NDSS
National Diabetes Services Scheme
An Australian Government Initiative

Diabetes Yarning: All about diabetes

diabetes australia

The NDSS is administered by Diabetes Australia

Version 5. 10 August 2023. First published July 2021.

Diabetes Australia pays respect to the many Nations, Language Groups and Clans across these lands and recognises the continual custodianship, ownership and obligations of elders, past, present and emerging.

Aboriginal and Torres Strait Islander viewers are advised that this booklet contains names and images of Aboriginal and Torres Strait Islander people who may have passed on and images that may cause distress. We acknowledge the hardships and sacrifices made by our elders, depicted through their stories, as we continue to write our own.

This booklet was developed by Diabetes Australia and funded through the NDSS.

It was developed in collaboration with Aboriginal and Torres Strait Islander health professionals throughout Queensland and provides information about diabetes. Information presented in this booklet will provide a foundation for the reader to continue their personal health journey through registering with the NDSS; talking to their local Aboriginal or Torres Strait Islander Health Worker or Practitioner, attending workshops, conducting independent research or having discussions with family, friends and community.

While the information has universal appeal, the booklet has been written specifically for Aboriginal and Torres Strait Islander people. Information is presented from a cultural perspective reflecting the experiences that are specific to Aboriginal and Torres Strait Islander people whether First Nations people of Zenadth Kes, Koories, Goories, Palawas, Nungas, Noongahs, Yamatji, Yolngu, Murries, Murrdi or Bama.

We acknowledge that there is no single First Nations experience and we encourage the reader to share and continue the yarn with family, friends, community or health team.

About The National Diabetes Services Scheme

The National Diabetes Services Scheme (NDSS) is an initiative of the Australian Government that commenced in 1987 and is administered by Diabetes Australia.

We would like to thank the following people who appear in this booklet. Auntie Deb Nagas, Uncle George Elarde, Jason Murphy, Suzan Chapman, Sheringa Minniecon, Manea Minniecon-Geia, Rita Mabo, Thomas Loban, Michael Muhamad, Elsie and Wigness Seriat, Fauzia Mosby, Shakira Pedro and her daughter Erina Wineera, Frankee Loban, Sam Mills, Deb Lui, Walter Shibasaki and Ellen Ronsen.

The purpose of this booklet is to encourage more yarning about diabetes, increase diabetes knowledge, guide you to peer support and encourage registration with the NDSS.

The NDSS Helpline on 1800 637 700 can provide advice on managing your diabetes and available support programs.

Contents

Physical, social and emotional health and wellbeing
Before others came and settled on our lands, our people, the animals, plants, skies and waters and our spiritual and physical environments were all in balance.

Before time

Before Time: our food

Our food came from nature. Nature provided the perfect balance of carbohydrates, fats and proteins.

Carbohydrates to fuel our bodies came from seeds, honey, fruits and roots.

Our fats came from oily fish, nuts and some seeds.

Proteins to build and repair our bodies came from fish, turtle, dugong, goanna, kangaroo, grubs and birds.

Before Time: physical activity

Our hunting, gathering and farming lifestyles meant there was a lot of physical activity in our lives.

Our cultural and ceremonial practices also meant that our lives were filled with activity.

This included visiting extended families and neighbours, getting together for cultural ceremonies and engaging in trade.

Changes

Changes to our food

After others came and settled in our lands, there came many changes. These included losing access to the lands and waters that provided nature's carbohydrates, fats and proteins. New diets incorporated processed foods such as flour and sugar. These rations replaced much of the foods we hunted, gathered and farmed.

Island Industries Board store on Saibai Island. CC 2.0 license.

Changes to physical activity

Without access to our lands and waters, there was no opportunity for physical activity through hunting, gathering and farming.

The separation from our families and the restrictions on our movement affected our cultural and ceremonial practices and affected our physical activity as we moved less.

Girls Dormitory, Palm Island, 1931. Photograph by the State Library of Queensland, Digital Image ID 5813. CC 2.0 license.

Changes to our health

These changes threw our health out of balance. After thousands of years of living healthy, diabetes is now a common condition in our community. The first diagnosis of diabetes among our people was recorded in 1923. If we acknowledge and learn from what happened to us in the past, we can create a new future. A healthy future.

