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Department of Nutrition & Dietetics Patient Information



Health & care

information in large print, easy read, on audiotape or in another language please call 0800 7838058 or email pals@dchft.nhs.uk

If you wish to obtain a list of the sources used to develop this information leaflet please call 0800 7838058 or e-mail patient.info@dchft.nhs.uk

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Carbohydrates

Information for people with diabetes using adjustable-dose insulin

Please note: This is general information and should not replace any personalised advice given to you by your healthcare team.

What is carbohydrate and why does it matter?

Carbohydrate (also known as 'carb' or 'carbs') is part of many foods. It is one of the main food groups, along with fat and protein. When you eat most types of carb, your body digests it and turns it into simple sugars. One simple sugar is glucose, which your body uses for energy.

Glucose is the sugar measured by your finger-prick tests and that we measure with an HbA1c blood test. Your body needs insulin to process this glucose properly.

If you want to understand your blood-glucose levels, then understanding carbs can help.

Which foods are carbs?

Carbs can be either sugar or starch. Both will affect your blood glucose levels. Many foods contain carbs but the main ones are:

- Bread
- Rice
- Pasta
- Potato
- Breakfast Cereal
- Flour
- Oats

- Beans & lentils
- Sugar, honey & syrup
- Fruit & fruit juice
- Milk, yoghurt & ice cream
- Sweets & chocolate
- Puddings, cakes & biscuits

Carbohydrates are recommended as part of a healthy balanced diet.



What to do with information about carbs:

Knowing about carbs is only useful if you understand how your insulins work. To find out more about your insulins, please contact your diabetes doctor, nurse or dietitian.

- You need rapid-insulin whenever you eat carbs. Your dose should be adjusted according to the amount of carb you eat: More carb needs more insulin. Less carb needs less insulin.
- Your dose of rapid-insulin should also be adjusted if you are planning to do more or less activity than usual
- A small adjustment in rapid-insulin may also be needed if you wish to correct your blood glucose level up or down

Only adjust your dose if you feel safe to do so. Please contact your diabetes team for any help and advice.

- It is the job of your diabetes team to help you work out the doses of insulin that are right for you. If you do not feel in control of your blood glucose levels, please contact your diabetes team for support.
- If the doses are right, you should be able to eat more-or-less what you want, when you want and still get good blood glucose control
 - Blood glucose control is just one way in which what you eat affects your health. When choosing what to eat, a healthy balanced diet is recommended. For more information please see www.nhs.uk/change4life
- Look for patterns between the amount of carb that you eat, the number of units of rapid-insulin that you take and your next blood glucose result

There are other things that will affect your blood glucose levels, such as your long-acting insulin dose, illness, very hot or very cold weather or out of date/incorrectly stored insulin. If you are not in control of your blood glucose levels, your diabetes team can look at your readings to find out which insulin dose(s) might need adjustment.

If you are having '**hypos**' (hypoglycaemia; blood glucose lower than 4mmol/l) often or unexpectedly or if you have to eat when you don't want to in order to avoid hypos, then your insulin doses probably need review – contact your diabetes team.

Useful contacts

Dorset County Hospital Diabetes Centre Dorset County Hospital Dietitians

Diabetes UK Careline

Tel: 01305 255211 Tel: 01305 254415 Email: dietetic.secretary@dchft.nhs.uk Tel: 0345 123 2399 (charges apply) Email: careline@diabetes.org.uk