



# The Social and Economic Benefits of Improving Mental Health

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The Dietitians Association of Australia (DAA) is the national association of the dietetic profession with over 6900 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 communities. DAA appreciates the opportunity to respond to the *Mental Health Inquiry* by the Productivity Commission.

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## **DAA interest in this inquiry**

As the peak body for the dietetic profession, the Dietitians Association of Australia (DAA) has an interest in the health and wellbeing of all Australians, including those with mental health disorders. There is growing recognition of the link between physical and mental health and the importance of nutrition and healthy lifestyles. Access to healthy food and nutrition care are significant factors in the management of mental health and physical health for people with mental health disorders. Improved access to nutrition and dietetic services, supported by government reforms, funding and coordinated health care will enable people with mental health disorders to improve their health, to increase their social and economic participation, and to develop their capacity to actively take part in the community.

The Accredited Practising Dietitian program administered by DAA is the platform for self-regulation of the dietetic profession and provides an assurance of quality and safety to the public. Accredited Practising Dietitians are food and nutrition experts who translate the science of nutrition into practical solutions for healthy living. Accredited Practising Dietitians have an important role in providing medical nutrition therapy to individuals with mental health disorders. Accredited Practising Dietitians play an integral role in supporting individuals and groups in community health services and in private practice, overseeing food services and working with other health professionals and health workers as part of the multidisciplinary team supporting inpatient populations.

## **Key Messages**

DAA supports the focus on the link between physical and mental health and overall wellness, as a high priority area in the Fifth National Mental Health and Suicide Prevention plan. When a person feels physically and mentally well, there is opportunity for increased motivation, confidence, self-respect, self-esteem and capacity for participation in the community.

It is time to translate the growing evidence on the important role that food and nutrition play into action in the prevention and treatment of mental health disorders and common physical comorbidities.

People with mental health disorders need to be able to access nutritious food as a prerequisite to health.

Providing person centric care is critical in addressing mental ill health in Australia. People with mental health disorders recognise the important role that Accredited Practising Dietitians have in improving their mental and physical health and wellbeing. They want greater access to Accredited Practising Dietitians in public sector services through more funded positions. There is also a need for expansion of the Medicare Better Access to Mental Health program to include Accredited Practising Dietitians with long consultations.

## Discussion

### Structural weaknesses in healthcare

DAA agrees with the structural issues identified on page 12 in the report, in particular the limited resources for community care and poorly coordinated systems. Many people with mental health disorders want to develop strategies for self-care and lifestyle change but they do not have access to dietetic services that could lead to improvements in mental and physical health. As outlined in the issues paper a number of reforms are in progress and improving access and coordination of care is critical.

Increasing the number of Accredited Practising Dietitians in mental health multi-disciplinary teams in publicly funded health services to enable greater access to services for mental health consumers is not covered in current reforms. The number of dietitians for a given population size in Australia is much less than other health professions,<sup>1</sup> despite nutrition playing a critical role in both physical and mental health. More funded dietetic positions and subsidised dietetic services are required to improve nutrition and promote wellness for those living with mental health disorders and the wider community.

General practitioners have a role as gate keepers to primary care services but even when they recognise the need to connect their patient with an Accredited Practising Dietitian, there is very limited support through Medicare. Referral pathways for dietetic services should be established which include health services, general practitioners, mental health support workers, and Accredited Practising Dietitians. The increased access and use of services and subsequent improvements in health is expected to contribute to improvements in productivity of the population.

A further structural weakness in health care is the absence of a current National Nutrition Policy. Australia is in need of a new National Nutrition Policy<sup>2</sup> which would provide a contemporary, comprehensive and integrated framework across the spectrum of nutrition issues, including nutrition and mental health.

