



Diabetes won't stop me!

Encouraging our young people to live well



Diabetes won't stop me! Encouraging our young people to live well

Published by the State of Queensland (Queensland Health), September 2022.



This document is licensed under a Creative Commons Attribution 3.0 Australia licence.
To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Queensland Health) 2019

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Good Start Program, Children's Health Queensland Hospital and Health Service, Queensland Health,
GPO Box 48, Brisbane QLD 4001, Email: goodstartprogram@health.qld.gov.au

An electronic version of this document is available at www.childrens.health.qld.gov.au/service-good-start/

Disclaimer

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.





Contents

1	Young People and Type 2 Diabetes	5
2	Emotional Wellbeing	13
3	Check-Ups	22
4	Self-Monitoring	31
5	Medications	40
6	Healthy Habits	50



1

Young People and Type 2 Diabetes



Living well with Type 2 Diabetes

We are here to help!

We welcome you and your family as we support you on your journey with Type 2 Diabetes. You will learn about what Type 2 Diabetes is and how to manage it daily through:

- supporting your emotional well-being
- regular check ups
- self-monitoring glucose levels
- taking medications
- 9 healthy habits

There are many lifelong health problems that can happen if you don't get the help you need. If you manage your diabetes well, you'll feel better every day, and be able to do the things you like to do.

Diabetes will not stop you!

Your diabetes care team can support you through your journey with Type 2 diabetes.

Your endocrinologist and diabetes educator will work closely with you to monitor your progress. A dietitian, physiotherapist and psychologist are also at the clinic to help you reach your nutrition and physical activity goals.



Meet your Diabetes Care Team



Multicultural Health Worker

I am your 'go-to' person if you have any questions or worries. I will book your appointments, send you reminders, help you understand information and support you on your journey.



Diabetes Educator

I will help you understand Type 2 Diabetes and how it affects your body. With the help of your family, I will help you be your healthiest self.



Paediatric Endocrinologist

I am a diabetes doctor for children. Together with you and your family, I will support you through your journey and your medical care.



Dietitian

Together we will unlock the superpower of food! We will try new foods, learn new skills and build a family friendly routine.



Psychologist

Together we will work to achieve a healthy mind and body. We will work to reframe unhelpful thoughts, change behaviours and understand your relationship with food.



Physiotherapist

You deserve to move, play, connect and discover your true strength and joy. I am here to discover it with you!

What is Type 2 Diabetes?

Type 2 Diabetes means that your body can't make enough insulin, or your insulin isn't working properly to help move glucose into your body's cells.

This causes too much glucose in your blood.

Type 2 Diabetes doesn't happen overnight. It's a condition that gets worse over time and, if left untreated, can make you more sick.

There are many reasons why young people get Type 2 Diabetes.

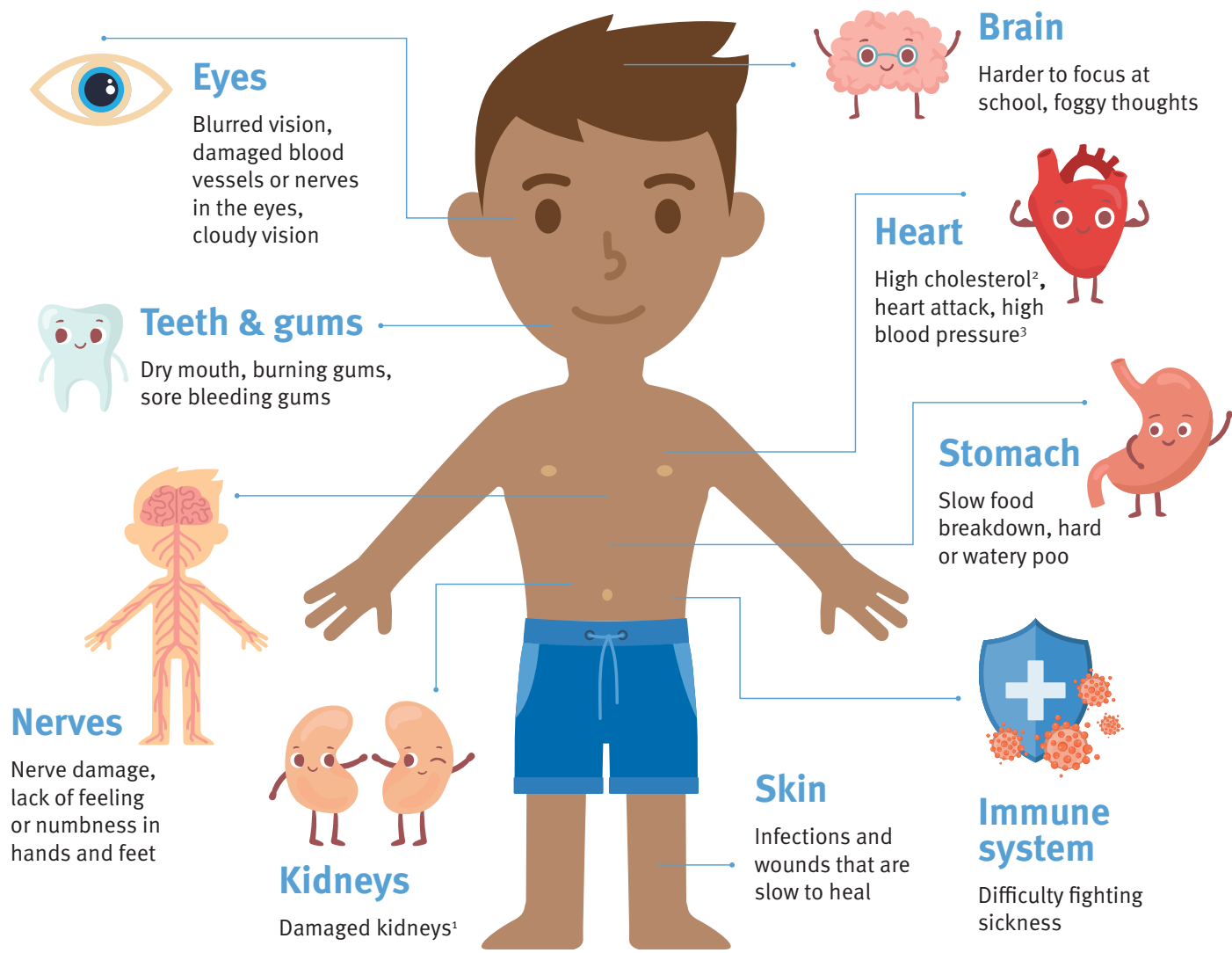
You are more likely to get Type 2 Diabetes if:

- You are Maori, Pacific Islander, Aboriginal, Torres Strait Islander, South East Asian, Indian, Middle Eastern, North African, or of Southern European background.
- Someone in your family has Type 2 Diabetes.
- Mum had diabetes when she was pregnant with you.
- You had pre-diabetes.
- You have unhealthy lifestyle habits or are overweight or obese.



What can happen to my body if I don't look after my diabetes?

Looking after yourself is important because diabetes is a lifelong condition and it can increase your risk of the following conditions:



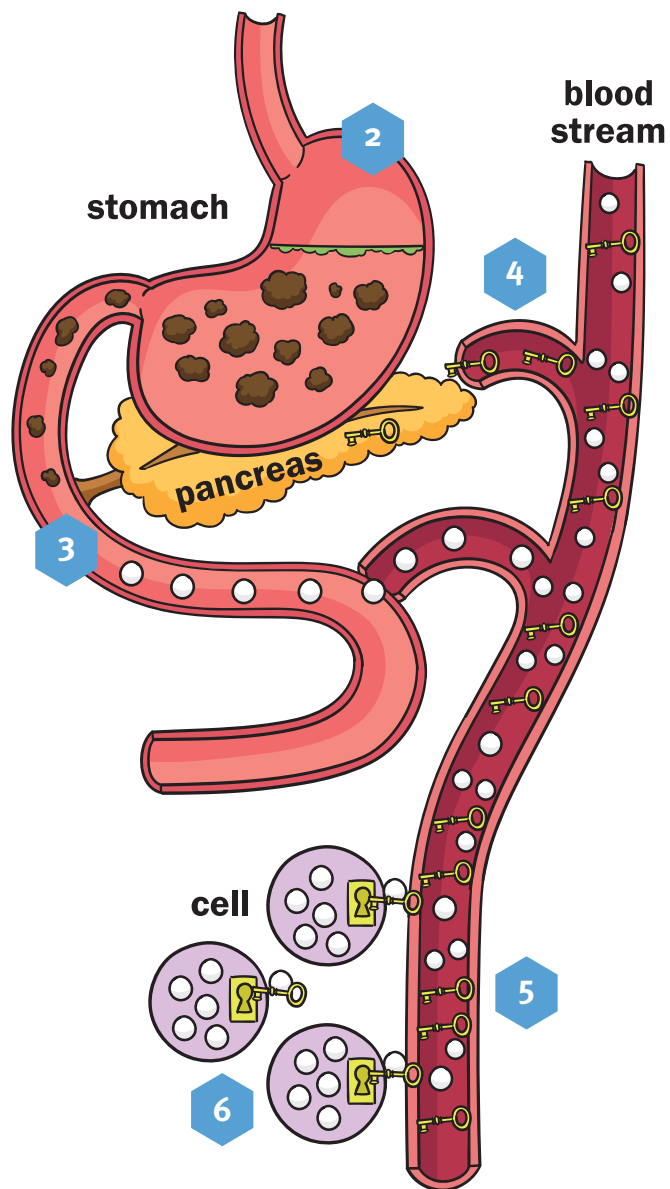
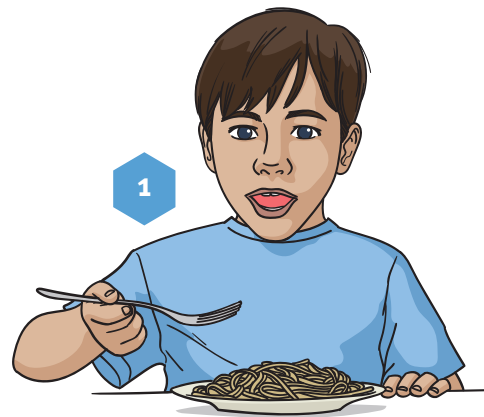
1. Damaged kidneys: the kidney's role is to clean the blood. When there is too much glucose in the blood, the kidney's have to work harder and becomes tired.

2. High cholesterol: too much fat in the blood, making it harder for the heart to pump blood around your body. This can increase the risk of other health problems.

3. High blood pressure: when there is too much glucose in the blood, the heart has to work harder to move blood around the body.

