



## Pre-Operative Assessment Department

# Patients with Insulin Treated Diabetes Undergoing Surgery

You are due to have an operation which will mean that you will be asked to omit at least one meal. This leaflet gives advice about what you should do about your diabetes treatment before and after the surgery.

**Before your operation, please follow the instructions below.**

### **If your operation is in the morning:**

- Do not take any food or drink other than water from 6 hours before the time you are asked to come to hospital.
- You may drink water until 2 hours before you come to hospital.
- Check your blood glucose from 6.00am every 2 hours before you arrive at hospital.
- If you are driving, check your blood glucose before starting the car and drive only if your blood glucose is more than 5mmol/l.
- Please inform staff at the hospital if you have needed to take any hypo treatment because it is possible that your surgery may have to be rearranged for another day.

### **If your operation is in the afternoon:**

- Eat breakfast before 7.00am and take no food or drink other than water after this time.
- You may drink water until 2 hours before you come to hospital.
- Check your blood glucose level before breakfast and every 2 hours before you arrive at hospital.
- If you are driving, check your blood glucose before starting the car and drive only if your blood glucose is more than 5mmol/l.
- Please inform staff at the hospital if you have needed to take any hypo treatment because it is possible that your surgery may have to be rearranged for another day.

### **How to treat hypoglycaemia or low blood glucose levels 4mmol/L or less**

- You can treat immediately with one of these options of quick-acting glucose treatments:
  - 200ml (a small carton) of smooth orange juice
  - 5 glucotabs
  - 6 dextrose tablets
  - 5 jelly babies.
- You can repeat one of these treatments if you do not feel better after 10 minutes (or if your blood glucose level is still less than 4mmol/L).

For further information on how to treat hypoglycaemia or low blood glucose levels less than 4mmol/L please visit the website below.

[https://trenddiabetes.online/wp-content/uploads/2022/03/A5\\_Hypo\\_TREND.pdf](https://trenddiabetes.online/wp-content/uploads/2022/03/A5_Hypo_TREND.pdf)

### **Things to bring with you to hospital:**

- Hypo treatments (glucose drink, tablets or jelly babies).
- Blood glucose testing equipment you usually use.
- Insulin you usually take for your diabetes, labelled with your name.

### **During your operation**

- If you are likely to miss more than one meal, or if your blood glucose is high at the time of the operation, you may be given an intravenous insulin infusion (a combination of insulin and fluid given into a vein).
- This will be continued until you are ready to eat and drink and will be discontinued once you have taken your usual insulin.

### **After your operation**

- It is not uncommon to experience changes in blood glucose levels after your operation. Your blood glucose will be monitored after the operation and additional insulin given if necessary. The glucose targets may change for safety reasons.
- After your operation you will be offered food and drink when you feel able to eat.
- Once you are eating and drinking normally, you should restart your normal insulin from that meal onwards. Your blood glucose levels may be higher than usual for a day or so.

### **At home:**

- Continue taking your usual medication and insulin as advised by your healthcare team.
- Monitor your blood glucose levels more often as these may be higher than usual for a day or so. This is not a problem unless you are feeling unwell.
- If you feel unwell, especially if you are vomiting and unable to eat or take medication, please seek medical attention.
- For more information on what to do when you are ill, please visit these websites below:
  - [A5\\_T2Illness\\_TREND.pdf \(trenddiabetes.online\)](#)
  - [A5\\_T1Illness\\_TREND\\_FINAL.pdf \(trenddiabetes.online\)](#)
- Contact your usual diabetes team/GP surgery or local out-of-hours service for advice. If you usually attend the hospital for diabetes care, please telephone the Diabetes Team on (01305) 255342.

## What to do with your insulin before surgery

### Long-acting insulin

**Examples:** Abasaglar®, Humulin® I, Insulatard®, Insuman® Basal, Lantus®, Levemir®, Semglee®, Tresiba®, Toujeo®, Xultophy®

Frequency/timing of long-acting insulin	Day before to admission	Day of surgery if your operation is in the morning	Day of surgery if your operation is in the afternoon
Once daily long acting (morning)	No dose adjustment necessary	Give 80% of usual dose and check blood glucose on admission.	Give 80% of usual dose and check blood glucose on admission.
Once daily long acting (lunchtime)	Give 80% of usual dose.	Check blood glucose on admission. Restart at normal dose when eating and drinking.	Check blood glucose on admission. Restart at normal dose when eating and drinking.
Once daily long acting (evening)	Give 80% of usual dose.	No dose adjustment necessary Check blood glucose on admission.	No dose adjustment necessary Check blood glucose on admission.
Twice daily long acting	Morning dose stays the same, evening dose will need to be given at 80% of usual dose.	Give 80% of usual morning dose. Evening dose unchanged. Check blood glucose on admission.	Give 80% of usual morning dose. Evening dose unchanged. Check blood glucose on admission.

