



IPAN
INSTITUTE FOR PHYSICAL
ACTIVITY AND NUTRITION



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Institute for Physical Activity and Nutrition (IPAN), Deakin University: Submission to the Standing Committee on Health, Aged Care and Sport, Inquiry into Diabetes.

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About the Institute for Physical Activity and Nutrition, Deakin University

The Institute for Physical Activity and Nutrition (IPAN), welcomes the opportunity to have input into the Australian Government Inquiry into Diabetes. At IPAN, we conduct world-leading research into all aspects of physical activity and nutrition across the lifespan, from conception to older age.

Our research is ranked well above world standard (1, 2). It spans from the laboratory to real-world settings, including: studying the biological mechanisms behind exercise, sedentary time and nutrition; using technology and physical activity to prevent and manage chronic conditions; exploring innovative solutions to improve nutrition, increase physical activity and reduce sedentary behaviour in our community; and develop evidence-based food policy.

Through our research, we strive to improve health outcomes in populations all over the world. Our team collaborates nationally and internationally, as well as across disciplines. We are also committed to nurturing a new generation of leading researchers, through a supportive and dynamic research environment.

As diabetes becomes more prevalent across the globe, the need to establish more effective interventions targeting the major modifiable health risk behaviours for prevention and management is increasingly urgent. The Baker-Deakin Department of Lifestyle and Diabetes (the Department) was launched in 2022 as a collaborative partnership between the Baker Heart and Diabetes Institute (the Baker) and IPAN, Deakin University. The Department focuses on promoting lifestyle approaches directed at healthy eating and active living to prevent and manage diabetes. The Department brings together interdisciplinary researchers and health practitioners to establish new evidence on innovative and effective lifestyle approaches.

Response to the four key areas from the Terms of Reference (ToR) for the Inquiry into Diabetes.

ToR 1: The causes of diabetes (type 1, type 2 and gestational) in Australia, including risk factors such as genetics, family history, age, physical inactivity, other medical conditions and medications used.

RECOMMENDATION 1: RECOGNISE UNHEALTHY DIETARY PATTERNS (INCLUDING CONSUMPTION OF ULTRA-PROCESSED FOODS) AND SEDENTARY TIME AS CRITICAL RISK FACTORS FOR DIABETES.

Dietary Patterns

Unhealthy dietary patterns are characterised by low intake of whole grains and cereal fibre, while high intake of red and processed meat, sugar-sweetened beverages and alcohol are associated with an increased risk of type 2 diabetes (3). Higher consumption of monounsaturated and polyunsaturated fats from diverse food sources (e.g. nuts, seeds and oily fish) and lower consumption of saturated fats should be encouraged as part of a healthy dietary pattern for the prevention and management of diabetes (4). Inadequate intake of fruit and vegetables is a risk factor for type 2 diabetes and gestational diabetes mellitus (GDM). In 2017–18, most Australians aged 2 and over (95%) did not meet the 2013 Australian Dietary Guidelines for adequate fruit and vegetable intake (7 serves/day) (5). There is also a growing concern that the consumption of ultra-processed foods is driving type 2 diabetes globally. A recent meta-analysis of international studies found that ultra-processed foods increased the risk for type 2 diabetes as dose-response effect, with moderate to high credibility of evidence (6). However, evidence in Australia is lacking.

Sedentary time

Physical inactivity is well accepted as a risk factor for cardiometabolic diseases including type 2 diabetes and GDM (7). However, sedentary time - time spent sitting or lying down – is an often-overlooked contributor to type 2 diabetes and GDM. Several meta-analyses have shown that sedentary time is associated with the incidence of type 2 diabetes (8-10). This is because time spent being sedentary has been shown to result in substantial reductions (ie. near absence) in skeletal muscle contraction/action, particularly of the lower limbs. This is a critical consideration for the management of glycaemic control for those with or at risk of diabetes, since skeletal muscle is a large user of circulating blood glucose in the body (11). While the recent WHO guidelines state there is moderate evidence for the association between sedentary time and incidence of type 2 diabetes (12), it is acknowledged that evidence gaps remain. These include:

- More evidence including objective measures is needed to define the dose-response relationship between sedentary time and incidence of type 2 diabetes and GDM.
- More evidence is needed which examines how the relationship between sedentary behaviour and incidence of type 2 diabetes and GDM varies by physical activity.
- More evidence is needed which examines how the type or domain of sedentary behaviour alters the association with the incidence of type two diabetes and GDM.

