plant-based alternatives were marketed, including around how they were labelled and the use of comparative nutrition claims and animal images. Meat and dairy representatives raised that the use of product terminology was misleading in that it suggested that plant-based alternative products were nutritionally equivalent and implied health benefits associated with consumption of meat or dairy products. Meat and dairy representatives raised concerns that this contributes to poor health outcomes.

Finding 3: There is limited consumer research on whether consumers are confused however an Australian study commissioned by the plant-based industry from 2019 suggests that most consumers do not purchase plant-based alternatives thinking they come from an animal. However, concerns were raised that current labelling and marketing inaccurately implies to consumers, by word or image use, that plant-based alternatives are nutritionally equivalent or superior to meat and dairy, and in turn impact health outcomes.

Truth in labelling and marketing – nutritional perceptions

The working group further considered whether Australian consumers are confused by the nutritional composition of plant-based alternatives. Nutrition is cited as a key factor (but not the only factor) for many consumers when considering their food, including for consumers of both plant-based alternatives and meat and dairy. It is important to note that meat and meat-based and dairy products are vastly different nutritionally, and there are products within each sub-category that also differ greatly nutritionally (e.g., red meat vs white meat, unprocessed meat vs processed meat, or milk vs sweetened desserts).

Research conducted by Dairy Australia found that 36% of survey respondents perceive plant-based alternatives to be nutritionally equivalent to dairy milk despite the differences in the nutritional profiles of these products. The main reason cited by survey respondents for purchasing plant-based milk alternatives is because they perceived that they are healthier than dairy milk (49%). Plant-based representatives highlighted that there is a lack of independent research on consumer perception of dairy (that is research not commissioned by the dairy industry).

The working group noted evidence that demonstrated the difference between plant-based alternatives and meat and meat-based and dairy, specifically in nutrients and bioavailability. The working group considered the way how some of these products are packaged and labelled does not allow consumers to adequately compare them. Meat and dairy representatives raised concerns that the use of comparative nutrition claims (e.g. with as much protein and calcium as dairy milk), images and depictions of animals on plant-based products had the potential to incorrectly convey to consumers that plant-based products offered an equivalence in nutrition to meat and dairy. Plant-based alternatives representatives reject this concern, and raise there is no evidence that there is consumer confusion based on images and depictions of animals.

Meat and dairy representatives raised concerns that plant-based alternatives claim superiority in environmental claims which could cause consumer confusion and lead to denigration of meat and meat-based products and dairy products. While environmental differences in the products, and how this is reflected in labelling and marketing was raised as a consideration, due to the

time constraints the depth of analysis required, a full investigation was determined as outside the scope for this working group.

Finding 4: The working group noted there are nutritional differences between plant-based alternatives and meat and dairy (noting that products must be compared like for like) and considered that current labelling and marketing requirements should allow consumers to adequately differentiate between them.

International examples

The working groups considered international examples of how other jurisdictions had approached this issue and noted the range of measures that had been pursued. However, given the lack of evaluative work on the impact of these standards was unable to form a view on what if any of these approaches should be adopted in Australia.

Table 1 – High-level overview of plant-based alternatives labelling by location

	EU	France	USA	Canada	China	Japan	India
Meat	Yes – EU recently considered and did not support amendment proposing to ban PBA[2] use of meat terms	No – France passed amendment in 2018 to prohibit PBA being labelling like meat and dairy	Yes with qualifiers but specifics differ between states – noting there is current legal activity ongoing as outlined in next sections (and in some cases proposed laws rejected)	Yes with qualifiers - noting the Canadian Food Inspection agency is currently reviewing this after recent consultation	Yes with qualifiers – regulations are currently being drafted to specify qualifiers	Yes – noting currently consulting that includes labelling and standardisation	Yes – with a standardised mark that is used to distinguish between vegetarian and non-vegetarian products
Dairy	No – EU Parliament voted in favour of banning PBA using dairy terminology	No – France passed amendment in 2018 to prohibit PBA being labelling like meat and dairy	Yes with qualifiers but specifics differ between states – noting there is current legal activity ongoing as outlined in next sections (and in some cases proposed laws rejected)	No – Milk must meat definition in B.08.003. Many PBA brands use 'beverage'	Yes with qualifiers – regulations are currently being drafted to specify qualifiers	Yes – noting currently consulting that includes labelling and standardisation	Yes – with a standardised mark that is used to distinguish between vegetarian and non-vegetarian products

Table 4 outlines the current regulations and activity at a high level based on international locations. In addition to the above continent/country-based regulations and activities, Codex Alimentarius, which is a collection of international recognised standards that ensures food is safe and can be traded, also provides exceptional permissions for the use of dairy terms on non-dairy food whose nature is clear from traditional usage or when the term is clearly used to describe a characteristic quality, e.g. peanut butter.

Further information on current international regulation is detailed through section 5.2.

[2] In this table PBA is meaning Plant-based alternatives

Finding 5: International evidence suggests a range of options are available for the labelling and marketing of plant-based alternatives compared to meat and meat-based and dairy products to be adopted in Australia to assist consumers to be clearly informed as to their nature, composition and nutritional value.

Clear food labelling and marketing for plant-based alternatives delivers benefits to both consumers, and the agricultural industry.

Table 2 – Benefits of clear food labelling and marketing

What benefits are there for consumers?	What benefits are there for the Meat and dairy sector?	What benefits are there for the plant-based sector?
• Consumers can easily differentiate between types of products • Consumers can easily identify the correct product they were intending to purchase • Consumers can understand and compare the nutrition between products.	• Consumers can identify meat and meat-based and dairy products, and purchase them intentionally • Consumers will have clarity on meat and meat-based and dairy products nutrition, and established health benefits • Meat and meat-based and dairy products have a clear market presence as the plant-based alternatives market expands. • Will provide the meat and dairy sectors with a clearer understanding and greater confidence in the terminology/ imagery to be adopted by plant-based alternatives, as sectors continue to grow and innovate.	• Consumers can identify plant-based alternatives, and purchase them intentionally • Consumers have clarity on plant-based alternatives' nutrition and established health benefits, which is based on like for like nutritional comparisons • Plant-based sector have a clear industry standard specific to the labelling and marketing of plant-based alternatives as the plant-based alternatives market expands.

Working group principles

The working group has developed 6 principles to guide its approach:

Working Group Principles

1) Decisions made by the working group are made on a consensus basis
2) Discussion are to be based on the latest evidence, with data presented throughout the process
3) A range of options needs to be considered, including status quo, voluntary, co-regulatory and regulatory approaches
4) There needs to be awareness of the current policy and regulatory framework
5) Any approach suggested must not attempt to dictate or influence market share or restrict competition, and deliver positive outcomes for industry as a whole
6) There should be consideration for future review – including agreement on a review process, and markers of success – as the market becomes more complex over time.

Recommendations and next steps

The working group noted that there is no specific industry guidance for the labelling and marketing of plant-based alternatives compared to meat and meat-based products and dairy products to assist consumers to be clearly informed as to their nature, composition and nutritional value, and considered a broad range of approaches to address this, from status quo, voluntary approaches to regulatory approaches.

After considering the range of approaches set out in this report, the working group could not come to a consensus decision on a preferred approach. The majority of working group members did however agree that a voluntary approach is the preferred way forward noting further work should be undertaken to explore this option. This position was shared by all working group members, except members from the meat industry who expressed a preference for regulation. Members also noted that a voluntary framework should incorporate an appropriate compliance and enforcement framework that is subject to review.

The working group has developed and proposed numerous approaches for consideration. The next steps for the investigation into the labelling and marketing of plant-based alternatives involves presenting these findings and recommendations to the Minister for Agriculture, Drought and Emergency Management.

Introduction

1.1 Context

Australia has a diverse agricultural industry, producing a range of crop and livestock products. The agricultural industry creates jobs, particularly in regional and rural areas, and all of its components have a critical role to play in increasing the value of Australian agriculture to $100 billion by 2030.

The market for plant-based alternatives to meat and meat-based and dairy products (plant-based alternatives) has increased both domestically and globally. Plant-based alternatives provide consumers with more options when they cannot, or choose not to, consume meat and dairy. The increased demand in plant-based alternatives presents a significant and growing commercial opportunity for Australian horticultural and crop producers, food technologists and food manufacturers.

Labelling and marketing of plant-based alternatives has used terminology that is more traditionally associated with meat and dairy industries. There is currently no formal guidance in place that provides clear and unequivocal guidance regarding the use of these terms. Whether such mechanism is required has been the context of the working group discussions.

1.2 Industry working group

On 29 September 2020, a round table discussion brought industry participants together to share their views on labelling and marketing of plant-based alternatives.

The round table noted that meat, dairy and plant-based industries are important to Australia's agriculture sector. The growing diversity of food products supports consumer choice, especially for those who choose not to or are unable to consume specific products. These industries also create additional diversified jobs across the nation, particularly in regional and rural areas.

The round table agreed a working group be established to conduct an evidence-based investigation on labelling and marketing of plant-based alternatives to consider whether existing arrangements can be improved. Representatives who attended the round table were invited to participate in the working group.

1.3 Objective

The objective of the working group is to provide advice on the labelling and marketing of plant-based alternatives in the context of how they are labelled and marketed with relation to meat and dairy, to assist consumers to be clearly informed as to their nature, composition and nutritional value. The findings of the working group will be used to develop an understanding of options, and to suggest the next steps for broader industry and government engagement.

1.4 Problem Statement

There is an absence of specific industry guidance for the labelling and marketing of plant-based alternatives compared to meat and meat-based and dairy products, to assist consumers to be clearly informed as to their nature, composition and nutritional value.

2 Scope

For the purpose of this document, the following definitions are used:

- Plant-based alternatives - alternatives to meat and meat-based and dairy products that are produced with plant-based ingredients that may claim to have the texture, flavour, appearance, nutrients or other characteristics associated with meat or dairy products but do not contain animal-derived ingredients
- Meat – meat is referring to whole meat from the flesh of an animal, including chicken, beef, pork, etc
- Meat-based products – meat-based products includes processed meats including sausages, patties, mince, ham, salami, etc.Dairy – dairy is referring to dairy products including milk, cheese, yoghurt, butter, etc.
- Dairy – refers to products derived from milk as per Food Standards Code, Primary Production and Processing Standard for Dairy Products, Standard 4.2.4, including fat and protein derivatives, which includes products such as milk, cheese, yoghurt, butter, ice-cream, including plain and flavoured varieties, regular and reduced fat etc.
- Nature - the nature of a food or beverage product, specifically whether the food product is plant-based or animal-derived in nature
- Composition - what the food or beverage product is made from or derived from (e.g., soy based, pea protein based)
- Nutritional value - the contribution of a food or beverage to the nutrient content of a diet intake, such as, the essential nutrients (protein, fat, carbohydrates, minerals, vitamins) by consuming the food.

There is a broad range of plant-based alternatives products, using varying labelling and marketing, with examples shown in figure 1, figure 2 and figure 3.

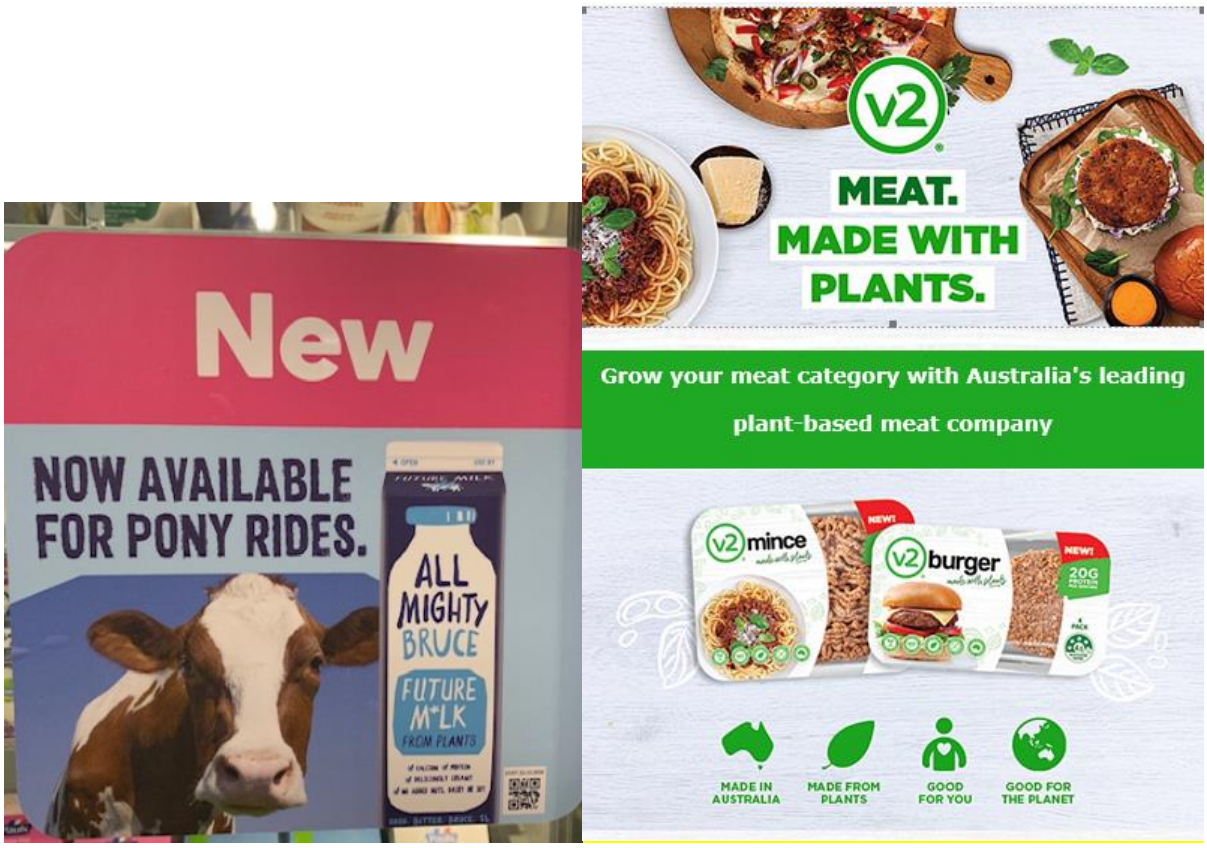
The focus of this work is on the labelling and marketing of plant-based alternatives for products sold in Australia. Other factors, however, were raised during the working group discussion which includes product innovation, nutrition composition, environment considerations, retail placement, impact on consumers and business and potential trade implications – and should have consideration in the final options recommended.

While environmental labelling was raised and formed part of some discussion, due to time constraints, a full investigation and recommendations on environmental labelling and marketing were determined as not within scope for this process.

Figure 1 – Examples of plant-based meat and meat based product alternatives

Figure 2 – Examples of plant-based dairy product alternatives

Figure 3 – Example of plant-based alternatives marketing



3 Overview of plant-based alternatives sector

The plant-based alternatives market is long-standing, varied and caters to a range of consumer preferences, with various types of products undergoing significant levels of product development. Key plant-based protein sources include soy, pea pulses, seitan (made from wheat protein) and tempeh (made from soy protein).

