



# Certificate III in Ageing Support – Draft 1

May 2019

The Dietitians Association of Australia (DAA) is the national association of the dietetic profession with over 6700 members, and branches in each state and territory. DAA is a leader in nutrition and advocates for food and nutrition for healthier people and healthier nations. The DAA appreciates the opportunity to provide feedback on Draft 1 of the Certificate III in Ageing Support prepared by SkillsIQ.

Position:	Senior Policy Officer
Organisation:	Dietitians Association of Australia
Address:	1/8 Phipps Close, Deakin ACT 2600
Telephone:	02 6189 1200
Facsimile:	02 6282 9888
Email:	<a href="mailto:pao@daa.asn.au">pao@daa.asn.au</a>

## DAA interest in this consultation

DAA has an interest in fostering food and nutrition knowledge and skills across the community. It is important that workforce development for the aged care sector considers knowledge and skills in food and nutrition to support good health and wellbeing among elderly Australians living in the community and residential aged care homes.

DAA welcomes the opportunity to review and comment on the proposed package units of competency for **Certificate III in Ageing Support**, with the intention of better meeting the immediate and critical skills required of the aged care workforce.

## Summary of Recommendations

Nutrition underpins every aspect of care and it is essential that all care workers have a basic understanding of the principles of nutrition for older people. As such, DAA recommends to:

- Include **food, nutrition and hydration competencies** (including malnutrition screening) as a **CORE component** of Certificate III in Ageing Support.
  - DAA supports the inclusion of core unit **CHCCCS023 (Support Independence and Wellbeing)**, as this unit includes food, nutrition & hydration knowledge and skills to support physical wellbeing.
  - DAA supports the inclusion of core unit **HLTAAP001 (Recognise Healthy Body Systems)**, which recognises and promotes ways to support healthy functioning of the body. DAA considers it essential that this unit covers malnutrition risk, malnutrition screening and its management given the unacceptably high rates of malnutrition among the elderly in Australia.
- Keep the proposed **ELECTIVE units that address (a) food and dietary requirements and (b) issues/conditions requiring nutrition knowledge and skills** for Certificate III in Ageing Support. These include:
  - HLTAHA019 – Assist with the monitoring and modification of meals and menus according to individualised plans
  - HLTOHC003 – Apply and manage use of basic oral health products
  - CHCCCS001 – Address the needs of people with chronic disease
  - CHCLAH003 – Participate in planning, implementation and monitoring of individual leisure and health programs
  - CHCAGE002 – Implement falls prevention strategies
  - CHCPAL001 – Deliver care services using a palliative approach
- **Extend the offering of ELECTIVE units** for Certificate III in Ageing Support to

include additional food and nutrition competencies for **care staff, support workers and foodservice staff** working in residential and community aged care. DAA recommends adding the following elective units to the list of eligible elective units for Certificate III in Ageing Support:

- HLTAHA018 - Assist with planning and evaluating meals and menus to meet recommended dietary guidelines
  - SITHCCC201 - Produce dishes using basic methods of cookery
  - SITHCCC307 - Prepare food to meet special dietary requirements
  - CHCAGE006 - Provide food services
  - HLTAHA021 - Assist with screening & implementation of therapeutic diets
  - HLTNSE001 - Follow basic food safety practices
  - HLTOHC001 – Recognise and respond to oral health issues
  - HLTAHA013 – Provide support in dysphagia management
- Ensure the **food and nutrition training material** developed and delivered as part of the course content for Certificate III in Ageing Support is **evidence-based** and provides course participants with **clear referral pathways for higher level dietary assessment and management** (i.e. referral to an Accredited Practising Dietitian (APD) for the management of food and nutrition related issues experienced by older people, such as malnutrition, dysphagia, food allergy and intolerance, chronic disease, wounds and falls).
  - Consider any **workforce training issues identified in the Royal Commission into Aged Care Quality & Safety** (interim report due 31/10/19 and final report due 30/04/20) in the development and delivery of Certificate III in Ageing Support.