ToR 2: New evidence-based advances in the prevention, diagnosis and management of diabetes, in Australia and internationally

RECOMMENDATION 2: PROMOTE AND SUPPORT THOSE LIVING WITH, OR AT RISK OF, DIABETES TO INCORPORATE HEALTHY EATING PATTERNS INTO THEIR DAILY LIVES AND ADOPT A HOLISTIC APPROACH TO ACTIVE LIVING THAT ADDRESSES BOTH OF THE HEALTH RISK BEHAVIOURS OF PHYSICAL INACTIVITY AND EXCESSIVE SEDENTARY TIME.

Nutrition

There are many ways for Australians to achieve dietary patterns that promote health and wellbeing and reduce the risk of chronic disease. Diet is one of the most important behavioural risk factors that can be improved to have a significant impact on health. As the quality and quantity of foods and drinks consumed has a significant impact on the health and wellbeing of individuals, society and the environment, better nutrition has huge potential to improve individual and public health and decrease healthcare costs (13). Many diet-related chronic diseases such as cardiovascular disease, type 2 diabetes and some forms of cancer are major causes of death and disability among Australians.

Evidence shows the need to shift the focus away from 'low fat' diets with more emphasis on the importance of healthy fats from diverse food sources (e.g. oily fish, nuts, seeds, olive oil) to manage blood glucose (especially postprandially) and risk of diabetes comorbidities e.g. cardiovascular diseases. Healthy dietary patterns such as the Mediterranean Diet have been proven to reduce prevalence of type 2 diabetes and manage blood glucose levels (14). Dietary recommendations should also align with sociocultural preferences and be readily available and affordable.

The WHO has recently released statements regarding artificial sweeteners use (albeit for weight management and carcinogenic risks), which is used to manage blood glucose among people with diabetes (15, 16). Clarification/specific recommendation to this population on this issue is needed.

Digital interventions to enhance dietary behaviours should be adopted to improve access for a larger proportion of individuals including those who live in rural remote or regional communities (17, 18). The evidence shows that co-design of digital dietary interventions that have clear and comprehensive dietary recommendations are more likely to meet consumer needs and to lead to more favourable outcomes (18).

Physical activity and exercise

Informative insights that have come from device-based measurement of physical activity have shifted public health messaging beyond a single focus on planned 'exercise', to now emphasise the importance of having a whole-of-day approach across the physical activity spectrum. This includes addressing all of the waking hour behaviours from sedentary time, to light-intensity activity, to moderate-intensity activity through to vigorous-intensity activity. Specifically, physical activity includes all body movement that uses energy, whereas exercise is planned structured physical activity. The 2016 position statement of the American Diabetes Association (ADA) on physical activity/exercise and diabetes has acknowledged that various types of physical activity can enhance health and glycaemic management in people with type 2 diabetes, including flexibility and balance exercise for older adults (19). The statement recommends that all adults, particularly those with type 2 diabetes, should engage in physical activity regularly and be encouraged to reduce sedentary time and break up sitting time with frequent activity breaks. Any activities undertaken with acute and chronic health complications related to diabetes may require accommodations to ensure safe and effective participation. Furthermore, the ADA statement supports the need for greater emphasis on the acute benefits that a single-session of physical activity/exercise can have on glycaemic control (up to 48 hours post-exercise/activity) (19).

