

Dietary Advice for Diabetes in Adults

What is diabetes?

- Diabetes is the name used to describe a metabolic condition of having higher than normal blood glucose (sugar) levels.
- In people with diabetes there is too much glucose in the blood because the body does not produce enough of the hormone insulin, or the insulin it produces does not work properly.

There are two main types of diabetes:

- **Type 1 diabetes** – little or no insulin is produced by the pancreas. Therefore the insulin has to be replaced by insulin injections and a healthy diet.
- **Type 2 diabetes** – the pancreas is unable to produce enough insulin, or the insulin produced does not work properly (insulin resistance). This type of diabetes is treated through a healthy diet, but tablets, insulin, or both, may become necessary.

Aims of treatment

- The aim of treatment for both types of diabetes is to achieve and maintain the best possible control of blood glucose, blood pressure and cholesterol. This will help prevent complications associated with diabetes in the future.
- Eating a healthy diet, regular physical activity, weight control, not smoking and maintaining a healthy cholesterol level are important factors in the treatment of your diabetes.

Dietary advice

- All people diagnosed with diabetes should see a dietitian. Alongside healthy eating, an awareness of carbohydrate foods and food portion sizes is important for all people with diabetes, and the dietitian will help people with Type 1 diabetes understand the balance between carbohydrates and their insulin doses.

Insulin resistance

- Whether you have Type 1 or Type 2 diabetes, you can also be insulin resistant. Extra body weight, especially around the middle, makes the body become resistant to the insulin being produced or injected. Being a healthy weight and increasing your physical activity will improve your insulin resistance and enable the insulin to work effectively.

Carbohydrates

- Carbohydrates cause the rise in blood glucose levels. By controlling the amount and type of carbohydrate in your diet you will be able to improve control of your blood glucose levels. There are two main types of carbohydrates:
 1. Sugars – these are digested very quickly and can cause a rapid rise in blood glucose levels, e.g. sugar, cakes, biscuits, puddings, sweets, ice cream, fruit and fruit juice, milk, yoghurt, honey, jam, marmalade, fizzy drinks, squashes and juices.
 2. Starches – these take longer to digest and release glucose more slowly into the blood, therefore helping to control your blood glucose levels, e.g. cereals, bread, rice, pasta, noodles, flour, potatoes, pulses, beans, lentils.

Glycaemic Index (GI)

- This is a scale that ranks food depending on the rate at which the body breaks it down to form glucose. Low GI foods are broken down slowly and high GI foods are broken down quickly. Being aware of healthy low GI foods can help improve diabetes control. Choosing lower GI foods means your blood glucose levels will rise more slowly. The table overleaf provides a guide to foods which have a low or high GI.

Food Group	Low GI	High GI
Breakfast cereals	Porridge, All-Bran, Muesli (no added salt/sugar)	Cornflakes, Rice Krispies
Bread	Granary, wholegrain, seeded or multigrain bread	White, brown, wholemeal bread
Pasta / Noodles	White or wholemeal pasta or noodles	
Potatoes	New potatoes, sweet potatoes	All other potatoes, e.g chips, mashed, baked
Rice	White or brown basmati rice	Other rice varieties
Pulses	Lentils, beans (including baked), chickpeas	
Vegetables	Almost all vegetables	Pumpkin, parsnip
Fruit	Apples, pears, peaches, bananas, cherries, grapes, oranges, plums, grapefruit	Watermelon, pineapple, raisins, dates
Dairy products	Milk, milky puddings e.g. custard, low calorie yoghurt	Ice cream

Dietary Advice – General Guidelines

- The best advice for people who have been recently diagnosed with diabetes is to follow a healthy balanced diet which should be followed by the general population: i.e.

1. Eat regular meals

- Aim to eat three meals a day, including breakfast.
- Include small portions of starchy carbohydrate foods at each meal:
 - try breakfast cereals (avoid sugar-coated cereals), bread, potatoes, pasta, rice, noodles, chapattis.
 - wherever possible choose low glycaemic index (GI) foods as these will help you feel fuller for longer and reduce the rapid rises and falls in blood glucose.
 - Watch your portions sizes - the larger the portion, the more effect this will have on raising your blood glucose levels

2. Eat five portions of fruit, vegetables or salad daily

- Fruit contains natural sugar which will raise your blood glucose levels, so spread your intake of fruit throughout the day and eat only one portion of fruit at a time.

