

Diabetes Role Statement

Developed by members of the Diabetes Interest Group

Introduction

Accredited Practising Dietitians (APDs) are recognised professionals with the qualifications and skills to provide expert nutrition and dietary advice. APDs are qualified to advise individuals, groups and organisations on nutrition-related matters.

APDs have university training accredited by Dietitians Australia, undertake ongoing professional development and commit to evidence-based practice. They comply with the [Dietitians Australia Code of Professional Conduct and Statement of Ethical Practice](#) and commit to providing quality service.

APD is the only national credential recognised by the Australian Government, Medicare, the Department of Veterans Affairs, the National Disability Insurance Agency and most private health funds as the quality standard for nutrition and dietetics services in Australia. It is a recognised trademark protected by law.

Purpose of this Role Statement

- To define the role an APD may fulfil when working in the area of diabetes
- To promote the knowledge and expertise of an APD in the area of diabetes and beyond [National Competency Standards](#)
- To advocate for dietetic services

Knowledge and skills in this area of practice

Entry level dietetic competencies ensure all APDs can conduct assessments, diagnose nutritional issues, and develop, monitor and evaluate interventions. Within a particular practice area, APD skills and knowledge will range from entry level to highly skilled. Within this continuum APDs can either fully manage the patient, seek support to continue seeing the patient or refer the patient on.

The following is a list of skills and knowledge required to work in the diabetes area:

Knowledge

- Pathophysiology of all types of diabetes including: risk factors, diagnostic criteria, usual presentation, acute emergencies, co-morbidities, complications, optimal/suboptimal blood glucose profiles, and the differences in nutritional approaches for Type 1 as compared with Type 2, gestational and other forms of diabetes mellitus.
- Standard diabetes management goals and strategies for different populations, while understanding the need for individualisation including: targets for glycaemia (eg HbA1c, fasting and post-prandial blood glucose, and continuous glucose monitoring metrics such as ‘time-in-range’), lipids, blood pressure; complications screening and advice regarding foot care; exercise; home blood glucose monitoring; insulin delivery; and which health professionals are best placed to address each area.

- Nutrition implications of oral and injectable diabetes medications and their delivery, including their profile of action (peak, duration) in relation to food and risk of hypoglycaemia.
- Nutrition implications of evolving diabetes technologies including: insulin dosing apps and glucose meters; continuous and flash glucose monitoring systems; hybrid-closed loop insulin delivery systems; and associated terminology (eg 'flexible dosing', 'carbohydrate ratio', 'sensitivity factor', 'insulin on board').
- Current, evidence-based medical nutrition therapies for diabetes and related complications/co-morbidities such as obesity, cardiovascular diseases, kidney disease, coeliac disease, gastroparesis and disordered eating.
- Available diabetes services and schemes, and client access/eligibility including: local diabetes centres and hospital services; private diabetes related clinicians; National Diabetes Services Scheme and Medicare initiatives.

Skills

- Assessment of an individual, including detailed nutrition and carbohydrate assessment (amounts, type, timing) in relation to their diabetes management plan/targets, medications or insulin, blood glucose patterns, and other factors affecting glycaemia (eg physical activity).
- Provide individualised medical nutrition therapy, including recommendations for modification of current intake, appropriate to age, type of diabetes, comorbidities/health concerns, risk of hypoglycaemia and management targets; integrating lipid, blood pressure, glycaemic and weight management goals with physical activity and healthy eating strategies.
- Provide nutrition education to people with diabetes both individually and within a group setting, using a variety of tools such as: food/blood glucose records, carbohydrate counting, glycaemic index, portion modelling, meal planning, label reading, cooking/recipe adjustments and behaviour modification.
- Behaviour change, self-management and client centred counselling skills to facilitate long-term and/or community-based management.

Activities entry level APDs would conduct

- Provide individualised medical nutrition therapy for low complexity cases within skill and experience level. For example, diet- and tablet-treated pre-diabetes, Type 2 diabetes and gestational diabetes.
- Consult with a diabetes-experienced APD for complex individual cases until further upskilling has been undertaken.; For example, Type 1 diabetes, Type 2 or gestational diabetes on insulin, complex obesity, multiple co-morbidities, pregnancy in pre-existing diabetes and paediatric cases, depending on prior experience.
- Deliver nutrition group education for pre-diabetes, Type 2 diabetes and gestational diabetes including optimal meal patterns, carbohydrate amounts and types, and nutrition strategies to address comorbidities.

Activities APDs working at a higher level would conduct

- Provide individualised medical nutrition therapy for complex diabetes cases (eg highly unstable blood glucose, insulin pump therapy, morbid obesity, gastroparesis).

- Provide advanced carbohydrate counting education (individual and/or group) and assessment of suitability/readiness for flexible insulin therapy and/or insulin pump therapy, based on carbohydrate counting knowledge and skills.
- Conduct analysis of the impact of carbohydrate and other macronutrients, physical activity, alcohol, disordered eating and diabetes medications/insulin on glycaemia. This includes interpretation of graphs, summaries and food records available from diabetes technologies, such as insulin pumps, continuous/flash glucose monitoring systems and apps.
- Provide input into diabetes team treatment decisions, where these relate to the individual's diet (eg carbohydrate ratios, insulin pump bolus types, safety and efficacy of low carbohydrate diets) and complex care co-ordination.