In general, 2018 US Physical Activity Guidelines (20) and the WHO 2020 Guidelines on physical activity and sedentary behaviour (21) apply to all individuals with type 2 diabetes, with a few exceptions and modifications (e.g. contraindications, etc). There is now strong evidence of an interdependent relationship between physical activity and time spent being sedentary, whereby: 1) the benefits that can be derived from physical activity depend on how much time a person spends sitting throughout the day; and 2) the risks associated with too much sitting depend on how much

physical activity a person undertakes, with those who are physically inactive (not meeting recommendations) being the most at risk for the hazards associated with excessive sitting (22).

Researchers from the Baker Heart and Diabetes Institute and Deakin University have developed an evidence-informed risk matrix that provides a simple tool for assessing the interacting influence of sedentary behaviour and physical inactivity on health risks. The risk matrix utilises two simple behaviour risk assessment questions: 1) during a usual 24-hour day, approximately how much time (in minutes) do you spend doing physical activity?, and 2) during a usual 24-hour day, approximately how much time do you spend sitting? The answers to these questions can then be applied to the risk matrix to characterise risk level as low, low-medium, medium, medium-high and high risk. For those identified as having an elevated risk (physically inactive, high sitting time), Deakin University researchers have put forward a strong case for the use of a “staircase approach” to promoting more movement and less sitting (23).

This staircase approach initially focuses on decreases in sitting time, increases in standing and stepping time, progressing to increasing light-intensity activity volumes then to increasing to moderate-vigorous intensity physical activity. Importantly, the staircase approach contrasts with the salutary but formidable primary goal of transitioning from a chronic inactive state to regular engagement in moderate-vigorous intensity activity and improved cardiorespiratory fitness and therefore is appropriate for those living with, or at risk of type 2 diabetes, who experience significant barriers to undertaking regular physical activity. However, more evidence is needed on the efficacy of sitting less and moving more interventions in type 2 diabetes. Addressing barriers to and inequities in physical activity adoption and reducing sedentary time and maintenance is also key (12, 19, 24-26).

Active Travel

RECOMMENDATION 3: INCREASE PHYSICAL ACTIVITY BY PROMOTING ACTIVE TRAVEL AND REDUCING DEPENDENCY ON PRIVATE VEHICLES THROUGH A COORDINATED, CROSS-GOVERNMENT ACTION PLAN.

Active travel is an important source of physical activity. Active travel (any walking or cycling that is done to get from place to place, for all or part of a journey) provides an opportunity to integrate regular health enhancing physical activity into daily life (27, 28). Active travel (commuting) is a powerful way to reduce the risk of developing obesity (a major risk factor for type 2 diabetes and GDM). Cross-sectional analysis of over 10,000 adults, revealed that every additional kilometre walked per day was associated with a 4.8% lower likelihood of obesity (29). Analyses of data from the UK Household Panel Survey revealed that, over a two-year period, adults who switched from using a private motor vehicle to active travel for their journey to work had a significant reduction in their body mass index (BMI) compared with adults who continued to travel in a private motor vehicle (30). Conversely, adults who switched from using an active mode of travel to private vehicular travel for the journey to work, significantly increased their BMI compared with those who continuously used active travel (30). Similar associations have been observed in young people and cycling to school (31, 32). Active travel (commuter cycling) is associated with a lower risk of type 2 diabetes; for example, a Danish study of approximately 50,000 adults aged 50 - 60 years found that even low doses of cycling to and from work (1 - 60 min/week) were associated with an almost 28% lower risk of type 2 diabetes 5 years later, even when controlling for work and leisure time physical activity (33). Australia has some of the lowest rates of active travel in the developed world. Just under 80% of trips to work are by private vehicle while 3.8% are walking trips and 1.6% are cycling trips (34).

To reduce dependency on private vehicles and increase active travel, a coordinated effort across all levels of government is required. These include:

- Create opportunities for local living by designing or redesigning neighbourhoods so that they are more compact, higher density, mixed use, pedestrian friendly neighbourhoods, serviced by frequent and reliable public transport.
- Provide bike lanes that are separated from traffic and connect people to where they want to go, pedestrian crossing points, and adequate end-of-trip facilities.
- By reclaiming road space, traffic calming local streets and introducing traffic restrictions, roads can be made safer for all users. An example is the Liveable Neighbourhoods introduced in the outer boroughs of London. In addition to separated bike lanes on main roads, other local roads were closed to private vehicular traffic, while

allowing walkers and cyclists to travel though. Such a strategy works to promote active travel in two ways - it makes it safer for pedestrian and cyclists, but also disincentivises car travel.

