

Carbohydrate servings and meal planning

Please use the time line below to help you think about how food fits into your daily routine. Plot along the line: when you tend to eat meals and have regular snacks, when you have your main meal, when you work, any regular periods of activity and when you sleep. Do weekdays differ significantly from the weekend? (You may need to plot a second line for weekends).



How do you feel about your current eating pattern and lifestyle?

What would you like to change, if anything?

There is no one recommended diet or eating pattern for people with diabetes. The aim is to find an eating pattern that suits you, allowing you to work towards or maintain your weight goal and blood glucose goal (measured using the HbA1c blood test showing your three-monthly average blood glucose).

So why the emphasis on carbohydrate? Carbohydrate foods and drinks convert to glucose when digested, which in turn raises blood glucose. For this reason carbohydrate has a far greater impact on blood glucose compared to protein foods (meat, fish, eggs) and fats (oils, butter). Being aware of your carbohydrate intake at meals can help to limit blood glucose levels after meals. The carbohydrate portions table, on the reverse, is a useful tool to monitor carbohydrate intake and structure your meals. Here is how it works:

- Carbohydrate foods typically consumed are divided into five groups
- The foods are displayed as portions of 15g carbohydrate
- Decide how many carbohydrate portions you want to have at each meal or snack (please note, snacks are not essential and some people are better off having only three main meals). For example 11 portions eaten during a day = 165g of carbohydrate.
- Note: this is a carbohydrate portions size chart and not a measure of how nutritious the food is. Both a tablespoon of sugar and a glass of milk contain equal amounts of carbohydrate, but sugar is 'nutrient empty', while milk contains calcium and protein in addition to carbohydrate. For this reason it is best to limit foods high in sugar.



Carbohydrate portions and meal planning

This table can help with meal planning to ensure that you know approximately how much carbohydrate you are eating at each meal or snack and that your carbohydrate intake does not vary significantly from one day to the next. Decide how much carbohydrate you want to eat at each meal and snack (note: snacks are not essential). For a detailed list of foods refer to the paperback or app called *Carbs & Cals* by C. Cheyette and Y. Balolia and check the food labelling on packaged products.

1 portion = 15g carbohydrate

Number of carbohydrate portions you want to eat for each meal and snack Breakfast: _____ Lunch: _____ Dinner: _____ Snack (am): _____ Snack (pm): _____

Breads & grains		Beans & starchy vegetables		Fruit		Milk products		Foods containing added sugars	
Bread	1 medium slice	Baked beans	3 tbsp/100g	Apple	1 medium	Milk	250ml	Rich Tea biscuit	3
Pita bread	½ large	Chickpeas	3 tbsp/100g	Orange	1 medium	Yoghurt,	200-250g	Garibaldi	2
Chapatti	1 small	Lentils	3 tbsp/100g	Grapefruit	1 large	natural		Digestive	1 ½
Naan bread	¼ large	Corn on the cob	1 medium	Pear	1 medium	Yoghurt,	150g	Scone	½
English muffin	½	Baked potato	¼ large / 65g	Satsuma	2	flavoured		Teacake	½
Crackers	2 - 3	Boiled potato	3 small / 100g	Banana	½ large/1 small	Evaporated milk	120g	Sugar	1 tbsp
Rice, cooked	1½ tbsp / 50g	Mashed potato	2 tbsp / 100g	Grapes,	10-15 /120g	Soya milk**	250ml =	Honey	1 tbsp
Rice, uncooked	20g	Sweet potato,	¼ large	Cherries	15-20 /100g		7g carbs	Jam	1 tbsp
Couscous, cooked	2 tbsp / 50g	baked		Strawberries	15-20 /250g	Almond	250ml =	Ice cream	1½ scoop
Pasta, uncooked	20g	Yam	¼ large	Raspberries	300g	milk**,	1-4g carbs		
Flour	2 tbsp / 18g	Butternut squash,	200g	Blueberries	150g	unsweet-		Jelly Babies*	3
Oats, uncooked	3 tbsp / 25g	raw		Melon	200g	ened		Coke*	150 ml
Muesli	3 tbsp / 25g	Plantain	1/3 large	Mango	½ medium			Original	170 ml
Branflakes	3 tbsp / 25g	Parsnip	2 tbsp	Prunes, dried	3			Lucozade*	
Weeta/Oatibix	1 biscuit	Sweetcorn	4 tbsp /150g	Kiwi	2 small			(2017)	
Shredded Wheat	1 biscuit	Cassava	1 ½ tbsp	Apricot,	3				
Popcorn	20g			fresh & dry					
				Fruit juice	150 ml				

* save these for treating a low blood glucose

** not 15g portions

Take note:

- Vegetables not listed in this table are generally low in carbohydrate. Aim to fill half your plate at lunch and dinner with these non-starchy vegetables such as broccoli, cabbage, spinach, aubergine, mushrooms, lettuce, okra, salad vegetables, etc.
- The above table focuses on foods containing carbohydrate. Proteins and fats do not increase blood glucose in the same way as carbohydrates do. Choose unprocessed protein foods (fish, chicken, meat, eggs) and healthy fats (olive oil, avocado, nuts) to make your meals balanced and to feel fuller.