### Specific health concerns

#### *The link between physical and mental health*

The issues paper highlights that there is an established link between mental and physical health, with those living with a mental health disorder experiencing a high prevalence of physical health conditions and shorter life expectancies. The importance of addressing physical health in those with mental health disorders is outlined in a joint statement from DAA, Exercise and Sports Science Australia and the Australian Psychological Society.<sup>3</sup> Whilst the issues paper highlights the significant impact of mental health on productivity and the economy, it is crucial to recognise the further burden physical comorbidities have on the mental health and productivity of individuals.

A focus on good nutrition in mental health will help manage the physical comorbidities as well as generally support good health for the whole community. This in turn has the potential to improve productivity amongst the Australian population and reduce the economic burden of these conditions. Given nutrition care is important for prevention and treatment, greater awareness of its importance is needed amongst the general community and health professionals.

### *Benefits of nutrition on mental health*

There is a growing evidence base from epidemiological and intervention studies on the direct impact that nutrients, food and dietary patterns have on mental health. Nutrients, such as vitamins, minerals, polyunsaturated fats and amino acids support healthy brain structure and function, act as cofactors for hundreds of different enzymes, support metabolic pathways, prevent oxidation and are involved in neurotransmitter synthesis, cell signalling, myelin sheath maintenance, glucose and lipid metabolism, mitochondrial function, and more.<sup>4,5</sup> Factors that adversely affect physical health such as inflammation, glucose intolerance, impaired cerebral blood flow and oxidative stress, also impact on mental health.<sup>5,7</sup> Poor diet contributes to these factors.

Often people with a mental health disorder have lower quality diets. In an Australian study, people suffering from depression were shown to have unhealthy diets in comparison to the recommendations in the Australian Dietary Guidelines and Australian Guide to Healthy Eating. Of 166 potential study participants in the SMILES trial, only 15 (9%) of individuals were excluded from participating due to high quality diet.<sup>8</sup> Nutrition is considered a potential contributing factor to mental health disorders.

Recent reviews conclude that healthy dietary patterns containing fish, legumes, fruits, vegetables, nuts, and whole grains as recommended in the Australian Dietary Guidelines and typically found in Mediterranean diets, can lower the risk of depression.<sup>9,10</sup> Large population based studies and reviews of these have shown strong associations between diet quality and mental health.<sup>10-14</sup> This includes prospective studies such as the large SUN cohort in Spain (over 10,000 participants) that found a healthy Mediterranean diet pattern was associated with a reduction in the risk of developing depression.<sup>13</sup> Conversely, a high intake of discretionary items such as sweets, highly processed cereals, crisps, fast-food and sugar sweetened beverages increases the risk of poor mental health.<sup>9,10</sup> This link between diet and prevention of mental health disorders highlights the importance of focusing on nutrition as part of prevention and early intervention strategies for mental health.

### *Benefits of nutrition interventions*

New evidence from randomised controlled trials demonstrates that dietary interventions for persons at risk of, or with current, depression can improve diet quality and reduce incidence and rates of depression.<sup>15,16</sup> Two of the first randomised controlled trials to explore the use of diet to treat people with depression were recently completed by Australian research teams – the SMILES Trial<sup>8,17</sup> and HELFIMED study.<sup>18,19</sup> These studies found that diet was a highly effective treatment for depression symptom reduction and also remission of depression when delivered as a tailored service. The SMILES trial which involved individual sessions with an Accredited Practising Dietitian has demonstrated the importance of diet therapy delivered by a dietitian in the treatment of mental health disorders.

As highlighted, there is a growing body of evidence showcasing the integral role nutrition plays in the prevention and management of mental health disorders. It is critical that this evidence starts translating into routine mental health care in Australia.

### *Nutrition interventions – safe and good value*

Dietary interventions are low cost, safe and effective. Two Australian economic evaluations published in 2018 found that dietary interventions were cost effective when compared to social support as treatments for depression.<sup>20,21</sup> Specifically, the cost-utility analysis undertaken in one of the studies found that a Mediterranean diet as a treatment for depression was highly cost-effective compare to social group program (\$2275/QALY).<sup>20</sup> There are no known harms associated with consuming a diet consistent with the Australian Dietary Guidelines or food patterns typical of Mediterranean diets. Rather, a healthy diet is likely to be associated with additional benefits in relation to comorbid health conditions. The potential side effects from a healthy diet will almost certainly involve positive effects on health and reduction in health costs associated with comorbid health conditions.