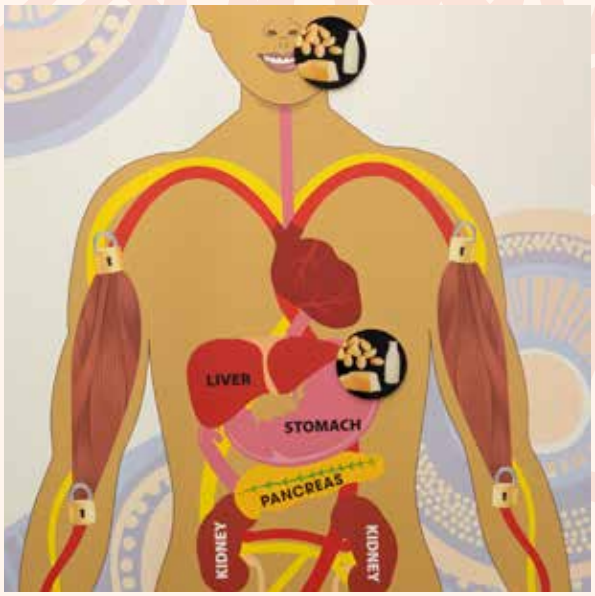
How our body works

Before we learn about diabetes, it is important to know how our body works.

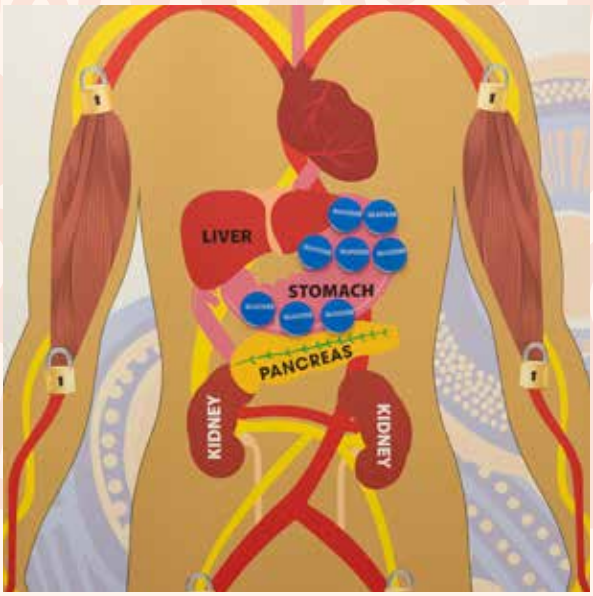
Our muscles and brain need glucose to work properly. Glucose is a simple form of sugar that gives us energy to walk, run, jump, move and think.

Glucose also helps parts of our body like our heart, liver and kidneys to work properly. It's important that our body has enough glucose, but not too much.

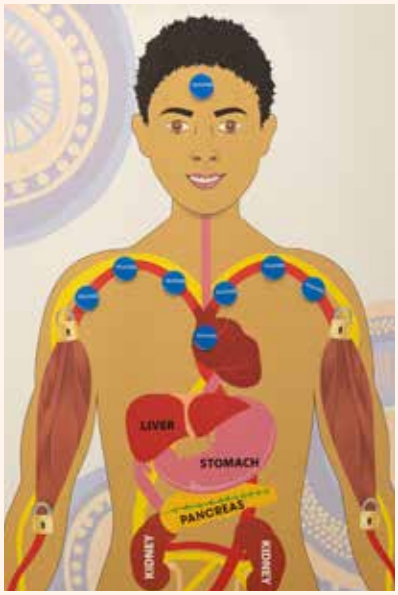
Where do we get glucose from?
We get glucose from carbohydrate foods. For thousands of years, our carbohydrate foods included bananas, quandongs, bush plums, taro, waterlily and of course sugarbag honey. These days, much of our carbohydrate food includes bread, milk, rice, pasta, fruit, potatoes, soft drink and lollies.



When we eat carbohydrate food, like bread, it travels down into the stomach and intestines.



In the stomach, the carbohydrate from the food is digested and broken down into glucose.



The glucose is absorbed from the stomach and intestines into the bloodstream.

It travels to all parts of the body, including the brain and muscles to give us energy.

