Dairy Australia

Dairy Clinician Toolkit

Aussie Dairy

Contents

About Dairy Australia

At Dairy Australia, we are committed to supporting the health and wellbeing of all Australians through evidence-based nutrition insights and expert guidance. Backed by a team of in-house dietitians and nutrition scientists, we translate the latest research into practical advice for healthcare professionals and the community. Our expertise spans digestive health, chronic disease prevention, weight management, and nutrient adequacy, ensuring dairy continues to play a valuable role in balanced, healthy diets across all life stages.

The Australian Dietary Guidelines are the cornerstone of nutrition advice in Australia, developed through rigorous analysis of over 55,000 scientific studies in human nutrition. They represent the most comprehensive, evidence-based recommendations for promoting health and reducing the risk of chronic disease across the population.

These guidelines serve as the "true north" for all credible health and nutrition messaging in Australia. The information provided in this clinician toolkit is firmly grounded in these guidelines, ensuring that the dietary advice you share with patients is both scientifically sound and nationally endorsed.

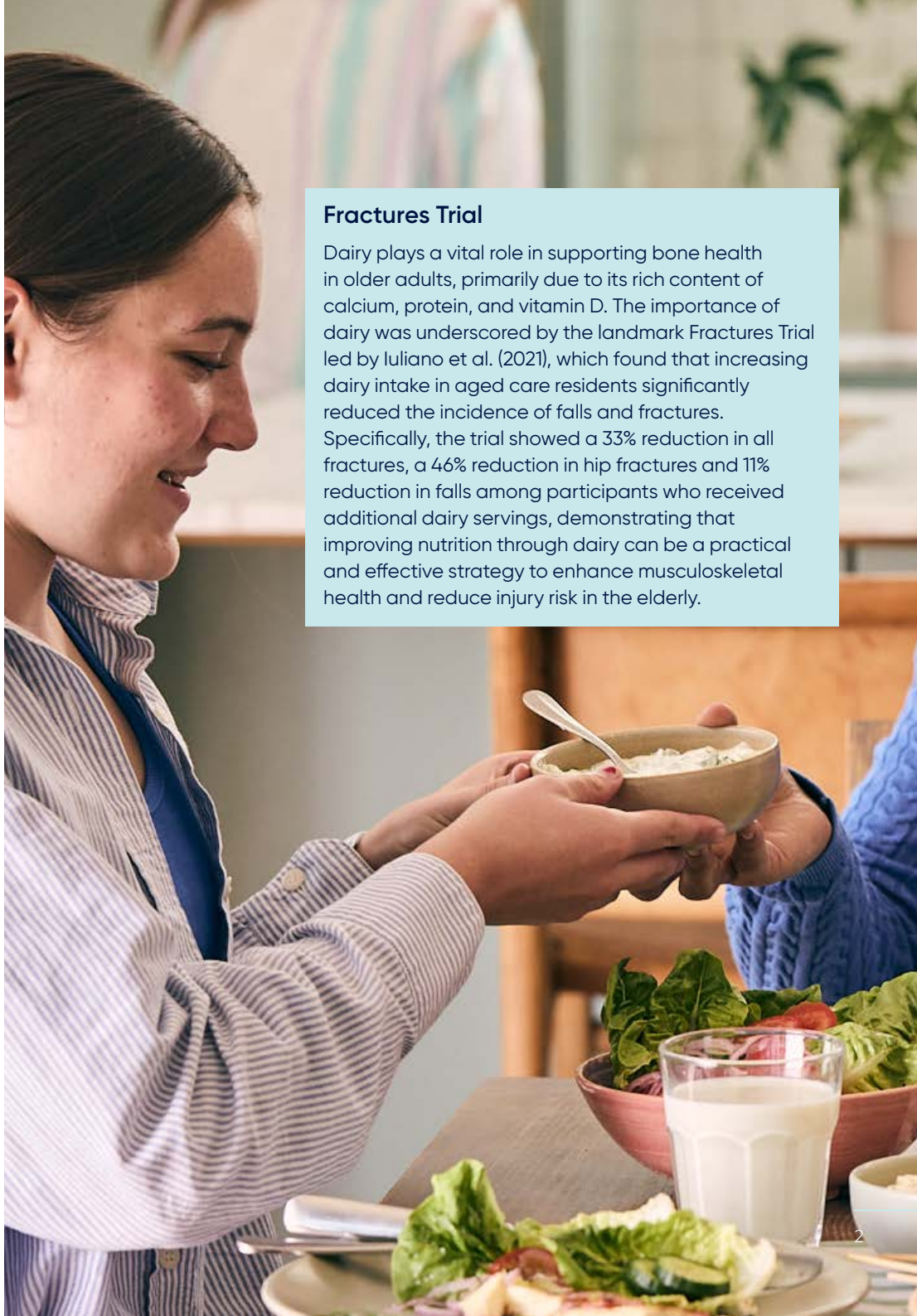
For more information, including expert advice and patient resources visit **dairy.com.au/hcp**.

