Gestational Diabetes
Life after gestational diabetes

1 EAT WELL 2 PLAY WELL 3 STAY WELL

Reduce your risk of diabetes - information for all the family

1300 136 588 ndss.com.au

The National Diabetes Services Scheme (NDSS) is an initiative of the Australian Government administered with the assistance of Diabetes Australia.
Gestational diabetes mellitus

Diabetes found in pregnancy is called gestational diabetes (GDM).

If you have had GDM, you probably have the genes that make you at risk of getting type 2 diabetes.

Many people have the genes for diabetes, but the only way to diagnose diabetes is to have a blood test. Left unmanaged, high blood glucose (sugar) levels put you at a greater risk of problems with eyes, feet and organs such as the kidneys.

Knowing you are at high risk of developing type 2 diabetes enables you to take control. Research has shown that women who achieve their healthy weight and become more active can delay or prevent the onset of type 2 diabetes. Eating healthy meals and walking each day – the things you learned about whilst pregnant – can help you to prevent or delay developing type 2 diabetes and will also show your children how to be healthy and avoid diabetes too!

Once baby is born...

The pregnancy hormones (which caused the delay of glucose transport from the blood to cells) fall within a few days, allowing your insulin to work more effectively maintaining blood glucose levels (BGLs) within the healthy range.
Keep testing your diabetes status!

Ask your GP for an oral glucose tolerance test (OGTT):

- 6-12 weeks after your baby is born (or as soon as possible after this time)
  Two out of every 100 women still have diabetes after their baby is born, so having a test soon after you give birth will assess if your glucose (sugar) levels have returned to the normal range.
- If you are planning to have another pregnancy.

The table below explains when you can expect to have a follow-up check for diabetes.

<table>
<thead>
<tr>
<th>OGTT result</th>
<th>Next diabetes check in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre diabetes</td>
<td>1 year</td>
</tr>
<tr>
<td>No diabetes</td>
<td>1-3 years (depending on your risk factors)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>No further checks for diabetes are required. Your doctor will arrange for you to have the appropriate education and management.</td>
</tr>
</tbody>
</table>

FACT
People with type 2 diabetes often feel OK without noticing symptoms for years. That’s why it’s important to see your GP and ask for a diabetes test. That way you can find out early if you have type 2 diabetes and prevent diabetes problems from occurring.
Why is diabetes a problem?

People can develop diabetes (high blood glucose levels) at any age. Untreated, blood glucose levels above 8 mmol/L can lead to damage of organs such as your eyes, kidneys and heart, as well as your feet. If you are at risk (and women who have had GDM are), testing for diabetes regularly may reduce the amount of time your blood glucose levels are high before getting treatment.

Choose to:

1 EAT WELL  
2 PLAY WELL  
3 STAY WELL

and you can reduce or delay your 50% chance of developing type 2 diabetes.
“Early diagnosis and management of pre diabetes and diabetes are important for good health and planning for subsequent pregnancy.”

Remember, even if your test shows you do not have diabetes, remind your GP to test for you again every one to three years to avoid the problems undiagnosed diabetes can cause.

“I want to be a doctor so I can help the sugar in your tummy mummy!”

4yo daughter of a GDM mother
Take the steps to a healthier life

**EAT WELL** to lead a healthy life

Food is an important part of life and sharing mealtimes with your family and friends is one of life’s great joys!

Here are some ideas to share with your family and friends:

- Make eating a fun time. Share healthy snacks with your children
- Include 3 snacks each day, reduce portion sizes at main meals to enjoy snacks
- Enjoy a wide variety of nutritious foods and choose foods you enjoy
- Adjust your favourite recipes to be healthier, for example use yoghurt instead of cream in recipes
- Meet a friend for a walk, then stop for coffee
- Have healthy snacks available in your pantry and fridge to choose from
- You don’t need to cook separate meals for yourself, healthy foods are right for all of your family!

Examples of healthy snacks to choose from are:

2 *Slices raisin toast*

1 *Fruit kebab (fruit pieces on a stick) with natural yoghurt*

250ml *Yoghurt (check the fat is less than 2g/100g)*

*Low fat popcorn*

1 *Toasted muffin with low fat cheese / baked beans*

300ml *Milk with blended fruit eg. 6 strawberries*

*Dried fruit and nuts (handful)*

*Fruit muffins (homemade - 1 large)*

*Vegetable sticks and homous*
Shopping list!