The global plant-based meat alternatives market has estimated its value at US $12.1 billion and predicted to reach almost US $28 billion by 2025. The global plant-based dairy alternatives market is showing similar growth, valued at $21 billion in 2015, and forecast to reach sales of over $34 billion by 2024 (ProVeg International, 2019). Growth is expected to continue as the plant-based alternatives market is still in an early stage of its lifecycle, and as consumer trends show an emergence of 'flexitarian' consumers and increase of vegetarians and vegans (Deloitte, 2019).

In Australia, the plant-based alternatives market is predicted to grow and is reflective of consumer trends. According to research undertaken by the plant-based alternatives industry, 32% of Australians have consciously limited their meat consumption and identified as either 'flexitarians' or meat-reducers (Food Frontier , 2019). Australians spent $150 million on plant-based meat alternatives with the sector employing 265 in 2018-19. Sales are forecast to reach $3billion and generate 6,000 jobs by 2030 (Food Frontier , 2019).

In 2020, the CSIRO published a report on the economic recovery of the Australian industry from COVID-19 and highlighted the plant-based industry as an opportunity to meet export demands for proteins as the global middle class continues to expand (CSIRO, 2019). The CSIRO estimates growth opportunities at $4.1 billion in increased domestic sales, and $2.5 billion in increased export sales. For transparency, it is noted that the CSIRO has investments in this sector.

The plant-based dairy alternatives market offers a range of products including alternatives to milk, ice-cream, cheese, yoghurt, and other traditionally dairy products, with plant-based milk alternatives being the most developed. In the past 4 years, the sale of plant-based milk alternatives grew 48% to 132 million litres (Dairy News, 2019). There are now close to 200 different products available in Australian supermarkets for consumers who are seeking a plant-based milk alternative.

Although plant-based milk alternatives sector is growing exponentially, the sector still accounts for a small portion of the entire milk market, with plant-based milk accounting for approximately 7% of milk consumed in Australia. Soy and almond milk production are worth $237.1 million (IBIS World, 2021), with revenue increasing at an annual rate of 8.3% through 2019-20, with soy being the most popular plant-based dairy due to its long standing market presence.

There is opportunity for further innovation as the sector continues to respond to changes in demand as seen in consumer trends.

4 Overview of meat and meat products and dairy and dairy products sector

The meat and dairy sectors are globally significant, with the global meat sector valued at US $945.7 billion in 2018, forecast to increase to US $1142.9 billion by 2023 (Statista, 2019). The global dairy market was worth US $718.9 billion in 2019 (IMARC, 2020), with global milk production forecast to increase by between 1 and 2% in 2020-21 (ABARES, 2020). In 2019, the global consumption of cheese reached 20192 kilotonnes and consumption of butter was 10350 kilotonnes (ABARES, 2020).

Global meat consumption has increased by 58% over the 20 years to 2018, reaching 380 million tonnes, with population growth accounting for 54% of this increase, and per person consumption growth accounted for the remainder (Department of Agriculture, Water and the Environment, 2020). Global meat consumption between 2019 and 2024 is expected to rise, largely driven by population growth and rising incomes in developing countries. In Australia, the meat and dairy sector continues to see similar growth, and continue to contribute to the economy through increased sales and jobs.

In 2018-19, the Australian red meat industry contributed $17.6 billion[3] to Gross Domestic Product (GDP) – or 1.4% of Australia's GDP which was 1% higher year on year, and up 89% from 2013-24 (Meat & Livestock Australia, 2020). The Australian red meat and livestock industry created (directly and indirectly) employment for approximately 434,000 people. Furthermore, Australia exported 65% of beef, 73% of sheep meat, and 90% of goat meat production in 2018, which is valued at more than $13.5 billion, making Australia the world's largest red meat exporter by value (Fortune, 2019).

The Australian chicken meat sector is also seeing continued growth. The sector grew from $2.72 billion in 2018-19 to $2.78 billion in 2019-20 (Agrifutures, 2021). This sector also has an approximate retail value of around $6.6 billion and employed approximately 58,000 people. It is forecasted that growth in both production and consumption of chicken meat will continue to steadily increase, with the growth rate expected to be the highest at 60% in 2030 (Australian Chicken Meat Federation, 2011). The consumption of chicken meat in Australia has risen over the past few decades at an average rate of 3% per annum, with Australians now consuming more chicken per year than other meat, at an average of 47 kg per person (Agrifutures, 2020). The popularity of Australian chicken has been attributed to the increasing product diversity,

[3] Dollar amount used in this report is in AUD unless otherwise specified

price competitiveness, high quality and consistency, and targeted marketing (Australian Chicken Meat Federation, 2020).

The Australian pork sector contributed more than $5.2 billion to Australia's GDP, and supported more than 36,000 jobs across Australia in 2015-16 (Australian Pork Limited, 2017). This includes pig production, primary processing, secondary processing and wholesaling. Strong consumer demand continues for fresh pork, having increased by more than 10% per capita during 2018/19 (Australian Pork Limited, 2019). Australian Pork Limited states that over the past five years leading to 2019, the per capita consumption of fresh pork in Australia has moved from around 8.5kg per annum to more than 11.5kg.

Meat-based products include processed meats such as meat-based sausages, patties, bacon, and ham. In 2011-12 Australians aged over 19 years consumed on average almost 560 grams of red meat per week (Cancer Australia, 2017). Also in 2011-12, the ABS has data that shows an average of 0.4 serves of processed meat was consumed per day (Australian Bureau of Statistics, 2016). The ABS also found that the most common sources of discretionary meats were higher fat sausages, contributing to 14% of total discretionary meat, with lamb and mutton being the next highest making up 8%, and ham as the third highest contributing 7%.

The Australian dairy sector is the fourth largest agriculture industry, employing approximately 43,500 people in 2019-20, generates $4.8 billion in farm gate value (Dairy Australia, 2019). Australia exports approximately 29% of its dairy production, with exports valued at $3.4 billion in 2019-20. Total milk production in Australia is forecast to increase by 2% in 2020-21 to 9 billion litres (The Department of Agriculture, Water and the Environment, 2019).

Under the Australian Dairy Plan, the growth in dairy demand is strong, with Australians consuming more dairy than other comparable countries. In particular, Australian milk production has exceeded expectations in the FY21 season, boosting the base year volume. Under the medium growth scenario analysed under the Australian Dairy Plan, milk production in 2024-25 (FY25) is forecasted to be 9.6 billion litres, one billion litres higher than the projected levels of production on current settings. The additional production will generate almost $500 million annually in extra value at the farmgate. There is also expected growth in the Asian and Middle East North Africa economies, which provides the greatest opportunity for expansion of the dairy market (Dairy Australia, 2020).

Dairy products include yoghurts and milks (plain and flavoured), cheese, butter, ice cream, and other dairy desserts. According to research conducted by Dairy Australia for 2019-20 (Dairy Australia, n.d.), Australians eat about 13.6 kilograms of cheese per capita annually, 4 kilograms of butter per capita annually, and 9.5 kilograms of yoghurt per capital annually. Cheese has remained relatively steady while yoghurt has grown strongly in the years prior to this research. According to research conducted by Roy Morgan in 12 months to March 2019 (Roy Morgan, 2019), 45.5% of Australians surveyed are eating natural or plain yoghurt in an average four weeks, compared to 42.4% who eat flavoured or fruit yoghurt in the same period.

With the continued growth of these established sectors, there is opportunity for continuous improvement on efficiency and productivity, as well as interest in responding to changes in demand as seen in trends (such as free-range meat and organic dairy).

5 Current regulation

5.1 Domestic regulation

5.1.1 Food standards code

Definitions
Food Standards Australia New Zealand (FSANZ) sets the labelling standards in the Australian New Zealand Food Standards Code, which is implemented and enforced by Australian states and territories.

Meat
Meat is defined in Standard 1.1.2-3 and Standard 2.2.1-2 as:

(a) means whole, or part of the carcasses of any of the following animals, if slaughtered other than in a wild state:
   i. Buffalo, camel, cattle, deer, goat, hare, pig, poultry, rabbit or sheep
   ii. Any other animal permitted for human consumption under a law of State Territory or New Zealand; and

(b) does not include:
   i. fish; or
   ii. avian eggs; or
   iii. foetuses or part of foetuses

Also within Standard 1.1.2-3 and Standard 2.2.1-2:

> Cured and/or dried meat flesh in whole cuts or pieces includes any attached bone.
>
> Dried meat means the meat that has been dried but does not include slow cured dried meat
>
> Manufactured meat means processed mean containing no less than 660 g/kg of meat
>
> Meat flesh means that consists of skeletal muscles and any attached:
>
> (a) animal rind; or
>
> (b) fat; or
>
> (c) connective tissue; or
>
> (d) nerve; or
>
> (e) blood; or
>
> (f) blood vessels; or
>
> (g) skin, in the case of poultry.

meat pie means a pie containing no less than 250 g/kg of meat flesh

offal:

(a) includes blood, brain, heart, kidney, liver, pancreas, spleen, thymus, tongue and tripe; and

(b) excludes meat flesh, bone or bone marrow

(c) Processed meat means a food that has, either singly or in combination with other foods, undergone a method of processing other than boning, slicing, dicing, mincing or freezing.

Processed meat means a food which has, either singly or in combination with other foods, undergone a method of processing other than boing, slicing, dicing, mincing or freezing.

Sausage means a food that:

(a) consists of meat that has been minced, meat that has been comminuted, or a mixture of both, whether or not mixed with other foods, and which has been encased or formed into discrete units; and

(b) does not include meat formed or joined into the semblance of cuts of meat.

Standard 2.2.1 also outlines the requirements for sale:

Requirement for food sold as sausage

A food that is sold as sausage must be sausage and:

(a) contain no less than 500g/kg of fat free meat flesh; and
(b) have a proportion of fat that is no more than 500 g/kg of fat free meat flesh content

Requirement for food sold as meat pie

A food that is sold as a meat pie must be a meat pie.

Requirements for food sold as dried meat or cured and/or dried meat flesh in whole cuts or pieces, manufactured meat or processed meat

(1) A food that is sold as a dried meat must be dried to a water activity of no more than 0.85.

(2) A food that is sold as cured and/or dried meat flesh in whole cuts or pieces must

contain not less than 160 g/kg of meat protein on a fat free basis.

(3) A food that is sold as manufactured meat must contain not less than 660 g/kg of

meat.

(4) A food that is sold as processed meat must contain not less than 300 g/kg of meat.

Dairy

Milk is defined in Standard 1.1.2-3 and Standard 2.5.1-2 as:

> The mammary secretion of milking animals, obtained from one or more milkings for consumption as liquid milk or for further processing, but excluding colostrums

Yoghurt is defined in Standard 1.1.2-3 and Standard 2.5.3-2 as:

> A fermented milk where the fermentation has been carried out with lactic acid producing microorganisms'

Cheese is defined in Standard 1.1.2-3 and Standard 2.5.4-2 as:

> (a) 'The ripened or unripened solid or semi-solid milk product, whether coated or not, that is obtained by one or both of the following processes:
>
> i. wholly or partly coagulating milk, or materials obtained from milk, or both, through the action of rennet or other suitable coagulating agents, and partially draining the whey which results from such coagulation;
>
> ii. processing techniques involving concentration or coagulation of milk, or materials obtained from milk, or both, which give an end-product with similar, physical, chemical and organoleptic characteristics as the product descripted in subparagraph (a)(i); or
>
> (b) such a product with any of the following additional ingredients added during production:
>
> i. water;
>
> ii. lactic acid producing microorganisms;
>
> iii. flavour producing microorganisms;
>
> iv. gelatine;
>
> v. starch;
>
> vi. vinegar;
>
> vii. salt;
>
> viii. tall oil phytosterol esters added in accordance with this Standard.

Butter is defined in Standard 1.1.2-3 and Standard 2.5.5-1 as:

> A product derived exclusively from milk and products obtained from milk, principally in the form of an emulsion of the type water-in-oil.

Ice cream is defined in Standard 1.1.2-3 and Standard 2.5.6-2 as:

> A sweet frozen food that is made from cream or milk products or both, and other foods, and is generally aerated.

Other relevant standards

Primary Production and Processing Standard

Standard 4.2.4 sets out a number of food safety requirements, including the implementation of documented food safety programs for dairy primary production, collection, transportation and processing. Furthermore, this standard provides guidance around what is a dairy product.

Prescribed name

Standard 1.2.2-2 requires that the name of a food uses the prescribed name, or a name or description that is sufficient to indicate the true nature of the food. This must be included on the label.

Food sold with a specified name

Standard 1.1.1–13(4) includes a provision that states:

> If a food name is used in connection with the sale of a food (for example in the labelling), the sale is taken to be a sale of the food as the named food unless the context makes it clear that this is not the intention…

It also provides an example:

> …The context within which food such as soy milk or soy ice cream are sold is indicated by the use of the name soy; indicating that the product is not a dairy product to which a dairy standard applies.

Standard 1.1.1–13(4) was included in an omnibus submission (P1025) in 2016, which underwent two rounds of consultation. It should be noted that this provision provided clarification to existing standards, as oppose to introducing new standards. Products such as soy milk and plant-based meat alternatives were already available on the market prior to this provision being introduced, and were already using terms such as meat, dairy, milk, etc.

The meat and dairy representatives have stated that the implications to industries were not explicitly communicated and was unaware of the change and did not tender any submissions through the consultation process.

Ingredients

Standard 1.2.4-2 requires a statement of ingredients for packaged food for sale. Ingredients must be listed by their common name, a name that describes the true nature of the ingredient or a generic name to allow consumers to be able to consider ingredient information when making informed food choices.

Nutrition

Standard 1.2.1-8(1)(i) and Standard 1.2.8-5(1) requires a Nutrition Information Panel (NIP) to be included on the label of most packaged food for sale. The NIP must include energy, protein, fat, saturated fat, carbohydrate, sugars, and sodium content of the food.

Mandatory advisory statement for plant-based milk alternatives

Schedule 9-1 requires plant-based milk alternatives must include a mandatory advisory statement indicating that they are not suitable as a complete milk replacement for children under two or five years (subject to protein and fat content).

5.1.2 Australian Competition and Consumer Commission

All representations about food are subject to fair trading laws and food laws which prohibit false, misleading or deceptive representation. This includes the Australian Consumer Law (ACL) contained in the Competition and Consumer Act 2010, and state and territory Fair Trading Acts (Food Standards Australia New Zealand, 2017).

The key prohibitions are that businesses:

- Must not engage in actual or potential misleading or deceptive conduct in relation to a food or beverage;
- Must not make false claims including but not limited to the content, characteristics, or origin of food or beverages; and
- Must not engage in misleading conduct about the nature, manufacturing process, characteristics, suitability for their purpose or the quantity of any good.

The advice in the Food and Beverages industry – Food Descriptors guideline to the Trade Practices Act states the key issue to consider is the 'do not mislead' principle is the overall impression that a representation will leave in the mind of the consumer.

The ACCC recommends consumers who believe that they have been misled to contact the business in the first instance, or the state and territory consumer protection agency, industry ombudsmen, state and territory tribunals, or the ACCC.

The ACCC provides information on consumer rights and obligations, as well as possible courses of action that can be taken. While the ACCC does not resolve individual complaints, they use information to help understand what issues are causing most harm to Australian business and consumers, and where to focus their compliance efforts (ACCC, 2020).