## Discussion

### ***Nutrition knowledge and skills of aged care workers and foodservice staff***

Older people have unique nutrition needs, so it is important that the aged care workforce has good quality training that encompasses the basics of nutrition and hydration for the elderly. Currently, aged care staff with vocational education training may have completed Certificate III in Individual Support or Certificate IV in Ageing Support level courses without studying any food or nutrition component. This impacts on quality of care when personal care workers assisting aged care clients in the community with grocery shopping and meal preparation do not have a basic understanding of the food and nutrition needs of the elderly. Likewise, it compromises quality of care when staff working in residential aged care homes have little to no understanding of nutrition

requirements and malnutrition risk. In residential care, Australian studies have identified a prevalence of malnutrition from 22% up to 50% (see Appendix). There is a failure in safety and quality systems for the prevention and management of malnutrition in older Australians.

Chefs and cooks working in aged care may not have a sound knowledge of ‘therapeutic diets’ or the special dietary needs of people with chronic disease (e.g. diabetes, kidney disease) or food allergies/intolerances (e.g. gluten intolerance). They may be more uncertain when combination diets are required (e.g. dietary requirements for someone with diabetes and gluten intolerance). The outcome for the older person is a meal which lacks the necessary nutrients or includes items which pose a risk of harm.

DAA considers it vital that Certificate III in Ageing Support includes appropriate nutrition training to ensure all staff working in aged care are competent to meet the nutrition and hydration needs of elderly clients living in the community and residential aged care.

### **Core Units**

DAA considers it vital to include **food, nutrition and hydration competencies** (including malnutrition screening) as a **CORE component** of Certificate III in Ageing Support. As such, DAA applauds the inclusion of:

- core unit **CHCCCS023 (Support Independence and Wellbeing)**, as this unit includes food, nutrition & hydration knowledge and skills to support physical wellbeing. DAA will provide more direct feedback when updates to units of competency are reviewed in Phase Two of the project.
- core unit **HLTAAP001 (Recognise Healthy Body Systems)**, which recognises and promotes ways to support healthy functioning of the body. DAA considers it essential that this unit covers malnutrition risk, malnutrition screening and its management given the unacceptably high rates of malnutrition among the elderly in Australia. DAA will advocate for malnutrition knowledge and screening skills when updates to units of competency are reviewed in Phase Two of the project.

### **Elective Units**

DAA supports the inclusion of the proposed **ELECTIVE units that address (a) food and dietary requirements and (b) issues/conditions requiring nutrition knowledge and skills** for Certificate III in Ageing Support. These include:

- HLTAHA019 – Assist with the monitoring and modification of meals and menus according to individualised plans
- HLTOHC003 – Apply and manage use of basic oral health products
- CHCCCS001 – Address the needs of people with chronic disease
- CHCLAH003 – Participate in planning, implementation and monitoring of individual leisure and health programs
- CHCAGE002 – Implement falls prevention strategies
- CHCPAL001 – Deliver care services using a palliative approach

In addition to these elective units, DAA recommends **extending the offering of ELECTIVE units** for Certificate III in Ageing Support to include additional food and nutrition competencies for **care staff, support workers and foodservice staff** working in residential and community aged care. DAA recommends adding the following elective units to the list of elective units for Certificate III in Ageing Support:

- HLTAHA018 - Assist with planning and evaluating meals and menus to meet recommended dietary guidelines (*essential for foodservice staff and personal carers who assist in preparing meals for clients*).
- SITHCCC201 - Produce dishes using basic methods of cookery (*essential for foodservice staff and personal carers who assist in preparing meals for clients*).
- SITHCCC307 - Prepare food to meet special dietary requirements (*essential for foodservice staff and personal carers who assist in preparing meals for clients*).
- CHCAGE006 - Provide food services (*essential for foodservice staff*).
- HLTAHA021 - Assist with screening & implementation of therapeutic diets (*essential for all aged care staff, personal carers and foodservice staff*).
- HLTFSE001 - Follow basic food safety practices (*essential for foodservice staff and personal carers who assist in preparing meals for clients*).
- HLTOHC001 – Recognise and respond to oral health issues (*essential for residential aged care staff and personal care workers assisting aged care clients in the community*).
- HLTAHA013 – Provide support in dysphagia management (*essential for residential aged care staff, personal care workers assisting aged care clients in the community and foodservice staff*).