To connect with our in-house clinical team, visit **dairy.com.au/contact**.

The importance of dairy

The dairy food group as defined by the Australian Dietary Guidelines, includes all types of milk, cheese, and yoghurt - whether full-fat or reduced-fat, as well as fortified plant-based alternatives that contain at least 100mg of calcium per 100mL. Dairy foods are rich in more than 10 essential nutrients including calcium, protein, vitamin B12, iodine, and riboflavin, and play a vital role in supporting bone health, muscle function, and overall wellbeing. Evidence shows regular consumption of dairy foods has been associated with a reduced risk of chronic conditions including osteoporosis, cardiovascular disease, type 2 diabetes, and colorectal cancer, with no link to overweight or obesity[i]. Including 1.5 to 4 serves of dairy or alternatives daily, depending on age and sex, helps Australians meet their nutritional needs and maintain long-term health.

Australians' dairy consumption trails behind recommendations, with nine in 10 Australians not meeting their recommended daily serves.[ii] This can lead to nutritional deficiencies and longer-term adverse health outcomes, including an increased chronic disease risk and a decline in functional health.



Fractures Trial

Dairy plays a vital role in supporting bone health in older adults, primarily due to its rich content of calcium, protein, and vitamin D. The importance of dairy was underscored by the landmark Fractures Trial led by Iuliano et al. (2021), which found that increasing dairy intake in aged care residents significantly reduced the incidence of falls and fractures. Specifically, the trial showed a 33% reduction in all fractures, a 46% reduction in hip fractures and 11% reduction in falls among participants who received additional dairy servings, demonstrating that improving nutrition through dairy can be a practical and effective strategy to enhance musculoskeletal health and reduce injury risk in the elderly.

Serve sizes and recommendations

Table 1 Minimum recommended number of serves from the dairy food group.

	Age (years)	Number of serves per day
Men	19–70	2 ½
	70+	3 ½
Women	19–50	2 ½
	50+	4
	Pregnant or breast feeding	2 ½
Children under 8 years	<8	1.5 - 2
Older children and teens	8+	2.5 - 3.5

Adapted from: 2013 Australian Dietary Guidelines. The dairy food group includes milk, cheese, yoghurt and/or alternatives.*

One serve of dairy is equivalent to:

Milk
1 cup
(250ml)

Cheese
2 slices
(40g)

Yoghurt
¾ cup
(200g)

Ricotta
1/2 cup
(120g)

**Alternatives include: 250ml soy, rice or other cereal drink with at least 100mg of added calcium per 100ml.*

Calcium recommended daily intakes (RDI) across the lifespan

Table 2 Recommended daily intake (RDI) – calcium (mg)

A serve of dairy provides approximately 300mg of calcium per serve.
Including 2-4 serves of dairy per day ensures calcium requirements are met.

Age	RDI
Children (all)	
1-3 years	500 mg/day
4-8 years	700 mg/day
Boys	
9-11 years	1,000 mg/day
12-13 years	1,300 mg/day
14-18 years	1,300 mg/day
Girls	
9-11 years	1,000 mg/day
12-13 years	1,300 mg/day
14-18 years	1,300 mg/day

Age	RDI
Men	
19-30 years	1,000 mg/day
31-50 years	1,000 mg/day
51-70 years	1,000 mg/day
>70 years	1,300 mg/day
Women	**RDI**
19-30 years	1,000 mg/day
31-50 years	1,000 mg/day
51-70 years	1,300 mg/day
>70 years	1,300 mg/day

Age	RDI
Pregnancy	
14-18 years	1,300 mg/day
19-30 years	1,000 mg/day
31-50 years	1,000 mg/day
Lactation	**RDI**
14-18 years	1,300 mg/day
19-30 years	1,000 mg/day
31-50 years	1,000 mg/day

Table adapted from eatforhealth.gov.au.

