HOW TO GET ENOUGH FIBRE

If you're living with diabetes, you've probably heard a lot about carbohydrates. But fibre, a type of carbohydrate that doesn't raise blood glucose in the same way, often gets far less attention. However, evidence shows that a fibre-rich diet is one of the most powerful things you can do to support your long-term health.

This document explains what fibre is, why it matters so much for people with diabetes, how to get more of it safely through food, and why food is nearly always a better choice than supplements. You'll also find practical swap ideas and a sample high-fibre day of eating to get you started.

WHAT IS DIETARY FIBRE?

Dietary fibre is the part of plant foods that your body cannot fully digest or absorb in the small intestine. Instead, it passes largely intact into the large intestine (colon), where it plays an important role in gut health, immune function, and metabolic health.

Unlike other carbohydrates, which are broken down into glucose and absorbed into the bloodstream, most fibre does not raise blood glucose levels. This is one reason why, in the UK, fibre is listed separately from total carbohydrates on food labels and is not generally counted as a carbohydrate in the context of diabetes management.

TYPES OF FIBRE AND WHY THEY MATTER

Not all fibre is the same. There are several types, and each has slightly different effects in the body. Understanding them can help you make more informed food choices.

TYPE OF FIBRE	EXAMPLES	KEY BENEFITS FOR DIABETES
Soluble fibre	Oats, barley, legumes (lentils, chickpeas, kidney beans), apples, pears, citrus fruit	Slows glucose absorption, helps lower LDL cholesterol, feeds beneficial gut bacteria
Insoluble fibre	Wholemeal bread, brown rice, wheat bran, nuts, seeds, skin of fruit and vegetables	Supports regular bowel movements, promotes feelings of fullness
Resistant starch	Cooked and cooled potato or rice, pasta, green (unripe) bananas, oats, legumes	Feeds beneficial gut bacteria, lower glycaemic response compared with regular starch
Prebiotic fibre (a type of soluble fibre)	Onions, garlic, leeks, asparagus, Jerusalem artichoke, chicory root, oats	Selectively feeds beneficial gut bacteria (Bifidobacteria, Lactobacillus), supports immune health

Most plant foods contain a mixture of different fibre types, which is one reason why variety in your diet matters so much. Rather than focusing on a single source, aiming for a wide range of fibre-containing foods across the day will naturally give you a good mix.

HOW MUCH FIBRE DO YOU NEED?

The UK government's Scientific Advisory Committee on Nutrition (SACN) recommends that adults consume 30g of dietary fibre per day. Yet research consistently shows that most people in the UK fall well short of this, with average intakes closer to 18–20g per day (SACN, 2015).

People with diabetes are no exception. In fact, many diabetes-specific dietary patterns, such as low-carbohydrate diets, can inadvertently reduce fibre intake if they involve cutting out wholegrains, legumes, and certain fruits. It is entirely possible to follow a lower-carbohydrate approach and still meet fibre targets, but it requires a little more planning.

Children's requirements are lower and vary by age. If you are supporting a child or young person with diabetes, speak with a paediatric dietitian for age-specific guidance.

DIETITIAN TIP: HOW TO REACH 30g OF FIBRE A DAY

- Start the day with porridge with nuts and seeds added (around 5g fibre per serving).
- Include at least two portions of vegetables at lunch and dinner.
- Choose wholegrain bread, pasta, or rice over white versions.
- Add a portion of legumes (lentils, chickpeas, beans) 3–4 times a week.
- Snack on fruit, nuts, or oatcakes rather than low-fibre options like crisps.
- Leave the skin on potatoes, apples, and pears where possible.

WHY FIBRE IS ESPECIALLY IMPORTANT IF YOU HAVE DIABETES

The evidence linking high fibre intake to better health outcomes in people with diabetes is substantial and growing. Here is what the research tells us:

1. Improved blood glucose control

Soluble fibre, found in oats, barley, legumes, and fruit, slows the rate at which carbohydrate is digested and absorbed. This leads to a more gradual rise in blood glucose after eating, rather than the sharp spike that can follow a low-fibre meal. A meta-analysis by Post et al. (2012) published in the Journal of the American Board of Family Medicine found that higher dietary fibre intake was associated with lower HbA1c levels in people with type 2 diabetes. Similarly, a Cochrane review by Gianfrancesco et al. and others has consistently supported the role of dietary fibre in glycaemic management.

