





### **National Diabetes Services Scheme**

The NDSS is an initiative of the Australian Government administered by Diabetes Australia. The NDSS provides information, support and services and diabetes-related products at subsidised prices to people living with diabetes.

Registration is free and open to all eligible people in Australia diagnosed with diabetes.

For more information, visit ndss.com.au or call the NDSS Helpline on 1800 637 700.

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Whether you have been living with diabetes for a while, or have just been diagnosed, getting older can change the way you manage your diabetes. This booklet gives you information to help you manage your diabetes as you grow older.



Ageing involves physical and mental changes that can affect sight, hearing, memory, sensation, balance, mobility and other functions. How the ageing process affects these functions is different for everyone.

These kinds of changes can make it difficult to continue taking care of yourself and stay independent. It is important to stay connected with others and to do the things you enjoy, as this enables you to continue feeling good and have a sense of control as you age. This may mean changing the way you do some things. For example, if you love reading but have trouble with your sight, you could try listening to an audio book instead.

It can be difficult to tell the difference between symptoms caused by diabetes, and those that are part of the normal ageing process.

# Getting older can mask some symptoms of diabetes.

**Example 1:** When you were younger, and your blood glucose levels were high, you may have felt thirsty. As you get older, you may lose your sense of thirst if you have high blood glucose levels. This may affect the way you manage your diabetes and may unknowingly cause you to become dehydrated.

**Example 2:** As your body ages, the way it absorbs medicine can change. This could affect your blood glucose levels and the way you manage your diabetes.



Not everyone with diabetes will need to self-monitor their blood glucose levels. However, if you do self-monitor, your target range may need adjusting as you get older.

The target range for blood glucose levels of older people living independently is generally between 4 and 10 mmol/L. This may increase to between 6 and 15 mmol/L if you take certain types of medicines for your diabetes, become frail, have other health problems or are at risk of falls.

Your doctor should review your target blood glucose range regularly and help you decide what target range is best for you.

One reason for regular monitoring is to make sure your blood glucose levels do not go too low – known as hypoglycaemia or 'hypo' (see page 8). The older or frailer you become, the more a hypo can affect you. For example, a hypo can result in falls, confusion and even loss of consciousness.

Blood glucose meters and other devices used to help manage your diabetes need regular review, testing and upgrading. Your credentialled diabetes educator or pharmacist may be able to help you with this. Once you turn 65, ask your doctor to review your blood glucose targets regularly.



Hypoglycaemia (often known as a 'hypo') means a low blood glucose level. It can occur in people who inject insulin or take certain diabetes medicines. It is usually not a problem for those who manage their diabetes through a healthy eating and exercise alone. Check with your doctor if you are at risk of developing hypoglycaemia.

Ageing can increase your risk factors for hypoglycaemia. These risk factors include having a poor appetite, being on four or more medicines, or having kidney disease or other conditions.

There are a number of common causes of hypoglycaemia in older people including:

- » having too much insulin or other diabetes medication in your system
- » losing your appetite, skipping meals or not eating as much as you used to
- » fasting (for example, during Ramadan or before surgery)
- » if you are sick with vomiting and/or diarrhoea
- » doing extra physical activity
- » not eating enough carbohydrate foods
- drinking alcohol.

Some oral diabetes medicines can increase your risk of hypoglycaemia, so it is important to talk to your doctor about this. It might be possible to change the medicine to something with a lower hypo risk.

You may find that your hypoglycaemia warning signs change as you get older. When you were younger, early warning signs of hypoglycaemia may have included hunger, sweating, weakness, trembling, headache, dizziness, and tingling of the mouth and lips. As you get older, your warning signs may become less obvious. You may just feel tired or confused, or you may feel nothing at all. If you think your warning signs have changed, please discuss this with your doctor or diabetes educator.