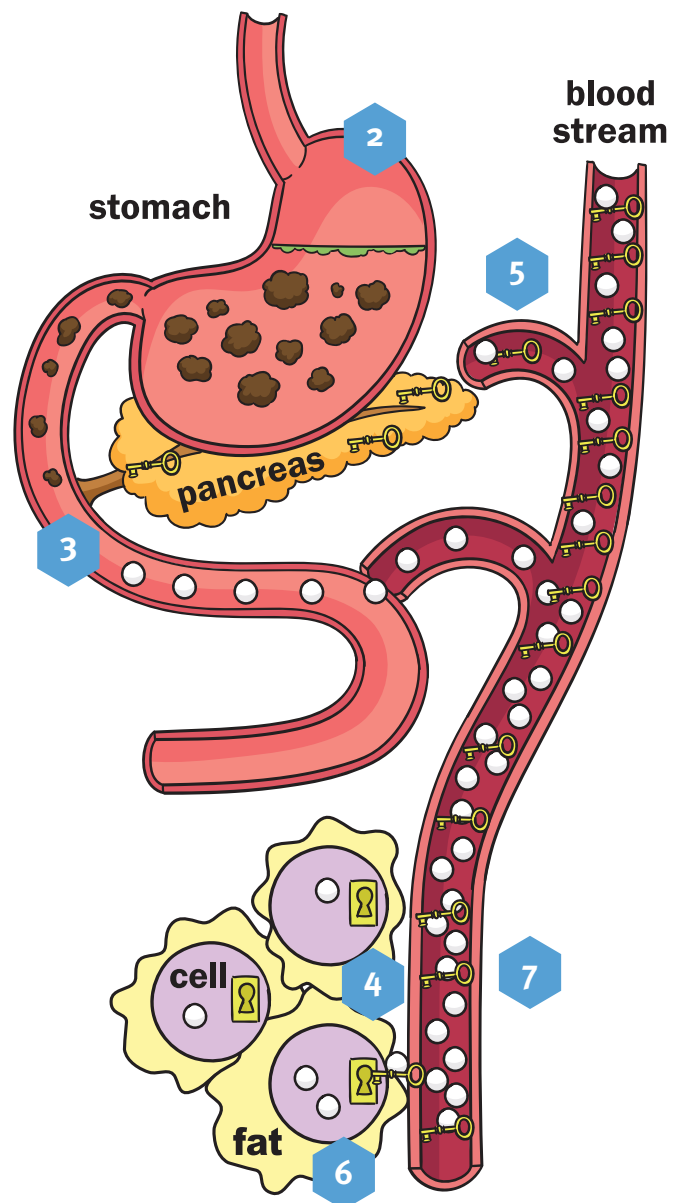
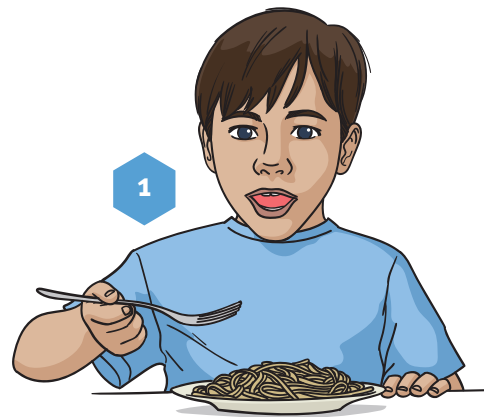
Person without Type 2 Diabetes

- 1 Person eats food
- 2 Food goes into the stomach
- 3 Food turns into glucose and goes into blood stream
- 4 Pancreas releases insulin into blood stream
- 5 Insulin acts like a key to open the cell and let glucose in
- 6 Cells now have enough glucose to give your body energy



Person with Type 2 Diabetes

- 1 Person eats food
- 2 Food goes into the stomach
- 3 Food turns into glucose and goes into blood stream
- 4 Glucose can't get into the cells
- 5 Pancreas works hard to release enough insulin into blood stream
- 6 Fat blocks insulin from opening the cell door known as insulin resistance
- 7 Glucose builds up in the blood stream (high blood glucose level). Your body doesn't get enough energy



Glucose
 Insulin

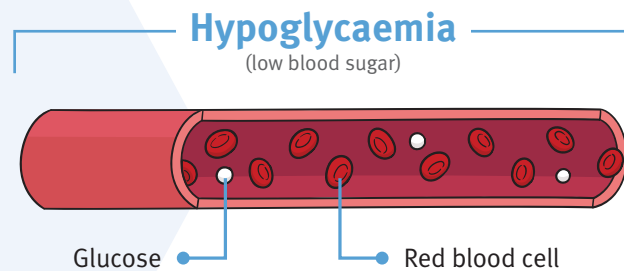
Blood Glucose Levels (BGL) explained

What is a low?

A blood glucose level **below** the target range (less than 4mmol/L)

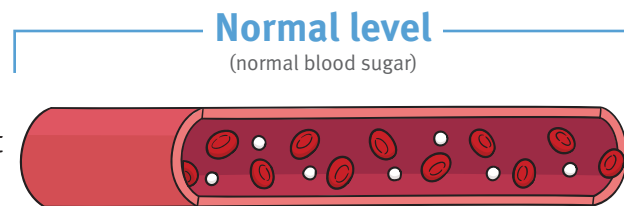
What causes a low?

- Too much insulin injected into your body
- Skipping meals
- Being more active than usual and on insulin
- Sickness, and being unable to eat usual meals or snacks while on insulin



What is normal range?

A blood glucose level **within** the target range of 4 – 8mmol/L.

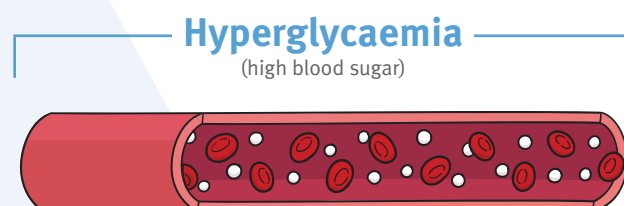


What is a high?

A blood glucose level **above** the target range (more than 8mmol/L).

What causes a high?

- Eating too much food
- Feeling stressed
- Feeling sick
- Being less active than usual
- Forgetting to take your medication



Blood Glucose Levels (BGLs)

Below target	1
	2
	3
In target range	4
	5
	6
	7
	8
A little above target	9
	10
	11
A lot above target	12
	13
	14
	15
	16
	17
	18
	19
	20



2

Emotional Wellbeing



Diabetes and mental health

A diagnosis of diabetes can be a shock for the whole family. It is common to feel disbelief, sadness, anger, or self-blame.

Over time, these feelings may fade as you adjust to having diabetes in your life. Other times, these feelings may be hard to manage.

If you feel this way, you are not alone. There are many things you can do to make living with diabetes easier.



Working as a team

Family support is very important when managing diabetes and looking after your overall wellbeing.

Feeling connected and understood can help empower us and allow us a safe place to talk about our feelings, worries and hopes.

Working together as a family helps successfully manage your diabetes and improve healthy lifestyle behaviours, than trying to manage diabetes alone.

Not everyone will know how to respond to your emotions and concerns but that's okay; don't let that stop you from asking for help.

People can help in many ways, such as cooking, exercise, transport, and support.

Other important people in your support network may be your friends, extended family, community and religious leaders or teachers.

Who can you ask for help?

Mum/Dad

Sisters/Brothers

Aunty/Uncle

Grandma/Grandpa

Cousins

Friends

Teachers

Community Leaders

Diabetes Care Team

When I need help, who can I turn to?

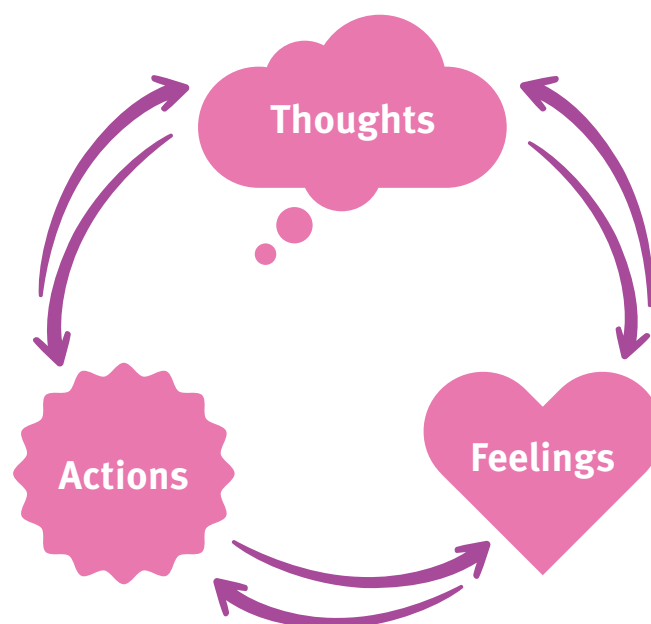


Thoughts

What are thoughts?

Thoughts are the words and statements we say to ourselves in our mind. Sometimes we are aware of them and sometimes we're not.

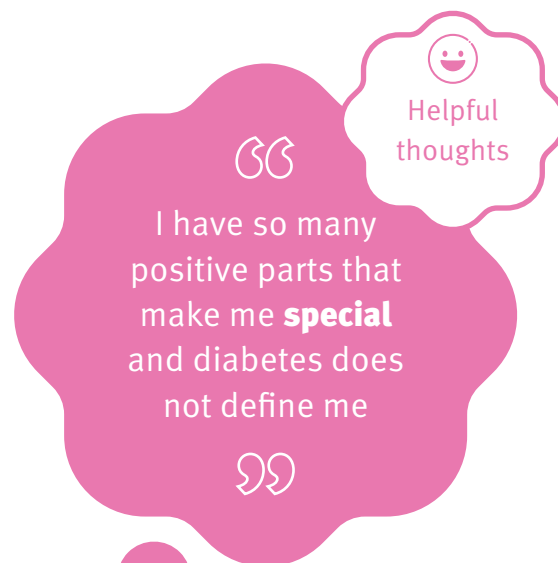
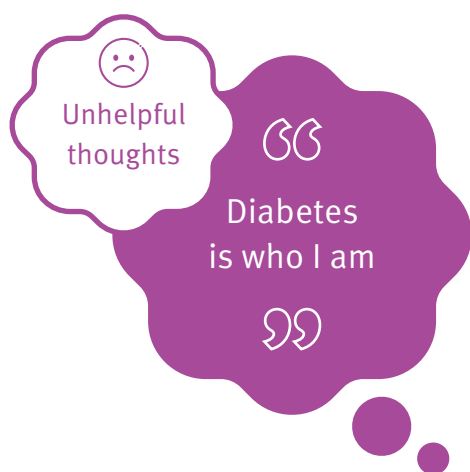
Our thoughts impact the way we feel and how we behave. Our behaviour and feelings can also impact our thoughts.



Become a 'thought lawyer'

Did you know that your thoughts are not always true or correct? Did you know you can change the way you think?

For our mental wellbeing and self-confidence, we need to be able to defend ourselves against unhelpful thoughts and adjust them into being more helpful and empowering.



Feelings

We all have a lot of emotions and feelings we go through every day. All emotions are okay! They can tell us important things about ourselves and situations.

Diabetes can be a tricky diagnosis to understand and take care of.

