

SUMMER 2026 | ISSUE 311

DiABETES UK
KNOW DIABETES. FIGHT DIABETES.

BALANCE

The exclusive magazine
for Diabetes UK members

GET AWAY FROM IT ALL

Managing diabetes
on your travels

GROUP ACTION

Reap the benefits
of exercise classes



FACT OR FICTION?

How diabetes
is seen on
screen

Tackling my type 2

Andy's journey to remission

TOGETHER TYPE 1

MEET THE PEOPLE WHO UNDERSTAND LIFE WITH TYPE 1 DIABETES

Together Type 1 is the community for you if you are aged 11-25 and live with type 1 diabetes. We have fun socials, discussions about things that matter to us, and find ways to make change happen! If you've got ideas, then we are all ears.

This is Youcef. Hear why he thinks Together Type 1 needs you.



Join the community at diabetes.org.uk/tt1

Welcome to your summer issue of Balance



With your valued support we have been able to fund vital research, like our game-changing DiRECT weight management programme which has helped put type 2 diabetes into remission for many of those living with the condition. We reveal how DiRECT could deliver huge savings to the NHS on page 15.

We also look at how research into precision medicine is shifting diabetes care away from one size fits all towards approaches tailored to each person's genes, biology and life. Thanks to you, we'll be funding and driving the research that could unlock the full potential of precision medicine for everyone at risk of or living with diabetes.

In this issue, our cover star, Andy, tells us how he finally confronted his condition and has put his type 2 diabetes into remission after years of living with feelings of guilt and shame around his diagnosis. Andy shares his story to encourage others living with diabetes not to suffer in silence or feel ashamed.

And, as artificial intelligence (AI) continues to extend its reach into increasingly wider areas of our daily lives, we look at some of the sources of information it uses and how trustworthy they are.

Rachel Hardy
Senior Membership and
Retention Manager, Diabetes UK

➔ [Become a member](https://diabetes.org.uk/bal-member)
diabetes.org.uk/bal-member

welcome



p22

On a mission: How Andy finally confronted his type 2 and put his diabetes into remission



p47

Back to the source: Should we be putting so much trust in AI tools?



p54

Far-flung places: We take our inspiration from holiday season to serve up some delicious recipes

Q: How do I amend my direct debit details for my membership?

A member of our Customer Care team can amend these details for you. Please call us on **0345 123 2399** or email us at: helpline@diabetes.org.uk with details relating to your direct debit.

Q: Where is my welcome pack?

If you have not received your welcome pack within 21 days of signing up, please contact us at: helpline@diabetes.org.uk

Q: Do you provide alternative formats of Balance?

We provide large print, audio and digital formats of Balance. If you would prefer one of these formats, please email us: helpline@diabetes.org.uk

FIND SUPPORT

➔ Call our Helpline

Our confidential helpline is staffed by a team of highly trained advisors with counselling skills who have extensive knowledge of diabetes. Get in touch for answers, support, or just to talk. Call **0345 123 2399** 9am to 6pm weekdays or email helpline@diabetes.org.uk. In Scotland, call **0141 212 8710** or email helpline.scotland@diabetes.org.uk

➔ Talk to people with diabetes

The Diabetes UK Support Forum is our online community where you can share experiences and get information and advice. Go to forum.diabetes.org.uk. To meet other people with diabetes in your local community, visit one of our local groups all over the UK. For more details, go to diabetes.org.uk/support-for-you

➔ Campaign

We campaign hard for people living with diabetes, but we can't do it without your help. Join our campaigning network and help influence care. diabetes.org.uk/bal-voices

➔ Contact the Balance team

balance@diabetes.org.uk

➔ Our Address Diabetes UK

126 Back Church Lane, London E1 1FH

QUESTIONS ABOUT DIABETES?

We're here to talk.

If you're looking for someone to speak to about living with diabetes, get in touch by calling or emailing our helpline. We're here 9am to 6pm, Monday to Friday.

Call **0345 123 2399***
Email **helpline@diabetes.org.uk**

*Calls to 0345 numbers cost no more than calls to geographic (01 and 02) numbers and must be included in inclusive minutes on mobile phones and discount schemes. Calls from landlines are typically charged between 2p and 10p per minute while calls from mobiles typically cost between 10p and 40p per minute. Calls from landlines and mobiles to 0345 numbers are included in free call packages. Calls may be recorded for quality and training purposes.

The British Diabetic Association operating as Diabetes UK, a charity registered in England and Wales (no. 215199) and in Scotland (no. SC039136). © Diabetes UK 2021



CONTENTS

06 The Bulletin

Our latest news and events

11 The Insider

Precision medicine's potential and the power of community to unlock discoveries

20 Ask the experts

Hand conditions and diabetes, and looking after diabetes tech on holiday

22 Road to remission

How Andy confronted feelings of guilt around his type 2 and put it into remission

26 Great escapes

Ways to help you take your diabetes in your stride on your travels

29 Get set, go...!

Head over to our shop for all you need when you're out and about this summer

31 Meet the supporter

Greg Reed on his incredible 20-year fundraising journey

32 Competition

Win a two-night luxury spa relaxation stay for two

34 Side by side

Four people tell us what it's like to live with another condition alongside diabetes

39 Your tech reviews

Kenneth shares his thoughts on the FreeStyle Libre 2 Plus

40 Diabetes and emotional eating

Understand eating habits when emotions take over

43 Crossword

44 Rewriting the script

In film, TV and social media, we look at how diabetes is viewed in popular culture

47 A matter of fact

Can we trust everything artificial intelligence serves up to us?

50 Best in class

The benefits of group work to help you keep on track with physical activity

54 Bring the sunshine home

Brighten up your repertoire with recipes that hark back to holidays past

60 Staying out for the summer

Ways to take pressure off managing your diabetes at social gatherings

64 A whole lot of good!

Demystifying whole foods to show how they can support diabetes management



29



For Diabetes UK: Editors **Lucy Evans, Shirish Gandhi** Sub Editor **Angela Coffey**
Contributors **Robert Brown, Angela Coffey, Katherine Hignett**

For DMS Agency: Editor **Sabeha Syed** Creative Director **Marcie Bower**

Design, production and editorial support from DMS Agency. Printed by Warners Midlands PLC.

ADVERTISEMENTS AND ARTICLES: Products and services advertised in Balance are not necessarily recommended by Diabetes UK. Although the utmost care is taken to ensure products and services advertised are accurately represented it is only possible to thoroughly check specialist diabetes equipment. Please exercise your own discretion about whether or not an item or service advertised is likely to help you personally and, where appropriate, take professional advice from your medical advisor. Products worn on the feet can cause issues for people with diabetes. Please check with your healthcare professional if the products advertised are suitable for you. Please note that any prices are applicable only to British buyers and may vary for overseas purchases. Paid adverts do not represent the views of Diabetes UK. Complaints regarding advertised services or products should be addressed to: Balance Content Team, Wells Lawrence House, 126 Back Church Lane, London E1 1FH, or email balance@diabetes.org.uk

© Diabetes UK 2026. A charity registered in England and Wales 215199 and in Scotland SC39136.

THE BULLETIN

The latest diabetes news, research and developments

Join us this Diabetes Week

Nobody should experience judgement or blame because of a health condition. That's why, this Diabetes Week, we're continuing the vital conversation around stigma following the launch of our Strike Out Stigma campaign on World Diabetes Day last year.

Words matter. And hearing negative and hurtful comments about diabetes regularly can have a lasting impact.

That's why we're on a mission to change the way everyone talks about diabetes. Help us strike out stigma this Diabetes Week from 8–14 June. Keep an eye on our website to see how to get involved diabetes.org.uk/bal-diabetes-week

DIABETES WEEK
8–14 June 2026

Step up to the challenge

➔ Step into summer with our One Million Step Challenge from 1 July to 30 September 2026. Choose your target – one million, half a million or even 1.7 million steps – and complete it at your own pace, in your own way, by yourself or in a team.

Since 2016, our incredible steppers have raised over £9 million taking part in the challenge, helping to transform the lives of people living with diabetes. And this year, we're aiming to reach £10 million!

Every step you take and every pound you raise helps fund research, campaign for better care and support people living with diabetes every day. Step for you and for all the mums, dads, sisters, brothers, sons, daughters, grandparents, and best friends juggling diabetes every single day. Take the first step today.

■ Find out more at diabetes.org.uk/bal-omsc



NEWS IN NUMBERS

1 IN 5

ADULTS live with diabetes or prediabetes in the UK.



4.3%

OF PEOPLE AGED 18–44 in England have prediabetes.

1.3M

ESTIMATED to be living with undiagnosed type 2 diabetes in the UK.

47%

INCREASE IN THE NUMBER OF PEOPLE living with type 2 under the age of 40 since 2017/18.

■ It's Type 2 Diabetes Prevention Week from 25–31 May.

■ For more information, visit diabetes.org.uk/bal-prevention-week



Remembering Lyla

When two-year-old Lyla Story from Hull died suddenly in May 2025 from undiagnosed type 1 diabetes, her parents, Emma and John Story, found their world irreversibly changed

➔ Lyla had been showing symptoms linked to type 1 diabetes, also known as the 4Ts: more frequent toileting, increased thirst, becoming thinner, and tiredness. But Lyla received a diagnosis of acute tonsillitis instead.

The loss of a child is a devastation no family should ever face, and in those early days of grief, Emma and John clung to each other and promised that Lyla's life would continue to mean something. While Emma fostered a healing environment at home, John felt a powerful pull to step forward, publicly determined that no other family should endure the same heartbreak. Together, their love for Lyla sits at the heart of everything that has followed – the way John now champions her legacy is simply an extension of that shared love.

In the first quiet weeks after losing Lyla, John began writing to all GP practices across the UK, asking a simple but vital question: Do you have what you need to spot type 1 diabetes early? He knew that recognising the 4Ts and acting on them immediately can save a child's life. His emails prompted many practices to reflect and respond, checking whether training for staff and blood glucose meters were available, updating posters, and discussing Lyla's case in team meetings.

"It reached over 120,000 signatures, becoming one of the most significant grassroots campaigns in recent diabetes history"

John's message soon grew into a national movement. Determined that no child showing any of the 4Ts would ever be sent home without a simple glucose finger-



prick test, he launched a petition calling for routine testing whenever the 4Ts are present. It reached over 120,000 signatures, becoming one of the most significant grassroots campaigns in recent diabetes history.

In March 2026, supported by Emma, John stood outside Downing Street alongside MPs, healthcare leaders and Diabetes UK colleagues to hand in the petition. Just hours later, Emma and John gathered in Westminster to watch MPs debate Lyla's Law. The public gallery was full, and many MPs spoke about their own experiences of type 1 diabetes, or the stories families had shared with them, showing just how deeply the message of the 4Ts had reached.

Across the NHS, John's campaigning has prompted reflection and actions across all levels. NHS England leaders have acknowledged the importance of early testing and recognised the impact of the campaign, particularly around improving recognition of type 1 symptoms.

Our policy and health system teams reference Lyla's Law frequently when advocating for better training and consistent awareness of type 1 diabetes.