### **Considerations in the development of nutrition training material for Cert III in Ageing Support**

DAA considers it vital that the **food and nutrition training material** developed and delivered as part of the course content for Certificate III in Ageing Support is **evidence-based** and it aligns with Australian Dietary Guidelines and current nutrition knowledge and practice.

Furthermore, DAA considers it important that CORE course content provides participants with **clear referral pathways for higher level dietary assessment and management** (i.e. referral to an Accredited Practising Dietitian (APD) for the management of food and nutrition related issues experienced by older people. Examples include referrals for malnutrition, dysphagia, food allergy and intolerance, chronic disease like diabetes & heart disease, wounds and falls). DAA will provide feedback on the course content when updates to units of competency are reviewed in Phase Two of the project.

### ***Considerations of workforce training issues identified in the Royal Commission***

Workforce training issues have been a hot topic of discussion in the Royal Commission into Aged Care Quality & Safety. As such, DAA considers it important for SkillsIQ to consider **workforce training issues and recommendations identified in the Royal Commission** in the development and delivery of Certificate III in Ageing Support. The interim report from the Royal Commission is due 31/10/19 and the final report is due 30/04/20.

## Appendix: Studies of malnutrition in older Australians

Older Australians in the community and in residential aged care represent a diverse population (i.e. some are well nourished, some are overweight or obese, some are malnourished). Research shows that up to 50% are either at risk of malnutrition or are malnourished. Malnutrition is defined as two or more of the following characteristics:

*insufficient energy intake, weight loss, loss of muscle mass, loss of subcutaneous fat, localized or generalized fluid accumulation or diminished functional status<sup>1</sup>.*

There are many contributors to the development of malnutrition. People with malnutrition are at higher risk of falls, infection and pressure wounds and they experience greater mortality than people who are well nourished. They also experience longer recovery from illness or injury and are less able to carry out activities of daily living.

There are a variety of tools available to screen and assess malnutrition in different care settings. These have been reviewed and summarised in 'Nutrition Education Materials Online' (NEMO) on the [Queensland Health website](#).

While there is no single marker for malnutrition, unplanned weight loss is a key indicator of malnutrition risk. It is possible to be overweight or obese and also malnourished, as any weight loss at a later age can significantly impact lean body mass and therefore immune capacity, wound healing ability and more. Studies show also that there is an increased risk for older people with a Body Mass Index (BMI) <23.0 kgm<sup>2</sup>. Monitoring of body weight is essential in both residential and community aged care settings.

The involvement of Accredited Practising Dietitians is vital where unplanned weight loss is identified as they are uniquely qualified to lead integrated strategies for the prevention and management of malnutrition. Better outcomes in treating malnutrition and hydration are achieved when organisations implement proactive policies and when collaboration occurs with older people, carers, nursing, medical practitioners, allied health professionals, food service managers and staff, aged care workers and service managers.

1. White JV, Guenter P, Jensen G, Malone A, Schofield M. Consensus statement: Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition: characteristics recommended for the identification and documentation of adult malnutrition (undernutrition). JPEN 2012; 36: 275-83

## Summary table showing prevalence of malnutrition in Australian studies

The table below is a summary of Australian studies in malnutrition. While the focus in this document is residential care and community settings, the prevalence of malnutrition in Australian hospitals is also of concern. Most hospital programs aim to screen and assess patients soon after admission, which reflects nutritional status prior to admission to hospital. This is not to say however that a great deal more needs to be done to address malnutrition in hospital, whether it is pre-existing or not.