### *Limitations of medication*

A common side effect of mental health medication is changes in appetite and weight gain. It is critical that those living with a mental health disorder who are on medications receive support from suitably qualified health professionals, including Accredited Practising Dietitians, to manage any appetite and weight related side effects. Routine nutrition screening should be included as part of mental health care, to enable early identification and management of nutrition issues. Early intervention to prevent weight gain and decrease risk of physical comorbidities is imperative and Accredited Practising Dietitians are well placed to support this.

In view of the substantial effect of mental health on physical health and the limitations of pharmacotherapy and psychotherapy, there is a need for new approaches for preventing and managing mental illness in Australia. Dietary intervention may reduce the need for on-going treatment with medication, thereby reducing the risk of medication-induced side effects. The importance of complementing medications with diet and lifestyles was highlighted in an article published in the Medical Journal of Australia (Davey et al., 2016) that concluded that “Australia has one of the highest rates of antidepressant use in the world ... despite evidence showing that the effectiveness of these medications is lower than previously thought... Antidepressant medications still have an important role in the treatment of moderate to severe depression; they should be provided as part of an overall treatment plan that includes psychotherapy and lifestyle strategies to improve diet and increase exercise.”<sup>22</sup>

Nutrition and healthy lifestyles are not only beneficial for mental health, they are also integral in preventing and managing physical health conditions, which commonly coexist with mental health disorders. This includes diabetes, heart disease and other diseases where unhealthy lifestyles are a known risk factor. Preventing and managing physical comorbidities also reduces the potential mental health burden that these physical comorbidities have on the person.

Increased access to nutrition and lifestyle interventions provided by qualified allied health professionals including Accredited Practising Dietitians is critical. Dietary interventions are both low risk and low cost and as highlighted have additional benefits for the individual beyond improving their mental health.

### Health workforce and informal carers

A large skilled workforce is required to address the burden of mental ill health in Australia. There is a need to ensure that all individuals working in the field of mental health have adequate skills

and knowledge to competently undertake their role and support health and wellbeing in clients. Training to increase skills and knowledge of mental health should be provided to all health professionals. More opportunities are needed for student dietitians to experience mental health practice and to demonstrate an ability to meet entry-level competencies relevant to mental health prior to graduation. Ongoing opportunities to extend skills, including working in mental health, need to be available for Accredited Practising Dietitians to consolidate and advance their practice after graduation.

The skill mix of the health professional workforce must be equipped to adequately manage and integrate physical and mental health care. DAA recommend greater employment of Accredited Practising Dietitians as part of mental health multidisciplinary teams, to adequately service and address the needs of individuals with mental health disorders. This should be supported by models of care that enable those living with a mental health disorder to access these services with minimal financial burden. In addition to a larger dietetic workforce, basic nutrition education should be provided to all health professionals to ensure that nutrition is recognised as a central, necessary and integrated part of care. These changes will support implementation of the Fifth National Mental Health and Suicide Prevention Plan which includes a priority area specifically focusing on physical health and calls for improvements in integrated service delivery and coordination of care.<sup>23</sup> These workforce improvements have the capacity to support wellness in those living with a mental health disorder and improve participation and productivity.

Given the importance of nutrition and lifestyle in the prevention and management of mental health, adequate knowledge of these is required across the health and support staff workforce. Health workers and health professionals should be able to support people around basic healthy eating at the level of the Australian Dietary Guidelines with food shopping, preparation and storage. They should also be able to screen for nutrition and food related issues which indicate the need for referral to an Accredited Practising Dietitian for specialised nutrition care. The appropriate skills and knowledge should be incorporated in the relevant training units and packages in the Vocational Educational and Training sector.