John Story has honoured Lyla's legacy by campaigning for greater awareness of the 4Ts



Emma and John will always carry the weight of their loss, but carry Lyla's light, too. In everything John has done publicly, and everything Emma has held privately, their love for their daughter shines through. Already,

"Her legacy and lifesaving message of the 4Ts is only growing"

that love is reshaping the system that failed her. Lyla's story is saving lives. Her legacy and lifesaving message of the 4Ts is only growing.

Colette Marshall, Chief Executive at Diabetes UK said: "The number of people diagnosed with type 1 diabetes when in diabetic ketoacidosis is shocking. I am conscious of the other brave parents who've campaigned and made change happen and how much the diabetes community has come together behind them and John and Emma. Thanks to you all and your campaigns, we regularly hear of children who are diagnosed in time."

■ Visit diabetes.org.uk/bal-lylas-law to watch a snippet of the MPs debate.

Fundraising feat

A gift for future generations

Sue was diagnosed with type 1 diabetes in 1965, at just 11 years old. At the time, the doctor told Sue and her mother that she probably wouldn't live beyond 30 and would never have children. Now, age 72, Sue has two children and two grandchildren – happily proving the doctor wrong.

In November 2015, Sue took a literal leap of faith by completing a tandem skydive to raise £1,000 for Diabetes UK. This bold challenge was one of the items on her bucket list, designed to make a meaningful impact in the fight against diabetes. Though nerves were high as she stepped out of the plane, she recalls: "The rush of adrenaline quickly transformed into a profound sense of freedom as I glided back to earth beneath the canopy of my parachute." For Sue, this daring experience wasn't just about the thrill of the jump – it was a deeply personal commitment to raising crucial funds and awareness for a cause that touches the lives of millions.

Over the years, Sue has seen remarkable changes in how diabetes is managed. From using an insulin syringe that resembled a knitting needle and testing her urine daily for sugar levels, to now using a continuous glucose monitor (CGM) linked to her smartphone and an insulin pump, Sue's journey has been shaped by advancements in research.

Alongside her fundraising efforts, Sue has kindly left a gift in her Will for us. Reflecting on these research breakthroughs, Sue says: "Without gifts in Wills to Diabetes UK, none of this research, none of these

changes would have happened." That's why, alongside her fundraising efforts – through swimming challenges, hot air balloon rides, and skydiving – Sue has decided to leave a gift in her Will to support future life-changing research.

Thank you, Sue, what a special gift to leave for future generations.

■ **To find out more about leaving a gift in your Will or to request a free guide, please contact our friendly Gifts in Wills team at giftsinwills@diabetes.org.uk, call 020 7424 1853, or visit diabetes.org.uk/giftsinwills**



Public advised to stop using some non-sterile alcohol-free wipes

➔ The UK Health Security Agency (UKHSA) and Medicines and Healthcare products Regulatory Agency (MHRA) are reminding the public not to use some non-sterile alcohol-free wipe products due to an ongoing risk of infection associated with their use. While the overall risk remains very low, four wipe products have been linked to an outbreak of *Burkholderia stabilis*.

Burkholderia stabilis is a bacteria found in natural environments and rarely causes infection in healthy people. The risk to the general population is very low. However, people who are immunocompromised or have other risk factors, such as cystic fibrosis, are at higher risk of developing infection.

The following products have been found to be contaminated with *Burkholderia* and should not be used under any circumstances:

- ValueAid Alcohol Free Cleansing Wipes
- Microsafe Moist Wipe Alcohol Free
- Steroplast Sterwipe Alcohol Free Cleansing Wipes
- Reliwipe Alcohol Free Cleansing Wipes (testing revealed contamination with a *Burkholderia* strain not related to an outbreak of cases between January 2018 and February 2026).

You can clean your skin with soap and water ensuring it is thoroughly dry before applying any insulin pump cannula, insulin pump pods and continuous glucose monitor (CGM) sensors or checking blood sugar levels with a finger-prick test.

■ **For more information visit our website at diabetes.org.uk/bal-wipe-products**

Honouring the life and legacy of Kevan Gregory

➔ We were deeply saddened to learn of the passing of Kevan Gregory, a long-standing Diabetes UK friend, member and supporter. Living with diabetes for 63 years, Kevan's life was shaped by resilience, optimism and generosity.

Diagnosed at just eight, Kevan grew up when little was understood about diabetes. He spent five years in a hostel in Hammersmith to stabilise his health, seeing his parents only once a week. Even then, his determination to live life fully never wavered.

Kevan met his wife Linda at 18, and together they shared 53 years of marriage filled with warmth, humour and unwavering support. Through his volunteering, Kevan offered reassurance to others living with diabetes, always believing that help and acts of kindness could make a big difference.

In his Will, Kevan kindly left two medical ID pendants to Diabetes UK, reflecting his wishes to help, support and inspire others living with diabetes. With Linda's blessing, we awarded two young leaders, Josh and Ryan, with items in his memory, in recognition of their outstanding

contribution to the Diabetes UK community. His legacy lives on – in their hands, and in every life he touched.

Linda shared: "Kevan always believed making a difference to just one life was a win. Knowing that his gifts will help protect and recognise young people living with diabetes would have meant everything to him."

Josh shared: "It means a lot to receive this chain and medical ID pendant in Kevan's memory. I feel proud to carry something that represents his belief in young people like us

and we will continue to grow and give back."

Ryan also reflected on what this meant to him: "I really appreciate receiving this chain and pendant, it makes me proud to be a Young Leader. I hope I can also help other young people like me."



Find Diabetes UK events in your area

➔ Each month we share some of the exciting Diabetes UK events coming up across the UK on our website. If you want to join in on our next family event or just drop in to your local community centre for a cuppa and chat about diabetes, we've got something for everyone.

- **If you live in England, visit diabetes.org.uk/bal-region-events**
- **If you live in Wales, Scotland or Northern Ireland visit diabetes.org.uk/bal-nation-events**



Photography: The Centre for Ageing Better

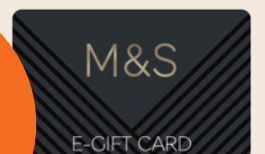


★ Star letter

➔ I've had type 2 diabetes for 30 years this year and, at 77, I'm in pretty reasonable health although I am currently having problems with my balance – but not the Balance I receive from Diabetes UK which I find most informative. Of course, it's important to know how diabetes can affect various parts of the body, and I appreciate there are many worse off than me, but I find it beneficial to push the positives a bit more and make those living with diabetes, or who have recently been diagnosed, feel better about – and within – themselves. In other words, strike that all important balance! Please keep up your excellent work at Balance and thank you Diabetes UK for all you do. It's invaluable.

Michael Cloughton, Kent

■ **Get in touch at balance@diabetes.org.uk. Our star letter wins an M&S gift card worth £50.**



Join a local support group today

➡ We have active support groups working locally all over the country to provide a space for people living with and affected by diabetes to come together and offer understanding, help and support.

Caroline Cornford lives with type 2 diabetes and recently started her local group in Okehampton and trained to be a Diabetes UK volunteer.

"I moved to Okehampton four years ago and searched for a diabetes group but couldn't find one," Caroline explains. "I joined the Ramblers Wellbeing Walks group and, from there, was approached to start a diabetes group. I worked with the West Devon Community & Voluntary Services (CVS) and Okehampton Community and Recreation Association (OCRA) to plan the group and then we approached the Diabetes UK South West & South Central team to start my volunteer training.

"I completed my training online and now feel confident in holding a group meeting. It's all about making sure everyone feels welcome.

"We had our first meeting in February, and it was extremely satisfying that people turned up! After we all introduced ourselves, it was like we had known each other for ages. We aim to discuss anything and everything diabetes related.

"We're going to arrange guest speakers, take part in exercise classes and, of course, enjoy a cuppa and general chitchat about diabetes. I've made some fantastic friends since moving here and hope that, through the group, I'll make even more."



■ **Diabetes UK have support groups for all ages, for adults with diabetes as well as for children and young people. You can find your nearest support group at diabetes.org.uk/bal-local-groups. Or, if like Caroline, you'd like to join a network of nearly 400 groups and start your own, visit diabetes.org.uk/bal-start-a-group**

Help us make life-changing type 1 treatments a reality

➡ This summer, we're launching our exciting new campaign, Type 1 Tipping Point. The discovery of insulin transformed type 1 diabetes care, offering people hope for the first time. Since then, Diabetes UK has continued to lead the way to incredible breakthroughs like the rollout of life-changing technology such as hybrid closed loop.

But now, for the first time in 100 years, we're on the verge of moving beyond insulin. New interventions and treatments, such as screening, immunotherapies and beta cell therapies could tackle the root cause of type 1 diabetes and restore the body's ability to make insulin.

To turn this scientific process into real-world change, innovation must reach people through the NHS. The UK has a unique chance to lead the world in developing new type 1 treatments and bringing them to people sooner.

■ **Together, we can make this a reality. Scan the QR code to sign up to our campaign today.**



THE INSIDER

The latest diabetes health news, research and developments

Driving discoveries through data

Health data scientists are helping to shape better care in the future. We're supporting the next generation of data scientists at the start of their careers through a Master's partnership with Health Data Research UK. We spoke to Alex Puricelli, one of the students on our joint programme

➡ So much of what we know about diabetes, from who is most at risk to which treatments work best, starts with data. Health data scientists make sense of the millions of pieces of information collected every day, spotting patterns, predicting risk and uncovering insights that can shape better care.

It's an exciting and fast-growing field. Unlocking its potential depends on having the right expertise. Through our partnership with Health Data Research UK (HDR UK), we're helping to nurture a new generation of data scientists. Together, we're supporting students at the very start of their research careers to complete Master's programmes and build skills needed to apply data science to some of the biggest questions in diabetes research.

Diabetes UK and HDR UK Master's student, Alex Puricelli, tells us about his research and how the programme is shaping his journey.

Alex, who is studying at the



Alex Puricelli

University of Cambridge, came to data science with a strong interest in inequality and how it affects health. Before his Master's, he worked with families in deprived communities.

It was there that he saw how diabetes information and support can be uneven. "Parents I spoke to hadn't been provided with the right diabetes information or support they needed," he says. "I applied for this scholarship so I could contribute to public health research providing resources to communities that have been historically marginalised."

Alex became interested not just in access to care, but in how the stories we tell about health can shape who gets listened to and supported.

Using data to understand stigma

Alex's research explores how UK media coverage frames new incretin medications, and how this differs when they are talked about for treating type 2

compared with weight management.

GLP-1 and GIP agonists are a group of medicines that work by increasing hormones the body makes naturally after eating, to produce more insulin when needed. Some, such as Ozempic or Mounjaro, are licensed to help people with type 2 manage their blood sugars. Others, including Mounjaro, are also used to support people living with obesity with weight loss. These medications appear in headlines almost daily. The way they're talked about can shape public understanding and have wider consequences.

"Media narratives drive stigma and influence health policy. Understanding the messaging that patients, the public and politicians are exposed to is a crucial step in building support for more equitable policies and better access to care," Alex explains.

"I've learned that new incretin treatments for type 2 often receive far less media fanfare than when these medicines are talked about for weight loss. Identifying these trends and their implications helps us understand how stigmas develop, funds are allocated in medical research, and how public health bodies and advocacy groups can better challenge negative stereotypes and push for fairer access."

