

# Encouraging Good Nutrition: Home, Hospital and Residential care

Irene Rulli  
Community Dietitian  
Northern Beaches

## Overview

- Malnutrition & Falls
- Identifying Nutritional Risk
- Healthy Eating for Older People
- Osteoporosis
- Important Nutrients
- Where to find further information

## Malnutrition & Falls

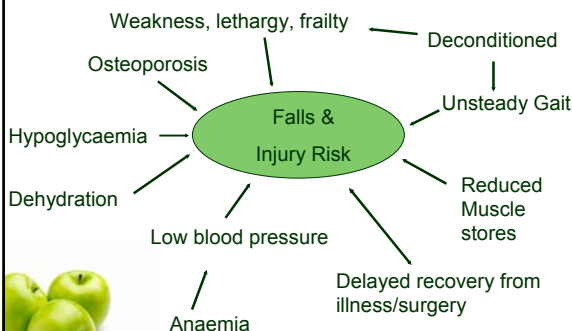
- Numerous studies have shown that malnutrition can increase the tendency to fall.
- Nutritional deficiencies in the elderly are associated with factors such as balance, gait and mobility
- Malnutrition is associated with decreased muscle mass, weight loss, weakness and gait abnormalities, all of which can increase the risk of falls.

## Malnutrition & Falls

- Possible causes of malnutrition in the elderly include:
  - Illness
  - Poor dental hygiene
  - Inability to chew or swallow
  - Impairment of taste, smell and cognition
  - Conditions that increase metabolic needs



## Malnutrition & Falls



## Nutrition Risk Screening & Monitoring Tool

### NUTRITIONAL RISK SCREENING AND MONITORING TOOL

Client: \_\_\_\_\_ Date: \_\_\_\_\_

YES	INSTRUCTIONS: Tick the box when the answer to your observation is YES
<input type="checkbox"/>	Obvious underweight – frailty?
<input type="checkbox"/>	Unintentional weight loss?
<input type="checkbox"/>	Reduced appetite or reduced food and fluid intake?
<input type="checkbox"/>	Mouth or teeth or swallowing problems?
<input type="checkbox"/>	Follows a special diet?
<input type="checkbox"/>	Unable to shop for food?
<input type="checkbox"/>	Unable to prepare food?
<input type="checkbox"/>	Unable to feed self?
<input type="checkbox"/>	Obvious overweight affecting life quality?
<input type="checkbox"/>	Unintentional weight gain?

Signature: \_\_\_\_\_ Position: \_\_\_\_\_

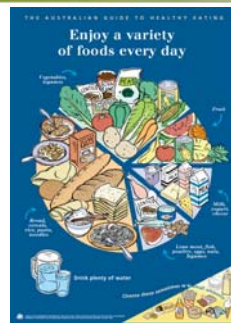
## Nutrition Risk Screening & Monitoring Tool

- One or more ticks means nutrition risk exists
- Try 2 weeks of simple intervention
  - e.g. provide mid meal suggestions, weight chart, food diary
- Refer to a health professional if no improvement seen



## Healthy Eating for Older People

- At Least 3 meals/day
- Breads & cereals – 4 + serves
- Vegetables – 5 serves
- Fruit – 2 serves
- Dairy/alternatives – 4 serves
- Meat and alternatives – 1 serve
- Extras – 0-2 serves
- Fluid – at least 8 glasses a day



## Fluid Intake

- Inadequate fluid intake can lead to dehydration, postural hypotension, constipation and confusion and may increase the inclination to fall
- Delirium is also common in dementia sufferers due to decreased thirst sensation
- Ensure adequate fluid intake
  - 1500ml-2000ml
  - Fluids also include:
    - milk, custard, ice cream, cordial, juice, soup, teas, coffee, broth, and jelly



## Fluid Intake

- Tips:
  - Flavour a jug of water with lemon juice or slices of fruit
  - Drink throughout the day, as opposed to waiting for thirst sensation
  - Have a jug of water and a glass on the table at meals.
  - Not drinking due to a weak bladder or getting up to go to the toilet at night can make the problem worse. Limit alcohol and caffeine containing drinks (e.g. coffee, tea, cola drinks) and seek referral to a Continence Nurse.



With “Healthy Bones Week” next week, what should we be looking out for in both ourselves and those whom we care for?