The glycaemic benefits of fibre are particularly relevant for people using insulin or medications that lower blood glucose, as more gradual glucose absorption can make dosing more predictable. If you do make significant changes to your fibre intake, it is worth monitoring your blood glucose more carefully for a period and speaking with your diabetes care team about any adjustments that may be needed.

2. Cardiovascular benefits

People with diabetes have a significantly increased risk of cardiovascular disease. Regular intake of soluble fibre, particularly beta-glucan from oats and barley, has been shown to reduce LDL (low-density lipoprotein) cholesterol, sometimes called 'bad' cholesterol. A meta-analysis by Zhu et al. (2015) found that oat beta-glucan significantly reduced total and LDL cholesterol compared with control diets. The European Food Safety Authority (EFSA) has approved a health claim for oat beta-glucan and the maintenance of normal blood cholesterol levels.

3. Gut health and the microbiome

A diverse and well-nourished gut microbiome plays an important role in immune function, inflammation, and metabolic health. Fermentable fibres, including prebiotic fibres such as inulin (found in leeks, onions, garlic, and asparagus), are selectively fermented by beneficial bacteria such as Bifidobacteria and Lactobacillus. This produces short-chain fatty acids (SCFAs), including butyrate, which support the health of the gut lining and have anti-inflammatory effects (Dahl et al., 2024).

Emerging research suggests that people with type 2 diabetes often have a less diverse gut microbiome compared with those without diabetes, and that dietary interventions which increase fibre intake may support microbiome diversity and improve metabolic outcomes.

4. Weight management and satiety

Both soluble and insoluble fibre contribute to feelings of fullness and satiety. High-fibre meals tend to have lower energy density and take longer to digest, which can help with overall calorie intake, a consideration for many people with type 2 diabetes or those managing weight alongside diabetes. Research has shown that higher fibre diets are associated with better weight management outcomes (Slavin, 2005).

5. Reduced risk of diabetes-related complications

Larger prospective studies, including the PREDIMED trial (which investigated a Mediterranean dietary pattern rich in fibre), have shown that dietary patterns high in fibre and plant foods are associated with a reduced risk of cardiovascular events and overall mortality in people at high cardiometabolic risk (Estruch et al., 2013).

WHY WHOLE FOODS ARE BETTER THAN FIBRE SUPPLEMENTS

Walk into any health food shop or pharmacy and you will find a wide range of fibre supplements. Psyllium husks, inulin powders, wheat dextrin sachets, and more. While supplements have their place for specific medical conditions (such as constipation or irritable bowel syndrome), they are not a substitute for fibre-rich food, and here's why.

Whole foods provide a complex package of nutrients

When you eat a portion of lentils, you are not just getting fibre. You are getting protein, iron, B vitamins, folate, and a range of phytonutrients with antioxidant and anti-inflammatory properties. A fibre supplement provides fibre alone. The health benefits we see in studies are associated with whole food sources, not isolated fibre fractions (Reynolds et al., 2019).

Carbohydrate content matters

Some fibre supplements do contain carbohydrate that can affect blood glucose, particularly those that contain sugars or are fruit-based. Always check the nutrition label and, if in doubt, speak to your dietitian or diabetes team. Whole food fibre sources are generally predictable, well-studied, and easy to account for when carb counting.

The evidence base is for food, not supplements

The large-scale studies showing benefits of fibre on HbA1c, cardiovascular risk, and long-term health outcomes were conducted using dietary fibre from food, not supplements. As Reynolds et al. (2019) note in their landmark Lancet analysis of nearly 250 prospective studies and clinical trials, the evidence overwhelmingly supports fibre-rich whole foods as the vehicle for these benefits.

DIETITIAN TIP: WHEN MIGHT A SUPPLEMENT BE APPROPRIATE?

- If you have been diagnosed with a bowel condition and your gastroenterologist or dietitian has recommended one.
- If you are struggling to meet fibre targets through food alone despite best efforts.
- If you have a very restricted diet for medical reasons.
- Always discuss with your GP, dietitian or diabetes care team before starting a fibre supplement.