#### *Continuing professional development*

To meet actions specific to developing and supporting the workforce, outlined in the National Mental Health Workforce plan,<sup>24</sup> relevant and appropriate professional development should be provided for health professionals. The availability of low cost, or free, accessible, evidence-based education that meets the professional development requirements for health professionals could support an increase in uptake of training. Additionally, delivery format of the training needs to be considered. Technology can be used to extend opportunities to access education. It is important though that onsite training is also provided when competence in practical skills is required such as skills in food purchase, preparation and storage.

Primary Health Networks provide a potential avenue to offer training for health professionals and support workers in each region.

#### *Meeting needs in remote areas*

DAA recommends that Medicare Chronic Disease Management items for Allied Health Professionals, be extended to allow substitution of telehealth services for face to face encounters, as is supported for the Better Access MBS items in recognition of workforce shortages in regional and remote areas. Additionally, it removes barriers and increases access to allied health services for those living in rural and remote areas, older Australians and those with

mobility issues. Given the benefits of lifestyle interventions in mental health this offers great potential.

### Housing, income support and social services

Affordability of food is a prerequisite to health and effective dietetic interventions. DAA is concerned about issues of food security in those living with a mental health disorder and their ability to afford the cost of food, to support good physical and mental wellbeing. An Australian study has found that a healthy diet can be affordable for people living with major depressive disorders compared to their normal intake.<sup>25</sup> However, not all individuals may be able to afford adequate food in the first instance. In an Australian paper (2009), the cost of healthy food habits was equivalent to 44% of the disposable income of welfare-dependant couple-families, compared to 18% of the income of average-wage couple-families.<sup>26</sup> As the issues paper highlights, many with a mental health disorder are utilising social services and income support, and consequently they may have difficulty purchasing adequate healthy food or paying for exercise equipment or services.

Given the integral role of nutrition and physical activity in mental health this is concerning and ensuring that all those living with a mental health disorder can afford and access healthy food is important. Accredited Practising Dietitians and qualified exercise professionals can support those with a mental health disorder adopt low-cost strategies to support their wellbeing. Accredited Practising Dietitians play a critical role in helping consumers understand what is an affordable, healthy diet and support the development of skills for food budgeting and preparation to improve their nutritional intake and health.

Access to secure housing, a common challenge faced by this population, can also limit the capacity to adequately store and prepare healthy food. Accommodation options need to ensure there are adequate facilities for food storage and preparation or provision of healthy food choices, to support mental and physical wellbeing. People living in hostels or supported accommodation should be able to access enjoyable nutritious food which meets their needs.

### Coordination and integration

DAA recommend that establishing integrated care systems for physical and mental health care should be a priority and this may include colocation of services as part of shared care models.

### Funding arrangements

Accredited Practising Dietitians have supported people with mental health disorders for many years in public hospitals and community services but funded positions are not enough to meet community needs. Those with a mental health disorder, often have lower income as outlined in the issues paper and thus may have limited access to private Accredited Practising Dietitians.

The provision of five annual services shared across all eligible allied health provided under the Medicare Chronic Disease Management program, is not enough to meet the complex needs of people with a mental health disorder. This is due to the limited number of eligible services,

insufficient time available to develop therapeutic relationships with clients to provide clinically effective nutrition counselling and the inadequate reimbursement for services. Additionally, the five services are shared across allied health and thus access to effective, holistic, multi-disciplinary health care is limited. The SMILES study demonstrated good outcomes with a recommended seven longer duration sessions.<sup>8,17</sup> Analysis of Medicare statistics shows that over 90% of Better Access items used by psychology, social work and occupational therapy practitioners were long consults as required for counselling nature interventions. Increasing the number of services available and length of services in the Chronic Disease Management items would support better care for people with a mental health disorder.