Frequently asked questions (FAQs)

Your go-to guide for dairy FAQs

These are the dairy questions clinicians hear time and time again - answered with clarity, clinical tips, and the latest evidence. The FAQs in this section are drawn from *You Ask, We Answer*, Dairy Australia's trusted platform designed to support patients and health professionals with accurate, science-based answers to their dairy questions.

To explore more questions or submit your own, visit **dairy.com.au/yawa**.

Can patients with lactose intolerance still consume dairy products?

Yes. Lactose free doesn't have to mean going dairy free. Many dairy foods are naturally low in lactose or contain bacteria that assist with lactose digestion. For example:

- **Hard cheeses** (e.g. cheddar, Parmesan, Swiss) and **matured soft cheeses** (e.g. Brie, Camembert, Feta) contain negligible amounts of lactose due to fermentation and maturation processes.
- **Yoghurt**, particularly those with live cultures, contains bacteria (e.g. *Lactobacillus delbrueckii subsp. bulgaricus, Streptococcus thermophilus*) that partially hydrolyse lactose, making it better tolerated. Yoghurt's lactose content decreases over time due to bacterial metabolism.

Clinical tip 1

Be cautious of **self-diagnosed lactose intolerance**—only an estimated **5% of individuals of Caucasian descent** have true lactose malabsorption, with rates varying across other ethnic groups.[iii] Symptoms may instead stem from **functional gut disorders**, such as irritable bowel syndrome (IBS), stress, certain medications or **perceived intolerance**.[iv] Consider evaluating tolerance objectively before advising dairy restriction.

Importantly, over 90% of Australian adults do not meet the recommended 2.5–4 serves of dairy or dairy alternatives per day (depending on age and sex), which may lead to inadequate intake of calcium and other key nutrients.[v]

Unnecessary avoidance of dairy can contribute to long-term nutritional deficiencies, particularly in adolescents, postmenopausal women,[vi] and older adults. Adequate consumption of dairy foods - particularly milk, yoghurt, and cheese - has been consistently associated with a reduced risk of several chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension, and stroke. Emerging evidence also suggests a protective role in the prevention of certain cancers, such as colorectal cancer, likely due to the combined effects of calcium, bioactive peptides, and fermentation-derived compounds.

Incorporating recommended daily serves of dairy as part of a balanced dietary pattern, such as the **Mediterranean** or **DASH diet**, may offer synergistic benefits for metabolic and cardiovascular health.

Clinical tip 2

Research suggests patients with lactose intolerance may tolerate up to 250mL of milk daily if consumed with other foods and distributed throughout the day. Gradual exposure may also help build tolerance. Patients who have cut out dairy foods from their diet due to digestive problems can try a 21-day milk-drinking intervention.[vii] This involves starting with half a cup of milk with a meal twice a day in week 1, increasing this to two-thirds of a cup in week 2 and then one cup during week 3. Patients who complete the 21-day milk-drinking intervention see an improvement in symptoms and go on to enjoy milk and other dairy foods such as cheese and yoghurt as part of their everyday meals and snacks. Referral to an Accredited Practising Dietitian (APD) is recommended for tailored advice.

Does milk contribute to weight gain?

No- current evidence indicates that milk, along with other dairy products such as cheese and yoghurt, is not linked to weight gain or obesity when consumed as part of a balanced diet.[viii] In fact, these dairy foods may assist with weight management and even support weight loss efforts.[ix]

Research, including meta-analyses of randomized controlled trials, has demonstrated that incorporating at least three daily servings of milk, cheese, and yoghurt into a kilojoule-controlled diet can lead to:

- Greater weight loss
- Increased lean muscle mass
- Reduced fat mass
- Decreased waist circumference.[x,xi]

These benefits are attributed to several factors:

- **Calcium content:** Dairy calcium may reduce the amount of dietary fat absorbed by the body.[xii]
- **Fat metabolism:** Adequate calcium intake supports fat mobilization and oxidation, aiding in fat loss.[xiii]
- **Satiety:** The protein content in dairy products can promote a feeling of fullness, potentially reducing overall energy intake.[xiv] A diet high in protein can also assist with retaining lean muscle mass, optimising body composition.
- **Nutrient synergy:** The combination of nutrients in dairy foods may have synergistic effects that support weight management.