HOW TO INCREASE YOUR FIBRE INTAKE SAFELY

One of the most important things to know about fibre is this: increase it gradually. Jumping from a low-fibre diet to 30g a day overnight is a recipe for uncomfortable digestive symptoms such as wind, bloating, abdominal cramps, and changes in bowel habits. These symptoms are not dangerous, but they are unpleasant and can put people off fibre for good.

The golden rules of increasing fibre

- Increase fibre slowly over 4–6 weeks, adding small amounts at a time.
- Drink plenty of fluids, fibre absorbs water, and without adequate hydration it can cause constipation rather than preventing it. Aim for 6–8 cups (1.5–2 litres) of fluid per day.
- Spread fibre intake across the day rather than trying to get it all in one meal.
- Introduce new fibre sources one at a time so you can identify any that don't agree with you.
- Cook legumes thoroughly, undercooked beans and lentils are harder to digest.
- If you take diabetes medications that lower blood glucose, monitor your levels more carefully when making significant dietary changes, and speak to your care team.

Potential side effects and when to seek advice

Some people experience more pronounced digestive symptoms, particularly with certain fermentable fibres (such as inulin). If symptoms are severe, persistent, or accompanied by blood in the stool, unexplained weight loss, or significant changes in bowel habit, please speak to your GP. These symptoms should always be investigated to rule out other causes.

People with certain bowel conditions, including inflammatory bowel disease, diverticular disease, or bowel obstruction, may need specific guidance from a gastroenterologist or registered dietitian before increasing fibre. This article is intended as general guidance and does not replace personalised advice from your diabetes care team.

PRACTICAL SWAP IDEAS

Small, consistent changes are far more sustainable than dramatic overhauls. Below are some simple swaps to help you build more fibre into your everyday meals. These all feature foods available in the Carbs & Cals food database.

Breakfast swaps

Instead of:	Choose:	
White Toast (butter) 0.8g Fibre, 15g Carbs, 109 Cals, 3g Prot  31g	Wholemeal Toast (butter) 2.3g Fibre, 14g Carbs, 109 Cals, 3g Prot  33g	1.5g extra fibre
Rice Krispies (semi-skimmed milk) 0.6g Fibre, 17g Carbs, 78 Cals, 1g Prot  20g	Porridge (semi-skimmed milk) 1.4g Fibre, 18g Carbs, 122 Cals, 7g Prot  145g	0.8g extra fibre
Orange Juice 0.3g Fibre, 20g Carbs, 83 Cals, 2g Prot  250ml	Orange (medium) 2.8g Fibre, 13g Carbs, 62 Cals, 2g Prot  230g	2.5g extra fibre

Lunch swaps

Instead of:	Choose:	
Ham Salad Sandwich 2.6g Fibre, 40g Carbs, 261 Cals, 13g Prot  160g	Tuna Niçoise Salad 4.2g Fibre, 22g Carbs, 401 Cals, 24g Prot  315g	1.6g extra fibre
Eggs Benedict 1.9g Fibre, 31g Carbs, 573 Cals, 31g Prot  240g	Beans on Toast 16g Fibre, 74g Carbs, 382 Cals, 20g Prot  337g	14.1g extra fibre
Cornish Pasty 4.7g Fibre, 39g Carbs, 450 Cals, 11g Prot  162g	Chunky Vegetable Soup 8g Fibre, 30g Carbs, 156 Cals, 6g Prot  400g	3.3g extra fibre
Crisps 1.2g Fibre, 16g Carbs, 138 Cals, 2g Prot  28g	Houmous & Dippers 2.6g Fibre, 9g Carbs, 112 Cals, 3g Prot  72g	1.4g extra fibre

Dinner swaps

Instead of:	Choose:	
Chicken Curry & Rice 2.1g Fibre, 37g Carbs, 359 Cals, 13g Prot  250g	Lentil Curry & Brown Rice 7g Fibre, 47g Carbs, 390 Cals, 12g Prot  280g	4.9g extra fibre
Meat Lasagne 3.3g Fibre, 50g Carbs, 594 Cals, 32g Prot  330g	Veggie Lasagne 4.1g Fibre, 44g Carbs, 386 Cals, 16g Prot  330g	0.8g extra fibre
Mushroom Risotto 1.7g Fibre, 43g Carbs, 338 Cals, 9g Prot  240g	Spaghetti Bolognese 4.6g Fibre, 46g Carbs, 307 Cals, 15g Prot  300g	2.9g extra fibre
Pasta Bake (tuna, sweetcorn, cheese) 3.9g Fibre, 40g Carbs, 381 Cals, 26g Prot  355g	Veggie Shepherd's Pie 11g Fibre, 66g Carbs, 362 Cals, 14g Prot  400g	7.1g extra fibre