The ACCC has also advised that there have been very few contacts from consumers claiming they had been misled by the labelling used for plant-based alternatives. Over the period of January 2018 to October 2019, the ACCC received only 2 contacts out of 480,000 contacts received. The ACCC has also reviewed the labelling of some products and are of the view that the overall impression conveyed by the labelling of these products was unlikely to be misleading to an ordinary consumer. In ACCC's experience, the labelling of plant-based alternatives is not a consumer issue of concern.

5.1.3 Food Regulation Standing Committee (FRSC)

In 2018, the Australia and New Zealand Ministerial Forum on Food Regulation (the Forum) noted stakeholder concerns regarding potentially misleading descriptions of food products and asked the FRSC to develop an options paper on how food standards, including labelling, definitions and other elements can be used to address misleading descriptions of food. In August 2019, the Forum resolved on a majority basis that plant-based alternatives are adequately regulated under the current labelling requirements and consumer and fair trading laws (Food Regulation, 2021).

Through the Misleading Descriptions for Food Options Paper, the FRSC considered 6 key issues (Food Regulation Standing Committee, 2019):

1) Increasing consumer demand
2) Nutritional equivalence and potential dietary impacts
3) Whether consumers are being misled about nutritional equivalence
4) Whether consumers are being misled about the food source, considering terminology and self placement
5) Where this issue falls in the Food Labelling Hierarchy.

The FRSC report discusses how consumer demand has risen in recent years, and that the rise in vegetarianism, 'flexitarians', and veganism is likely a key factor driving the increased demand for these products. FRSC raise that plant-based alternatives are often, but not always, fortified with calcium, and/or protein, to achieve parity with dairy milk, but do not necessarily contain similar levels of the other nutrients found in dairy milk. The FRSC also stated that there is no evidence-based comparison between plant-based alternatives and good quality beef identified by the committee.

The FRSC then considered whether consumers are being misled about nutritional equivalence, which they ultimately concluded that there is no available evidence to determine whether Australian and New Zealand consumers are misled about the nutritional differences between meat and dairy and their plant-based alternatives when choosing products.

In considering whether consumers are being misled about the food source, the FRSC raised that research suggests most consumers understand the differences in source (i.e. the product is derived from an animal versus plant), and concluded that there was no evidence identified to confirm whether or not consumers are misled about the source of plant-based alternatives.

In regard to the Food Labelling Hierarchy, the FRSC determined that this issue (i.e. consumers being misled about the nutritional differences between dairy or meat and their plant-based alternatives) would be considered to sit at the bottom of the Food Labelling Hierarchy as a consumer values issue overseen by consumer protection laws. Consumer values issues are deemed as lower risk and should generally be self-regulated by industry, overseen by consumer protection laws. The FRSC also stated that in the event that evidence was found to show that consumers directly substitute plant-based products as alternatives to meat and dairy, and consequently miss out on important nutrients, then the issue could be considered a preventative health issue and therefore elevated in the hierarchy.

Some members have raised concerns about the limitations of the FRSC report and this is included within the discussions section of this report in Section 6.

5.2 International regulation

Table 4 shows a high-level summary of plant-based labelling requirements by location, with further detail in the following sections.

Table 3 – High-level overview of international plant-based alternatives based on location

	EU	France	USA	Canada	China	Japan	India
Use meat terms?	Yes – EU recently considered and did not support amendment proposing to ban PBA[4] use of meat terms	No – France passed amendment in 2018 to prohibit PBA being labelling like meat and dairy	Yes with qualifiers – noting there are new laws in some states with restrictions but with pending litigation action to be resolved, (and in some cases proposed laws rejected)	Yes with qualifiers - noting the Canadian Food Inspection agency is currently reviewing this after recent consultation	Yes with qualifiers – regulations are currently being drafted to specify qualifiers	Yes – noting currently consulting that includes labelling and standardisation	Yes – with a standardised mark that is used to distinguish between vegetarian and non-vegetarian products
Use dairy terms?	No – EU Parliament voted in favour of banning PBA using dairy terminology	No – France passed amendment in 2018 to prohibit PBA being labelling like meat and dairy	Yes with qualifiers – noting there are new laws in some states with restrictions but with pending litigation action to be resolved, (and in some cases proposed laws rejected).	No – Milk must meat definition in B.08.003. Many PBA brands use 'beverage'	Yes with qualifiers – regulations are currently being drafted to specify qualifiers	Yes – noting currently consulting that includes labelling and standardisation	Yes – with a standardised mark that is used to distinguish between vegetarian and non-vegetarian products

There has been significant public discussion around plant-based alternatives labelling internationally. Table 4 outlines the current regulations and activity at a high level based on international locations.

In addition to the above continent/country-based regulations and activities, Codex Alimentarius, which is a collection of international recognised standards that ensures food is safe and can be traded, also provides exceptional permissions for the use of dairy terms on non-dairy food whose nature is clear from traditional usage or when the term is clearly used to describe a characteristic quality, e.g. peanut butter

Further information on current international regulation is detailed through section 5.2.

5.2.1 Europe

There are various European food laws that outline the principles and requirements for food (De Boer, 2019). This includes the Regulation (EU) No 1169/2011 which obligates all food business owners to communicate the mandatory particulars of every food product sold in the EU.

This includes that the name of the product must be its legal name. For example, to use 'butter', it must comply with the legal description of butter, 'a solid, malleable emulsion, derived exclusively from milk with milk-fat content of at least 80%'.

If there is no legal name, then the product must use its customary name that is recognised by consumers without needing further explanation (Food Standards Agency, 2014). If neither a legal name or customary name exists for a particular product, then the name must use a

[4] In this table PBA is meaning Plant-based alternatives

descriptive name, which is a name that describes its use and food in the way that the consumers can know the 'true nature' of the product, for example 'macaroni in cheese sauce'.

Regulation (EU) No1308/2013, Articles 78 and 92, Appendix VII Part III outline the definition, designation and sales description of 'milk':

> Annex VII Part III "Milk" means exclusively the normal mammary secretion obtained from one or more milkings without either addition thereto or extraction therefrom.
>
> (3). The term 'milk' and the designations used for milk products may also be used in association with a word or words to designate composite products of which no part takes or is intended to take the place of any milk constituent and of which milk or a milk product is an essential part either in terms of quantity or for characterisation of the product.
>
> (5)…. "However, this provision shall not apply to the designation of products the exact nature of which is clear from traditional usage and/or when the designations are clearly used to describe a characteristic quality of the product.
>
> (6). In respect of a product other than those described in points 1, 2 and 3 of this Part, no label, commercial document, publicity material or any form of advertising as defined in Article 2 of Council Directive 2006/114/EC (1) or any form of presentation may be used which claims, implies or suggests that the product is a dairy product.

In regard to the definition of milk, there is a list of exceptions (products that can use the term milk), which included coconut milk or cream until 2020. In 2020, the European Parliament voted in favour of Amendment 171, banning plant-based alternatives from using dairy terminology, which means that coconut milk and other exceptions will no longer be able to use the term 'milk' but could instead be labelled as coconut drink or beverage.

This follows on from the Court of Justice of the European Union ruling that purely plant-based products cannot be marketed with designations such as 'milk', 'cream', 'butter', 'cheese', or 'yoghurt', which are reserved by EU law for animal products (Court of Justice of European Union, 2017).

The European Parliament also considered amendment 165, proposing to ban terminology such as 'burger', 'sausage', 'steak' for plant-based alternatives but this was not supported. The proponents of the amendment state the amendment is intended to avoid consumer confusion, with Europe's largest farmers' association supporting the amendment (Farming UK, 2020). The European Consumer Organisation, an umbrella consumer's group that brings together 45 consumer organisations across the EU, is against the amendment citing the Farm to Fork Strategy which includes a recommendation that European consumers need to move to a more plant-based diet with less red and processed meat (The European Consumer Organisation, 2020). It is noted that the Farm to Fork strategy is a broad and holistic sustainability strategy, and recommendations regarding moving to a more plant-based diet are a small part of the strategy and not the focus of the strategy.

Currently, both votes are subject to final approval, with the parliament's decision now moving into discussion between European Union member states, the European Commission, and the European Parliament, known as the 'trilogue' phase of the European Union's legislative process.

France

Prior to this, France passed an amendment to its agriculture bill in 2018 that prohibits any product largely based on non-animal ingredients from being labelled like traditional meat and dairy (Assemblee Nationale, 2018). This prohibits food producers from using meat terminology such as 'vegetable steak', or 'soy sausages'.

More recently, France's economic minister detailed a new Act in a recent communication to the European Commission. Article 5 of France's new Act states (Pritchett, 2020):

> The names used to indicate foodstuffs of animal origin shall not be used to describe, market, or promote foodstuffs containing vegetable proteins. A decree shall set the proportion of vegetable proteins beyond which this name is possible.

These events are relatively new, particularly noting that the EU changes have not been implemented, so the impacts have not been yet documented. However, it has been raised that national initiatives, such as France's new Act, reduce the consistency of EU law across Europe, meaning that businesses located outside of France may need to alter their strategies to adhere to national regulations. This can cause challenges for products developed outside of France but are popular with French consumers.

5.2.2 United States

Voluntary standards – as developed and set by the United States plant-based alternatives industry

In the United States (U.S), the Plant-based Food Association (PBFA) has developed a voluntary set of industry standards for plant-based milk alternatives (Plant Based Food Associations, 2018), plant-based meat alternatives (Plant Based Food Association, 2019) and plant-based yoghurt alternatives (Plant Based Food Association, 2020), with the goal to promote consistency in labelling across the plant-based alternatives sector.

The PBFA is a trade association that represents 300 company, affiliate and investor members of the plant-based alternatives industry. This includes more than 175 plant-based alternatives companies, with committee representatives from major plant-based alternatives companies such as Beyond Meat, Morningstar Farms, and Tofurky.

The PBFA standards includes recommendations that a prominent plant-based label be placed on the product's principal display panel, aiming to provide sufficient clarity for consumers.

The PBFA standards allows companies to reference traditionally animal-derived meat terms (such as chicken or beef), and their utility (such as nugget or burger), as long as labels clearly use qualifiers that identify the product as plant-based, vegan or meatless. The qualifier also must be in either the statement of identity or an otherwise prominent position. PBFA recommended these standards be adopted within one year of implementation.

As the voluntary standards were developed by the PBFA, it involves standards that plant-based alternative companies are likely to support, with a majority of products already adhering to the approach.

Regulation
Under the Code of Federal Regulations (Legal Information Institute, 2020):

- Milk (21 CFR 131.110) is defined as:

  > The lacteal secretion, particularly free from colostrum, obtained by the complete milking of one or more healthy cows.

- Meat (9 CFR 301.2) is defined as:

  > The part of the muscle of any cattle, sheep, swine, or goats, which is skeletal or which is found in the tongue, diaphragm, heart, or oesophagus, with or without the accompanying and overlying fat, and the portions of a bone (in bone-in product such as T-bone, or porterhouse steak), skin, sinew, nerve, and blood vessels, which normally company the muscle tissue and that are not separated from it in the process of dressing.

There are also general requirements for non-standardised foods, including naming, which outlines the name should be uniform among identical and similar products, and not be 'confusingly similar' to the name of other food that is not reasonably encompassed within the same name.

There are a number of states within the U.S. which have or had laws that restrict terminology traditionally used for meat and dairy from being used on plant-based alternatives. These laws are not yet enforced due to pending litigation action. There has been notable pushback against these laws by groups including plant-based alternatives companies, including litigation action. Many of these lawsuits are claiming that the stricter stance violates the First Amendment free speech protections, stifle innovation and competition, among other arguments. While proponents of new laws state that they are necessary to protect consumers, as use of terms traditionally used for meat and dairy on plant-based alternatives may lead consumers to believe that the plant-based alternative contain animal-derived ingredients.

The states with recent or ongoing activity in plant-based alternative law labelling include:

- Arkansas - A law restricting plant-based alternatives use of 'meat' terminology was scheduled to go into effect in 2019 in Arkansas (Chan, 2020). As a result of litigation action, the federal court has prevented Arkansas from enforcing its meat labelling law, while ongoing challenges proceed.
- Louisiana – Tofurky is the plaintiff in a federal lawsuit that claims a Louisiana state law prohibiting meat terminology not derived from animals is unconstitutional. Under Louisiana law, plant-based meat companies can be fined up to $500 per product, per day for using meat terms (Poinski, 2020).
- Oklahoma – In 2020, Plant-based food company Upton's Naturals and the Plant-based Foods Association took their case to the U.S. 10th Circuit Court of Appeals after an Oklahoma judge declined to put a hold on state law requiring plant-based meat products to have a plant-based claim on their products that is the same size as the brand name (Food Dive, 2020). The decision is being appealed and ongoing.
- Mississippi – Plant-based alternatives companies are now able to use terminology such as 'veggie burgers' or 'veggie bacon' after an earlier ban was challenged by a federal lawsuit

(Institute of Justice, 2019). The new regulations now allow plant-based alternatives to use 'meat' terminology if it uses an adjective such as 'meatless', 'plant-based' or 'vegan' on its labelling.

- Missouri – In 2018, the state of Missouri passed a law that prohibits plant-based alternatives from using the word 'meat' (United States District Court, 2018). However the state clarified that it will not consider products to be misrepresented if their labelling contains:

  A prominent statement on the front of the package, immediately before or immediately after the product name that indicates the product is 'plant-based', 'veggie', or a comparable qualifier; and

  A prominent statement on the package that the product is 'made from plants', or a comparable disclosure.

- North Carolina – North Carolina passed a law requiring its Department of Agriculture and Consumer Services 'to enforce FDA's standard of identity for milk as adopted in the North Carolina Administrative Code to prohibit the sale of plant-based products mislabelled as milk (General Assembly of North Carolina, 2017). This bill will not be enforced until 11 additional member states pass similar legislation. A late amendment was added to the law that requires the 11 other states to adopt similar policies to ensure retailers and other businesses are not negatively impacted by regulations that only apply to one state.

The National Milk Producers Federation introduced the Dairy Pride Act to congress, but did not pass in 2017, and again in 2019. However, this Act continues to be introduced in the Senate. The Dairy Pride Act proposes to prohibit non-dairy products from being labelled with dairy terms such as milk, yoghurt, and cheese (National Milk Producers Federation, 2020). It proposes for the United States Food and Drug Administration (FDA) to issue guidance for nationwide enforcement of mislabelled imitation dairy products within 90 days and require the FDA to report to congress two years after enactment to hold the agency accountable for this update in their enforcement obligations.

In 2018, the Food and Drug Administration (FDA) initiated calls for submissions, through the Use of the Names of Dairy Food in the Labelling of Plant-based Products, on consumer awareness of plant-based vs dairy products to inform development of an approach to labelling (Food and Drug Administration, 2018). In 2018, the FDA raised concerns that plant-based milk alternatives may not be satisfactory substitutes for all uses of dairy, and are working on modernising the standards of identify, which define through regulation certain characteristics, ingredients and quality of specific foods (Food and Drug Administration, 2018).

The recently released 2020-2025 Dietary Guidelines for Americans (DGA) (USDA, 2020), continue to recognise the health and nutrition benefits of dairy foods, with the DGAs continuing to classify dairy as its own food group in the three recommended Food Patterns. As in the 2015 DGA, the dairy group includes both dairy and fortified plant-based milk alternatives. It does not include non-fortified plant-based milk alternatives as the nutritional content without fortification is not similar to dairy milk or fortified plant-based milk alternatives.