## Osteoporosis

- Bones becomes fragile and brittle
- Increased risk of fracture even with a minor bump or fall
- 1 in 2 women and 1 in 3 men over 60 yrs in Australia will develop osteoporosis



## Risk Factors for Osteoporosis

### • Modifiable risk factors:

- Smoking
- High Alcohol Intake
- High Caffeine Intake
- Limited Physical Activity
- Low Body Weight
- Frequent Falls



## Risk Factors for Osteoporosis

### • Non modifiable risk factors:

- Family History
- Female
- Caucasian/Asian
- Small frame
- Anorexia
- Delayed puberty or early onset menopause
- > 60 years of age
- Rheumatoid Arthritis, Chronic Liver Disease, Kidney Failure
- Long term drug treatment with corticosteroids (prednisone)
- gastrointestinal malabsorption/IBD



## Calcium Requirements

### • Prevention is better than cure -

- Diet high in calcium can help prevent osteoporosis
  - Adults - 1000mg of calcium per day
  - Women > 50 yrs - 1300mg of calcium/day
  - Men > 70 yrs - 1300mg of calcium/day
- 3-4 serves of dairy foods per day**



## Calcium

### • Sources:

- 1 serve =
  - 1 cup (250ml) Milk
  - 1 tub (200g) Yoghurt
  - 1 slice (40g) Cheese
  - 1 cup (250ml) Calcium enriched soy milk
  - 1 cup (250ml) Custard
  - 1/2 cup Tinned fish with bones (Salmon)



## Calcium

### • Tips on how to improve calcium intake:

- Dairy based mid meal snack:
  - Cheese and biscuits instead of a sweet biscuit
- Sandwich fillers
  - Sardines or tinned salmon
- Dairy based dessert
  - Fruit or cake with ice cream/custard/yoghurt



## Vitamin D

- Important to help the body absorb calcium
- Best source is the sun
  - Avoid the sun between 10am -3pm
  - Ensure bare skin is exposed
    - face, hands/arms or legs
  - Aim for 15 minutes, 4-6 times per week



## Dietary Sources of Vitamin D

- Small dietary sources can be found in:
  - Oily/Saltwater fish - mackerel, herring
  - Egg Yolks
  - Fortified foods sources
    - Some margarines
    - Some dairy products



## Vitamin D & Elderly

- Vitamin D deficiency may be due to:
  - Reduced sunlight exposure
  - Reduced synthesis from a given UV exposure
  - Low consumption of foods with high vitamin D content
- Speak with GP re: Supplementation



Table 1. Australian high risk population groups with low serum 25OHD levels as reported in the literature

Highest risk groups	Prevalence of deficiency*
Residential care elderly in high level care	55% <sup>24</sup>
Residential care elderly in high and low level care	68-86% <sup>25</sup>
Residential care elderly in low level care	22% <sup>24</sup>
Geriatric admissions to hospital	67% <sup>26</sup>
Patients with hip fracture	61% <sup>26</sup>
	63% <sup>8,24</sup>
Dark skinned women (particularly veiled)	>80% <sup>8,27,28</sup>
Mothers of infants with rickets (particularly dark skinned and veiled)	80% <sup>29</sup>
<b>Lower risk groups</b>	
Community dwelling elderly	17% <sup>26</sup>
Women in winter	
80+ years	22% <sup>2</sup>
80-79 years	12% <sup>2</sup>
20-59 years	8% <sup>2</sup>

\* Deficiency defined as either <25 or 28 nmol/L  
 \*\* Deficiency defined as <50 nmol/L

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## Menopause & Bone Loss

- During menopause women's oestrogen levels keep decreasing resulting in 2-4% of bone loss per year
- Most bone loss occurs in the first 5-10 years after menopause and can continue for a further 15-20 years
- Some women can lose 30% of their bone during these years



## Men & Osteoporosis

- Men's bone density remains stable for a longer period of time compared to women
- By 65 years of age, both men and women lose bone at the same rate, especially in the hip



## Exercise

- 30 minutes a day of weight bearing activity
  - Walking, dancing, playing tennis
  - Strength training



## What can you do?

- Removing barriers to nutrition
- Awareness raising – nutrition screening, education for client, family/carers
- Dispel nutrition myths
- Weight loss is NOT a normal part of ageing!



## Key Points

- Malnutrition in the elderly is linked with falls & injury risk
- Malnutrition is multifactorial
- Nutrition Screening - Best Practice for Falls Management
- Service providers are well positioned to use screening tools to identify and address nutritional risk factors



## Where to find further information?

- Dietitians Association of Australia



- Osteoporosis Australia
- Dairy Australia



## Referring to a Dietitian



- Acute Setting - Hospital Dietitian
  - Community Setting - HACC Dietitian
- |              |                                    |           |
|--------------|------------------------------------|-----------|
| Irene Rulli  | Northern Beaches                   | 9998 0356 |
| Queeny Lau   | Hornsby /Ku-ring-gai               | 9477 9525 |
| Caryn Kneale | Ryde/ Hunters Hill<br>(Mon, Thurs) | 9858 7782 |
| Megan Jones  | Lower North Shore                  | 9926 8705 |
- Residential Care - Private Practise Dietitian
- "Find an APD" - Dietitians Association of Australia



Thank you!!

