## We're here for you

JDRF is the type 1 diabetes charity, improving lives until we find the cure.

We're totally focused on type 1 diabetes, and are run by people with type 1, for people with type 1.

We fund research to cure, treat and prevent type 1 diabetes. We provide information for children, adults and parents living with the condition, at all stages of from diagnosis and beyond. We give a voice to people with type 1 diabetes and campaign for increased focus on, and funding for, research to find the cure.



66 Hypos happen at all times of the day and everyone, including myself, just expects you to get on with things. I feel embarrassed that I have lost control, and angry with myself that a hypo has interrupted whatever I was trying to achieve at the time 99

**66** The worst thing

about hypos is

they are. They

66 For me it's a bit like bad flu, an overall weakness in my legs. shakiness in my hands and frustrating lack of coordination. terrible tiredness and mental confusion 99

how unpredictable happen at the most inconvenient times 99

66 Once I've treated the hypo, it can take my brain a while to get back up to speed which is incredibly frustrating in certain situations such as at work or when out and about 99

66 My hypo symptoms come and go. Sometimes, I get mild symptoms almost immediately, and I can treat it before it gets to the stage where I am tearful and confused. Other times, I don't get symptoms until it's too late and I'm a sweating, emotional, confused wreck ••

In association with

#### **DEXTRO ENERGY – Fast and Direct**



Dextro Energy is the perfect choice for hypos. It enters the blood very quickly and increases blood sugar levels in minutes. The small packet sizes make it ideal for carrying when you're on the go. Make it your go-to hypo treatment. For more information please visit.

www.dextro-energy.com



# Type 1 diabetes and hypoglycaemia









# Type 1 diabetes and hypoglycaemia

When you have type 1 diabetes and use insulin, there will be times when you have too much insulin in your bloodstream.

There are many reasons for this; it may be because you accidentally injected more than you needed or because you have been more active than you anticipated. It could be that your meal was delayed or has less carbohydrate than you thought. It may also be because the insulin preparations you use are not perfect and don't work exactly the same each day. No matter what the cause, there will be times when you have too much insulin in your bloodstream and your blood glucose level drops below 4 mmol/L. This is known as hypoglycaemia or 'hypo' for short.



Having a hypo can be a frightening experience. Symptoms are different for different people, and can vary with each hypo, but they may include:

- shaking
- sweating
- dizziness
- hunger
- blurred vision
- difficulty concentrating
- feeling anxious
- changes in behaviour.

If you feel like this, you should check your blood glucose level. If it is low you will need to eat or drink something that contains carbohydrate to bring your blood glucose back up into the normal level.

The amount of carbohydrate you'll need will depend on how low your blood glucose has dropped and the timing and cause of your hypo – for example, if it's due to increased exercise or taking too much insulin.

You should follow up your hypo treatment with a longer-acting carbohydrate snack — like a couple of digestive biscuits — once you are over 4mmol/L, to help prevent a further episode of hypoglycaemia.

Examples of a quick hypo treatment, providing approximately 15g fast acting carbohydrate:

• five glucose tablets eg. dextrose tablets

- 150ml of normal (not diet) soft drink or fruit juice (check the amount of carbohydrate on the label)
- three jelly babies.



You should check your blood glucose 10 to 15 minutes after you have treated your hypo. If your level is still low, you should eat a further 15g of carbohydrate and re-check in a further 10 to 15 minutes.

You can't always predict when your blood glucose is going to drop too low so you need to carry a hypo treatment with you at all times.

## Some useful places to keep a hypo treatment include:

- the glove box of your car
- your handbag or backpack
- beside your bed
- in your desk drawer
- in your back pocket
- with your sports kit/bag.

### Getting help in an emergency

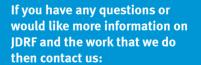
If you are not able to recognise the signs and symptoms of low blood glucose levels or you ignore them, there is a risk that your blood glucose will drop so low that you are unable to treat the hypo yourself. For this reason it is a good idea to teach your family, friends and work colleagues how to recognise and treat a hypo if you cannot. They should only give you something to eat or drink if you can respond to their commands. If you can't, they need to call an ambulance by dialling 999, or they could give you an injection of glucagon.

Glucagon is a hormone which triggers a release of stored glucose from your liver and is available with a prescription from your doctor. The GlucaGen HypoKit is what is normally prescribed. Talk to your doctor or diabetes team about getting this kit and teach your family members or friends how to administer it.

# Hypo symptoms are possible at different blood glucose levels

Depending on how high or low your blood glucose levels have been lately, you may get symptoms of a hypo at varying levels. For example, if your blood glucose levels have been high you could get symptoms of a hypo between 4 and 5 mmol/L (or higher). If you have been having a lot of lows you may lose your warning signs altogether. You may also feel hypo if your glucose level drops very quickly. It is important to treat your hypo if your blood glucose level falls below 4 mmol/L, even without symptoms.

This may all seem very daunting at first, but over time most people learn to recognise their hypo symptoms. Talk to your diabetes team if you have any concerns, or if you are experiencing regular hypoglycaemia, as you may need to alter your insulin dosage.



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