5.2.3 Canada

The Canadian Food Inspection Agency (CFIA) recently launches a consultation that ended in December 2020 seeking views on the proposed guidelines for simulated meat and simulated poultry products. The Government of Canada outlines that 'simulated meat and simulated poultry products do not contain any meat or poultry but are represented as having the physical and nutritive characteristics of meat or poultry (Government of Canada, 2020).

The proposed guidelines specify that the common name on the label must clearly identify the food in order to sufficiently distinguish it from similar food which it may likely to be mistaken. It states that when meat or poultry products are simulated, the phrase 'contains no meat' or 'contains no poultry' is required on the principal display panel of the label, in close proximity to the common name and in letters of at least the same size and prominence shown as those shown in the products common name.

Canada's Food and Drug Regulations (FDR) Section B.08.003 defines milk as (Government of Canada, 2021):

> Shall be the normal lacteal secretion obtained from the mammary gland of the cow, genus Bos.

The Canadian Food Inspections Agency states that 'in order to meet the common name requirement, the term 'milk' is reference only to milk' as standardised in section B.08.003 of the FDR'. Many brands use the term 'beverage' as an alternative descriptor in Canadian markets.

5.2.4 China

The Chinese Institute of Food Science and Technology published a draft group standard for plant-based meat products in 2020 (United States Department of Agriculture, 2020). The proposed standard permits the use of terms that are traditionally referred to animal sourced meat, such as beef, sausage, bacon, hamburger, etc. if the nature of the product is clearly stated through use of a qualifier. A qualifier could include terms such as plant-based, plant protein, non-animal source that indicate the true nature of the product.

As background, the food authority in China, the State Administration of Market Regulation, have also drafted regulations on the management of food labelling that mandated that qualifying terms be added to the product name of plant-based alternatives. In a translated copy of the draft regulations (translated from Chinese into English by United States Department of Agriculture Foreign Agriculture Service) (United States Department of Agriculture, 2019), it states:

> For food which is made from plants and produced to imitate body, organs or tissues of other organisms, such words as 'imitated', 'man-made', or 'vegetarian' shall be put before the name and label the food category that reflect the real property of the food.

Although this regulation has not been finalised, it is noted that this would be legally binding and overrule any voluntary standard or guidance material including the draft standard above.

5.2.5 Japan

In April 2020, Japan's Ministry of Agriculture, Forestry and Fisheries established the 'Food Tech Study Group' that consisted of 164 food companies, start-ups, trading houses, financial companies, academic institutions, research institutions and government agencies. This group

was developed to discuss future diversification of protein supply and develop legislation for the industry including on labelling and standardisation of other specifications.

While this was not focused only on plant-based alternative as defined within the scope of this report (as it includes cell-based meat and insect-based alternatives), this group would also inform future regulation in these areas including plant-based alternatives (Ho, 2020).

The outcome of this process is not yet known as it is still underway.

5.2.6 India

Food Safety and Standards Authority India (FSSAI) recently announced their draft proposal to ban the use of dairy terms such as 'milk' and 'cheese' for plant-based alternatives. According to FSSAI, the reason for this ban is as the FSSAI regulations define milk as the 'normal mammary secretion derived from complete milking of healthy milch animals' (The Economic Times, 2020).

Packaged food in India is also required to be labelled with a mark that distinguishes between vegetarian and non-vegetarian (Fischer, 2019). As per the Food Safety and Standards (Packaging and Labelling) Act of 2006, vegetarian food is identified with a green circle, and non-vegetarian food is identified with a brown circle.

These symbols are also currently being updated so that people who are colour blind are able to use this system – by changing the vegetarian symbol to a green coloured triangle and maintaining the non-vegetarian symbol as a brown circle.

5.2.7 Codex

Codex Alimentarius is a collection of internationally recognised standards that ensure food is safe and can be traded. The Commission is the central part of the Joint FAO/WHO Food Standards Programme and was established by FAO and WHO to protect consumer health and promote fair practices in food trade. Australia is heavily involved in the development of the Codex Standard for use of General Terms, which is widely adopted in food trade.

Codex General Standard for the Use of Dairy Terms (GSUDT) (CODEX STAN 269) was adopted in 1999 (Joint FAO/WHO Codex Alimentarius Commission, 2021) to protect consumers from being confused or misled by the use of dairy terms on non-dairy products, to ensure the correct use of dairy terms intended for milk and milk products, and to ensure fair practice in the food trade.

The GSUDT does provide exceptional permissions for the use of dairy terms on non-dairy food whose nature is clear from traditional usage, or when the term is clearly used to describe a characteristic quality of the non-milk product (e.g., peanut butter, coconut milk, cocoa butter). This use is dependent on avoiding impression that the non-milk product is a milk product.

Globally recognized and implemented in the regulations and policies of many countries all over the world, the Codex GSUDT provides an internationally accepted framework to protect the integrity of milk and milk products.

6 Discussion questions

6.1 Summary of discussion questions

The working group discussed 2 key questions:

1) Are Australian consumers able to identify between what is a plant-based alternative, and what is a meat and meat-based and dairy product?
2) Can Australian consumers accurately compare the nutritional composition of plant-based alternatives and meat and meat-based and dairy products?

While focusing on the above questions, the working group considered related factors including product innovation, environment, retail placement, and impact on consumers and business.

It is important to understand that these are two distinct questions. Question 1 is specifically about the identification of plant-based products, from meat and meat-based and dairy products. This is looking at whether Australian consumers are purchasing plant-based alternatives believing it to be an meat or dairy product, or believing that the product contains or is based on meat or dairy ingredients.

Question 2 is about whether consumers are purchasing plant-based alternatives because of their perception that plant-based alternatives are nutritionally equivalent or superior to meat and meat-based and dairy products – this includes whole meats as well as processed meats and should be compared like for like – for example, plant-based sausage compared with meat sausage.

6.2 Question 1: Are Australian consumers able to identify between what is a plant-based alternative and what is meat and dairy?

The working group considered whether consumers are able to identify that plant-based alternatives are not meat or dairy, or contain meat or dairy ingredients, and are purchasing plant-based alternatives intentionally (as opposed to purchasing plant-based products thinking they were meat and meat-based or dairy products), and whether the labelling and marketing is impacting this.

Some representatives raised concerns that plant-based alternatives do not fit into either the prescribed or traditionally used definitions of meat and meat-based and dairy products, and other terminology commonly used for meat and meat-based and dairy products, which could create consumer confusion in what is a plant-based alternative, and what is a meat and meat-based and dairy product. Some representatives raised that much like margarine was the term developed to differentiate from butter, there is an opportunity for plant-based industries to differentiate their products without making implications, positive or negative, regarding linkages between their product and traditional meat and dairy products.

Plant-based alternative representatives have raised that it is in their interest to clearly indicate that the products are dairy or meat-free, and to advertise the plant-based origin of their

products. A report by Food Frontier reviewed on-pack marketing claims across the Australian and New Zealand markets and found 89% of plant-based alternatives made on-pack claims including 'vegan', 'vegan friendly', 'made from plants', '100% plant-based' (Food Frontier, 2020). It is highlighted that this is specific to on-pack marketing claims, which are separate from, and in addition to, their product names and other product information. This means that while 11% of products do not have an additional marketing claim, they use other qualifiers on front-of-pack to indicate the plant-based nature, such as product names and imagery (e.g., Meat-free Pops, Chicken-free Kievs, Plant-based Rissoles, Vegan Sausages) and/or brand slogans (e.g., Proudly meat free, made with love and plants).

6.2.1 Food Standards Code

While the Food Standards Code includes definitions for meat and dairy, which plant-based alternatives do not meet (as detailed in section 5: Current Regulations), it also includes a provision (Standard 1.1.1-13(4)) that allows for products to use a term, provided the context makes clear of the intention. The provision specifically uses the example where 'soy milk' is permitted with 'soy' as the qualifier that sets the context and intention, which permits the use of the word 'milk'. The meat and dairy representatives object to this provision and view it as an anomaly, while the plant-based alternative representatives view this provision to be equal and fair.

This standard also provides additional examples permitting the use of 'ginger beer', 'shortbread' and 'crispbread'. However, some representatives state that the packaging and marketing of these products in no ways implies equivalence to or linkages with the examples given – butter, beer or bread.

6.2.2 FSANZ report

In the Soy Leghemoglobin in Meat Analogue products report, FSANZ had explored the labelling and marketing of plant-based alternatives as a consideration (Food Standards Australia New Zealand, 2020). In this report, it is stated the ACCC consider the overall representation of the product when determining if it is misleading. The ACCC provided the example that a product clearly and prominently labelled as 'vegan', 'vegetarian' or 'meat-free' is unlikely to mislead a consumer about whether the product is meat or plant-based.

In this report, FSANZ highlighted an international experimental study of US consumers which found that nearly a third of participants incorrectly identified a meat analogue burger patty labelled as "Beyond Meat Beyond Burger' as containing beef mince, when it was displayed side by side with two traditional meat burger patties. However, ingredient lists were not provided for any burger patty and the removal of the underlined terms made little difference to consumer's ability to correctly identify the meat analogue product.

In this same report, FSANZ states the ACCC have received complaints about how plant-based meat alternatives are being represented as meat products but notes the majority of these complaints were from companies producing meat and dairy, with very few complaints from consumers. There is no information available to determine how much awareness there is of this process by consumers.

6.2.3 Consumer research

There is currently limited independent research on whether Australian consumers are able to reliably differentiate between meat and dairy compared to a plant-based product. As noted in this report, FRSC concluded that there was no evidence identified to confirm whether or not consumers are misled about the source of plant-based alternatives.

Government research into consumer attitude or expectations regarding the labelling of plant-based alternatives and other food labelling issues has not been undertaken at this stage. However, there may be opportunity for further research as the plant-based alternatives sector grows.

Given it has been seen as a low hierarchy issue for FSANZ, and there have been relatively few complaints to the ACCC by consumers, government research into consumer attitude or expectations regarding the labelling of plant-based alternatives and other food labelling issues has not been undertaken.

There is some consumer research that has been conducted/commissioned by plant-based alternative manufacturers which claim Australian consumers are generally able to identify between what is a plant-based alternative, and what is a meat and meat-based and dairy product. Specifically:

- Sanitarium highlighted through a 2018 nationally representative study (*N* =1,544) that the majority of respondents know the difference between dairy-free and dairy milk, and correctly identified the ingredients (Sanitarium, 2018). It also found that less than 1 in 20 people incorrectly believe that there is no cow's milk in dairy milk, and that dairy-free milk contains cow's milk.
- Food Frontier commissioned a nationally representative research from Colmar Brunton (*N* =1002), which found that 91% of Australians surveyed who were surveyed have never mistakenly purchased a plant-based alternative thinking it was the meat or dairy counterpart, and vice versa (Food Frontier, 2019). Of the 9% of Australians surveyed who have mistakenly purchased the wrong product, they were more likely to be vegetarian or vegan purchasing an animal-based product thinking it was plant-based.

There is no current evidence on Australian consumers that specifically demonstrate that consumers are confused as to identifying what is a plant-based product, and what is a meat and meat based or dairy product, or believing that a plant-based product contains meat or dairy ingredients.

There is international research indicating that there is some consumer confusion. While the international research can be useful to provide consideration of consumers in other locations, the limitations to consider are that there is not enough information to be certain how much the international respondents may reflect Australian consumers as they are focused on a different geographical location. There may be differences in general upbringing, culture, education, norms, that could impact on responses.

It is noted that plant-based alternative representatives strongly state that international research on consumer behaviour is not relevant and should not be considered for this process.

The international research on consumer perceptions of plant-based alternatives include:

- A survey conducted by the National Cattlemen's Beef Association (*N* = 1800) found (Successful Farming, 2020):
  - in America, less than half of those surveyed understood that the term 'plant-based beef was meant to describe an entirely vegetarian or vegan food product
  - Nearly two third of respondents believe that plant-based alternative products produced by Beyond Meat contained animal-derived ingredients
- A 2017 nationally representative survey of French adults (*N* = 5175) commissioned by the CNIEL (The French Dairy Interbranch Organization) assessed consumer perceptions of plant-based products, and despite the regulations, one in three adults surveyed believe milk is present in plant-based milk alternatives (Audirep, 2017)
- A 2018 nationally representative survey of Americans (*N* = 1000) conducted by the International Food Information Council Foundation indicated that a significant majority of people understood correctly which products contain and which do not contain milk from cows when shopping for various type of products labelled using the word milk (Food Insight, 2018).

6.3 Question 2: Can Australian consumers accurately compare the nutritional composition of plant-based alternatives and meat and dairy products?

The working group also discussed whether Australian consumers accurately compare the nutritional composition of plant-based alternatives and meat and meat-based and dairy products. The working group discussed whether consumers are purchasing plant-based alternatives because they believe they have equivalent or superior nutrition credentials as animal-derived meat and meat-based and dairy products.

The consumer's intention to buy a product is guided by their capability to understand the information presented to them on the labelling and marketing, which can sometimes include their interpretation or impression of the nutritional profile of the products. This can apply to both plant-based alternatives, as well as meat and meat-based and dairy products.

Meat and meat-based and dairy products have been separated into two sub-sections in this discussion, noting the differences in nutrition with meat and meat-based and dairy products. Within the meat and meat-based and dairy categories, there are further differentiation required between products. For example, whole meat vs processed meat, and milk vs sweetened desserts. It is important that when comparing a meat and/or dairy product with its plant-based alternative, that there is a like for like comparison.

6.3.1 Food Regulation Standing Committee

In May 2019, the FRSC considered the labelling of plant-based alternatives, and concluded in their report with (Food Regulation Standing Committee, 2019):

> An industry survey suggests most consumers understand the differences in source (i.e. the product is derived from animal versus plant) between cow's milk and its plant-based substitutes, but no evidence was identified to confirm whether or not

consumers are misled about the source for plant-based alternatives to other types of dairy products or for meat products.

There is a long history of plant-based alternatives using meat and dairy terminology in their names (e.g., nut butters, fruit mincemeat, creamed corn), and no evidence to suggest that consumers fail to understand that these products are not animal-based*.

At present there is no available evidence to determine whether Australian and New Zealand consumers are misled about the nutritional differences between animal products and their plant-based alternatives when choosing products.

*Diary members noted that the examples of nut butters and fruit mincemeat have a long history of traditional use by consumers, and their nature and characteristics are well understood, and not truly considered as alternatives to dairy and meat products.

Perceived limitations of FRSC report

There was a select amount of evidence referenced, and may not be reflective of all research findings that are available, which is an important limitation to consider. Some representatives noted that there is available research and contradicts some of the findings of the FRSC paper. For example, the FRSC paper cited that 'there was no available evidence to determine whether Australian and New Zealand consumers are misled about the nutritional differences between animal products and their plant-based alternatives when choosing products'.

In response to this some representatives highlighted that the 2020 Dairy Australia nationally representative Trust Tracker survey (*N* = 1293) claims 36% of survey respondents perceive plant-based alternatives to be nutritionally equivalent to dairy milk (Dairy Australia, 2020) – among other findings, discussed in more detail in section 6. To note, since 2016 the Dairy Trust Tracker survey has been collecting data annually on consumers perceptions of plant-based alternatives. This was not considered in the FRSC paper, among other research discussed in this paper.

