Alternative Proteins Council

Plant-Based Meat Alternatives Sold in Australia

A Comparative Analysis of Product Labels 2021 vs 2024

A retail audit conducted by the Alternative Proteins Council

September 2024

The Alternative Proteins Council (APC), founded in March 2021, is the peak representative body for the Australian and New Zealand alternative protein sector, manufacturing proteins using plants, precision fermentation or cell-cultivating technologies.

Executive summary

The Alternative Proteins Council (APC) is the peak representative body for the Australian and New Zealand alternative protein sector, which manufactures proteins using plant-based, precision fermentation or cell-cultivating technologies. The APC's role is to support its members to ensure the burgeoning alternative protein industry is acting responsibly and building a positive reputation in the community.

This 2024 report presents the findings of a retail audit conducted by the APC to assess changes in front-of-pack labelling practices within the plant-based meat alternatives category in Australia, compared to the initial July 2021 audit conducted by Food Frontier. The objective was to evaluate industry compliance with the APC *Plant-based Meat Alternative Product Labelling Guideline*, first published in June 2022 and revised in April 2023. While the APC does not enforce regulations, these guidelines establish industry standards and serve as a crucial resource to ensure labelling accuracy, consistency and transparency, thereby enhancing consumer understanding and trust.

The study compared front-of-pack labelling of plant-based meat alternatives with 2021 data, covering 272 products across Sydney supermarkets, including major chains and online retailers. Results indicate an 8% increase in the availability of plant-based meat alternatives, accompanied by a reduction in product diversity as retailers streamline their offerings to align with consumer trends. The audit observed a rise in snacking and party formats, chunk and strip-style products, and a decline in burgers, sausages and ready-made meal categories.

Changes since the 2021 audit include a decrease in animal depictions and a reduction in the average number of qualifiers and animal terminology on front-of-pack labels, reflecting evolving consumer preferences and industry dynamics. While there has been little change in the number of products featuring animal depictions (90% of products do not include animal depictions), a increase has been observed with all products adhering to the APC Plant-based Meat Alternative Product Labelling Guideline, which stipulates that animal depictions should be no more than 15% of the front-of-pack label.

This audit is integral to fulfilling the APC's role in monitoring guideline compliance and considering any required external evidence-based audits. For example, the industry will assess the need for formal audits if there is accepted evidence of market failure, poor compliance or research supporting behaviour change. The report also provides insights into the plant-based meat alternatives concerning the changing retail landscape, category shifts, and health trends, which may influence the dynamics of the plant-based meat alternatives category in Australia.

Background

Senate Inquiry into the Definitions of Meat and Other Animal Products

Food Frontier previously conducted a comprehensive update of the category-wide analysis of front-of-pack labels for plant-based meat alternative products available in the Australian market (Kalocsay, K. et al., 2021). The initial audit was undertaken in July 2021 to establish an evidence base for contempory labelling practises utilised by plant-based meat alternative products available for sale in major retail, within the context of the Senate Inquiry into the Definitions of Meat and Other Animal Products. This subsequent January 2024 audit review aimed to replicate the original audit to assess current levels of industry compliance with the APC *Plant-based Meat Alternative Product Labelling Guideline* and to provide updated data on current labelling practices.

During the interim period:

- The Senate Inquiry Committee released its findings in February 2022, marking a significant milestone in the ongoing conversation surrounding meat and related product definitions.
- The APC was proactive in providing valuable resources to industry stakeholders, including the issuance of the *Plant-based Meat Alternative Product Labelling Guideline*, aimed at bolstering regulatory compliance and enhancing transparency for both industry participants and consumers.
- The Federal Government's commitment, declared during the May 2022 election, to endorse clearer labelling practices underscored a growing acknowledgment of the importance of transparent labelling within the food industry.

As APC awaits the forthcoming response from the Government to the Senate Inquiry Committee Report, it is crucial to acknowledge the evolving regulatory landscape in this report. The Government's ongoing engagement with stakeholders regarding its election commitment, alongside the release of the APC's industry resources, highlights the dynamic nature of the industry and underscores the need for continued collaboration among stakeholders.