## What can you can do to manage hypoglycaemia?

- Talk to your healthcare team about your risk of hypoglycaemia and when to monitor for hypoglycaemia.
- » Have a plan for managing hypoglycaemia. Make sure your family and friends know about this.
- When you have a change in medicines or your health changes - review your plan for managing hypoglycaemia with your doctor or credentialled diabetes educator.
- » Have a hypoglycaemia kit ready (including your blood glucose meter, and your hypoglycaemia treatments), and take it with you whenever you go out.

It is important for you and your family to know what to do if you experience hypoglycaemia. Talk to your healthcare team about developing a hypoglycaemia plan personalised to your risk.

### **Hyperglycaemia**

Hyperglycaemia is when your blood glucose levels are too high. Usually this is a blood glucose level greater than 15.0 mmol/L. If you are self-monitoring your blood glucose levels, a high reading every now and then is not usually a problem (see below causes of hyperglycaemia to work out what could be causing the high reading). However, if you notice a daily pattern of high blood glucose levels, or are experiencing any of the symptoms below, it is important to contact your doctor or diabetes educator.

If you are not self-monitoring your blood glucose levels, keep an eye out for hyperglycaemia symptoms. Common symptoms of hyperglycaemia are:

- » increased thirst
- » passing more urine than usual
- » blurred vision
- » feeling more tired than usual.

As you age, these symptoms may become less obvious, or you may think they are just part of normal ageing. It is important that you discuss any of these symptoms with your doctor or credentialled diabetes educator.

Common causes of hyperglycaemia include:

- » missing or not taking enough insulin or glucose-lowering medications
- » eating more carbohydrate food than usual
- » being less active than normal
- » being sick or having an infection or injury
- y feeling stressed (emotionally or physically)
- y taking certain medications such as oral or injected steroids
- » having your insulin pump not work properly.

If you have a blood glucose level over 15 mmol/L and you are not sure what to do, or if you are feeling unwell, contact your doctor or credentialled diabetes educator.

Also refer to "Managing sick days" on page 6.



You may find it harder to manage your diabetes when you are sick. When you are feeling unwell, you need to take extra care.

It is important to be prepared for when you are sick and have a personalised sick day management plan ready to use at the earliest sign of feeling unwell. Write a sick day management plan with your doctor or credentialled diabetes educator. Make sure that you give a copy of the plan to your family and friends so they also know what to do.

Your sick day management plan should include the following:

Step	Example			
	Type 1 diabetes	Type 2 diabetes		
1. When to use this plan				
» When you are feeling unwell.				
» When your blood glucose levels are (discuss with doctor or credentialled	<b>O</b> (	nmol/L) for a certain amount of time		
2. Who to contact				
Family, friends and neighbours. Include your doctor's or credentialled diabetes educator's contact details. If you live alone, it is important to tell someone you are unwell so they can check on you.				
3. Monitoring				
Blood glucose levels	Every 2 hours	Every 2-4 hours		
Blood ketone levels	Every 2 hours	Usually not necessary, unless you are taking a SGLT2 inhibitor.* Ask your doctor or credentialled diabetes educator for advice.		

Step		Example
	Type 1 diabetes	Type 2 diabetes
4. Medicines(excluding insulin)	N/A	Discuss this with your doctor.  If you have been vomiting or have diarrhoea, you may need to stop certain medicines e.g. metformin, empaglifozin (Jardiance®), dapagliflozin (Forxiga®).
5. Insulin	Ask your doctor or credentialled diabetes educator to work out a dose adjustment plan with you.	Never stop taking your insulin Your insulin dosage may change depending on your glucose levels, ketones and any vomiting and diarrhoea.
6. Drinking and eating	Keep drinking and eating if possible. It is important to drink extra fluid every hour to avoid becoming dehydrated. Discuss with your doctor or credentialled diabetes educator what is right for you.	Continue to eat regularly and drink half a cup (125ml) of unsweetened fluid every hour.  If you are unable to eat and:  your blood glucose level is below 15mmol/L: drink sweetened fluids  your blood glucose level is above 15mmol/L: drink unsweetened fluids.
7. Know when to go to hospital or c Go to the hospital or call your doctor in	-	
Are concerned about low blood glucose levels or experiencing hypoglycaemia (hypo).	<i>v</i>	V
Have ketones that are moderate to high.	~	Usually not necessary, unless you are taking a SGLT2 inhibitor.*
Have high blood glucose levels and you do not know what to do.	<b>v</b>	<b>✓</b>
Cannot keep food or fluids down and have persistent vomiting, diarrhoea and/or abdominal pain.	V	•
Continue to be unwell, become drowsy or breathless.	<b>~</b>	•
Have a 'fruity' odour to your breath (you may be at risk of diabetes ketoacidosis).	~	Usually not necessary, unless you are taking a SGLT2 inhibitor.*
Are unsure what to do (and your support person is also unsure).	~	~