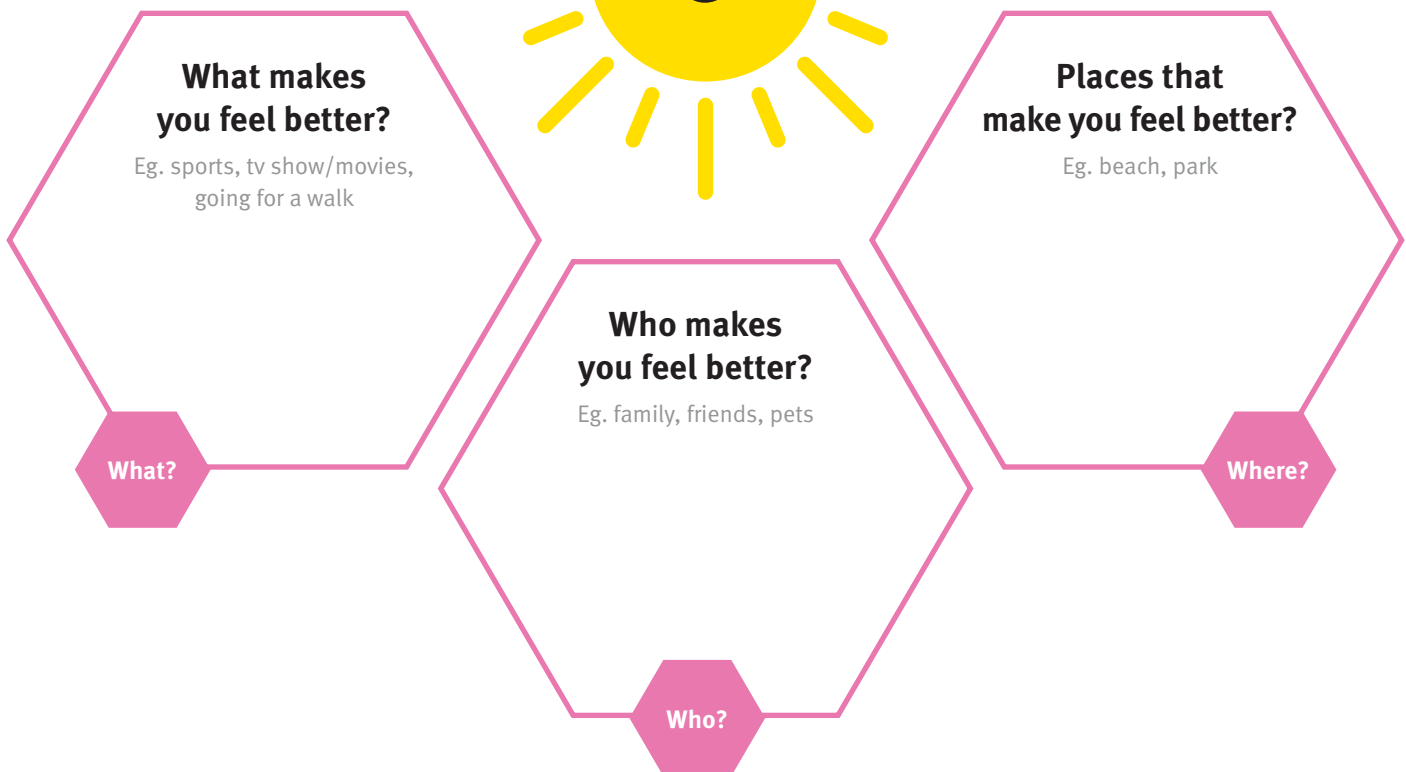
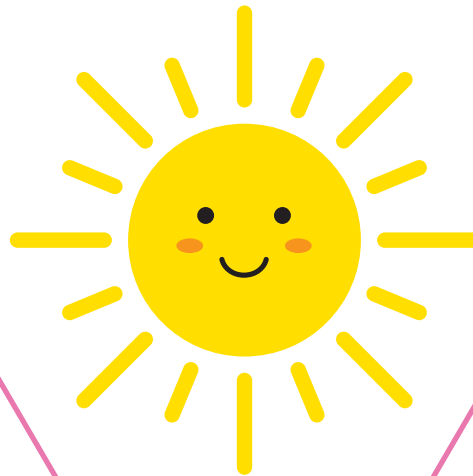
It can make us feel:

- upset at times
- frustrated or sad about having to check our blood sugars
- lonely as our friends may not understand.

What can you do to feel better?

There are many things we can do to make ourselves feel better.

You can use the sun below to identify these things.



Mindfulness

Another way to calm our mind and let go of tricky or unhelpful thoughts is through mindfulness.

Mindfulness refers to being in the 'present moment' and not getting caught up in thoughts and worries about the past or future.

Mindfulness helps us to recognise our thoughts and emotions without dwelling on them (ruminating) or making it worse than it is (catastrophising).

This helps us clear our minds and calm our thoughts, which then helps us to feel more relaxed and in control.

When you are finding it hard to deal with unhelpful thoughts, try writing them down on the balloons

Then imagine letting them go into the sky



Things that can help you feel good

What we do can help our feelings and thoughts in a positive way

Move your body

Play sport you like, go to the gym

Plan & Organise

Diabetes plans and checklists

Fun activities

Seeing friends, playing games with your family

Breathe!

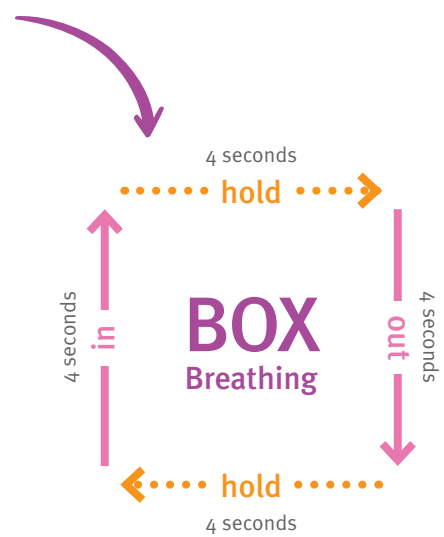
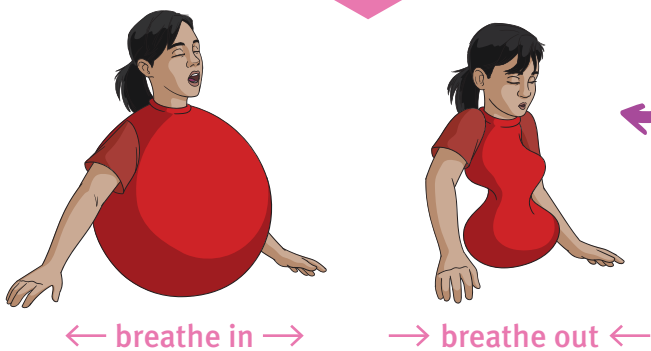
Balloon breathing and box breathing

Goals

Work towards achieving your goals

Relax

Read a book, listen to music, go for a walk



Burnout

Diabetes burnout is when you get tired of managing your diabetes. It can lead to you being less able to self-manage your diabetes.

*It's hard
work to take
care of your
diabetes!*

It does not mean:

- you're lazy
- you don't care about your health
- you have a mental health issue

What can you do to make things easier?

- ask your parents for help with your daily diabetes care eg. checking blood sugars and taking medication
- practice mindfulness
- do things, see people, and go to places that make you feel better
- have checklists
- set reminders
- talk to your Diabetes Care Team

*Not
motivated*

Exhausted

Low mood

Frustrated

Talk with a professional

Your psychologist or social worker at the Healthy Kids Club will have more great tips to help you and your family adjust to living with diabetes.

They can connect you to other services, like:

- your guidance counsellor at school
- your GP by accessing a Mental Health Care Plan (MHCP)
- online services.

For further information and support:

Headspace:

A free online and phone service supporting young people (aged 12 to 25 years) and their families.

Ph: 1800 650 890 or www.headspace.org.au

Kids Help Line:

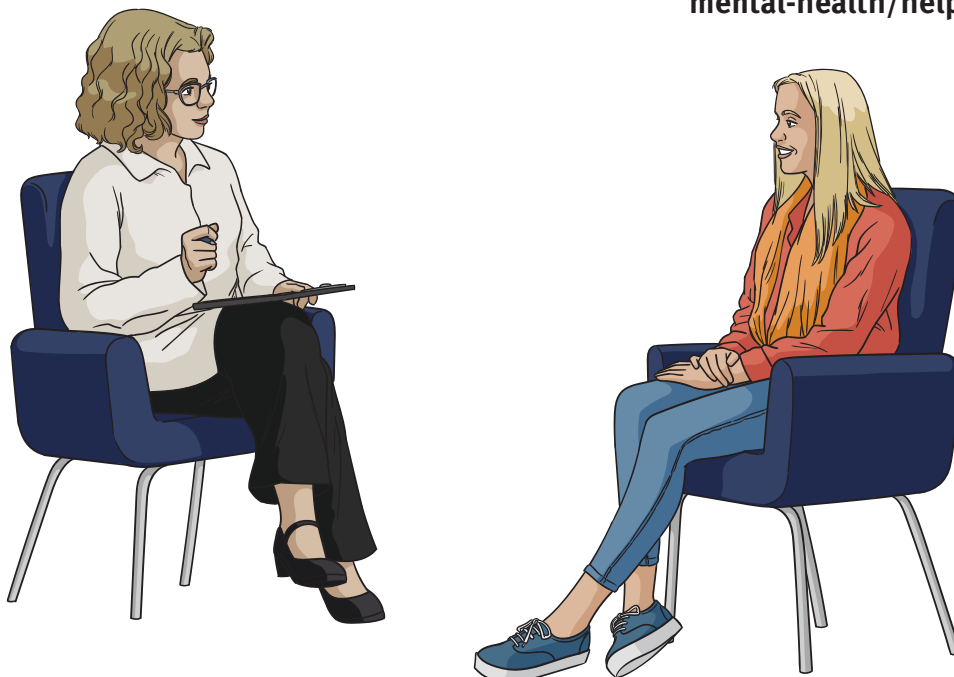
Kids Helpline is Australia's only free (even from a mobile), confidential 24/7 online and phone counselling service for young people aged 5 to 25 years.

Ph: 1800 55 1800 or www.kidshelpline.com.au

MHCall:

1300 MH CALL is available 24 hours a day, 7 days a week, and will link callers to their nearest Queensland Public Mental Health service.

Ph: 1300 642255 or www.qld.gov.au/health/mental-health/help-lines/1300-mh-call



3

Check-Ups



Clinic check-ups

Why do I need to attend clinic check-ups?

Clinic check-ups are scheduled regularly so your Diabetes Care Team can support you.

Check-ups are a great time to talk about what you find hard, and what you might need help with.

There are lots of things you can talk about:

- How you feel about having diabetes
- How you feel about taking medication
- How we can support your healthy lifestyle

Don't miss your check-ups!

If you can't attend, talk to your Diabetes Care Team about changing your appointment, or if they could do a telehealth appointment instead.

Link in with your GP

- We will discuss your care with your GP
- If you don't have a GP, we will help you find one
- We may do shared care with your GP
- When you move on to adult care, your GP will be your main diabetes carer.

How often are the check-ups?

Diabetes Clinic

Your medical reviews with the diabetes doctor (endocrinologist) are usually every 3-6 months. The doctor will look closely at your:

- HbA1c (glucose control)
- blood glucose levels (BGLs)
- medications
- growth – weight and height

Between clinic visits

The diabetes educator, dietitian, physiotherapist, psychologist, social worker and health worker will provide education and help you reach your goals. They will look at things like your:

- blood pressure
- weight and height
- waist circumference
- medications
- blood glucose monitoring
- emotional health
- healthy eating
- physical activity levels.



HbA1c

What is it?

HbA1c is a test done to show the average blood glucose levels over 12 weeks.

Things that can improve blood glucose levels include:

- A healthy diet
- Regular exercise
- Taking medication

How often?

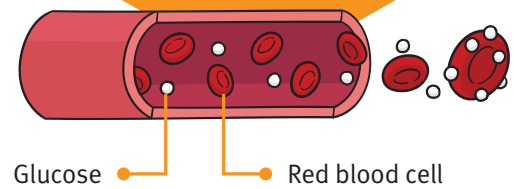
Every 3 months, at your clinic visit. This test can be done at the clinic with just a finger prick. Bring your own finger pricker!

Why we monitor?

HbA1c tells us how much glucose has been circulating in your blood over the last 3 months. Aim to keep it within the target range of below 6.5% to lower the risk of developing diabetes related complications.

