

Dairy Nutrition in Aged Care

Contributing to the health
of older Australians



Dairy for life

Why we love dairy

Dairy is considered a 'good for you' food and is one of the five food groups recommended by the Australian Dietary Guidelines. It is one of the richest sources of calcium and provides energy and high-quality protein which contains all the essential amino acids and helps to grow and repair muscles. As part of a healthy, balanced diet, dairy helps meet the body's nutrition requirements to enable optimal functioning and health.

We offer dairy foods that meet different health and wellness needs of Australians. This is based on our belief in quality products, sound science and 'doing what's right' by our consumers. We continually build our dairy portfolio to minimise the use of added sugars, refined carbohydrates, added fats, salt and other additives without compromising on quality, taste, texture or safety.

We provide a range of dairy foods that can all play a role in a healthy, balanced diet for older Australians. This includes foods which form the dairy food group in the Australian Dietary Guidelines, such as milk and cheese, which provide a valuable source of dairy goodness. We also supply dairy foods such as butter and cream which can help provide a rich source of energy, add flavour and improve the palatability of meals in aged care.



Nutrition and ageing

Optimal nutrition has a powerful impact on the natural ageing process, and can reduce the impact of various physiological changes that can occur.¹

Nutrition requirements change as we age, particularly for adults aged 70 years and older.² While energy requirements generally decrease due to reduced physical activity and a drop in metabolic rate, the requirements for certain nutrients such as protein, calcium, Vitamin D and Vitamin B2 (riboflavin) increase.³

This combination of changes means that consuming a nutrient dense diet is critical to maintaining good health in older years. The best way to do this is to select food from the five food groups outlined in the Australian Dietary Guidelines.³

The five food groups

①

Vegetables and legumes/beans

②

Fruits

③

Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties

④

Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans

⑤

Milk, yoghurt, cheese and/or alternatives

One of the key nutrition challenges in aged care, particularly for frail older adults, is ensuring they are eating enough nourishing food to meet their energy requirements. This ensures that a healthy weight can be maintained, which is a protective factor in older people.⁴ In fact, research has shown that carrying a little extra weight can be beneficial during times of illness and when appetite is poor.⁵ In addition to maintaining a healthy weight, adequate nutrition also helps combat sarcopenia (decline in muscle mass) and decreases in bone density.

The impact of medical conditions and inadequate nutrition intake can result in malnutrition, a major issue in institutionalised elderly. Malnutrition in older adults is predominately protein energy malnutrition (PEM) and so it is important that aged care facilities support residents in consuming protein throughout the day, in meals and snacks, to help address PEM. Dairy is perfect for this due to the protein content and the varied formats available.



Some studies have shown that up to 89 per cent of residents are malnourished, or at risk of malnutrition.⁶ This is associated with an increased risk of higher morbidity and poorer health outcomes; including an increased risk of falls and fractures, delayed wound healing, and an overall increase in cost of care.^{7, 8}

Nutrition supplementation can be beneficial to help address malnutrition, when nutritional needs can't be met through diet alone. Meanwhile, a 'food first' approach incorporating the Australian Dietary Guideline's five food groups is cost-effective and provides additional benefits beyond nutrients, including a positive impact on quality of life.⁹

Providing adequate serves of dairy foods, aligned with Australian Dietary Guideline recommendations, has been shown to be a simple and cost-effective method that may reduce the malnutrition risk in aged care residents.¹⁰ Available in a wide range of familiar, palatable and easy-to-consume formats to suit the preferences of individual residents, dairy foods can help improve nutrition intakes by providing a valuable source of essential nutrients.

Managing hydration and nutrition

This is important for a consumer's quality of life. It helps to minimise the risks of infections, pressure injuries, anaemia, hypertension, confusion and impaired cognition, decreased wound healing and fractures.*

*Aged Care Quality and Safety Commission 2018, Guidance and Resources for Providers to support their Aged Care Quality Standards.



Benefits of dairy in aged care

Consuming dairy foods each day is recommended by the Australian Dietary Guidelines, to help achieve the requirements for essential nutrients including protein, calcium and Vitamins B2, B3, B12, phosphorous and potassium.

How much dairy is recommended?

The recommended serves of dairy are higher for older adults to help meet their increased requirements for nutrients such as calcium, which contributes to bone health.

