

IMPROVING THE FOOD, NUTRITION AND MEALTIME EXPERIENCE IN AGED CARE

DISCUSSION PAPER



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CONTENTS

Introduction	3
1. Evidence of food, nutrition and mealtime needs of aged care recipients	4
2. Challenges to consider in identifying how to address these needs	6
Questions	8
3. Skills and capabilities required to meet food, nutrition and mealtime needs	9
Questions	12
Conclusion	14
Endnotes & References	15

INTRODUCTION

This is one of a series of interlinking discussion papers seeking input from aged care stakeholders like you to help the Aged Services Industry Reference Committee (ASIRC):

- develop training products to address the clear skills gaps in the area of nutrition and mealtime experiences in aged care
- identify how these skills would be implemented in the workforce through a broad-based Personal Care Worker (PCW) role or an additional specialist qualification in nutrition and the mealtime experience.

The ASIRC, with input from the Nutrition and Mealtime Experience Specific Interest Advisory Committee, ¹ has identified that food, nutrition and mealtime experiences are a critical area of need in addressing skills deficits in the sector.

This paper, along with *The Reimagined Personal Care Worker*² which looks at the broad range of skills required to meet consumer needs (found here); *An evidence-based Discussion Paper on the issue of VET student work placement* (found here); and the *Pathways and Tertiary Education in Aged Care Discussion Paper* (found here) all seek to stimulate discussion on what a PCW's role should be in the future and what other skills are needed in a multidisciplinary approach to care.

While we cannot address issues such as funding and staffing arrangements and other challenges the sector faces which are outside our remit, this paper aims to engage stakeholders in a discussion regarding the opportunities to improve the education and training of aged care staff to meet nutritional needs and support high-quality mealtime experiences, particularly for residential care recipients.

We need to think beyond what is needed now. We want to challenge thinking of what the roles in the industry will look like well into the future as the dynamics of the sector continue to evolve.

We hope that you will be able to critically and creatively consider the issues and stimulate the kind of constructive discussion that includes all key aged care stakeholders, from employers and service providers to workers and unions, to help reimagine roles in the aged services sector.

FOCUS ON FOOD, NUTRITION AND MEALTIME EXPERIENCES

This discussion paper is focused on the **food**, **nutrition and mealtime experiences** of care recipients in residential aged care. It will inform the development of draft competencies and qualifications by the ASIRC for consultation.

Many aged care sector representatives, as well as the Aged Care Quality and Safety Commission (ACQSC), have called for a greater customer service focus and consumer engagement beyond fundamental care, with a focus on quality, dignity, respect and choice.³

The shift towards a more consumer-centric aged care market is consistent with changing consumer dynamics across the broader economy. The time is right for the aged care industry to lead community interactions and design its service delivery based on deeper and actionable consumer insights - including the mealtime experience.⁴

1. EVIDENCE OF FOOD, NUTRITION AND MEALTIME NEEDS OF AGED CARE RECIPIENTS

MALNUTRITION IN OLDER AUSTRALIANS

The World Health Organization (WHO) recognises malnutrition as one of six contributing factors to the declining physical and mental capacity of older people.⁵ Malnutrition may be 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.⁶

Malnutrition increases the risk of falls, osteoporosis and fractures, slow wound healing, morbidity and mortality, and contributes to poor quality of life.⁶ Malnutrition is an accelerator to entry to residential aged care.⁷

Studies have shown that a third of Australians in hospital aged 65 years and older are overtly malnourished and that a further 50% of this group are at high risk of malnutrition.⁸ Many of these frail older adults are discharged home, where they face the possibility of a downward spiral of ill health.⁹

Among older adults living in the community, almost 10% are malnourished, while another 40% are considered to be at high risk of malnutrition. ¹⁰

In residential care, the Dieticians Association Australia (DAA) submission to the Royal Commission into Aged Care Quality and Safety (ACRC) notes that Australian studies have identified a prevalence of malnutrition from 22% up to 50%. ¹¹

The DAA goes on to note that 'this is such an important issue that the Australian Government has recently mandated reporting by residential aged care providers of unplanned weight loss in residents in the National Aged Care Quality Clinical Indicator Program.' However, it adds that what is further required is recognition of malnutrition

in older Australians as a public health issue, with the last national food and nutrition policy being released in 1992.

The DAA states that a consistent, comprehensive and contemporary national food and nutrition policy would address malnutrition alongside chronic disease and obesity. It would also position food and nutrition as an important factor in the promotion of quality of life and prevention of disease. ¹²

Dr Cherie Hugo, a specialist dietitian in older adult nutrition, founded The Lantern Project 13 in 2013 due to her concerns about nutrition in aged care and her vision to improve the quality of life of older Australians through good food and nutrition.