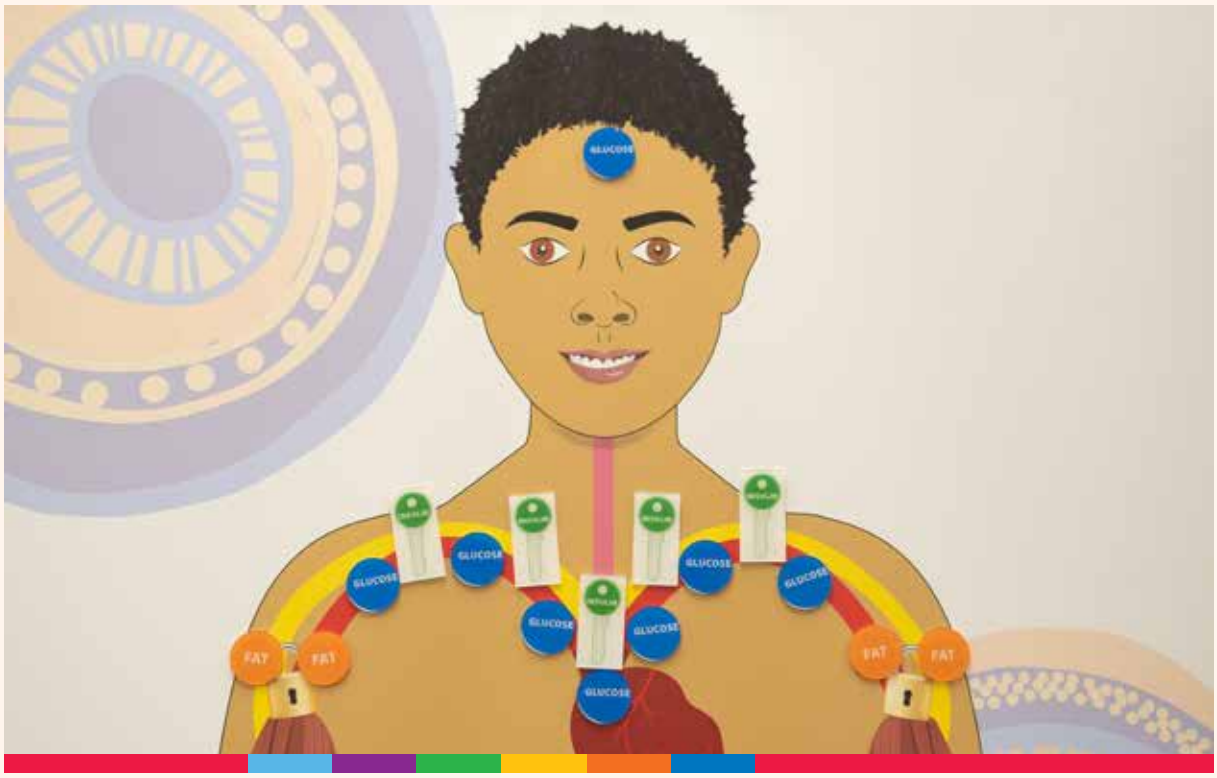
Glucose can get straight into the brain, but it needs help to get into the muscles.

Muscles have receptors on them that are like locks that need to be opened to let glucose in.

Insulin is a hormone made in the pancreas which is like a key that opens the locks.

When there is a rise in glucose in the bloodstream, a message is sent to the pancreas to produce and release insulin.

The insulin travels through the bloodstream and unlocks the pathway into the muscles. This means our body can now use the glucose for energy.



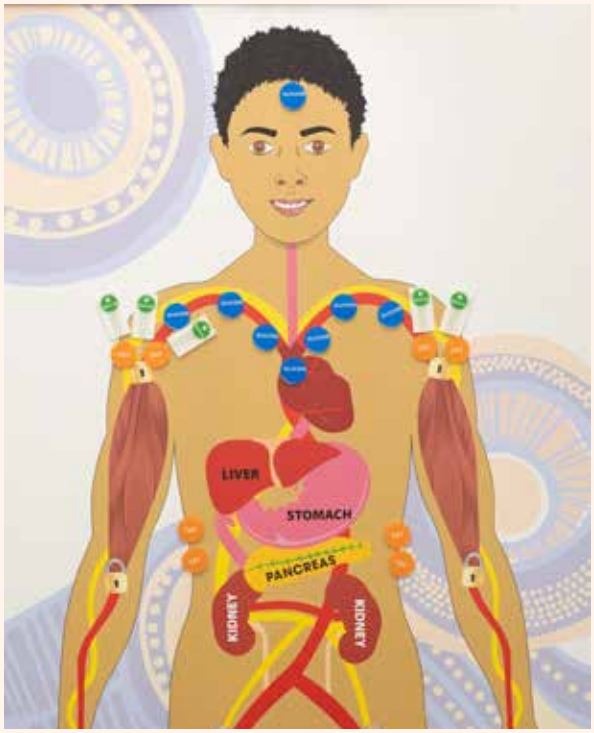
Diabetes: what happens in our body

Diabetes is a condition where there's too much glucose in the blood.