Importantly, these positive outcomes are observed with both regular and reduced-fat dairy products. The National Health and Medical Research Council (NHMRC) found no link between the consumption of milk, yoghurt, or cheese and weight gain or obesity risk in adults, regardless of fat content.[xv]

Clinical tip 1

Reassure patients that including milk and other dairy products in their recommended daily servings of dairy can support weight management goals, especially when integrated into a kilojoule-controlled eating plan. For personalised dietary advice, consider referring patients to an Accredited Practising Dietitian.

Clinical tip 2

To maintain a healthy weight, the Australian Dietary Guidelines advise cutting back on discretionary foods, moderating portion sizes, and increasing physical activity levels, rather than cutting out core food groups.

Should patients consume yoghurt or take a probiotic for gut health?

Both probiotic supplements and yoghurt with added probiotics can support gut health; however, yoghurt offers additional nutritional benefits beyond probiotics.

Yoghurt as a probiotic source:

- **Nutrient density:** Yoghurt provides essential nutrients such as calcium, protein, phosphorus, potassium, and vitamins A, B2, and B12, contributing to overall health.
- **Protein content:** It is a good source of high-quality protein, containing whey and casein, which support muscle building and maintenance (as well as satiety).
- **Probiotic strains:** Many yoghurts contain live cultures like *Lactobacillus bulgaricus* and *Streptococcus thermophilus*, which can aid in maintaining a healthy gut microbiota.[xvi]
- **Yoghurt matrix:** Yoghurt's unique food matrix provides an ideal medium for added probiotics. Research suggests yoghurt improves probiotics' survivability in the harsh conditions of the gut.[xvii] One study showed 100 times less bacteria are required to reach the l arge intestine if delivered through yoghurt vs probiotic supplements.[xviii]

Important note: Not all yoghurt products contain probiotics by default. For a yoghurt to be considered probiotic, it must contain specific strains added in sufficient quantities that have demonstrated health benefits.[xix] Patients should look for labels that specify the inclusion of live probiotic cultures (e.g., *Lactobacillus acidophilus, Bifidobacterium* species).

Considerations for probiotic supplements:

- **Targeted strains:** Supplements can provide specific probiotic strains in controlled doses, which may be beneficial for certain clinical conditions.
- **Viability:** The efficacy of supplements depends on the viability of the probiotic strains at the time of consumption.