Dr Hugo makes the important point that 'food is an emotive thing and about so much more than nutrition. Quite often the environment, staffing, social engagement before and during a meal, food quality and presentation can kibosh well-meaning attempts to put a nutritious meal on the table.' ¹⁴

Dr Hugo states that Lantern Project research has found that a 'food first' approach effectively treats malnutrition and may offer cost savings. She believes that the key is supporting aged care homes to prioritise food as a foundation of care before considering supplement prescription. However, she adds that too often, with budget restraints, this focus has been diminished, often resulting in fewer fresh foods on the menu, understaffed dining rooms and underqualified staff. ¹⁵

QUALITY STANDARDS AND INDICATORS

Organisations providing Commonwealth-subsidised aged care services are required to comply with the Aged Care Quality Standards. *Standard 4* outlines the expectations of a residential aged care provider as part of the assessment process. ¹⁶

In their ACRC Submission, the DAA states that it has been critical of the Aged Care Standards because they are so general, and do not explicitly stipulate nutrition, but only that meals provided should be 'of adequate quality and quantity'. ¹⁷

The DAA notes that the need for interpretation presents a challenge because accreditation surveyors rarely

have professional backgrounds in nutrition and dietetics. Their ability to determine whether individuals have received adequate nutrition may be limited, and they generally have little or no training in the very complex food and nutrition systems which exist. The DAA also reports that accreditors interpret the Aged Care Standards inconsistently. ¹⁸

Under the National Aged Care Mandatory Quality Indicator Program, residential aged care services must report on three quality indicators, one of which is weight loss. This program aims to improve transparency and help providers to monitor and improve the quality of their services. ¹⁹ Weight loss can be an indication of an older person deteriorating and it is therefore an important area to monitor. Conversely, with obesity rates increasing, weight loss may be a preference for some residents.

CARE RECIPIENTS' EXPECTATIONS OF FOOD IN AGED CARE

Twenty-five per cent of online submissions to the Royal Commission into Aged Care Quality and Safety raised concerns about nutrition and malnourishment in residential aged care.²⁰ One of the major issues raised was that food in aged care facilities is not appealing:²¹

Very bland. They don't use any salt or pepper. But they do have salt and pepper shakers on the table but some food you don't—you need to have it put in the cooking, and they don't use any spices ... I've never had curry since I've been there. So you're just straight out plain food. If you get vegetables, there's no butter in the vegetables.'

'Potato, mashed potato, no butter in the mashed potato. It's so sticky and dry.'

- "...there were signs on residents' doors saying this or similar, "Please give mum an extra dessert, she is losing weight". I spoke to a family who said they actually bring in their own food and feed their family member but what happens to those without family?"
- "...unless they are getting fed within 15 minutes of the food leaving the kitchen, they are being fed a cold meal."

According to the 2017–19 Aged Care Quality and Safety Commission *Consumer Experience Reports* which surveyed 30,000 respondents in residential aged care, the majority of residents (98%) gave a positive response to Question 2 about whether they feel safe in their aged care home, with 17% citing they felt safe 'Most of the time' and 81% citing 'Always'. However, a question on whether they liked the food achieved the second lowest positive response at 85%.²²

2. CHALLENGES TO CONSIDER IN IDENTIFYING HOW TO ADDRESS THESE NEEDS

Mealtimes are a key part of day-to-day life in residential aged care. Food is associated with enjoyable taste and smell experiences, memories of sharing food with others, and of past events and occasions.²³ Nutritious food and good dining experiences are important to maintain enjoyment of life and a healthy weight.

There are many reasons for older people not meeting their dietary requirements, including appetite loss (possibly due to dementia), depression, delirium, decreased vision, dental health issues, polypharmacy and acute or chronic diseases.²⁴ Other factors include the human rights of the individual to choose whether to eat or not, the dining experience, and organisational culture.

APPETITE LOSS

- Many people with dementia experience appetite loss.²⁵ They may also forget how to chew or swallow or be distracted by things around them.²⁶
- As a person ages there are normal appetite changes that occur. However a number of factors can impact on appetite, including medications, changes to taste, depression, thyroid disorders, liver disease and many others.²⁷
- Loss of appetite may occur in those who have loss of sensory stimulation such as smell and vision deterioration or taste altering, which then affects the overall enjoyment of food.²⁸
- Swallowing can be a significant problem in people with advanced dementia.²⁹ A person may have an 'unsafe swallow' and should not eat by mouth because of the risk of aspiration.³⁰
- With 'unsafe swallowing' interventions such as percutaneous endoscopic gastrostomy (PEG) tubes are an option, but as well as depriving people of the pleasure of real food there are ethical issues in applying this invasive process.³¹ A Cochrane Review concluded that there is no evidence to suggest that tube feeding is useful for people with advanced dementia.³²

 Each person with dementia is unique, and what works for one may not work for another.³³

