

Diabetes Research & Wellness Foundation

Healthy eating for diabetes

By:
Azmina Govindji RD MBDA
Consultant Nutritionist and
Registered Dietitian



Staying well until a cure is found...

Healthy eating and diabetes

Magazines, friends and social media offer lots of advice about food. How can you tell what is true and what is not?

Use this leaflet as your dietary guide. It highlights three key messages to improve your diet and food choices: choose healthier carbohydrates, eat less sugar and cut down on ultra-processed foods.

This guide cannot give you a strict eating plan, as we are all different with unique medical needs, cultural and food preferences.

What questions are on your mind?

Can I still enjoy my favourite foods?

Will diabetes stop me eating with my family?

Does diabetes mean I have to eat differently?

Feel free to read these tips and view the images in any order you like. Together, they will build your skillset on how to make healthier choices over time. If you want to know more, check out the signposts in the **More information** section at the end.



Food matters in diabetes.

Three reasons why

- 1. What, when and how many carbohydrates you eat directly affects your blood glucose levels.** This in turn impacts your long-term health, such as your risk of developing heart disease.
- 2. Eating well and having sensible portions can help you watch your weight.** Keeping to a healthy weight can reduce your risks of developing serious problems with your heart, eyes and feet.
- 3. Food is your body's fuel.** Eating regular balanced meals means you are more likely to have a range of important nutrients as well as steady energy levels throughout the day.

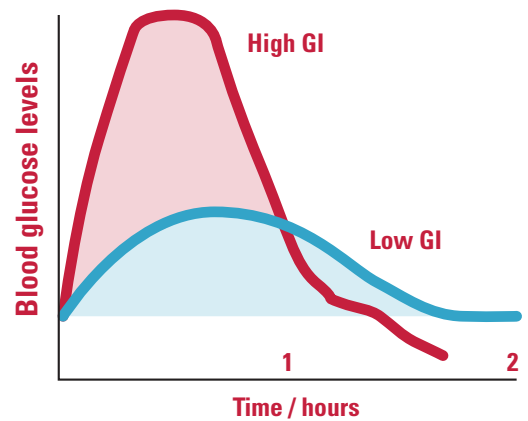
Key message 1: Choose healthier carbohydrates

Imagine certain foods as health heroes, loaded with things your body loves: fibre, vitamins and minerals. These are the ones you should aim to enjoy more often. Fibre is found in many carbohydrates (carbs), particularly in the wholegrain variety, as well as in skins of fruit and vegetables, nuts, seeds and pulses (beans). Fibre is essential for gut health, keeping your digestive system working properly.

Carbs and your blood glucose

All carbohydrates turn into glucose (sugar). Some are broken down more quickly and can cause a spike in blood glucose (high glycaemic index (high GI) foods) and some are broken down more slowly (low GI foods). Low GI foods are sometimes called slow-release foods. Making changes to your diet that help lower the overall GI of a meal or snack can help regulate blood glucose levels.

See below for suggestions of slow-release foods to include in your diet.



Carbohydrate swap box

Choose these foods	Instead of these foods
Wholegrain bread	White or wholemeal bread
Brown rice	White rice
Oatcakes	Rice cakes
Porridge	Cornflakes
Wholemeal or coarse atta (chapati flour)	White atta
Roasted chana (chickpeas) or edamame	Bombay mix
Popcorn or lentil chips	Potato crisps
Chickpea hummus	Sour cream dip
A handful of unsalted nuts	Chocolate or yogurt-coated peanuts
Baked beans on wholegrain toast	Toasted cheese sandwich
Peanut butter	Spread and jam
Lentil dahl with brown basmati rice	Lamb curry with white rice

The type of fibre found in pulses such as beans and lentils, and grains like oats and barley, is more slowly digested. This helps you manage your blood glucose levels and provide a steadier source of energy.

Choose wholegrains
Oats, including rolled pinhead hulled
Barley, including hulled but not pearled
Brown and wild rice
Wheat grains, including cracked wheat, spelt and freekeh
Corn kernels
Rye
Millet
Buckwheat
Quinoa

Enjoy legumes
Chickpeas
Lentils
Beans, including black, cannellini, haricot, kidney beans
Butter and lima beans
Green peas
Cowpeas
Broad beans
Soya beans

Fruit and vegetables

Fruits and vegetables contain fibre, and are rich in vitamins and minerals, such as vitamin C and potassium. Studies show that eating more fruit and vegetables helps cut your risks of high blood pressure and strokes.

Aim for at least five portions of fruit and vegetables each day. Fruit contains higher levels of natural sugar compared to vegetables (particularly tropical fruits). Try to limit fruit to two to three portions and spread throughout the day. Eating more vegetables or salad will have less impact on blood glucose levels.



What counts as a portion?