Evolving Food Landscape

With the anticipated global population growth and the pressing need to address climate change, the transition towards dietary patterns that are both healthy and environmentally sustainable stands as a pivotal challenge of our time (Lawrence, A. S., 2023). Sales of plant-based meat alternative products, emulating the visual and functional characteristics of animal-source foods, have experienced rapid growth over the past decade and, despite recent global macroeconomic trends impacting sales, are projected to continue this upward trajectory (Curtain, F., & Grafenauer, S., 2019; Kalocsay, K. et al., 2024). Concurrently, there is a discernible shift towards flexitarian food choices, with a growing number of individuals embracing more flexible eating habits. This shift is propelled by heightened awareness of personal health and environmental impact, reshaping the culinary landscape in Australia (Jaeger, S. R., et al., 2023).

Furthermore, notable changes are observed in packaging strategies, wherein a preference for clean and simplistic labels is gaining prevalence over the traditional use of animal graphics (Ganderats-Fuentes & Morgan, 2023; Inguglia, E. S., et al. 2023). Additionally, the substantial growth of online food retailers has led to an expanded array of products available online, surpassing the offerings found in traditional in-store settings (Lawrence, A. S., 2023). This reflects the industry's response to evolving consumer preferences, as individuals seek greater clarity, transparency and availability in their food choices.

Lack of 'Meat' Terminologies

Various terminologies are employed on the front-of-pack to indicate the products do not contain animal meat. This includes *qualifier* terms such as 'plant-based', 'vegan', 'vegetarian', 'meat-free' and 'meatless', which indicate to a consumer the contents of the product and *modifier* terminology such as 'chicken-style', 'chicken-free' or deliberate misspellings of animal meat terms such as 'chick'n', which indicate to a consumer how the product will taste and how it can be used. These *qualifier* and *modifier* terms undergo evaluation based on their prominence and frequency within the packaging context, an examination conducted across the 272 products compiled for assessment in this report.

It's important to note that both the 2021 and 2024 audits excluded traditional plant protein products that do not aim to replicate the taste and appearance of animal meats, such as lentil burgers, tofu and falafel, focusing specifically on the evolving landscape of plant-based meat alternatives in Australia.

Research objectives

The primary objective of this report was to determine industry compliance with the APC *Plant-based Meat Alternative Product Labelling Guideline*, first published in June 2022 and revised in April 2023. This involved conducting labelling audits within two years of the guidelines' launch. This commitment arises from both governmental requests to demonstrate the level of industry compliance with the guidelines and the imperative for industry transparency and adherence to best practices, ensuring alignment with APC guidelines.

Moreover, this updated analysis aimed to provide insights into labelling practices across the entire plant-based meat alternative category. Quantitative analysis compared a dataset of 252 products collected in 2021 with an expanded dataset of 272 products compiled for this report in 2024, focusing on evaluating front-of-pack labelling.

Additionally, this research initiative sought to inform industry stakeholders, regulatory bodies and policymakers and contribute to the development of a more transparent and consumer-centric regulatory framework that aligns with the evolving needs of both the industry and consumers.

Methodology

Data collection: Data collection involved acquiring front-of-pack labels for 272 products currently available in Australian leading retail supermarkets, Woolworths, Coles, IGA, Harris Farm and large-scale independent retailers in January 2024. Aldi was also included in the audit, however, at the time the audit was undertaken, it did not include any products that fit the audit criteria. To ensure a comprehensive representation, a combination of both online and in-store research methodologies was employed. The Woolworths product lists served as a crucial reference tool throughout the collection process, enhancing accuracy and inclusivity.

Product categorisation: Product categorisation was outlined initially to align with the original 2021 audit data by Food Frontier through the format of the product with 'nuggets/ schnitzels/tenders/burgers, etc (crumbed)', 'sausages', 'snacking/party food', 'ready-meals', 'chunks/strips', 'burgers (uncrumbed)', 'deli slices' and 'mince'. Product formats that represent less than 4% of a category were assigned as 'other', such as 'seafood-style' and 'bacon'.