Take this handy guide shopping with you to make life easier when choosing lower fat products:

**Breads and cereals**
less than 5g fat/100g (if predominately rolled oats less than 10g fat/100g)

**Milk**
less than 2g fat/100mL

**Yoghurt**
less than 2g fat/100g

**Ice cream**
less than 5g fat/100mL

**Cheese**
less than 20g fat/100g

**Dry biscuits, sweet biscuits, cakes, snack bars and muesli bars, mayonnaise, dressings, sauces, soups and convenience meals**
less than 5g fat/100g

**Fibre**
Aim for breads and cereals containing at least 5g fibre/100g
Aim for biscuits and snack foods containing at least 3g fibre/100g

**Sodium (salt)**
Aim to choose foods containing less than 450mg/100g of sodium (cheese less than 800mg/100g)

Ask a dietitian for more ideas and information on carbohydrates and fats (you can ask at your local community health centre or go to the Dietitians Association of Australian website to find a dietitian in your area: www.daa.asn.au).

TIP
Remember to take your label reading guide to the supermarket with you!
Take the steps to a healthier life

2 PLAY WELL to lead a healthy life

Being active is good for you in so many ways! Activity can provide a huge range of fun experiences, make you feel good, improve your health, and is a great way to relax and enjoy the company of your friends. Here are some ideas to add extra activity into your daily life:

- **Dance 10 minutes with the children to their favourite music**
  Think of movement as an opportunity, not an inconvenience. See all forms of movement as an opportunity for improving your health, not as a time-wasting inconvenience.

- **Walk 10 minutes to buy milk and bread**
  Be active every day in as many ways as you can. Make a habit of walking or cycling instead of using the car, or do things yourself instead of using labour-saving machines.

- **Play 10 minutes in the garden or park with the kids**
  Put together at least 30 minutes of physical activity on most, if not all, days.

*Your 30 minutes (or more) of activity can be added up throughout the day by combining a few shorter sessions of activity (as little as 10 to 15 minutes each). Enjoy being active AND reduce your chance of developing diabetes.*
Find the healthy balance to enjoy life whilst avoiding diabetes for you and your family.
Be a role model for your children. Eat well and play well together.
Here are some ideas to get you moving!

*Play hide and seek with your kids around your house and garden;*
*Start or join a pram walking club;*
*Take your children to the park or playground;*
*Take a ball to kick or throw around the park;*
*Book your children in for swimming class and do some laps during their lessons;*
*Dance to your favourite CD or DVD with your children;*
*Supervise (and run after) your children on tricycles and push bikes.*

**Reasons the whole family should BE ACTIVE!**

Being active can:

- help prevent heart disease, stroke and high blood pressure;
- reduce the risk of developing type 2 diabetes and some cancers;
- help build and maintain healthy bones, muscles and joints, reducing the risk of injury; and
- promote psychological well-being.

**Enjoy being Active!**
Take the steps to a healthier life

**3 STAY WELL to lead a healthy life**

Stay well with the ABC to avoid D (diabetes)...

A **Ask your GP**
- Test for diabetes every 1 - 3 years (depending on your risk) and learn the signs and symptoms

B **Before your next baby**
- Test for diabetes before your next pregnancy

C **Control your weight**
- Return to your healthy weight range

**TIP**
- Keep your waist measurement under 80cm

**A Ask your GP!**
Remember to ask your GP for a diabetes test 6 - 12 weeks after the birth of your baby and every 1 - 3 years after that. Your glucose test may reveal several results: pre diabetes, diabetes or within the normal ranges.

*I had the test after my baby was born, the gestational diabetes has gone*

The gestational diabetes may ‘go away’ after your baby is born. Having had gestational diabetes, you may have inherited the genes for diabetes, so regular testing for diabetes is recommended.

**FACT**
- You are more likely to develop type 2 diabetes before your baby becomes a teenager.
Pre Diabetes
(called impaired fasting or impaired glucose tolerance)

“I had the test and was told I had pre diabetes”

If the results from your diabetes test show you have pre diabetes that means you are at higher risk of developing type 2 diabetes soon. The results are not in the diabetes range but are above normal. People with pre diabetes can revert their blood glucose levels to the normal range by being active and maintaining healthy weight goals. The glucose tolerance test should be repeated every 12 months to observe if blood glucose levels are rising.

Diabetes

“I was tested again when my baby was eight weeks old, my blood glucose stayed high”

Some women have developed diabetes before their pregnancy without knowing they had high blood glucose levels. An oral glucose tolerance test (OGTT) after your baby is born will diagnose whether you have diabetes or not. If you do have diabetes it is important that you see a doctor to help manage your blood glucose levels to avoid diabetes-related problems developing.

All in the Family....

This is a good time to discuss diabetes with your relatives (parents, grandparents, aunts, uncles). Ask if they have recently been tested for diabetes and if not, suggest they visit their GP and ask for a test. Ask your friends if they want to stay healthy by walking with you, or meeting up at the pool or gym!

