



## Attachment A

# Health and nutrition of older Australians – environment scan

Version 1.0 November 2023



# Contents

Introduction	3
Background	3
Demographics	3
Health status	3
Nutrition status	3
Possible outcomes of poor nutrition	4
Malnutrition	4
Frailty	4
Cardiovascular disease	5
Periodontal disease	5
Sarcopenia	5
Falls	5
Osteoporosis	5
Dementia	5
Government policy landscape	6
Royal Commission into Aged Care Quality and Safety	6
Aged Care Quality and Safety Commission	6
National Preventive Health Strategy	6
National Nutrition Policy	7
Australian National Oral Health Plan 2015-2024	7
Reference list	8

## Introduction

---

In late-2023 the Department of Health and Aged Care requested NHMRC provide advice for older Australians to support health and wellbeing as an additional component of the revised Dietary Guidelines. Guidance will cover the general population aged 65 years and older (or 50+ years for Aboriginal and Torres Strait Islander peoples) and will include prevention of chronic disease and people with common diet-related risk factors such as high blood pressure or being overweight. The guidance will not apply to people with medical conditions that require specialised diets for managing disease or frailty. However, it is aimed at supporting prevention of malnutrition, frailty, falls and chronic conditions.

This report provides a high-level summary of the health and nutrition status of older Australians, outcomes of interest and key Australian Government policy. It represents a component of the scoping activities to support the Dietary Guidelines Expert Committee to prioritise topics and develop research questions.

## Background

---

### Demographics

An estimated 17% of Australians are aged 65 years and over (based on data collected 30 June 2021).<sup>1</sup> Life expectancy for Australians aged 65 was another 20.3 years of life for males and another 23 years for females.<sup>2</sup> In 2021, 18% of Aboriginal and Torres Strait Islander people were over the age of 50.<sup>3</sup> Total life expectancy for Aboriginal and Torres Strait Islander people was estimated at 71.6 years for males and 75.6 years for females.<sup>4</sup>

In 2018 approximately 95.3% of Australians aged 65 years and over lived in a private dwelling or self-care retirement village.<sup>5</sup>

### Health status

While older Australians generally perceive their health as good, there is still a large proportion of people affected by disability and disease. The 2017–18 National Health Survey found that approximately 74% of Australian over the age of 65 reported their health as good to excellent.<sup>2</sup> However, the majority (80%) had at least one chronic health condition.<sup>2</sup> In addition to this, the prevalence of disability in Australians over the age of 65 was estimated to be 49.6% in 2018.<sup>5</sup> The overall leading cause of death for older Australians is coronary heart disease.<sup>2</sup>

### Nutrition status

The Australian Dietary Guidelines (the Guidelines) provide guidance on foods, food groups and dietary patterns that protect against chronic disease and provide the nutrients required for optimal health and wellbeing.

Most Australians do not eat a diet that aligns with the Guideline recommendations. The National Health Survey 2020–21 found only 7.6% of Australians over the age of 65 met the recommendations for fruit and vegetable consumption.<sup>6</sup> The 2018 Aboriginal and Torres Strait

Islander Health Survey found that 3.7% of First Nations people over the age of 55 met the recommended serves of fruits and vegetables.<sup>7</sup>

The average daily intake of the five food groups in 2011–12 is below the Guideline recommendations for adults aged 51–70 and 70 and over. The exception to this was females aged 71 and over who exceeded the recommendations for grain foods by 0.4 of a serve.<sup>8</sup> Adults aged 51 and over exceeded the recommendations for discretionary foods consuming an average of 5 serves (adults aged 51–70) and 4.5 serves (adults aged 71 and over).<sup>8</sup> However, the National Health Survey found that 71.9% of people over 65 did not usually consume sugar sweetened or diet drinks.<sup>6</sup> The 2018 Aboriginal and Torres Strait Islander Health Survey reported 50.8% of Aboriginal and Torres Strait Islander people over the age of 55 did not usually consume sugar sweetened or diet drinks.<sup>7</sup>

## Possible outcomes of poor nutrition

---

Maintaining a healthy diet can reduce the risk of developing various health conditions including type 2 diabetes, cardiovascular disease and some forms of cancer.<sup>2</sup> In addition, many ageing related health conditions can be improved, prevented or the decline in health slowed by eating a diet high in nutrients. The guidance developed as part of this project will provide advice on healthy diets for older Australians to reduce the likelihood of these poor health outcomes.