Data inclusion: Data was collected for this analysis by:

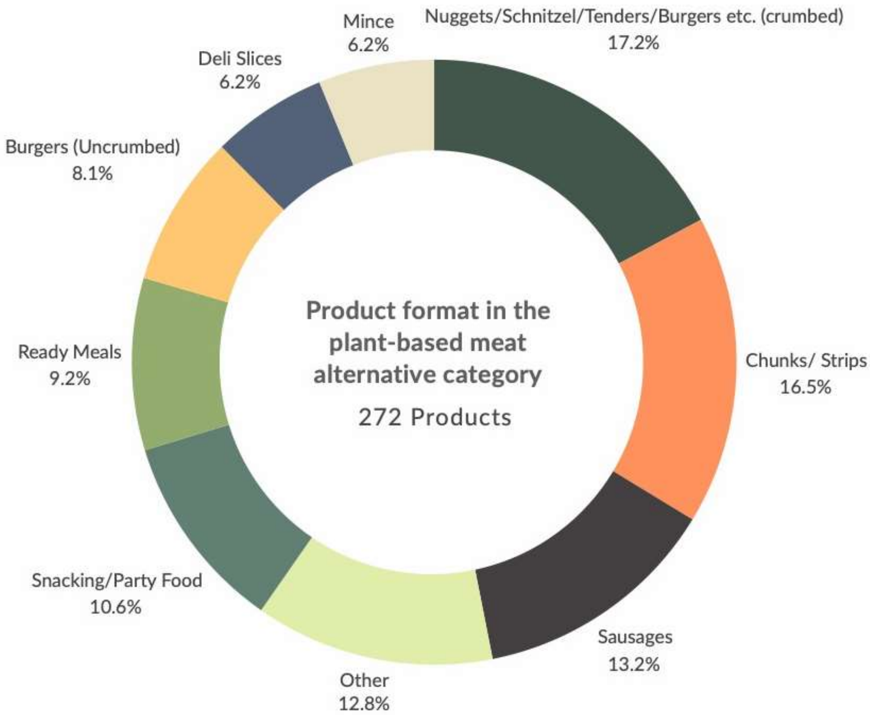
- Brand name
- Product name
- Product style/format
- Meat-free terms used in product name
- Animal meat terms included in product name
- Any modification of animal meat terms
- Any additional meat-free terms displayed on the front-of-pack
- Total number of meat-free terms displayed on front-of-pack
- Animal depictions on front-of-pack
- Size of animal depictions
- Description of front-of-pack artwork

Analysis parameters: For a meat-free term to be considered part of the product name, the term needed to have equivalent prominence as the product name (similar font size, of equal visibility to the product name). If a meat-free qualifier term was included near the product name but in a significantly smaller or different font or style, leading to a lower prominence and visibility than the product name, it was not counted as part of the product name and was, instead, counted only as an additional front-of-pack term. Brand names/logos did not count as meat-free terms and were not included in the analysis.

Results

As seen in Figure 1, the dataset expanded from 252 products (in 2021) to 272 products (in 2024), also revealing transformations in category formats. While results indicate the number of plant-based meat alternatives in the market has grown by 8% since July 2021 to January 2024, there has been a reduction in the range of products now available in major grocery chains nationwide, with retailer range reduction (product deletions) seen in some stores. The number of products available at smaller independent supermarkets and online retailers increased.