HUMAN RIGHTS AND THE DIGNITY OF RISK

- Aged care residents should have the right to choose to eat or not, the same as any other member of the community.³⁴
- Individuals should have the right to eat what they choose even if it may cause harm, e.g. a diabetic resident drinking a sugary soft drink.³⁵

THE DINING EXPERIENCE

- The food itself is only one part of the dining experience for the resident. The whole event/dining experience needs to reflect quality care. 36
- People in aged care should be able to choose the times at which they eat.³⁷
- Choice needs to be considered for those with modified diets.³⁸
- There needs to be consideration and understanding of the cultural preferences relating to food and dining, and relevant skills for staff.³⁹

ORGANISATIONAL CULTURE

- In its submission to the ACRC, the DAA states it is concerned there is a culture of acceptance by many service providers that weight loss is usual or even desirable.⁴⁰
- The DAA states that while some service providers consistently invest for quality in people, policies and food, this is not universal. The DAA adds that other factors include inadequate investment in nutritious food and a lack of Accredited Practising Dietitians to support integrated multidisciplinary approaches to prevent and manage malnutrition.⁴¹

DIFFICULTIES IN RECRUITING QUALIFIED CHEFS

 Service providers may face difficulty in recruiting qualified chefs, especially in rural and remote areas.
 Chefs and cooks may not have sound knowledge of therapeutic diets, and may be more uncertain when there are combination diets required.⁴²

IMPACT OF VISITOR RESTRICTIONS

• Visitor restrictions during periods where infectious diseases are being managed may impact nutrition. For example, during the COVID-19 pandemic period, where COVID-19 has been kept at bay, the majority of residents and staff have remained safe.⁴³ That has occurred in large part because visitor restrictions have been put in place. However, prior to the COVID-19 pandemic, visitors brought in special foods and assisted at mealtimes, and with visitor restrictions in place these activities are not occurring as readily, potentially raising the increased risk of malnutrition.

The Aged Care Quality and Safety Commission recently distributed 'Nutrition during COVID-19' guidance to providers in its *Aged Care Quality Bulletin #17* and recommended:

- screening regularly for malnutrition using a validated screening tool; designating responsible staff member(s), and increasing weight monitoring where necessary
- maintaining dietitian contact and ensuring prompt referral, especially with regard to screening, and facilitating remote or face-to-face access with appropriate infection control in place, or in a designated meeting space on site
- ensuring the dining experience is positive for all, with staff on high alert for any signs of reduced intake and ready with strategies to assist as necessary.⁴⁴

EXPENDITURE ON FOOD AND NUTRITION

There has been a great deal of discussion in recent times relating to catering in aged care facilities. According to the StewartBrown quarterly financial survey (FY2018/19)⁴⁵ reporting on over 1,100 Australian aged care facilities in June 2019, the total cost of catering averaged \$30.99 per

resident per day.

The average cost of consumables, including food, equated to \$8.28 per day. However, that figure does not allow for the facilities that use a contract catering model, with the cost of the food and consumables being included in the contract catering price.

The average everyday living revenue received was \$52.32 per bed per day, and the total everyday living costs incurred, including food, was \$60.77 per bed day. This was before administration costs of \$34.26 per day. The cost of preparing meals accounted for 59.7% of the everyday living revenue.

The residential aged care sector is currently experiencing significant financial strain, with 56% of aged care homes having recorded an operating loss for the six month period to 31 December 2019, increasing to an operating loss of 71% for facilities in remote and rural areas. ⁴⁶ This has obviously impacted on the budgets and services that can be offered.

QUESTIONS

- **1.** What is the single most practical/realistic action we can take in **terms of skills** to improve the food, nutrition and mealtime experience:
- a. For cooking and catering specialist roles?
- b. For other staff groups?
- **2.** What essential skills are required to improve food, nutrition and mealtime experiences in:
- a. residential aged care?
- b. home care?
- **3.** Does meeting the needs of consumers require aged care services to provide:
- a. a specialised role(s) providing leadership in the area of food, nutrition and mealtime experience?
- b. in-house nutrition training for care staff and support workers in residential aged care, to keep skills current in malnutrition screening, referral pathways and documentation processes?
- **4.** If so, what capacity is there to create these roles? What obstacles are there to providing this focused leadership and the improvement of skills?

3. SKILLS AND CAPABILITIES REQUIRED TO MEET FOOD, NUTRITION AND MEALTIME NEEDS

Workforce skills and training regularly feature as identified barriers, directly contributing to the current issues arising with the aged care food, nutrition and dining experience. In addition, innovative models of care mean that aged care roles of the future will require a broader skill set to meet the needs of care recipients.