ToR 3: Any interrelated health issues between diabetes and obesity in Australia, including the relationship between type 2 and gestational diabetes and obesity, the causes of obesity and the evidence-base in the prevention, diagnosis and management of obesity.

Prevention of obesity

Infancy and early childhood are a critical but overlooked window for prevention of obesity and diabetes. Rapid weight gain during infancy is a potent risk factor of obesity later in life (35). Maternal BMI, infant birth weight, breastfeeding and infant rapid weight gain act in concert to influence obesity outcomes in early childhood (36). Lifestyle behaviours contributing to obesity originate and track from infancy and early childhood (37).

Higher diet quality, scored according to the 2013 Australian Dietary Guidelines, is associated with lower odds of obesity in Australian men and women (38). The increased consumption of ultra-processed foods is at the centre of the rise in obesity and chronic disease prevalence, and is associated with higher odds of obesity among Australian adults (39-41), which is recognised in the [National Obesity Strategy 2022-2032](#) and the [National Preventive Health Strategy 2021-2030](#).

Physical inactivity and excessive sedentary behaviour are both risk factors for obesity among adults and older adults. For example, a recent meta-analysis of 23 studies with a total of 638,000 adults (42) and older adults reported higher odds of obesity for physical inactivity (not meeting physical activity guidelines) and high levels of sedentary behaviour (eg, sitting more than 8h per day). Promotion of physical activity throughout childhood is critical for the prevention of obesity in the short and long term (43).

Type 2 diabetes, gestational diabetes and obesity

RECOMMENDATION 4: TO ADDRESS THE GAP IN PROVISION OF CARE FOR WOMEN WITH GESTATIONAL DIABETES MELLITUS (GDM), WE RECOMMEND INCREASED RESOURCES IN ANTENATAL CARE FOR MANAGEMENT OF GDM AND PREVENTION OF TYPE 2 DIABETES POSTPARTUM.

More than 60% of Australian adults are overweight or obese which puts these individuals at risk of developing pre-diabetes, type 2 diabetes and GDM. GDM is the most common pregnancy complication and in Australia, affects roughly 14% of all pregnancies (44, 45). Prevalence of GDM in Australia has almost quadrupled over the past decade (44) and among some population groups, prevalence has been shown to be as high as 28% (46). GDM is often driven by maternal obesity and excess gestational weight gain (47) with high pre pregnancy BMI being among the strongest risk factors for GDM (48). GDM impacts both maternal and child health in the short and long term. In addition to increased risk of pregnancy complications, a diagnosis of GDM significantly increases the risk of future type 2 diabetes in later life. Compared to women without GDM, those who have had GDM in pregnancy are up to 18 times more likely to develop type 2 diabetes later in life (49). Moreover, babies born to women with GDM are significantly more likely to be born large for gestational age (48), be overweight in later life and have an increased risk of developing type 2 diabetes (48). Management of GDM in the public health care system involves dietetic intervention to improve maternal and infant health outcomes (45). The optimal delivery of care for women with GDM remains unclear and is a significant gap in the Australian healthcare system (50).

ToR 4: The effectiveness of current Australian Government policies and programs to prevent, diagnose and manage diabetes.

National Diabetes Strategy and Implementation Plan

RECOMMENDATION 5: DEVELOP AND FUND AN UPDATED IMPLEMENTATION PLAN FOR THE AUSTRALIAN NATIONAL DIABETES STRATEGY 2021-2030.