Figure 1: 272 Plant-Based Meat Alternative Products Reviewed: 2024

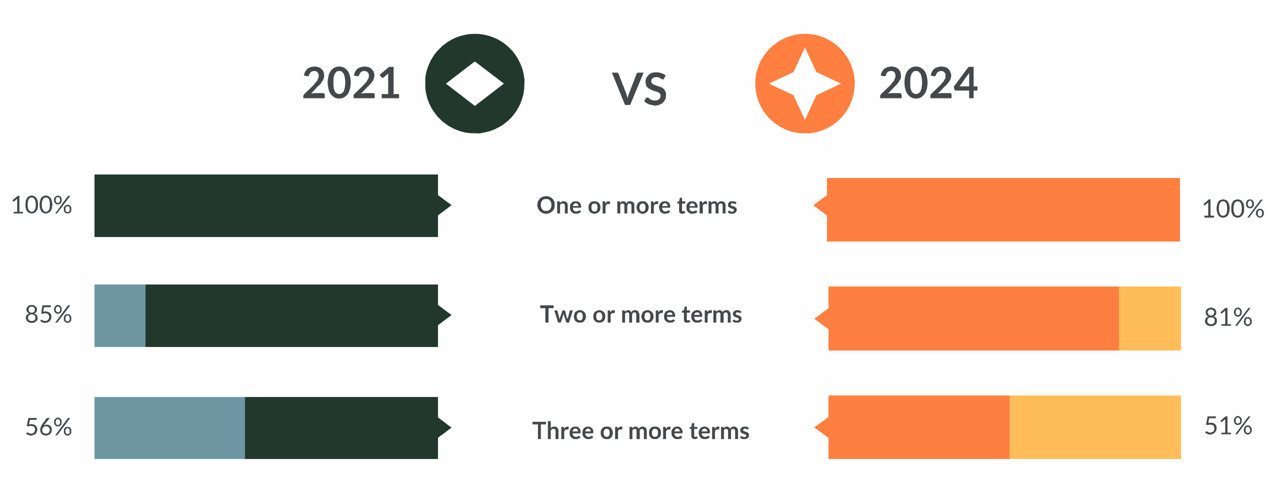


Compared to the 2021 audit, there was an increase in snacking/party food offerings (up from 6.3% to 10.6%), accompanied by more chunk/strip-style products (up from 10.3% to 16.5%). A decline was observed in several other categories including ready meals (down from 17.8% to 9.2%), burgers (uncrumbed) (declining from 11.5% to 8.1%) and sausages (down from 15.5% to 13.2%).

Use of Qualifier and Modifier Terms

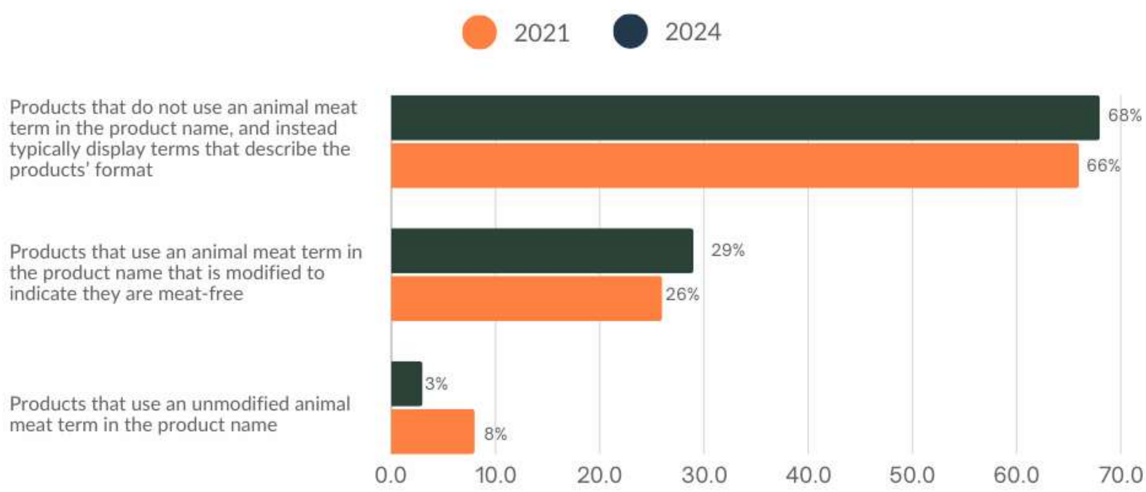
Results indicate that the category has evolved since 2021, manifesting a shift in product format, with all products still incorporating at least one or more *qualifier* or *modifier* terms on the front-of-pack label. However, there has been a reduction in the average number of qualifier and modifier terms and animal terminology used, potentially signalling reduced clutter on packaging and reflecting the trend towards simpler and more streamlined labelling, as *seen in Figure 2.*

Figure 2: Quantity Comparison of Qualifier/Modifier Terms on Front-of-Pack Labelling: 2021 vs 2024



A comparison of front-of-pack labelling between 2021 and 2024 (Figure 3) shows a slight increase in products that do not use an animal meat term (68%) in the product name and instead typically display terms that describe the product format. There has been a decrease in the number of products using an unmodified or unqualified animal meat term in the products name in 2024 (3%) compared to 2021 (8%).

