



# Carbohydrates awareness and diabetes

**Dietetics & Nutrition** 

Information for Patients

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## What are carbohydrates?

Carbohydrates, or carbs for short, are foods that give us energy. When we eat carbs, our body turns them into sugar (glucose). This helps us move and do things.

There are 2 kinds of carbs: starchy carbs and sugars.

Starchy carbs include foods like bread, pasta, potatoes, and grains.

Sweets, biscuits, and soft or fizzy drinks all contain sugar. Also, sugar is present in fruits and various dairy products like yoghurt.

You can tell if there is sugar in your food by looking for ingredients that end with "-ose" on the label like glucose, fructrose (in fruits) and lactose (some dairy products).





# How many carbohydrates should I be eating?

It is important for everyone to eat some foods that have carbs in them. But how much you should eat depends on your age and how active you are.

If you eat a lot of carbs, your blood sugar levels can get too high. It is best to eat smaller portions to avoid this.

If your blood sugar levels are between 4 to 7mmol/l before meals, that is good! But if they are higher than 7mmol/l, try eating smaller portions of carbs at your next meal to see if it helps.

If you want to lose weight and you eat a lot of carbs, try cutting down on the amount of food you eat. This can help lower your blood sugar levels. If you take medication for diabetes, you may need to reduce it too when you make this change to your diet.

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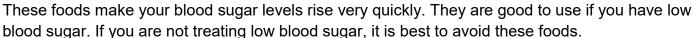


## Are all carbs digested the same?

Carbohydrates are broken down and absorbed by the body at different speeds. They can be split into 3 groups - fast, medium, and slow-acting.

#### Fast-acting carbs are:

- Energy drinks and glucose tablets
- Sugary drinks like fizzy drinks and fruit juice
- Chewy and boiled sweets, gums, jellies, and mints.



#### Medium-acting carbs include:

- Bread, chapattis
- Potatoes and sweet potatoes
- Breakfast cereals and oats
- Rice and pasta
- Most fruits
- Milk, yogurt, and ice cream
- Chips, crisps, biscuits, cakes, and other foods made from flour.

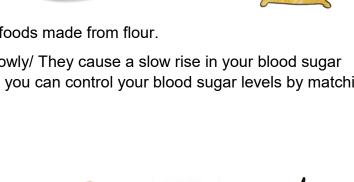
These foods break down into glucose more slowly/ They cause a slow rise in your blood sugar levels. If you take fast-acting insulin with food, you can control your blood sugar levels by matching your insulin to the amount of carbs you eat.

## Slow-acting carbs are:

- Pearl barley
- Peas, beans, and lentils
- Some vegetables, like sweetcorn, squash or pumpkin, and parsnips
- Some fruit, like tomatoes, cherries, grapefruit, lemon, and lime
- Nuts, Quorn, tofu, and soya.

These foods have some carbs, but they are absorbed slowly. They might not affect your blood sugar levels as much (unless you eat a lot). Do not take fast-acting insulin with these foods unless you are eating them with other foods that have carbs.







#### Which carbs will make me feel fuller?

Slow-acting carbs are the ones that can make you feel full for longer. Carbs that are high in fibre, like wholegrain bread, pasta, and fruit are also good for keeping your gut healthy.

Here are some tips on how to include good quality carbohydrates in your diet:

- Choose wholegrain bread and grains such as wholewheat pasta, wheat and brown rice.
- Eat whole fruit instead of drinking juice. Eating an apple with the skin on is better than drinking a glass of apple juice because it has more fibre.
- Try quinoa and bulgur wheat instead of pasta.
- Eat seeds, nuts, and pulses as lower carb sources of fibre.
- Choose unsweetened milk and yogurt.

If you want to find out how many carbohydrates are in your portion of food, there are some resources available to help you.

#### Food labels:

When you buy packaged food, you can check the label on the back to find out how many carbohydrates are in the food. The total number of carbohydrates on the label includes both starchy carbohydrates and sugars.

It is important to also check the portion size on the label to see if it is the same as the portion you are eating. If your portion is different, you will need to work out how many carbohydrates are in your portion.

Typical values	Per 100g	Per 1/4 pot	% based GDA for wor
Energy	256 kJ	320 kJ	
	61 kcal	76 kcal	3.8%
Protein	. 4.9g	6.1g	13.6%
Carbohvdrate	6.9g	8.6g	3.7%
of which sugars	6.9g	8.6g	9.6%
of which starch	nil	nil	
Fat	1.5g	1.9g	2.7%
of which saturates	0.9g	1.19	5.5%
mono-unsaturates	0.4g	0.5g	
polyunsaturates	nil	nil	·
Fibre	nil	nil	nil
Salt	0.2g	0.3g	5.0%
of which sodium	trace	0.1g	4.2%
Vitamins & m	inerals	Recommended	% of RDA daily amount
Calcium	168mg	210mg	26%

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#### Carbs and cals:

Carbs and cals is a tool that helps you count carbohydrates and calories in your food. It is like a book or an app that you can use on your phone or tablet. You can look at pictures of food and compare your portion size to the pictures in the book or app.

The green circle will show you how many carbohydrates are in the portion size you are looking at. The weight of the portion is also shown under the picture. This tool can help you make healthier choices about what to eat.

# Food groups that do not contain carbohydrates

The following types of food do not contain a lot of carbohydrates and will have little impact on blood sugar levels.

- Protein: meat, fish, poultry, seafood, eggs
- Vegetables: non-starchy vegetables such as leafy greens, broccoli, peppers, tomatoes, cucumbers and so on.
- Fat: butter, oils, lard, margarine, and so on.
- Dairy: cheese, cream, butter, and so on.
- Drinks: water, coffee, tea (without added sugar or milk), diet drinks, sugar-free drinks.

It is important to note that even though these food groups do not contain lots of carbohydrates, they may still contain some. This can have an impact on blood glucose levels in some people. These food groups are still important parts of a healthy and balanced diet.

#### **Contact details:**

If you have any queries, please phone your dietitian on 0116 258 4919

patient-and-public-involvement

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