

# Guidance for self-administration of insulin injections

You have been recommended to give yourself insulin by injection during your pregnancy. The diabetes specialist midwife or one of the team has already shown you how to inject yourself.

The following checklist will act as a reminder about what you have been told and help you give your insulin safely.

## Equipment

Your insulin will be supplied in a disposable pen device.

1. You have been given a starter supply of needles for use with the injecting device.
2. If you have been given a whole box of disposable pens please ask your GP for repeat prescriptions. Check that your repeat prescription is for exactly the same insulin, and needles. It is worth keeping the old packets as a reminder.
3. When you collect your prescription from the pharmacy, check that you have been given the correct products.

## Disposable pen device

1. The device you have been recommended has been demonstrated to you.
2. You have had the opportunity to become familiar with it.
3. The device comes with instructions that you can refer to.

## Needles

1. Needles come in different lengths. You have been given needles of \_\_\_\_\_mm length.
2. Check that your repeat prescription is always written for the same length needles. This is important because the time it takes for the insulin to be absorbed may vary if you use different lengths of needle. You have been given a 'sharps container' to dispose of your used needles safely. When this is full, close the lid and return it to the antenatal clinic for disposal and a replacement will be given. Alternatively, your GP's surgery or your nearest chemist may accept it for disposal.

## Insulin

1. The disposable injecting device or pen in use, should be **kept in a safe place, away from children**.
2. It should be kept cool (under 25°C), avoiding direct heat, such as sunlight and radiators.
3. Your spare disposable devices or insulin cartridges should be kept in the refrigerator, not the freezer. Also in a safe place away from children.
4. If travelling, keep the insulin as cool as possible and refrigerate when you arrive.
5. If you plan to go on holiday to a hot climate, you may consider buying a water-activated cold pack, available online from [www.friouk.com](http://www.friouk.com).
6. Take enough insulin with you, and spare (in case the device fails or the cartridge breaks).

## How to give insulin

1. There are many different types of insulin and we measure the dose in units.
2. You have been taught about the insulin you have been recommended to take.
3. Some insulin's are clear and some are cloudy. If you are using a cloudy insulin, it may have separated and be partly cloudy and partly clear.
4. Before giving your injection, it is important that it is gently mixed by rolling between the palms of the hand 10 times and turning the pen up and down 10 times until it looks evenly cloudy.

## Injecting the insulin

1. Check that there is no air in the insulin cartridge. You will not harm yourself if you inject air but it may affect the dose given.
2. How to expel air:
  - a. Dial up a few units of insulin;
  - b. Hold the device or pen vertically, with the needle uppermost. The air will float to the top below the needle. You may need to flick the bottle to encourage the air to move up;
  - c. Press the injection button fully. The air should be expelled along with the units of insulin dialled.
3. If you do not need to expel air from the device, you are ready to inject the insulin.
4. **Before every injection**, you should check your device is working properly.
  - a. Dial up a dose of 1 or 2 units;
  - b. Press the injection button fully;
  - c. You should see insulin coming out of the needle. If you do not, repeat the process until you do.
  - d. If a disposable device is not working properly, throw it away and use another device.
  - e. If a non-disposable device is not working, change the insulin cartridge. If the device still fails to work, please call us for advice, or, if outside our working hours, please contact your GP or out-of-hours doctor service immediately. The device will need to be replaced on prescription and it is important not to miss any insulin doses.
5. Once you have checked your pen, dial up the number of units required. Your doses will have been written in your blood sugar book.
6. Insulin may be given into the thigh or tummy. The diabetes specialist midwife will have shown you suitable places to inject.
7. You should use the same site for injecting at the same time of day, e.g. if you give a breakfast dose in your tummy then always inject into your tummy at breakfast; do not do tummy one day and leg the next.
8. You should move around the injecting site so that you are not always injecting into the same area.
9. At the point that you are going to inject, introduce the needle straight into the skin up to the end of the needle.
10. Do not put the needle into your skin at an angle.
11. Ensure that you can see the dose dialled up in the window at the top of the pen.

12. Press the injection button and watch carefully that the dose showing in the window reduces to zero.
13. Hold the needle in place under the skin for ten seconds to allow all the insulin to completely leave the needle, and then remove.
14. You may wish to have a small piece of cotton-wool ready to hold over the puncture site, in case there is little leakage or bleeding.
15. Remove the needle from the device after each injection and discard in the sharps bin provided.
16. Do not reuse needles.

## Timing of injections

1. The timing of the insulin injection depends on the type of insulin that you have been prescribed.
2. You have been advised about the timing of your insulin injections and this is detailed on the checklist at the end of this leaflet.