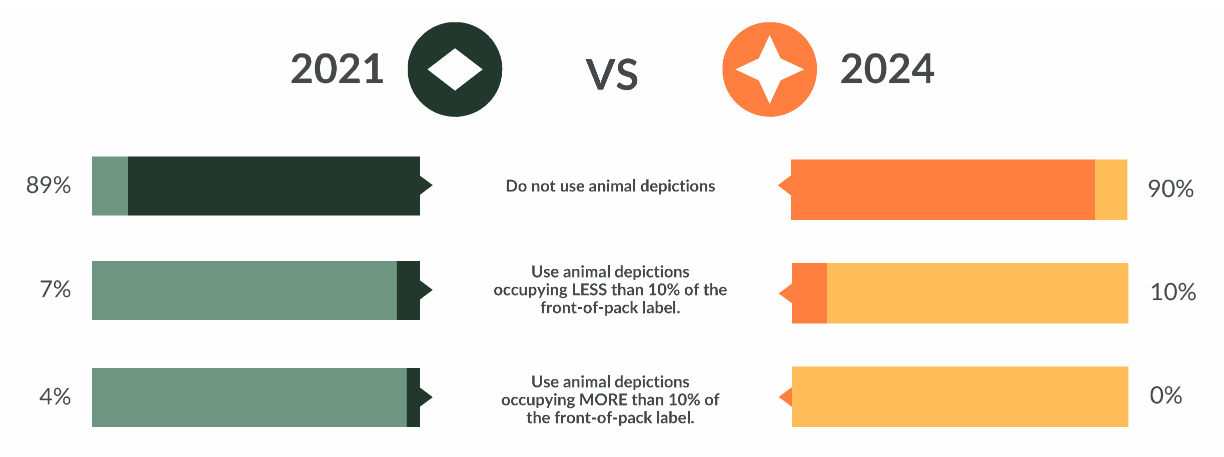
Figure 3: Comparison of Animal Meat Terminology on Front-of-Pack Labelling: 2021 vs 2024



Use of Animal Depictions

As seen in Figure 4, a comparison of front-of-pack labelling between 2021 and 2024 showed distinct changes in the use of animal depictions on product labels. Between 2021 and 2024 there was a slight increase in the number of products not using animal depictions on front-of-pack (from 89% to 90%). However, in 2024, of the remaining 10% of products that did feature animal depictions, no product utilised animal imagery occupying more than 10% of the front-of-pack label, with the average animal depiction taking up 7% of the front-of-pack label if utilised.

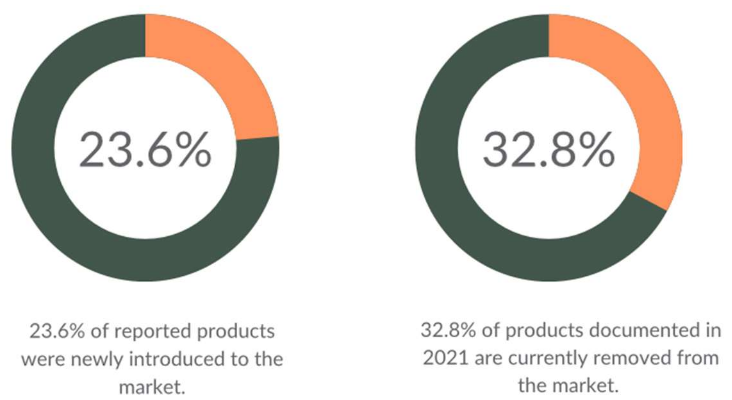
Figure 4: Use of Animal Depictions on Front-of-Pack Labelling Comparison: 2021 vs 2024



Market Dynamics

As described above, while the number of products not featuring animal depictions has remained similar (1% change), an increase has also been observed among those adhering to the APC labelling guideline stipulating animal depictions should be no more than 15% of the front-of-pack labelling.