The FRSC also concludes that most consumers understand the difference in source between cow's milk and its plant-based alternatives, however this appears to be based on 1 industry survey by Sanitarium.

It has also been highlighted that FRSC's focus was on comparing plant-based alternatives with whole meat as a general category, where a fair comparison would be comparing like for like product. For example, comparing plant-based sausages with meat sausages, and plant-based burgers with meat burgers. In addition, the FRSC report did not consider that dairy foods do not necessarily contain similar levels of other nutrients found in plant-based alternatives, such as fibre and plant phytonutrients.

It is important that assumptions should not be made that there are nutrient deficiencies in the general population as a result of confusion over labelling as this is unproven.

6.3.2 Consumer tools for assessing nutritional value

Consumers have access to the Nutritional Information Panel (NIP) and the Health Star Rating (HSR) system to assist them in comparing product nutritional content. The NIP outlines the nutritional composition of the product and is available on most packaged food. The HSR system

is a voluntary but widely implemented labelling system that rates the nutritional profile of packaged food and assigns it a score from half a star to 5 stars.

Packaged products are given a health star rating based on their nutritional profile, using a strict algorithm that considers energy (kilojoules), risk nutrients – saturated fat, sodium (salt) and sugars, and positive components – dietary fibre, protein, and the proportion of fruit, vegetable, nut and legume content. The HSR system is co-regulatory voluntary model, that sits under the remit of the Ministerial Forum. As it is voluntary, there is no official enforcement of HSR system (noting that misrepresentation of HSR could be captured within consumer protection laws for false and misleading claims) but there are voluntary product targets and regular review periods to monitor progress against the five-year targets. The National Heart Foundation of Australia also monitors the HSR system in Australia, including the accuracy of the star rating on a random sample of products.

6.3.3 Limitations of consumer tools for assessing nutritional value

Although these tools are available, there are limitations of consumer use of these tools – specifically whether consumers are using these tools, and if they are, if they have the ability or motivation to be using them correctly. In the Policy Guideline on Food Labelling to Support Consumers to make Informed Healthy Choices (Food Regulation, 2020), it highlights that consumers are required to read and interpret food/nutrition label information to identify healthier products. Reading and interpreting food label involved a level of skill, motivation, and knowledge, which is not available to everyone (Soederberg Miller & Cassady, 2013; Soederberg Miller & Cassady, 2015). For example, consumers of an older age, or with lower levels of education and income, have greatest difficulty interpreting nutrition labels.

In the Report on Monitoring of the implementation of the Health Star Rating system in the first two years of implementation: June 2014 to June 2016, an assessment was conducted on consumer knowledge and understanding of the HSR system, correct use, and level of trust in the system (Heart Foundation, 2017). The assessment was conducted over three waves with a sample of more than 2,000 Australian adults for each wave. Of those surveyed, prompted awareness reached 67% in July 2016, which was a 26% increase compared to the September 2015 result. Although those respondents who were aware of the HSR system mostly had a broad understanding of the what the HSR represents, a large proption of respondents still lacked knowledge of the correct meaning of the HSR system (Heart Foundation, 2017).

FSANZ conducted a consumer survey in 2015 which found that around 27% of consumers did not use the NIP (FSANZ, 2015). More recently, FSANZ undertook a rapid evidence assessment to assess relevant literature on consumer knowledge, attitudes and behaviours relating to ingredient lists on food (FSANZ, 2019). Through this assessment, FSANZ found that up to 52% of consumers reported using the ingredient list, with ingredient list often used by consumers who were wishing to avoid a particular ingredient due to dietary requirements. This was lower in general use, but higher in first time product purchases.

While completing the rapid evidence assessment mentioned above, FSANZ also noted there were no Australian studies found on consumer understanding of the ingredient list, however there were some international studies that suggested there is consumer confusion about the ingredient list, and some of the ingredient terms used.

An expert panel, chaired by Dr Neal Blewett, undertook a review of food labelling law and policy, with the final report, Labelling Logic, released in 2011. The review acknolwedges that the interaction between food labels and consumer is complex, making it difficult to evaluate the impact of label information on consumer behaviour, and notes that label effectiveness needs to account for incremental changes in knowledge and behaviour. The review made a number of recommendations to FSANZ to ultimately improve the existing food regulatory system, and highlights that food labels plays a role in supporting long term health (Food Regulation, 2018).

6.3.4 Plant-based meat alternatives compared with meat

A review of current literature indicates that health reasons are a key factor for many consumers when considering their food purchase choices, including for consumers of both plant-based alternatives and meat and meat-based and dairy products (Rothgerber, 2014; Ruby, 2012; Valli, et al., 2019; Mullee, et al., 2017). Meat and Livestock Australia's (MLA) consumer insights also shows a strong consumer trend toward health and wellbeing – Australian consumers want variety and healthier meals (Meat and Livestock Australia, 2019).

The Australian Dietary guidelines encourages variety, recommending Australians consume lean meat, poultry, fish, eggs, tofu, nuts, seeds, legumes and beans as a food group (Department of Health, 2017). The guideline recommends 1-3 serves of foods from this food group a day, with a recommended maximum consumption limit of around 7 serves of lean red meat per week (each serve being 65 grams of cooked meat). This recommended maximum consumption limit was included in the Dietary Guidelines report to specifically enhance dietary variety and reduce some of the health risks associated with consuming too much meat. The Dietary Guidelines report states 'there is evidence of a probable association between consumption of greater than 100-120g/day of red meat and increased risk of colorectal cancer (Grade B; Evidence Report, Section 4.7)' (National Health and Medical Research Council, 2013).

The guidelines states that lean red meat provides a good source of nutrients while noting that Australians should keep within the recommended amount. The guidelines also note that legume consumption could benefit all Australians, due to their significant nutrient profile. While the guidelines recommend plant-based proteins such as tofu, nuts, seeds, legumes and beans, it does not mention the plant-based meat alternatives being discussed within this report. It is noted that there has been advances in the plant-based sector since the Australian Dietary Guidelines had been developed.

Both animal-derived meat and meat-based products and plant-based meat alternatives have products that are protein rich, and provide a wide variety of other nutrients such as iodine, iron, zinc, vitamins, b12 and essential fatty acids. However, there is difference in bioavailability between animal-derived meat, and plant-based alternatives. For example, the iron and zinc in animal-derived foods is more easily absorbed by the body than in plant-food (Department of Health, 2017).

More specifically, iron presents in two forms – haem iron and non-haem iron. Haem iron is more readily absorbed compared to non-haem iron (KHNI, 2020). Animal-derived meat provide rich sources of haem iron, while plant-based sources contain non-haem iron only. However, vitamin C found in fruit and vegetables will help the absorption of iron in plant-based sources. Iron is particularly important for some groups including infants, children, and women (particularly

when pregnant). Vitamin B12 is also mainly found in animal-derived products, however plant-based alternatives can also contain Vitamin B12 when they have been fortified.

Plant-based alternatives representatives state that there is no evidence that the differences in bioavailability have any health consequences in the Australian context. The issue of bioavailability of one food compared with another is influenced by the overall meal, dietary context and health status of the individual. Plant-based alternatives representatives view that bioavailability should not be considered as a part of nutrition labelling.

Research also shows that vegetarians who eat a varied and well-balanced diet are not at any greater risk of iron deficiency anaemia than non-vegetarians (Saunders, et al., 2013). Additionally, in a U.S. cohort study (*N* = 416,104) with 16 years of observation and nearly 78,000 deaths, it was found that greater intake of plant protein was significantly associated with lower overall mortality and cardiovascular disease mortality, independent of several other risk factors (Huang, et al., 2020). Similarly, analyses were conducted (*N* = 11,879) in the U.S. that concluded healthy plant-based diets were associated with a lower risk of all-cause mortality in U.S. adults (Hyunju, et al., 2018).

The International Food Information Council conducted a consumer survey on plant-based alternatives to meat (*N* = 1000) (International Food Information Council, 2019), and found that 50% of those surveyed have tried a plant-based alternative. 47% of those surveyed believe plant-based alternatives are better for the environment than meat, and after comparing nutritional facts examples (equivalent to Nutritional Information Panel), 40% of respondents said that plant-based alternatives were healthier than meat and dairy. This may not mean that consumers misunderstood the nutrient profile, as it could mean that consumers are correctly identifying the plant-based alternative as being healthier in some aspects.

Companies producing plant-based alternatives appeal to consumer interest in health by highlighting nutrients, which is a common practice for on-pack marketing. Food Frontier conducted a review of on-pack claims across the Australian and New Zealand markets, and found that 65% of products made claims about nutrients contained with the product, with the most common on-pack nutrient content claim revolving around plant-based meat products being ‘high in fibre’, and ‘good/high source of iron’ (Food Frontier, 2019).

Food Frontier commissioned a qualified dietitian to conduct a review of nutrient averages, and claim that plant-based meats across most categories have on average, lower or comparable kilojoules and sodium, higher or comparable protein, and lower fat and saturated fat per 100g,

along with the presence of health-promoting fibre, in comparison to their conventional meat equivalents (Food Frontier, 2020). This analysis is summarised in Figure 4[5].

To note, the dairy industry highlighted that this data should be interpreted with care as plant-based alternatives use the same HSR criteria as meat (or dairy), which is based on their complex nutrient matrix. As the same nutrient matrix is absent in plant-based alternatives, it generally means those products score well, if not better than the meat (or dairy) alternatives. The dairy industry considers that this is misleading to the consumer.

Figure 4 - Plant-based meat alternatives and meat equivalents (per 100g)

Table 3: Red meat-style plant-based meats and conventional red meat equivalents (per 100g)

Nutrient	Sausages (n=23)	Sausages[4]	Burgers (n=23)	Burgers[5]	Mince (n=9)	Mince[6]	Bacon (n=4)	Bacon[7]
Energy (kilojoules)	785.1	987	863.3	950.4	757.7	767	971	1310
Protein (g)	16.3	14.5	14.7	16	17.2	22.5	22.4	15.4
Fat, total (g)	9.0	18.7	10.9	16.4	9.2	10.4	12.2	28.2
Saturated Fat (g)	2.7	8.7	3.7	7.5	4	4.7	2	10.9
Carbohydrate (g)	8.6	2.9	11.8	4.3	6.4	0	8.8	0.3
Sugars (g)	1.8	0	1.8	1.3	1.9	0	1.6	0.3
Dietary Fibre (g)	4.5*	0	3.9*	0.1	5.8*	0	2.7*	0
Sodium (mg)	501.1	740	416.7	471.3	346.4	51	639.0	1274
Health Star Rating	3.7	1.5	3.7	2	4	4	3.6	0.5

* Dietary Fibre: Calculated based on products that list fibre nutrient value (Sausages, n=19; Burgers n=15; Mince, n=4; Bacon, n=1)

Table 4: White meat style plant-based meats and conventional white meat equivalents (per 100g)

Nutrient	Poultry – crumbed (n=25)	Poultry – crumbed[8]	Poultry – un-crumbed (n=11)	Poultry – un-crumbed**[9]
Energy (kilojoules)	847.1	970.1	684.6	644.6
Protein (g)	12.6	13.8	18.6	18.1
Fat, total (g)	10.3	12.5	5.8	7.9
Saturated Fat (g)	2.1	2.7	1	2.4
Carbohydrate (g)	14.3	15.8	6	2.4
Sugars (g)	2.3	2.6	1.6	1.3
Dietary Fibre (g)	4.9*	0.6*	5.6*	0.1
Sodium (mg)	541	596	506.4	504.2
Health Star Rating	4	3.5	4.4	4

= Plant-based Meat
= Plant-based average is superior
= Average is comparable within 10%
= Plant-based average is inferior

*Dietary Fibre: Calculated based on products that list fibre nutrient value (Poultry – crumbed, n=23; Poultry – un-crumbed, n=10)
**Includes raw and pre-seasoned poultry pieces

[5] Data of plant-based meat substitutes were provided by Grains & Legumes Nutrition Council via an audit of plant-based meat substitutes in four major supermarkets (Aldi, Coles, IGA, and Woolworths) of metropolitan Sydney in June 2019. Nutrition composition data for meat (mince, sausage, and bacon) were obtained through FSANZ's Australian Food Composition (AFC) database. Information for burgers did not exist within this database so the nutrition data was averaged from 15 beef burger products across a range of price points, including both fresh and frozen products available for purchase in Coles, Woolworths and IGA stores. Brands included Woolworths Market Value, Woolworths Brand, Coles Brand, Coles Finest, Beak & Sons, Fitzco, Peppercorn Cleavers Organic, and Created with Jamie.

Information for crumbed poultry did not exist in the AFC database, so nutrition data was averaged from AFC entry for F002755: Chicken, nugget, purchased frozen, baked, no added fat, and data averaged from 14 crumbed chicken products, including brands such as Coles, Woolworths, Steggles, Ingham's, Bayview, Bite Me Fine Foods, and Lilydale. Nutrition across the un-crumbed poultry category was averaged across a combination of pre-seasoned chicken pieces (14 products – including brands such as Woolworths Deli, Woolworths Market Value, Woolworths Macro, Poachers Pantry, Steggles, Coles, Ingham's, Primo, Moira Macs, Luv-a-duck)

It is highlighted that the health benefits of processed foods – including both plant-based alternatives and meat-based products, is debated. Although the raw ingredients used may be nutritional, there are concerns that these benefits may be lost during processing, and the long-term consumption of some additives are not known (Tufts University, 2020).

The Heart Foundation states that processed meat is not part of a 'heart healthy' eating pattern' and should be limited or avoided (Heart Foundation, n.d.). It also states that unprocessed red meat should be limited at less than 350g per week, and encourages the use of other protein sources such as fish and seafood, legumes, eggs, poultry and dairy.

FSANZ also noted in the Soy Leghemoglobin in Meat Analogue products report they will be liaising with interested jurisdictions to update the existing consumer information on their website to include nutritional, science, and technological aspects of plant-based meat alternatives generally (including some GM production processes, and varying nutrient levels, such as iron, B12 and protein) (Food Standards Australia New Zealand, 2020).

6.3.5 Plant-based dairy alternatives compared with dairy

Representatives from the Dairy sector have provided evidence that demonstrates many consumers are purchasing plant-based dairy alternatives due to perceived nutritional and health benefits. Lewers Research has been conducting the Dairy Australia Trust Tracker since 2018, which is a consumer study that monitors community sentiment including trust and perceptions of dairy foods, the industry, and identifies emerging food and general issues in the macro-environment, as well as monitor the impact of marketing activities.

The 2020 Dairy Australia nationally representative Trust Tracker survey (*N* = 1293) claims (Dairy Australia, 2020):

- 36% of survey respondents perceive plant-based alternatives to be nutritionally equivalent to dairy milk
- Of respondents who purchased plant-based dairy alternatives (*N* = 535), half (49%) did so because they perceived that they were healthier than dairy milk
- More than half (56%) of consumers who purchased plant-based cheese (*N* = 177) and yoghurt (*N* = 244) substitutes reported doing so because they believe that they were a healthier option.

In addition to this Australian research, there is also international research conducted by Mintel on U.S. consumers that claims that 1 in 5 Americans surveyed say they are consuming less dairy for health reasons. A 2018 Ipsos (global leader in market research company) population survey (*N* = 2010) found that 73% of U.S. consumers surveyed believe almond milk had as much or more protein per serving than milk from cows, and 68% strongly or somewhat agreed that plant-based alternatives have the same nutrition as dairy milk (Ipsos, 2018).

