

Overview of Carbohydrate Counting and Intensive Insulin Therapy for Paediatric Diabetes

This pack has been designed to help you and your family get the most out of **carbohydrate counting** and should be used to support structured education programmes for children with diabetes and their families.

Carbohydrate counting is a way of matching your insulin doses to your food, which can help you achieve better control of your diabetes.

The Basis for Carbohydrate Counting

Following the outcomes of research carried out over the last 20 years, diabetes treatment for children has moved from 'conventional' to 'intensive' insulin therapy.

- **What is conventional therapy?**

Conventional therapy is injecting insulin twice a day using pre-mixed insulin. The doses are kept the same from one day to the next so meals and snacks have to be at set times with set amounts of carbohydrate to match the insulin.

- **What is intensive insulin therapy?**

Intensive insulin therapy involves either:

- taking multiple injections of short-acting insulin each day at mealtimes with injections of long-acting insulin either once or twice a day. This is also sometimes referred to as basal/bolus or multiple daily injections (MDI)

or

- using an insulin pump.

In addition this therapy requires having information and extra support from your diabetes team to carefully work out how much insulin you need depending on what you eat and what your activities are from day-to-day.

Having information and extra support is very important to get the best out of intensive insulin therapy by enabling you to use **carbohydrate counting**.

Carbohydrate counting allows you to get the most out of basal/bolus injections and is essential if you are using a pump. Research has shown that children with diabetes and their families who accurately count carbohydrate achieve lower HbA1c levels.

This practice provides a more flexible way of using insulin and has a less rigid approach to diet that can give a better quality of life than 'conventional therapy'.

This pack will show you how to:

- calculate the carbohydrate in each meal, and
- use this information to calculate the amount of insulin required to keep blood glucose levels within target.

This information has been produced for SNDRI by Registered Dietitians and other relevant health professionals. At the time of publication the information contained within the leaflet was, to the best of our knowledge, correct and up-to-date. Always consult a suitably qualified dietitian and/or your GP on health problems. SNDRI cannot be held responsible for how clients/patients interpret and use the information within this resource.



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