\*There are certain diabetes medicines that do place you at risk of ketones. These medicines are called SGLT2 inhibitors, including dapagliflozin (Forxiga®) and empagliflozin (Jardiance®). Ask your doctor or diabetes educator if you are taking any of these medicines.

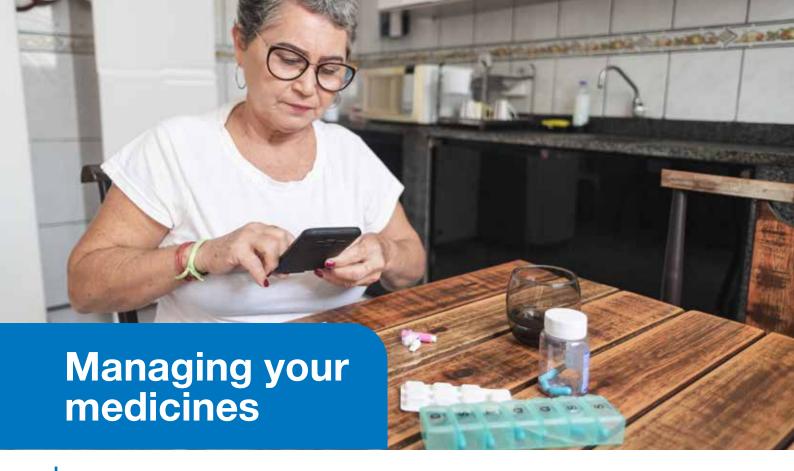
### **Key contacts**

If you feel hesitant to bother other people when you are unwell, remember it is often better to get help early, rather than waiting. Make sure you let those on your contact list know when you are feeling unwell. If you are not sure whether you need an ambulance, it is better to be safe and check. Ring 000 and talk to the operator, and they will help decide whether you need an ambulance or some other service. Your safety is the most important thing.

If you have a mobile phone or a digital home phone, it is a good idea to program essential numbers into that phone. You can also fill in the missing numbers in the following table and keep it handy so you can find it quickly if you, or a relative or friend, needs to call for help.

Contact	When	Phone number
Ambulance	If you are seriously ill, or if you are not sure whether you need to go to the hospital	000
Healthdirect Australia	If you are sick after hours and you are not sure what to do	1800 022 222
Your doctor	If you are sick during surgery hours and you want to see a doctor or are not sure what to do	
Your credentialled diabetes educator, community nurse or care coordinator	For information or advice	
Your emergency contact (family or friend)	To let them know you are unwell, especially if you feel worse	

If you do not already have a personal alarm, you may want to consider getting one. Personal alarms are devices that can be used to alert a family member, a friend or a monitoring service in a medical emergency. If you live alone, a personal alarm may help you to feel safe and stay independent in your own home. It will also reassure your family and friends that if you are in trouble you can easily call for help. Talk to someone in your healthcare team if you think this might help you.



Ageing increases the chance of developing other medical conditions in addition to diabetes. This can lead to the need for extra medicines or changing the medicines you are already on.

