

## Hypoglycaemia ('hypos')

### Remember:

1. Always carry some form of glucose and starchy carbohydrate around with you.
2. Always carry or wear some form of diabetes identification.

### What is hypoglycaemia?

- Hypoglycaemia, or a 'hypo', is when your blood glucose levels are too low (below 4 mmols/L). However, some people can experience the symptoms of hypos at higher blood glucose levels. These also need to be treated.
- You **won't** have hypos if your diabetes is controlled by diet alone, or if the only medications you take for controlling your diabetes are metformin, one of the glitazones or acarbose (known as Glucobay).

### What are the warning symptoms?

The warning signs of hypos vary from person to person. In time, you will learn to recognise your own warning signs. Once you notice them, you should take action as soon as possible to prevent them becoming a more severe hypo.

### During a hypo you might feel:

Shaky or dizzy	Have palpitations	Anxious or bad-tempered
Intense hunger	Sweaty	Tingling lips or fingers

### During a hypo others might notice in you:

Mood change	Lack of concentration	Irritability and aggression
Lack of co-ordination	Irrational behaviour	Confusion
Change in skin colour eg going pale		

In a small number of people using insulin, hypoglycaemia can cause a fit (like epilepsy); this can be very frightening at the time, but you can expect to make a full recovery.

### What can cause a hypo?

Hypoglycaemia is usually caused by one or more of the following:

- A **missed or delayed** meal or snack.
- Eating **less food** than usual, especially carbohydrate such as bread, cereals, potato, fruit.
- Taking **too much insulin** or **too high** a dose of diabetes tablets.
- Unplanned or sustained **exercise**: note, hypos can happen many hours after exercise
- **Not rotating** your insulin injections sites often enough so you are injecting into 'lumpy' areas.
- Drinking excessive amounts of **alcohol** or drinking alcohol without food: note, hypos can happen many hours after drinking.
- Extremes of **temperature**: being too hot or too cold.
- Too tight glucose control.
- Interaction with other medications.
- Stress and anxiety.

**Treatment of first warning signs of hypos**

- **Step 1: Quick-acting glucose or sugar** - to raise the blood glucose level rapidly.  
Take any **one** of the following:  
Four glucose tablets OR Small glass of Lucozade (75 ml) OR  
Glass of non-diet coke or lemonade OR Three teaspoons of sugar, jam or honey
- **Wait 4 to 5 minutes** – if you don't feel better, repeat step 1. If you do feel better, go to step 2:
- **Step 2: Starchy carbohydrate** - to prevent your blood glucose level from falling again. Take any **one** of the following:  
Biscuits OR Milk OR A sandwich OR Your next meal, if it is due
- Note, if your next meal is more than one hour away, you will need to either have a snack now, or bring your meal forward.

**Treatment of more-severe hypos:**

- If you do not treat hypos, you could become semi-conscious or fully unconscious. In this situation, you will need help from someone with you.
1. **While you are semi-conscious: Hypostop, honey or jam:** a friend, relative or colleague can give you Hypostop (a thick glucose gel), honey or jam while you are still semi-conscious. They should put it into the side of the mouth and massage the cheek gently from the outside. This helps absorb it into the blood. Hypostop should **not** be used on anyone who is unconscious.
  2. **When you are conscious again: starchy snack:** When you feel better after Hypostop/honey/jam, it is important that you eat a snack containing starchy carbohydrate such as a sandwich, biscuits, or your meal if it is due. This should prevent your blood sugar falling again.
  3. **If you are unconscious: Glucagon:** If the above steps are unsuccessful, or you are found unconscious, someone will need to give you a glucagon injection. They must be confident and trained to do so. Glucagon (which is available on prescription) is a very quick and effective way of reversing a hypo - it will bring you round within 5 to 10 minutes. When you recover after glucagon, you should follow steps 1 and 2 again.
  4. **If you can't get effective treatment with glucagon, get medical help eg someone needs to dial 999 or contact your GP.**

**For further information contact:**

- **Diabetes UK:** 10 Parkway, London NW1 7AA; Careline 0845 1202 960;  
[www.diabetes.org.uk](http://www.diabetes.org.uk)
- **Your GP:**
- **Your nurse:**
- **Your dietitian:**