The previous Australian National Diabetes Strategy 2016-2020 Implementation Plan ([Diabetes in Australia: Focus on the future \(health.gov.au\)](https://www.health.gov.au)) clearly outlined a set of national priority actions – many of which have not as yet been achieved. Continued focus and adequate investment in these actions will help deliver the longer-term vision to “Strengthen, integrate and coordinate all sectors to improve health outcomes and reduce the social and economic impact of diabetes in Australia” as set out in the most recent [Australian National Diabetes Strategy 2021-2030 \(health.gov.au\)](https://www.health.gov.au).

National Preventive Health Strategy and National Obesity Strategy

RECOMMENDATION 6: ADEQUATELY FUND THE IMPLEMENTATION AND EVALUATION OF THE AUSTRALIAN GOVERNMENT'S NATIONAL PREVENTIVE HEALTH STRATEGY AND NATIONAL OBESITY STRATEGY.

The [National Preventive Health Strategy](https://www.health.gov.au) (NPHS) provides the overarching long-term approach to prevention in Australia and is underpinned by evidence based approaches. Adequate funding to support the implementation of the NPHS will be critical to supporting the prevention of type 2 diabetes and GDM in Australia.

We support the targets set out in the NPHS, particularly those focusing on food and nutrition and physical activity:

Food and Nutrition targets

1. Align action to address Diabetes with the food and nutrition targets set out in the [National Preventive Health Strategy](https://www.health.gov.au), including those for fruit and vegetable consumption, discretionary foods (%energy), sodium, and added sugars.
2. Australia must develop targets in respect of ultra-processed foods: Reduce the consumption of ultra-processed foods to <20% of total energy intake.

Physical activity and sedentary behaviour targets

3. Align action to address Diabetes with the physical activity targets set out in the [National Preventive Health Strategy](https://www.health.gov.au).
4. Australia must develop targets in relation to reducing sedentary behaviour and screen time.

IPAN, Deakin University, also supports implementation of the [National Obesity Strategy 2022-2032](https://www.health.gov.au), developed by all Australian governments and released in March 2022. This is a 10-year framework to prevent, reduce and treat overweight and obesity in Australia. Long term, multi-partisan support for the implementation and evaluation of the National Obesity Strategy will enable and support prevention of diabetes in Australia.

National Physical Activity Action Plan

RECOMMENDATION 7: DEVELOP A NATIONAL PHYSICAL ACTIVITY ACTION PLAN TO SUPPORT THE PREVENTION AND MANAGEMENT OF DIABETES.

The World Health Organisation (WHO) and the United Nations have committed to reducing physical inactivity across the world by 15% by 2030 (7). To achieve this target, member states, including Australia, have been implored to establish a multi-sectoral national committee or coalition to provide necessary leadership and coordination. Investment and leadership by the Australian Government is vital.

There is an urgent need for Australia to develop a National Physical Activity Action Plan that aligns with the [Global Action Plan on Physical Activity 2018-2030](#) (GAPPA) (21). The Australian government signed up to GAPPA in 2018, but is yet to implement any of the objectives. While the full breadth of the GAPPA objectives should be considered in a National Physical Activity Action Plan, *action 3.2 incorporate physical activity into health and social services*, is particularly relevant to diabetes management. The incorporation of physical activity into primary and secondary health care and social services as part of universal health care is not always done well in most countries, and Australia is no exception.

Physical activity, particularly moderate to vigorous physical activity, is already well-established within clinical guidance as a “first-line” treatment to help improve clinical risk factors and reduce disease progression in people with an increased risk of type 2 diabetes, cardiovascular disease and hypertension (12, 19, 24-26). Despite this well-established evidence base, physical activity intervention or referral is still far from being standard practice and remains comparatively underutilized. This may be due to a multitude of factors including: perceived low compliance or adverse health outcomes, lack of adequate training or inclusion of physical activity guidance in medical curricula, lack of incentives or prioritization, time constraints, and/or medicolegal responsibility.

Two recent studies (21) provide examples of a prioritized set of cost-effective interventions, which incorporate physical activity and are designed for delivery in diverse settings. However, successful adoption and implementation will require appropriate training and adequate resourcing.