The level of glucose in our blood is controlled by insulin.

Type 2 diabetes happens when our insulin does not work as well as it needs to and our body is not able to make enough insulin.

With type 2 diabetes there is reduced sensitivity to the insulin we produce. This is known as insulin resistance and is shown with the insulin key struggling to open the lock on the muscle in the image on the right. This leads to the body having to make more and more insulin to keep blood glucose levels in a healthy balance. Over time, insulin production is reduced as the pancreas wears out.



Without enough insulin some of the glucose can't enter the muscles and it builds up in the blood. When glucose levels in our blood are too high and remain too high, it is harmful to our body.

Some people in our community have **type 1 diabetes.** It happens because the body's immune system attacks part of the pancreas where it makes the insulin. We cannot prevent it, but we can manage it. Because the person with type 1 diabetes produces no insulin, glucose cannot get into the cells for energy. We all need insulin every day to live. People with type 1 diabetes inject their insulin.

Insulin is also used by some people who have type 2 diabetes to reduce the glucose levels in the blood. This does not mean they have type 1 diabetes. They have type 2 diabetes and are now using a medicine called insulin, which helps move glucose levels into a healthy range.

Another common type of diabetes in the community is **gestational diabetes.** This diabetes happens only during pregnancy. During pregnancy some of the hormones decrease the action of insulin and the pancreas has to produce extra insulin during this time to keep glucose levels in a healthy balance.

If the pancreas is unable to produce enough insulin, the glucose levels become high. High glucose levels are passed through to the baby.

Healthy glucose levels keep mum and bub healthy. In most cases when bub is born, glucose levels return to a healthy balance.

Symptoms

We may notice changes in our body often before we even know we have diabetes. These changes are because our body is trying to get rid of or manage high glucose levels. Some symptoms may be:

Feeling tired

Carbohydrates break down into glucose which provides our muscles with energy. Being tired comes from not being able to get energy from what we eat.

Going to the toilet more often

Increased urination, or peeing a lot more than usual, is the body's attempt to flush out the excess glucose.

Feeling thirsty

Peeing a lot more than usual takes water with it, making us thirsty to replace this water. Often it is a thirst that can't be satisfied.

Blurred vision

This happens when the high glucose levels change the shape of our lens in the eyes.

Wounds that are slow to heal

High levels of glucose in the blood affects the circulation and the immune response in the body. This means it takes longer for cuts, bruises and wounds to heal. And wound infections are more common.

No symptoms

Some people may not notice symptoms until their glucose levels are quite high and even then they may dismiss them because of hot weather, life changes or as part of getting older.

All of these symptoms can disappear when glucose levels are in the healthy range again.

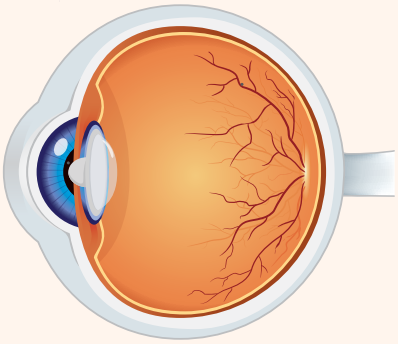
Complications: due to high glucose levels

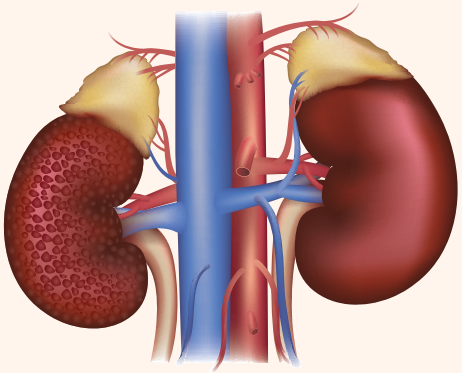
Too much glucose in the blood makes us sick particularly when we do not get treatment.

Complications of consistently high glucose levels happen because of damage to our capillaries, veins and arteries (vessels) that carry our blood around our body.

