

Carbohydrate counting recipes: a step by step guide

Paediatric Diabetes Specialist Team
Patient Information Leaflet





Introduction

Healthy eating is an important part of looking after your diabetes so we want to give you the confidence to prepare meals from scratch. This means you will not have to rely on convenience food that is often high in salt, fat and sugar. Calculating carbohydrates from recipes can seem like a daunting task. This handy guide therefore provides a breakdown of the steps needed to calculate the carbohydrate content of your recipes so that you can enjoy cooking your favourite dishes at home.



What will I need?

- A recipe with the amounts of each ingredient needed in grams (please see 'Weight conversions' section if you need to convert ounces to grams).
- All the ingredients needed for your recipe.
- Any nutritional information labels that are available to you.
- The Carbohydrate Counting Tables booklet available from your Paediatric Diabetes Team, or similar information.
- Some scales – preferably digital if you have them.
- A calculator, pencil and paper.



What do I need to do?

Please note that there is a template after these instructions that should help you.

1. Identify the **ingredients containing carbohydrates** in the recipe such as flour, pasta, rice, sugar, ingredients with added sugars (e.g. jam) or natural sugars (e.g. fruit), and write these down. You could use a copy of the template provided in this leaflet, if you like.
2. Write down the **weights of these ingredients** needed in grams, in a column next to each ingredient.
 - a. To convert from imperial measurements (e.g. ounces), you can use the information in the conversion table in the 'Weight conversions' section.
 - b. You may need to weigh household measures such as cups or spoons the first time you make the recipe.



3. Where nutritional information labels are available, write down the **total carbohydrate per 100g** figure in a column next to the weight of each ingredient.

Make sure you check that the figure on the label matches what you are weighing e.g. a nutritional value for uncooked pasta from the label cannot be used where the pasta was weighed cooked.

4. Where no labels are available or the value given cannot be used, use the carbohydrate values per 100g for a similar ingredient from the Carbohydrate Counting Tables booklet and write this down instead. Your Paediatric Diabetes Team will be able to provide a copy of this booklet.
5. Calculate the grams (g) of carbohydrate (carb.) in your ingredients using the **following formula**:

Calculation:

$$\text{Amount of carb. in my ingredient (g)} = \frac{\text{carb. per 100g} \times \text{weight of ingredient (g)}}{100}$$



(Divide the carb. per 100g figure by 100; then multiply this figure by the weight of the ingredient (g) figure. This will give you the amount of carb. in the ingredient).

6. **Add up the calculated values** for the amount of carb. in each ingredient – this will be the total amount of carbohydrate in the whole recipe.
7. Work out **how many portions** your recipe makes (this may be different from the suggested number of portions as individual portion sizes can differ) and **divide the total carbohydrates by this number**. This will give you the amount of carbohydrate in each portion.

This exercise may appear quite tricky to begin with but when you have done it once, you can use the calculated value when you make

the recipe again (as long as the recipe and portion size does not change).

Recipe template

This template can be used to calculate the carbohydrate content of your recipes. You could create a file of your favourite recipes. That way when you make the same recipe again, you will have all the carbohydrate values already calculated.

Ingredient containing carbs.	Weight in g	Carbs. per 100g	Total carbs. in ingredient, using formula
	g	g	g
	g	g	g
	g	g	g
	g	g	g
	g	g	g
	g	g	g
	g	g	g
Total carbs. in recipe:		g
Divided by number of portions = carbs. per portion:		g



An example recipe

Here is an example of how the seven steps were used to calculate the carbohydrate content of a portion of apple pie. The steps are given in brackets.

Apple pie



For the filling:

- 1kg bramley apples
- 130g golden caster sugar
- ½ tsp cinnamon
- 40g sultanas

For the pastry:

- 200g butter or margarine
- 50g golden caster sugar
- 2 eggs
- 300g plain flour

Serves 8

Abbreviations used in this leaflet:

kg = kilogram

g = gram

tsp = teaspoon

tbsp = tablespoon

L = litre

oz = ounce

fl oz = fluid ounce

ml = millilitre

My notepad

Ingredient containing carbs. (1)	Weight in g (2)	Carbs. per 100g (3 & 4)	Total carbs. in ingredient, using formula (5)	Calculations, using formula (5)
Apples	1000g (1kg)	12g	120g	$12 \div 100 = 0.12$ $0.12 \times 1000 = \mathbf{120g}$
Caster sugar	130g + 50g	100g	180g	$100 \div 100 = 1$ $1 \times 180 = \mathbf{180g}$
Sultanas	40g	70g	28g	$70 \div 100 = 0.7$ $0.7 \times 40 = \mathbf{28g}$
Flour	300g	76g	228g	$76 \div 100 = 0.76$ $0.76 \times 300 = \mathbf{228g}$
Total carbs. in recipe (6):			556g	
Carbs. per portion (7):			69.5g	