The DAA states that the successful implementation of integrated nutrition care and the provision of nutritious enjoyable food are complicated undertakings. They require trained workers operating within their scope of practice, present in sufficient numbers, and guided by contemporary policies and procedures.⁴⁷

From submissions and other evidence provided to the Aged Care Workforce Strategy Taskforce, it's clear that workforce competencies need to be boosted, particularly for PCWs, in areas such as:

- basic care skills, such as hydration and nutrition
- specialist knowledge in oral health, diversity, mental health, medication management, dementia and endof-life care.⁴⁸

At the Royal Commission Cairns hearing, cook and media personality Maggie Beer spoke about her Foundation, set up to provide training and education to chefs and cooks who work in the aged care sector.

She highlighted the importance of relevant training for people in aged care other than direct carers. She stated that relatively minor reforms, such as increased training for chefs in nutrition and special diets, would make a significant impact on the quality of food offered to aged care residents:

The roles of cooks and chefs in aged care is extremely demanding and highly responsible. ...
[I]n the busy world of aged care they often take on responsibility for menu design, staff, procurement, budget and for kitchen and dining room management. They are expected to have knowledge of the special needs of older people, their nutrition and special diets, the psychology of their social interaction ... [y]et many of the cooks and chefs

currently in aged care have no formal training in cooking, let alone hospitality, and are expected to learn on the job. 49

Dr Hugo states that a 2019 poll of 75 stakeholders and industry experts from across Australia found that staffing and staff training were the most pressing barriers to improving aged care food, nutrition and the mealtime experience, and that 92% of respondents felt that hospitality training should be mandatory for aged care staff involved in food, nutrition and the mealtime experience.⁵⁰

While competencies for PCWs need to be boosted, there are some examples of specific training available for cooks and chefs working in aged care, as follows:

- Melbourne City Institute of Education, which plans to provide specialist training to prepare qualified chefs to cook for people living in the care of regulated aged care services from September 2020.
- TAFE SA, which has partnered with food distributor Bidfood, Southern Cross Care, and the Group Training Organisation Maxima to offer a tailored course in Certificate II in Kitchen Operations with specific subjects focused on the aged care sector.⁵¹
- The Maggie Beer Foundation,⁵² which was established in 2014 to improve the food experiences for older Australians living in aged care homes.
- The William Angliss Institute, which offers a Certificate
 III in Catering Operations that's tailored to meet the
 growing needs of the Aged Care Longevity sector.⁵³

While historically recruitment of qualified chefs into the sector has been challenging, the COVID-19 pandemic has meant that there are now chefs whose roles have been displaced due to the significant downturn in the tourism and hospitality industries. As a result, ASIRC proposed a project to the Australian Industry and Skills Committee's (AISC's) Emergency Response Sub-committee to develop a skill set to equip qualified cooks and chefs with the additional skills to work in residential aged care settings to the Australian Industry Skills Committee (AISC) Emergency Response Sub-Committee. This skill set has been submitted and is currently under consideration, awaiting approval from the Sub-Committee.

INNOVATIVE MODELS OF CARE

There are many examples of good practice and innovative models for the delivery of aged care services, including nutrition and the mealtime experience. These different models may require a blend of skills and knowledge that is different from those offered via the traditional PCW qualification.

Some of these models include:

- Household Model: Residents live in home-like small group homes, generally with around eight residents, with flexibility in their care and activities. They have consistent care staff who assist with activities, meal choices and preparation, and other activities of daily living. Care companions will cook, clean and care for/with residents within the smaller groups, giving greater flexibility to meals, mealtimes, menus and personal care routines.⁵⁴
- Butterfly Household Model of Care: This model of care rests on the belief that for people experiencing dementia, feelings matter most; that emotional intelligence is the core competency; and that people living with a dementia can thrive well in a nurturing environment where those living and working together know how to 'be person-centred together'. Institutional features, such as staff wearing uniforms, medicine trolleys, and rigid task-based routines, are removed, enabling greater freedom for people living in the home to do more for themselves and feel less restricted.⁵⁵
- Dementia Villages: These are gated communities designed for people living with dementia. One of the key elements is residents living in small houses with people whose values they share with dementia design principles throughout. The design allows for residents with dementia to walk around the village and participate in everyday life decisions. These activities include going to the café or to the supermarket to 'buy' groceries. The first Australian dementia village, Glenview, has recently opened in Tasmania.⁵⁶
- Virtual Reality Workshop: Dementia Australia has developed an immersive workshop that uses virtual reality as a learning tool. A Day in the Life explores the influence of food and mealtimes on the quality

of life of people living with dementia. The workshop enables carers to experience mealtime through the eyes of Ted, a person living with dementia, and care worker Priah. Participants have the opportunity to explore strategies for improving mealtime and nutritional outcomes for people living with dementia. 57



CASE STUDY: CAREPAGE: CUSTOMER EXPERIENCE⁵⁸

In 2018, an aged care organisation implemented CarePage customer experience technology to better understand the needs of their consumers and highlight areas of focus for improvement. Real-time data compiled in late 2018 found that just 68% of residents in one home responded positively to the survey question on food, which flagged a need for further investigation.

