# Department of Nutrition & Dietetics

# **Patient Information**



# Information

If you need this 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

Author: Isabel Hooley Role: Diabetes Dietitian Publication Date: 06/15 Review Date: 06/18

# **Carbohydrates**

# Information for people with diabetes using fixed-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 some people measure with a finger-prick test and that the doctor/nurse measures with an HbA1c blood test. Your body needs insulin to process the glucose properly. This could be insulin made by your body, insulin helped along with tablets or insulin you inject.

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:

If you have high blood glucose levels most of the time or a high HbA1c, you probably need to eat less carb or take more insulin. Contact your diabetes doctor or nurse if you think your insulin dose needs to change.

If you have **high** blood glucose levels **occasionally**, try these things:

- Have a look at the amount of carb you eat
  - When you get blood glucose readings in target, the amount of carb at your last meal/snack was right for your insulin
  - When you get a high blood glucose reading, the carb at your last meal/snack was more than your insulin could cope with
    - Use this information to work out what portion size is right for you and try to keep your portions at that size. Your dietitian can advise you on this.
- Think whether you have been less active than usual. To stop your blood glucose going high, eat less carb if you are being less active than usual.

A 'hypo' (short for hypoglycaemia) is a blood glucose level lower than 4mmol/l.

If you have **hypos often** or if you often have to eat when you don't want to, in order to avoid hypos, then your insulin dose is probably too high - contact your diabetes doctor/nurse.

If you have **hypos** occasionally, try these things:

- Have a look at the amount of carb you eat and try to keep it consistent. Hypos can happen when you eat less carb than your insulin dose is designed for.
- Think whether you have been more active than usual. If you are more active, you
  need to eat more carb just before or during the activity to avoid hypos. The amount
  of carb you need to eat will depend on the type of activity. Your dietitian can advise
  you on this.

Other things may also affect your blood glucose levels, like illness, very hot or very cold weather or out of date/incorrectly stored medication. For some foods, the rate at which the food is digested will also have an effect but there are only a few foods where this is so.

## **Useful contacts**

If you have questions, please ask a diabetes dietitian or Diabetes UK.

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