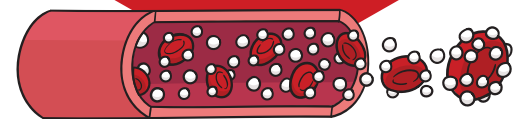
Normal HbA1c

Red blood cells pick up glucose in the blood stream. HbA1c tells us how much glucose is stuck to red blood cells.



High HbA1c

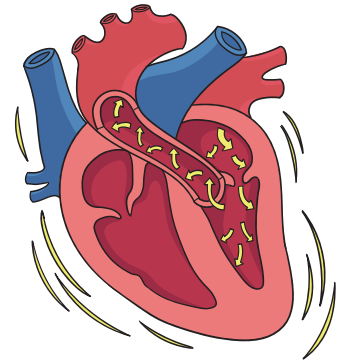
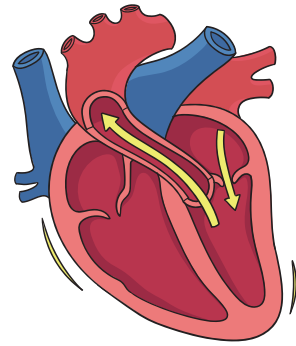
When there is more glucose in the bloodstream, more glucose sticks to the red blood cells.



Blood pressure

What is it?

Blood pressure is how hard your heart is working to push blood around your body. It measures the pressure your heart uses when it's pumping and when it's relaxed.



High blood pressure (hypertension)

This means your heart is working extra hard and it's putting more stress on your blood vessels.

You might feel healthy but having high blood pressure all the time is damaging to your blood vessels.

If your blood pressure is high, you may need to be on medication to help lower your blood pressure.

Why we measure it?

People with diabetes are more likely to have high blood pressure. It also means they are more at risk of having a heart attack or stroke.

We will measure your blood pressure every time you visit the clinic.

How to keep your blood pressure down?

A healthy lifestyle is the best way to keep your blood pressure down.

- Aim for a healthy weight
- Be physically active
- Eat a healthy balanced diet
- Eat less salty foods



Cholesterol

What is it?

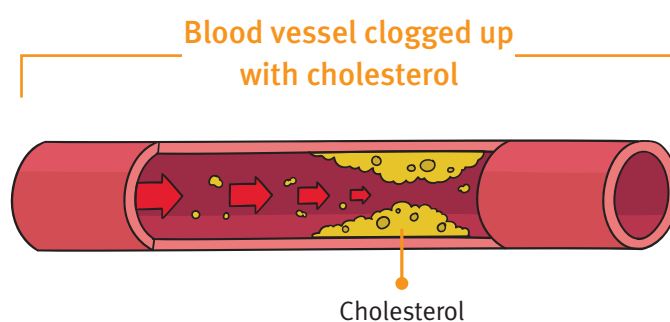
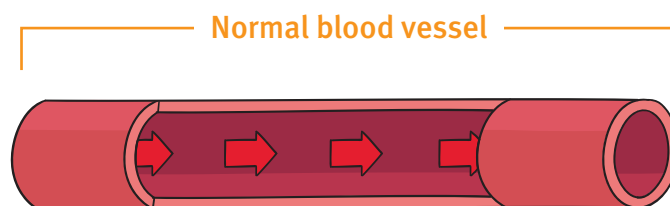
Cholesterol is a type of fat in the blood. We have good cholesterol (HDL) and bad cholesterol (LDL).

Why we measure it?

It helps us to check your risk of heart disease and stroke. High cholesterol or high bad cholesterol (LDL) means you are at higher risk of heart disease.

Why is high cholesterol a problem?

Too much fat in the blood will clog up the blood vessels. This makes it harder for blood to travel to the heart and brain. This increases your risk of a heart attack or stroke.



How to lower your cholesterol?

- Eat food from all food groups
- Eat more fruit and vegetables
- Eat less fried foods, pastries, cakes, biscuits
- Choose low fat or lean meat
- Drink more water
- Drink less sugary drinks
- Be more physically active



Cut back on bad fats

Eating foods low in bad fats (saturated and trans-fats) can help keep your **cholesterol** down.

Try to swap these bad fats with foods that have good fats.

Foods with lots of bad fats

- Fatty meats
- Full-fat dairy products
- Butter
- Coconut oil
- Palm oil
- Deep-fried takeaway foods
- Pies, biscuits, buns, pastries, cakes



Foods to choose

- Choose leaner cuts of meat
- Cut any fat off before cooking
- Use spray oil when frying
- Cook using fresh ingredients, rather than buying takeaway or premade meals
- Choose reduced-fat, low-fat or no-fat milk, yoghurt and cheese
- Oily fish (Fresh, frozen or canned)

Cut back on salt

Our body only needs a small amount of salt. We eat too much salt when we add it to our meals, or when we eat packaged and takeaway foods.

A person develops a taste for salty foods. As you cut down how much salt you eat, your taste buds will adapt. In just a few months, you'll notice other flavours and will find salty foods may then be too salty.



Foods with lots of salt

- processed meats like ham, sausages, bacon, meat pies, sausage rolls
- chips and other salty snack foods
- burgers, pizza, noodles
- biscuits, muffins, cakes
- some sauces such as soy sauce, BBQ and tomato sauce



Foods with less or no salt

- fresh fruits
- fresh vegetables
- herbs like parsley, coriander, basil, or dry herb mix
- spices like chilli
- choose 'low salt' or 'reduced salt' or 'unsalted' options



Driving

Why is diabetes an issue when driving?

Diabetes is a long-term condition that may affect your ability to drive.

The main worry is if someone with diabetes has a hypoglycaemic episode while driving (refer to page 12 and 37).

Other diabetes related issues like eye problems are also a worry as it affects your ability to drive.

If your diabetes is well managed, (ie. blood glucose levels are within target), you can still hold a driver's licence or learner permit.

What do I need to do?

- ✔ You will need an eye test.
- ✔ You need to notify the licensing authority that you have diabetes.
- ✔ Your doctor will also need to complete a medical certificate that you submit when you apply for a license.

You need to check your BGL before you drive and every 2 hours if driving a long way.

To drive your BGL needs to be above 5.0 mmol/L.

Talk to your doctor or diabetes educator about how to make sure you are safe on the road.

Tell the licensing authority that you have diabetes. They have a form that your doctor will need to fill out.



Moving on to adult care

What does this mean?

As you become an adult, you will need to move to a diabetes service for adults. Here, the doctors, diabetes educators, and other health care workers are trained in supporting adults to get the care they need.

It also means, you are now in charge of your own diabetes care. This involves:

- Choosing the services you need
- Explaining what you want and what you need
- Getting your own Medicare card
- Booking and going to appointments on your own (if you want)

When will you need to move?

Around the age of 16 to 18 years old. The time to move will be different for everyone.

What do I need to do?

Talk to your current Diabetes Care Team.

They will help you sort out the things you need to do, such as:

- Where and when you will move
- Make sure you are ready
- Let the new clinic know you are coming
- Book your first appointment

What are your options?

GP care


- We will let your GP know that they will be the main doctor for the management of your diabetes. You will see them every 3-6 months, or more regularly if needed.

Hospital Services

- A referral can be made to the diabetes service at Redland, Logan or Ipswich hospital. The Mater Adolescent and Young Adult Centre may also be of interest.

Logan Health Living

- A Logan based specialised Type 2 diabetes and obesity support team. Here you can access a diabetes educator, dietitian, physiotherapist, psychologist, exercise physiologist and community liaison.



What service to transition to depends on your medication regimen and location



4

Self-Monitoring



Blood glucose monitoring

What is blood glucose monitoring?

It's checking the amount of glucose that's in your blood at different times of the day.

It helps you to see how food, physical activity, medication, and illness can affect your blood glucose levels.

How do we monitor blood glucose levels?

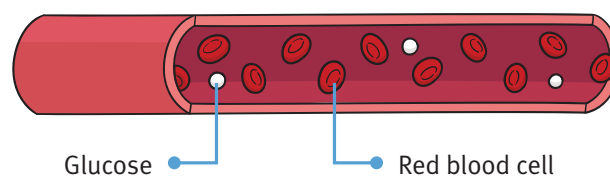
There are 2 different ways we can monitor our glucose levels:

Finger prick check with blood glucose meter

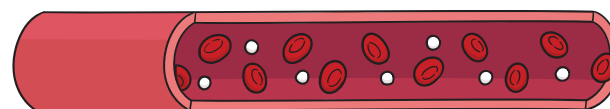
Flash glucose monitoring (see page 36).

Hypoglycaemia

(low blood sugar)

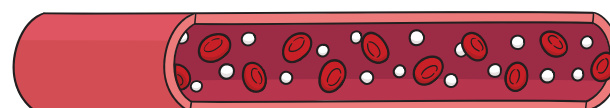


Normal level



Hyperglycaemia

(high blood sugar)



Finger prick checks

Why we check?

To understand how diet, exercise and medication affects your glucose level.

With this information you can achieve target glucose levels.

How often do I need to check?

The diabetes educator will discuss how often you need to check your BGL's. It's best to check every day, and at different times of the day.

Times of the day might include:

- When you first wake up, before you eat or drink anything (fasting)
- Before breakfast, lunch and dinner
- 2 hours after breakfast, lunch and dinner
- Overnight
- Before and after physical activity
- Before driving

Your BGL's can also depend on:

- What medication you are on, especially if you start or change medications
- What physical activity you are doing
- What foods you are eating
- Whether you might be sick or not feeling well

BGL's for healthy long-term diabetes management:

Before food
4 - 6 mmol/L

2 hours after food
4 - 8 mmol/L



Blood Glucose Levels (BGLs)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Below target			In target range					A little above target					A lot above target						

Finger prick testing kit

To check your own blood glucose levels, you will need:

- lancet device
- glucose meter
- glucose strips

Lancet device

Glucose meter



Glucose strip

If you are having problems, check:

- Is the battery in the glucose meter flat?
- Have you washed and dried your hands?
- Has the glucose strip been put into the meter the right way?
- Is it the right type of strip for your glucose meter?
- Did you get enough blood onto the strip?



How to test blood glucose levels?



Step 1

Wash hands with warm soapy water and dry well.



Step 5

Carefully transfer blood to the test strip. If it says 'error', or you didn't get enough blood, repeat this step using a new test strip.



Step 2

Insert test strip into the meter.



Step 6

Write down your reading in a logbook or diary.



Step 3

Choose a finger and prick the side of your fingertip.



Step 7

Apply a little bit of pressure onto your finger with a tissue or cotton ball to stop the bleeding.



Step 4

Gently squeeze your finger to get a big enough drop of blood.

Remember

- Don't use the same finger all the time
- Warm hands will make it easier to get blood
- Change your needle regularly
- If the needle is blunt, it will hurt more

Flash Glucose Monitoring

Freestyle Libre

What is it?

It's a way of checking your blood glucose levels without finger pricks.

You wear a small sensor, usually on the back of your upper arm for up to 14 days (and then you change it to a new one).

Scan the small sensor with your glucose meter or smartphone to see your results. You can share these results with your Diabetes Care Team.

How does it work?