### Malnutrition

Malnutrition is associated with increased risk of falls, infection and pressure wounds. Malnutrition and unplanned weight loss, which can be a sign of malnutrition, is a challenge faced by older Australians living in residential aged care facilities and the community. Unplanned weight loss in residential aged care is measured on a quarterly basis as part of a Residential Aged Care Quality Indicator. In January 2023, 8.6% of residents experienced unplanned weight loss of 5% or more in comparison with their previous quarter's weight.<sup>9</sup> A study looking at quality and safety indicators for older Australians receiving home care packages found the prevalence of weight loss/malnutrition to be 4.9%.<sup>10</sup>

### Frailty

The Royal Australian College of General Practitioners defines frailty as:

*'... a syndrome of physiological decline that occurs in later life, and is associated with vulnerability to adverse health outcomes. Older people who are frail are less resilient to stressors (e.g. acute illness, trauma) and at an increased risk of adverse outcomes, procedural complications, falls, institutionalisation, disability and death.'*<sup>11</sup>

A systematic review looking at the global incidence of frailty among older adults living in the community estimated the rate to be 43.4 new cases per 1000 person-years. However, rates may be lower in Australia as higher income countries were associated with a lower incidence of frailty compared with lower or middle income countries.<sup>12</sup>

People who are malnourished are at a higher risk of increased frailty. This is due to symptoms such as reduced muscle strength, delayed wound healing and impaired immune system compounding the effects of frailty.<sup>11</sup>

## Cardiovascular disease

Cardiovascular disease includes a range of conditions including stroke, heart and vascular diseases. In 2017–18, 20% of males and 12% of females aged 65–74 years and 32% of males and 20% of females over the age of 75 had cardiovascular disease.<sup>2</sup> In 2018, cardiovascular disease represented 10% of disease burden for all Aboriginal and Torres Strait Islander peoples.<sup>4</sup> Poor diet, insufficient physical activity and alcohol consumption are all risk factors for cardiovascular disease.<sup>13</sup>

## Periodontal disease

An unhealthy dietary pattern, added sugars and excess alcohol are risk factors for periodontitis – a serious infection or inflammation of the gums.<sup>14</sup> In addition, oral health issues such as periodontitis and tooth loss impact a person’s ability to chew and swallow leading to poor nutrition.<sup>15</sup> Oral health issues are also associated with other chronic diseases such as diabetes and cardiovascular disease.<sup>15</sup>

The National Study of Adult Oral Health 2017–18 found that 30.1% of Australians aged 15 or older had moderate or severe periodontitis.<sup>16</sup> Of these, 69.3% were aged 75 years or older. In addition, 24% of adults (with at least one natural tooth) had avoided eating certain foods due to poor dental health.<sup>16</sup> Severe tooth loss represents the leading cause of oral disease burden (48%) for Aboriginal and Torres Strait Islander people over the age of 65.<sup>4</sup> Periodontal disease represents 25% of oral disease burden for this group.<sup>4</sup>

## Sarcopenia

Sarcopenia is a loss of skeletal muscle mass, strength and function due to age-related changes in hormones and inflammatory pathways.<sup>11</sup> Malnutrition in older people can also decrease muscle mass leading to further decline with sarcopenia. This condition is associated with an increased risk of falls due to the decrease in muscle strength and function.

## Falls

Injuries caused by falls represent 60% of hospitalisations (2021–22) and 94% of deaths (2020–21) in Australians over the age of 65.<sup>17</sup> In the January quarter of 2023, 31% of residential aged care residents experienced a fall.<sup>9</sup> Among older Australians receiving home care packages the prevalence of falls resulting in hospitalisation was 11.7%.<sup>10</sup> Loss of muscle strength and function, poor nutrition and fluid intake are risk factors for falls.

