Carbohydrate counting for type 1 Diabetes

This leaflet explains about carbohydrate counting. The aim of this leaflet is to provide you with basic information before you meet with the paediatric diabetes dietitians.

What is carbohydrate counting and how will it help you and your child?

Carbohydrate counting involves matching the insulin taken to how much carbohydrate in the food or drink to be eaten. Carbohydrate counting is necessary to achieve the best results in diabetes blood glucose control. The other benefit of carbohydrate counting is it allows you and your family to eat a variety of foods that everyone enjoys and also to eat at times that are convenient to the family rather than set meal times.

What are carbohydrates?

Carbohydrate is a nutrient and source of energy found in foods such as potatoes, rice, pasta, cereals, milk, fruit, sweets and sugary drinks. Different foods contain different types of carbohydrate.

- **Starchy**: potatoes, rice, pasta, noodles, bread, cereals, couscous, lentils, injera and products made from flour
- **Fructose**: fruit and fruit juice
- **Lactose**: milk, yoghurt, ice cream, custard
- **Sucrose**: table sugar, syrup, sweets and sugary drinks.

During digestion the body breaks down the carbohydrate from food and drink into glucose which the body uses for energy. This glucose enters the bloodstream and causes the blood glucose to rise. The body needs insulin to be able to use this glucose for energy. The more carbohydrate in the food and drink, the more insulin is needed to keep the blood glucose within the target range. Therefore, knowing how much carbohydrate is in the food and drink will help you estimate how much insulin is needed.

How can I carbohydrate count?

Carbohydrate counting can be done using the Carbs and Cals book or phone app, food labels or carbohydrate tables. The most important thing is a set of weighing scales.

You / Your child will be prescribed an insulin to carbohydrate ratio, for example 1:10 which means 1 unit of insulin is required for every 10g of carbohydrate. While you are in hospital you will meet with the dietitians in the paediatric diabetes team who will support you in working out the carbohydrate in your normal family meals.

It would be useful if you could start thinking about the foods you / your child normally eat and which of these foods you think contain carbohydrate.
What next?
You will be given a food diary to start keeping a record of what foods you / your child eat and how many carbohydrates they contain. There is a helpful picture guide in the back of the food diary. Your nurse should also be able to help you make a start on this until you meet our diabetes dietitian.

Useful sources of information
If you would like to research carbohydrate counting more before meeting with the dietitians then the following websites have good information:

https://www.upbete.co.uk/

Contact us
If you have any questions or concerns about carbohydrate counting please contact the paediatric diabetes dietitian’s on 020 7188 4568 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.evelinalondon.nhs.uk/leaflets

Evelina London Medicines Helpline
If you have any questions or concerns about your child’s medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003 10am to 5pm, Monday to Friday
e: letstalkmedicines@gstt.nhs.uk

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS)
e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)
e: complaints2@gstt.nhs.uk

Language and Accessible Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815
e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
w: www.nhs.uk