Figure 5: Turnover of Products – New Introductions and Removals: 2021 vs 2024



Discussion

Evolution of Product Packaging in the Australian Plant-Based Meat Alternative Market

Retail Landscape Transformation

The Australian retail industry is undergoing a transformation driven by evolving consumer preferences and the surge in e-commerce. While online shopping is gaining popularity, traditional in-store experiences will remain important for consumers valuing personal selection and immediate gratification. Approximately 35% of audited products in 2024 were sourced from online platforms, reflecting the growing trend of online grocery shopping possibly spurred by the pandemic and rising living costs (Lawrence, A. S, 2023). According to US data, consumers are increasingly shopping online using e-commerce sites, hence the decision to include e-commerce in the 2024 audit (Good Food Institute, 2022). Brands are strategically expanding online offerings, including exclusive products, to cater to consumers seeking optimal pricing and wider choice.

Diverse Data Collection Sources

The audit noted the presence of plant-based meat alternative brands in major and independent supermarkets, with a wider range observed in smaller independent or specialty stores in 2024. This expansion reflects changing consumer preferences, particularly the increased popularity of online grocery retail following the pandemic (Luo et al., 2023; Good Food Institute, 2022).

Australian Plant-Based Meat Alternative Category Changes

Product Format Changes: Retail Range Rationalisation, Dominance and Shifts

The Australian plant-based meat alternative market has experienced notable transformations in retail range rationalisation, with eight manufacturers reducing their product offerings by up to half, while an equivalent number expanded their product range. This dual trend reflects the adaptability and strategic decisions of companies, prompting further exploration (Figure 5).

Despite a 23% increase in the total number of plant-based meat alternative products since January 2021 (Kalocsay et al., 2024) and an 8% rise since the July 2021 audit, crumbed formats (nuggets/schnitzels/tenders/burgers) continue to dominate the market.

While there is a reported demand for plant-based ready meals, this review observed a significant decrease in ready meals products from 17.8% to 9.2%, suggesting potential shifts in targeting strategies by brands (Curtain & Grafenauer, 2019) and the observation that several international brands that produced ready meals have left the Australian market since the previous audit.

Labelling in Plant-Based Meat Alternatives

Qualifying or Modifying Terms Analysis

Aligning with the methodology of the previous audit, brand names were excluded as qualifying meat-free terms. All 272 products included in the audit incorporate at least one *qualifier* or *modifier* term on the front-of-pack label. Some brands opt for fewer qualifying terms, enlarging and prominently featuring logos and slogans to convey meat-free status, suggesting a shift towards using brand identity as a primary indicator of such attributes.

Animal Depictions and Labelling Compliance

Regarding animal depictions and labelling compliance, the 2021 audit identified 11% of products displaying animal imagery on the front-of-pack, with 4% exceeding 10% of the front-of-pack surface area and 8% using unmodified animal meat terms in the product name (however, that 8% was accompanied by an average of 2.4 terms used elsewhere on the front-of-pack to indicate they were meat-free).

In 2024, 90% of products in the audit do not feature animal depictions on front-of-pack. Additionally, only 3% of products in 2024 use an animal meat term without qualification or modification in the product name, indicating a positive trend towards informative and transparent packaging, aligning with consumer expectations (Ganderats-Fuentes & Morgan, 2023; Cooper et al., 2022; Maganja et al., 2023; Inguglia et al., 2023). Of the 3% of products that use an unmodified animal meat term in the product name, they do so along with an average 3.5 terms elsewhere on the front-of-pack label that indicate they are meat free.

Consumer Health Trends

Rise of Flexitarianism

The Australian plant-based meat alternative market has undergone significant changes since 2021 with 13 new brands entering and 22 existing brands departing, including international brands downsizing or exiting altogether (Kalocsay et al., 2024). These shifts, influenced by factors like evolving consumer preferences towards flexitarianism, demand for healthier options, market trends, heightened competition, inflationary pressures and the higher price of plant-based products compared to animal meat, require thorough analysis.

It is reported that globally, the demand for plant-based meat substitutes is growing for nutritional and environmental reasons (Sheen et al., 2023; Curtain & Grafenauer, 2019) with flexitarians the leading consumers of plant-based meat alternatives (Kalocsay et al., 2024).