People are sometimes unsure about how much fruit and veg makes a portion. A typical portion is about 80 grams, and a helpful guideline is that a portion of fruit or vegetables should be roughly the size of what fits in your hand. For instance, one portion might be equivalent to a pear, a peach, two satsumas, an apple or a handful of berries.

Tinned, fresh and frozen all count. Limit dried fruit to 30g or a tablespoon amount as these are higher in natural sugars.

Check out the **More information** section for lists of fruit and vegetables that count as a portion.

Five ways to add one more veg to your meals

Get into the habit of adding an extra portion of vegetables or a side salad to all your main meals. Here are five ideas to give you some inspiration.

1. Add broccoli, red onion, tomatoes or peppers to pasta.
2. Throw in a handful of red lentils, a can of beans or frozen peas when making soups, stews or curries.
3. Making rice? Mix in an equal amount of frozen mixed vegetables before cooking.
4. Add chickpeas or kidney beans to salad or rice dishes.
5. Add spinach leaves, onions, peppers or mushrooms when making an omelette.

Your weight really matters

Weight loss is fundamental if you have type 2 diabetes. Losing just 5% of your body weight can reap significant benefits to your long-term health, such as reducing your risks of heart disease. Keep healthier foods within easy reach, stay active, ask for support from friends and family, and get enough sleep. Keeping a record of your portion sizes can make you more aware of your eating habits.

Intermittent fasting may benefit people with type 2 diabetes. You will need to plan your diet carefully to make sure you are eating balanced meals. If you find this approach leads to binge eating, then try a different approach. Talk to a healthcare professional for guidance on medication adjustments and blood glucose monitoring before trying intermittent fasting.

If you are not overweight, it is important to eat a variety of healthy foods in the right amounts for you. Ask for a referral to a dietitian for support if you are losing weight unintentionally.

Key message 2: Swap sugar for natural sweetness

High-sugar foods and drinks typically do not provide us with any essential vitamins and minerals and are therefore not necessary for a healthy diet. Living with diabetes does not rule out any food. However, it is important to eat fewer higher-sugar foods as they can have a quick, direct impact on blood glucose levels.

Foods with lots of sugar are usually processed and might also be high in fat – like chocolate, cakes, biscuits and puddings. It is better to enjoy naturally sweet-tasting foods that are less processed. For example, dried fruits such as raisins, apricots and dates bring sweetness in baking and also provide fibre goodness.

Sugar in liquid form like juice or cola can make your blood glucose levels rise quickly. This can be useful in certain circumstances where a small amount (equivalent to 15g carbohydrate) is recommended for treating a hypoglycaemic episode (low blood glucose level under 4mmol/l).



Is fruit juice okay?

Fruits contain natural sugars but when eaten as a whole fruit they also provide fibre, which helps slow down the rise in blood glucose levels. When fruit is juiced, we take out most of the fibre and your blood glucose is likely to rise more quickly. Also, when fruit is taken in the form of juice, it is easier to consume a larger amount of natural sugar than you would have if you had eaten whole fruits.

For these reasons, it is recommended not to drink more than 150ml of unsweetened fruit juice or fruit-based smoothies per day. Adding vegetables instead of fruit to a smoothie can help boost fruit and veg intake and have less impact on blood glucose levels.

Should you count carbs?

For people living with type 1 diabetes and people living with type 2 diabetes on insulin, matching quick-acting insulin to carbs is crucial for blood glucose management. Knowing the carb content in your food and drink helps you adjust quick-acting insulin accurately. Your diabetes team can teach you how to do this and factor in other variables, like exercise. They can also inform you about local education programmes.

Eating well on a budget: three top tips



Avoid shopping when hungry and make a shopping list to help you restrict buying on impulse.



Check for loyalty card deals and set a time limit when shopping.



Choose own-brand versions of products, in addition to buying discounted foods close to their use-by or best-before date.

Key message 3: Eat fewer ultra-processed foods

Ultra-processed foods (known as UPFs) often contain a long list of ingredients. Examples of these UPFs include crisps, biscuits, cakes, doughnuts, muffins, pastries, processed meats like sausages, burgers and hot dogs, as well as some ready meals. Many of these foods have ingredients that you might not use at home. They include additives, preservatives, emulsifiers, sweeteners, and artificial colours and flavours. Ingredients lists may also include added sugars, such as brown sugar, fruit nectar, dextrose and molasses. Remember, they are all types of sugar and can affect your blood sugar levels.

Sometimes people pick these foods for the sake of convenience. It is okay to have them on occasion, but be mindful they do not add much nutritional benefit to your diet. Foods that are heavily processed tend also to be higher in fat, sugar and salt and many are high in calories, so they can lead to weight gain. They can often be low in nutrients such as fibre, protein, vitamins and minerals. Note that some foods that might be considered ultra-processed can actually provide important nutrients. Fortified high-fibre breakfast cereals are a good example. Choose lower-sugar versions and those with a shorter list of ingredients, by reading food labels and checking the ingredients list for any added sugars.