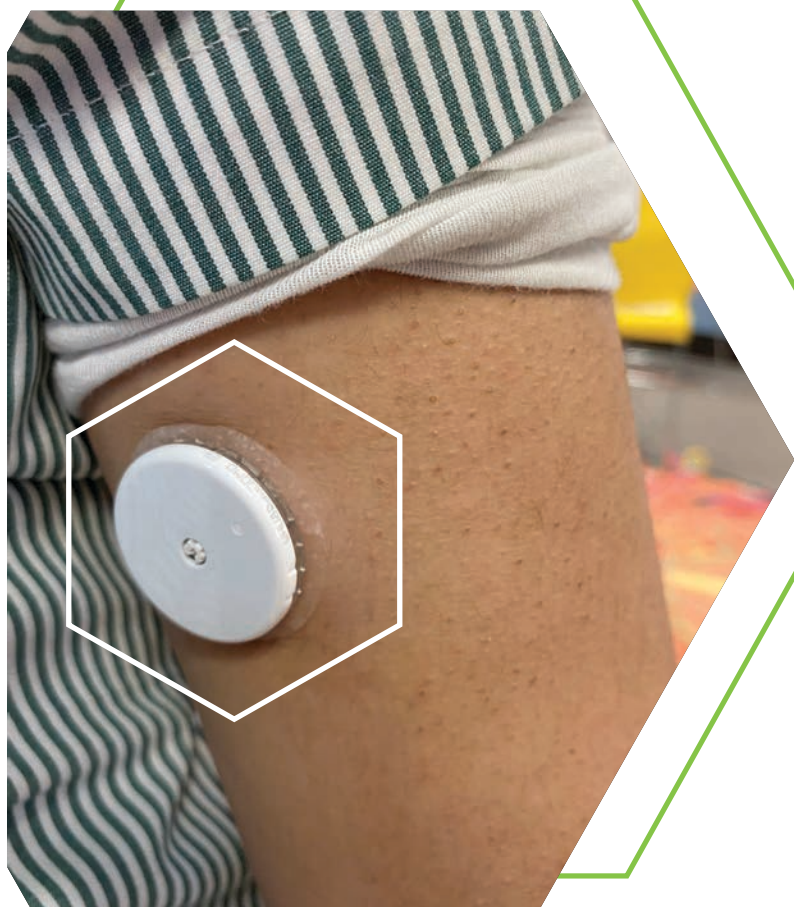
- Scan the sensor 3 times a day (every 8 hours)
- Monitors your glucose levels all day and night
- Stores up to 8hrs of data

How to use your CGM

- Replace every 2 weeks
- It is okay to exercise, swim and bathe with it in
- You can wear it on different parts of your body
- Sometimes you might need tape to make sure it doesn't fall off

How to get one?

- Self funded
- Usually only available to those taking insulin



What is hypoglycaemia?

What is a hypo?

A blood glucose level (BGL) of less than 4mmol/l. It is often called a 'hypo' or 'low'.

What causes a 'low'?

- Too much insulin
- Skipping meals
- Being more active than usual when on insulin
- Sickness and unable to eat usual meals and snacks while on insulin

Tips

Always be prepared and carry a hypo kit with you
Treat straight away!

First signs



Hungry



Tired



Headache



Moody and cranky



Sweaty



Shaky

Late signs



Very tired, hard to wake up



Hard to speak, confused, unbalanced walking



Blacking out or shaking without control

What to do if you have a 'low'

1



Check blood glucose levels
If BELOW 4mmol/L

2

Eat one portion of **FAST ACTING CARBS (15 grams)**



3 teaspoons of honey
or golden syrup



3 teaspoons of sugar



4-7 jelly beans



½ can of soft drink
(not diet)



150ml juice

3



Wait 15 minutes
Re-check BGL



4

If still BELOW 4mmol/L
repeat step 2

If ABOVE 4mmol/L
then go to step 5

5

If ABOVE 4mmol/L

Eat one portion of **SLOW ACTING CARBS (15 grams)**



1 slice of
grain bread



1 piece of fruit like
an apple or banana



100g low-fat
fruit yoghurt



250ml
glass of milk



1 muesli bar



My hypo kit

A hypo kit is something small you can carry around in your backpack or bag, wherever you go.

Your parents or carers can help you put one together.

- If you use food or drink in your hypo kit, replace it quickly
- Check the glucose meter and strips regularly
- At school, let your teachers know where you keep your hypo kit in case you need help when you are having a low
- Ask your diabetes educator for a school management plan

It should have:



Fast acting carbs



Slow acting carbs



Blood glucose meter



Glucose strip



Lancet device

5

Medications



Medications and Type 2 Diabetes

People with diabetes usually need medicines to help keep their blood glucose levels within the target range.

The most common medications children/adolescents use are:

- Metformin (tablets)
- Insulin (injection)

Other injectables are a possibility.

Your doctor will prescribe your medication. If you have any concerns discuss these with your Diabetes Care Team.

Medication needs to be taken as prescribed, even when you go away on holiday.

What happens if you forget to take your medication?

- Some medications you can take as soon as you remember
- Some medications you need to wait until the next dose is due

Tips to help you remember your medications:

- Put reminders around the house (on the fridge, on your mirror)
- Write it in your diary
- Set alarms on your phone
- Take at the same time as other family members



It's best to ask your doctor or diabetes educator what you should do if you forget to take your medication.

Metformin

What is it?

Metformin is a tablet that lowers blood glucose levels by using your body's insulin.



How does it work?

- 1 Makes the body more sensitive to insulin
- 2 Reduces the amount of glucose released by the liver

Are there side effects?

Like all medications, there are some side effects to taking metformin:

- Nausea
- Abdominal pain
- Diarrhoea
- Bloating

These side effects can be reduced by:

- 1 Having your metformin tablet with or after a meal
- 2 Increasing the dose slowly
- 3 Not missing doses

Follow the advice of your diabetes educator as everyone's medications, and how much they need, are different.



Insulin

What is it?

Insulin is a hormone that is made by the pancreas. Insulin is needed to move glucose from the blood stream into the cells so it can give the body energy. Some people with diabetes need to take insulin via an insulin pen.

Your daily insulin regimen is provided by your diabetes educator or doctor.

Why might I need to inject insulin?

For someone with Type 2 Diabetes, the pancreas isn't making enough insulin, or the insulin isn't working properly. Insulin injections help control and lower blood glucose levels.

The 2 main types used are:

- 1 Long-acting insulin
- 2 Rapid-acting insulin

Long-acting Insulin

Long-acting insulin helps to keep blood glucose levels normal in between meals and overnight. It is given once or twice daily, depending on the type of insulin.

Rapid-acting Insulin

Short acting insulin is given 15 minutes before a meal, to keep glucose levels within target after a meal.



Taking care of insulin

1 Keep it cool

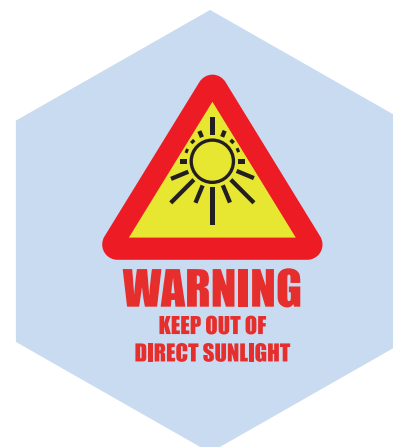
- Insulin should be stored in the fridge
- Do not use insulin that's been frozen
- It's okay to keep your current insulin pen in your bag



It's important to store insulin correctly.

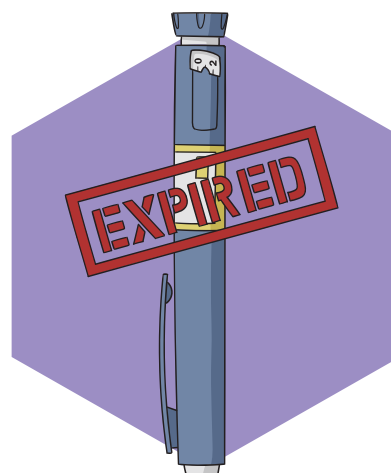
2 Keep it out of the sun

- Don't leave it in a place where it can get hot, like in the car
- Use a cooler bag if it's too hot, or when you're travelling



3 Check the expiry date

- Don't use insulin that's expired, or if it looks flakey or has changed colour
- **Once opened, throw it out after 28 days**



Tip

Change your pen at the start of each month



Injection sites

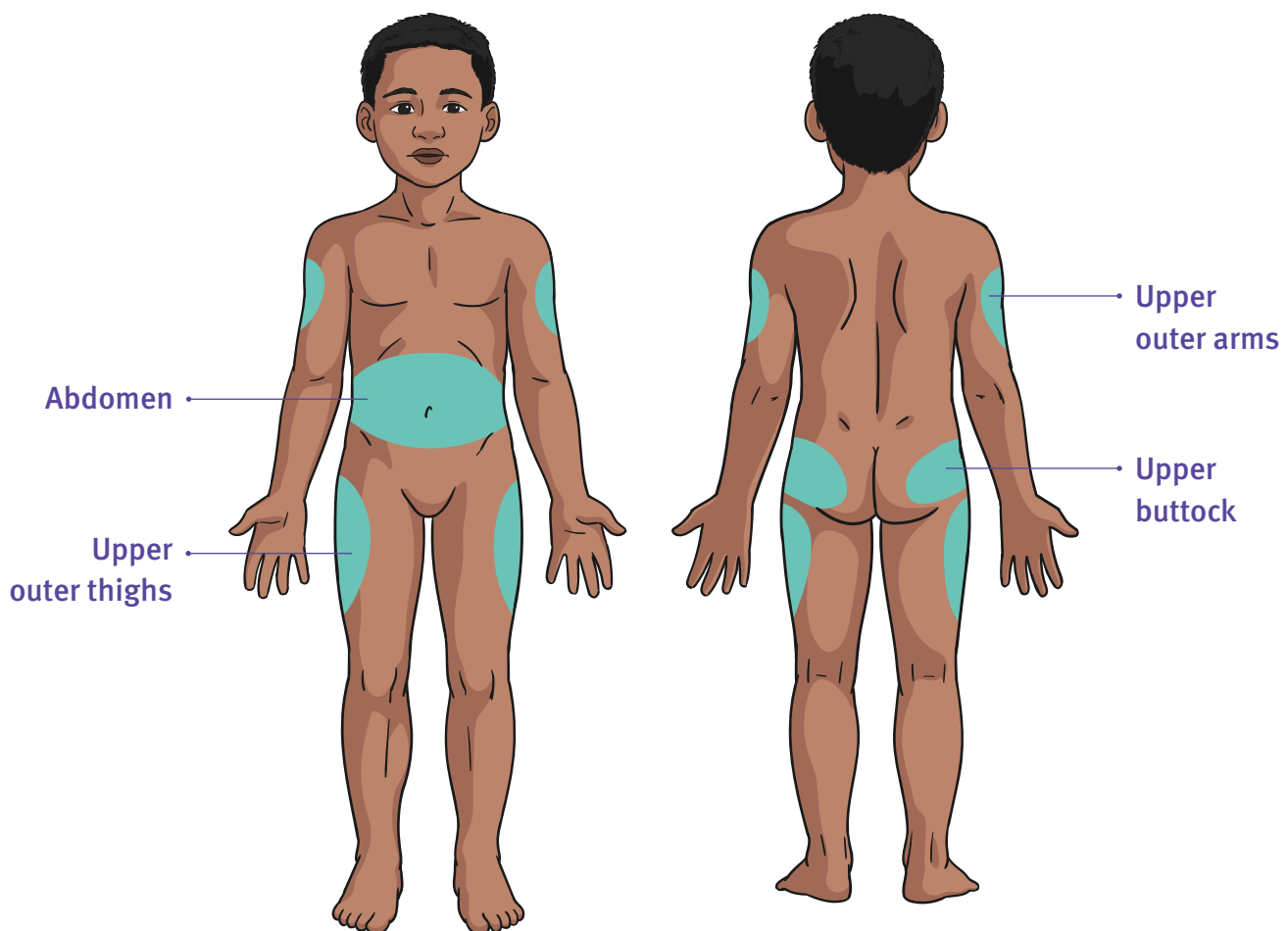
Your diabetes educator will show you the right way of injecting insulin.