Weight conversions

Weight measurements:

½ oz	=	15g
1 oz	=	30g
2 oz	=	55g
3 oz	=	85g
4 oz	=	115g
5 oz	=	140g
8 oz	=	225g
16 oz	=	450g
1 teaspoon	=	5g
1 tablespoon	=	15g

Liquid measurements (1ml = 1g):

5 fl oz (1/4 pint)	=	150mls
10 fl oz (1/5 pint)	=	275mls
15 fl oz (3/4 pint)	=	425mls
20 fl oz (1 pint)	=	550mls

Other resources

‘Carbs and Cals.’ book series and phone app: allows you to see pictures of a variety of foods in different portions alongside nutritional information including carbohydrate content. On the phone app, you can add multiple ingredients to build a meal or a recipe and can change the number of servings for the recipe.

<http://www.healthapps.uk.com/cook-and-count.html>

Carbohydrate counted recipes: Many recipes now also contain nutritional information, including the carbohydrate content per portion or per 100g. This can be very useful but it is important to be aware that the suggested portion size may differ from your own.

Diabetes UK – Balance Magazine: Included as part of membership to Diabetes UK, this magazine provides carbohydrate-counted, healthy recipes as well as updates on news, personal stories, research and dietary information. An example of a carbohydrate-counted recipe from this magazine is on the next page. To find out more about Diabetes UK, visit the weblink:

<http://www.diabetes.org.uk/>

Pork, barley and carrot casserole

Serves 4 – 27.8g carbohydrates per serving (429g serving size)

Ingredients:

1tbsp sunflower oil
2 onions, diced
350g pork, cubed
300g carrots
150g mushrooms,
quartered
2 garlic cloves, crushed
1tsp dried thyme
2 tsp wholemeal flour
Pinch of salt and pepper
3 heaped tbsp pearl barley
1 heaped tsp Dijon
mustard
1 vegetable or chicken
stock cube, dissolved in 1L
water

1. Preheat oven to 180°C/gas 4. Add the oil and onions to a pan and cook until softened but not browned.
2. Add the pork and cook for a further 2 to 3 minutes, stirring until the meat starts to brown.
3. Add the carrots, mushrooms, garlic, thyme, flour and seasoning, stir for 2 to 3 minutes, then add the barley, mustard and stock. Mix well, bring to the boil and transfer to an ovenproof dish.
4. Put the lid on the casserole dish and place in the middle of the oven for 60 to 70 minutes. (Alternatively, you can carry on cooking on the hob, if you add a lid and turn the heat down low).

Recipe adapted from Diabetes UK Balance Magazine, September-October 2014 Issue No 260.

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

Paediatric Diabetes Specialist Team
Brierley Hill Health and Social Care Centre
Venture Way
Brierley Hill
Dudley
DY5 1RU
01384 321420 (9am to 5pm, Monday to Friday)

This leaflet can be downloaded or printed from:

<http://dudleygroup.nhs.uk/services-and-wards/diabetes-specialist-team-community/>

This leaflet can be made available in large print, audio version and in other languages, please call 0800 0730510

ਜੇਕਰ ਇਹ ਲੀਫਲੈੱਟ (ਛੋਟਾ ਇਸਤਿਹਾਰ) ਤੁਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਨਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** ਟੈਲੀਫੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज़ अपनी भाषा में चाहिये तो पेशन्ट इनफ़रमेशन को-आरडीनेटर को टेलीफ़ोन नम्बर **0800 0730510** पर फ़ोन करें।

ਜੇ ਤੁਸੀਂ ਆ ਪਤਿਕਾ ਤੁਸਾਰੀ ਪੋਤਾਨੀ ਭਾਸ਼ਾ (ਗੁਜਰਾਤੀ) ਮਾਂ ਜ਼ੋਠੀ ਭੀਯ, ਤੋ ਕ੍ਰਿਪਾ ਕਰੀਨੇ ਪੇਸ਼ਾਣ ਈੰਫੋਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨੂੰ **0800 0730510** ਪਰ ਸੰਪਰਕ ਕਰੋ।

আপনি যদি এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটরের সাথে **0800 0730510** এই নম্বরে যোগাযোগ করুন।

إذا كنت ترغب هذه الوريقة مترجمة بلغتك الاصلية (اللغة العربية), فرجاء ا اتصل بمنسق المعلومات للمريض
0800 0730510 على التلفون Information Co-ordinator

حسب ضرورت اس ایف ایٹ کوٹھی زبان (اردو) میں حاصل کرنے کے لئے برہم پرائی ٹیلیفون نمبر **0800 0730510** پر پوزیٹ انفرمیشن کو-آورڈینٹر (مریضوں کے لئے معلومات کی فراہمی کے سلسلے میں انٹر) کے ساتھ رابطہ قائم کریں۔