

## The Right Time

Some people need to take insulin with or just after food, others up to 40 minutes before food, and some at bedtime. **Please ask your Diabetes Team to explain when you should take yours.**

- If you are admitted to hospital and are well enough, ask to be involved in giving your own insulin. **This is really important if you use an insulin pump.**
- Ask staff to arrange a safe place to store your insulin in hospital.
- If you cannot be involved in giving your own insulin, do not be afraid to ask staff when you need to take it.
- Some people may also need to take a dose of insulin separately from meal times when correcting a high blood glucose. This should only be done if you have been taught to do so by your Diabetes Team.

## Storage and Disposal

- Store unopened supplies of insulin in a refrigerator. **Insulin must not freeze.**
- Insulin that is in use can be kept at room temperature (for up to 4 weeks).
- Avoid keeping your insulin in direct sunlight or in warm places eg near radiators, fires or window sills.
- Always dispose of needles into a "sharps" bin. These are available on prescription. Patients should return filled sharps boxes to their community pharmacist for safe disposal.
- Make sure that you have enough supplies of insulin, especially when you are going on holiday.

## Hypoglycaemia ('Hypos')

Hypoglycaemia is the main side effect of insulin treatment. This can happen if your blood glucose levels drop below 4 mmol/l. Early symptoms of hypos are:

- Sweating heavily
- Anxiety
- Palpitations
- Tingling of the lips
- Dizziness
- Hunger
- Going pale
- Trembling and shaking

## How to avoid Hypos

- Avoid missing meals
- Keep to recommended alcohol limits and do not drink on an empty stomach
- Take your insulin at recommended doses and times
- Test before driving and **do not** drive if your blood glucose is less than 5 mmol/l
- Always carry glucose, snacks and your meter
- You may need to reduce insulin doses before and after exercise

If you experience a lot of hypos ask to see the Diabetes Team.

## Useful Contacts

To contact your local Diabetes Team:

Tel:

Further information and support is available from Diabetes UK at [www.diabetes.org.uk](http://www.diabetes.org.uk).

## The Safe Use of Insulin for Patients with Diabetes



This leaflet provides you with information on the safe use of insulin. It is important that you consider:

- **The right insulin**
- **The right dose**
- **The right way**
- **The right time**
- **How to avoid hypoglycaemia**
- **Carrying an Insulin Passport**

## The Safe Use of Insulin and You

Insulin is used to lower blood glucose levels. When used correctly, it improves the quality of life for many people and saves the lives of others. However, insulin prescribing, dispensing and administration errors can sometimes occur and may lead to patient harm. These can be as a result of not having:

*“The **Right** insulin, in the **Right** dose, in the **Right** way and at the **Right** time”*

## The Right Insulin

There are over 20 different types of insulin. Your healthcare professional will have discussed with you which insulin is best for you. Insulin packaging and labels are often very similar and so are insulin names. This table shows some examples of different insulin names that can be confused:

Humalog®	May be confused with	Humalog® Mix 25 or Humalog® Mix 50
Humulin® S	May be confused with	Humulin® I or Humulin® M3
Humalog®	May be confused with	Humulin® I or Humulin® S or Humulin® M3
NovoRapid®	May be confused with	NovoMix® 30 or Actrapid®
Lantus®	May be confused with	Levemir®
Hypurin Porcine Neutral®	May be confused with	Hypurin Porcine® 30/70 Mix

## Make sure you carry an up-to-date Insulin Passport (ID card) showing the correct name of your insulin(s)

An Insulin Passport (shown below) gives the name of your insulin(s) and device and is the size of a credit card. You should be provided with an Insulin Passport by your Diabetes Team when you start insulin or change the type of insulin you use.



- You should always carry your insulin passport with you and make sure it is kept up to date. If you need a new one ask your Diabetes Team.
- You should show your insulin passport to healthcare professionals to identify the insulin you are taking.
- When getting a prescription dispensed for your insulin, always check with the pharmacist that it is the right one before you leave the pharmacy.
- If someone else is giving you your insulin eg in hospital, at home, or in a nursing home, **always double check the name.**

Insulin comes in a number of different ways (devices) including vials for use with insulin syringes and pumps, cartridges for insulin pens and pre-filled pens. Each should be clearly labelled with the name of the insulin. You should always check that you have been given the right device. There are two different designs of insulin cartridge so not all cartridges can be used in all insulin pens. If you use cartridges you need to know which pen is right and safe for you to use.

## The Right Dose

**You should keep a record of the number of units of insulin you are taking.**

Sometimes doses of insulin can be misread. If someone else gives you your insulin **always ask to check the dose.** Never leave out a dose or stop taking your insulin unless your Diabetes Team has told you to do this.

## The Right Way

- Insulin should be injected at a 90 degree angle.
- The best sites for injection are the upper outer thighs, buttocks and abdomen.
- Vary the places you inject into to avoid the development of fatty lumps (lipohypertrophy) which will delay insulin absorption.
- Change your insulin pen needle every time you inject.