Accredited Practising Dietitian services are not available at present under the Better Access initiative, a Medicare scheme aiming to improve community management of mental illness. Part of the solution would be to include Accredited Practising Dietitians in Better Access care items as medical nutrition therapy can improve mental health as well as physical health. Introducing long and short MBS items for Accredited Practising Dietitians for individual and group consultations in person and by telehealth would improve equity of access to nutrition services for people with mental a health disorder who are most at risk of poor diet but have the least capacity to pay for private services. To embed the importance of physical care in the Mental Health Care plans, physical health including nutrition should be included in the templates used for these models and in practice applications, for example electronic record templates. These suggestions support both priority area three and five in the Fifth National Mental Health and Suicide Prevention Plan.<sup>23</sup>

In addition to the expansion of Medicare dietetic items, more funding for publicly funded community-based positions is critical. Mental illness is a major reason for eligibility for the disability pension but the payment is intended to meet basic costs e.g. rent, transport and food. Finding money for additional health care presents a barrier to access to that care. The burden of mental illness is a powerful motivator in finding approaches to prevention and treatment which improve outcomes and carry little risk of additional harm. Given the impact of social determinants in those living with a mental health disorder it is important to support access to services, including dietetics, which can be beneficial in the management of mental illness.

It is critical solutions be found to improve access and provision of integrated care to those with a mental health disorder. Continuity of care for the consumer is critical whilst finding solutions to improve models in mental health care.

#### Other comments

The importance of physical health for those living with a mental health disorder has been included widely in the literature and throughout this response the specific role of nutrition has been highlighted. For those living in facilities where food is provided, such as hospitals, mental health facilities and residential aged care facilities it is critical that clients have the opportunity to access nutritious enjoyable food to promote wellbeing. As such, a focus on having standards for food service and appropriately trained staff is imperative to ensure those in these facilities are provided with food and drinks that will support physical and mental wellness.



## References

1. Segal L, Opie RS. A nutrition strategy to reduce the burden of diet related disease: access to dietician services must complement population health approaches. *Front Pharmacol* 2015; 6: 160.
2. Dietitians Association of Australia. *Nourish not neglect. Putting health on our nation's table.* 2019. Available from: <https://daa.asn.au/voice-of-daa/advocacy/call-for-a-new-national-nutrition-policy/>
3. Dietitians Association of Australia, Australian Psychological Society and Exercise and Sports Science Australia. *Joint Position Statement- Addressing the physical health of people with mental illness.* 2016. Available from: <https://daa.asn.au/wp-content/uploads/2016/05/addressing-physical-health-mental-illness.pdf>
4. Kaplan BJ, Crawford SG, Field CF, Simpson JSA. Vitamins, minerals and mood. *Psych Bull* 2007, 133: 747-760
5. Kaplan BJ, Rucklidge JJ et al. The emerging field of nutritional mental health: Inflammation, the microbiome, oxidative stress, and mitochondrial function. *Clin Psych Sci* 2015; 3: 964-980.
6. Parletta N, Milte CM, Meyer B. Nutritional modulation of cognitive function and mental health. *J Nutr Biochem* 2013; 24: 725-43.
7. Sinn N, Howe PRC. Mental health benefits of omega-3 fatty acids may be mediated by improvements in cerebral vascular function. *Biosci Hypoth* 2008; 1: 103-108.
8. Jacka F, O'Neil A, Itsiopoulos C, Opie R, Itsiopoulos C, Cotton S, Mohebbi M et al. A randomised controlled trial of dietary improvement for adults with major depression (the 'SMILES' trial). *BMC Med* 2017; 15: 23
9. Opie RS, Itsiopoulos C, Parletta N, Sanchez-Villegas A, Akbaraly TN, Ruusunen A, et al. Dietary recommendations for the prevention of depression. *Nutr Neurosci* 2017; 20: 161-171
10. Li Y, Lv MR, Wei YJ, Sun L, Zhang JX Li B. Dietary patterns and depression risk: A meta-analysis. *Psychiatry Res* 2017; 253: 372-382
11. Lai JS, Hiles S, Bisquera A, Hure AJ, McEvoy M, Attia J. A systematic review and meta-analysis of dietary patterns and depression in community-dwelling adults. *Am J Clin Nutr* 2014; 99: 181-97
12. Psaltopoulou T, Sergentanis T, Panagiotakos D, Sergentanis I, Kostis R & Scarmeas N. Mediterranean diet, stroke, cognitive impairment, and depression: A meta-analysis. *Ann Neurol* 2013; 74: 580-91.
13. Sanchez-Villegas A, Delgado-Rodriguez M, Alonso A, Schlatter J, Lahortiga F, Serra Majem L, et al. Association of the Mediterranean Dietary Pattern With the Incidence of Depression: The Seguimiento Universidad de Navarra/University of Navarra Follow-up. *Arch Gen Psychiatry* 2009; 66: 1090-98

