Name: _____

Dietitian/DSN: _____

Telephone: _____

Version 2 November 2018

Nutrition and Dietetic Services

Estimating the Carbohydrate in Your Food

Estimating Carbohydrate

This leaflet may help you to work out the amount of carbohydrate in your meals. It should be used with the leaflet *Carbohydrate and Blood Glucose*, which explains what carbohydrate is, how it affects your blood glucose levels and which foods it is found in.

Why would I want to know how much carbohydrate I am eating?

Carbohydrate is the nutrient that directly affects blood glucose. It is found in sugary and starchy foods and you might want to estimate it for the following reasons:

- **To spread carbohydrate out during the day**

If you have Type 2 diabetes eating similar amounts of carbohydrate foods at meals helps to keep your blood glucose stable. It can also help your healthcare team to prescribe the correct amount of medication for you.

- **To help you adjust your insulin**

The basal bolus insulin regime, where insulin is taken at each meal, can allow you to adjust this insulin according to how much carbohydrate you have eaten. This gives you greater flexibility with your mealtimes and the foods eaten.

Ways to Estimate Carbohydrate

There are a number of ways of estimating carbohydrate. These include counting carbohydrate portions, using carbohydrate tables in books and on websites, and reading food labels.

Weighing foods

You may wish to weigh your food to work out how much carbohydrate is in your portion.

- Weigh food in grams and note weight
- Look up the amount of carbohydrate per 100g (from the label or a food table)
- Multiply the weight of the food by the carbohydrate per 100g
- Divide the result by 100

$$\text{Carbohydrate} = \frac{\text{Weight of food (g)} \times \text{Carbohydrate per 100g}}{100}$$

So the carbohydrate for a larger 35 g bag of the crisps on the previous page would be:

$$\frac{35 \times 52.4}{100} = 18.3g$$

Nutritional Scales

A number of companies make nutritional scales. These contain information on common foods. Choose a food and the scale will work out how much carbohydrate and other nutrients are in the food you are weighing.

Common Measures

It can also be useful to weigh a food in a common measure such as a cup or tablespoon and work out how many grams of carbohydrate it contains. You can then use this measure to serve yourself, and easily work out your carbohydrate.

NHS
University Hospitals Birmingham
NHS Foundation Trust

Reading Labels for Carbohydrates

Many food labels show the total amount of carbohydrate per 100g and per portion. Remember to use the total carbohydrate figure, not just the sugars.

In the example below the carbohydrate would be 13.1g for one packet of crisps. With larger packets make sure that your portion is the same as that on the packet.

Crisps

	Per 100g	Per Bag (25g)
Energy	2180kJ	545kJ
	524kcal	131kcal
Protein	5.2g	1.3g
Carbohydrate	**52.4**	**13.1g**
of which sugars	0.8	0.2g
Fat	32.4	8.1g
of which saturates	4.0g	1.0g
Fibre	3.6g	0.9g
Salt	2.0g	0.5g

Carbohydrate Portions

Your dietitian can give you a carbohydrate portion list. Portion lists help you to do a quick estimate of the carbohydrate in your foods. A Carbohydrate Portion is 10g of carbohydrate. Examples of foods that contain one Carbohydrate Portion are:

Food Group	Carbohydrate Portion Size (10g)
Starchy Carbohydrates	• 1 egg sized (65g) boiled potato • 1 tablespoon (30g) of cooked rice or pasta • 1 Weetabix • $^2/_3$ slice of medium sliced bread (1 slice = 1.5 portions)
Fatty and Sugary Foods	• 1 scoop of ice cream • 1 digestive biscuit • 1 rounded teaspoon jam/honey (15g) • 1 fun sized chocolate bar
Fruits and Vegetables	• 1 small apple (100g) • ½ a medium banana (40g)
Protein Foods *Most do not contain carbohydrate*	• 1 party sized sausage roll • 1 tablespoon beans/lentils
Milk and Dairy Foods	• 1 glass of milk (200ml) • 1 natural yoghurt (150g)

Adding up your Carbohydrate Portions

If you estimate how many portions of carbohydrate containing foods you have eaten in a meal, then this can be used to add up the carbohydrate eaten. This table shows an example of one day's carbohydrate.

Meal		Portions	Carbohydrate
Breakfast	2 Weetabix	2	20g
	Glass of milk	1	10g
	Total	3	**30g**
Lunch	2 medium slices of granary bread	3	30g
	10g of low fat spread	0	0g
	75g of roast chicken	0	0g
	Lettuce	0	0g
	1 small apple	1	10g
	Total	4	**40g**
Snack	Packet of crisps	2	**20g**
Evening Meal	4 egg sized potatoes	4	40g
	Pork Chop	0	0g
	3 tablespoons Peas (80g)	1	10g
	Total	5	**50g**
Supper	2 Crumpets	4	40g
	Low Fat Spread	0	0g
	Glass of Milk	1	10g
	Total	3	**50g**

Books, Websites and Apps

Many books are available that give you information on the nutrient content of food including carbohydrates. These may include pictures that help you estimate your portion size. Some examples are:

- Carbs and Cals, Chris Cheyette and Yello Balolia
- The Calorie, Carb and Fat Bible, Juliette Kellow, Lyndel Costain, Laurence Beeken
- Collins Gem Carb Counter

Some websites also contain useful information about the nutrients in food, for example online nutrition tables and recipes with nutrient information. If you own a smart phone there are also a number of Apps available.

Take care that anything you use online is an accurate source of information, for example foods in other countries may have different ingredients or portion sizes. Some Apps allow users to add information, which may not be accurate. It is also important to check that the portion that you are having is the same as that listed.

Eating Out

It can be challenging to estimate the amount of carbohydrate in foods when you are eating away from home. As you become more familiar with the carbohydrate content of foods you normally eat, you will find it easier to estimate for meals out.

Some carbohydrate tables in books and on websites include common meals that are eaten out. Many fast food restaurants also have nutrition information on their websites.