### Short-acting insulin with meals

**Examples:** Actrapid®, Apidra®, Fiasp®, Humalog®, Humulin® S, Porcine Neutral, Insuman® Rapid, Lyumjev®, Novorapid®

Short-acting insulin	Day before to admission	Day of surgery if your operation is in the morning	Day of surgery if your operation is in the afternoon
Short-acting insulin with meals (2 - 4 doses a day)	No dose adjustment necessary	Omit morning dose if no breakfast is eaten. Check CBG on admission.	Take usual morning insulin dose with breakfast. Omit lunchtime dose if not eating.

		<p>Omit lunchtime dose if not eating and drinking normally.</p> <p>Resume normal insulin with evening meal if eating a normal meal.</p> <p>If eating half or a small meal, give half usual dose.</p> <p>If not eating, give basal long-acting only component (see box above).</p>	<p>Check CBG on admission.</p> <p>Resume normal insulin with evening meal if eating a normal meal.</p> <p>If eating half or a small meal, give half usual dose.</p> <p>If not eating, give basal only long-acting component (see box above).</p>
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### Premixed insulin prepared by manufacturers

**Examples:** Humulin® M3, Humalog® Mix 25, Humalog® Mix 50, Hypurin® Porcine 30/70 Mix, Insuman® Comb 15, Insuman® Comb 25, Insuman® Comb 50, Novomix® 30

Frequency of premixed insulin	Day before to admission	Day of surgery if your operation is in the morning	Day of surgery if your operation is in the afternoon
Twice daily (premixed insulin)	No dose adjustment necessary	<p>Half usual morning dose.</p> <p>Check blood glucose on admission.</p> <p>Resume usual insulin with evening meal if eating a normal meal.</p> <p>If eating a half or small meal, give half usual dose.</p> <p>If not eating, start VRIII.</p>	<p>Half usual morning dose.</p> <p>Check blood glucose on admission.</p> <p>Resume usual insulin with evening if eating a normal meal.</p> <p>If eating a half or small meal, give half usual dose.</p> <p>If not eating, start VRIII.</p>
Three times per day (premixed insulin)	No dose adjustment necessary	<p>Half usual morning dose.</p> <p>Check blood glucose on admission.</p> <p>Omit lunchtime dose.</p> <p>Resume normal insulin with evening meal if eating a normal meal.</p> <p>If eating a half or small meal, give half usual dose.</p> <p>If not eating, start VRIII.</p>	<p>Half usual morning dose.</p> <p>Check blood glucose on admission.</p> <p>Omit lunchtime dose.</p> <p>Resume normal insulin with evening meal if eating a normal meal.</p> <p>If eating a half or small meal, give half usual dose.</p> <p>If not eating, start VRIII.</p>

## Self-mixed insulin prepared by patient/carer

**Examples:** Short-acting: Actrapid®, Apidra®, Fiasp®, Humalog®, Humulin® S, Hypurin® Porcine Neutral, Insuman® Rapid, Lyumjev®, Novorapid®  
AND Intermediate-acting: Humulin® I, Hypurin® Porcine Isophane, Insulatard®

Self-mixed insulin frequency	Day before to admission	Day of surgery if your operation is in the morning	Day of surgery if your operation is in the afternoon
Twice daily (two different types of insulin combined by the patient or carer into one injection)	No dose adjustment necessary	Calculate total dose of both morning insulins and give half of this total dose as intermediate acting insulin only, in the morning. Check blood glucose on admission. Resume usual insulin with evening meal if eating a normal meal. If eating half or small meal, give half usual dose. If not eating, start VRIII.	Calculate total dose of both morning insulins and give half of this total dose as intermediate acting insulin only, in the morning. Check blood glucose on admission. Resume usual insulin with evening meal if eating a normal meal. If eating half or small meal, give half usual dose. If not eating, start VRIII.

## Other information

Dorset County Hospital operates a smoke-free policy. This means that smoking is not allowed anywhere on the Trust site, this includes all buildings, grounds and car parks.

Leaflets, information, advice and support on giving up smoking and on nicotine replacement therapy are available from the local Stop Smoking helpline on 0845 6013116, the free national helpline on 0300 123 1044, your local pharmacy or email: [hello@livewelldorset.co.uk](mailto:hello@livewelldorset.co.uk)

Car parking at Dorset County General Hospital is extremely limited and it is essential to arrive early, allowing ample time for parking. You may find it more convenient to be dropped off and collected.

This information can be provided in other languages and formats upon request including Braille, audio cassette and CD. Please contact the Patient Advice & Liaison Service (PALS) on (01305) 254964, FREEPHONE 0800 7838058 or email: [pals@dchft.nhs.uk](mailto:pals@dchft.nhs.uk)

## Contact Numbers:

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to the following Dorset County Hospital Staff:

Pre-operative Assessment Department: 01305 254222

Diabetes Nurse Specialist: 01305 255342

## About this leaflet:

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email [pals@dchft.nhs.uk](mailto:pals@dchft.nhs.uk)



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