## Meals

1. When taking insulin you must eat regularly – three meals per day.
2. **Do not skip a meal.**
3. Eat a healthy diet based on complex starchy food, such as good quality wholegrain bread, pasta, potatoes and rice.
4. Cut out sugary foods in your diet.
5. Try not to drink fruit juice, eating the whole fruit is better however, if you do, unsweetened apple or grapefruit juice, taken with a meal, will have the least adverse effect on your blood glucose.
6. Most European fruits are fine, such as apples, pears, berry fruits and oranges but do not have melon, especially watermelon. Eat tropical fruits in small portions only, with a meal.
7. For your long-term health, try to reduce your fat intake, especially animal fats.
8. Reduce your salt intake and try to eat at least five portions of fruit and vegetable per day.
9. Half an hour of moderate activity per day, enough to get warm and little out of breath, will help keep your blood glucose levels down. This could simply be achieved by walking after meals, for 15-20 minutes, fast enough to make you slightly breathless.

## Hypoglycaemia ('hypo')

Insulin can make your blood sugar too low and it is important you and those around you know that you are on insulin, what the symptoms of a low blood sugar are and how to help you if your sugar gets too low. Your blood sugar may be low if you have the following symptoms:

- Headache
- Anxiety
- Hunger
- Shaking
- Weakness or feeling faint
- Dizziness
- Sweating
- Dry mouth

Always carry fast-acting sugar with you, such as, dextrose (Lucozade) tablets, or, Jelly Baby sweets are a good alternative.

If your sugar is low you may need to:

1. Take 3-6 dextrose tablets or Jelly Babies.
2. The effect of the fast-acting glucose will not last long, so take more substantial food within ½ an hour of having the dextrose tablets or Jelly Babies, such as a sandwich or toast and a glass of milk.
3. Test your blood sugar regularly until normal.
4. **You may not be able to help yourself so tell your family and friends when and how they can help you.**

## Driving

You must inform the DVLA if you have a driving licence and you are going to be on insulin for more than three months either during or after delivery of your baby. Your insurance company should also be notified however, your treatment does not usually affect either. Always check your blood glucose before driving, '**5 to drive**' to be sure there is no risk of having a hypo.

## When you come in to hospital

1. When you come into hospital to have your baby, or if you are admitted for any reason whilst you are pregnant, you will be able to carry on giving yourself your insulin, as long as you are well enough to do so.
2. On arrival you will be given a leaflet entitled 'Self-administration of insulin'. This leaflet outlines your responsibilities to look after your insulin whilst you are an inpatient.
3. You will have a discussion with the midwife caring for you on the ward. If you are both satisfied that you are able to do so, and then you will carry on administering your own insulin injections.
4. If the circumstances change, for example, if you have a general anaesthetic, then the midwives will take over the care of your diabetes until you are well enough to do so again.
5. When you are admitted to hospital, always bring your insulin, your blood glucose monitor and your sharps box with you. If you forget to bring it, please ask a relative to do so as soon as possible.

## References

1. British National Formulary (October 2011)
2. A guide to insulin treated diabetes and driving (INF294) Ref: INF294PDF, 212KB, 6 pages (last updated March 2020) <https://www.gov.uk/government/publications/information-for-drivers-with-diabetes>
3. <https://www.tommys.org/pregnancy-information/pregnancy-complications/gestational-diabetes/gestational-diabetes-and-injecting-insulin>
4. Diabetes in pregnancy: management from preconception to the postnatal period NICE guideline Published: 25 February 2015, last updated Dec2020. [www.nice.org.uk/guidance/ng3](http://www.nice.org.uk/guidance/ng3)
5. <https://www.nice.org.uk/guidance/ng3/resources/diabetes-in-pregnancy-management-from-preconception-to-the-postnatal-period-pdf-51038446021>

## Checklist

Your insulins are called: \_\_\_\_\_ Signed: \_\_\_\_\_

Your starting doses are:

Insulin: \_\_\_\_\_

Breakfast \_\_\_\_\_ units given with your meal

Midday meal \_\_\_\_\_ units given with your meal

Evening meal \_\_\_\_\_ units given with your meal

Insulin: \_\_\_\_\_

Breakfast \_\_\_\_\_ units given @ (time) \_\_\_\_\_

Evening \_\_\_\_\_ units given @ (time) \_\_\_\_\_

### IMPORTANT:

- **Always inject in the specified area (e.g. tummy, thigh) for a particular meal.**
- **Vary the site of injection in the injection area so that you do not inject in the same spot all the time.**
- **Always change your needle.**
- **Keep insulin and injecting equipment away from children.**

Your injecting device is called: \_\_\_\_\_

Your needles are: \_\_\_\_\_ mm long

You have been advised to inject your insulin into your thigh or abdomen but remember to rotate around the site of injection

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**Please ask if you need this information in another language or format.**

D Graham, Diabetes Specialist MW, September 2004

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