Growing skills

Along with research, the programme is allowing Alex to develop skills for a future career in health data science that benefits people with diabetes.

Diabetes UK and HDR UK support has been an important part of that journey. "When I was developing my research plans, both organisations offered advice on how best to approach diabetes research with sensitivity and respect," he says.

Alex's work shows how data, used thoughtfully, can help challenge stigma and help drive better care for people with diabetes.

Precision medicine's true potential

Precision medicine could transform the way we prevent and diagnose diabetes and its complications – offering the right care to the right person at the right time

➡ No two people experience diabetes the same. The way diabetes develops, how its harmful complications potentially unfold, and how they respond to treatments is different for everyone. So, a one-size-fits-all approach to diabetes care doesn't work.

Precision medicine offers a way forward. It uses detailed information about a person's genes, environment, and individual health behaviours to tailor healthcare to them.

The phrase 'precision medicine' is new, but the idea has been used in healthcare for decades. Take blood transfusions. The donor's blood type is precisely matched to the blood type of the person receiving it to prevent the immune system from rejecting the donated blood.

More recently, advances in medical imaging and our ability to capture vast, detailed biological data have accelerated precision approaches. In cancer care, doctors can now use specific changes in tumour genes to guide which treatment works best for each person. In infectious diseases, scientists can analyse every gene in a virus to develop safer, more effective vaccines that target those genes.

In diabetes, precision medicine is already transforming how we diagnose and treat maturity onset diabetes of the young (MODY), a rare type of diabetes caused by a single gene change.

Ninety per cent of people with MODY are first mistakenly diagnosed

with type 1 or type 2 diabetes. But scientists can now identify the exact gene causing someone's MODY, allowing them to find their specific subtype. This is reducing misdiagnosis. Plus, it's giving doctors the biological information they need to choose the right MODY treatment for each person.

These advances show that we're entering a new era of precision medicine. And with NHS England's new 10 Year Health Plan setting out a vision for more proactive and personalised care, driven by data and genetics, momentum is only growing.

At Diabetes UK, we'll be funding and driving the research that could unlock the full potential of precision medicine for everyone living with or at risk of diabetes. From personalised paths to type 2 prevention, to tailoring complications care, to advancing precision cures for type 1 diabetes – and more.

Type 2 diabetes

Personalised type 2 treatments are a very promising example of precision medicine.

In type 2 diabetes, the body doesn't make enough insulin, or the insulin it makes doesn't work properly. It's a complex condition influenced by a wide range of risk factors, from genes to ethnicity to body weight, no single factor explains why people get the condition.

And this variation is reflected in differences in the condition's biology once it develops. Some people's type 2



“At Diabetes UK, we'll be funding and driving the research that could unlock the full potential of precision medicine for everyone living with or at risk of diabetes”

is chiefly driven by insulin resistance, meaning their insulin no longer works effectively. For others, the biggest problem lies with their beta cells not making enough insulin.

As research reveals more about these biological differences, scientists are increasingly viewing type 2 diabetes as a collection of closely related conditions rather than one. A key study identified the potential of at least five distinct type 2 subtypes, each with different biological drivers and different long-term outcomes. This biological understanding is helping explain why some people are more prone to complications or faster type 2 diabetes progression, and why

responses to treatment differ.

For example, early research suggests that people with type 2 diabetes whose beta cells don't function as well may benefit less from GLP-1 receptor agonists, a class of type 2 diabetes drugs, than those with better-working beta cells. And researchers are pinpointing biomarkers – measurable clues that show what's going on in the body – that could help predict who is most likely to develop complications of type 2 diabetes.

But there's still more to understand. We need to nail down the biomarkers that define each type 2 subtype. And, adding to the complexity, a person's type 2 diabetes can change over time – meaning they could shift between subtypes. As such, they may need different treatments at different times in life.

When it comes to prevention, while studies show that interventions focused on weight loss, increasing physical activity, and diet are effective routes to preventing or delaying type 2, they don't work for everyone. The



difficulty lies in building a prevention programme that considers the spectrum of biological, environmental, and social factors shaping each person's unique type 2 risk profile.

This is where precision medicine could be transformative.

A precision approach to type 2 prevention would consider these factors and tailor prevention interventions to them – at the right time.

By creating the Type 2 Diabetes Grand Challenge, we're aiming to scale up investment in precision prevention research to make this vision a reality. We'll build a deeper understanding of how type 2 diabetes varies between individuals and bring the research community together with people affected by type 2 to identify and tackle key questions.

Type 1 diabetes

Precision medicine is already improving type 1 diabetes care.

Diabetes tech, like CGM, is becoming more personalised because its

algorithms are being trained on each person's specific blood sugar level patterns.

And Researchers can now look for type 1 biomarkers – like genes or proteins – that help distinguish between other types of diabetes and correctly diagnose it. Precision medicine is also starting to help us diagnose type 1 much earlier, or identify who is at higher risk of it, to guide the right support at the right time.

Genetic screening can identify children and adults who have genes that increase their risk of developing type 1. Meanwhile, screening for type 1 autoantibodies in the blood can detect whether the immune attack at the root of the condition has already begun – telling us if someone is already in the early stages of type 1, before symptoms develop.

Luckily, we're entering the era of type 1 immunotherapies, giving us the opportunity to intervene at this early stage.

Last summer saw the licensing of

Words: Freya Masters. Photography: Adobestock

“While more research is needed, there’s real hope for a transformative precision cure for type 1 diabetes”

the first-ever type 1 immunotherapy, teplizumab, in the UK, for people in the early stages of type 1 diabetes. Immunotherapies reprogramme the immune system and weaken its attack on beta cells. This can delay type 1’s full development – and, in future, may prevent it altogether.

However, type 1 diabetes develops and progresses differently for each person, shaped by their unique genetic, immune, and environmental drivers.

Because of this complexity, the same immunotherapy might not work equally well for everyone. This presents a further opportunity for precision prevention.

Understanding how the biological pathways to type 1 differ between people could inform new immunotherapies targeting a person’s specific immune response, making them more effective at holding back or preventing type 1.

Personalised immunotherapies could also help to treat, and even cure, type 1 diabetes in people already living with it.

To cure type 1, we need to replace

the beta cells that have been destroyed. Our scientists are developing beta cell therapies designed to

do just this. But the immune system will attack newly transplanted cells – unless they’re protected. Combining beta cell replacement with targeted immunotherapies to hold off the attack sounds sci-fi – but our Type 1 Diabetes Grand Challenge scientists are on the case.

Elsewhere, researchers are using ‘genetic scissors’ – a molecular tool called CRISPR – to make precise edits to DNA. One exciting use of this technology is to genetically engineer lab-grown beta cells so they can hide from the immune system, evading its attack.

Looking ahead, there’s big potential to design the right beta cells for the right person. For instance, by customising gene-edited beta cells to evade an individual’s specific immune response. While much more research is needed, there’s real hope for transformative precision cures for type 1.

Diabetes complications

Diabetes complications can affect many parts of the body and impact major organs like the eyes, heart or

kidneys. They’re caused by high blood sugar, blood lipid and blood pressure levels damaging the body’s blood vessels and nerves.

But not everyone with diabetes gets complications. Even among people who do, the way complications present and progress in the body varies. This means that strategies to prevent or manage diabetes complications need to be tailored to the individual.

For instance, there’s plenty of evidence that keeping blood sugar levels in range significantly reduces the risk of diabetes complications. But it isn’t the only risk factor. In people with type 1, for example, blood sugar levels are thought to account for about 50% of their overall complications risk. Things like genes, high blood pressure, cholesterol or socio-economic background also contribute.

Let’s zoom in on genes. Some people with type 1 may carry genes that make their blood vessels, including those in the heart, less responsive to the protective effects that come from tight blood sugar management. As such, keeping their blood sugar levels in range might not offer the same level of heart damage protection as it does for others with type 1 diabetes.

To build a richer understanding of why complications develop, researchers are identifying additional biomarkers, alongside genetic differences, that influence a person’s risk. This could help doctors tailor care to the specific biological processes driving an individual’s complications risk, better protecting people from the harm diabetes can cause.

■ **As scientists reveal how our genes, biology and environments influence diabetes, care is beginning to shift away from blanket approaches to something more personalised. The foundations are now in place for a new era of smarter prevention, earlier diagnosis, and treatments shaped around each individual.**



A new analysis has revealed the potentially enormous health and economic impact of funding innovative research ideas, with predicted savings of up to £1 billion every year for the NHS

➔ It all began with a small, bold investment. In 2008, type 2 diabetes was still viewed as a permanent, progressive condition. But Professor Roy Taylor had a different thought: that it might be possible to reverse the mechanisms driving the condition.

His Twin Cycle Hypothesis suggested that excess fat in the liver would cause too much sugar and fat to be produced, harming the pancreas. But if that excess fat was removed, he believed the liver and pancreas might recover.

We gave Professor Taylor (pictured, above right) a grant of £126,000 to test this idea in the Counterpoint Study. The groundbreaking findings showed for the first time, how type 2 diabetes could be reversed. Rapid weight loss through a low-calorie diet decreased the harmful fat in the liver and pancreas, allowing them to function

normally again and returning blood sugar levels to normal.

It was a eureka moment. But that was only the start. Further studies showed this reversal could last in the longer term, leading to a new concept – remission of type 2 diabetes. With this, the stage was set for Diabetes UK’s biggest-ever research investment.

Our landmark DiRECT trial was co-led by Professors Roy Taylor and Mike Lean, starting in 2014. It demonstrated that a low-calorie diet weight management approach worked in real-world GP settings for people

“Each person who takes part in the NHS remission programme could gain health benefits worth £5,237 over their lifetime”

living with type 2 and overweight or obesity. But it depended on maintaining weight loss. The dramatic results led to the NHS Type 2 Diabetes Path to Remission Programme.

Now, a new economic analysis by the Association of Medical Research Charities and Wellcome Trust shows just how far that early investment has gone.

It estimates that each person who takes part in the NHS remission programme could gain health benefits worth £5,237 over their lifetime. Multiply that by the 631,000 people in the UK who are currently eligible to take part, and that’s £3 billion worth of improvements in people’s health and wellbeing.

And the NHS could save money too. The programme costs around £2,090 per person to deliver but could save £3,806 in reduced type 2 medication and fewer appointments. That’s a saving of £1,717 per person. Across the country, that adds up to nearly £1 billion in potential savings each year.

All from one small, visionary grant, made possible by the generosity of our supporters.

Professor Roy Taylor said: “This is a great story of success for Diabetes UK. There was worldwide interest in the initial revelation that a condition regarded as irreversible could indeed be reversed. But Diabetes UK went on to answer the big question – could the return to normal last for years?”

“The concept of remission of type 2 diabetes was tested in the DiRECT study and now we have a successful national remission programme. Now the news of major economic benefit is great – but it is the recovery of health and feeling of wellbeing for individuals that is really the winner.”