Your doctor may review your medicines for diabetes and change them to work better with your daily routines and reduce issues like hypoglycaemia. Having a poor appetite, changing your level of physical activity, or missing meals or medicines due to memory problems can affect how your medicines work.

## Some tips to help you manage your medications:

- » If you take insulin, ask your doctor or credentialled diabetes educator about getting an insulin pen cap that automatically records your insulin use and dosage.
- » Dose Administration Aid: Talk to your pharmacist about whether a dose administration aid (such as Webster-pak®) can help you remember to take your medicine. These are made up by your pharmacy and separate your medicines into days and times, making it easy to check whether you have taken your medication.
- Calendar or diary: Mark the dates and times on a calendar to help keep track of when to take your medications.

- Home Medicines Review: If you are concerned about the number of medicines you are taking and how they interact, you can ask your doctor to arrange a Home Medicines Review for you. A pharmacist will visit you at home and go through the medicines you take and your daily routines. The Home Medicines Review will provide your doctor with recommendations about how best to manage your treatment in line with your lifestyle routines and health conditions. It is also an ideal opportunity to find out more about your medicines, including how to take them for the best results and to minimise any side effects. From there, your doctor will work with you on any necessary adjustments.
- » Diabetes MedsCheck: Many community pharmacies offer a service called a Diabetes MedsCheck. This is an in-pharmacy review with a focus on your diabetes medicines management, monitoring devices, education and self-management. This service is targeted at people who cannot access other diabetes education or health services in their community.

3 1300 MEDICINE: In addition to your doctor, pharmacist and credentialled diabetes educator, the Australian Government's 1300 MEDICINE service is also available to help you with any questions you may have about your medications. You can call 1300 633 424 from Monday to Friday, 9am-5pm AEST.

The way your body uses medicines can change with age, and medicines can work differently if you have a poor appetite, miss a meal or become less active.



Many older people worry about their ability to think clearly and remember things. For most older people, thinking and memory stay relatively intact in later years. However, if you, your family or friends notice that you are having problems remembering recent events or thinking clearly, let your doctor know.

Here are some tips for helping with memory loss if it affects you:

- Tick it off: Keep a diary or checklist recording which medicine you took and when you took it.
- » Use an aid: Talk to your pharmacist about a dose administration aid or a Webster-pak® (refer to "Some tips to help you manage your medications:" on page 9).
- » Ask your pharmacist: Ask your pharmacy whether they can send you a reminder for a new prescription or re-supply.
- » Keep a record: Make a note of your blood glucose results in a blood glucose level record book, to make it easy to track when you last checked your blood glucose level.
- Set yourself reminders to check your blood glucose levels using alarms on your watch or phone, or sticky note reminders.
- Weep them close: Keep your meter and medicines in an easy-to-spot place such as on the kitchen bench or next to your phone.

- Get a friendly reminder: Have a family member or friend remind you to check your blood glucose levels or take your medicines.
- "Use memory devices: Talk to your doctor or credentialled diabetes educator about devices that may be available to help you. These include blood glucose meters with built-in alarms to remind you to monitor your blood glucose levels throughout the day, and insulin pens with a built-in memory that can recall the time and how many units of insulin you injected.

All people with diabetes over the age of 65 should have their memory checked by their doctor once a year.



Older people have a higher risk of falls that cause serious injuries. Having diabetes increases this risk further. This is because blood glucose levels that are too high or too low can impact how you feel and move. Diabetes can also affect your vision, balance and the feeling in your feet.

- Tell your doctor: If you have a fall, let your doctor know, even if you have not hurt yourself. That way your doctor can work out what caused the fall and how to reduce the risk of falls in the future. Your doctor may refer you to an occupational therapist who can come to your home, assess it for falls risks and make suggestions to reduce the likelihood of falling.
- » Review your medicines: The more medicines you take, the greater your risk of falls. If you take more than four medicines, ask your doctor or pharmacist if your medicines should be reviewed.
- » Get physical: Be more physically active to improve your balance, strength and flexibility (refer to "Physical activity" on page 14).
- Choose sensible shoes: Wear properly fitting, sturdy shoes with non-skid soles. Avoid wearing high heels, floppy slippers, thongs and stockings or socks with no shoes, as they can make you slip, stumble or fall. Your doctor may refer you to a podiatrist who can check your feet and advise you on suitable footwear. This is particularly important if you have lost feeling in your feet or are at risk of foot ulcers.

