

February 2012

nutrition matters

Hello and welcome to Nutrition Matters produced by Leading Nutrition for Aged Care Facilities to support optimal nutrition practices. Leading Nutrition provides expert dietitian services to over 150 aged care facilities throughout Australia. The professional dietitians at Leading Nutrition compile the nutrition insights offered in this newsletter.

Nutrition and Falls Preventions

Presently, falls are among the most serious preventable injury facing older Australians.¹ The nutritional status of an elderly adult has been shown to be a determining factor in their risk of falling, severity of injuries incurred and recovery time after a fall-related injury.² Studies have confirmed that deficiencies in micro- and macro-nutrients are associated with increased falls risk due to the many side effects of poor nutritional condition, including reduced muscular strength and impaired mobility.¹ Increasing awareness of the importance of nutrition status as a risk factor for falls, can assist in the prevention of malnutrition and subsequently reduce falls and acquired injuries.¹

The propensity to fall increases with low body weight resulting from protein energy malnutrition (PEM) by accelerating age-dependent bone loss, impairing movement coordination, reduced reaction time, increasing bone fragility, and reducing muscular strength, which in turn impacts on gait and balance.¹ Recent studies have shown that the prevalence of



PEM in Queensland residential aged care facilities has been found to be 40% – 45%.³ Overseas studies have reported levels of PEM in older patients admitted to hospital with hip fractures of 39% – 58%.³ Excess body weight, however, may be protective against injuries from falls as the reserves of body fat act to cushion a fall, as well as assisting to meet the increased energy requirements associated with fracture and healing.¹

Deficiencies in a number micro-nutrients have been shown to contribute to increased falls risk in older adults, including Vitamin D deficiency. When in its active form, vitamin D binds to a receptor in muscle tissue, leading to improved muscle function and therefore reduced risk of falling.⁴ A 2004 study found that adequate vitamin D levels reduce the risk of falls among institutionalised older people with stable health by more than 20% when compared to those who had acquired Vitamin D deficiencies.⁴ The incidence of deficiency of vitamin D (levels <25 nmol/L) in Australia has been reported as 22% – 86% in residential aged care.⁵ Another study found that in Australia, 86% of women and 68% of men in residential aged care have frank vitamin D deficiency and virtually all

of the remainder of residents have a level in the lower half of the reference range.⁶

Although there are a small number of Vitamin D-containing foods, there is good evidence to suggest that sourcing vitamin D from dietary intake alone is not sufficient, and our main source of vitamin D is sunlight.⁵ There is no Recommended Dietary Intake (RDI) for vitamin D; however 1–2 hours of direct sunlight per week is perceived to be adequate.⁷ Vitamin D supplements are readily available and necessary for many institutionalized elderly with low sun exposure levels and dietary Vitamin D intake. A number of studies have demonstrated that when both calcium and vitamin D intake and serum levels are adequate simultaneously, femoral bone loss and, in institutionalized patients, the incidence of hip fracture is reduced.⁷ Calcium is stored in our bones and is what helps to maintain bone strength, and Vitamin D acts to increase the absorption of calcium and is therefore also vital in retaining bone health.⁹

Vitamins A, C and E are necessary for human visual perception and deficiencies of these vitamins can cause sight impairments which

Key Points:

- **Falls are a preventable injury**
- **Poor nutrition status increases prevalence of falls**
- **Low vitamin D can directly increase risk of falls**
- **Other nutrients such as those that improve eyesight can also have an indirect effect on falls prevention**

Nutrition and Falls Preventions *Continued*

in turn can cause confusion, disorientation and imbalance whilst mobilizing, and therefore result in falls. Similarly, Vitamin B12 and folic acid deficiencies can elevate the risk of falling, due to reduced nerve sensitivity in extremities and mental confusion.⁹ Dehydration is a common health problem in older adults and can lead to confusion, postural hypotension, constipation and delirium, all of which can increase fall risk.

⁹ Deficiency in vitamin K has also been suggested to contribute to bone fragility in

patients sustaining hip fracture.¹⁰ For this reasoning, it is imperative that aged care facilities ensure that the meals which they provide are nutritionally appropriate.

Falls are a serious yet often preventable ongoing problem for residents of aged care facilities, and nutrition is one of the key risk factors. An accredited practicing dietitian can work with aged care facilities to develop a malnutrition screening system, review and help to improve the nutritional status of the menu, and provide nutritional advice tailored to residents' individual needs, to assist in reducing the incidence of falls.

References:

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I'll drink to that!