■ **Professor Roy Taylor’s latest book, ‘Life Without Diabetes: The definitive guide to understanding and reversing your type 2 diabetes’ is now available on our shop: diabetes.org.uk/bal-shop-roy-taylor**





Discoveries shaped by communities

Over the past 10 years, British Bangladeshi and British Pakistani communities have been a part of a major research study – Genes & Health – that is looking at the health and genetics of British South Asian people. Diabetes has become a central focus of this study, which is drawing on the power of community to help generate discoveries

➡ People of South Asian ethnicity make up just a quarter of the world’s population, yet carry over a third of the global burden of type 2 diabetes. In the UK, British South Asian people are up to six times more likely to develop the condition and often do at younger ages, at lower body weights, and with more severe complications than White people.

For the past decade, one major research study has been working to

change that story.

Genes & Health is one of the world’s largest studies focused on the health and genetics of British South Asian communities. It’s based at Queen Mary University of London, and is co-led by Professors Sarah Finer and David van Heel.

Over the past 10 years, Genes & Health has recruited more than 75,000 British Bangladeshi and British Pakistani volunteers across East London, Bradford, Manchester and the West Midlands. It’s been built side by side with local communities, working with grassroots organisations, the NHS and research networks. These long-standing relationships have helped the programme earn trust and shape research that reflects what matters most to South Asian communities.

While the programme covers a wide range of health issues, diabetes has become a central focus.

Genes & Health has built one of the richest and most secure databases of its kind, bringing together volunteers’ saliva samples (for genetic information) and anonymised NHS health records.

Collectively, all the data adds up to an extraordinary three million years’ worth of NHS health records from its volunteers, allowing researchers to build detailed pictures of their health throughout their lives. More than 250 researchers around the world now use this secure data to generate discoveries that aim to improve the health of current and future generations of British Bangladeshi and Pakistani people.

Higher type 2 risk

By analysing genetic and health information from tens of thousands of volunteers, Genes & Health has been able to uncover some of the specific biological reasons that can, in part, explain the higher risk of type 2 diabetes in British Bangladeshi



Professor Sarah Finer

and Pakistani people. A key tool in this work is something called a polygenic risk score, which combines thousands of tiny genetic signals to estimate someone’s inherited risk of developing a condition.

First, the team needed to create versions of these scores designed specifically

for people of South Asian ancestry, as most of these tools were built and tested only in White European people, meaning they would not work as well for South Asian communities.

The findings show that polygenic risk scores could help identify young Bangladeshi and Pakistani people at high risk of type 2 diabetes, before the onset of risk factors that the NHS usually looks for. This could open the door to much earlier prevention, including support through type 2 diabetes prevention programmes.

“Genes & Health has also shown that in Bangladeshi and Pakistani women, those with a high polygenic risk score are five times more likely to develop gestational diabetes”

Genes & Health has also shown that in Bangladeshi and Pakistani women, those with a high polygenic risk score are five times more likely to develop gestational diabetes, and nearly twice as likely to go on to develop type 2 diabetes, compared to those at lower genetic risk.

The team then used these scores to understand the biological processes involved in the development of type 2 in South Asian people. They found that two factors played a particularly strong role: lower insulin production – meaning the body struggles to make enough insulin – and fat stored in more harmful places, such as in and around

the liver and pancreas.

Volunteers with the highest genetic risk for lower insulin production and harmful fat storage tended to develop type 2 diabetes nearly 10 years earlier, and at a lower body weight, compared to people with low genetic risk.



Dr Moneeza Siddiqui

Dr Moneeza Siddiqui, Senior Lecturer in Genetic Epidemiology and member of the Genes & Health Executive, explained:

“South Asians often develop type 2 diabetes

at younger ages and for different biological reasons. This can include having a lower body mass index (BMI), the body making less insulin, and particular genetic patterns. By studying these pathways in our communities, we can move towards earlier diagnosis and more tailored, effective diabetes care.”

Getting diabetes diagnosis right

When someone is first diagnosed with diabetes, it can sometimes be difficult for healthcare professionals to be completely sure whether they have type 1 or type 2 diabetes. This uncertainty can lead to misdiagnosis. For South Asian people, who are more likely to develop type 2 at younger ages and lower BMI, misclassifications can be more common.



Words: Professor Sarah Finer, Dr Moneeza Siddiqui and Annum Salmaan. Photography: Diabetes UK

Healthcare professionals working with Genes & Health raised this concern and designed a study to uncover how often this happens. By applying polygenic risk scores, the researchers were able to estimate how often the wrong diagnosis might be given. They found that around 1 in 20 British Bangladeshi and British Pakistani people with insulin-treated diabetes were likely to have type 1, despite being diagnosed with type 2.

“Many say they take part because they want future generations to have better facilities and medications than they did”

This highlights the value of using tests that help to confirm type 1 diabetes. These tests can help avoid delays in appropriate care and reduce the risk of dangerous conditions such as diabetic ketoacidosis (DKA). Recently, Genes & Health helped uncover another important issue affecting type 2 diabetes diagnosis. Researchers identified a genetic condition called G6PD deficiency,

which is relatively common in men of South Asian or Black heritage. This condition can make HbA1c test results look lower than they really are, potentially masking high blood sugar levels. This can delay a diagnosis of type 2 diabetes for several years, increasing the risk of complications because treatment starts later.

The power of community in research
Research like this is only possible because tens of thousands of people chose to take part, as Professor Finer, Genes & Health co-lead, explained: “Thanks to the incredible 75,000 plus British Bangladeshi and British Pakistani people who have joined Genes & Health, we are making important discoveries that are going to guide personalised and precise diabetes care in the future and ensure that the benefits are experienced equitably. For too long, South Asian communities have been left out of genetic research, and we are proud to be changing that through trusted, community-engaged and high-quality research. We encourage more people to join the study and help us continue

this long-term journey to improve prevention, diagnosis and treatment for people living with or at risk of type 2 diabetes.” Genes & Health has become a leading example of how to build trust and overcome the past underrepresentation of people from diverse backgrounds in health research. From the outset, the programme invested in genuine, long-term partnerships with British Bangladeshi and British Pakistani communities. This included working with grassroots organisations, faith leaders and local groups, and forming a Community Advisory Board, a group of local volunteers who meet four times a year to help guide priorities and raise concerns. Bodrul Mazid from Genes & Health Recruitment Team added: “When we’re out in the community, people tell us they’re grateful that someone is finally focusing on the health of British Pakistani and British Bangladeshi families. They feel seen. Many say they take part because they want future generations to have better facilities and medications than they did.”

The next 10 years
As the NHS looks to use more genetic testing and personalised care approaches, findings from Genes & Health will help ensure this progress benefits everyone, not just a few. This is especially important for communities at highest risk and those historically underrepresented in research. Most importantly, this progress belongs to the tens of thousands of volunteers and the community, NHS and research partners who have supported the programme. Their commitment is helping create a future where diabetes care is more accurate, more inclusive and fairer for generations to come.



“The group soon became the highlight of my week”

Kheira Ghachi, 56, from Northamptonshire, describes her journey to new-found confidence

➡ After losing my father and, soon after, my older brother, I turned to food for comfort and to ease my grief. As a teacher, I put a smile on my face during the day for my students and colleagues, but once I got home, I reached for frozen pizzas and high-calorie ready meals. Slowly, my weight crept up, and I was diagnosed with depression. I’d had a form of arthritis from an early age, and I was diagnosed with fibromyalgia, asthma and sleep apnoea on top of my existing hearing loss. I eventually had to retire due to my health, and I isolated myself. I rarely left the house, and I lost all confidence in myself.

I’m originally from France, but after living in England for three decades, I became a British citizen in 2021. I was proud and excited, but my self-esteem was once again knocked after seeing photos of myself from the ceremony. Only a few days later, I received results from a blood test that confirmed I was living with type 2 diabetes. My doctor also told me my weight put me at greater risk of developing further health conditions, including heart issues. I was put in touch with a social prescriber who told me about a programme where I could join Slimming World for free.

“I have to take care of my health, but I’m no longer hiding myself away”



For Kheira, those first Slimming World nerves soon gave way to weight loss, renewed confidence and a fresh outlook

When I first walked through my Slimming World group doors, I was very nervous, but my Consultant, Angela, greeted me like a friend. After Angela explained the healthy eating plan, I was excited as it felt like something I could do. As soon as the group ended, I went and bought fresh fruit and veg, and lean meats to try the Slimming World recipes that had caught my eye, like cottage pie and crustless quiche.

I lost 2.04kg (4½lb) in my first week. And as the weight came off, my confidence and belief in myself grew. I started contributing more in my Slimming World group, like sharing photos of the recipes I cooked at home, and going to the group soon became the highlight of my week.

I’ve lost 47kg (7st 5lb) since joining my local Slimming World group following referral by my social prescriber. As well as

improving my mental wellbeing, by losing weight, I’m sleeping better, and after a routine blood test, I was told my type 2 diabetes was in remission. I still take medication for my other conditions and have to take care of my health, but I’m no longer hiding myself away. My old life is now unrecognisable to me!

Slimming World and Diabetes UK have come together in a three-year partnership to support people living with all types of diabetes and those at risk of type 2 to manage their weight in a way that works for them.

Slimming World on Referral is a partnership scheme with the NHS, which provides people living with overweight or obesity access to Slimming World support, funded in 12-week blocks.

Visit slimmingworld.co.uk to find out more.

In partnership

DIABETES UK

KNOW DIABETES. FIGHT DIABETES.

Slimming World

Photography: Slimming World (David Cummings)

ASK THE EXPERTS

Our team answers your questions about diet, treatment and life with diabetes

EXPERT TEAM



NATASHA MARSLAND
Senior Clinical Advisor: Natasha has worked as a registered dietitian for 25 years.



ESTHER WALDEN
Senior Clinical Advisor: Esther worked as a Diabetes Specialist Nurse for over 18 years.



DOUGLAS TWENEFOUR
Head of Clinical: Douglas has over 20 years experience in nutrition and dietetics.

I was diagnosed with type 1 diabetes over 40 years ago. I was talking to my diabetes specialist recently about the difficulties I'm having using my phone to scan my CGM (continuous glucose monitor) and with insulin injections because my hands are so stiff. They asked me to put my hands together as if to pray and to put my hands flat on the table. When I couldn't do either of these, they said I might have diabetic cheiroarthropathy and referred me to a hand physiotherapist. I've never heard of this and wondered if it affects many people with diabetes.
Beverley, Midhurst

Esther says: Most people with diabetes are familiar with the need to care for their feet and check them regularly because of the risk of developing foot problems. A foot check should be included in your annual diabetes review. However, healthcare professionals rarely check people's hands even

"The risk of developing diabetic cheiroarthropathy increases with age, diabetes duration and higher levels of blood sugar"

though common hand conditions like carpal tunnel syndrome, trigger finger, Dupuytren's contracture and osteoarthritis affecting the thumb are all more common in people with diabetes compared with the general population. Diabetic cheiroarthropathy affects people with both type 1 and type 2 diabetes. However, differing definitions of the condition between different studies mean it's difficult to know how many people with diabetes are affected.

Diabetic cheiroarthropathy (also sometimes called diabetic hand, diabetic stiff hand syndrome or limited joint mobility syndrome) is usually a painless stiffness of hands and fingers with thickened, tight, waxy-looking skin on the palms and backs of the hands. Fingers typically bend in towards the palms due to fixed flexion contractures (tightening and shortening) of the small hand joints, resulting in impaired fine movement and reduced grip strength. It's a condition that can seriously hinder a person's work and life.