The development of a residents' focus group, working closely with the chef, resulted in valuable insight into the specifics of what consumers felt would improve their dining experience. These discussions led to residents having access to more condiments, gravy in a separate jug that would allow them to pour it themselves, and more salad choices. February 2019 saw a dramatic increase in residents' satisfaction with the food, with an overall score of 80%, and 100% satisfaction in the month of March.



CASE STUDY: HAMMONDCARE⁵⁹

The main characteristics of HammondCare's approach to food and meals for those in their care are freshly cooked food; small home-like kitchens; increased choice for residents, clients and patients; and engagement in the meal preparation process. HammondCare's dementia care homes are designed as small cottages, each with their own kitchen, where staff prepare wholesome and tasty meals.

HammondCare appointed renowned chef Peter Morgan-Jones as Executive Chef and Food Ambassador. As well as bringing a restaurant-quality approach to ingredients, recipes and food service, Peter has become a powerful voice for change. He works alongside dietitians, cooks, dementia consultants and speech pathologists who work together to help ensure food and dining is a memorable and nutritious experience.

QUESTIONS

- **1.** What are the skills required for Personal Care Workers (PCWs) in food, nutrition and the dining experience?
- a. What level of skills and education is required to support PCWs to understand health care objectives relating to food and nutrition, and how these can be aligned with consumercentric goals?
- b. What's realistic in terms of the skills and capabilities of a PCW if the current context of the role is that of an entry-level, minimum wage worker with an entry-level qualification?
- **2.** Looking at innovative models of care, such as Homemaker, which involves the PCW assisting residents with activities such as meal preparation, what skills are required to undertake this role?
- **3.** What level of supervision would be required for the PCW?
- **4.** How much autonomy would the PCW have to make decisions about meals, nutrition and the dining experience?
- **5.** What level of training in meal preparation and nutrition would be necessary?
- **6.** What skills are required to identify the reasons why a resident may be suffering appetite loss?
- **7.** What are the skills required for Enrolled Nurses in food, nutrition and the dining experience?

- **8.** What are the skills required for Registered Nurses in food, nutrition and the dining experience?
- **9.** What are the skills required for cooks and chefs in food, nutrition and the dining experience?
- **10.** Is there a new role that could address the food, nutrition and mealtime experience, including presentation, taste and service?
- a. Is there a need for specialised skill sets or microcredentials to build on existing expertise?
- b. What would be the role of customer service and hospitality skills? Would these be additional skills required of a PCW, or what other parts of the aged services workforce?
- c. What is the role of allied health professionals with respect to this?
- **11.** What skills are required to support individuals if they refuse to eat or want to eat something that is not recommended for them (such as a diabetic drinking a sugary drink)?
- a. What level of autonomy should the PCW have in making these decisions?
- b. What skills are required for PCWs to be able to make decisions and provide support to residents that assist preservation of personal dignity and optimise healthy eating?

- 12. What skills are required to:
- a. plan and document the nutrition care for each person in advanced care plans, per the Nutrition and Hydration Guidelines for Hospitals and the National Safety and Quality Health Service (NSQHS) Standards?
- accommodate food/meal preferences and choices for people at the end of life in consultation with individuals and their families?
- **13.** Who should be responsible for this planning, documenting and accommodating?
- 14. If the Aged Care Quality and Safety Commission allowed specific online training modules developed for cooks and chefs working in residential aged care, would industry pay the additional annual licence fee and the associated costs of delivering content? Would there be any parameters around what they would be prepared to pay?

Dementia Australia has identified several problems related to the mealtime experience and stressed that aged care workers need the skills to recognise and understand the reasons why care recipients aren't eating. We would appreciate stakeholders' responses to the questions below in terms of the skills, education and training of residential aged care workers.

- a. When a care recipient isn't eating, do workers have the skills to recognise the importance of the mealtime experience and dedicate their time and attention to this?
- b. In understanding a recipient's failure to eat, have workers screened for gum disease, dry mouth or any other healthrelated conditions?
- c. Are workers on high alert for any signs of reduced intake, ready with strategies to assist?
- d. Instead of assuming a recipient isn't hungry, do workers have the skills to identify other issues, such as the fact that the recipient may need the toilet, for example, or feel embarrassed at being assisted?
- e. Does the worker have the skills to identify that the cutlery may be inappropriate for the recipient? Are workers aware of the need for adaptive cutlery?
- f. Are workers using person-centred language, and not just seeing the recipient as a 'feed'?
- g. Do workers have the skills to ensure that the recipient's environment is appropriate for eating – for example, by being aware of the noise levels in the room, and the comfort of the setting?
- h. Do workers recognise the need to support residents to eat by themselves, in order to maintain their dignity?
- i. Do workers have the skills to ensure that the overall environment is as conducive to a pleasant dining experience as possible?