It's best to inject into areas where there is a layer of fat under the skin that helps to absorb the insulin.

Tip

Rotate your injection sites to avoid lumps forming. Lumps can stop insulin from working.

The best areas to inject are:



How to give an insulin injection



Step 1
Take the cap off.



Step 2
Remove paper from
top of needle.



Step 3
Screw needle
onto pen.



Step 7
Dial up the dose
you need.



Step 8
Holding the pen like a dagger gently
insert needle into injection site and
push button. Count to 10.



Step 9
Remove needle
from skin.





Step 4
Remove both caps.



Step 5
Dial up 2 units
for the air shot.



Step 6
Holding pen upright,
inject into the air.



Step 10
Put large clear cap back on the
needle and unscrew needle.



Step 11
Dispose in
sharps container.

Needles and sharps disposal

What are pen needles?

- Pen needles are disposable needles that screw onto the insulin pen to inject insulin into the body.
- The needles are 4mm in size – very fine, short, and small.
- Use a new needle for every injection.
- Remove needle and dispose of it in a sharps container.

Where do the needles go?

- Needles should be placed in a yellow sharps container.
- Sharps containers can be purchased from the chemist.
- Once your yellow sharps containers are full, take them to your local chemist.

It's OK to feel scared or nervous about using a pen needle.

Talk to your diabetes care team about your feelings and they will help you.

Keep needles and sharps containers out of reach of children.



6

Healthy Habits



9 Daily habits



Drink lots of water

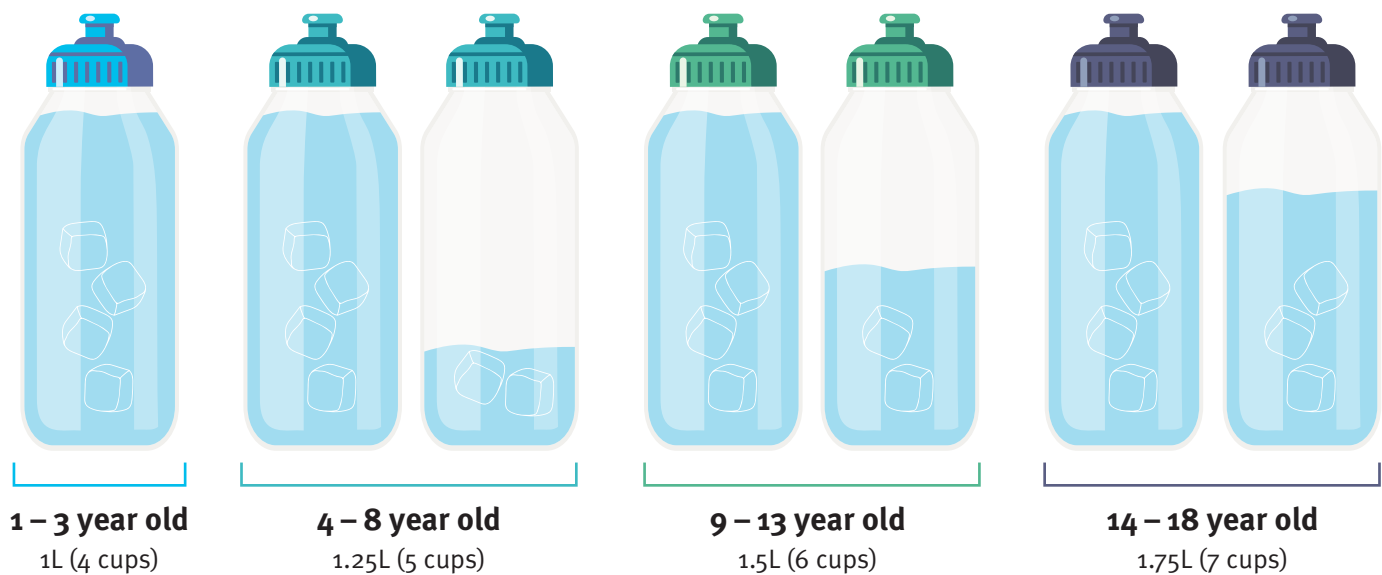
Your body needs water to:

- Keep our body hydrated
- Keep our kidneys happy
- Help our joints to move well
- Help digest our food, and go to the toilet
- Help with weight loss

Tips to drink more water

- Freeze a water bottle so it stays cold during the day
- Carry a water bottle with you everywhere
- Set a daily goal
- Set reminders or alarms on your phone
- Use a water bottle that shows how much you drink
- Have a glass of water at each meal time

How much water do I need to drink?



Rethink that sugary drink

What's the fuss about sugary drinks?

Sweet drinks like soft drinks, cordial, energy drinks, sports drinks, fruit juice and flavoured milk drinks are high in sugar and will raise your blood glucose levels quickly.

Drinking sugary drinks often will cause high BGL's and weight gain

How much sugar is in that drink?

Note: 1 teaspoon (tsp) = 4 grams of sugar



2 1/2 tsp



Coconut water
250ml carton



4 tsp



Fruit popper
200ml carton



8 tsp



Iced tea
500ml bottle



8 tsp



Sports drink
600ml bottle



9 tsp



Cola
375ml can



13 tsp



Chocolate milk
600ml bottle



13 tsp



Orange drink
600ml bottle



14 tsp



Energy drink
500ml can



Eat healthy carbohydrate portions

What are carbohydrates?

Carbohydrates give you energy for physical activity and help you grow. Carbs is often a shortened word for carbohydrates.

Why are carbs important for people with diabetes?

Carbs have a direct impact on your blood glucose levels. For someone with diabetes, it's important to know what type of carbs you are eating and how much.

Your dietitian can help you make an eating plan that suits your needs and what you like.

How are carbs used by my body?

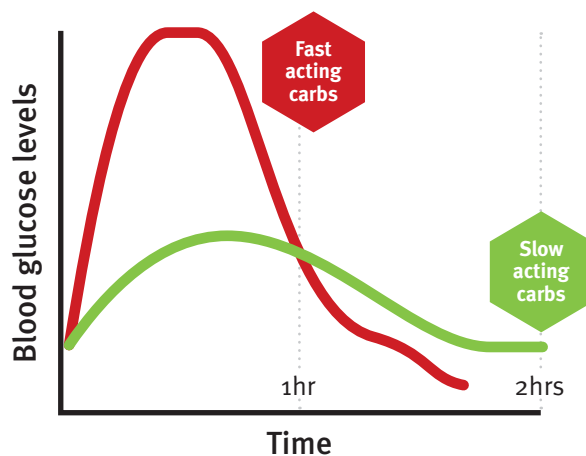
When carbs are eaten, they break down into glucose and enter the bloodstream.

Some carbs, like lollies, break down fast (fast-acting carbs) and cause high BGL's.

Carbs like wholegrain bread break down slowly (slow-acting carbs).

Over the day, it is better to eat carbs that break down slowly to help keep your blood glucose levels within target.

Slow vs fast acting carbs



Everyday carb foods

Wholegrain breads

Wholegrain cereal

Wholegrain crackers

Wholemeal flour

Barley, quinoa

Pasta, noodles

Rice

Oats

Lentils, legumes, chickpeas

Starchy vegetables like corn, potato, sweet potato, taro, cassava

Most fruits like banana, grapes, mango, oranges, pineapple, watermelon, peaches, kiwi fruit, dried fruits

Milk, yoghurt



Limit these carb foods

Biscuits

Cakes, muffins, donuts, pastries

Sugar, honey, golden syrup

Jam, hazelnut spread

Chocolates, lollies

2-minute noodles

Regular soft drinks, cordial

Fruit juice

Flavoured milks

Potato chips, corn chips

Ice-cream, ice-blocks

Custard, jelly



Foods that contain little or no carbs

Beef, pork, lamb, chicken, fish,

Sausages, ham,

Tofu, eggs, cheese

Oil, coconut milk, butter, cream

Avocado, nuts

Sugar free drinks

Chilli, garlic, ginger, herbs and spices

Some fruits like strawberries,
blueberries passionfruit, lemon, lime


























Non-starchy vegetables like lettuce,
tomato, broccoli, cauliflower, zucchini,
eggplant, bok choy, okra, carrots,
cucumber, mushrooms, capsicum,
pumpkin, radish, celery, cabbage, peas



What is a carb portion?

Each food item shown is **1 carb portion = 15grams carbs**

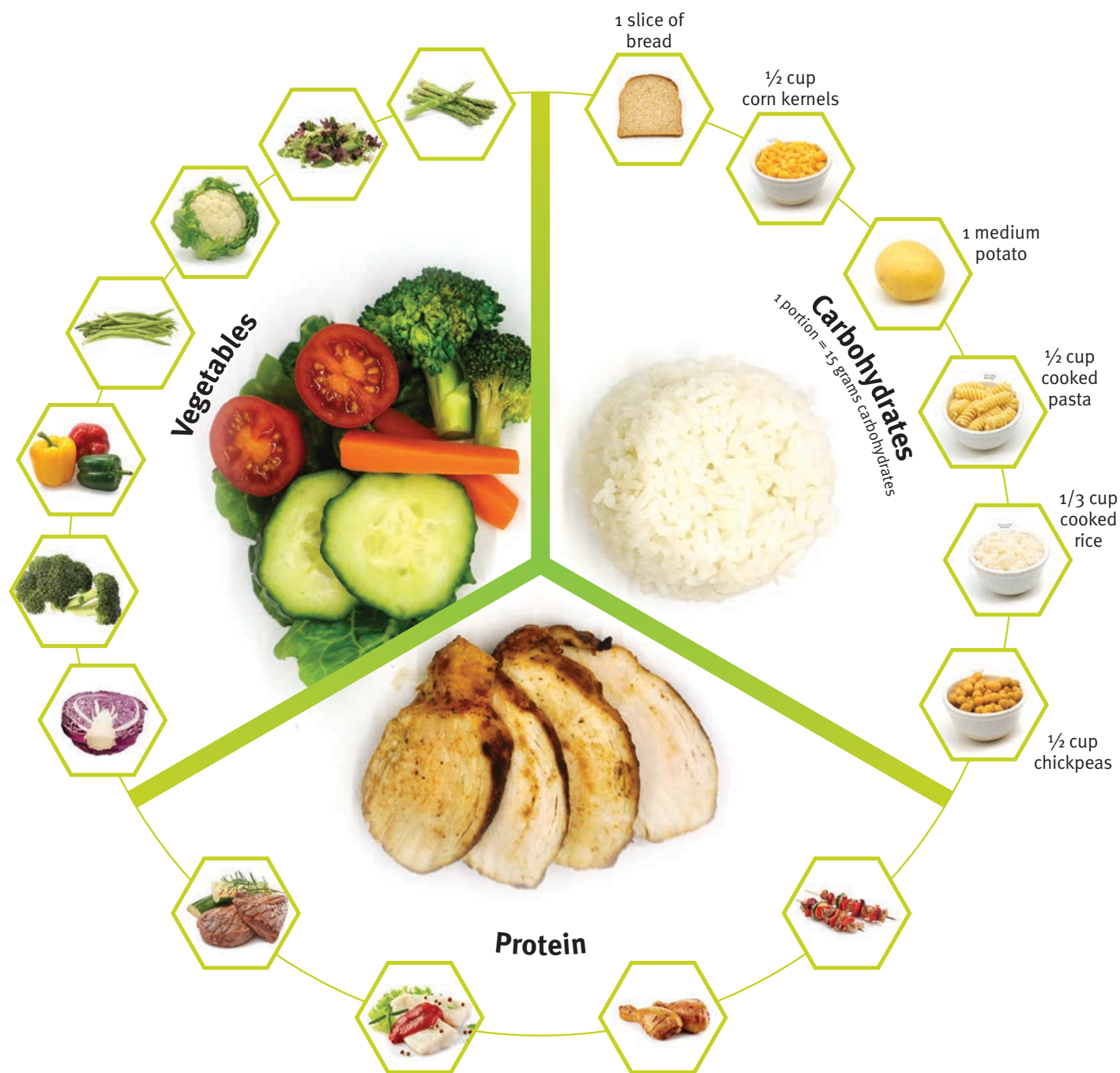
Measure and weigh your food to calculate your carbs correctly. Check labels as brands vary.

