

Having a Hypo

Patient Information Leaflet



WHAT IS HYPOGLYCAEMIA?

Hypoglycaemia or 'hypo' is when your blood glucose levels are too low (below 4mmols/l). This is a potentially dangerous side-effect of some diabetes tablets and insulin. This leaflet is designed to give you information to prevent, recognise and treat hypoglycaemia.

WHAT ARE THE WARNING SYMPTOMS?

Hypo warnings vary from person to person. However, you will often recognise your own warning signs that indicate your blood glucose level is too low.

You may experience:

- ❖ headaches
- ❖ shaking or dizziness
- ❖ anxiety or bad-temper
- ❖ sweating
- ❖ palpitations
- ❖ hunger
- ❖ tingling lips or fingers

Others may notice you becoming:

- ❖ moody
- ❖ irritable and aggressive
- ❖ irrational
- ❖ confused
- ❖ unable to concentrate
- ❖ unable to co-ordinate (shaking)
- ❖ pale

WHAT CAUSES A HYPO?

- ❖ Too little or no carbohydrate at your last meal. For example no bread, pasta, rice, potato, cereal
- ❖ Missed or late meal
- ❖ Too much insulin or tablets
- ❖ More exercise than usual for example housework, gardening or sport.
- ❖ A 'delayed hypo' can occur several hours after exercise. Always make sure you have a suitable carbohydrate snack when you exercise
- ❖ Alcohol - this may cause you to have a "delayed hypo" the next day. Always make sure you have a suitable carbohydrate snack or meal if you have alcohol to drink
- ❖ A change in injection sites for example changing your injections from an area of lipohypertrophy ("lumpy skin") to "normal" skin
- ❖ Direct heat or sauna treatment may affect the absorption of insulin and can potentially cause low blood glucose levels if insulin is absorbed more quickly than usual
- ❖ Weight loss (whether intentional or not) or a change in your lifestyle. Your medication may require to be reduced to prevent hypoglycaemia

Occasionally the cause of a hypo may not be obvious. If in doubt, contact your GP, Practice Nurse or one of the Diabetes Team for advice.

GENERAL ADVICE ABOUT HYPO

- ❖ Always carry some form of glucose for example dextrose tablets or lucozade
 - ❖ Always carry/wear some form of identification specifying you have diabetes and your treatment
 - ❖ Tell your friends, relatives and colleagues that you have diabetes and let them know how to help if you have a hypo
 - ❖ You may have a high blood glucose for a few hours after a hypo. This may be caused by the treatment of the hypo and your body's natural response to hypo.
 - ❖ Night sweats, morning headache and/or wakening during night may be symptoms of hypoglycaemia during the night
 - ❖ You may need to adjust your treatment before exercise to prevent hypo – ask for advice from your healthcare professional
 - ❖ **DO NOT tolerate regular hypos** – ask for advice.
- Learn how to treat and prevent hypoglycaemia (see below)

TREATMENT OF HYPO

Mild Hypo

This is when you become aware of the symptoms as described on Page 1.

Stop and treat quickly. Follow the treatment guidelines below. If you don't feel better after 15 minutes, take your quick acting carbohydrate (step 1) again. Avoid using chocolate for the treatment of hypo.

<p>Step one Take the equivalent of 20 grams of quick acting carbohydrate food or drink</p>	<p>Suitable food and drink</p> <ul style="list-style-type: none"> ❖ 4-6 glucose tablets (will depend on the manufacturer) ❖ or approx. 150-200 mls of ordinary cola or fruit juice - about 1/2 of can or large glass of cola; small carton of fruit juice ❖ or 3-4 soft sweets, best example would be jelly babies 	<p>This will raise the blood glucose level quickly.</p>
<p>Step two Take slower acting carbohydrate food or drink</p>	<p>Suitable food and drink</p> <ul style="list-style-type: none"> ❖ 2 digestive biscuits ❖ or sandwich (2 slices of bread) ❖ or large glass of milk or yoghurt ❖ or a banana ❖ or your next meal if it is due 	<p>This will prevent the blood glucose falling again.</p>

Moderate Hypo

If the mild symptoms are not recognised or treated quickly enough you may need help from someone else to treat a hypo.