CONCLUSION

If we're to have an aged services sector that's truly centred on the needs of care recipients, then the issue of addressing the inadequacies of the food, nutrition and mealtime experience is critical.

The economic devastation of the COVID-19 crisis has meant that experienced workers in the customer service and hospitality sectors, such as retail, travel and tourism, find themselves displaced, and there's a real opportunity for the sector to benefit from their skills and expertise.

What will be vital to the sector is ensuring that future competencies and training ensures the skills in food, nutrition and the mealtime experience are integral to the aged care workforce, so that positive food, nutrition and mealtime experiences become a feature of the aged care recipient's journey.

ENDNOTES & REFERENCES

- The Nutrition and Mealtime Experience Committee (SIAC) is one of ten SIACs which operates under the direction of the Aged Services Industry Reference Committee (ASIRC). Its membership consists of peak bodies, associations, industry/employers, and other nominated individuals with a focus on the nutritional needs of older Australians. SkillsIQ, Aged Services IRC, SkillsIQ website. Accessed circa July 2020 https://www.skillsiq.com.au/IndustryEngagement/ IndustryReferenceCommittees/ AgedServicesIndustryReferenceCommittee
- ASIRC, SkillsIQ, The Reimagined Personal Care Worker Discussion Paper, The Centre for Workforce Futures at Macquarie University, June 2020. Accessed circa July 2020. https://www.skillsiq.com.au/site/DefaultSite/filesystem/
 - https://www.skillsiq.com.au/site/Defaultsite/filesystem/documents/Research/Reimagined%20Personal%20 Care%20Worker%20Discussion%20Paper%20 June%202020.pdf
- Aged Care Quality and Safety Commission (ACQSC), Australian Government, Care that is right for me: A resource for working with aged care consumers, 29 January 2020, Canberra. Accessed 20 May 2020. https://www.agedcarequality.gov.au/sites/default/files/media/acqsc_working_with_aged_care_consumers_-resource.pdf
 - Coppola, M., et al. 'Lessons physician groups can learn from the hospitality industry', Huron Consulting Group, 2018. Accessed 20 May 2020. https://www.huronconsultinggroup.com/insights/lessons-physician-groups-learn-from-hospitality-industry
- Pollaers, J., et. al., A Matter of Care: Australia's Aged Care Workforce Strategy, Aged Care Workforce Strategy Taskforce, Australian Government Department of Health, June 2018, Canberra, p.4. Accessed circa July 2020. https://www.health.gov.au/sites/default/files/a-matter-of-care-australia-s-aged-care-workforce-strategy.pdf
- World Health Organization, Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity, Geneva, 2017. Licence: CC BY-NC-SA 3.0 IGO. Accessed circa July 2020.
 - https://www.who.int/ageing/publications/guidelines-icope/en/

- White Jane V., et al. '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 Journal of Parenteral
 and Enteral Nutrition. 2012;36(3): pp.275-283.
 doi:10.1177/0148607112440285 Accessed circa July
 2020.
 - https://pubmed.ncbi.nlm.nih.gov/22535923/
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Charlton, K.E, et al. 'Older rehabilitation patients are at high risk of malnutrition: evidence from a large Australian database'. The Journal of Nutrition, Health and Aging. 2010;14(8): pp.622-628. doi:10.1007/ s12603-010-0307-3. Accessed circa July 2020. https://pubmed.ncbi.nlm.nih.gov/20922337/
- Charlton, K. E., et al. '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, 2013, pp. e120-e125: Accessed circa July 2020. https://ro.uow.edu.au/smhpapers/617/
- Rist, G., et al. The presence of malnutrition in community-living older adults receiving home nursing services', *Nutrition & Dietetics*, Wiley Online Library, February 2012. Accessed 10 July 2020. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1747-0080.2011.01572.x
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/ uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- 12 Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/ uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf

- 13 The Lantern Project Australia website. Accessed circa July 2020. https://thelanternproject.com.au/about-the-lantern-project-australia/
- 14. Hugo, C., 'A food-first approach', *Australian Ageing Agenda*, March-April 2019, pp.46-48.
- Hugo, C., 'Aged care nutrition: most vulnerable are also least well fed', InSight+, issue 34, 4 September 2017. Accessed circa July 2020. https://insightplus.mja.com.au/2017/34/aged-care-nutrition-most-vulnerable-are-also-least-well-fed/
- 16. Aged Care Quality and Safety Commission, Guidance and Resources for Providers to support the Aged Care Quality Standards, Commonwealth of Australia, September 2019. Accessed circa July 2020. https://agedcarequality.govcms.gov.au/sites/default/ files/media/Guidance%20and%20resources%20 for%20providers%20to%20support%20the%20 Aged%20Care%20Quality%20Standards%20v3.pdf
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/ uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/ uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- National Aged Care Mandatory Quality Indicator Program Manual 1.0, June 2019. Accessed circa July 2020.