14. Lassale C, Batty GD, Baghdadli A, Jacka F, Sánchez-Villegas A, Kivimäki M, et al. Healthy dietary indices and risk of depressive outcomes: a systematic review and meta-analysis of observational studies. *Mol Psychiatry* 2018; doi: 10.1038/s41380-018-0237-8. [Epub ahead of print]
15. Sanchez-Villegas A, Martinez-Gonzalez M, Estruch R, Salas-Salvado J, Corella D, Covas MI et al. Mediterranean dietary pattern and depression: the PREDIMED randomised trial. *BMC Med* 2013; 11: 208
16. Stahl S, Albert S, Dew M, Lockovich M, Reynolds C. Coaching in healthy dietary practices in at-risk older adults: A case of indicated depression prevention. *Am J Psychiatry* 2014; 171: 499-505
17. Opie RS, O'Neill A, Jacka FN, Pizzinga J, Itsiopoulos C. A modified Mediterranean dietary intervention for adults with major depression: Dietary protocol and feasibility data from the SMILES trial. *Nutr NeuroSci* 2018; 21: 487-501
18. Parletta N, Zarnowiecki D, Cho J, Wilson A, Bogomolova S, Villani A et al. A Mediterranean-style dietary intervention supplemented with fish oil improves diet quality and mental health in people with depression: A randomized controlled trial (HELFIMED). *Nutr NeuroSci* 2017; 1-14
19. Zarnowiecki D, Cho J, Wilson AM, Bogomolova S, Villani A, Itsiopoulos C, et al. A 6-month randomised controlled trial investigating effects of Mediterranean style diet and fish oil supplementation on dietary behaviour change, mental and cardiometabolic health and health-related quality of life in adults with depression (HELFIMED): study protocol. *BMC Nutr* 2016; 2: 52
20. Segal L, Twizeyemariya A, Zarnowiecki D, Niyonsenga T, Bogomolova S, Wilson A, et al. Cost effectiveness and cost-utility analysis of a group-based diet intervention for treating major depression - the HELFIMED trial. *Nutr Neurosci* 2018; 20: 1-9.
21. Chatterton ML, Mihalopoulos C, O'Neil A, Itsiopoulos C, Opie R, Castle D, et al. Economic evaluation of a dietary intervention for adults with major depression (the "SMILES" trial). *BMC Pub Health* 2018; 18: 599.
22. Davey CG, Chanen AM. The unfulfilled promise of the antidepressant medications. *Med J Aust.* 2016; 204: 348-50.
23. Council of Australian Governments Health Council. *The Fifth National Mental Health and Suicide Prevention Plan*. Canberra. 2017. Available from: <http://www.coaghealthcouncil.gov.au/Publications/Reports>
24. Mental Health Workforce Advisory Committee. *National Mental Health Workforce Plan*. Victorian Government Department of Health, Melbourne, Victoria. 2011.
25. Opie RS, Segal L, Jacka FN, Nicholls L, Dash S, Pizzinga J & Itsiopoulos C. Assessing healthy diet affordability in a cohort with major depressive disorders. *J Public Health Epidemiol.* 2015; 7: 159-169.

26. Kettings C, Sinclair AJ, Voevodin M. A healthy diet consistent with Australian health recommendations is too expensive for welfare-dependent families. *Aust NZ J Public Health* 2009;33(6):566-72