Recommended Serves of Dairy ³		
	Men	Women
50-70 years	2 ½ serves	4 serves
70 years +	3 ½ serves	4 serves

What is a serve? ³

1 cup (250 mL) fresh, UHT (long life), reconstituted powdered milk or buttermilk

2 slices (40 g) of hard cheese, such as cheddar

½ cup (120 g) ricotta cheese

¾ cup (200 g) yoghurt

Five food group dairy foods including milk, cheese and yoghurt, are valuable sources of essential nutrients including energy, protein, fat, carbohydrate, vitamins and minerals such as calcium. As five food group dairy foods are nutrient dense, they are ideal for residents with a small appetite or who have increased nutrition needs. With the unique range of choices available, dairy foods can be enjoyed as meals and snacks across the entire day.

Benefits of five food group dairy foods as a regular menu item:

Versatility

A unique feature of dairy foods is the wide range of formats available, which means they can satisfy the needs of many residents:

- Variety of textures that can be incorporated in texture modified diets*
- Sweet and savoury options to help combat flavour fatigue
- Served hot or cold e.g. cold milkshakes or hot toasted cheese sandwiches



High-quality protein

Adults over 70 years of age require about 25 per cent more protein compared to younger adults, and even more during times of illness.¹¹ When consumed as part of a nourishing diet, protein plays an essential role in maintaining muscle mass and bone health in older adults.

Milk and cheese are valuable sources of high-quality protein which contains all the essential amino acids, and can help meet the increased requirements in older years.

**always consult with a speech pathologist to determine the appropriate consistency required for individual residents*

Valuable source of calcium

Calcium requirements of adults over 70 years are significantly higher (1300 mg each day), to help support bone health.¹¹

Compared to other foods, dairy foods are one of the richest sources of calcium and can help meet the increased requirements of older adults in approximately four serves.



Nourishing fluid intake

Older adults often have a reduced sensation of thirst. Therefore, ensuring adequate hydration throughout the day is essential to ensure healthy body function.

Milk provides a nourishing fluid option, with the added benefits of essential nutrients.

Fortification

Given their nutrient density, dairy foods can be used to fortify other meals and drinks on the menu. They are particularly beneficial for boosting energy, protein and calcium content, which can help top-up the nutrition intakes of residents who are frail, have a poor appetite, are malnourished, or at risk of malnutrition. Easy ways of fortifying foods include adding milk powder to enrich regular milk for use on cereal and in tea and coffee, and adding cheese in white sauces for extra protein and calcium.

Although butter and cream are not classified as five food group dairy foods and don't contain the same essential nutrients such as protein and calcium, they can be useful for those with a limited appetite or poor food intake. Providing a rich source of kilojoules, they can help 'at-risk' residents meet their energy needs.

Suitability of low fat dairy foods in aged care

While low fat diets are popular to promote weight loss among younger adults, they are not suitable for older adults, particularly those who are frail or unwell.¹² Therefore, all milks, including whole milk, are good choices for older people whose appetites are reduced or who have lost weight, unless medically advised otherwise.³









Lactose intolerance

When lactose cannot be tolerated, residents may need to achieve their calcium intake from alternative fortified products.³ Several recent studies have shown an improvement in lactose tolerance following the gradual introduction of lactose-containing foods, which may mean that dairy containing lactose can still be included as part of a nourishing diet.^{13, 14}

It is recommended that guidance is sought from a dietitian as part of the resident's ongoing care, to determine whether small amounts of dairy foods can be included in an individual's diet.