 https://www.health.gov.au/sites/default/files/documents/2019/12/national-aged-care-mandatory-guality-indicator-program-manual.pdf

19. Australian Government Department of Health,

 Royal Commission into Aged Care Quality and Safety, *Interim Report, Neglect*, Volume 1, Commonwealth of Australia, 2019, p.6. Accessed circa July 2020. https://agedcare.royalcommission.gov.au/sites/default/files/2020-02/interim-report-volume-1.pdf

- Royal Commission into Aged Care Quality and Safety, *Interim Report, Neglect*, Volume 1, Commonwealth of Australia, 2019, p.115. Accessed circa July 2020. https://agedcare.royalcommission.gov.au/sites/default/files/2020-02/interim-report-volume-1.pdf
- 22. Australian Institute of Health and Welfare, Consumers' experience of residential aged care Australia 2017–19, Australian Government, Canberra: AIHW. Accessed circa July 2020.

 https://www.aihw.gov.au/getmedia/87fa8d3e-ca23-48e7-905f-57df367f8f14/aihw-age-101.pdf.aspx?inline=true
- 23. Malloy, L., 'Appetite for life: What can help improve the mealtime experience', *Journal of Dementia Care*, vol 19, no. 6, 2012, pp.35-37
- 24. Flanagan, D., et al. 'Managing undernutrition in the elderly: Prevention is better than cure', Australian Family Physician, vol 41, no. 9, September 2012, pp.695-699. Accessed circa July 2020. https://www.racgp.org.au/afp/2012/september/ managing-undernutrition-in-the-elderly/
- 25. Department of Health & Human Services, 'Dementia eating', Better Health Channel website, State Government of Victoria. Accessed circa July 2020. https://www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/dementia-eating
- Clarke, L, 'Improving nutrition in dementia by using menu picture cards and cooking activities', *Nursing Times*, 2009, Vol 105 (30), pp.16-18. Accessed July 2020. https://pubmed.ncbi.nlm.nih.gov/19736793/
- 27. Flanagan, D., et al. 'Managing undernutrition in the elderly: Prevention is better than cure', Australian Family Physician, vol 41, no. 9, September 2012, pp.695-699. Accessed circa July 2020. http://www.racgp.org.au/afp/2012/september/managing-undernutrition-in-the-elderly/
- Shepherd, A., 'The hand in hand nature of nutrition and cognitive decline', Nursing and Residential Care, vol 12, no. 8, 2013, pp.370-377. Accessed circa July 2020. https://www.magonlinelibrary.com/doi/abs/10.12968/nrec.2010.12.8.49123
- Sutton L., et al, Out of the Shadows: End of life care for people with dementia, National Council for Palliative Care, 2009, London.

- 30. Evans, G., 'Improving end of life care for the person with dementia: A practical approach from general practice', *Dementia: The International Journal of Social Research and Practice*, vol 8, no 3, 2009, pp.363-376.
- 31. Shepherd, A., The hand in hand nature of nutrition and cognitive decline', *Nursing and Residential Care*, vol 12, no. 8, 2013, pp.370-377. Accessed circa July 2020.
 - https://www.magonlinelibrary.com/doi/abs/10.12968/nrec.2010.12.8.49123
- Sampson, E.L., et al. 'Enteral tube feeding for older people with advanced dementia', *The Cochrane Database of Systematic Reviews*, April 2009, doi: 10.1002/14651858.CD007209.pub2. Accessed circa July 2020. https://pubmed.ncbi.nlm.nih.gov/19370678/
- 33. Watson, R., et al. More food for thought: A report submitted to the Alzheimer's Society, Department of Nursing, Social Work and Applied Health Studies, The University of Hull, 2003, United Kingdom.
- 34. Aged Care Quality and Safety Commission, Aged Care Quality Standards [Fact sheet], Australian Government Aged Care Quality and Safety Commission, September 2019. Accessed circa July 2020.
 - https://www.agedcarequality.gov.au/sites/default/files/media/Aged%20Care%20Quality%20Standards.pdf
- 35. Aged Care Quality and Safety Commission, Aged Care Quality Standards [Fact sheet], Australian Government Aged Care Quality and Safety Commission, September 2019. Accessed circa July 2020.
 - https://www.agedcarequality.gov.au/sites/default/files/media/Aged%20Care%20Quality%20Standards.pdf
- 36. Department of Health & Human Services, 'Dementia-friendly environments, Dining areas, kitchens and eating', health.vic website, State Government of Victoria. Accessed circa July 2020. https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments/dining-areas-kitchens