Through FSANZ's consultation on the Fortification of Nut and Seed Beverages, numerous concerns were raised by jurisdictions and stakeholders that were relevant to consumer perception of plant-based alternatives nutritional equivalence to dairy milk (FSANZ, 2015). Plant-based alternatives representatives reject consideration to the concerns raised during consultation process, as although they were raised during the process, FSANZ had already considered these concerns already and proceeded to make a decision. The section has been included at the request of the dairy representatives as it provides relevant context.

Some key issues raised during the consultation process include:

- Disagreement of the use of the term 'analogue' for plant-based dairy alternatives, as they do not believe they are comparable (some jurisdictions)
- The variability in composition of plant-based milk alternatives raises the issue of whether consumers are likely to be misled about the suitability of some plant-based beverages as alternatives to milk (some jurisdictions)
- Variation of food group definition allows inappropriate comparisons between milk and plant-based milk alternatives, noting dissimilar nutrient profile (SA Health)
- Plant-based milk alternatives are only considered in the 'milk, cheese and yoghurt' group of the Australian Dietary Guidelines if they are fortified with 100 mg calcium per 100 ml. The Australian Dietary Guidelines considers unfortified plant-based milk alternatives to be discretionary foods (Dairy Australia, some jurisdictions)
- Inappropriate comparative claims being made between milk and nut- and seed-based beverages given the significant difference in nutrient profile (Dairy Australia, SA Health)
- The precedent set for fortifying products that provide little or no nutritional value and lack of consistence with the ADG recommendations (some jurisdictions)
- Consideration could be given to setting minimum or maximum values for selected nutrition parameters such as calcium or protein to ensure that plant-based milk alternatives are approaching nutritional equivalence with dairy (QLD Health).

Furthermore, they noted significant variability in composition of plant-based beverages, inconsistency in terminology related to 'dairy alternatives' – for example under the Australian Dietary Guidelines these must be calcium fortified and that organic products are not fortified or contain additives.

FSANZ's assessment report of A1104 was however approved by the Australia and New Zealand Ministerial Forum on Food Regulation. In its assessment report FSANZ noted:

- Very few substitute products on the market have an identical composition to their market competitors e.g. butter and edible oil spreads.
- Established mechanisms in the Code such as ingredient labelling, nutrition information panel and characterising ingredients provide consumers with information on the nutritional composition of their product choice. These include: the statement of ingredients including the requirements for characterising ingredients, the nutrition information panel.
- Voluntary fortification permissions provide industry with flexibility to meet varying consumer demands. Some consumers may wish to choose an unfortified product, e.g. labelled as organic, whereas others may choose a fortified product. Labelling requirements provide consumers with information to enable informed choices.
- FSANZ also noted that no additional evidence has been presented by submitters to show that consumers are confused with the current situation for legume and cereal based beverages. There are a number of provisions in the Code that when applied to food labels are intended to prevent consumers being misled or confused.

The 2011-12 Australian Health Survey found that nearly three quarters of females (73%) and half of all males (51%) aged two years and over did not meet requirements for calcium based on their usual intakes of food and beverages (Australian Bureau of Statistics, 2015). Meat and dairy representatives raised concern that perceptions of plant-based alternatives having nutritional equivalence (quantity and quality) to dairy may have potential negative long-term health outcomes. Plant-based alternative representatives advise that Sanitarium fortifies all plant-based milk alternatives with calcium, and it should not be assumed that plant-based alternatives do not contain adequate calcium. Dairy representatives noted that there are a range of plant-based products on the market (in addition to those produce by Sanitarium) which are not fortified and that it should not be assumed that all plant-based alternatives contain adequate calcium and/or other nutrients in amounts comparable to dairy products.

Dairy provides consumers with many naturally occurring nutrients, including calcium, protein, iodine, zinc, vitamin A, vitamin D, riboflavin (vitamin B2) and vitamin B12. Plant-based dairy alternatives are often fortified with vitamins and minerals, including calcium, and or/protein to achieve parity with dairy milk, but do not necessarily contain similar levels of other nutrients found in dairy milk. Vitamin B12 is only available from animal-derived food sources, unless the plant-based alternative has been fortified. It should be noted that this would vary between different types of dairy and plant-based dairy alternative products.

Research from the Grains and Legumes Nutrition Council, found that plant-based milk alternatives had a wide range of fortified (added) nutrients, and nutrient quality as compared to consuming naturally occurring nutrients in their dairy equivalent (Zhang, et al., 2020).

An international study published in the International Dairy Journal (Chalupa-Krebzdak, et al., 2018) assessed animal-derived milk to 17 plant-based milk alternatives to compare macro-nutrient composition and calcium to determine if plant-based milk alternatives could adequately replace the dairy role of animal-derived milk. This study found that in general, there was lower protein content, calcium availability, higher GI values in plant-based milk alternatives

The Australian Dietary Guidelines (ADGs) (National Health and Medical Research Council, 2013) recommend the inclusion of dairy (all milk, cheese and yoghurt) as part of a healthy diet, and allows for calcium-fortified plant-based milk alternatives as part of this food group, as alternatives are not naturally high in nutrients found in cows' milk. The ADGs recommendations to include adequate amounts of milk, cheese, and yoghurt in our diet is supported by scientific evidence which shows that consuming these foods is linked to a reduced risk of heart disease, stroke, high blood pressure and type 2 diabetes, and is not linked to an increase in weight or risk of obesity. The ADGs also recommend limiting intake of discretionary foods, which includes foods that are high in saturated fat and added sugar (which can include products that contain dairy or plant ingredients).

The guidelines state that the evidence for the health benefits of consumption of dairy foods (mainly reduced fat varieties) has strengthened since the release of the 2013 dietary guidelines. The Heart Foundation 2019 evidence-based guidelines on healthy eating, now recommend full-fat milk, yoghurt and cheese as an option for healthy Australians – updated from previously recommending reduced fat dairy. This represents a significant change in public health recommendations and strengthening scientific evidence (Heart Foundation, 2019). For Australians with high cholesterol, only reduced fat dairy is recommended.

Research conducted at the University of South Australia suggests that dairy product consumption is below the recommended targets for much of the population, and that in the 2010-2011 financial year, $2 billion were attributable to low dairy product consumption (Doige, et al., 2012). There is also international research that similarly show there are health conditions that can benefit from dairy, resulting in savings in healthcare costs (Javanbakht, et al., 2018).

There are a range of bioactive substances in milk products that may have a contributing role in health outcomes .There has also been recent literature on the nutritional benefits of dairy, including long-term health benefits for hypertension, metabolic syndrome (Bhavadharini, et al., 2020) and diabetes (Alvarez-Bueno, et al., 2019). Additionally, there is a positive effect on bone health, linear growth, and Vitamin D status (Merrit, et al., 2020) in childhood, but limited evidence exists regarding bone health in later stages of life (Raben, et al., 2016).

Soy milk does provide good quality protein and its accompanying bioactives including isoflavones. There are a number of studies that demonstrate the benefits of including soy protein in the diet – this includes four meta-analyses that have concluded that soy modesty lowers blood pressure (Hooper, et al., 2008; Dong, et al., 2011; Taku, et al., 2012; Liu, et al., 2012). Plant-based milk alternatives are also generally less energy dense than full cream milk, and most (except coconut) are lower in total fat and saturated fat (Grains & Legumes Nutrition Council, 2018). In contrast, nut, seed and grain milks are typically lower in protein compared to dairy, providing an average 0.6-1.1g protein per 100ml, however some legume milks, including soy and pea have more comparable protein levels to dairy (Zhang, et al., 2020).

While the total grams of protein may be comparable, the protein in milk (dairy) is considered of higher quality (i.e., contains high levels of bioavailable essential amino acids) as measured by DIAAS or PDCAAS (Rutherfurd, 2015). Milk protein is also considered complete (meaning it contains all the essential amino acids our bodies need. Many plant sources of protein such as cereals, nuts, and seeds are considered lower quality, and incomplete sources of proteins because they are low in one or more, or lack one or more, of the essential amino acids. The protein in milk has also been shown to more bioavailable, which refers to how well it can be digested and absorbed in the body (Phillips, 2017). While the protein content of raw milk varies depending on the animal breed, feed, and climatic conditions, under the Food Standards Code, all retail milk is standardised for protein and fat level prior to being sold.

Plant-based alternative representatives raised that protein intake is not an issue in Australia, and that the idea of having to complement the amino acid profile of individual foods is outdated in terms of nutritional science. The Academy of Nutrition and Dietetics state that the terms ‘complete’ and ‘incomplete’ are misleading in relation to plant protein. When considering vegetarian diets, they concluded that consuming protein from a variety of plant foods, eaten during the course of a day, supplies enough of all indispensable (essential) amino acids when energy requirements are met (Vesanto, 2016). Dairy representatives did not agree with these findings.

Dietary patterns change with each life stage; as we age different foods and nutrients become more important. As such plant-based milk alternatives and low fat dairy milk must include a mandatory advisory statement indicating they are not suitable as a complete milk replacement for children under two or five years (subject to protein and fat content). This advisory statement

provides information to consumers "to the effect that the product is not suitable as a complete milk food for children under the age of two years" (Australian Government, 2017).

In 2019, the FRSC stated that at present that was no evidence to determine whether consumers in Australia and New Zealand understand the nutritional differences between milk and its plant-based alternatives (Food Regulation Standing Committee, 2019). As discussed in Section 5.1.3, some working group representatives have raised concerns about the methodology used to develop the FRSC report, notably the limited and select evidence used to draw some conclusions.

In the U.S., recent dietary guidelines and campaigns relevant to dairy nutrition include:

- The recently released 2020-2025 Dietary Guidelines for Americans (DGA) (USDA, 2020), continue to recognise the health and nutrition benefits of dairy foods, with the DGAs continuing to classify dairy as its own food group in the three recommended Food Patterns. As in the 2015 DGA, the dairy group includes both dairy and fortified plant-based milk alternatives. It does not include non-fortified plant-based milk alternatives as the nutritional content without fortification is not similar to dairy milk or fortified plant-based milk alternatives.
- The 'Healthy Drinks, Healthy Kids' campaign which involves consensus organisations including American Heart Association, American Academic of Paediatrics, and the Academic of Nutrition and Dietetics, addresses the importance of healthy drink choices for children under age 5. As part of this the guidelines recommend limiting juice and avoiding most plant-based milk alternatives for exclusive consumption on the place of all dairy milk. Soy milks were noted as an exception in this advice related to plant milks (Lewis, 2019).

It is noted that plant-based alternative sector raised that in their view the above U.S. guidelines and campaigns are not relevant to the discussion.

6.4 Other considerations

6.4.1 Retail placement and signage

Some representatives from various sectors have raised concerns about the proximity of plant-based alternatives to meat and meat-based and dairy products may cause consumer confusion on the different products. This has led to claims that consumers could purchase plant-based alternatives unintentionally, however there is no available evidence to confirm this. In addition, it is in both the retailers and manufacturers best interest to have clear signage that supports consumers in locating and purchasing what they are seeking.

Retailers differ vastly from store/business size, layout, to products, so any new guidelines need to consider these impacts.

6.4.2 Impact on consumers

Some representatives from the plant-based alternatives sector raised concerns that if familiar and well understood terminology are restricted on plant-based alternatives, manufactures would need to create new terminology, which could lead to consumer confusion. Use of familiar terms for plant-based alternatives assists consumers in understanding what the product will taste like, the consistency, and how the product can be used.

Meat and dairy representatives disagreed with the plant-based alternatives sector's concerns, citing the billions of dollars of levy investments by the meat industry over many decades to

establish consumer education and promotional campaigns based on genuine meat characteristics.

Many terms such as 'meat' and 'milk', used with qualifiers, have been applied for decades by many manufacturers of plant-based alternatives globally – this includes soy milk and coconut milk. Nutmeat has been a term used for over a century, with the earliest recorded usage in Australia being by Sanitarium in 1912.

Additionally, terminology such as 'burger', and 'mince' have been understood by consumers to indicate the utility of the product, rather than the material the product is made from. These products often use a qualifier to explain their ingredients (i.e. burger can be beef, pork, chicken, or vegetarian).

In response to this, some representatives from the meat and dairy sector state that there are examples of new terminology being created for new products, which have then gone on to be widely used without confusion.

6.4.3 Impact on business

Some representatives from various sectors raised that any new labelling and marketing requirements could create unnecessary regulatory burden, which could have a negative impact and become a barrier on innovation and creativity in the sector for the growth of all agriculture food and beverage products. In addition, any new labelling and marketing requirements would come at a cost. Some representatives noted that cost of labelling/marketing changes is simply a cost of doing business, which occurs in all industries.

Companies would incur costs relating to label design, label production, proofing, package redesign, labour, and other marketing activities. A PwC study found that labelling changes for the total estimated cost per stock keeping units can range from around $800 for a minor change (changes to text and one printing plate only), up to around $12,000 for a major change, with a major change considered to be changes to text and/or label layout, changes to six printing plates, proofing required, and changing to packaging (PwC, 2014).

Further analysis would need to be conducted to identify more accurate costs specific to if there were changes to labelling and marketing. The cost would be impacted by a range of factors, including (but not limited to) number of products, transition time, colour, and printing methods. Some representatives raised that any labelling changes would be easier to implement while the plant-based industry is relatively small.

7 Opportunities to address key issues

7.1 Decision-making framework

The working group has developed 6 principles to guide its approach:

Working Group Principles

1) Decisions made by the working group are made on a consensus basis
2) Discussion are to be based on the latest evidence, with data presented throughout the process
3) A range of options needs to be considered, including status quo, voluntary, self-regulatory co-regulatory, and regulatory approaches
4) There needs to be awareness of the current policy and regulatory framework
5) Any approach suggested must not attempt to dictate or influence market share or restrict competition, and deliver positive outcomes for industry as a whole
6) There should be consideration for future review – including agreement on a review process, and markets of success – as the market becomes more complex over time.

The approach (or combination of approaches) pursued by the group primarily should be developed to address the problem statement, being the absence of specific industry guidance for the labelling and marketing of plant-based alternatives to assist consumers to be clearly informed as to their nature and composition.

While this is the focus, other criteria have also been determined as key criteria for consideration – including whether the approach supports communication of the true nature of the products, as well as the regulatory burden, and implementation process involved.

In addition to following these principles, the working group has applied 4 criteria to guide its decision-making in reaching their recommendation

Criteria for decision-making

1) The extent to which the approach addresses the absence of specific industry guidance for the labelling and marketing of plant-based alternatives to assist consumers to be clearly informed as to their nature and composition.
2) The extent to which the approach supports the accurate communication of the nature of the product
3) Consideration of any regulatory burden
4) Ability to implement, with consideration to time, cost, outcomes, ease and resourcing

7.2 Benefits of clear food labelling and marketing

Clear food labelling and marketing for plant-based alternatives compared to meat and meat-based and dairy products, delivers benefits to both consumers, and the agricultural industry.

