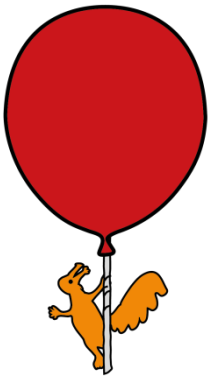

Alder Hey Children's NHS Foundation Trust

Children and Young People's Diabetes Service

Information about converting from insulin pump therapy back to Multiple Daily Injections (MDI/Insulin pens)

Information for patients, parents and carers

Introduction

Sometimes you may need to go back onto insulin injections. This may be due to a pump failure or for going on holiday. To go back onto insulin injections you will need to calculate a background insulin dose to replace the pump basal rate and use your insulin to carbohydrate ratios and insulin sensitivity factor to calculate bolus insulin injections.

It is very important that:

- **You download your meter and/or pump regularly OR keep written records of your pump doses, including your average total daily dose and the total daily basal insulin dose.**
- **You know your insulin sensitivity factors, i.e. how much insulin is required to correct high blood glucose levels**
- **You know your insulin carbohydrate ratios, i.e. how much insulin is required for carbohydrate foods**
- **Keep a record of total insulin doses, each time any changes are made, update your records.**
- **You keep a supply of rapid acting and long acting insulin and insulin pens in date**

How to calculate your long acting insulin dose:

1. Find the total daily basal dose of insulin from the memory of the pump or your written records.
2. If basal/background insulin is Levemir or Lantus add 10% to this amount, and this will be the dose in units.
3. If basal/background insulin is Tresiba, deduct 10% from this amount and this will be the dose in units.

Example: 1

Changing from pump to Levemir® or Lantus®

Current total daily basal insulin dose =	**15 units**
Find 10% of this dose –	15 x 0.1 = **1.5 units**
Add the 10% on to the total daily basal to calculate the dose required	15 + 1.5 = **16.5 units**

Example: 2

Changing from pump to Tresiba®

Current total daily basal insulin dose =	**15 units**
Find 10% of this dose –	15 x 0.1 = **1.5 units**
Deduct 10% from the total daily basal to calculate the dose required.	15 - 1.5 = **13.5 units**

This formula will provide you with a starting background insulin dose, you will need to check blood glucose levels and adjust insulin doses as needed.

For all food and correction doses give rapid acting insulin (Humalog® , Novorapid®, or Apidra ®) using your insulin to carbohydrate ratio (ICR) and insulin sensitivity factor (ISF).

Who to contact for further help or advice

If you need urgent advice about diabetes management Monday – Friday 8am – 6pm call, 0151 252 5766.

For out of hours advice call the hospital switchboard on 0151 228 4811 and ask for 'Diabetes on call'.

Always contact the insulin pump company in the event of pump failure.

For non urgent advice contact your diabetes nurse on the usual numbers or email diabetes@alderhey.nhs.uk

Follow us on Twitter: @AlderHeyDiab
Website: https://alderhey.nhs.uk/parents-and-patients/services/diabetes – Meet the team, useful guidelines, research and publications, helpful advice and video guides.

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

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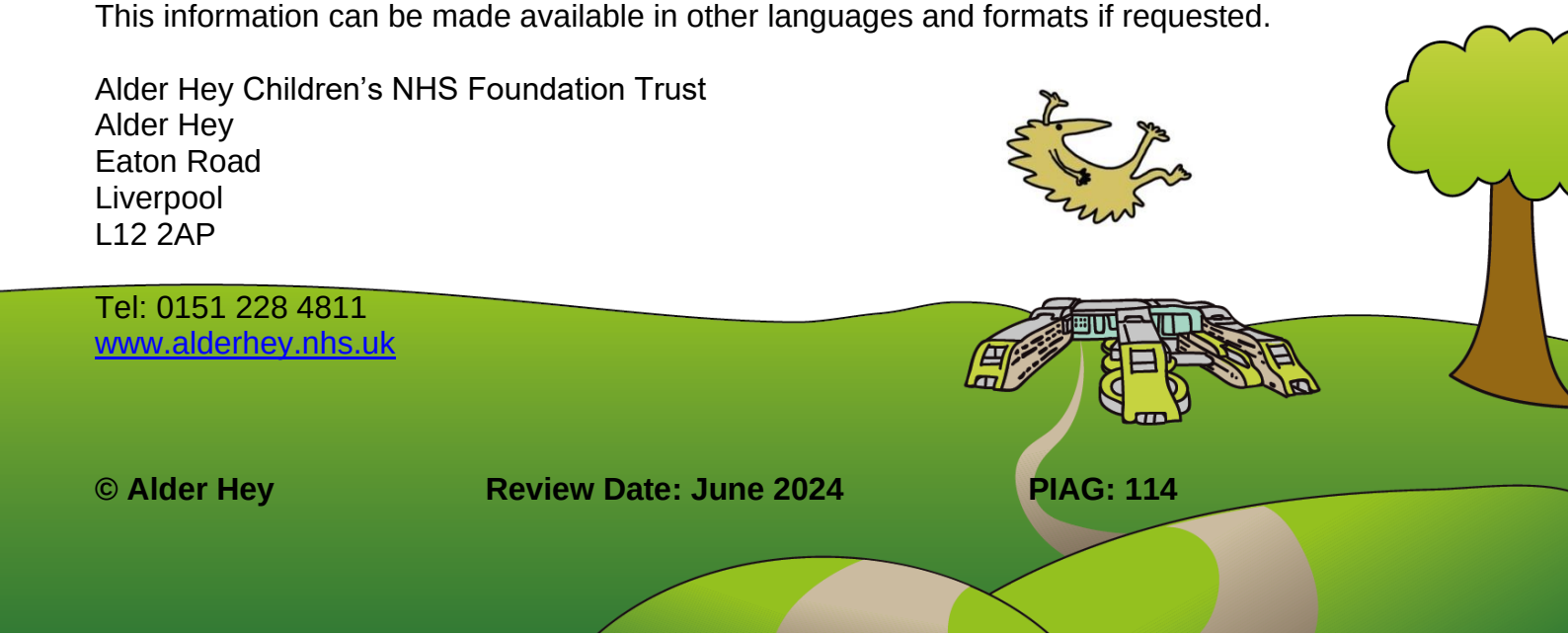

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