There is less research into how diabetes causes these sorts of musculoskeletal conditions than into other diabetes complications. Diabetic cheiroarthropathy is likely to result from several factors, with possible mechanisms including excess sugar bonding, with collagen molecules altering the basic structure of collagen and the way it behaves, and damage to small blood vessels leading

to low-level tissue damage and development of scar tissue. In general, the risk of developing diabetic

cheiroarthropathy increases with age, diabetes duration and higher levels of blood sugar. It usually only affects the hands, but in some cases it can also involve other areas, including the small joints of the feet, the shoulder, hips, ankle and spine. While it's generally seen in older individuals, cases have been reported in children as young as 10 years and in teenagers.

In most cases, diagnosis of diabetic cheiroarthropathy does not involve any special tests or imaging. It is based on the appearance of the person's hands together with a positive 'prayer sign' and/or 'tabletop sign'. These are simple physical tests where the person is asked to put the palms of their hands and fingers together, as in prayer, and/or put their hands palm downwards on a level surface like a desk. If the joints of the fingers don't fully come together in the first test or the hand cannot lie flat on the surface in the second, that is a positive result, which suggests diabetic cheiroarthropathy may be present.

There is currently no cure for diabetic cheiroarthropathy, but treatment usually includes physiotherapy and occupational therapy to reduce its impact on quality of life, as well as help and advice to optimise blood sugar levels if necessary.

If it is making it difficult to monitor and manage your diabetes using devices like CGMs and insulin pens due to reduced dexterity, it is important to talk with your diabetes team to find out what devices are available on prescription locally for people with difficulties with fine movements and/or grip strength.

■ To find out more, visit diabetes.org.uk/bal-joint-problems



To celebrate my 40th in a few months, I'm heading to St Lucia for a 'big' holiday with friends. I've heard that it's a good place to go snorkelling, and we'd love to give that a try. I've been using a CGM (continuous glucose monitor) for several years and an insulin pump for about eight months. Everything has gone well using the pump day to day, but I've not yet travelled outside the UK, let alone to a tropical island. So, is there anything I need to know about using diabetes tech while on holiday, especially if I'm planning to do water sports?
Harry, Rye

Douglas says: Travelling abroad with diabetes tech can be daunting. But with an understanding of the issues you need to be aware of and some advance planning, you should be able to enjoy whatever water sports are on offer.

When using your diabetes tech on holiday, it's important to think about how the unfamiliar environment may impact all the elements of the system – your CGM sensor and phone/reader, insulin pump and its controller, if it has one, plus the insulin in the pump and any pens. Heat and humidity can also impact battery life, so devices may need to be charged more often.

Most diabetes tech is water-resistant, so daily activities like having a shower or bath are unlikely to cause any issues. However, swimming or snorkelling is likely to involve longer periods in the water and possibly diving to the seabed several metres down. So, you need to know whether each bit of tech remains waterproof in the environment you're

likely to encounter. You can usually find details in the user manual for each device, which should specify how long it can be submerged and at what depth.

It's important to remember that different elements will have different limitations – so the sensor will have different limitations than the pump, and products made by different manufacturers may also have different limitations. It's also good to be aware that the conditions in the user manual will be based on the product 'as new' and properly assembled/used. If you're planning to wear your pump while swimming, carefully inspect it to ensure there are no cracks or damage before getting into the water, especially if it has been dropped or you suspect it might be damaged. The reservoir and tubes must also be properly fitted for the pump to be waterproof.

Your diabetes team should be able to give you advice if you need to disconnect your pump and what to consider if your pump is disconnected for a long time.

Even if your snorkelling trips are within the CGM's sensor parameters for water exposure – heat, sweating and repeated immersion in water may affect the sensor adhesive. So, it's important to check the adhesive holding your sensor in place regularly to ensure it remains secure.

advice

If the adhesive starts to weaken, consider using additional medical tape or adhesive patches to reinforce it. It's also important to remember that, although your CGM will be recording your blood glucose levels while swimming, you might be away from your phone/reader and won't get alarms/notifications in real time.

You also need to be aware of the operating temperatures for your sensor and insulin pump. Even if the general daily temperature where you're staying is lower than the maximum for your device, it might be hotter in specific spots, such as vehicles, beaches, boat decks, etc. It's important to keep your pump out of direct sunlight, so if you are sitting out in the sun, put a towel over the pump and line to keep it in the shade. It's also easy to forget that the insulin in your pump must be kept within certain temperature ranges to remain safe and effective. So, although the pump itself may be able to operate at a specific temperature, it may exceed the maximum temperature for the insulin it is delivering.

As you will be in an unfamiliar environment and doing different activities, it's really important that you take enough pump consumables to last the duration of your holiday, as well as spares to cover unexpected situations and unpredictable effects. Ideally, take two to three times the amount you expect to use, plus insulin pens and cartridges in case your pump fails. It's also useful to take the manufacturers' helpline numbers for the countries you're visiting. Be sure to do this for your CGM sensors, and take spare insulin, as it may degrade more quickly in warmer climates, and your insulin needs may be different from usual.

■ Turn to page 26 for more on travelling and diabetes.

WRITE TO

'Ask the experts',
Balance, Diabetes UK,
126 Back Church Lane,
London E1 1FH, or email:
balance@diabetes.org.uk

HELPLINE

To speak with a trained
advisor, call: 0345 123
2399 Mon to Fri, 9am to
6pm, or email: helpline@diabetes.org.uk

SUPPORT FORUM

For information and
support, chat to
members of our forum
at: diabetes.org.uk/bal-forum

Photography: AdobeStock, Alex Ingram
PLEASE NOTE: The experts can't take phone calls

Andy, 45, had been living with type 2 diabetes, along with a deep sense of shame and guilt, for nine years when he finally decided to confront the condition he'd ignored since diagnosis. Here he talks about his journey to type 2 remission

ROAD TO REMISSION

TYPE 2 REMISSION:

Trying for remission isn't appropriate for everybody and it's important to talk to your healthcare team if you're thinking about trying to get advice that is personalised to your circumstances.

W

hen Andy reflects on the past year and the changes it has brought to his life, the results of his determination to manage his type 2 diabetes and, ultimately, put it into remission are clear to see – in numbers alone. Andy brought his HbA1c down from 63mmol/mol to 33mmol/mol over the course of four months, losing 2st 7lb over that time.

Andy had already been living with type 2 for nine years when he embarked on putting his diabetes into remission. Behind the positive numbers, what becomes apparent as he talks about his journey to remission is his newfound openness around his diagnosis. It's something that didn't come easy to Andy before, but that he wholeheartedly embraces now.

"Rightly or wrongly, one of the ways I handle stress is to almost compartmentalise it and try to ignore it. I suppose it's one of my coping mechanisms and I did the same when I was diagnosed with type 2," says Andy. "Ignoring the fact I had diabetes and avoiding talking about it to anyone was a way not to confront the reality of the diagnosis. It was also a way to protect myself from the guilt I felt of breaking a promise. Just before Dad passed away in 2011, I promised him that I'd look after my health, so I didn't develop type 2 diabetes like him."

Now working as a partner in a law firm, life couldn't be busier for Andy, who divides his time between the Edinburgh, Glasgow and London offices, while juggling family life with two young children alongside his wife, Joanna, 42, a senior compliance officer in global asset management. The arrival of Katherine, now five, and James, now three, was a turning point for Andy, having lost his own father, William, to diabetes complications. "I've always had a sweet tooth and I would say, probably in a response to stress at work at the time, I was drinking more alcohol than I should," Andy says, looking back at life before he became a husband and father.

"I got married in 2015 and in the lead up to the wedding, and afterwards, rather than losing weight, I was gaining weight, I climbed to about 21 and a half stone," Andy says. "One of the things that contributed to me facing my diabetes was the fact that I now had the children and suddenly I'm thinking, I want to be around to see them grow up."

A sense of shame

Andy was 36 when he was diagnosed with type 2 diabetes in 2016. His father, who was diagnosed with type 2 at the age of 35. Being a similar age at diagnosis, Andy felt he was following in his father's

footsteps. Having witnessed his father's struggles with type 2, deep down Andy knew only too well how important it was to take his own diagnosis seriously to help avoid diabetes complications. "My family and I have been touched by diabetes in one of the most devastating ways. My dad developed kidney failure in 2001, at the age of 52, and also went on to have one of his legs amputated from below the knee," Andy recalls. "My younger brother, Martin, and I were just two and five years of age respectively when my dad was diagnosed with type 2 diabetes. Like me, Dad couldn't confront his diagnosis and lived day to day pretending his diabetes didn't exist. I felt I was a carbon copy of my dad – not only in terms of my age at diagnosis, but also in how I chose to ignore it."

Andy doesn't underestimate the impact it has had on him, his mum, Rosemary, and brother to see his dad living with diabetes complications. "After Dad was diagnosed with kidney failure, he suffered for 10 years before he died. That affected Martin, Mum and me in so many ways. But Dad's illness brought us closer together. Joanna never met Dad, but she is extremely supportive and understanding."

Before diagnosis, Andy was experiencing the telltale symptoms of diabetes but tried to put any thoughts that he may have type 2 to the back of his mind. "I was constantly thirsty, felt tired and was running to the toilet more often than usual – during the night as well. And I was exhausted," Andy says. "Because of Dad's type 2, I really didn't need anyone to tell me that I had diabetes, but I buried my head in the sand."

When Andy eventually went to the GP and received his diagnosis, he was overwhelmed by feelings of guilt and shame that he'd let his father down, so did nothing to manage his type 2

diabetes. "I ignored it for years. I tried to lose a little bit of weight, but I didn't really do much to control the diabetes itself," explains Andy. "I would occasionally make a half-hearted attempt to do the odd finger-prick check to see what my sugar levels were. But I was aware that it was only a snapshot in time on any given day, and so I didn't really adjust my diet. I did lose weight over time. From my heaviest, I managed to drop to 16st over a period of about four years. I hovered at this weight for around five years, from 2020 to 2025."

Time to act

Looking back, Andy readily admits that from 2016 right through to last year, he continued drinking too much alcohol and giving way to his sweet tooth. He



Joanna and Andy on their wedding day in 2015

Words: Sabeha Syed. Photography: Julie Howden



Clockwise from far left: Andy and Joanna with James and Katherine; a young Andy with Martin (centre) and his dad; at the Scottish Parliament; Andy’s parents

wasn’t taking any diabetes medication, either. But after Katherine and James were born, Andy did start to take more of an interest in his diabetes. Fortunate enough to have access to private health checks through work, he was shocked to discover that his HbA1c was 86mmol/mol. “I decided to act and attended appointments with my GP and diabetes nurse. I was prescribed metformin,” says Andy. “From there, my HbA1c numbers started to drop, and by Christmas Eve 2024, they were down to 63mmol/mol.”

Although Andy had reduced his HbA1c, deep down he knew that wasn’t enough and he needed to do more to get on top of his diabetes management. “Some people would say I didn’t know about diabetes, and I didn’t have the education, either,” says Andy. “But I kind of did with having seen my dad’s journey – it’s just that I wasn’t ready to confront it and that led through to keeping it secret. Not confronting my diabetes meant I was doing a lot of damage to my health, but I was just hoping it would go away. Of course, it doesn’t – so you have to tackle it head on.”