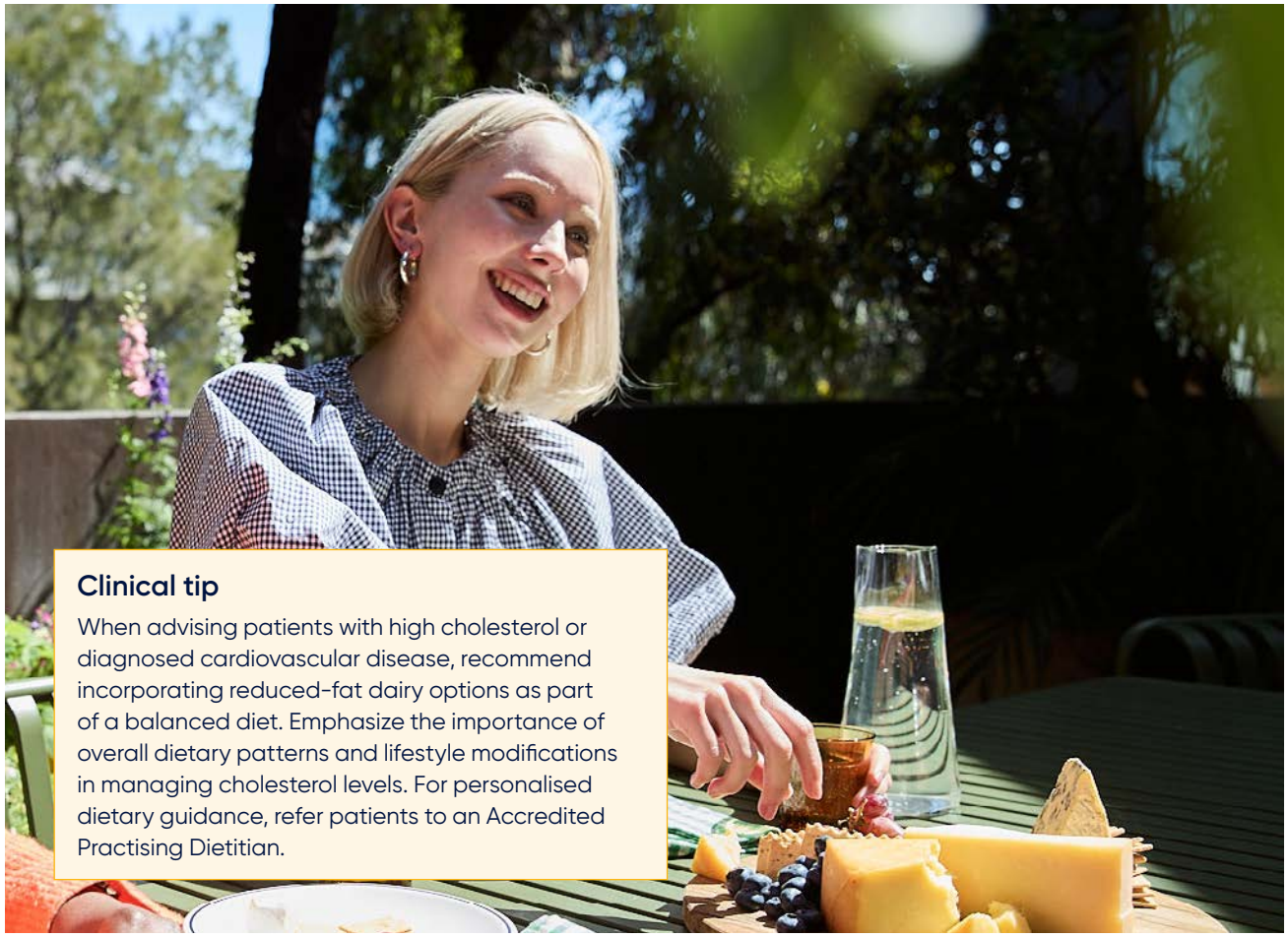
Clinical tip

For general gut health maintenance, recommend patients consume probiotic-rich yoghurts regularly, ensuring the products contain live and active cultures. For specific health concerns requiring targeted probiotic strains, consider probiotic supplements as an adjunct, and refer to an Accredited Practicing Dietitian for personalised advice.

Can patients with high cholesterol consume dairy products?

Yes, individuals with elevated cholesterol levels can include milk, cheese, and yoghurt in their diets. However, it's advisable to opt for reduced-fat varieties to minimize saturated fat intake.[xx] Saturated fats are known to raise LDL (low-density lipoprotein) cholesterol levels, which is a risk factor for cardiovascular disease.

Recent studies suggest that the relationship between dairy fat and heart health is complex. Some research indicates that full-fat dairy products may not have the adverse effects on heart health once believed. For instance, certain components in dairy, like calcium and bioactive peptides, might counteract the potential negative impacts of saturated fats.[xxi] Although the Australian Dietary Guidelines recommend 'mostly' reduced fat dairy for the general population, updated guidelines from The National Heart Foundation approve regular-fat dairy for the general population,[xxii] if this is a healthy individuals' preference.[xxiii] The National Heart Foundation guidelines recommend consuming reduced-fat dairy for people with high cholesterol or a history of heart disease to minimise risk factors.[xxiv]



Clinical tip

When advising patients with high cholesterol or diagnosed cardiovascular disease, recommend incorporating reduced-fat dairy options as part of a balanced diet. Emphasize the importance of overall dietary patterns and lifestyle modifications in managing cholesterol levels. For personalised dietary guidance, refer patients to an Accredited Practising Dietitian.

How does the calcium in cow's milk compare to plant-based beverages?

While almond milk is often fortified to match the calcium content of cow's milk, the bioavailability - or the body's ability to absorb and utilise that calcium - can differ significantly between the two.