The key to healthy eating is the kind of foods you choose, how much you eat and how often you eat them.

UPFs are not to be feared. This is not about restricting – it is about reducing. If you are choosing ready meals, fast food or takeaways for example, be mindful of how much you have. Takeaway serving sizes can be larger than you need and are often higher in fat and calories – consider sharing and adding a side salad or some steamed vegetables to make your meal go further. If you are trying to lose weight or improve your glycaemic control, aim to choose a ready meal that has less than 50g carbohydrate in total per meal.

Try to choose foods that are less processed and keep to the recommended portion sizes on the pack. Get into the habit of looking at food labels and choose brands that are lower in fat, sugar and calories, yet still fit within your budget. ***Try cooking from scratch with these speedy swaps:***

Swap box

Choose these foods	Instead of these foods
Grilled frozen fish with oven chips and peas	Takeaway fish and chips
Beef pasta made with lean minced beef (or turkey/vegetarian alternative), a jar of tomato pasta sauce and wholemeal pasta. Add a side salad	Lasagne ready meal
Apple wedges with nuts and 0%-fat Greek yogurt or yogurt alternative	Apple pie and cream
Grilled reduced-fat cheese, tomatoes, green peppers and olives on wholemeal pitta bread	Three-cheese pizza
Baked jerk chicken with brown rice and peas	Jamaican beef patty
Home-made popcorn with a touch of chilli and lemon	Sweet chilli crisps

Staying healthy is not only about what you eat.

Physical activity and sleep also play a big role in managing stress and taking care of your body.



Remission of type 2 diabetes

Remission in type 2 diabetes means your blood glucose levels return to a healthy range without needing medication. It is often achieved through rapid weight loss, with a goal of at least 15kg. Remission is an HbA1c below 48mmol on two occasions, three months apart. Coming off diabetes medications will be dependent on whether medications are prescribed for other cardiac or renal protective benefits and not just improving glycaemic control. The NHS offers a structured remission programme, so ask your healthcare team if it is available in your area.

Key messages checklist:

People living with diabetes can still eat the same kind of food as people who do not have the condition. Here is a summary of the key messages in this leaflet:

1. Eat more high-fibre foods like beans, pulses, whole grains, fruit and vegetables.
2. Cut down on sugar-rich food and drink.
3. Choose fewer ultra-processed and takeaway foods and be mindful of portion sizes.



More information

There are diabetes education programmes available to you locally which will be offered when you are first diagnosed and possibly beyond. These may be face-to-face or online and will help improve your knowledge, skills and confidence in managing your diabetes, and to get your diabetes into remission. Alternatively, you can register for the NHS **Healthy living for type 2 diabetes** programme at www.healthyliving.nhs.uk, or attend a DRWF Diabetes Wellness Event, such as United Through Diabetes (www.drwf.org.uk/news-and-events/), which provides a one-stop shop on all aspects of diabetes self-management and an opportunity to meet new people living with all types of diabetes.

Need more help?

Talk to your diabetes specialist team or practice nurse and check out the further information below.

Cardiovascular disease

British Heart Foundation
www.bhf.org.uk/information-support/conditions/cardiovascular-heart-disease

Managing your weight

NHS *Managing your weight*
www.nhs.uk/live-well/healthy-weight/managing-your-weight/
NHS Better Health *Lose weight*
www.nhs.uk/better-health/lose-weight/

Carb counting

Bertie www.bertieonline.org.uk
Carbs & Cals www.carbsandcals.com
Know Diabetes www.knowdiabetes.org.uk/resources/internal/carbohydrate-counting/

Eating a balanced diet

NHS *Eating a balanced diet*
www.nhs.uk/live-well/eat-well/how-to-eat-a-balanced-diet/eating-a-balanced-diet/
British Dietetic Association food facts
www.bda.uk.com/food-health/food-facts.html

Diabetes remission

Life Without Diabetes: The definitive guide to understanding and reversing type 2 diabetes
by Professor Roy Taylor (Short Books Ltd, 2019)

Fruit and vegetables portion sizes

NHS *5 A Day portion sizes*
www.nhs.uk/live-well/eat-well/5-a-day/portion-sizes/

Educational videos

Southern Health NHS Foundation Trust
www.youtube.com/@T1DiabetesEducation
www.youtube.com/@T2DiabetesEducation

NHS remission programme, weight management programme or community centre support groups in your area – ask your GP practice.



The Diabetes Research & Wellness Foundation works towards educating, informing and reminding you of the best and healthiest choices to make.

If you would like to become part of our Diabetes Wellness community, visit our website for more details.

www.drwf.org.uk

DRWF, Building 1000, Langstone Park, Havant, Hampshire PO9 1SA

Tel: **023 9263 7808**

Email: **enquiries@drwf.org.uk**

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PIF TICK is the only independently-assessed UK quality mark for trusted health information. It is operated by the Patient Information Forum.

Source references can be provided on request
All details correct at time of print.

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