Activities Dietitians working in this area of practice do not usually undertake

- Endorse intensive diet restrictions and 'sugar free' diets for frail and aged people with diabetes, where malnutrition can be a greater risk than mild hyperglycaemia. Refer to the [NDSS diabetes management in aged care handbook](#) for more information.
- Manage individuals without the involvement of other members of a diabetes multidisciplinary team, such as general practitioner, endocrinologist, diabetes educator, exercise physiologist, podiatrist etc.
- Provide education, counselling or interventions beyond dietetic scope of practice, such as in-depth diabetes self-management education, psychological counselling, foot assessments, insulin adjustments and activities involving skin penetration (including insertion of insulin pump or continuous/flash glucose monitor), without undertaking appropriate steps to extend scope of practice (eg post-graduate training to become a Credentialed Diabetes Educator, or local health network approval process for extended scope of practice).
- Many APDs undertake additional training to become Credentialed Diabetes Educators (CDEs). Refer to the [joint publication](#) by Australian Diabetes Educators Association and Dietitians Australia for more information.

Practitioners should refer to the [Scope of Practice Decision Tool](#) to determine if a task is within their scope of practice.

Appendix A – Background

Dietary intake is a major contributor to glycaemic control in diabetes. It is a key feature of multiple comorbidities, including cardiovascular diseases and risk factors, overweight/obesity and chronic kidney disease. Improved glycaemic control reduces diabetes complications, which are extremely costly to health services and society in general. Diet can also be a major contributor to hypoglycaemia in people with diabetes; the consequences of which can range from minor to severe.

Studies have shown dietetic input improves health outcomes, and is cost saving to health services.¹⁻³ Programs showing improved health outcomes for people with diabetes, often have dietetic interventions as a key component.⁴⁻⁶ Of all clinicians involved in diabetes management in Australia, Accredited Practising Dietitians alone are trained in medical nutrition therapy (MNT), which involves individualised assessment and counselling for the implementation of nutrition therapy recommendations.⁷ Nutrition advice provided by dietitians achieves better clinical parameters than nutrition advice provided by physicians, nurses and nutritionists who are not trained in MNT⁸⁻¹⁰. Consequently, key national and international stakeholder organisations such as the International Diabetes Federation acknowledge the importance of dietitians in diabetes management.¹¹⁻¹⁶

References

1. Siopis G, Colagiuri S, Allman-Farinelli M. Effectiveness of dietetic intervention for people with type 2 diabetes: a meta-analysis. *Clinical Nutrition*; 2020. Doi: 10.1016/j.clnu.2020.12.009
2. Siopis, G., Wang, L., Colagiuri, S. & Allman-Farinelli, M. (2020) Cost effectiveness of dietitian-led nutrition therapy for people with type 2 diabetes mellitus: a scoping review. *J Hum Nutr Diet*. doi: 10.1111/jhn.12821
3. MacLeod J, Franz MJ, Handu D, Gradwell E, Brown C, Evert A, Reppert A, Robinson M. Academy of Nutrition and Dietetics Nutrition Practice Guideline for Type 1 and Type 2 Diabetes in Adults: Nutrition Intervention Evidence Reviews and Recommendations. *J Acad Nutr Diet* 2017; 117: 1637-1658
4. Delahanty L, Simkins SW, Camelon K. Expanded role of the dietitian in the diabetes control and complications trial: Implications for clinical practice. *Journal of the American Dietetic Association*. 1993; 93(7):758–767
5. Gunn D, Mansell P. Glycaemic control and weight 7 years after Dose Adjustment For Normal Eating (DAFNE) structured education in Type 1 diabetes. *Diab Med*. 2012; 29: 807–812
6. Crowther CA, Hiller JE, Moss JR, McPhee AJ, Jeffries WS, Robinson JS Effect of Treatment of Gestational Diabetes Mellitus on Pregnancy Outcomes. *NEJM*. 2005; 352(24).
7. Evert AB, Dennison M, Gardner CD et al. Nutrition Therapy for Adults With Diabetes or Prediabetes: A Consensus Report. *Diabetes Care*. 2019. doi: 10.2337/dci19-0014
8. Møller G, Andersen HK, Snorgaard O. A systematic review and meta-analysis of nutrition therapy compared with dietary advice in patients with type 2 diabetes. *Am J Clin Nutr* 2017; 106: 1394-1400.
9. Aggarwal M, Devries S, Freeman AM, et al. The Deficit of Nutrition Education of Physicians. *Am J Med* 2018; 131: 339-45.
10. Crowley J, Ball L, Hiddink GJ. Nutrition in medical education: a systematic review. *Lancet Planet Health* 2019; 3: e379-e389.
11. American Diabetes Association. 5. Lifestyle management. *Standards of Medical Care in Diabetes*. *Diabetes Care* 2019; 42: S1: S46-S60.
12. Diabetes UK. Evidence-based nutrition guidelines for the prevention and management of diabetes. 2018. Available from: https://diabetes-resources-production.s3.eu-west-1.amazonaws.com/resources-s3/2018-58803/1373_Nutrition%20guidelines_0.pdf.
13. International Diabetes Federation. IDF Clinical Practice Recommendations for managing Type 2 Diabetes in Primary Care. 2017. Available from: <https://www.idf.org/e-library/guidelines/128-idf-clinical-practice-recommendations-for-managing-type-2-diabetes-in-primary-care.html>
14. Colagiuri R, Girgis S, Eigenmann C, Gomez M, Griffiths R. National Evidenced Based Guideline for Patient Education in Type 2 Diabetes. *Diabetes Australia and the NHMRC*, Canberra 2009.
15. The Royal Australian College of General Practitioners. Management of type 2 diabetes: A handbook for general practice. East Melbourne, Vic: RACGP, 2020.
16. Craig ME, Twigg SM, Donaghue KC, Cheung NW, Cameron FJ, Conn J, Jenkins AJ, Silink M, for the Australian Type 1 Diabetes Guidelines Expert Advisory Group. National evidence-based clinical care guidelines for type 1 diabetes in children, adolescents and adults, Australian Government Department of Health and Ageing, Canberra 2011