Nutrient content and health benefits:

- **Cow's milk:** Naturally contains approximately 300 mg of calcium per 240 mL (one cup), with a bioavailability of about 30–35%, making it an excellent source of absorbable dietary calcium.[xxv]
- **Plant-based beverages:** Typically contain minimal natural calcium. To compensate, manufacturers often fortify these beverages, adding calcium compounds to reach levels comparable to cow's milk. However, the absorption of this added calcium can be less efficient (up to 75% less absorbable), influenced by factors such as the type of calcium used and the presence of compounds like phytates, which may inhibit calcium absorption.[xxvi]
- **Nutrient package:** Although many plant-based beverages are fortified with calcium, they lack the broad range of naturally occurring nutrients found in cow's milk, such as high-quality protein and B vitamins. Without proper planning, avoiding dairy entirely can lead to nutrient deficiencies.[xxvii] Additionally, the long-term health benefits of cow's milk are well-documented,[xxviii] whereas evidence for long-term effects of plant-based alternatives is currently more limited.

Clinical tip

When advising patients who prefer plant-based alternatives, it's crucial to emphasize the importance of choosing calcium-fortified products and to be aware of the potential differences in calcium absorption. Note that for a plant-based beverage to be considered a milk 'alternative', it must be fortified with at least 100mg calcium per 100mL.[xxix] For individuals at risk of osteoporosis or with increased calcium requirements, refer to an Accredited Practicing Dietitian.

Nutrient bang for buck - a comparison of milk and fortified plant-based beverages

Milk is naturally nutrient rich and more affordable than plant-based beverages

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	34%
Phosphorus	23%
Riboflavin (mg)	28%
Vitamin A	15%
Zinc	7%
Magnesium	8%
Nutrients per serve	
Energy (kJ)	698*
Total fat (g)	8.8
Protein (g)	8.5
Total sugar (g)	13.8
Added sugar (g)	0
Free sugar (g)	0

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	37%
Phosphorus	18%
Riboflavin (mg)	4%
Vitamin A	2%
Zinc	3%
Magnesium	17%
Nutrients per serve	
Energy (kJ)	620*
Total fat (g)	7.0
Protein (g)	9.5
Total sugar (g)	6.8
Added sugar (g)	4.5
Free sugar (g)	4.5

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	23%
Phosphorus	5%
Riboflavin (mg)	0%
Vitamin A	0%
Zinc	2%
Magnesium	8%
Nutrients per serve	
Energy (kJ)	670
Total fat (g)	2.5
Protein (g)	1.0
Total sugar (g)	9.8
Added sugar (g)	0
Free sugar (g)	0

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	22%
Phosphorus	4%
Riboflavin (mg)	3%
Vitamin A	0%
Zinc	2%
Magnesium	6%
Nutrients per serve	
Energy (kJ)	160
Total fat (g)	3.8
Protein (g)	1.2
Total sugar (g)	0
Added sugar (g)	0
Free sugar (g)	0

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	36%
Phosphorus	22%
Riboflavin (mg)	0%
Vitamin A	0%
Zinc	2%
Magnesium	6%
Nutrients per serve	
Energy (kJ)	583
Total fat (g)	2.0
Protein (g)	3.5
Total sugar (g)	8.0
Added sugar (g)	0
Free sugar (g)	0

Vitamins and minerals (% regulatory RDI)/250mL	
Calcium	38%
Phosphorus	25%
Riboflavin (mg)	29%
Vitamin A	18%
Zinc	N/A
Magnesium	N/A
Nutrients per serve	
Energy (kJ)	345
Total fat (g)	5.0
Protein (g)	8.3
Total sugar (g)	0.3
Added sugar (g)	0
Free sugar (g)	0

Please note: The price of plant-based beverages can vary significantly, by up to $1 or $2 more per litre.

** Comparative pricing analysis using data sourced from major supermarket retailers, 2025.*

 # Independent product data

+ DAIRY AUSTRALIA calculation based in part on data reported by NielsenIQ through its Homescan Service for the dairy category for the 52-week period ending 0/01/2022, for the total Australian market, according to the NielsenIQ standard product hierarchy. Copyright (c) 2022, Nielsen Consumer LLC.

RDI: Recommended Dietary Intake. The average daily dietary intake level that meets nutrient requirements of nearly all (97-98%) healthy individuals in a sex and particular life stage group.

Regulatory RDI: The regulatory RDI sets the minimum criteria for claims about the vitamin or mineral content of a food.

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Dairy Australia

1800 004 377
enquiries@dairyaustralia.com.au
dairyaustralia.com.au

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