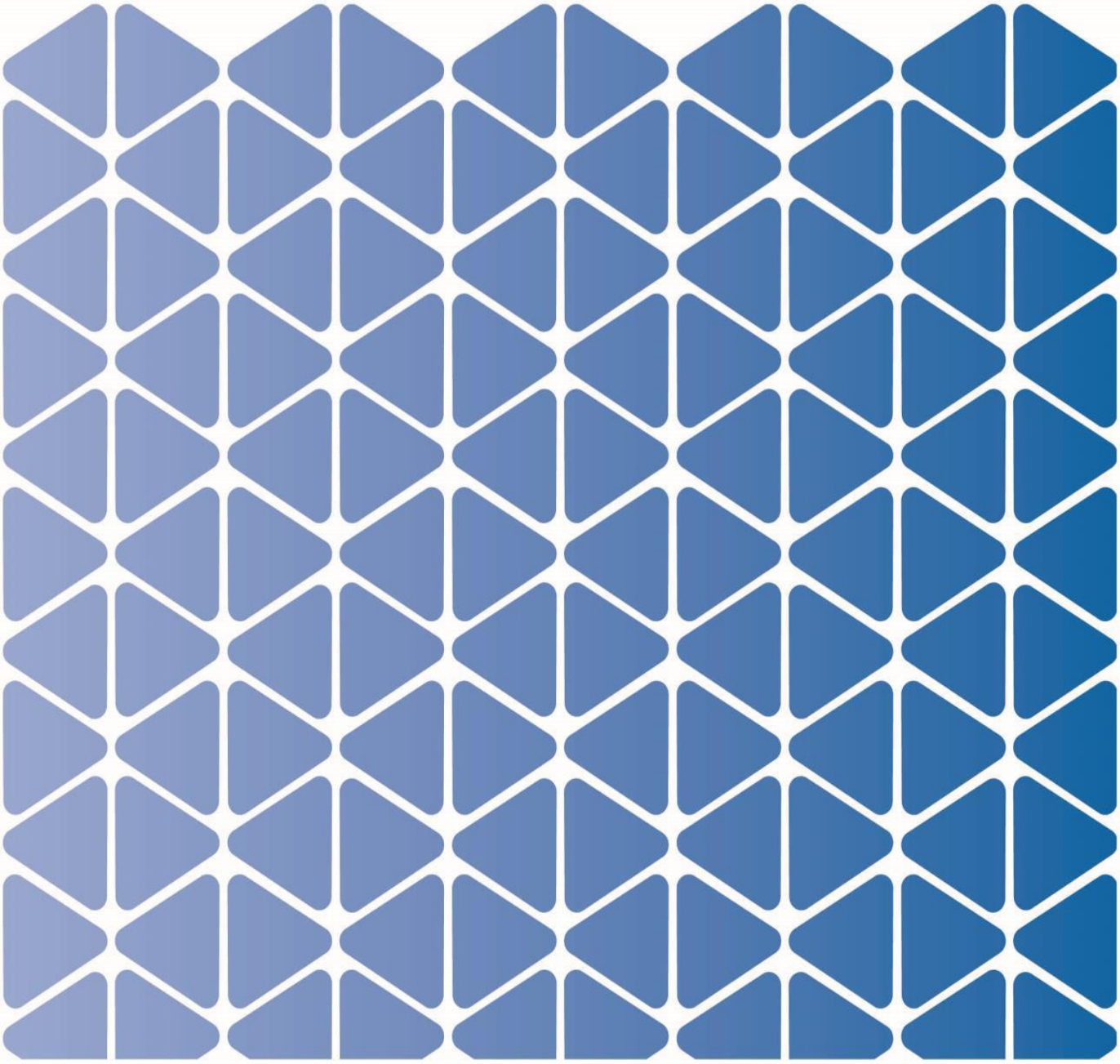
NHS
Worcestershire Acute Hospitals NHS Trust

PATIENT INFORMATION

Starting Insulin When You Have Gestational Diabetes



Important Contacts

Diabetes Specialist Nurse Teams:

Worcestershire Royal Hospital	01905 760775
Kidderminster Hospital	01562 826385/ 01562 512324
Alexandra Hospital	01527 505782

Diabetes UK

Helpline: 0345 123 2399

Email: helpline@diabetes.org.uk

- **www.diabetes.org.uk**

Gestational Diabetes, Causes and Treatment

Following your diagnosis of Gestational Diabetes (GD) you should have been advised of:

- Potential risks involved for yourself and your baby
- Dietary advice
- Lifestyle changes which can help improve blood glucose readings

All this information is included within a leaflet called 'Gestational Diabetes Dietary Information'. This is available on your Badger Notes app.