Table 4 – Benefits of clear food labelling and marketing

What benefits are there for consumers?	What benefits are there for the meat and dairy sector?	What benefits are there for the plant-based sector?
• Consumers can easily differentiate between types of products • Consumers can easily identify the correct product they were intending to purchase • Consumers can understand and compare the nutrition between products.	• Consumers can identify meat and meat-based and dairy products, and purchase them intentionally • Consumers will have clarity on meat and meat-based and dairy products nutrition, and established health benefits • Meat and meat-based and dairy products have a clear market presence as the plant-based alternatives market expands. • Will provide the meat and dairy sectors with a clearer understanding and greater confidence in the terminology/ imagery to be adopted by plant-based alternatives, as sectors continue to grow and innovate.	• Consumers can identify plant-based alternatives, and purchase them intentionally • Consumers have clarity on plant-based alternatives' nutrition and established health benefits, which is based on like for like nutritional comparisons • Plant-based sector have a clear industry standard specific to the labelling and marketing of plant-based alternatives as the plant-based alternatives market expands.

7.3 Options considered by working group

The working group considered a range of approaches to address the identified problem statement. At a high level, the options for consideration can be grouped into 3 approaches:

- Status quo – The status quo option involves no further action and would mean that plant-based alternatives cont inue using terms as per existing labelling and marketing requirements, as supported by the Ministerial Forum on Food Regulation
- Voluntary or self-regulatory approaches – Voluntary approaches would include self-regulated guidelines developed and agreed by industry, with aims to work toward a mutually agreeable solution to address the range of concerns discussed in this paper.
- Regulatory approaches – Regulatory approaches involve amending current labelling and marketing requirements and could involve various types of regulation including co-regulation, or government regulation. This might involve introducing new labelling and marketing standards on when meat and dairy terms can be used that are required to be followed.

Table 5 – Examples of existing approaches

	Status Quo	Voluntary industry standards	Guideline documents	Co-regulation (Voluntary Code)	Co-regulation (Voluntary Code)	Co-regulation (Mandatory Code)	Regulation
Level of additional regulation	Low (none)	Low to moderate	Low to moderate	Moderate	Moderate	Moderate to high	High
Existing examples	Current regulation*	Plant-based Food association Voluntary Plant-based Labelling Standards (USA)	Food and beverage industry – Food Descriptor Guidelines to the Trade Practices Act	Food and Grocery Code of Conduct	Health Star Rating (HSR) system	Dairy Code of Conduct	Allergen Labelling requirements
Enforcement	N/A	None specified	Supplementary to regulation that is enforceable under the Trade Practices Act	Enforceable under the Competition and Consumer Act	Non-compliance is managed through a joint industry and government committee and enforceable under the Competition and Consumer Act	Enforceable under the Competition and Consumer Act	Enforceable under the Food Standards Code
Lead organisation	N/A	The Plant-based Food Association	Australian Competition and Consumer Commission	Australian Competition and Consumer Commission	Australian Government Department of Health	Australian Competition and Consumer Commission	Food Standards Australia and New Zealand

*See Section 5: Current regulation

7.4 Status quo

Table 6 - Activity 1: Status Quo

Activity 1: Status Quo	
Description	This option involves no further action and would reflect a finding that there is currently no evidence of whether or not consumers are failing to differentiate between plant-based alternatives and animal-based products, or consumer confusion on nutritional composition. It is noted that the Australia and New Zealand Ministerial Food Forum have also considered similar issues, and asked FRSC for its consideration of regulatory and labelling issues. In August 2019, the Forum resolved on a majority basis that plant-based alternatives are adequately regulated under the current labelling requirements and consumer and fair trading laws (Food Regulation, 2021).
Implementation considerations	Status quo would involve no changes to existing requirements of plant-based alternatives labelling or marketing. Plant-based alternatives labelling and marketing would continue to follow the current regulations, which include the Food Standards Code, Competition and Consumer Act 2010, and the territory Fair Trading Acts. This means that plant-based alternatives would be able to continue using terminology associated with meat and dairy, provided the context is considered clear of the intention of the product, while also following the current ingredients, nutrition and legibility standards.
Potential Benefits	• No additional regulatory burden on industry as there would be no changes to existing requirements • Recognises decision made by Australia and New Zealand Ministerial Food Forum
Potential Detriments	• Concerns raised by some stakeholders as outlined in this report will not be addressed • Risk of inconsistency of labelling as the plant-based alternatives sector grows

7.5 Voluntary approaches

Voluntary approaches offer an opportunity for industry to set product labelling and marketing standards, which could be developed and implemented in a relatively short timeframe, with minimal costs, while also avoiding creating additional regulatory burden. However, voluntary approaches may be constrained by industry uptake, variability in interpretation and application, and no opportunities for enforcement.

There are several voluntary approaches that industry could lead with aims to support consumer understanding and plant-based alternatives, without changing or implementing new regulation. A voluntary industry standard could include the development of plant-based alternatives labelling and marketing standards, which would include clear guidance covering the use of terminology and images traditionally used for meat and dairy

This approach would be self-regulated, developed and agreed by industry, with aims to work toward a mutually agreeable solution to address the diverse range of concerns discussed in this paper. Self-regulation may consist of industry-written rules or codes enforced by industry itself and can be a good option where industry participants understand and appreciate the need for the guidelines.

7.5.1 Voluntary approach options

Table 7 – Industry voluntary plant-based alternatives labelling and marketing standards

Activity 2: Industry voluntary plant-based alternatives labelling and marketing standards	
Description	This activity would involve the development of a voluntary food labelling and marketing standard to provide guidelines to food manufacturers on the labelling and marketing of plant-based alternatives. A voluntary labelling and marketing standard could be developed, by industry, with the aim to alleviate the key concerns that have been raised, while also being suitable and make business-sense for plant-based alternatives producers and manufacturers. The development of standardised terminology may contribute to the consistency of labelling and marketing, and assist consumers navigate, make informed decisions and recognise the credentials of plant-based alternatives and animal-based products in their own right, particularly their nutrition profile.
Implementation considerations	This would involve forming a separate group with members that had specific knowledge and experience in labelling and marketing within the industry. Industry would lead the development and consultation to develop a voluntary standard. This may take a number of meetings to develop an agreed upon voluntary standard. Once agreed, the implementation of the voluntary standard could be phased over a period of time agreed on by the group, allowing manufacturers with sufficient time to work toward an agreed standard. This voluntary standard would then need to be promoted through relevant industry bodies. Supermarket representatives have also indicated they would be open to cooperate with an industry voluntary code by promoting it to their suppliers.
Potential Benefits	• Voluntary standards do not need to go through lengthy government approval processes, and are comparatively easier to implement than regulatory options • Voluntary standards are more flexible, and can be adjusted to changing industry and consumer needs in the future • Voluntary standards provide less regulatory burden on industry, while still setting up standards that can be used to ensure consistency, particularly as the market grows • As the voluntary standards are developed by industry, there may be stronger support/uptake • Industry would be able to lead the development of a standard that has a consumer focus while not impeding on business and innovation • Enables the plant-based alternatives sector to demonstrate industry leadership over the matter
Potential Detriments	• Businesses will incur costs associated with label and marketing change, and self-regulation/compliance costs • Risk of non-compliance or low industry uptake especially in emerging industries • Risk of inconsistent use of voluntary standards – this could be as a result of (but not limited to) different interpretations or applications • Difficult to consistently enforce, especially where there is an absence of an industry representative body that captures the whole of the industry. If a industry representative body is developed, there will be costs involved with funding and membership to undertake enforcement. • Limited avenues for other industries to input into the development of the standard

Examples of voluntary food labelling and marketing standards criteria

While acknowledging that voluntary standards would need to be separately developed and agreed to by industry, the following are example criteria based on international examples that might be considered.

Voluntary standards could provide guidance for:

- Use of qualifiers: qualifiers may include 'plant-based', 'dairy-free', as well as many others. Industry could consider developing specific guidance for use of qualifiers. Table 10 shows examples of common qualifiers currently used.
- Prominence: prominence provides the context in which the term is used, and should be prominent on the packaging so that it is easily seen and interpreted by consumers.
- Imagery: other considerations could involve agreement as to what is acceptable in the sense of imagery and marketing material.

Table 8 – Example of qualifiers for plant-based alternatives labelling and marketing

Qualifiers for plant-based meat alternatives	Qualifiers for plant-based dairy alternatives
• Plant-based • Meatless (or chickenless, beefless, porkless or similar) • Meat-free (or chicken-free, beef-free, pork-free or similar) • Meat-style (or chicken-style, beef-style, pork-style or similar) • Vegetarian (or veggie, veggie-based, or similar) • Vegan	• Plant-based • Dairy-free • Vegan • Vegetarian (or veggie, veggie-based or similar) • Ingredient based qualifiers (e.g. Soy, Almond, Coconut, Oat, etc.) – note the Food Standards Code's requirement to declare allergens

Table 9 – Voluntary (Opt-in) Code of Conduct plant-based alternatives labelling and marketing standards

Activity 3: Voluntary (Opt-in) Code of Conduct plant-based alternatives labelling and marketing standards	
Description	Activity 2 involves industry developing a voluntary standard for plant-based alternative labelling and marketing. Activity 2 is distinguished by having this industry standard as a Code of Conduct within the Food Standards Australia and New Zealand Act 1991, while remaining voluntary and applying only to those who opt in. The ACCC encourages industry to develop voluntary codes that will deliver effective compliance with the Competition and Consumer Act 2010. Effective voluntary codes potentially deliver increased consumer protection and reduced regulatory burdens for business. Non-prescribed voluntary codes are a form of industry self-regulation that are usually flexible and can change in response to industry or consumer needs. An example of a voluntary Code of Conduct includes: • Food and Grocery Code of Conduct, which is a voluntary code prescribed under the Competition and Consumer Act 2010. It was introduced to improve standards of business conduct in the food and grocery sector, where the ACCC is responsible for enforcing the code.
Implementation considerations	A Code of Conduct could be developed under the Food Standards Australia and New Zealand Act 1991, Part 2, Section 13, which describes FSANZ as having function to develop codes of practice, varying codes of practice, and reviewing codes of practice for industry. FSANZ's first remit is to ensure consumer health and safety, which would mean that the basis of the Code of Conduct would need to be developed with this regard. FSANZ has not identified any health or safety issues due to plant-based alternatives labelling and marketing. It is also noted by some representatives that consumer health and safety was not in scope of this working group, with the focus being on consumer confusion due to labelling and marketing. Industry codes can also be prescribed under the Competition and Consumer Act 2010. The ACCC advise that to develop a code, there would need to be clear rationale on what basis it would be formed. This would include evidence that the current legal framework is deficient or leading to market failure. This process would involve significant work in policy development, as well as support from the Treasury and the ACCC (where there is concern that a code could be anti-competitive)
Benefits	• Voluntary (Opt-in) Code of Conduct allows industry to work together with government to develop what the code involves • Voluntary (Opt in) Code of Conduct provides structure and compliance mechanisms • There may be less regulatory burden in comparison to full regulatory options
Detriments	• Businesses may incur costs associated with label and marketing change, and self-regulation/compliance costs • Risk of non-compliance or low industry uptake especially in emerging industries • Risk of inconsistent use of voluntary standards – this could be as a result of (but not limited to) different interpretations or applications • Limited avenues for other industries to input into the development of the standard • Consideration of regulatory burden – there may be more regulatory burden in comparison to other voluntary options that do not sit within a Code. Contradicts the findings of the Ministerial Forum which found that current regulatory settings are fit-for-purpose

Voluntary Code of Conduct example: Food and Grocery Code of Conduct

Overview

An example of a current voluntary Code of Conduct is the Food and Grocery Code of Conduct (the Grocery Code), which is a voluntary code prescribed under the Competition and Consumer Act 2010. The Grocery Code was introduced to improve standards of business conduct in the food and grocery sector (ACCC, 2020).

The Grocery Code was developed in response to public concerns about the conduct of retailers and wholesalers toward their supplier (The Treasury, 2018). Australia's food and grocery industry has a high degree of market concentration by two major retailers, which have significant bargaining power leading to suppliers having relatively limited options to get their product to the market on a broad or national basis. Suppliers may find it difficult to negotiate fair trading terms and have little choice but to accept particular terms due to fear of losing contracts.

The Grocery Code set the outer boundaries to regulate retailer or wholesaler behaviour through increasing transparency, certainty, and access to fair dispute resolution procedures for suppliers. Aldi, Coles, Woolworths and more recently, Metcash, are signatories, bound by the Grocery Code.

The ACCC is responsible for enforcing the Grocery Code, with decisions about which matters to pursue made in line with the ACCC's Compliance and Enforcement Policy.

Review

In 2018, the government conducted a review of the Grocery Code, where it was recommended that the Grocery Code remain as a prescribed voluntary code. Three main areas were also identified for improvements including relating to enhancing good faith and fair dealings, grocery code arbiters (with the dispute resolution mechanism being underutilised by suppliers), and a need for retailer and wholesalers with significant market power to become signatories.

Developing a voluntary code

The ACCC describes a voluntary industry code of conduct to set out specific standards of conduct for an industry in relation to the manner in which it deals with its members as well as its customers. These standards are voluntarily agreed to be signatories.

The ACCC do not have a role in drafting voluntary code but may be able to provide assistance through general guidance. The ACCC recommends as a starting point that industry should consider the:

- Appropriateness of a voluntary industry code as a self-regulatory tool for the industry
- Competition implications of introducing a voluntary code of conduct
- Role of any industry associations in the development of a voluntary industry code
- Need for a code administration committee to oversee the code
- Purpose and objectives of the voluntary industry code and how the achievement of these objectives will be measured
- Coverage of the code
- Sanctions that will apply for non-compliance with the code
- Collection of data and monitoring the effectiveness of the code.

Research conducted on behalf of the ACCC has found that voluntary code of conducts tend to be more effective when the self-regulatory body has widespread support of industry, comprises of representatives of the key stakeholders, and operates an effective system of complaints handling (ACCC, 2011).

7.5.2 Other considerations to voluntary approaches

Other considerations were raised during the working group process, which included consumer education and retail (in-store) approaches.

Consumer education

The working group discussed whether consumer education should be included as an option, where industry would lead education through the ongoing development of marketing and/or website material to educate consumers about their products, with aims to provide consumers with information to understand the nutritional differences between plant-based and meat and dairy.

Consumer education as a solution to the problem statement was not supported by the working group, however, was considered as a separate support activity – noting the need for consistency of message and adequate funding. Effective consumer education campaigns are costly, and there is a risk that communication may not reach or penetrate the target audience. Marketing and communication on product nutrition can remain part of other business strategy and as a support mechanism to other approaches but was not seen as a stand-alone solution to the problem statement agreed by the working group.

Retail (in-store) approaches)

The working group also considered retail (in-store) approaches, which included developing guidance for suitable product placement and signage of plant-based alternatives and meat and dairy products in the retail setting.

For a variety of reasons, these approaches were not deemed feasible by the retail representatives. Major retailer's stores also range in size and are individually designed, with the use of signage and placement built around customer behaviours. There is concern that a prescriptive standard for retailers would hinder core competitive retail business strategy.

The retail representatives have not received any customer feedback or evidence that what they currently implement within their stores cause any customer confusion, and that their customer focused approach is already designed to assist consumers in located the products they intend to purchase. The working group also considered how a standard for placement and signage would impact smaller grocers, noting vast differences between major retailers and smaller grocers.