Apart from Joanna, only a small circle of people knew that Andy was living with type 2 – his mum, brother and a close friend, who himself had just been diagnosed with prediabetes. Alongside wanting to see his children grow up, talking to his friend about how he was managing his prediabetes diagnosis was also a turning point for Andy.

“My pal was using a CGM (continuous glucose monitor) to keep an eye on his sugar levels. We were out for a dog walk, and

I was listening to him talk about it. At first I wasn’t so sure it was right for me. But I came round to the idea and I thought, ‘Hang on, maybe this isn’t such a bad idea. Maybe this is something that I need to help me confront the condition and manage it’, so I decided to buy a CGM,” says Andy. “This was the start of my journey to remission, and I knew I really had to focus on this. So again, I engaged with the diabetic nurse to run various tests. I’ve still got the test results from that time – they became a starting point for me to build on and put my type 2 into remission.”

On a mission

Having invested in a CGM, Andy embarked on his mission to turn his diabetes management around and bring his HbA1c down. He drastically reduced alcohol intake and started following a restricted diet. By the autumn, Andy had put his type 2 into remission. “From May last year, when I began an incredibly restricted diet, my HbA1c was dropping by one point every three days,” says Andy. “I got it down to 33mmol/mol by October 2025.”

Along the way, Andy found his CGM invaluable in helping him understand how his diet was affecting his sugar levels: “With a CGM, I could see that I was getting spikes in my sugar levels when I had certain foods. It helped me to understand which foods worked better for me and how to get the balance right.” Andy’s path to remission wasn’t without its obstacles. Reflecting on some of the challenges along the way, he says: “There was always a reason to celebrate or go for a drink, or to eat the wrong things when out with friends, family or work

clients – and on holiday. I also think it was hard for others to see me on such a restricted diet. And it was incredibly difficult for me, too – I was on that remission journey and trying to reduce my HbA1c by one point every three days. And if I didn’t achieve that, I was annoyed at myself,” admits Andy. “So, people would think they were helping by giving me a treat. And actually, that wasn’t right for me. Playing golf was another challenge as I occasionally go for a beer after a game. So I had to change my habits around that and other aspects of my work and social life.”

Once Andy had put his type 2 into remission, he felt that another challenge was maintaining his weight as he moved away from the very restricted diet he had been following. “My game plan was to achieve an HbA1c below 41mmol/mol and then transition to a long-term, more sustainable diet. Once you’re motivated, once you’re on the journey, I think the difficulty then is the transition to normality. That has led to a bit of an increase in weight, but that’s OK,” says Andy. “I’d got down to 13st 7lb and now I’m hovering around about 15st. At the time I started on my remission journey, I invested in a home gym – an exercise bench, adjustable dumbbells, and weight plates, and have set a daily exercise regimen using these pieces of equipment, so I have a focus to get back to 14st 7lb and I think that will be fine.”

Opening up

Joanna was with Andy every step of the way on his path to remission. “It was a difficult journey, and I don’t feel people should have to deal with it alone. It took the support, effectively, of those close to me – Joanna, my mum and brother, my in-laws and a good friend, to change my approach to diabetes and not keep it a secret,” says Andy. “I’m quite open about my diabetes now and feel more comfortable speaking more freely about it. My wider family, friends, and work colleagues have – without exception – been incredibly supportive and encouraging when I describe my journey. I wasn’t keeping it quiet because I was afraid of any stigma – I didn’t experience any from other people. It was just that I couldn’t confront it, which was part of my mindset at the time.”

In November 2025, just weeks after putting his type 2 into remission, Andy spoke publicly at the Scottish Parliament at a reception hosted by Diabetes UK to highlight the urgent need for consistent, high-quality diabetes care across Scotland and challenge stigma surrounding the condition.

“From talking far more openly about my experience, I then took the leap to speak at the Scottish Parliament in November to support the work of Diabetes UK,” says Andy of the event. “It was the first time that I’ve spoken publicly about it. I felt that it was quite cathartic doing that. And if I can help just one person to change their mindset and put the message out there that people shouldn’t feel ashamed or suffer in silence, it’s been worth sharing my story.”

TYPE 2 DIABETES REMISSION

Type 2 remission is when your long-term blood sugar levels fall below the diabetes level and stay there for at least three months, without the need for glucose-lowering medication. This means having an HbA1c below 48mmol/mol or 6.5%. By bringing your blood sugar levels into a non-diabetes range long-term, you reduce the risk of complications. This doesn’t mean your diabetes has gone away forever as your blood sugar levels can rise again.

You still need to make sure you have regular check-ups and get support you need to treat or manage any existing diabetes-related complications. But it does mean that you’re more likely to feel better and see improvements in your health long term.

CHANCES OF GOING INTO REMISSION

We’re still learning how to support everyone with type 2 to go into remission. We know remission may not be possible for everyone and remission may not be right or safe for you. So talk to your healthcare team first about your circumstances. Many people who have tried for remission have gone into it. Some who have tried haven’t gone into it. But we know that:

- The chances of remission are better the sooner you try after your type 2 diagnosis.
- If you’re living with obesity or overweight, your type 2 is more likely to go into remission if you lose around 15kg (or 2st 5lb) of weight as quickly and safely after diagnosis.
- You can go in and out of remission.
- Staying in remission can be tough. You need to be supported to keep your weight at a level that is right for you.
- Any time spent with your blood sugar levels below the diabetes range can have benefits. And, if you do come out of remission, it’s possible to get your blood sugar levels back down to a non-diabetes range.
- Whether you go into remission or not, working to lose weight, if needed, brings about many other health benefits.

IS REMISSION THE SAME AS ‘REVERSING’ TYPE 2?

We know many say ‘reversing’ type 2 instead of remission but we, and the NHS, say ‘remission’. When you’re in remission your diabetes hasn’t gone completely so you still need checks, such as diabetic eye screening.

■ Visit diabetes.org.uk/bal-what-is-remission

ANDY’S THOUGHTS ON HIS JOURNEY

“My approach in putting my type 2 into remission on my own (self-remission) was challenging and unique to me. Everyone’s journey to remission is different, so it’s best to speak to your healthcare team about individual goals and what’s achievable.”

■ Visit diabetes.org.uk/bal-remission-how-to



GREAT ESCAPES

Being able to get away from it all is something most of us enjoy. Planning ahead can help you ensure that your diabetes doesn't get in the way of your travels – regardless of your destination and any holiday activities you might have organised for your trip

➔ From insurance and keeping your diabetes tech in working order to making sure you have packed adequate medication, there's a lot to think about when you go away on that well-earned break. Whether you're opting for a beach holiday, a city break or an adventure further afield, whatever type of diabetes you're living with, it pays to have a think about how your holiday destination may impact your condition well before you travel.

The holiday destination and what you do when you're away from home can affect how you manage your diabetes, including your blood sugar levels, insulin

absorption and how you store your diabetes medication and tech. It's helpful to find out where you can get supplies locally at your destination in case of emergency. Read on for our tips to help you take travelling with diabetes in your stride.

Hot climates

Enjoying the sunshine can be one of the great pleasures of a holiday. But hot weather can make diabetes management a little trickier. While there's nothing nicer than relaxing on a lounge for hours, it can push up your blood sugar levels because you're not as active. If you

AllClear Insure My Diabetes

We've chosen to work with AllClear Insure My Diabetes because they offer a range of levels of cover, both single and annual multi-trip policies, and have been a specialist since 2000 in providing travel insurance for those who need cover for pre-existing medical conditions. It is important that you consider all aspects of cover when selecting your travel insurance policy, not just price and you may be able to get the insurance you want at a better price, if you shop around.

■ You can find out more at diabetes.org.uk/bal-all-clear

treat your diabetes with insulin, it's also worth remembering that warm weather can increase blood flow and lead to insulin being absorbed more quickly, raising the risk of hypos. The important thing is to check your blood sugar levels more frequently and be ready to adjust food, activity or insulin as required. Speak to your diabetes team in advance for tailored advice around this.

It's also important to protect your insulin from heat as it can get damaged and may not work properly. Store it as recommended, keep it out of direct sunlight, and use an insulated cool bag when you're out and about. When it comes to using your diabetes tech in the sun, follow the manufacturer's guidelines and your healthcare team's advice.

And, finally, don't forget the basics of sun safety. Choose cool, comfortable clothes, use a high-factor sunscreen, and wear sunglasses with UV400 protection. If you have neuropathy (reduced sensation in your feet), take extra care by protecting your feet with socks, sandals and extra sunscreen – sunburn can cause damage before you feel it.

Diving in

When you're going for a swim in the pool or the sea, it's a good idea to plan ahead.

You may find that you need extra carbohydrates beforehand, and it's wise to keep hypo treatment within easy reach.

If you use a CGM (continuous glucose monitor) or insulin pump, it's important to check manufacturer guidance in the user manual on wearing your diabetes tech in the water. It's also a good idea to take extra adhesive or patches, as heat, sweat, sunscreen and salt water can loosen the adhesive on diabetes tech. You might also want to consider buying a protective case for your CGM or pump, even if it's waterproof.

It's also recommended that you don't leave your tech on hot sand or in direct sunlight. T-shirts or towels can be useful to help cover tech from sunlight. And if you're using a pump, it's best not to change your battery or insulin on the beach as sand, sunscreen and dirt may all cause problems both with the tech and your insertion site.

■ See page 21 for more on protecting your diabetes tech on holiday.

Make sure you're covered

Everyone wants peace of mind when they travel. So it's a good idea to find out if your pump, CGM, receiver (also known as a reader) or any other diabetes tech are covered for all risks as 'specified items' on your home contents insurance and when away from home. If not, speak to your insurance company to see if they can be added to your policy. You will need to ask your integrated care board (ICB) or health board for a certificate of value and ownership before you can do this.

Alternatively, you may want to consider taking out separate specific cover for your insulin pump, CGM or receiver from a specialist insurance company to protect them from theft, loss or accidental damage in the UK or abroad. This way, any claim you make won't affect your household insurance premiums and any

"The important thing is to check your blood sugar levels more frequently and adjust food, activity or insulin as required"

no claims bonus you may have. Another option is to see if you can get cover for your diabetes tech when you buy your travel insurance.

Here are a few crucial things to remember when choosing insurance:

STAY FOCUSED: First and most important is to always focus on the cover your insurance policy provides for pre-existing medical conditions like diabetes, rather than think of price alone.

FULL DISCLOSURE: When arranging your policy, make sure you fully disclose your medical conditions, including diabetes, even if you are not specifically asked. If you don't, the insurer could reject a claim you make later.

REST ASSURED: It's also worth checking that you're happy with the level of medical cover and emergency support, and whether your policy covers any essential diabetes tech you plan to take with you, such as pumps, CGMs and meters.

COVER ALL: It's important to make sure you have a valid Global Health Insurance Card (GHIC). This card allows you to have any 'medically necessary healthcare' provided by the state in the European Economic Area (EAA) that can't wait until you get back home. This could be, for example, emergency treatment and visits to A&E, or if you have a long-term or pre-existing medical condition you need treatment or routine medical care for. The UK GHIC has replaced the existing European Health Insurance Card (UK EHIC).