Conclusion & recommendations

In summary, this research provides valuable insights into front-of-pack labelling in Australia's plant-based meat alternative market, enhancing understanding of industry evolution. The audit results indicate strong and almost universal compliance with the APC labelling guideline, emphasising clear labelling practices and reduced usage of animal imagery on packaging. Instances where such depictions exceed 10% of front-of-packaging no longer exist in the market, marking notable progress since 2021. This improvement demonstrates the plant-based meat alternative industry's commitment to clear labelling practices and collaboration within the broader food manufacturing sector, showcasing the effectiveness of the APC guidelines in supporting manufacturers with labelling compliance.

By limiting the prominence of animal imagery and reducing the use of unmodified or unqualified animal meat terms on the front-of-pack, manufacturers demonstrate heightened sensitivity to consumer preferences and contribute to a visually balanced and informative retail environment. This trend reflects the industry's responsiveness and signifies a commitment to transparent and clear product labelling principles. Sustaining this momentum towards adherence to established guidelines will be crucial for fostering consumer trust and advancing standards within the marketplace.

One strength of this audit was the comprehensive gathering of both online and in-store data, providing a more holistic view of the market landscape. Future audits may consider expanding the scope to include an analysis of the entire packaging, including back-of-pack information. Monitoring changes in product placement within stores could also be helpful. Further research could explore the impact of consumer acceptance, pricing and nutrition claims, such as protein and fibre, to provide valuable insights into purchasing behaviours and preferences.

Although outside the scope of this report, the number of plant-based products that are not considered plant-based meat alternatives (eg falafel, tofu and tempeh-style), has also increased since 2021. The increase in the domestically produced plant-based food sector offers opportunities for Australian grain, legume and vegetable growers access to this growing value-adding supply chain.

In conclusion, this audit serves as a cornerstone in validating industry voluntary compliance and endorsing self-regulatory frameworks that champion best practices. It complements existing food regulations and consumer laws, ensuring transparency and truthfulness in product representation. Providing a deeper understanding of the category, this audit offers a vital platform for dialogue, enabling stakeholders to collectively address pertinent issues. As a talking point for member reporting, it underscores the industry's commitment to addressing challenges head-on and serves as a powerful tool to validate the efficacy of the APC's self-regulation, fostering greater compliance with both industry, consumer and governmental expectations.

Key for data analysis

A- **Plant-based meat alternative:** Products that are made from combinations of plant proteins, oils, spices, seasonings and other plant derivatives, including starches and common food additives. Generally, these products use plant proteins (most often in the form of protein isolates, concentrates and flours) or mycoprotein (protein derived from fungi) as a base to achieve a more meat-like appearance and texture than traditional meat alternatives, such as lentil burgers.

B- **Front-of-pack label:** The area on the front of a product, the principal display panel, that carries the product name, along with other brand and marketing imagery and information.

C- **Product format:** Term describing a finished food product, such as 'burger', 'sausage', 'tender', 'slices', etc, which is more relevant to the process used to create a food than the origin of the food's ingredients.

D- **Terms**: A word or phrase used descriptively to communicate a product's ingredients, style or flavour. Includes modifications and qualifications (see definitions below).

E- **Meat-free:** A product that does not contain animal meat.

F- **Product name:** The primary product title, which does not include the brand name and is the most visible portion of the name as it appears on a product label. Note: For a meat-free term to be considered part of the product name in this analysis, the term must have the same prominence as the product name (similar font size, of equal visibility to the product name). If a qualifier term was included near the product name, but in a smaller or significantly different font or style, leading to a lower prominence and visibility than the product name, it cannot be counted as part of the product name and was only included as a front-of-pack qualifying term.

G- **Animal meat term:** Refers exclusively to words: beef, chicken, duck, pork, fish, prawn, scallop, salmon or variations of these words such as 'beefy,' 'chicken-style', which modify the term to indicate the product is meat-free. Does not include terms indicating the format of a food product, as per the definition above.

H- **Product style:** Term describing a product's flavour characteristics.

I- **Modification:** A modification on an animal meat term changes the meaning of the original term to indicate that the product is meat-free; for example, 'beefless', 'chick'n', 'pork-style' and 'chicken-style'.

J- **Qualified or qualifier:** A term generally used at the start of a product name to indicate the product is meat-free; for example, 'plant-based', 'meat-free', 'no-meat', 'meatless', 'vegan', 'vegetarian', etc.

Product data included in the audit is available on request to the APC:
secretariat@alternativeproteinscouncil.org

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