Author	Year of publication	Age of subjects	Number subjects	Malnutrition prevalence	Assessment Tool	Practice setting	State/Territory
Hamirudin et al	2016	>75 yrs	72	1.4% malnourished 27.8% at risk	MNA-SF	General Practice	NSW
Hamirudin et al	2016	Mean: 85±5.8 yrs	79	61.8% at risk or malnourished	MNA	DVA	NSW
Walton et al	2015	Mean: 81.9 (±9.4) yrs	42	5% malnourished 38% at risk	MNA	MoW customers	NSW
Winter et al 2013	2013	>75 yrs  Mean age: 81.3 ± 4.3 yrs	225	1 malnourished person  16% At Risk	MNA-SF	General Practice	VIC
Ulltang	2013	Mean age: 62 yrs	153	17% malnourished	SGA	Hospital – MAPU	QLD
Charlton et al	2013		774	34% malnourished 55% at risk	MNA	Older Rehabilitation Inpatients	NSW
Manning et al	2012	Mean: 83.2±8.9 yrs	23	35% malnourished 52% at risk	MNA	Hospital	NSW

Charlton et al	2012	Mean: 80.6±27.7 yrs	2076	51.5% malnourished or at risk	MNA	Older Rehabilitation Inpatients	NSW
Kellett	2013		57	26% moderately malnourished 7% severely malnourished	SGA	RACF	ACT
Kellett	2013		101	20% moderately malnourished 2% severely malnourished	SGA	RACF	ACT
Kellett	2012		189	47% moderately malnourished 6% severely malnourished	PG- SGA	hospital	ACT
Gout	2012	59.5 +/- 19.9 yrs	275	16% moderately malnourished 6.5% severely malnourished	SGA	Hospital	VIC
Ackerie	2012		352	19.5% moderately malnourished – Public 18.5% moderately malnourished - Private 5% severely malnourished – Public 6% severely malnourished - Private	SGA	Hospital – public and private	QLD
Sheard	2012	Mean 70 (35 -92)	97	16% moderately malnourished 0% severely malnourished	PG-SGA		
Agarwal	2010	64 +/- 18 yrs	3122	24% moderately malnourished 6% severely malnourished	SGA	Hospital	QLD
Rist	2009	82 (65–100) yrs	235	8.1% malnourished 34.5% at risk of malnutrition	MNA	Community	VIC metro
Vivanti	2009	Median 74 yrs (65–82)	126	14.3% moderately malnourished 1% severely malnourished	SGA	Hospital – Emergency department	QLD
Gaskill	2008		350	43.1% moderately malnourished 6.4% severely malnourished	SGA	RACF	QLD
Adams et al	2008	Mean: 81.9 yrs	100	30% malnourished 61% at risk	MNA	Hospital	
Leggo	2008	76.5 +/- 7.2 yrs	1145	5 – 11% malnourished	PG - SGA	HACC eligible clients	QLD
Brownie et al	2007	65-98 yrs	1263	36% high risk 23% moderate risk	ANSI	Community setting	

Thomas et al	2007	Mean: 79.9 yrs	64	53% moderately malnourished 9.4% severely malnourished	PG_SGA	Hospital	
Walton et al	2007	Mean: 79.2±11.9	30	37% malnourished 40% at risk	MNA	Rehabilitation Hospitals	NSW
Banks	2007	66.5/ 65.0 yrs  78.9 78.7 yrs	774 1434 hospital  381 458 RACF	Hospital 27.8% moderately malnourished, 7.0% severely malnourished (2002), 26.1% moderately malnourished, 5.3% severely malnourished (2003)  RACF 41.6% mod malnourished, 8.4% severely malnourished (2002), 35.0% moderately malnourished, 14.2% severely malnourished (2003) malnourished	SGA	Hospital      RACF	QLD – metro, regional and remote
Collins et al	2005	Mean: 80.1 ±8.1	50	34% moderately malnourished 8% severely malnourished (at baseline)	SGA	Community	NSW
Lazarus et al	2005	Mean: 66.8 yrs	324	42.3% malnourished	SGA	Acute Hospital	NSW
Martineau et al	2005	Mean: 72 yrs	73	16.4% moderately malnourished 2.7% severely malnourished	PG-SGA	Acute Stroke Unit	
Neumann et al	2005	Mean: 81 yrs	133	6% malnourished 47% at risk	MNA	Rehabilitation Hospital	
Visvanathan et al	2004	Mean: 76.5-79.8 yrs	65	35.4-43.1%	MNA	Rehabilitation Hospital	SA
Visvanathan	2003	67 – 99 yrs	250 baseline	Baseline 38.4% not well nourished 4.8% malnourished	MNA	Domiciliary care clients	SA metro