Sometimes after making the recommended changes to diet and lifestyle blood glucose levels can remain high or difficult to control. You may have already started Metformin tablets in addition to making the advised changes. Please continue this unless advised otherwise.

Continuous high blood glucose levels can lead to complications for both mother and baby. These complications are discussed in more detail in the leaflet Gestational Diabetes Dietary Information.

Gestational Diabetes Dietary Information Leaflet

To try and reduce the chance of these complications your diabetes team have suggested starting insulin to keep your blood glucose levels within target range.

Insulin Types and Regimens

Regimen - 'a prescribed course of medical treatment'

There are a range of different insulin types and regimens available.

The most common are;

- Basal insulin only (long acting)
- Bolus insulin only (quick acting)
- Basal bolus regimen (both long and quick acting)

Basal insulin only

This may be given once or twice daily. It can be described as background or long acting insulin. This insulin works throughout the day or night so you should aim to eat regular meals which include some carbohydrate (see page 4) to keep your blood glucose steady.

Bolus insulin only

This is when you take insulin before each meal. A dose of quick acting insulin is given at mealtimes (ideally 10-20 minutes before you eat).

Basal Bolus Regimen

In addition to the basal (long acting) insulin, a dose of quick acting insulin is given at mealtimes. The amount and timing of quick acting insulin can be altered to fit in with your carbohydrate intake each mealtime.

Dietary Advice

When you were first diagnosed with gestational diabetes you will have received dietary information. Please ask if you need further advice or support with this.

Once taking insulin, it is important to eat a regular amount of carbohydrate with each meal to reduce the chance of hypoglycaemia (low blood glucose).

Weight Management

The more weight you gain during pregnancy the more insulin resistant you will become. This means that due to hormones produced in pregnancy you are unable to use your body's own insulin effectively. It is therefore important to carefully control weight gain.

If you find you are having to eat more food or snacks than usual to maintain your blood glucose you may be taking too much insulin. In this instance, please contact your diabetes specialist nurse.

Regular Meals

The timings of your insulin and meals depend on which insulin regimen you are on (see page 3 & 4), a healthcare professional will advise you on this.

Blood Glucose Monitoring

Why check blood glucose?

It is important to check your blood glucose so that you can monitor your blood glucose levels, and we can ensure your insulin dose is correct for you. It will also help you recognise high and low blood glucose levels.

The target levels for your blood glucose are;

Before breakfast 4- 5.2 mmol/l

1 hour after meals 4- 7.7 mmol/l

If you have 2 or more readings above these targets, please contact your diabetes specialist team.

Worcestershire Royal Hospital 01905 760775

Kidderminster Hospital 01562 826385/ 01562 512324

Alexandra Hospital 01527 505782

When to test;

- Before breakfast
- 1 hour after breakfast
- 1 hour after lunch
- 1 hour after evening meal

Please ensure it is timed 1 hour after you finish your food.

Additional blood glucose testing is recommended when;

- Driving,
- Doing additional exercise,
- Feeling unwell,
- Feeling hypo (see page 6, 7 and 8).

Insulin Injections

Your diabetes team will advise you on:

- The type of insulin you have been prescribed
- The pen device which will be used to give your insulin
- How to use your insulin pen and how to give an injection

Where to Inject Your Insulin:

It is recommended that your chosen injection sites are

- Tummy
- Thighs
- Buttocks

Can I inject into my abdomen?

With a standard 4mm needle you can safely inject into the fatty layer beneath the skin, this is nowhere near the baby. Avoid the area too close to the belly button and speak to your diabetes team if you have any concerns.

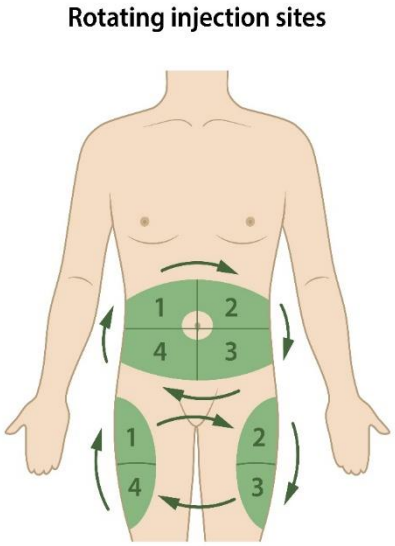
Your injection times may be:

- Before Breakfast
- Before Lunch
- Before Evening meal
- Once or twice per day as advised

Always remember to do an ‘air shot’ prior to injecting your insulin by dialling 2 units and injecting into the air, this primes the needle and ensures there are no blockages.