With summer upon us, the importance of ensuring patients and residents are adequately hydrated intensifies, as exposure to hot temperatures increases the likelihood of dehydration. Inadequate fluid intake results in dehydration, which can impact on quality of life through increasing the risk of falls, illness, hospitalization, pressure sore development and urinary tract infections. Approximately 10% of older people admitted to hospitals suffer from clinical dehydration and a fluid loss of 20% can even be fatal. Early identification of dehydration can prevent serious health complications. The physical symptoms of dehydration that care staff should look for are:

- Headache
- Confusion
- Drowsiness
- Postural hypertension
- Concentrated, dark, strong smelling urine
- Cracked lips, dry mouth and tongue
- Constipation
- Unpleasant taste in mouth

Most adults require at least 8 glasses of fluid each day and some effective



strategies that can be implemented to assist patients and residents in keeping hydrated include:

- Regularly including high fluid foods, such as jelly desserts, ice cream, icy poles, pureed fruit, soup and custards on the menu
- Giving medications with a full cup of fluid
- Leaving a jug of fluids at the bedside
- Where possible, revising medications that might contribute to dehydration
- Requesting speech pathology assessment for swallowing problems where appropriate
- Identifying residents at high risk,

recording their fluid intake and observing for signs of dehydration

- Providing cordial as an alternative to water as some residents may not enjoy the taste of plain water
- Incorporating drink breaks as part of all activities and lifestyle programs
- Assigning a staff member to be responsible for making regular 'hydration' rounds, encouraging residents to drink between meals
- Using larger, but easy-to-handle cups and glasses

Those living in aged care facilities require staff assistance to meet their fluid requirements, and the provision of adequate fluids must be **made a priority** to minimise the risk of dehydration. Small efforts made by care staff on a daily basis such as offering extra drinks between meals can be enough to prevent dehydration and any related detrimental health outcomes, including hospitalisation. Residents at risk of dehydration should be identified, and their fluid intake encouraged and carefully monitored to ensure its adequacy.



Nutrition in the News



“Brain food for elderly”

Herald Sun Dec 30, 2011

Studies are showing that the elderly (over 80 years) who have high blood nutrient levels including omega 3, score better on mental acuity tests and have less brain shrinkage associated with Alzheimer’s Disease compared to those who eat junk food.

Leading Nutrition recommends that facilities provide nourishing menus including good sources of omega 3’s such as fresh fish.

About Leading Nutrition

Leading Nutrition is an aged-care nutrition leader in Australia, providing specialized aged-care services of an exceptionally high professional standard.

Why should I choose a Leading Nutrition dietitian?

- Aged care specialists
- Flexibility to work with you according to your individual needs
- We concentrate on making you accreditation-ready all the time
- Always contactable (full-time reception and after hours emergency line)
- Better value for money through effective and efficient use of time and resources
- Values and experience of a cohesive team of more than 15 dietitians, not just a sole provider
- Access to a plethora of resources, associations, current research and best practice guidelines
- Strong focus on quality assurance and continuous improvement both internally and for your facility
- Your own Customer Partner, who keeps in regular contact with you to ensure optimum services are continually provided according to your needs.



What Leading Nutrition Can Provide For Your Facility

- Staff education
- Food service workshops
- Nutrition and hydration auditing
- Menu reviews and menu planning
- Assistance for passing accreditation
- Quality Assurance activities and reports
- Nutrition screening for malnutrition risk
- Comprehensive Diet Manual detailing modified diets & special meal plans
- Efficient regular or on-call clinical services
- Locum or leave cover for your regular dietitian
- Nutrition and hydration policy development

Contact Us

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Food For The Ages

Optimising Nutrition in Aged Care

Thursday 22nd & Friday
23rd March 2012

Day 1

8:30am - 5:00pm

Day 2

9:00am - 5:00pm

Eker Medical Centre
157 Scoresby Rd
Boronia VIC



"Leading Nutrition Dietitians provide great education to help train our staff so they can provide better nutrition."

Kylie Davey
Deputy DON, Sutton Park
McKenzie Aged Care

**Additional
Food for the Ages
Seminars are coming
to other states around
Australia soon!**

**Contact admin@
leadingnutrition.com.au to
register interest for your
state / town.**

Nutrition Seminar For Aged Care (VIC)

Up-skill your staff in the latest nutrition research and ideas! Includes presentations and learning activities by expert Dietitians.

Topics to be covered:

- General Nutrition in Aged Care (Australian Standards)
- Special Diets (Best Practice approach including Diabetes, HEHP & more)
- Menu design and planning
- Texture-modified meals and thickened fluids
- High fibre
- Coeliac disease
- Vegetarianism and much more.....

Seminar participants will leave inspired to achieve great nutrition outcomes for your residents, confident to try new things and to make positive changes. Participants will also receive a special purchase price on our Diet Manual.

Who will benefit:

- Food service managers, chefs, cooks
- PCAs
- RNs & DONs

Cost:

Early bird discount (before 22nd Feb): \$495

Additional participants: \$445 (a saving of \$50 for each extra person attending)

Standard price: \$595

Additional participants: \$545 (a saving of \$50 for each extra person attending)

Registration: (by 15th March 2012)

See attached registration form or go to

<http://dietitiancentre.com.au/aged-care/food-for-the-ages-seminar-2012/>

For further information please contact:

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