- 37. Aged Care Quality and Safety Commission, Aged Care Quality Standards [Fact sheet], Australian Government Aged Care Quality and Safety Commission, September 2019. Accessed circa July 2020.
 https://www.agedcarequality.gov.au/sites/default/files/media/Aged%20Care%20Quality%20Standards.pdf
- Dietitians Association of Australia, [Submission to the]
 Royal Commission into Aged Care Quality and Safety,
 March 2019. Accessed circa July 2020.
 https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Dietitians Association of Australia, [Submission to the]
 Royal Commission into Aged Care Quality and Safety,
 March 2019. Accessed circa July 2020.
 https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- Dietitian Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- 43. Hobbins, N., 'Preventing malnutrition can save lives', Australian Ageing Agenda, July 2020. Accessed circa July 2020. https://www.australianageingagenda.com.au/contributors/opinion/preventing-malnutrition-can-save-lives/

- 44. Aged Care Quality and Safety Commission, 'Aged Care Quality Bulletin # 17, 7 May 2020', Aged Care Quality and Safety Commission website, Australian Government, May 2020. Accessed circa July 2020. https://www.agedcarequality-bulletin-17-may-7-2020#nutrition%20during%20covid19
- 46. StewartBrown, Aged Care Financial Performance Survey: Aged Care Sector Report, December 2019. Accessed circa July 2020. https://www.stewartbrown.com.au/images/documents/ StewartBrown---Aged-Care-Financial-Performance-Survey-Sector-Report-December-2019.pdf
- Dietitians Association of Australia, [Submission to the] Royal Commission into Aged Care Quality and Safety, March 2019. Accessed circa July 2020. https://dietitiansaustralia.org.au/wp-content/uploads/2019/03/DAA_Royal-Commission-Aged-Care_Mar-2019_Final.pdf
- 48. Pollaers, J., et. al. A Matter of Care: Australia's Aged Care Workforce Strategy, Aged Care Workforce Strategy Taskforce, Australian Government Department of Health, June 2018, Canberra, p.26. Accessed circa July 2020. https://www.health.gov.au/sites/default/files/a-matter-of-care-australia-s-aged-care-workforce-strategy.pdf
- 49. Beer, M., Statement submitted to Royal Commission into Aged Care Quality and Safety, Maggie Beer Foundation, June 2019, Adelaide. Accessed circa July 2020. https://agedcare.royalcommission.gov.au/system/files/exhibits/WIT.0202.0001.0001.pdf
- 50. Hugo, C., 'A food-first approach', *Australian Ageing Agenda*, March-April 2019, pp.46-48.
- TAFE SA, 'Industry partnership cooks up aged care chefs of the future, Government of South Australia', TAFE SA website, Government of South Australia, October 2017. Accessed circa July 2020. https://www.tafesa.edu.au/tafe-sa-news/2017/10/18/industry-partnership-cooks-up-aged-care-chefs-of-the-future

- 52. Maggie Beer Foundation, 'About us', Maggie Beer Foundation website. Accessed circa July 2020. https://maggiebeerfoundation.org.au/about-us/
- 53. William Angliss Institute, 'Certificate III in Catering Operations', William Angliss Institute website. Accessed circa July 2020. https://www.angliss.edu.au/courses/foods/cookery/certificate-iii-in-catering-operations/
- 54. Flinders University, Improving quality of life for people with dementia living in residential aged care: Findings from the INvestigating Services Provided in the Residential care Environment for people with Dementia (INSPIRED) study, 2018. Accessed circa July 2020. http://sites.flinders.edu.au/residential-aged-care/wp-content/uploads/sites/19/2020/01/INSPIRED-study-summary-brochure.pdf
- Dementia Care Matters, 'Care Home Development', Dementia Care Matters website. Accessed circa July 2020. http://www.dementiacarematters.com/carehomedevelopment.html
- 56. Glenview Community Services, 'Site works start on Australia-first dementia village', Glenview website, Korongee blog, December 2018. Accessed 10 July 2020. https://glenview.org.au/site-works-start-on-australia-first-dementia-village
- 57. Dementia Australia, 'VR used to improve mealtimes for people with dementia in residential care', Dementia Australia website, December 2019. Accessed circa July 2020. https://www.dementia.org.au/about-us/news-and-stories/news/vr-used-improve-mealtimes-people-dementia-residential-care
- 58. Carepage, 'Customer experience is key to the perception of quality in aged care', Carepage website. Accessed circa July 2020.

 https://carepage.com.au/customer-experience-is-key-to-the-perception-of-quality/
- 59. HammondCare, 'Residential Aged Care, Food Culture', HammondCare website. Accessed circa July 2020. https://www.hammond.com.au/services/residential-aged-care/food-culture