There is also a need for stronger and more efficient integration and collaboration between primary/secondary health care and population health jurisdictions. Notably, these two parts of the system unfortunately still tend to mostly function in isolation leading to inefficiencies. One such approach could be to link clinical services to those of other sectors, such as community or population health (e.g., through “community hubs” to provide more targeted physical activity, sedentary behaviour reduction, and other non-pharmacological support/services/approaches for people with chronic conditions). In doing so, health care systems could enhance patient contact/follow-up and improve health outcomes. This could subsequently reduce the duplication of services, and achieve better economies of scale by consolidating services across clinical care and population health programs. Improved integration would also allow clinical practices to match health care services and community support to specific diabetes/multiple long-term conditions needs, thereby better targeting person-centred preventive efforts for higher-risk or more underserved populations and reducing overall health care burden.

A further missed opportunity for the prevention and management of obesity through the healthcare system that could also help reduce inequity, is to broaden access to exercise physiologists via the [Medicare Benefits Schedule](#) by including patients with overweight or obesity as well as through telehealth and telerehabilitation delivery of exercise services for regional/remote and disadvantaged groups. Currently there is no MBS item for allied health support for those with obesity.

National Nutrition Policy and Action Plan

RECOMMENDATION 8: DEVELOP THE NATIONAL NUTRITION POLICY COMMITTED TO IN THE 2022 FEDERAL BUDGET AND COMMIT TO A NUTRITION ACTION PLAN TO SUPPORT THE PREVENTION AND MANAGEMENT OF DIABETES.

The challenges of persistent malnutrition and diet-related chronic diseases are both global and local. Australia has continuing and pressing issues in nutrition insecurity, particularly in disadvantaged and remote communities, as well as well-documented challenges in addressing rising rates of obesity, diabetes and other diet-related chronic conditions. Furthermore, national nutrition surveys are infrequent and irregular, resulting in a lack of current information on the relationship between food intake and health outcomes for Australians.

A constraint on advancing population health targets in Australia is that there is currently no national nutrition policy or plan. However, in 2022 the Australian Government committed funding in the budget to developing a National Nutrition Plan. Such a policy or plan based on robust evidence would provide a framework for sustainable population health

improvement initiatives. We recommend the development of a contemporary framework, which integrates current and new guidelines and programs, including the Australian Dietary Guidelines (under review), Nutrient Reference Values, food labelling initiatives [including review of current 'Health Star Rating' system which provides a health halo for ¾ of ultra-processed foods marketed in Australia (51)], with relevant taxes, laws, and monitoring systems. This will address the cost and prevalence of diet-related chronic diseases, the nutritional needs of vulnerable and disadvantaged Australians and improve food and nutrition security, sustainability, social equity, and productivity (52). Trade agreements influence food environments (53) and we recommend that the Australian Government review and consider the inclusion of ultra-processed food and industrial ingredients in future global free trade agreements, including:

- Focused ultra-processed food and industrial ingredient import volumes
- Actual and bound tariff rates for ultra-processed foods and industrial ingredients - Tariff-rate quotas for ultra-processed foods and industrial ingredients
- Tariff differential (if any) between whole foods (minimally processed grains, whole plant foods) and ultra-processed foods, industrial ingredients
- Anti-dumping and countervailing measures for ultra-processed foods and industrial ingredients.

Increase federal agricultural subsidies to whole fruit and vegetable producers. Evidence suggests that there could potentially be large health benefits for the Australian population and large benefits in reducing health sector spending on the treatment of non-communicable diseases as a result (54).

We explicitly support retaining the GST exemption on healthy foods. The economic, social and environmental payback to invest to lift Australia's low vegetable consumption is compelling. There is a strong evidence base for sustained, collaborative effort: - A 10% increase in vegetable consumption would reduce annual health expenditure in Australia on certain cancers and cardiovascular diseases alone by \$100 million (55) - That is, 10% of national average 2.5 serves = .25 serve or 18.75g of vegetables.