Patterson et al	2002	70-75 yrs	12,939	30% high risk 23% moderate risk	ANSI	Community setting	
Middleton et al	2001	Median: 66 yrs	819	36% malnourished	SGA	Acute Hospital	NSW
Beck et al	2001	Mean not available	5749	7-14% malnourished in acute setting 49% malnourished in rehabilitation setting	MNA	Acute and Rehabilitation Hospitals	NSW
Burge & Gazibarich	1999	>65 yrs  Mean: 75.2 ±5.8 yrs	92	-High risk: 27% (score of 6 or more) -Moderate risk: 30% (score of 4-5) -Low risk: 43% (score of 0-3) -Most common nutrition risk factors: polypharmacy (47%), eating alone most of the time (45%) and dietary modification due to illness (35%).	Australian Nutrition Screening Initiative (ANSI)	Community living (Senior citizen's centres)	NSW Regional
Cobiac & Syrette	1996	>70 yrs	1098	30% high risk 20.6% moderate risk	ANSI	Community setting	

## References for summary table

1. Ackerie A, Carroll E, McCray S, Hill J, Leveritt M. Malnutrition does not discriminate. *Nutr Diet* 2012; 69: (Suppl. 1): 146
2. Adams NE, Bowie AJ, Simmance N, Murray M & Crowe TC. Recognition by medical and nursing professionals of malnutrition and risk of malnutrition in elderly hospitalised patients. *Nutrition & Dietetics* 2008; 65:144-150.
3. Agarwal E, Ferguson M, Banks M, Batterham M, Bauer J, Capra S, Isenring E. Nutrition care practices in hospital wards: Results from the Nutrition Care Day Survey 2010. *Clin Nutr* 2012; 31: 995 – 1001
4. Banks M, Ash S, Bauer J, Gaskill D. Prevalence of malnutrition in adults in Queensland public hospitals and residential aged care facilities. *Nutr Diet* 2007; 64: 172-178
5. Beck E, Patch C, Milosavljevic M, Mason S, White C, Carrie M & Lambert K (2001a). Implementation of malnutrition screening and assessment by dietitians: malnutrition exists in acute and rehabilitation settings. *Australian Journal of Nutrition and Dietetics*;58(2):92-97.
6. BROWNIE, S., MYERS, S. P. & STEVENS, J. 2007. The value of the Australian nutrition screening initiative for older Australians - Results from a national survey. *Journal of Nutrition, Health and Aging*, 11, 20-25.
7. BURGE, K. & GAZIBARICH, B. 1999. Nutritional risk among a sample of community-living elderly attending senior citizens' centres. *Australian Journal of Nutrition & Dietetics*, 56, 137-143.
8. Cobiac, L. & Syrette, J. A. 1995. What is the Nutritional Status of Older Australians? *Proceedings of the Nutrition Society of Australia*, 19, 139.
9. Charlton, K. E., Batterham, M. J., Bowden, S., Ghosh, A., Caldwell, K., Barone, L., Mason, M., Potter, J., Meyer, B. & Milosavljevic, M. 2013, 'A high prevalence of malnutrition in acute geriatric patients predicts adverse clinical outcomes and mortality within 12 months', e - *SPEN Journal*, vol. 8, no. 3, pp. e120-e125.
10. Charlton K, Nichols C, Bowden S, Milosavljevic M, Lambert K, Barone L, Mason M, Batterham M. 2012. Poor nutritional status of older subacute patients predicts clinical outcomes and mortality at 18 months of follow-up. *European Journal of Clinical Nutrition*, 66, 1224-1228.
11. Collins CE, Kershaw J, Brockington S. Effect of nutritional supplements on wound healing in home-nursed elderly: A randomized trial. *Nutrition* 2005; 21: 147 – 155.
12. Gaskill D, Black LJ, Isenring EA, Hassall S, Sanders F, Bauer JD. Malnutrition prevalence and nutrition issues in residential aged care facilities. *Australasia J Ageing* 2008; 27: 189 – 94
13. Gout BS, Barker LA, Crowe TC. Malnutrition identification, diagnosis and dietetic referrals: Are we doing a good enough job? *Nutr Diet* 2009; 66: 206-211
14. Hamirudin A, Walton K, Charlton K, Carrie A, Tapsell L, Milosavljevic M, Pang G & Potter J (2016). Feasibility of Home-Based Dietetic Intervention to Improve the Nutritional Status of Older Adults Post Hospital Discharge. *Nutrition & Dietetics*; DOI: 10.1111/1747-0080.12305
15. Hamirudin A, Charlton K & Walton K (2016). Outcomes Related To Nutrition Screening In Community Living Older Adults: A Systematic Literature Review. *Archives of Gerontology and Geriatrics*; 62:9-25.