If you are confused or unable to treat yourself a relative, friend or colleague can give you a quick acting carbohydrate providing you can swallow safely.

Treatment with Glucogel

If you are hypo but confused, drowsy or unco-operative, you will need someone to help you. Glucogel is a 'sugar' gel for treatment of hypoglycaemia which can be prescribed by your GP or it can be purchased over the counter.

Glucogel should only be used if the person being treated can swallow.

Do not administer Glucogel to an unconscious person because of the risk of choking.

A friend, relative or carer should be taught how to use Glucogel as follows:

- ❖ The person being treated must be able swallow
- ❖ Twist off the Glucogel tube cap
- ❖ Squeeze the tube to insert the gel into mouth between the teeth and cheek
- ❖ The outside of the cheek should be gently rubbed to aid absorption
- ❖ Glucogel is absorbed from the lining of the mouth
- ❖ It should help raise the blood glucose within 15 minutes
- ❖ Follow this treatment with a starchy' carbohydrate snack such as toast, a sandwich or your next meal if it is due
- ❖ Recheck blood glucose level
- ❖ The treatment can be repeated if necessary

Severe Hypo

A very low blood glucose (usually less than 1-2 mmols) may cause you to become unconscious. This is an emergency situation. You will need immediate attention from another person and/or a healthcare professional.

Treatment with Glucagon

If you are treated with insulin, a carer, friend or relative can be taught how to treat severe hypo using an injection of Glucagon. GlucaGen Hypo Kits are available on prescription to treat hypoglycaemia in insulin-treated patients.

Glucagon is a hormone that occurs naturally in all our bodies. Glucagon raises the blood glucose level by releasing glucose that is stored in the liver.

Please note: If the stores in the liver are low the Glucagon may not be effective. Glucagon may not work if a person has been drinking alcohol to excess, has had a very poor appetite/very little food recently or has had a problem with hypo within the previous day.

The person treating you with Glucagon should be taught the following:

- ❖ Place the person in the recovery position
- ❖ Give the injection (intra muscular or subcutaneous) GLUCAGEN™ or Glucagon
- ❖ Glucagon takes about 10 - 15 minutes to work
- ❖ If there is no improvement in conscious levels within 15 minutes or there are signs of a seizure (a fit), dial 999 as the person may need to have an injection of glucose to treat the hypo
- ❖ If improvement in conscious levels, recheck blood glucose in 15 minutes
- ❖ Once the person has improved and is able to swallow, provide a snack of 'starchy' carbohydrate - for example sandwich or toast to prevent the blood glucose falling down low again

ALWAYS look for a cause of a hypo. Seek advice from your healthcare professional to help prevent risk of further hypo.

WHAT IF I HAVE A HYPO WHEN MY INSULIN INJECTION IS DUE?

- ❖ Take some quick acting carbohydrate – see table on Page 2
- ❖ Once your blood glucose is above 4 mmols, take your normal dose of insulin.
- ❖ Have your meal without delay.
- ❖ Look for the reason for hypo. If there is no obvious reason then you may have to reduce the insulin that is working at that time. Further information in the leaflet “Insulin Adjustment” available from your diabetes healthcare team.

Never miss an insulin injection your insulin may need some adjustment.

WHAT DO I DO IF I HAVE A HYPO WHEN MY DIABETES TABLETS ARE DUE?

- ❖ Take some quick acting carbohydrate – see table on Page 2
- ❖ Once your blood glucose is above 4 mmols, take your tablets as you would normally
- ❖ Have your meal without delay
- ❖ Look for the reason for hypo. If there is no obvious reason then you may need to have your diabetes medication dose given **before** the hypo reduced. Contact your healthcare professional for advice.

This guide is intended for use when you are well. During illness, see leaflets on “Sick day rules for patients on insulin” or “Sick day rules for patients on tablets”. These are available from your diabetes healthcare team or on the [Diabetes MCN website](#).

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