Tips for giving an insulin injection

- Always rotate your injection sites using different areas of the body for each injection.
- Ensure you are at least 1cm or half an inch from the last injection. Avoid any bruised areas or fatty lumps.
- Always use a new needle for each injection.
- 4mm pen needles should be used and there is no need for a lifted skinfold with these smaller needles.
- Always hold the needle in for a count of 10 seconds after delivering your dose.



Disposal of Sharps

Sharps are pen needles, blood glucose lancets and syringes. These should be disposed of safely in a sharps container. Your diabetes team will explain how to dispose of your sharps.

Identification

It is advisable to always carry identification with you stating that you have diabetes. You should also carry a record of your blood glucose levels in case they are needed for an appointment or in the case of feeling unwell.

Extra Supplies

Your extra supplies of insulin, tablets, pen needles, testing strips, lancets and sharps container are available from your GP on prescription. This prescription request is sent at your first appointment.

Hypoglycaemia

Sometimes called a Hypo - this means your blood glucose level is Too Low **(Below 4 mmol/l).**

What to do if you have a low blood glucose level / hypo.

'Hypos' can happen for several reasons. Your nurse or midwife will talk to you about these. The best way to prevent hypos is to balance insulin doses, physical activity, and carbohydrate intake. There is usually no need to have snacks between meals unless you are being more active than usual.

If you are having a hypo, you will usually get warning signs. For example, you may feel one or more of the following:

- **Hungry**
- **Sweaty**
- **Dizzy**
- **Feeling weak**
- **Trembling**
- **Bad tempered or moody**

When you are hypo, your brain becomes depleted of glucose, other people may notice some of the following:

- **Confusion**
- **Irritability**
- **Slurred speech**
- **Loss of concentration**
- **Aggression**
- **Change in behaviour**

In the event of a ‘hypo’ you should:

Step 1: Test

Check your blood glucose levels with fingerprick test (to confirm hypo)

Step 2: Treat

If your blood glucose is below 4 mmol/l, treat with a fast acting carbohydrate

Step 3: Test

After 10-15 minutes, recheck your blood glucose levels with fingerprick test. **If still below 4mmol/l- Repeat step 2 and 3.** If above 4mmol/l- Eat!

Step 4: Eat

Have a starchy carbohydrate snack or eat a normal meal if due

Options for fast acting Carbohydrates 15-20g are:

- 3-5 Jelly Babies.
- 200ml pure Orange Juice
- 5-7 Glucose tablets (Dextrose energy tablets)
- 4-5 Glucotabs

Once your blood glucose is above 4mmol/l have your meal if it is due or have a snack of about 15-20g of longer acting carbohydrate, such as a plain biscuit, glass of milk, piece of fruit or slice of toast.

You may need someone else to assist you if you are unable to treat your hypo yourself. They may need to seek urgent medical help as they should not give you anything by mouth if you are unresponsive.

Always carry fast acting carbohydrate with you!

If you have had a hypoglycaemic episode, it is important to:

1. Contact your diabetes specialist nurse to adjust the dose of insulin as soon as they are open.
2. Contact maternity triage to monitor the babies' movements.

Driving

By law you only need to inform the DVLA and your insurance company if you have diabetes treated with insulin **for over 12 weeks**. You must always ensure you are safe to drive and have a blood glucose level of at least 5mmol/l.

You are required to test your blood glucose within 2 hours prior to driving **even for very short journeys** as well as at regular 2 hourly intervals on a longer journey.
If you are treating a hypo, you should always be sat in the passenger seat.

You should not drive for 45 minutes after having a hypo.

What happens after the baby is born?

Insulin and Metformin are usually only needed during the pregnancy and will be stopped once you have delivered your baby. Your GP will arrange a blood test 6-12 weeks after the baby is born to confirm the gestational diabetes has resolved. Then annually if this result is normal.

You have an increased chance of developing the condition in future pregnancies. You are also more likely to develop Type 2 diabetes in the future. There are several ways you can reduce these risks:

- Attend for your follow up blood test at approximately 12-13 weeks after birth of baby, if you don’t get an appointment for this please schedule one at your GP surgery
- Look out for any symptoms of diabetes and arrange to see your GP/nurse if you are concerned. These may include passing urine more often, especially at night, extreme tiredness, increased thirst, unexplained weight loss or slow healing of cuts and wounds.
- Attending your yearly re-call for blood test to rule out Type 2 diabetes
- Continue with healthy eating and regular physical activity
- Take steps to manage your weight and keep your BMI in the normal range
- Get support if you need to lose weight from a dietitian or weight management group.
- Your GP can arrange referral to the NHS Diabetes Prevention Programme (NHS DPP) or you can self-refer online.

Produced by:
Diabetes Specialist Service
Worcestershire Acute Hospitals NHS Trust

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.