Dairy (except cheese/cream)	1 cup (250ml) milk/ low fat milk 	1/2 cup (125ml) of flavoured milk 	1/2 tub flavoured yoghurt (100g) 	200g tub diet/ natural yoghurt 	1/2 cup custard (150g) 
Fruit	1 medium apple 	1 cup frozen berries/ strawberries 	1 small banana 	20 grapes 	3/4 cup chopped fruit 
Starch Vegetables	1/2 cup chickpeas 3/4 cup canned lentils 	1/2 cup mashed potato (1 medium potato) 	1/2 cup corn kernels (1 medium corn cob) 	1/2 cup boiled taro / sweet potato 	1/2 cup baked beans 
Cereals and Grains	4 vita-weat 3 SAO's 9 rice crackers 	1 slice bread (35g) 	1 1/2 weet bix 1/3 cup raw rolled oats 	1/3 cup cooked rice 	1/2 cup cooked pasta 
Sometimes foods	1/2 cup ice-cream 	150ml soft drink / fruit juice 	6 squares of plain chocolate (30g) 	12 regular sized hot chips 	3 tsp jam 

Carb Counting

Carb counting is a way to estimate the amount of carbs in your food. This can help you better manage your blood glucose levels. Together with your dietitian, you will learn how to carb count.

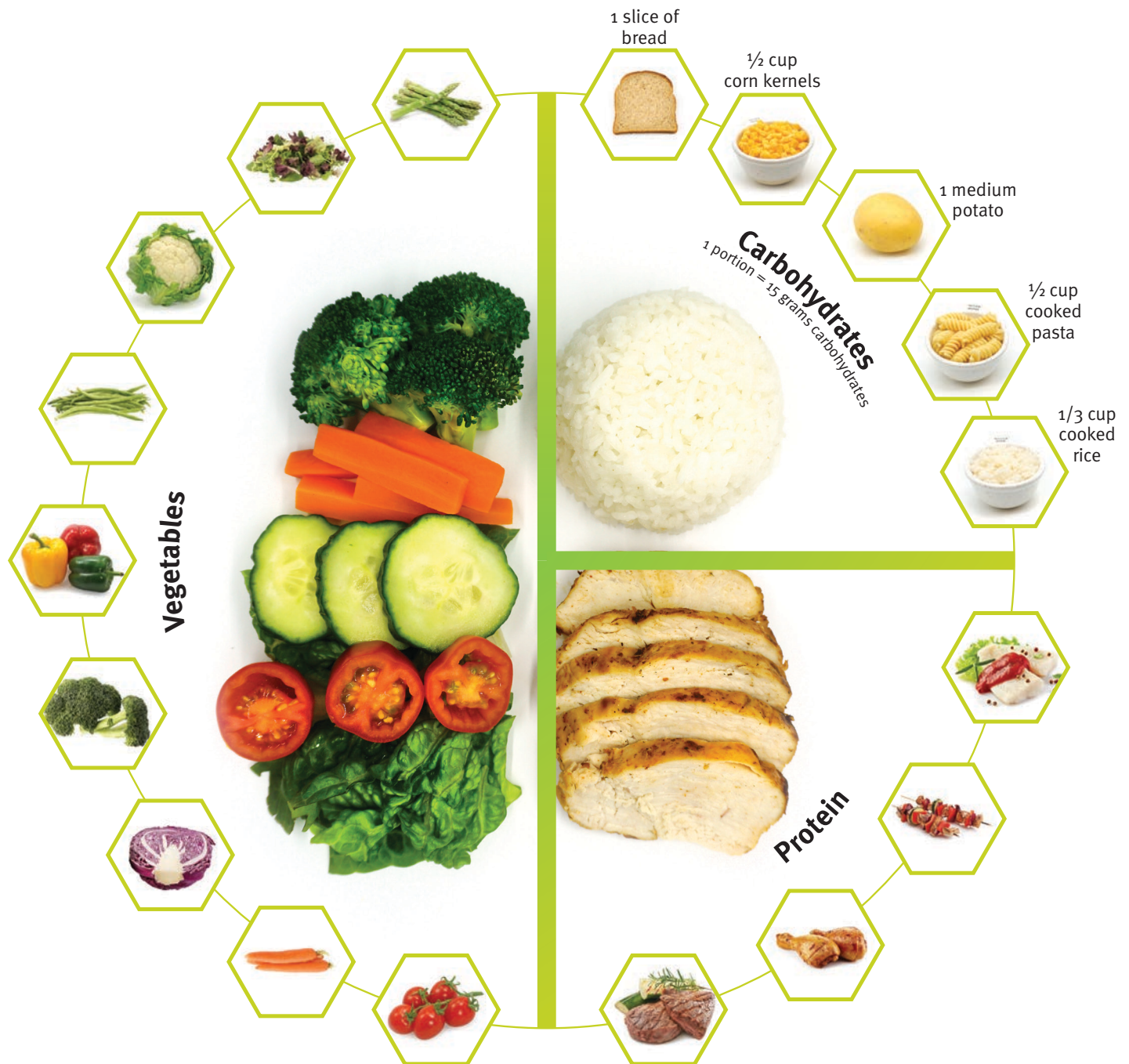
Kids healthy dinner plate



Discuss with your dietitian about how many carb portions you should have at each meal.



Teens healthy dinner plate



Discuss with your dietitian about how many carb portions you should have at each meal.

Have a healthy meal routine

Eating at set times means you will have energy to grow, learn and play. It also keeps us from getting too HANGRY (hungry and angry).

Eating at regular times will help your blood sugars stay in the target range.

Don't skip meals

People with diabetes need to make sure they eat regular meals, at about the same time every day if they can.

Skipping meals can lead to:

- Having a hypo or low BGL
- Overeating at the next meal you eat, and then having a high BGL
- Feeling tired because you don't have enough energy

Tips

Set meal times that suit you

Pack school lunches with healthy snacks

Pick healthy snacks in between meals

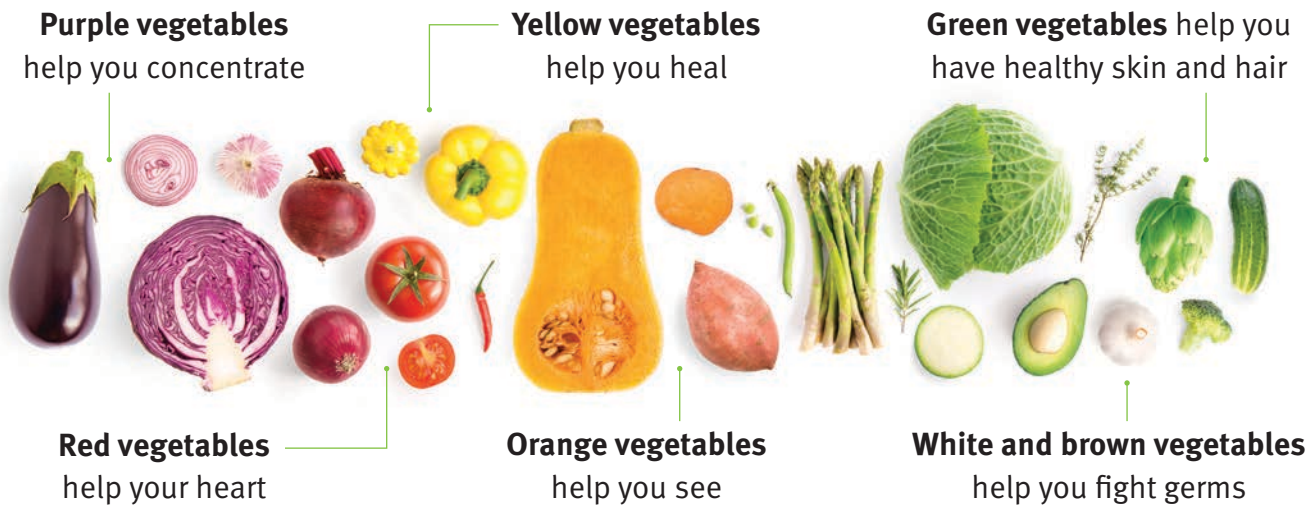
It's important to spread your carb portions throughout the day.

Daily meal guide

MEAL		NUMBER OF CARB PORTIONS
Breakfast		
Snack		
Lunch		
Snack		
Dinner		
Snack		



Eat 5 serves of veggies daily



Why are veggies so good for you?

Vegetables:

- are high in fibre (fibre can help maintain target glucose levels)
- keep you fuller for longer
- lower cholesterol levels
- reduce constipation
- helps maintain a healthy weight.

Tips to help you eat more veggies

- Aim for half a plate for dinner
- Take some veggie sticks to school for a snack
- Cook them differently – blend, mash or bake them
- Try vegetables with a favourite dip or dressing
- Grate veggies in bolognese sauce and other sauces
- Serve the veggies with a favourite dish
- Frozen veggies are just as nutritious as fresh veggies



Choose healthy snacks

Choose a healthy snack when you're hungry between meals. Just make sure it's not too close to the next mealtime!

Add protein to keep you fuller for longer. It's better to plan ahead so you have healthy snacks available.



Some healthy snacks you could try:

- apple almond butter
- banana with peanut butter
- trail mix or mixed nuts
- small handful unsalted nuts/seeds
- veggie sticks with dips like hummus, beetroot, tzatziki, guacamole
- mozzarella and cherry tomato skewers
- veggie, cheese and egg muffins
- small bowl of fresh fruit salad
- grainy crackers topped with avocado or cottage cheese
- reduced fat yoghurt with fresh fruit
- raisin toast with ricotta cheese spread
- small tin canned tuna or salmon
- boiled eggs
- low fat milk
- plain home-made popcorn
- cheese
- fresh fruit skewers
- roasted chickpeas
- corn cob
- baked beans
- smoothie

*Aim for 1 carb
serve for a
snack*



Sit less, move more, limit screen time to 2 hours a day

*This is what happens
to our bodies when we
do a lot of sitting or lying
down:*



If we don't exercise,
our brain forgets how
to tell our body to move.
Our movements become
slow and clumsy.



We gain
weight.



Our heart and
muscles aren't used
as much, so they get
smaller and weaker.