7.6 Regulatory approaches

Regulatory approaches could take many forms – including co-regulation and regulation. Co-regulation involves industry developing and administering its own arrangement, with government providing the underpinning legislation to enforce it. Regulation comprises of legislation and is the most common form of legislation.

Regulatory approaches could ensure that product labelling and marketing is consistent. Regulatory approaches could involve changes to current labelling and marketing requirements, which could be enforced by amending legislation. This approach would be a long-term approach, noting the process and approvals required in amending legislation.

Regulatory approaches likely involve changes to either the Australian New Zealand Food Standards Code, or Australian Consumer Law, or both, which would require the agreement of

State and Territory Governments. In the case of the Australian New Zealand Food Standards Code, there would also need to be agreement from The New Zealand Government.

Table 10 – Regulation through a Mandatory Code of Conduct

Activity 4: Regulation through a Mandatory Code of Conduct	
Description	Both industry and government could work together to develop, administer and regulate a solution, with arrangements accompanied with legislation. This would involve both industry and government having a role – for example industry developing the arrangements, such as a Code of Conduct, and government providing the legislative backing for the arrangements to be enforced. This activity could involve plant-based alternatives producers, and retailers to develop and sign up to the Code that governs certain practices within business – including labelling, marketing, and placement. The details of this activity would need to be separately identified by industry. Examples of current regulatory codes include: • Dairy Code of Conduct, which is an industry code that regulates the conduct of farmers and milk processors in their dealings with one another. The ACCC is responsible for the enforcement of the Code and investigates alleged breaches. While this is an option for consideration, the plant-based alternatives market differs from other markets where a Code of Conduct has worked, notably, these examples have gained support in a context where there is a clear market failure that needed to be addressed. Further investigation is also required to identify how this could be developed, including where is suitable for this Code of Conduct to be placed within government. An alternative non-government enforcement option may be through an independent facility which audits against a set standard. For example, AUSMEAT is the delegated body to administer labelling standards and application on behalf of the commonwealth government.
Implementation Considerations	A Code of Conduct could be developed under the Food Standards Australia and New Zealand Act 1991, Part 2, Section 13, which describes FSANZ as having function to develop codes of practice, varying codes of practice, and reviewing codes of practice for industry. FSANZ's first remit is to ensure consumer health and safety, which would mean that the basis of the Code of Conduct would need to be developed with this regard. FSANZ has not identified any health or safety issues due to plant-based alternatives labelling and marketing. It is also noted by some representatives that consumer health and safety was not in scope of this working group, with the focus being on consumer confusion due to labelling and marketing. Industry codes can also be prescribed under the Competition and Consumer Act 2010. The ACCC advise that to develop a code, there would need to be clear rationale on what basis it would be formed. This would include evidence that the current legal framework is deficient or leading to market failure. This process would involve significant work in policy development, as well as support from the Treasury and the ACCC (where there is concern that a code could be anti-competitive)
Potential benefits	• A Mandatory Code of Conduct has strong compliance mechanisms so should promote consistency and compliance of the Code, ensuring labelling and marketing are accurate and not misleading. • There may be opportunity for industry to work with government to develop what the Code would involve. • Supports traditional as well as new and emerging food products development
Potential detriments	• Consider regulatory costs on food manufacturers. • Businesses will incur costs associated with label and marketing change, and self-regulation/compliance costs • Consider enforcement costs on Government • Comparatively may take a longer period of time to implement • Consideration of regulatory burden - there may be more regulatory burden in comparison to voluntary options. • Contradicts the findings of the Ministerial Forum which found that current regulatory settings are fit-for-purpose

Regulatory Code of Conduct example: Dairy Code of Conduct

Overview

An example of a current regulatory code (also known as a mandatory code) includes the Dairy Industry Code of Conduct (Dairy Code). The Dairy Code is an industry code regulating the conduct of farmers and milk processors in their dealings with one another. All milk supply agreements created, varied or renewed after this date are subject to this code (ACCC, 2020).

The industry had first took the initiative to self-regulate by implementing a voluntary code on 30 June 2017 (ACCC, 2018). However, the ACCC ultimately determined that a mandatory code of conduct within the Act should be established for the dairy industry, following an 18-month public inquiry. The inquiry was prompted as a result of an event involving late-season retrospective changes to farmgate prices paid by Australia's two largest dairy processors in 2016 which caused substantial detriment to dairy farm businesses in the southern regions of the Australian dairy industry.

The ACCC determined that a mandatory code was the best method to improve the position of farmers in the dairy supply chain, due to a perceived imbalance in the bargaining power between dairy farmers and processors, and farmers having limited access to price and market information compared to processors.

After this decision on 30 April 2018, there were several stages involved including drafting the code, consultation, implementation, and transition. The code came into effect on 1 January 2020.

The Dairy Code requires processors to only purchase milk under a milk supply agreement, and all milk supply agreements must comply with the Dairy Code. The Dairy Code of Conduct contains penalty provisions, where not complying with a penalty provision could result in the ACCC taking court action seeking financial penalty for the breach or issuing an infringement notice.

Review

In December 2020, the ACCC published a Dairy Code: Initial observations on compliance report approximately one year after the Dairy Code came into effect (ACCC, 2020). The ACCC advised that they had seen significant positive changes as a result of the Dairy Code. However, the ACCC also noted that there were some issues that will be reviewed during 2021, with a formal review of the code to be completed by December 2021. The key issues were related to publishing requirements, termination of milk supply agreements and supply period.

Table 11 – Changes to Food Labelling and Marketing in Food Standards Code

Activity 5: Changes to Food Labelling and marketing in Food Standards Code	
Description	This activity would involve amendment of the Food Standards Code to restrict the use of the terms such as meat, milk, dairy, etc so that plant-based alternatives are unable to use these terms. This would mean that plant-based alternatives would need to change their labelling and marketing to meet the updated requirements. The proposed changes to the Food Standards Code could involve a new standard, as well as removal of the provision that currently clarifies for plant-based alternatives to use terminology such as meat, milk, etc.
Implementation Considerations	FSANZ accepts submissions on applications and proposals to change the Food Standards Code. FSANZ notes that submissions have a greater impact if it comments on the issues raised, provides possible options, provides supporting evidence (e.g. groups or individuals who may be affected, data on the impact of the proposed decision, relevant technical information) and is written with regard to the policy framework FSANZ must have regard to. Submissions should contain scientific evidence as FSANZ is required to use the best scientific evidence available in its decision-making processes. Proposals to amend the Food Standards Code are prepared by FSANZ and can also be undertaken at the request of the Ministerial Forum. The Ministerial Forum considered a paper proposing to refer the naming of analogue foods (e.g milk and meat) to FSANZ with a view to limiting use of these defined terms to products derived from animals in the Food Standards Code. The Ministerial Forum chose not to refer the matter to FSANZ. Changes to the Food Standards Code would also need the support from state and territory governments, as well as the New Zealand government. The process can take 12 months for a major process – this includes assessment of the submission, public notification, draft regulatory measures develop, applicant notification/public notification, decision and forum notification. Processes can take less time if it is considered minor.
Benefits	• Regulation through the Food Standards Code may result in high compliance • A specific legislative standard that recognises and supports the growth of plant-based industries as an independent food category • Encourages consistency of terminology used by plant-based alternatives industry • Sets a long-term goal to clarify and consistently use terms traditionally used for meat and dairy • Supports unique identification of meat and dairy, and plant-based alternative food • Supports Australia's reputation for food production by setting clear parameters and supports export of clearly differentiated food • May support overall health and nutritional goals to assist consumers make informed choices to meet their individual health needs •
Detriments	• Consider regulatory costs on food manufacturers • Consider enforcement costs onto Government • Will require agreement by government – including states, territories, and New Zealand •

Government regulation example – Red meat export industry

The Australian red meat export industry is one of the few countries in the world that is governed by a set of all-encompassing export legislation (including the Export Control Act and subordinate Orders, the Australian Meat and Livestock Act, and the Australian Standard AS4696). This differentiates Australian meat from other international competitors, where Australian meat holds a superior reputation for food safety, integrity, product identification and traceability.

Together, this legislative package and its successful administration by the Department of Agriculture, Water and the Environment provides consumers in Australia and export markets

the confidence in the integrity and food safety of the Australian meat system. As such, the Australian red meat export industry is able to access over 100 international markets.

Explicit compliance costs for the red meat industry are in the form of cost-recovered fees and charges imposed by DAWE (as such, there is no direct cost to government for enforcement), and amount to less than 0.5% of the export revenues for the industry.

The legislative package has undergone a number of successful updates/reviews since its inception, to ensure it remains contemporary and fit for purpose, and that it continues to foster growth, innovation and competitiveness in the Australian red meat industry.

Table 12 – Information Standard introduced through Consumer Law

Activity 6: Information Standard introduced through Consumer Law	
Description	This activity would involve development of a National Information Standard for the labelling and marketing of plant-based alternatives. A National Information Standard could outline what plant-based alternatives labelling and marketing must include, and what they cannot include. A National Information Standard could provide guidance to manufacturers around the use of terminology and operate similar to other Information Standards already in operation, such as 'free-range egg' and country of origin claims. Plant-based alternatives sector would be responsible to ensure their products comply with the relevant information standards once developed. Supplying products that do not comply with relevant information standards is an offence, and may result in penalties.
Implementation Considerations	Any mandatory changes to the Australian Consumer Law must be put to the Legislative and Governance Forum on Consumer Affairs, consisting of Australian Government, state, territory, and New Zealand ministers responsible for fair trading and consumer protection law. Before Consumer Affairs Forum can make any decisions on changes to the Australian Consumer Law, consultation with industry, consumer research and development of a regulatory impact statement (RIS) would have to be undertaken. The general process involves: 1) Australian Government decides to amend Australian Consumer Law to develop an information standard 2) Australian Government member of Consumer Affairs Forum to seek approval to have issue placed on Consumer Affairs Forum agenda 3) Consumer Affairs Forum meeting – to decide whether they will consider issue 4) Commonwealth to develop a valid proposal for consultation with the states and territories 5) Commonwealth to write to state and territory consumer affairs ministers notifying them of the proposal to develop a standard under Australian Consumer Law 6) States and territories have 3 months from the notification by the Commonwealth to consider and respond. 7) Consultation undertaken with stakeholders and RIS prepared and agreement sought from Consumer Affairs Forum 8) Commonwealth Minister calls a formal vote from Consumer Affairs Forum on the proposal 9) Under the intergovernmental agreement on consumer affairs, state and territories have 35 dates to vote on the proposal 10) Drafting of legislation and gazettal.
Benefits	• Information standard supports increased differentiation between plant-based and meat and dairy. • Information standard could promote more consistency across products. A specific legislative standard that recognises and supports the growth of plant-based industries as a independent food category • Encourages consistency of terminology used by plant-based alternatives industry • Supports Australia's reputation for food production by setting clear parameters and supports export of clearly differentiated food • Reduces likelihood of regulatory cost-shifting
Detriments	• Consider regulatory costs on food manufacturers

	• Businesses will incur costs associated with label and marketing change, and self-regulation/compliance costs • Consider enforcement costs onto Government • Will require agreement by government

Table 13 - Strengthening compositional requirements through the Food Standards Code

Activity 7: Strengthening compositional requirements through the Food Standards Code	
Description	Activity 6 involves amendment of the Food Standards Code to define plant-based alternatives and better align the minimum compositional requirements to meat and dairy products. There are 2 parts to this: 1) Introduce Standards within the Food Standards Code that define plant-based alternatives and their minimum compositional requirements. 2) To revise the fortification permissions for plant-based alternatives, to provide better alignment to and meat and dairy products. For example, this would mean increasing the fortification permissions for dairy products to the same levels as for plant-based alternatives. For context, currently, there are no Standards within the Food Standards Code that define plant-based alternatives and their minimum compositional requirements. Plant-based alternatives are currently permitted to add a number of vitamins and minerals at levels greater than dairy (e.g., whole milk is not permitted to be fortified, only modified versions).It is noted that this is an option strongly supported by the meat and dairy representatives. Plant-based alternatives and food manufacturers strongly oppose to the inclusion of this option being included within this report as they deem this to be out of scope as it is amending the Food Standards Code for the purpose of regulating compositional requirements, not current labelling requirements
Implementation Considerations	FSANZ accepts submissions on applications and proposals to change the Food Standards Code. FSANZ notes that submissions have a greater impact if it comments on the issues raised, provides possible options, provides supporting evidence (e.g. groups or individuals who may be affected, data on the impact of the proposed decision, relevant technical information) and is written with regard to the policy framework FSANZ must have regard to. Submissions should contain scientific evidence as FSANZ is required to use the best scientific evidence available in its decision-making processes. Changes to the Food Standards Code would also need the support from state and territory governments, as well as the New Zealand government. The process can take 12 months for a major process – this includes assessment of the submission, public notification, draft regulatory measures develop, applicant notification/public notification, decision and forum notification. Processes can take less time if it is considered minor.
Benefits	• Increased consistency in nutrition between plant-based alternatives and meat and dairy products. • Provide clarity regarding bioavailability and fortification • May support development of additional products for both meat and dairy and plant-based alternatives
Detriments	• Will impose regulatory costs on food manufacturers. • Fortifying foods comes at a significant cost to manufactures and does not always enable a return on investment • May increase consumer confusion regarding fortification versus actual bioavailability • Will likely require a lengthy period of time to implement • May not receive the approvals or support required to progress • Contradicts the findings of the Ministerial Forum which found that current regulatory settings are fit-for-purpose

8 Conclusion

8.1 Recommended approaches by members

There is a diverse range of perspectives expressed by industry on plant-based alternatives labelling and marketing, which created challenges in the initial intention of reaching full consensus. It is important for this report to recognise the range of views and recommendations put forward by the group, so despite best efforts, full consensus was not achieved.

The working group discussed in detail the options outlined in Section 7, with each option having some support from various members within the working group. The working group present these approaches to the Government for consideration in the next steps, noting that further consultation is required to determine the detail of the proposed approaches.

Table 14 – Summary of approaches considered

Status Quo –	Voluntary	Co-regulatory	Regulatory
No changes to existing requirements – plant-based alternatives to continue following current regulations	Development of a voluntary framework, which could include an industry led voluntary labelling standard. This approach will require further consultation through a separate industry group to develop what the voluntary framework involves.	Development of a co-regulatory framework, which could include a voluntary code of conduct. This approach will require further consultation through a separate industry group to develop what the co-regulatory framework involves.	Development of regulatory actions which could include mandatory code of conduct, changes to Food Standards Code, Information Standard, Strengthening compositional requirements. This approach will require further consultation with industry, further government analysis on feasibility, as well as government to lead process to seek approval of option that is being pursued.

Recommended approach

After considering the range of approaches set out in this report, the working group could not come to a consensus decision on a preferred approach. The majority of working group members did however agree that a voluntary approach is the preferred way forward noting further work should be undertaken to explore this option. This position was shared by all working group members, except members from the meat industry who expressed a preference for regulation. Members also noted that a voluntary framework should incorporate an appropriate compliance and enforcement framework that is subject to review.

8.2 Next steps

The working group has developed and proposed numerous approaches for consideration. The next steps for the investigation into the labelling and marketing of plant-based alternatives involves presenting these findings and recommendations to the Minister for Agriculture, Drought and Emergency Management.

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