## Osteoporosis

In 2017–18, 15.6% of Australians aged over 65 reported having osteoporosis.<sup>18</sup> It is reported that osteoporosis affected 2.3% of Aboriginal and Torres Strait Islander peoples in 2018–19.<sup>19</sup> Osteoporosis is characterised by bones becoming thin, weak and fragile leading to increased risk of fractures.<sup>19</sup> There are several lifestyle interventions that can assist in reducing the risk of developing osteoporosis, including eating a healthy diet with an adequate amount of calcium.

## Dementia

Dementia is an overarching term for multiple illnesses which cause gradual impairment of brain function.<sup>2</sup> This condition can affect memory, thinking, language and judgement. The prevalence of dementia in Australia increases with each age group. In 2018, 1% of people aged 65 to 74 years had

dementia compared to 28% of people aged 95 years and over.<sup>20</sup> There is no national-level estimates for the number of Aboriginal and Torres Strait Islander people with dementia, however consistent findings suggest that prevalence rates are 3–5 times as high as those for Australia overall.<sup>21</sup> Maintaining a healthy diet and weight have been shown to reduce the risk of cognitive decline and dementia.<sup>22</sup>

## Government policy landscape

---

### Royal Commission into Aged Care Quality and Safety

There are several recommendations from the Royal Commission into Aged Care Quality and Safety that relate to nutrition for healthy ageing. Below is a summary of the recommendations that may be relevant.

*Recommendation 19: Urgent review of the Aged Care Quality Standards* identified the need for review and amendment of the Aged Care Quality Standards in regards to facilities meeting nutritional needs and ensuring meals are desirable to eat and consider individual preferences.<sup>23</sup> In response to this recommendation, the Aged Care Quality and Safety Commission is piloting a food and nutrition focused standard to be included in the Aged Care Quality Standards.<sup>24</sup>

*Recommendation 112: Immediate changes to the Basic Daily Fee* proposes an increase to the Basic Daily Fee for approved residential aged care providers. This funding will be provided on the condition that additional reporting is carried out to ensure that basic living needs, with a focus on nutrition requirements, are being met.<sup>23</sup>

### Aged Care Quality and Safety Commission

The Aged Care Quality and Safety Commission has set up a Food, Nutrition and Dining Advisory Support Unit. This unit will provide:

- expert nutrition advice to consumers and aged care providers
- an avenue for complaints about food in aged care facilities
- facilitation of assessments and spot checks on nutrition and dining at aged care facilities.

This unit will also support the development of dietary guidelines and resources for older people.<sup>24</sup> NHMRC will review the evidence on dietary requirements for older people to support development of these resources.

### National Preventive Health Strategy

The National Preventive Health Strategy includes 2030 targets relevant to improving nutrition for older Australians including:

- increasing fruit and vegetable consumption to meet the recommended number of serves
- decreasing the proportion of total energy intake from discretionary foods to <20%
- reducing average population sodium intake by at least 30%
- reduce the proportion of people exceeding the recommended intake of free sugars.<sup>25</sup>

Older Australians are specifically mentioned in relation to the policy goal to provide ongoing access to adequate and affordable healthy food options to all Australians by 2030.<sup>25</sup>



## National Nutrition Policy

The National Nutrition Policy forms part of the National Preventive Health Strategy. This policy will be a framework to identify, prioritise, drive and monitor healthy eating in Australia.<sup>26</sup> Work on this policy has commenced with \$700,000 over four years included in the 2022–23 Department of Health and Aged Care budget.<sup>26</sup>

## Australian National Oral Health Plan 2015-2024

One of the Australian National Oral Health Plan healthy promotion goals is for

*'All Australians have access to oral health promoting environments and appropriate evidence-based information and programs that support them to make informed decisions about their oral health'.<sup>27</sup>*

The inclusion of oral health in policy has been identified as important strategy to achieve prevention outcomes. The Plan identifies the Guidelines as a document where oral health can be considered and notes the alignment between Guidelines and oral health messages.