Snack swaps

Instead of:	Choose:	
Cream Crackers 0.6g Fibre, 11g Carbs, 71 Cals, 1g Prot  16g	Oatcakes 1.9g Fibre, 13g Carbs, 91 Cals, 2g Prot  20g	1.3g extra fibre
Chocolate Digestive 0.3g Fibre, 9g Carbs, 73 Cals, 1g Prot  15g	Apple 1.3g Fibre, 12g Carbs, 58 Cals, 1g Prot  105g	1g extra fibre
Ice Cream (chocolate) 0.4g Fibre, 10g Carbs, 83 Cals, 2g Prot  40g	Yoghurt (natural) with Nuts & Seeds 1.3g Fibre, 11g Carbs, 172 Cals, 9g Prot  125g	0.9g extra fibre
Popcorn (sweet) 3.3g Fibre, 27g Carbs, 211 Cals, 3g Prot  45g	Almonds 5.5g Fibre, 6g Carbs, 370 Cals, 14g Prot  60g	2.2g extra fibre

A SAMPLE HIGH-FIBRE DAY OF EATING

Below is an example of what a high-fibre day of eating might look like for someone with diabetes. This is illustrative only — portion sizes, carbohydrate content, and meal timings should be adjusted to suit your individual needs, medication regimen, and glucose targets. Always work with your diabetes care team or registered dietitian to tailor this to you.

MEAL	FOOD IDEAS	KEY FIBRE CONTRIBUTION
Breakfast	Porridge oats made with semi-skimmed milk, topped with fresh raspberries and a sprinkle of ground linseeds and pumpkin seeds	Beta-glucan (oats), pectin (raspberries), lignans (linseeds)
Mid-morning snack (optional)	Small apple with a tablespoon of almond butter, or a small handful of unsalted mixed nuts	Pectin (apple), insoluble fibre (nuts)
Lunch	Wholemeal pitta filled with houmous, cucumber, spinach, and sliced red pepper, with a lentil soup	Resistant starch (wholegrains), insoluble fibre (veg), soluble fibre (lentils)
Afternoon snack (optional)	Carrot sticks and celery with houmous, or a small pot of natural yoghurt with mixed berries	Insoluble fibre (veg), pectin (berries)
Dinner	Grilled chicken or tofu with a serving of brown rice or quinoa, broccoli, green beans, and roasted cherry tomatoes	Insoluble fibre (broccoli, green beans), resistant starch (brown rice/quinoa)
Evening (if needed)	Small bowl of mixed berries or a small pear	Pectin (fruit)

Approximate total fibre for the day: 28–33g

Each of these foods can be looked up in the Carbs & Cals app for accurate carbohydrate and calorie, fibre and other nutrient information, helping you plan your meals and manage your glucose levels with confidence..

KEY TAKEAWAYS

- Aim for 30g of dietary fibre per day, in line with UK government guidelines.
- Fibre comes in different types — soluble, insoluble, resistant starch, and prebiotic — each with distinct benefits. Aim for variety.
- Higher fibre intakes are associated with better blood glucose control, lower cholesterol, improved gut health, better satiety, and reduced cardiovascular risk.
- Whole food sources of fibre are superior to supplements — they provide a complex package of nutrients that isolated fibre products cannot replicate.
- Increase fibre gradually (over 4–6 weeks) and drink plenty of fluids to avoid digestive discomfort.
- Simple swaps — wholemeal bread instead of white, adding lentils to stews, snacking on fruit and nuts — can make a significant difference over time.
- If you are on insulin or glucose-lowering medication, monitor your blood glucose more closely when making significant dietary changes, and discuss any adjustments with your care team.

Disclaimer: This article is intended as general information for people living with diabetes and does not replace personalised advice from a registered dietitian, diabetes nurse, or your diabetes care team. Individual dietary requirements vary. If you have any concerns about your diet or blood glucose management, please speak to your healthcare professional.

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