Small Blood Vessels

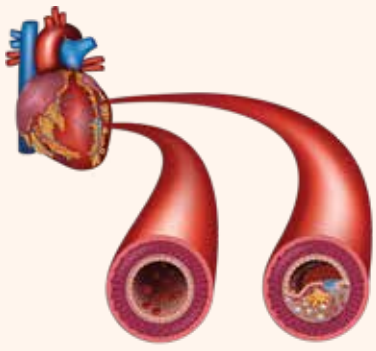
High glucose levels can cause damage to the vessels making them weak and leaky leading to eye or kidney damage, for example.

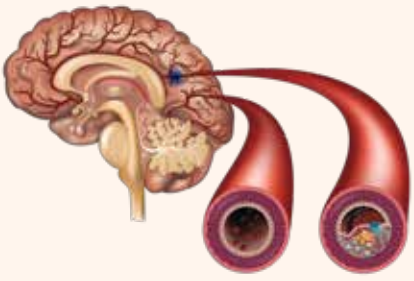




Large Blood Vessels

High glucose levels can cause the vessels to become damaged and blocked leading to increased risk of heart attack or stroke.





Nerves and sensation

High glucose levels may cause damage to nerve cells which can lead to a loss of sensation and sensitivity noticed most commonly in our hands and feet. Early signs of this may be tingling feelings or pins and needles.

Nerves that control body functions

Consistently high glucose levels can affect nerves that control body functions such as digesting food and blood pressure.

Preventing or reducing complications

The best way to prevent or reduce the risk of diabetes related complications is by managing your blood glucose levels as close to your target range as possible. Following an Annual Cycle of Care also supports your management with regular health checks. It is a checklist that you plan, implement and review with your doctor to help screen for any changes in your body related to diabetes. It may involve visiting a number of different health professionals who can support you with your diabetes management.

HbA1c check every 3 months

This is done through a blood test at a pathology clinic or with a finger prick check with a special machine, at your local medical service. It gives you your average blood glucose level over the previous three months. Your doctor may give you health advice and medications if your levels are above your target range.

Blood pressure (BP) check at least every 6 months

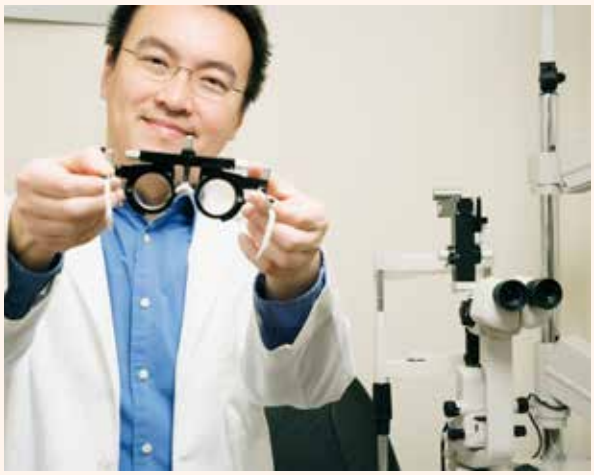
(or every visit) Your doctor, health worker or nurse will check your blood pressure to see if it is in a healthy range. Your doctor may give you advice and medications if your BP is above your target range.

Foot check every 12 months

Your doctor, health worker or nurse can check your feet. A regular visit to the podiatrist is also recommended. They will check the circulation and sensation in your feet as well as look for cuts, bruises, bunions, redness, swelling and changes in nail growth and colour. It is very important that you check your feet every day to pick up any changes in your foot health.

Eye check once a year

Most of the time this is done through a visit to an optometrist. They will take a photo of the blood vessels behind your eyes to see if there is any damage that may have been due to high glucose levels.



Kidney check once a year

This is done through a blood pathology test and by examining a sample of your urine. These tests check your kidney health and how well they are working. Your doctor may give you advice and medications if the results are outside healthy targets.

Cholesterol check once a year

This is done through a blood pathology test ordered by your doctor. This checks the level of blood fats, protective and harmful, in your blood. Your doctor may give you advice and medications if the results are outside healthy targets.

How we manage diabetes

The best ways to manage our diabetes and keep our glucose levels in a healthy range is through eating well, keeping active and taking medications as prescribed. These are the things that can reduce our glucose levels. And monitoring our glucose levels can check how we are going.

Healthy eating

There is no special diet for diabetes. Healthy eating means getting a balance of fruit, dairy, meat, grains and vegetables. The portion size of our meals and snacks are important too. If we think about the foods we ate before time, we are on the right track to healthy eating.