## Reference list

---

- <sup>1</sup> Australian Bureau of Statistics. National, state and territory population. Canberra: Australian Government; 2023.
- <sup>2</sup> Australian Institute of Health and Welfare. Older Australians Canberra: Australian Government;; 2023.
- <sup>3</sup> Australian institute of Health and Welfare. Aged care for First Nations people. Online: Australian Government; 2023.
- <sup>4</sup> Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander Health Performance Framework. Canberra: Australian Government; 2023.
- <sup>5</sup> Australian Bureau of Statistics. Disability, Ageing and carers, Australia: Summary of Findings. Canberra: Australian Government;; 2019.
- <sup>6</sup> Australian Bureau of Statistics. National Health Survey 2020-21 Australian Government;; 2022.
- <sup>7</sup> Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Healthy Survey 2018-19. Canberra: Australian Government; 2019.
- <sup>8</sup> Australian institute of Health and Welfare. Nutrition across the life stages. Canberra: Australian Government;; 2018.
- <sup>9</sup> Australian institute of Health and Welfare. Residential Aged Care Quality Indicators- January to March 2023: Australian Government;; 2023 [Available from: <https://www.gen-agedcaredata.gov.au/Topics/Quality-in-aged-care/Residential-Aged-Care-Quality-Indicators-latest-release>].
- <sup>10</sup> Caughey GE, Lang CE, Bray SCE, Sluggett JK, Whitehead C, Visvanathan R, et al. Quality and safety indicators for home care recipients in Australia: development and cross-sectional analyses. *BMJ Open*. 2022;12(8):e063152.
- <sup>11</sup> Royal Australian College of General Practitioners. RACGP aged care clinical guidelines Online2019 [Available from: <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/silver-book/part-a/frailty>].
- <sup>12</sup> Ofori-Asenso R, Chin KL, Mazidi M, Zomer E, Ilomaki J, Zullo AR, et al. Global Incidence of Frailty and Pre frailty Among Community-Dwelling Older Adults: A Systematic Review and Meta-analysis. *JAMA Network Open*. 2019;2(8):e198398-e.
- <sup>13</sup> Australian Institute of Health and Welfare. Heart, stroke and vascular disease: Australian facts. Canberra: Australian Government;; 2023.
- <sup>14</sup> World Health Organisation. Oral health 2023 [Available from: <https://www.who.int/news-room/fact-sheets/detail/oral-health>].
- <sup>15</sup> Centers for Disease Control and Prevention. Periodontal Disease 2013 [Available from: <https://www.cdc.gov/oralhealth/conditions/periodontal-disease.html>].
- <sup>16</sup> Australian Institute of Health and Welfare. Oral health and dental Care in Australia. Canberra: Australian Government; 2023.
- <sup>17</sup> Australian Institute of Health and Welfare. Injury in Australia: Falls. Canberra: Australian Government;; 2023.
- <sup>18</sup> Australian Bureau of Statistics. Arthritis and osteoporosis. Canberra: Australian Government;; 2018.
- <sup>19</sup> Australian institute of Health and Welfare. Chronic musculoskeletal conditions. Canberra: Australian Government;; 2023.
- <sup>20</sup> Australian Bureau of Statistics. Dementia in Australia. Canberra: Australian Government;; 2020.
- <sup>21</sup> Australian institute of Health and Welfare. Dementia in Australia. Canberra: Australian Government; 2023.
- <sup>22</sup> World Health Organisation. Dementia 2023 [Available from: <https://www.who.int/news-room/fact-sheets/detail/dementia>].
- <sup>23</sup> Royal Commission into Aged Care Quality and Safety. Final Report: Care, Dignity and Respect. Canberra: Australian Government;; 2021.





---

<sup>24</sup> Department of Health and Aged Care. Improving food and nutrition in aged care: Australian Government,; 2023 [Available from: <https://www.health.gov.au/our-work/improving-food-nutrition-aged-care>].

<sup>25</sup> Department of Health. National Preventative Health Strategy. Canberra: Australian Government; 2021.

<sup>26</sup> Department of Health and Aged Care. Budget 2022-23: National Preventative Health Strategy. Online: Australian Government; 2022.

<sup>27</sup> COAG (Council of Australian Governments) Health Council. Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015-2024. Adelaide: South Australian Dental Service; 2015.