- Put safety first: Look around your home to see how you can make it as safe as possible. Think about hazards both inside and outside, such as loose carpets, electrical cords or hoses in walkways, or items in hard-to-reach cupboards.
- » Light the way: Keep your home brightly lit to avoid tripping on objects that are hard to see.
- » Share your fears: Let your doctor know if you are worried about falling or if you have had a fall, even if you have not hurt yourself.
- Make a plan: Ask your doctor to develop a falls action plan for you so you know what to do if you have a fall.

If you have had a fall already, or you are at risk of falling, consider getting a personal medical alarm. If you live alone, a personal alarm may help you to feel safe and stay independent in your own home. It will also reassure your family and friends that if you are in trouble you can easily call for help.



Older people need to eat well to get enough energy and nutrients for good health. Eating well also helps manage blood glucose levels, cholesterol and blood pressure.

To eat well it is important to:

- » eat a variety of foods from the five food groups
- » drink plenty of fluids every day, preferably water
- » manage your weight based on your height, age and health
- » be as active as you can be
- y take your diabetes medicines with food, or as advised by your doctor or pharmacist.

Ask your doctor what a good weight range is for you. Always talk to your doctor first before trying to lose weight. Weight loss in people over 65 may be harmful to maintaining good health.

You should contact your health care team if you:

- » lose your appetite
- are losing weight without trying
- » experience incontinence or constipation
- » have a sore mouth, gums or teeth, or have trouble with your dentures or swallowing
- » have trouble grocery shopping or cooking.

The NDSS has a free booklet, *Healthy* eating – a guide for older people living with diabetes, which is available by visiting ndss.com.au or by calling the NDSS Helpline on 1800 637 700.

The booklet covers topics such as nutrition and daily food needs as you age.



No matter what age you are, being physically active is one of the most important things you can do for your health. How active you are will depend on your lifestyle and health.

The Physical activity and exercise guidelines for all Australians recommends people 65 years or older do at least 30 minutes of moderate activity on most (preferably all) days of the week.

If you are not this active, talk to your doctor before starting any physical activity. You doctor may refer you to an exercise physiologist to develop an exercise plan specific to your needs.

After talking to your doctor, begin slowly and build up: for example, if you are aiming for 30 minutes of walking per day, start with 10 minutes once or twice a day. After two weeks, make it 15 minutes twice a day and you will have reached your goal of 30 minutes a day.

There are many ways you can keep active such as walking, gentle swimming, working in the garden, washing the car, dancing or Tai Chi. Being physically active in the company of other people can be very social and can keep you motivated and committed.

Try walking with a family member, friend or neighbour, or see what senior classes your local council offers. It is important to do a range of activities that include fitness, strength, flexibility and balance. If you are not sure how to do all these types of activities, or you are not sure what activities are suitable for you, talk to your doctor or an exercise physiologist. They can help tailor a program just for you.

You are never too old to start exercising. Talk to your doctor first, then start off slowly and build up—and do it with a friend.



Many older people face significant life changes that can increase the risk of anxiety and depression. Loneliness, loss of purpose, fears about the future and bereavement can cause feelings of helplessness and depression. These can feel worse when living with a chronic (ongoing) health condition like diabetes.

Symptoms of anxiety and depression in older people are sometimes not recognised, because they can be seen as part of 'growing old'. It is important for you to talk to your doctor or another health professional about getting the right advice and support.

