

**Name:**

**Date:**

**Diabetes Specialist Dietitian:**

**Contact number:**

**Hospital Site:**

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All our patient information leaflets are reviewed every three years.

## Patient information

# Guide to Carbohydrate Counting

A brief guide for people with Type 1 Diabetes

## Nutrition and Dietetics Department

**Introduction:** Carbohydrate (CHO) counting involves working out how much total CHO is in a meal or food and then calculating how much insulin will be needed for that total meal.

### Advantages of CHO counting

By matching the dose of insulin to the amount of CHO in a meal you can:

- Improve your diabetes control
- Enjoy meals out
- Enjoy a variety of meals
- Eat large or small meals
- Reduce Hypoglycaemia
- Avoid feeling guilty about eating sweet foods

### Disadvantages of CHO counting

Apart from putting some time and effort in at the beginning and doing a few extra blood tests, once you are up and running there are not really any disadvantages.



## CHO counting....What you need to know?

- What CHOs are
- How to count CHOs
- How to read food labels
- The relationship between CHO, blood glucose and Insulin
- How to work out your insulin to CHO ratio
- How to work out and use a correction dose

## What is Carbohydrate?

CHOs are nutrients that are found in food and drinks. When CHOs are digested, it breaks down into glucose which then moves into the bloodstream. **CHOs are found in the following types of food:** (this is not a comprehensive list)

### Starchy CHO

Bread  
English muffins/ Bagel  
Pitta/ Naan bread  
Chapatti/Tortillas  
Croissant/ Crumpet  
Dumpling/ Yorkshire puddings  
Pasta/ Spaghetti  
Noodles  
Rice  
Couscous  
Breakfast cereals (all types)  
Potatoes  
Yam  
Cassava  
Fufu  
Plantain/Green banana

### Sugary CHO

Sugar  
Jam  
Marmalade  
Honey  
Syrup  
Sweets  
Chocolates  
Sugary drinks; fizzy and squash  
Jelly  
Fresh, dried and frozen fruit  
Pure fruit juice  
Milk  
Yoghurt (plain and flavoured)  
Fromage Frais  
Custard  
Ice cream

## How to read nutritional labels

In addition to having the list of CHO portions you can also find out how much carbohydrate is in a food by reading the nutritional information on the food label. Always “round off” to the nearest 5g CHO.

Example a label from a readymade Lasagne pack size = 800g

Nutritional Information	Per 100g product	Per ½ pack
Energy	148 Kcal	592Kcal
Protein	6.0g	24.0g
<b>Carbohydrate</b>	<b>13g</b>	<b>52g</b>
Of which sugars	3.0g	12.0g
Of which starch	10g	40g
Fat	8.0g	32g

### Per Serving

This label gives you information **per serving** which is ½ of the pack (400g) therefore a serving will provide 52g CHO which can be rounded off to 50g CHO.

### Per 100g

You can also work out how much is in a serving by looking at the “per 100g” section. The weight of the whole Lasagne is 800g. By eating ½ of the pack you would know you were eating 400g. This pack contains 13g CHO per 100g. Therefore in 400g there would be 4 x 13g = 52g which can be rounded down to 50g carbohydrate.

**Remember, it is the total carbohydrate number you are looking at, not the sugars or starches. (Ask your Dietitian for further details on reading food labels if you want to know more)**