Research

RECOMMENDATION 9: CONTINUE TO PRIORITISE RESEARCH INTO DIABETES, ITS BASIC/ DISCOVERY SCIENCE, ITS COMPLICATIONS AND EFFECTS AND ITS PREVENTION AND MANAGEMENT THROUGH VARIOUS FUNDING CHANNELS INCLUDING THE NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL (NHMRC) AND THE MEDICAL RESEARCH FUTURE FUND (MRFF).

Effective funding of research is critical to reduce the impact of diabetes in Australia. As highlighted in the [Australian National Diabetes Strategy 2023-2030](#), research, evidence and data are key pillars to Australia's response to the diabetes epidemic. Although Australia currently has multiple diabetes research funding streams, research efforts need to be further focused on strengthening evidence-based practice for the prevention and management of diabetes and its complications, implementation research and adequate funding for scaling up successful interventions and informing health policy decisions. Supporting research which is conducted in true partnership with practitioners, policy makers, community organisations and consumers should be prioritised. In particular, adequate funding is required for research into the lifestyle related risk factors for diabetes (nutrition, physical activity and sedentary behaviours) and digital and technological solutions to support people living with diabetes.

Summary of Recommendations

RECOMMENDATION 1: RECOGNISE UNHEALTHY DIETARY PATTERNS (INCLUDING CONSUMPTION OF ULTRA-PROCESSED FOODS) AND SEDENTARY TIME AS CRITICAL RISK FACTORS FOR DIABETES.

RECOMMENDATION 2: PROMOTE AND SUPPORT THOSE LIVING WITH, OR AT RISK OF, DIABETES TO INCORPORATE HEALTHY EATING PATTERNS INTO THEIR DAILY LIVES AND ADOPT A HOLISTIC APPROACH TO ACTIVE LIVING THAT ADDRESSES BOTH OF THE HEALTH RISK BEHAVIOURS OF PHYSICAL INACTIVITY AND EXCESSIVE SEDENTARY TIME

RECOMMENDATION 3: INCREASE PHYSICAL ACTIVITY BY PROMOTING ACTIVE TRAVEL AND REDUCING DEPENDENCY ON PRIVATE VEHICLES THROUGH A COORDINATED, CROSS-GOVERNMENT ACTION PLAN.

RECOMMENDATION 4: TO ADDRESS THE GAP IN PROVISION OF CARE FOR WOMEN WITH GESTATIONAL DIABETES MELLITUS (GDM), WE RECOMMEND INCREASED RESOURCES IN ANTENATAL CARE FOR MANAGEMENT OF GDM AND PREVENTION OF TYPE 2 DIABETES POSTPARTUM.

RECOMMENDATION 5: DEVELOP AND FUND AN UPDATED IMPLEMENTATION PLAN FOR THE AUSTRALIAN NATIONAL DIABETES STRATEGY 2021-2030.

RECOMMENDATION 6: ADEQUATELY FUND THE IMPLEMENTATION AND EVALUATION OF THE AUSTRALIAN GOVERNMENTS NATIONAL PREVENTIVE HEALTH STRATEGY AND THE NATIONAL OBESITY STRATEGY.

RECOMMENDATION 7: DEVELOP A NATIONAL PHYSICAL ACTIVITY ACTION PLAN TO SUPPORT THE PREVENTION AND MANAGEMENT OF DIABETES.

RECOMMENDATION 8: DEVELOP THE NATIONAL NUTRITION POLICY COMMITTED TO IN THE 2022 FEDERAL BUDGET AND COMMIT TO A NUTRITION ACTION PLAN TO SUPPORT THE PREVENTION AND MANAGEMENT OF DIABETES.

RECOMMENDATION 9: CONTINUE TO PRIORITISE RESEARCH INTO DIABETES, ITS BASIC/ DISCOVERY SCIENCE, ITS COMPLICATIONS AND EFFECTS AND ITS PREVENTION AND MANAGEMENT THROUGH VARIOUS FUNDING CHANNELS INCLUDING THE NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL (NHMRC) AND THE MEDICAL RESEARCH FUTURE FUND (MRFF).

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