16. Kellett J, Itsiopoulos C, Kyle G, Luff N. Prevalence of malnutrition amongst adult inpatients at a tertiary teaching hospital in the ACT region. *Nutr Diet* 2013; 70 (Suppl. 1): 26 - 47
17. Kellett J, Kyle G, Itsiopoulos C, Bacon R, Chapple L. A snapshot of malnutrition prevalence in five residential aged care facilities in the ACT region. *Nutr Diet* 2013; 70 (Suppl. 1): 4 - 25
18. Kellett J, Bacon R, Simpson A, Richards C. Malnutrition prevalence in aged care residences. *Nutr Diet* 2012; 69 (Suppl. 1): 72 - 164
19. Lazarus, C. & Hamlyn, J. 2005. Prevalence and documentation of malnutrition in hospitals: A case study in a large private hospital setting. *Nutrition & Dietetics*, 62, 41-47.
20. Leggo M, Banks M, Isenring E, Stewart L, Tweeddale M. A quality improvement nutrition screening and intervention program available to Home and Community Care eligible clients. *Nutr Diet* 2008; 65: 162 -167
21. Manning F et al. Additional feeding assistance improves the energy and protein intakes of hospitalised elderly patients. A health services evaluation. *Appetite* 2012; 59: 471-477
22. Martineau J, Bauer JD, Isenring E & Cohen S (2005). Malnutrition determined by the patient-generated subjective global assessment is associated with poor outcomes in acute stroke patients. *Clinical Nutrition*;24(6):1073-1077.
23. Middleton MH, Nazarenko G, Nivison-Smith I, Smerdely P (2001). Prevalence of malnutrition and 12-month incidence of mortality in two Sydney teaching hospitals. *Internal Medicine Journal*; 31:455-461.
24. Neumann SA, Miller MD, Daniels L & Crotty M (2005). Nutritional status and clinical outcomes of older patients in rehabilitation. *Journal of Human Nutrition and Dietetics*; 18:129-136.
25. Patterson, A., Young, A., Powers, J., Brown, W. & Byles, J. 2002. Relationships between nutrition screening checklists and the health and well-being of older Australian women. *Public Health Nutrition*, 5, 65.
26. Rist G, Miles G, Karimi L. The presence of malnutrition in community-living older adults receiving home nursing services. *Nutr Diet* 2012; 69: 46 - 50
27. Sheard J, Ash S, Silburn P, Kerr G. Prevalence of malnutrition in community-dwelling adults with Parkinson's Disease. *Nutr Diet* 2012; 69 (Supple 1): 72 - 164
28. Thomas JM, Isenring E & Kellett E (2007). Nutritional status and length of stay in patients admitted to an Acute Assessment Unit. *Journal of Human Nutrition and Dietetics*; 20:320-328.
29. Ulltang M, Vivanti A, Murray E. Malnutrition prevalence in a medical assessment and planning unit and its association with hospital readmission. *Aust Health Review* 2013; 636 -641
30. Visvanathan R, Penhall R & Chapman I (2004). Nutritional screening of older people in a sub-acute care facility in Australia and its relation to discharge outcomes. *Age and Ageing*;33(3):26-265.
31. Visvanathan R, Macintosh C, Callary M, Penhall R, Horowitz M, Chapman I. The nutritional status of 250 older Australian recipients of domiciliary care services and its association with outcomes at 12 months. *J Am Geriatr Soc* 2003; 51: 1007 – 11