Offering dairy foods in aged care

Dairy food	Key nutrients	Ideal for	Ways to incorporate on the menu	Examples of Fonterra products
Milk, fluid 	Energy, carbohydrate, fat, protein, calcium	Boosting fluid intake of residents, while providing a valuable source of energy, protein and calcium	Offer as a drink, in soups, sauces and dairy-based desserts such as custards	Anchor™ UHT Milk Blue Full Cream Anchor™ UHT Skim Milk Anchor™ Milk Portions
Milk, powdered 	Energy, fat, carbohydrate protein, calcium	Boosting the energy, protein and calcium intakes of residents, particularly for those with a small appetite or increased nutrition requirements	Enrich fluid milk and use on cereal, porridge, and in tea, coffee and flavoured milk	Diploma™ Instant Full Cream and Skim Milk Powder Australian Dairies™ Whole Milk Instant Milk Powder Australian Dairies™ Skim Milk Instant Milk Powder Australian Dairies™ High Calcium + Vitamin D Instant Milk Powder Australian Dairies™ High Protein Instant Milk Powder
Cheese, hard & semi-hard 	Energy, fat, protein, rich source of calcium	Ideal as a savoury option for increasing the protein and calcium intake of residents	Add grated cheese to vegetables, omelettes, baked beans, pasta, soup, scrambled eggs and sauces. Offer cheese and crackers, or include in fresh or toasted sandwiches	Mainland™ Tasty Shredded Mainland™ Gouda Block Mainland™ Tasty/Colby/Gouda/Edam Portions Bega™ Tasty Block Bega™ Bar-B-Cubes Mainland™ On the Go with Water Crackers Perfect Italiano™ Traditional Mozzarella Perfect Italiano™ Parmesan Block
Cheese, ricotta 	Source of energy, fat and protein	Boosting energy and protein intake in either sweet or savoury menu items	Use in savoury dishes such as pasta, or enjoy on toast, pikelets or crumpets sweetened with a drizzle of honey	Perfect Italiano™ Ricotta Cheese Original
Cream 	Rich source of energy and fat	Residents who may have increased energy requirements or who struggle to meet their energy requirements due to poor appetite	Add to soups, sauces, casseroles, fruit and desserts	Anchor™ Extra Yield Culinary Cream Anchor™ Whipping Cream
Butter 	Rich source of energy and fat	Residents who may have increased energy requirements or who struggle to meet their energy requirements due to poor appetite	Spread on toast, bread, crackers, crispbreads, scones or pikelets. Melt over vegetables, rice and pasta	Western Star™ Salted Butter Western Star™ Cultured Unsalted Butter Western Star™ Unsalted Butter



References:

1. World Health Organisation, World Report on Health and Ageing, World Health Organisation 2015. <http://www.who.int/ageing/publications/world-report-2015/en/> Access date, May 2019
2. Charlton K, Walton K. Nutrition during the lifecycle: Nutritional needs of older adults. Ch 11 in Tapsell LC (Ed.) 2013, Food, Nutrition and Health. Oxford University Press, South Melbourne
3. National Health and Medical Research Council. (2013) Australian Dietary Guidelines. Canberra: National Health and Medical Research Council
4. Eating Well- A food and Nutrition Resource for Frail Older People and Their Carers, Northern Sydney Central Coast Area and Central Coast Health Service 2010
5. Winter JE et al, BMI and all-cause mortality in older adults: a meta-analysis, The American Journal of Clinical Nutrition, Volume 99, Issue 4, April 2014, Pages 875-890
6. Borgstrom Bolmsjo B, Jakobsson U, et al. (2015) The nutritional situation in Swedish nursing homes – a longitudinal study. Arch Gerontol Geriatr 60, 128–133.
7. Hamirudin AH et al. 2016 Outcomes related to nutrition screening in community living older adults: A systematic literature review, Archives of Gerontology and Geriatrics; 62; 9-25
8. Kuikka LK, Salminen S, Ouwehand A, et al. (2009) Inflammation markers and malnutrition as risk factors for infections and impaired health-related quality of life among older nursing home residents. J Am Med Dir Assoc 10, 348–353.
9. Jacobs DR Jr, Gross MD, Tapsell LC. Food Synergy: an operational concept for understanding nutrition, American Journal of Clinical Nutrition 2009, May ;89(5):1543S-1548S.
10. Luliano S et al, Dairy food supplementation may reduce malnutrition risk in institutionalised elderly, British Journal of Nutrition (2017), 117, 142-147
11. Nutrient Reference Values for Australia and New Zealand, NHMRC 2006
12. The Australian Meals on Wheels Association (2016) National Meal Guidelines: A guide for Service Providers, Caterers and Health Professionals Providing Home Delivered and Centre Based Meal Programs for Older Australians. Australian Meals on Wheels Association
13. Corgneau M et al, Recent advances on lactose intolerance: tolerance thresholds and currently available answers. Crit Rev Food Sci Nutr 2017;57:3344-3356
14. Szilagyi A et al. Lactose intolerance, dairy avoidance, and treatment options. Nutrients 2018;10:1994



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