

## INSULIN USE IN PREGNANCY



Information for women, relatives  
and carers

## Introduction

Diabetes is a condition which occurs when your body is not able to use glucose (sugar) for energy. This is caused by a lack of the hormone called insulin.

## What is Insulin?

Insulin is a hormone made by the cells in the pancreas called beta cells, it is used to control blood glucose levels. The function of insulin is to help our bodies use glucose for energy.

There are many types of insulin available to treat diabetes and the type of insulin you will be prescribed will be specific to you.

## Insulin Therapy

Insulin can only be given by injection. Initially, some women find the thought of this frightening, but with help and support this process is made easier and most women adapt to it readily.

Insulin is required to control both the mealtime and background blood glucose levels. You may need to take a combination of insulin to provide 24 hour control.

Rapid acting insulin is used to cover your mealtime requirements. The lowering effect of this type of insulin lasts for about 3-5 hours. You may require a further injection with meals to keep your one hour post meal glucose below 7.8mmol/l or two hour below 6.4mmol/L .

This insulin is clear in appearance.

Intermediate or long acting insulin has an effect that lasts for several hours and keeps blood glucose under control between meals. This is usually required at bedtime to ensure your pre breakfast glucose is below 5.3mmol/l.

This insulin is cloudy in appearance.

## When to inject and how much?

The dose of insulin you start on will probably change over the weeks that follow, so don't be worried if the number of units you are taking starts to increase.

This will differ from person to person so try not to compare your insulin dose with someone else.

Rapid acting insulin is usually injected just before the meal.

If you skip a meal you should not take your rapid acting insulin.

Intermediate or long acting insulin is usually injected at bedtime and sometimes in the morning. There is no need to eat when injecting this insulin.

## Correction Doses

If your blood glucose levels are elevated one or two hour after a meal, you may be advised to correct with rapid acting insulin (Novorapid, Humalog).

## How to Inject

Insulin injection is usually given via an insulin pen device. It should be injected into the layer of fat under the skin.

1. Take the lid off the pen.
2. Attach an unused needle and remove both covers.
3. Dial pen to 2 units, press plunger and check that the insulin is coming out.
4. Dial the dose
5. Inject into the skin and press plunger.
6. Wait 10 seconds then remove.
7. Check the dial is back on zero.
8. Remove the used needle from pen and discard into sharps box.
9. Replace the lid on your pen.



## Injection Sites

Insulin can be injected into any of the places shown below. The site of injection should be rotated within an area to aid absorption, avoid irritation and stop lumpy or fatty areas forming. A little bleeding or bruising may occur. This is nothing to worry about and happens to most people.



## Insulin Needles

It is advisable to use a new needle for each injection. Never put needles or lancets into the dustbin. You will be given a sharps bin to dispose of them.

You need to get a repeat prescription for insulin needles from your GP.

## Storing Insulin

The insulin pen(s) which are currentl in use need to be kept at room temperature, but away from direct sunlight/heat. Spare insulin pens should be kept in the fridge away from the freezer compartment.

## Driving

If your treatment includes insulin use for more than 3 months or continues after birth then you need to contact the DVLA and your insurance company to disclose this information.

**You should not drive if you are having frequent hypos.**

More information on Driving & Diabetes can be found by following the link below:

[Diabetes - UK, Driving with Diabetes](#)

## Controlling Blood Glucose during Delivery

When you come into hospital please bring your usual insulin, meter, test strips and hypoglycaemia 'hypo' treatment. While you are not in established labour, you are probably the best person to manage your diabetes unless advised otherwise. If you have blood glucose levels outwith the target range please inform the midwife looking after you.

To control your blood glucose during established labour or a caesarean birth you may need to have two intravenous infusions (IVI) in progress, one with dextrose (sugar), the other insulin, this is called a variable rate intravenous infusion of insulin. Once the placenta is delivered the insulin will stop if you have gestational diabetes.

### Hypoglycaemia

Hypoglycaemia (also known as a hypo) is when your blood glucose level drops below 4.0 mmol/l. If your level drops too low you may have these symptoms:



Symptoms	Causes
Hunger	Missing meals/snacks/not eating enough
Dizziness	More active than normal
Light headedness	Had more insulin than you need
Sweating / irritability	Unexplained causes e.g very hot weather
Shaking/trembling/fast heartbeat	
Tingling around the lips	

The symptoms people experience when their blood glucose level is low can vary from person to person. If your blood glucose is below 4.0mmol/l you need to treat it quickly.

## **What to Do**

### **Step 1**

Act Quickly! Stop what you are doing

### **Step 2**

Take 15-20g of fast acting sugar (see table below)

### **Step 3**

Wait 10-15 Minutes

### **Step 4**

Retest....

**Above 4 mmol/l or**

Symptoms better



Eat a snack, e.g:  
2-3 plain biscuits  
A piece of fruit

**Below 4 mmol/l or**

symptoms not better



Repeat from Step 1

### **Step 5**

Test your blood sugar again in an hour.

**If recovery is slower than expected CALL 999**

<b>Product</b>	<b>Quantity Required</b>
Lift Glucose Chews	5 chews
D Dextrosol	6 tablets
Lift Glucose Shot	1 x 60 ml bottle
GlucoGel	2 x 25g tubes
Jelly	4 sweets
Babies	
Fruit Pastilles	6 sweets
Starburst	5 sweets
Skittles	18g mini bag
Coca Cola	190 ml

**You should carry have some fast acting sugar with you all the time.**

## **Questions**

If you have any questions during your pregnancy you should write them down so that they can be answered in the antenatal clinic by one of the team. No questions are too small or insignificant to ask. If it is worrying you it has probably worried someone before you.

## **Further Information / Support Groups:**

Diabetes UK – Gestational Diabetes – Careline 0345 123 2399  
<https://www.diabetes.org.uk/diabetes-the-basics/gestational-diabetes>

Frimley Health and Care – Maternity – Gestational Diabetes -  
<https://www.frimleyhealthandcare.org.uk/maternity/your-pregnancy/pregnancy-complications/gestational-diabetes/>

Gestational Diabetes UK - <https://www.gestationaldiabetes.co.uk/>

NICE –Diabetes in Pregnancy Guideline – [www.nice.org.uk](http://www.nice.org.uk)

### Contact details

#### **Frimley Park Hospital**

Diabetes specialist midwife 0300 613 4880  
Diabetes specialist nurses 0300 613 4701

#### **Wexham Park Hospital**

Diabetes Specialist Midwife 0300 615 4512

For a translation of this leaflet or for accessing this information in another format:



Please contact (PALS) the Patient Advice and Liaison Service on:

**Frimley Park Hospital**

Telephone: 0300 613 6530

Email: fhft.pals@frimleypark.nhs.net

**Wexham Park & Heatherwood Hospitals**

Telephone: 0300 615 3365

Email: fhft.pals@wexhampark.nhs.net

<b>Frimley Park Hospital</b> Portsmouth Road Frimley Surrey, GU16 7UJ	<b>Heatherwood Hospital</b> London Road Ascot SL5 8AA	<b>Wexham Park Hospital</b> Wexham Slough Berkshire, SL2 4HL
<b>Hospital switchboard:</b> 0300 614 5000	<b>Website:</b> <a href="http://www.fhft.nhs.uk">www.fhft.nhs.uk</a>	

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#### Legal Notice

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible. Please therefore always check specific advice or any concerns you may have with your doctor.

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