

Diabetes - Type 1

This Food Fact Sheet is about Type 1 diabetes only.

What is diabetes?

It is a condition where the body cannot properly use glucose for energy. Type 1 diabetes occurs when the body has stopped producing insulin. In Type 1 diabetes, the insulin has to be replaced either by daily injections or with insulin pump therapy. The aim of these insulin treatments is to have the best possible glucose control around your current lifestyle and daily activities.

Referral to a dietitian

When they are diagnosed with Type 1 diabetes, all children up to the age of 16, will be referred to a specialist paediatric diabetes team. Adults and young people should be referred to a diabetes specialist dietitian who works with a team including a doctor and diabetes specialist nurse. You should be offered referral to a structured diabetes education programme soon after your diagnosis to learn more about diabetes and food and how to monitor your diabetes by testing your blood glucose levels. You may also be offered an ongoing education programme.

What can you eat?

Adults and children with Type 1 diabetes should eat a healthy diet, just the same as somebody without diabetes e.g. it needs to be low in saturated fat, high in fibre and include a variety of fruit and vegetables.



The importance of good blood glucose control

Good diabetes control (HbA1c less than 58 mmol/mol without frequent low blood glucose levels) reduces your risk of developing complications of diabetes which can affect your eyes, kidneys, heart, feet, and sexual function. It is important for children and young people to achieve good control and reduce the risk of complications in later life.



In the short-term, good control will mean you have more energy, more restful sleep, improved physical performance and concentration, more stable moods and emotions, and healthier skin and gums. Good glucose control comes from a combination of diet, insulin and exercise.

How does food affect your blood glucose level?

Food and drinks containing carbohydrate are digested to provide glucose. You need glucose for energy. A dietitian will help you to balance your food intake and insulin doses so that your blood glucose is maintained as close as possible to the normal range and you have fewer high (hyperglycaemia) or low (hypoglycaemia) blood glucose levels.

Blood glucose targets

A normal blood glucose is between 3.5-8 mmol/l. But for people with diabetes the following are recommended. Some people may be given different targets depending on their age and lifestyle.

	Before meals	1.5 – 2hrs after meals
Adults	4-7 mmol/l	Less than 9 mmol/l
Children	4-8 mmol/l	Less than 9 mmol/l



Which foods contain carbohydrate?

Examples of food containing carbohydrate include bread, rice, pasta, breakfast cereals, potatoes, biscuits, sweets, chocolate, jams and sugary drinks. Fruit and milk also contain carbohydrate. All types of carbohydrate will increase your blood glucose level. How much your blood glucose goes up will depend on:

- the amount and type of carbohydrate in the food you eat or drink
- your insulin doses, the type of insulin you have and when you take it
- your daily activity levels as well as the exercise or sport you do

Your dietitian will be able to guide you on the type and amount of carbohydrate you need and when you need to eat it depending on your age, insulin regimen and lifestyle.

Carbohydrate counting

Carbohydrate counting can be a useful tool to help you manage your blood glucose levels. To get good blood glucose control you need to be able to balance the amount of insulin with the carbohydrate you eat. You can either:

- eat similar amounts of carbohydrate every day, or
- learn to adjust your insulin dose to match the amount of carbohydrate you wish to eat

Your diabetes team will help you decide which approach is best for you.

Alcohol

There is no reason why people with diabetes cannot have alcohol, unless you have been advised not to or you are under age.

Alcohol Units Guide

Alcohol	Serving size	Alcohol units
Wine	1 glass (175ml)	2
Beer/lager/ cider (normal strength 3-4 %)	1 pint	2
Spirits e.g. vodka, gin	35 ml	1.5
Alcopops	1 bottle	1.5

The safe limits for alcohol are 2-3 units/day for women (max 14 units/week) and 3-4 units/day for men (max 21 units/week). Alcohol can lower your blood glucose and hypoglycaemia may develop up to 16 hours after you have stopped drinking. Therefore, don't drink on an empty stomach and if drinking in the evening, have a carbohydrate snack before you go to bed. Do not miss breakfast and make sure it contains carbohydrate e.g. cereal or toast.

Diabetic foods

Foods labelled as 'diabetic' such as sweets, cakes and biscuits offer no special benefits and there is no need to have them. They are often high in calories, may increase your blood glucose level and have a laxative effect! Ordinary products, eaten as part of a healthy diet, are suitable.



Physical activity

Being active is an important part of a healthy lifestyle and can help prevent heart disease, maintain your

weight and make you feel good. However, it can be challenging to balance your food, insulin and exercise to keep your blood glucose in the normal range. Your diabetes team will work with you help you to achieve this balance.

Summary

People with Type 1 diabetes should eat a healthy balanced diet. Speak to your diabetes team about learning how to balance your insulin with your food intake in order to keep your blood glucose in the normal range. It is important to be active; aim to do some activity every day. Good diabetes control will help you lead a full and active life and may prevent other health complications.

Further information: Food Fact Sheets on other topics including Type 2 Diabetes, Healthy Eating, Healthy Eating for Children, Carbohydrates and Alcohol are available at www.bda.uk.com/foodfacts
Further advice is available from:
Diabetes UK
0845 1202 960 diabetes.org.uk
Juvenile Diabetes Research Foundation
020 7713 2030 jdrf.org.uk

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This Food Fact Sheet and others are available to download free of charge at www.bda.uk.com/foodfacts

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