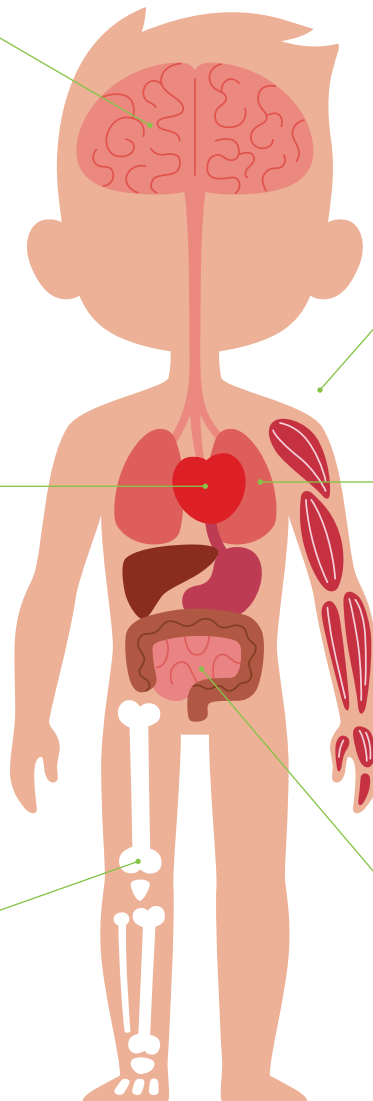
Our lungs lose their
stretch and become
smaller. This makes it
harder to breathe
and play.



Our bones and joints
become weak, brittle
and easier to break.
Our joints also
feel sore.



Our gut becomes
slow and sluggish
which makes it
harder to go to the
toilet.



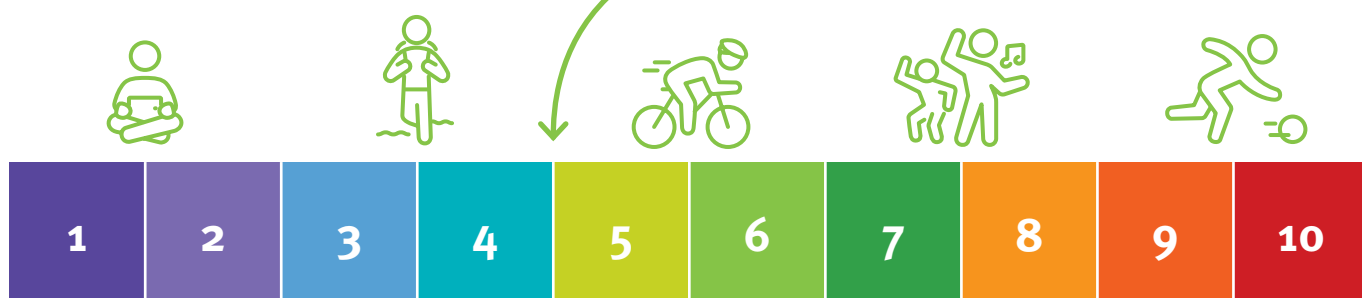
Be active for 1 hour every day

How much do I need to do?

A total of 60 minutes of physical activity every day.

What counts as physical activity?

This scale shows how hard our body is working. We need to get above the number 4 every day in order for our body to feel the benefits of physical activity! Physical activity is absolutely anything that gets you huffed and puffed, sweaty and having fun!



1 I'm resting.

2 I'm starting to puff but I can talk easily.

3 I'm puffed and can talk with deep breaths.

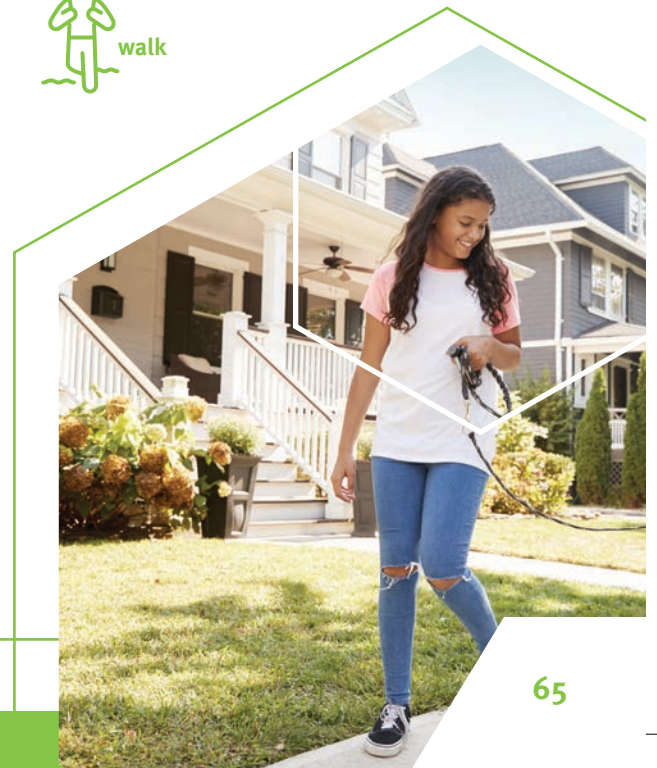
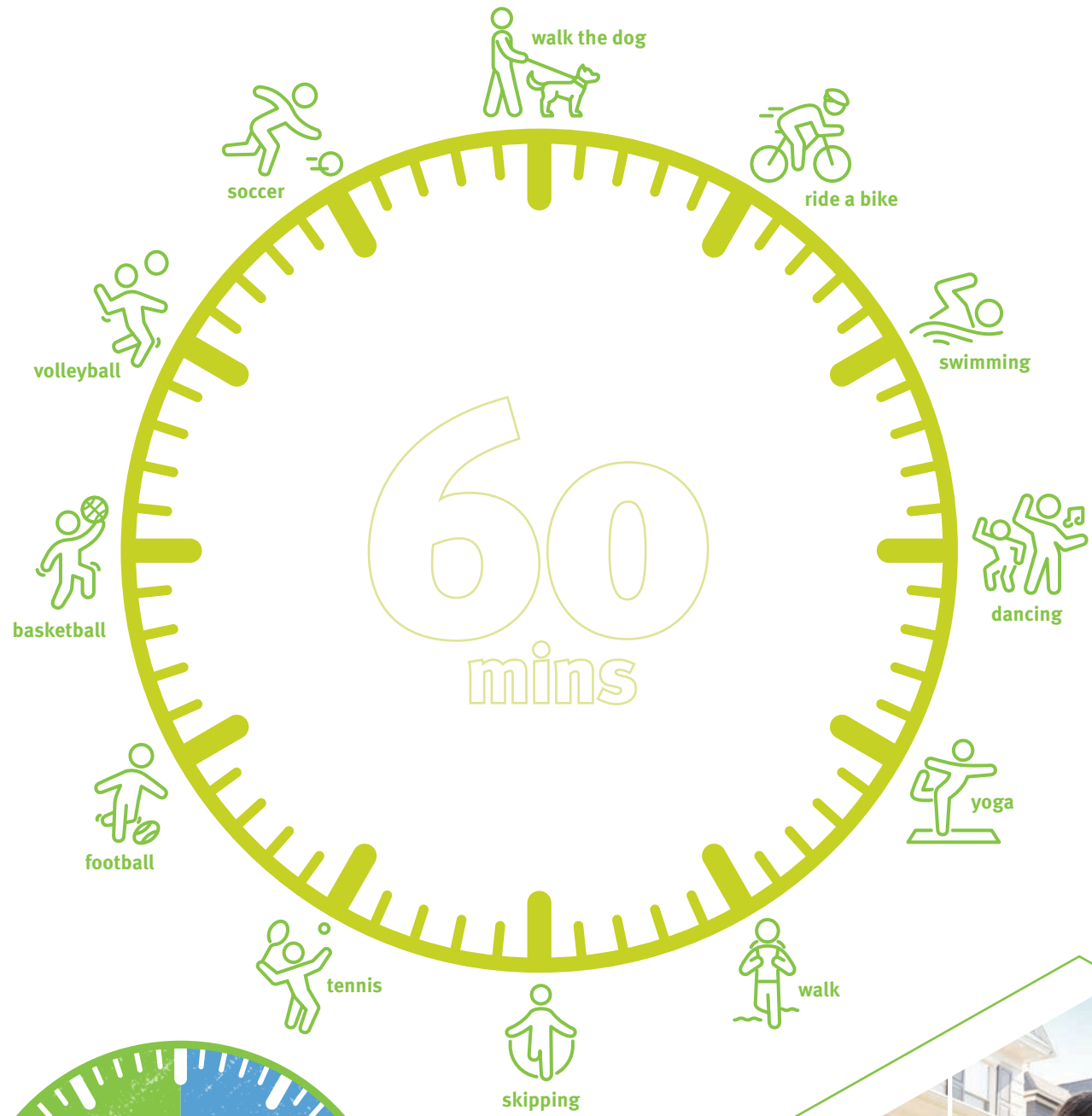
4 I'm working hard! I can keep going a bit longer.

5 I'm working my hardest. I have to stop soon.

Fat burning zone



Choose your 60 every day



The power of sleep

Sleep is essential for growth, immunity, learning, memory and recovery.

Why is sleep important?

- helps reduce our appetite
- makes us feel good
- strengthens new skills
- grows muscles and bones

What happens if you don't get enough sleep?

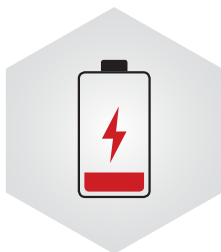
You'll be more distracted, irritable, hyperactive or restless.

Not getting enough sleep has been linked to mental health problems, poor growth, excessive weight gain, and poor performance at school.

You'll find it hard to:

- Concentrate
- Remember things
- Regulate your emotions
- Organise tasks
- Be creative

Aim for a regular sleep routine



How much sleep is enough?

Infants 4 to 12 months		12-16hrs
Toddlers 1 to 2 years		11-14hrs
Pre-schoolers 3 to 5 years		10-13hrs
Grade-schoolers 6 to 12 years		9-11hrs
Teens 13 to 18 years		8-10hrs
Adults 18 years and over		7-9hrs



Good sleep habits



Turn off screens 1-2 hours before bedtime (TV, smart-phones, tablets and computer games)



Get out during the day and enjoy some natural sunlight



Use the bedroom only for sleep, not study or play



Keep the bedroom an 'electronic free zone'



Exercise daily, but not just before bedtime



Keep the bedroom at a nice temperature



Have a pre-bedtime routine like light reading, warm bath or relaxation



Don't drink caffeine drinks later in the afternoon. Drinks like tea, coffee, chocolate, energy drinks and some soft drinks have caffeine.



Switch your phone to night mode after dinner



Keep a routine – make a regular bedtime and waking up time



Keep the bedroom dark





Notes





Acknowledgements

The ***Diabetes won't stop me! Encouraging our young people to live well*** booklet has been adapted from the ***Living Well with diabetes: A guide for Māori and Pacific Islander young people*** resource created by the Good Start Program within Children's Health Queensland Hospital and Health Service. The booklet has been funded by the Children's Hospital Foundation under a joint partnership between the Good Start Program and Queensland Children's Hospital Department of Endocrinology and Diabetes.

The development of the booklet has been coordinated and lead by the Good Start Program team. We gratefully acknowledge the expert advice and suggestions of the program's Healthy Kids Club team with particular thanks to Diana Simon, Jennifer Allen, Cleo Burke, Joachim Thetadig, Paulina Ratukula and Karina Vaevaemaki.

Special thanks to a range of health professionals from the Queensland Children's Hospital Endocrinology and Diabetes Department and Dietetics and Food Services Department. We would also like to recognise the invaluable contribution of the youth and families who are part of the Healthy Kids Club.

This resource was made possible by funding from the Children's Hospital Foundation.

Get in contact with us

We are here to help you live
a long healthy life.

Reach out to the Healthy Kids Club team on:



0436 679 153



healthykidsclub@health.qld.gov.au



www.childrens.health.qld.gov.au