The UK GHIC won't cover everything, so it's important to carry this card and arrange private travel and medical insurance for the length of your trip.

■ Find out more about healthcare when you're abroad at www.nhs.uk/using-the-nhs/healthcare-abroad

Packing tips for peace of mind

Diabetes travel packing doesn't have to be complicated – a few simple tips can make it feel manageable. Alongside your beach towels and summer read, it's a good idea to pack a back-up tech kit with you, should your diabetes tech stop working. Include

replacements, back-up batteries and even a spare pump or CGM – if you have one – in your back-up kit. Take supplies of insulin and insulin pens/ needles in case you can't get your pump working again. As a general guide, take two or three times the amount of insulin or other diabetes medication, equipment and spares you'd normally use at home. That way you can relax knowing you have plenty of supplies if you need to stay longer than planned or face any travel disruption.

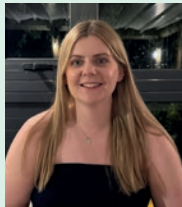
Keep essentials close to hand by packing your medication, tech and hypo treatments in your hand luggage. Avoid putting insulin or fragile technology in a suitcase in the hold, where it could be exposed to extreme temperatures, get damaged, or lost.

If you're travelling with someone else, it can help to split supplies between separate bags, just in case of loss. It's also a good idea to take a letter from your healthcare team explaining you have diabetes and need to carry medications and devices, plus a copy of your prescription.

Many people also find it reassuring to carry diabetes identification or wear a medical ID wristband. Some diabetes technology has specific guidance about security scanners, so check the manufacturer's advice before you travel.



ELLIE'S STORY



Ellie Clegg lives with type 1 diabetes and, last year, went to Mauritius and Kenya on her honeymoon. She says:

When I'm packing to go away, I have a list of everything I need to pack for my diabetes to make sure I don't miss anything. This includes my pump supplies and spares, injection pens, CGMs, insulin vials, blood glucose and ketone meter and strips, and hypo treatments. I also make sure I have a letter from my diabetes team listing what equipment and medication I need to take through the airport with me and a copy of my prescription in case airport security ask for it. I also always get travel insurance for any trip.

I notice hot climates have an impact on my blood sugar levels and tend to make me go lower. I need to take less insulin when I'm on holiday somewhere warm to prevent hypos. I also try to wear my Dexcom and Omnipod on my stomach to keep them out of direct sunlight. I find they can lose their stickiness due to sweat and being in and out of the pool so I make sure to take some adhesive patches I can stick over them.

Navigating food and drink when I'm away can be a challenge! I've been carb counting for a while now so have a good idea of the amount of carbs in certain food and drink, but this obviously isn't foolproof, so I make sure to keep a close eye on my levels after a meal and respond quickly if I notice them going low or high. It's about being reactive and adjusting when I need to and accepting that my levels on holiday won't always be perfect.

I went on my honeymoon last year and spent a week in Mauritius and then went on a safari in Kenya. Knowing that I was going to be in the middle of the Masai Mara with nothing around us was a slight concern with my diabetes. But I made sure I packed lots of supplies, had my vaccinations and trusted that I knew how to manage it. It was the trip of a lifetime and diabetes should never get in the way of you experiencing these things.

Finally, while we all hope for smooth journeys, delays happen. Pack a few snacks just in case you get held up.

Passports and flights

If you're travelling to Europe, check passport rules well in advance. For most UK travellers visiting countries in the Schengen area, your passport usually needs to have been issued less than

“Keep essentials close to hand by packing your medication, tech and hypo treatments in your hand luggage”

10 years before the day you arrive and have at least three months left from the day you plan to leave.

The European Union (EU) has launched new border checks which are known as the Entry/Exit System (EES). A European Travel Information and Authorisation System (ETIAS) is also expected in the future, so check official guidance as part of your planning. Find the latest information by visiting www.gov.uk/guidance/eu-entryexit-system

If you're flying to your destination, seek advice from your diabetes team and refer to your device manufacturer's guidelines on using tech while flying. Cabin crew can tell you when meals will be served, which can help with timing. Bring your own snacks too, in case meals are delayed or portions are smaller than expected.

Essential diabetes travel checklist

- Know how the weather could affect your diabetes.
- Take two to three times your usual amount of medication and device spares, and a back-up.
- Get specialist insurance that covers pre-existing medical conditions and diabetes tech.
- Request a diabetes travel letter and carry prescriptions.
- Check travel rules and plan your journey.

▼ CoolMeds Companion 2–8°C Medication Case, £83.90

Designed to accommodate bulkier pens and bottles, this case lets you safely carry temperature-sensitive 2°C to 8°C medication for 18 to 24 hours.



▼ CGM Patches, from £1.99 to £21.95

Shop our range of adhesive patches to keep your CGM or Omnipod secure and protect against knocks, jolts, showers and daily life, helping it stay on longer.



▼ CoolMeds Classic Cold Pack, £7.70

For use with the CoolMeds Classic Medication Travel Case, pack this spare cold pack as a handy replacement in times of need.



GET SET, GO...!

We have all the diabetes kit and accessories you need to make holidays and days out a breeze this summer. Here are just some of the products we sell – for more, visit diabetes.org.uk/bal-shop



If you have diabetes, please check with your diabetes team or GP before using compression travel socks.

▲ MediGenix Compression Travel Socks, £11.95

These travel socks give you comfortable, reliable support during long periods of sitting or standing and can help reduce the risk of deep vein thrombosis.



▲ CoolMeds Classic Medication Travel Case (2–8°C), £54.95

With its integrated digital thermometer, you can monitor and carry temperature-sensitive medication between 2°C and 8°C for 12 to 18 hours without opening the case.



▲ FRIO Large Cooling Wallet, £23.94

With space for insulin pens, vials, cartridges or auto-injectors, this cooling wallet will ensure your medications are kept within safe temperatures.

Specialist Diabetes Travel Insurance

With 25 years of experience, our mission is to help people living with diabetes to get the insurance they want and need.

Our policies have no upper age limit. Get your free quote today.

- ✓ Voted UK's No.1 for Customer Care²
- ✓ 24/7 English-speaking emergency medical helpline
- ✓ Up to Unlimited medical cover
- ✓ Up to £25K cancellation cover³



Call our UK Team 7 days a week FREE
0800 294 5124
InsureMyDiabetes.org.uk

AllClear™
INSURE MY DIABETES

DIABETES UK
KNOW DIABETES. FIGHT DIABETES.

AllClear Gold Plus and Platinum achieved a Which? Best Buy. AllClear Gold Plus and Platinum has been 5 Star rated by Defaqto.

1. Discount applies to the base premium of AllClear branded policies only. Discount expires at 23:59 on 31/12/26. 2. UK Broker Awards, Customer Service Award 2025. 3. Providing you have purchased a policy which includes cancellation cover. AllClear Travel Insurance is arranged by IES Limited, which is registered in Gibraltar company number 117274. Registered Office: 1st Floor, Portland House, Glacis Road, Gibraltar, GX11 1AA. IES Limited is licensed and regulated by the Gibraltar Financial Services Commission number FSC25393 and trades into the UK on a freedom of services basis. FCA FRN 824283. Diabetes UK Services Limited (a limited company, registered in England & Wales, no 891004), a wholly owned subsidiary of Diabetes UK, is an introducer-appointed representative of AllClear Insurance Services Limited.

10%¹
OFF BASE PRICE
Code: 10CAT



MEET THE... SUPPORTER GREG

Greg Reed, one of our long-term supporters, received a type 2 diagnosis in 2006. Over the last 20 years, he's run the equivalent of the circumference of the globe to raise money for us. Greg is also group CEO of PfP Group, the UK's leading social enterprise and a corporate supporter of Diabetes UK

→ When I was diagnosed with type 2 almost exactly 20 years ago, it came as a shock. Although I was a bit heavier, I didn't see it as something that was supposed to happen in my 30s. I was very active and, even though my food choices could have been healthier, I stayed away from takeaways.

I was put on metformin and told to make some moderate changes, mainly to be active. I took up running, completed some marathons and was running about 15 to 20 miles a week. I enjoyed the exercise but struggled more with food. Even though I didn't think I was eating unhealthily, I felt constantly hungry. If one of my kids didn't finish their meal at the dinner table, I'd eat their leftovers after I'd already finished my own portion and would still feel hungry later.

Fast forward to 2017, in an appointment with my consultant, I was told my blood sugar levels were high. At this point, I was around 108kg (17st), and I needed to lose weight to protect my health. I told people at work to keep an eye on me, and they were all very supportive. We made sure we had healthier food options in meetings, and some of my colleagues joined me on runs.

I also cut out refined carbs and stuck to a reduced-calorie diet. My initial progress inspired me to keep going. I lost about 44kg (7st) in seven months and started to gradually introduce more

calories back into my diet while picking up my running.

As I was lighter, I found running easier, which made me enjoy it even more. A few years ago, I set a personal goal of running three miles a day, and someone told me that if I kept it up and added a few more miles in, I'd have 2,000 miles by the end of the year. I set myself the challenge and decided to turn it into a fundraiser. I was also aware that I was coming up to a big running milestone. Since I started running in 2006, I've used the same app to track all my runs, so I had all the numbers and data. I knew I was getting close to running the equivalent of the globe's circumference since starting 20 years ago – nearly 25,000 miles. So, last October, I completed a Parkrun in Edinburgh, which brought me to my total. I had a lot of fun that day with my family and my running group, who were all so incredibly supportive.

Over the last 20 years, I've raised over £100,000 for Diabetes UK and Ronald McDonald House charities – and gone through 80 pairs of running shoes! Diabetes UK has been a great support over the years. It's my go-to source when I want to get the facts. There are so many articles and books out there and it's hard to tell what is real without checking with someone you trust like Diabetes UK. I'm very grateful to people for their generous donations. Although it wasn't something that came naturally to me at first, running, eating better and taking control of my health have allowed me to be a better dad, husband and leader. Everyone's journey is different, and you don't have to be running three to five miles a day to keep fit – it could just be going for a dog walk each day. But if you do want to push yourself a bit more, you might be surprised at what you can do.

■ Find out more about exercise and diabetes at diabetes.org.uk/bal-exercise. For more on eating well, visit diabetes.org.uk/bal-eat-well



**Greg's all-time
running stats
2006 to 2025**

24,901
MILES COVERED

4,132
HRS SPENT RUNNING

Around the world
for Diabetes UK

WIN

**A two-night
Spa Relaxation
Stay for two at
Lion Quays**

**RELAX,
RECHARGE,
REPEAT**

➔ Indulge in the ultimate rejuvenating escape with our two-night Spa Relaxation Stay, perfect for couples or anyone looking to unwind, recharge and enjoy well-deserved pampering.

This luxurious stay includes two nights in an upgraded room, allowing you to snuggle, snooze, and enjoy total comfort throughout your break. Both evenings feature a delicious dinner, giving you the chance to savour exquisite cuisine and relax in a welcoming, peaceful atmosphere.

Your stay also includes a dedicated spa day experience, complete with a 50-minute treatment designed to ease tension, revitalise the body and restore a sense of calm.