Fruit and vegetable portion sizes

- 2 - 3 tablespoons of any vegetables
- 1 bowlful of salad
- 1 apple or 1 orange or 1 banana
- 2 small fruits, e.g. 2 plums or satsumas or kiwi fruits
- 1 slice of melon or pineapple
- 1 handful of berries or grapes
- 1 tablespoon of dried fruit
- 1 small glass (150ml) of fruit juice



3. Limit sugar and sugary foods / drinks

- Sugar causes blood glucose levels to rise quickly.
- Choose sugar-free, no added sugar, or drinks labelled 'diet' e.g. diet lemonade or cola, water, tea and coffee without sugar.
- If you do have a sugary food eat it only occasionally and after a meal rather than as a snack.
- Sugar can be replaced with sweeteners in drinks or in cooking. Any brand of artificial sweetener based on aspartame, saccharin, acesulfame potassium, cyclamate, sucralose or Stevia can be used as these do not affect blood glucose levels. Some debate about safety of sweeteners remains despite extensive testing. In general, artificial sweeteners sold in the UK will have been approved for everyone. People with phenylketonuria are advised to avoid aspartame.



4. Eat less fat

- Aim to eat less fatty foods, particularly less saturated fat which is linked to heart disease.
- Saturated fat is found in fatty meats, butter, lard, full fat milk, cream, cheese, coconut, cakes, biscuits and pastry products.
- Grill, bake, poach, steam or roast rather than fry food. Eat lean meat and remove any fat or skin. If you need to use fats or oils, choose unsaturated fats such as olive or rapeseed oil.

5. Oily fish

- Eat oily fish once or twice a week, e.g. mackerel, sardines, pilchard or salmon as these contain heart-protective omega-3 polyunsaturated fatty acids.

6. Cut down on salt

- Salt can increase your blood pressure.
- Use less in cooking, at the table and eat less salty foods - processed foods are high in salt.
- Flavour foods with herbs and spices instead of adding salt.
- If you have kidney problems, salt substitutes such as Lo-salt are not advised.



7. Alcohol

- Do not exceed the maximum recommendations:
 - 2 - 3 units per day for women
 - 3 - 4 units per day for men
 - Aim to have 1 or 2 alcohol free days each week.
 - Do not drink on an empty stomach.
 - What is a unit?
 - Half a pint of ordinary strength beer, lager, cider
 - One small pub measure (25ml) of spirits
 - One standard pub measure (50ml) of fortified wine e.g. sherry
- What is 1½ units?
- One small glass (125ml) of wine
 - One standard pub measure (35ml) of spirits



“Diabetic foods”

Foods labelled “suitable for diabetics” are not recommended, because many are expensive, high in fat and calories, and may contain bulk sweeteners which may have a laxative effect

Food labels

Labels on foods can help you decide whether it is an appropriate food choice.

The table below will help you decide if a food contains ‘a lot’ or ‘a little’ of a nutrient e.g. fat, sugar, etc. The amounts in-between are considered to be moderate. For ready-meals or foods eaten in large amounts, use the ‘per serving’ figure on the label. For snacks or foods eaten in small amounts, use the ‘per 100g’ figure on the label.

Food labels – a guide to what is “a lot” or “a little”

Nutrient	A lot (per 100g)	A little (per 100g)
Fat	20g or more	3g or less
Saturated fat	5g or more	1.5 g or less
Sugar	15g or more	5g or less
Salt	1.5g or more	0.3g or less
Sodium	0.6g or more	0.1g or less
Fibre	3g or more	0.5g or less

When first diagnosed with diabetes, reducing the sugar in your diet is usually necessary. As a guide, a product containing less than 10g of sugar per 100g is acceptable.

Watch your weight

Weight control is an important part of controlling your diabetes.

- If you are overweight try to lose weight gradually and maintain any weight loss. Gradually losing weight will lower your blood glucose levels. Discuss with your GP or practice nurse how to safely lose weight.



Exercise regularly

The Department of Health recommends aiming for at least 150 minutes (2½ hours) per week of moderate intensity activity. This should be spread throughout the week, e.g. 30 minutes of brisk walking at least five times a week or choose an activity that you enjoy such as dancing or swimming.

If you are taking insulin, you should discuss exercise with your dietitian and Diabetes team.

Useful contacts

- Diabetes UK, 10 Parkway, London, NW1 7AA. Tel. 020 74241000, Careline 0845 1202960. Email: info@diabetes.org.uk. Website: www.diabetes.org.uk
- www.carbsandcals.com – information on portion sizes, weight loss and carbohydrate counting
- The British Dietetic Association: www.bda.uk.com

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