Being active

Being active does not always mean you need to join a gym. It can include throwing a football around at the park, gardening, fishing, walking and housework.

Being active every day helps us to burn off glucose. This helps keep our levels in a healthy range.

30 minutes of being active every day can help us to stay healthy. This could be 30 minutes at one time, or 30 minutes broken down into a few sessions throughout the day.

Medications

We may need medication to help us manage diabetes. Most people living with diabetes will need to start medication to help keep their glucose levels in a healthy range. Medications help to lower our glucose levels in different ways, and we may need different medications over time.

If you have side effects, talk with your doctor. Your doctor will work with you to decide if you need to change your dosage or change medication.

Your medications are prescribed for you and only you. It may be harmful to share yours or someone else's medications.

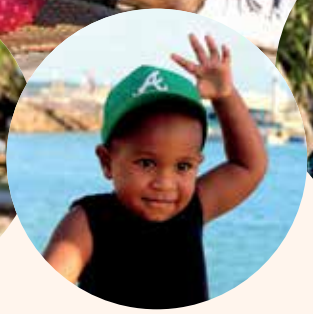
Monitoring

Checking our blood glucose levels regularly helps us to see if our glucose levels are in a healthy range. This can be done with a finger prick check or a blood test.

Talk with your doctor if your levels are out of your target range, so you can work together to get them in a healthy range again.

The general recommendations for target ranges in type 1 diabetes and type 2 diabetes.

	Fasting and before meals	Two hours after starting meals
Type 1 diabetes	4 - 7 mmol/L	5 - 10 mmol/L
Type 2 diabetes	4 - 7 mmol/L	5 - 10 mmol/L



Social & emotional health and wellbeing

Understanding how our bodies work, and doing things to keep our physical health in balance is important. But it is social and emotional health and wellbeing that is the foundation for good physical and mental health for us. It improves our motivation to look after our health.

Feeling good puts us in the best place to feel healthy and happy. If our life is balanced then we are in a better position to deal with the challenges of daily living and diabetes. We can stay strong.

Connecting with support

We have many stories of family who have had complications because of diabetes. Some of our family did not have the right information to stay well and some did not even know they had diabetes. Regular health checks and keeping glucose levels in your target range reduces these risks. Support from family and friends is also the key to living well with diabetes.

We need to talk to each other about our worries and work together to deal with them.

Many people look after their social and emotional wellbeing through being with family, being on country or water, in nature, through meditation, music or dance, through religion or spirituality.

What are some of the supports in your life?

My family: _____

My country: _____

My culture: _____

My language: _____

My spirituality: _____

My support group: _____

Setting goals

Setting goals can help us to stay motivated to stay healthy.

What goal might you like to set today?

I plan to make a change by doing the following things:

Walking with my friend for half an hour three days a week...

I will start on the following date:

This Friday morning...

I will make it easier to start by doing the following things:

Placing my walking shoes near the front door the night before...

My care checklist

This checklist is designed to help you keep your diabetes on track. Write the date of your check up in the boxes below. This checklist is a guide only and follows best practice guidelines in diabetes management.

HbA1c every 3 months				
3 months	3 months	3 months	3 months	3 months

Feet every 6 months				
6 months	6 months	6 months	6 months	6 months

Blood Pressure every 6 months				
6 months	6 months	6 months	6 months	6 months

Kidney Test once a year				
1 year	1 year	1 year	1 year	1 year

Cholesterol Test once a year				
1 year	1 year	1 year	1 year	1 year

Eyes at least every year				
1 year	1 year	1 year	1 year	1 year

The NDSS provides

1. support services for practical help and guidance
2. diabetes and health information and resources
3. subsidised products.

If you are living with diabetes and registered with the NDSS, you can access our services through:

- going online at ndss.com.au
- calling the NDSS Helpline on 1800 637 700 and ask to speak to a diabetes educator or dietitian
- Access Points, usually community pharmacies
- NDSS Agents, usually your local diabetes organisation.

“A Pathway to Health”

By starting this journey together, we can move towards healthier communities for future generations and take control of our family’s health. By yarning and understanding diabetes together, we are strong and can get through this together.

This painting was created for Diabetes Australia by artist Keisha Leon (Thomason), an Aboriginal Graphic Designer and Artist. Keisha is a proud Waanyi-Kalkadoon (Mount Isa, Queensland) and Chinese woman.

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