FACT

You can reduce your risk of type 2 diabetes (and your children’s risk) by following the steps to healthy living like the ones recommended to you when you were diagnosed with gestational diabetes.
**Signs of diabetes**

Be aware of signs and symptoms of diabetes such as:
- going to the toilet (to urinate) often;
- constantly feeling thirsty; and
- feeling tired.

**Ask your GP!**

Early diagnosis and management of pre diabetes and diabetes is important for good health, especially if you are planning for a future pregnancy.

Women who have had gestational diabetes face a 50% risk of developing type 2 diabetes at some point later in their lives.

"**WOW, I am so lucky I am not in the 50% group who WILL develop diabetes…**"

Unfortunately, life doesn’t always work as you think. Remember one in two women with gestational diabetes will develop type 2 diabetes.
I’d like to have another baby

Before your next baby

Have a diabetes test first!

If your test shows you have diabetes you can start to manage high glucose levels appropriately before they affect your baby. Aiming to keep your blood glucose levels between 4–7 mmol/L before you get pregnant and during your pregnancy can help reduce problems for your baby while he or she is growing. Some possible problems that may occur if blood glucose levels are high include deformed organs, problems with breathing, having extra fat around the stomach, and even death.

If the test shows you have pre diabetes or diabetes itself it’s important to visit your local diabetes educator or diabetes specialist before trying to become pregnant. Together you can work towards managing your diabetes before and during your pregnancy.

Some things to discuss with your diabetes care team include:

• Folic acid: Start taking at least 3 months before getting pregnant.

• Blood glucose testing: Ask about the recommended levels to aim for when planning pregnancy (readings between 4–7 mmol/L). Your doctor or diabetes educator may talk to you about starting insulin to help control your blood glucose levels.

TIP

Detect diabetes prior to or early in your next pregnancy by having an oral glucose tolerance test. Blood glucose levels in the healthy range will help to reduce your baby’s chance of developing complications from high blood glucose levels.
Aim for a healthy weight

Control your weight

Depending on how much weight you have to lose, it make take you some time to return to a healthy weight. Remember, if you are overweight, any weight loss is good. Losing 5-10% of your body weight will substantially reduce your risk of developing type 2 diabetes.

Setting realistic targets and seeking professional help is important to help you stay on track! Make an appointment with a dietitian for advice on healthy eating for you and your family and, if required, weight loss information.

Waist circumference can be used as a guide to work towards to keep / obtain a healthy weight range.

Waist circumference guidelines (cm)

<table>
<thead>
<tr>
<th>Women</th>
<th>Healthy</th>
<th>Overweight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80</td>
<td>80-87.9</td>
<td>≥88</td>
</tr>
</tbody>
</table>

Weight for height chart for adults from 18 years onward

For best results to achieve a healthier lifestyle and reduce your risk of developing type 2 diabetes, combine physical activity with healthy eating.
Websites for more information

You can find more information about how to delay diabetes at the following websites:

National Diabetes Services Scheme (NDSS)
www.ndss.com.au

Diabetes Australia
www.diabetesaustralia.com.au

The Australasian Diabetes in Pregnancy Society (ADiPS)
www.adips.org

Physical activity
www.essa.org.au

Nutrition
www.daa.asn.au

Disclaimer:
This information booklet is intended as a guide only. It should not replace individual medical advice and if you have any concerns about your health or further questions you should raise them with your doctor.
This booklet is to help you, women who have had gestational diabetes, and your family and your friends, understand how diabetes can affect you and your family. Take the steps to lead a healthier life to reduce the risk of both you and your children developing type 2 diabetes.

The development of this booklet was coordinated by the “Life After GDM Working Party” on behalf of the Australian Diabetes Society and the Australasian Diabetes in Pregnancy Society via funding under the National Diabetes Services Scheme (NDSS).

The National Diabetes Services Scheme (NDSS) is an initiative of the Australian Government administered with the assistance of Diabetes Australia. The NDSS delivers diabetes-related products at subsidised prices and provides information and support services to people with diabetes. Registration is free and open to all Australians diagnosed with diabetes. Visit www.ndss.com.au or call 1300 136 588. First published in 2009.

The Working Party would like to acknowledge the generous support of the women, partners and babies who participated in the focus groups during the resource development, the staff who co-ordinated the groups and Hilary, Husna and Janet.

“When I was told I had gestational diabetes, I was worried my baby would have problems. Getting through the pregnancy was a huge relief. Now the doctor tells me I should take care not to get diabetes again.”

Jenny mother of Sam 10 months