Seek help if you have any of the following symptoms for at least two weeks:

- y feeling sad
- » feeling tired, sleep a lot or have daytime sleepiness
- » trouble falling or staying asleep
- » unexplained or aggravated aches and pains
- reluctance to be with friends, participate in activities or leave your home
- » weight loss or loss of appetite
- » lack of motivation or energy
- » slowed movement or speech

- neglecting your personal care (such as skipping meals, forgetting your medicine or neglecting personal hygiene)
- » frequently worrying or feeling concerned about a number of things in your life, including your health
- y feelings of worthlessness or self-loathing
- » being fixated on death or having thoughts of harming yourself or suicide.

If you or someone you know has feelings of anxiety and depression, speak to your doctor

If you need to talk to someone immediately, please contact:

Beyond Blue 1300 22 46 36

Lifeline 13 11 14.



It is common for older people to develop other chronic health conditions in addition to diabetes. This may mean seeing different healthcare providers and taking multiple medications.

Managing your diabetes can become more difficult with age. Communication is the key: ask questions of all of your health care providers, and make sure they are all talking to each other about your treatment as well.

Here are some tips if you have multiple health conditions and several health professionals are caring for you:

- » Have regular medical check-ups.
- Make sure members of your healthcare team are talking to each other about your care. To help, have your GP be the central point of care. Ask your healthcare team (such as your dietitian or specialist) to send copies of your results to your GP.
- Make sure each member of your healthcare team knows what your health priorities are.
- » Be informed and do not be afraid to ask questions or to seek a second opinion or referral to a specialist.

» If you have any concerns about your medicines, talk to your pharmacist or doctor (see "Managing your medicines" on page 9)

The NDSS has a free booklet *You* and your health care team - a guide for older people living with diabetes, which is available by visiting ndss.com.au or by calling the NDSS Helpline on 1800 637 700. The booklet provides information to help you work with your health care team.



As you get older it is important to make decisions about your future. These can include when to get extra help at home, or when to move into an aged care facility. Even considering the type of care you may need towards the end of your life is important. While these things are difficult to talk about, letting people know how you want to live later in life will help ensure you have the best quality of life.

It is a great idea to involve your doctor in these decisions, as they can often refer you to the right people or organisation who can help further. Here are some things you could discuss with them:

An Aged Care Assessment Team (ACAT) review: Your doctor can organise this if you need some extra help at home or if you are thinking about moving into an aged care facility. In most states, it is undertaken by an ACAT but in Victoria it is called the Aged Care Assessment Service (ACAS). Some people feel worried about the idea of an assessment, but it is just a way of working out how much help you need and what type of care or services you are eligible for. It is a free service. For the most upto-date information about ACAT or ACAS and getting help at home, visit myagedcare.gov.au or call 1800 200 422

Advance care planning: Advance care planning is a process that helps you plan for future medical care. It is relevant at any age. The planning process involves thinking about your values and beliefs and your wishes about what medical care you would like to have if you are not able to make your own decisions. An important part of the planning process is to discuss your wishes with your family and other people close to you, as well as talking to your health care team. You may also choose to write down your wishes in an Advance Care Directive. A good way to start this process is to talk to your doctor.

You are never too young to start planning for the future. Talk to your family and doctor about an Advance Care Directive.



# **Checklist**

w is a checklist of helpful tips to support etes management and healthy ageing.
Have your doctor regularly review your blood glucose levels and target range.
Ask your doctor or credentialled diabetes educator to assess your risk of hypoglycaemia. If needed, develop and review and review your hypoglycaemia plan with your healthcare team (if you inject insulin or take certain medicines for your diabetes).
Develop or review your sick day management plan with your healthcare team.
Ask your healthcare team to regularly review your:
» medicines
» memory
» falls risk
» food choices
» physical activity
» emotional wellbeing.
Make sure members of your healthcare team are talking to each another about your health management.
Consider getting a personal medical alarm.
Talk to your family and doctor about an Advance Care Directive.

For more information about diabetes, visit ndss.com.au or call your state or territory diabetes organisation through the NDSS Helpline on 1800 637 700.

# **Notes**

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