32. Vivanti A, McDonald CK, Palmer MA, Sinnott M. Malnutrition associated with increased risk of frail mechanical falls among older people presenting to an emergency department. *Emergency Medicine Australasia* 2009; 21: 386 – 394
33. Walton KL, Williams P, Tapsell LC & Batterham M (2007). Rehabilitation inpatients are not meeting their energy and protein needs. *e-SPEN the European e-Journal of Clinical Nutrition and Metabolism*; 2 (6): e120 - e126.
34. Walton K, Charlton KE, Manning F, McMahon A, Galea S & Evans K (2015). The nutritional status and dietary intakes of Meals on Wheels (MOW) clients. *Appetite*; 95: 528-532.
35. Winter, J., Flanagan, D., McNaughton, S. A. & Nowson, C. 2013. Nutrition screening of older people in a community general practice, using the MNA-SF. *Journal of Nutrition, Health and Aging*, 17, 322-325.

### **Additional references**

1. Barker LA, Gout BS, Crowe T. Hospital malnutrition: Prevalence, identification and impact on patients and the healthcare system. *Int J Environ Res Public Health* 2011; 8: 514 - 527
2. Charlton K. Nutrition screening: Time to address the skeletons in the bedroom closet as well as those in hospitals. *Nutr Diet* 2010; 67:209 – 212
3. De van der Schueren M, Elia M, Gramlich L, Johnson MP, Lim SL, Philipson T, Jaferi A, Prado CM. clinical and economic outcomes of nutrition interventions across the continuum of care. *Ann N Y Ad Sc* 2014; 1321: 20 - 40
4. Demeny D, Jukic K, Dawson B, O’Leary F. Current practices of dietitians in the assessment and management of malnutrition in elderly patients. *Nutr Diet* 2015; 72: 254 – 260.
5. Ferguson M, Banks M, Bauer J, Isenring E, Vivanti A, Capra S. Nutrition screening practices in Australian healthcare facilities: A decade later. *Nutr Diet* 2010; 67: 213 – 218
6. Isenring EA, Banks M, Ferguson M, Bauer JD. Beyond malnutrition screening: Appropriate methods to guide nutrition care for aged care residents. *J Acad Nutr Diet* 2012; 112: 376 – 381.
7. Kendig H, Browning C, Pedlow R, Wells Y and Thomas S. Health, social and lifestyle factors in entry to residential aged care: an Australian longitudinal analysis. *Age and Ageing* 2010; 39: 342–349
8. May M. Importance of nutrition intervention in geriatric patients waiting for residential care. *Nutrition & Dietetics* 2007; 64 (Supp. 1): S25
9. Miller M, Crotty M, Whitehead C, Daniels L, Finucane P. Nutritional assessment and intervention in patients admitted with a femoral neck fracture: a chronical of missed opportunities. *Nutr Diet* 2001; 58: 86 - 91
10. Orpin P, Boyer K, King A. Study report: Assessment of nutrition risk in Home and Community Care Clients. May 2014.
11. Phillips, MB, Foley AL, Barnard R, Isenring EA, Miller MD. Nutritional screening in community-dwelling older adults: a systematic literature review. *Asia Pac J Clin Nutr* 2010; 19 : 440 – 449.

12. Spence A, McRorie T, Pearce L, Crowe T. Nutrition risk of elderly patients with dementia attending a memory loss clinic. *Nutr Diet* 2007; 64 (Suppl. 1): S40
13. Walton K. Improving opportunities for food service and dietetics practice in hospitals and residential aged care facilities. *Nutr Diet* 2012; 69: 222 - 225
14. White JV et al. Consensus statement of the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition: Characteristics Recommended for the identification and documentation of adult malnutrition (undernutrition). *J Acad Nutr Diet* 2012; 112: 730 - 738
15. Winter J, MacInnis RJ, Wattanapenpaiboon, Nowson CA. BMI and all-cause mortality in older adults: a meta-analysis. *Am J Clin Nutr* 2014; doi:10.3945/ajcn.113.068122