If you wish to extend your pampering, you can pre-book additional treatments at a 20% discount, making your two-night Spa Relaxation Stay even more indulgent.

In addition, you'll have full use of our extensive leisure facilities from your day of arrival until 4pm on your day of departure, including the swimming pool, sauna, steam room and gym.

Every aspect of this escape has been designed to help you slow down, relax and fully embrace a luxurious, restorative break.

■ Visit lqresorts.co.uk/lion-quays-resort

Reader's Offer: 10% off all Lion Quays spa breaks using code BREAK10.

To book: 01691 684 300

Terms and conditions: The prize and offer are subject to availability at the time of booking, and the offer must be booked directly with the hotel. Prize and offer are valid until 31 January 2027, excluding Christmas Eve and Christmas Day. Closing date is 28 August 2026.



PRIZE

SPA RELAXATION STAY INCLUDES:

- A two-night stay for two in an upgraded room
- Dinner on both evenings
- Breakfast on both mornings
- Spa day experience and 50-minute treatment
 - Use of leisure facilities until 4pm on day of departure

To enter, scan the QR code using the camera app on your phone or tablet, or go to: diabetes.org.uk/bal-comp



**LION QUAYS
Shropshire**

UPWARD SPIRAL

Cook up this healthy, modern twist on a classic Italian dish in under an hour

Turkey meatballs with courgetti

Serves 4 | Prep: 5 mins | Cook: 50 mins

DAIRY FREE | GLUTEN FREE

- Low-calorie cooking spray
- 1 large onion, finely chopped
- 2 garlic cloves, finely grated
- 2 x 400g cans chopped tomatoes
- 2 tbsp tomato purée
- 3 tbsp balsamic vinegar
- ½ small pack fresh basil, leaves shredded, plus extra leaves to serve
- 500g courgetti or 550g courgettes, spiralsised into courgetti, to serve

For the meatballs

- 500g lean turkey mince (5% fat or less)
- 2 medium carrots, grated
- 2 garlic cloves, finely grated
- 1 tsp dried oregano
- ½ tsp dried red chilli flakes (optional)

- 1 Preheat the oven to 200°C/fan 180°C/gas 6.
- 2 Mix together the ingredients for the meatballs and season with black pepper. Roll into 16 balls and spread out on a large, non-stick baking tray. Bake for 20 mins.
- 3 Meanwhile, for the sauce, spray a large, lidded non-stick saucepan or flameproof casserole dish with a couple of pumps of the cooking spray and place over a medium heat. Cook the onion for 5 mins, or until softened. Add the garlic and cook for 1 min. Stir in the chopped tomatoes, purée and vinegar and bring to the boil. Reduce to a simmer, then cover and cook for 15 mins, until the meatballs are cooked through.
- 4 If eating straight away, add the meatballs to the sauce, return to a simmer and cook for 5 mins, then stir in the basil. Cook the courgetti according to the pack instructions. If using spiralsised courgettes, cook for 2 to 3 mins in a non-stick pan until warmed through and softened. Serve with the meatballs and sauce, and top with a twist of black pepper and the extra basil leaves.
- 5 If freezing (optional), mix the meatballs with the sauce and cool completely. Transfer to a freezer-proof container or bag and freeze for up to 1 month. To serve, defrost overnight in the fridge, then reheat in a saucepan with a splash of water until piping hot. Cook the courgetti and serve as above.

PER SERVING 570g

CARBS
19g

CALS
289

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
17g	6.7g	1.9g	0.39g	34g	6g

4.5 portions of fruit and veg

Photography: Slimming World (Gareth Morgans)

➔ We hope you enjoy it. Don't forget you can find more of the recipes we have co-created on our Recipe Finder and the Slimming World website.

In partnership
DIABETES UK
KNOW DIABETES. FIGHT DIABETES.

**Slimming
World**

SIDE BY SIDE

Living with diabetes alongside another health condition can feel like a balancing act when it comes to managing symptoms and treatment for both. Here, four people share their stories...

“Physical activity helps me cope”

Debbie Keep, 58, was diagnosed with young onset Parkinson's in 2017 and type 2 diabetes three years later. She says:

Around the time of my Parkinson's diagnosis, I was working as a nursing assistant in a rehabilitation unit for people with brain injury at a hospital in Oxford. People we cared for could range from those who'd had a road traffic accident to others who'd had a stroke. Their ages ranged from 16 to 60 and the unit supported them with walking, among other things. We'd get them up and ready for physiotherapy. I moved into this field when I had my two daughters.

I'd been working at the unit for 10 years when my husband left. It was a very stressful time. About six months afterwards, I started having a tremor in my left hand, but I wasn't aware of it. One of the patients initially noticed that my hand was shaking when I rested it on the bed as I was preparing to help lift him. The symptoms progressed to a tremor on the left-hand side of my body before I was diagnosed with young onset Parkinson's. I was 49 years old.

My grandad and his brother had Parkinson's, so it was a condition I was familiar with. Even so, I couldn't quite believe it, and initially I didn't tell

anyone. But then I went on a two-day course organised by the hospital for people newly diagnosed. It really helped me to meet other people living with young onset Parkinson's like me.

I was still working at the unit when I was diagnosed with type 2 diabetes. It was 2020 and the coronavirus (Covid-19) pandemic was about to change our lives. One of the nurses who worked with me on the ward asked me if I had diabetes as I was constantly going to the loo. She suggested I see my doctor. Following tests, I was diagnosed with type 2 diabetes and started on metformin.

“I've been able to get my routine on track to help me manage my type 2 alongside Parkinson's”

Finding out I had type 2 was less of a shock. I had gestational diabetes when I was pregnant with my second daughter, and my mum – now aged 80 – has been living with type 2 for the past 20 years. So I had been expecting it. But then I tested positive for coronavirus in the same week as my type 2 diagnosis. I just kept thinking, ‘I have Parkinson's, type 2 diabetes and now coronavirus!’ I felt fearful as we just weren't sure how the virus would affect people like me living with other health conditions.

Then lockdown started and any follow-up diabetes education courses

didn't happen. I felt unsure how to manage my type 2, but I got support from my diabetes nurse at the GP surgery. I was on metformin for quite a long time, alongside a lot of medication for my Parkinson's. I was taking 11 tablets throughout the day. With my Parkinson's medication, I suffer from constipation. But when I started taking metformin alongside it, I found that it was upsetting my tummy.

I asked my healthcare team if I could try insulin instead. I was also finding that in spite of increased doses of metformin, my diabetes was hard to manage. They agreed and I've been on mixed insulin ever since. I've started using the FreeStyle Libre, which has been a game-changer. It really helps me to manage my blood sugar levels. I also joined a small nurse-led diabetes group that met once a fortnight, which offered structured dietary advice.

Since my type 2 diagnosis, I've started doing a lot more physical activity, which helps me manage my stiffness with Parkinson's, as well as my diabetes. Now my week is gym, spinning classes with a neuro-physio group, walking football and boxing. I find walking and physical activity makes me feel so much better. I've now been able to get my routine on track to help me manage both conditions.

I stopped working about three years ago and I miss my job a lot. Around that time, I started drawing and moved on to painting with acrylics. It helps me relax, which in turn helps me manage both conditions. I've found my way in what I like to paint, which is flowers mainly.

I experience stiffness when I first wake up. So I have my first insulin dose, then take Parkinson's medication, which I keep by my bed. I wait a bit for the Parkinson's medication to kick in, and then I can get up and get ready for the day. It's a difficult balance and of the two conditions I'm living with, if I can't manage my Parkinson's, I struggle to manage my diabetes.

■ **For more information on Parkinson's, visit parkinsons.org.uk**

Words: Sabeha Syed. Photography: Nick Dawe



TRIGGER WARNING: This article talks about disordered eating, which some readers may find distressing.

“My cystic fibrosis impacts CFD and vice versa”

Annabelle Brown, 27, was diagnosed with cystic fibrosis (CF) at 12 months old and cystic fibrosis diabetes (CFD) when she was 11. She says:

Shortly after I was born my parents and I caught the flu and while my parents fully recovered, my condition kept getting worse. My mum decided to take me to the GP and after being dismissed as an anxious first-time mum multiple times, she was eventually told to take me to hospital. At the hospital they did the sweat test, and I was diagnosed with cystic fibrosis (CF) at 12 months old. It was all completely new to my parents, no-one else in my family had cystic fibrosis so it came as a complete shock.

I have the two most common gene mutations that cause CF which means its severity is moderate. I was very healthy as a child growing up and my parents always encouraged me to stay active and eat well. They were also quite strict with chest physiotherapy to make sure my condition and symptoms were managed. As I kept healthy following my diagnosis, I didn’t have a hospital admission for an infection needing IV antibiotics until I was 13 years old, which is quite unusual. I think, because I’d not needed to go into hospital to treat lung problems or an infection until that point, I was under the illusion I was invincible with my CF. My way of coping when I was growing up was to pretend that I didn’t have it unless I had to confront it at appointments and blood tests.

After years of no complications, I was diagnosed with cystic fibrosis diabetes (CFD) when I was 11 years old. Growing up I was extremely scared of needles and

although I would do my injections when my parents were watching over me, if they weren’t around, I’d avoid it at any chance I could get. This led to a vicious cycle of my blood sugar levels being high because I wasn’t injecting which meant I should inject even more. It wasn’t until I was at university that I had a reality check, and my diabetes team told me my kidneys were starting to fail, that I knew I needed to sort myself out. I then became very rigid with taking my insulin and was able to bring my HbA1c down. That experience was the wake-up call I needed.

I notice my CF having an impact on my diabetes and vice versa. During exacerbations of CF or when I have a cold or chest infection, my blood sugar levels become more erratic which makes me feel worse on top of the CF symptoms I’m already having. And with the diabetes, continuously high blood sugar levels mean there’s more sugar in my body which the bacteria in my lungs feeds on. People with CF can have more bacteria in their lungs which can cause infections and having diabetes means they have a better environment to grow, causing my CF symptoms to worsen. So, both parts of the condition interact with each other.

Living with CFD has had an impact on my emotional health over the years. I’ve struggled a lot with motivation and mental health, especially around body image. I was a biology student and understood that if I avoided taking my insulin, I wouldn’t gain the excess weight from the food I was eating. This became a habit and having this knowledge created a mental block towards taking my insulin.

“If there’s more awareness and understanding within the general public, people with CFD might feel less like outsiders”

I’ve had professional mental health support since I was 12 and, although I still sometimes have thoughts about restricting insulin, they aren’t as often as they used to be. After a few years of having support, a psychologist joined my CF team, so I was able to get help specifically for my CF and CFD. The support I’ve had has made a massive difference to my emotional wellbeing which has had a positive effect on my CF and CFD management.

I think there needs to be more education about the different types of diabetes as some people aren’t even aware of the differences between type 1 and type 2, let alone a rarer form like CFD. The more aware the general population are about a condition, the more it helps you mentally because you feel like you have a team behind you. If there’s more awareness and understanding within the general public, people with CFD might feel less like outsiders.

■ For more information on cystic fibrosis, visit cysticfibrosis.org.uk



Words: Lucy Evans. Photography: Gemma Day

“It can be hard to know if a symptom’s from diabetes or MS”

Jane Keene, 55, has lived with type 1 diabetes for over 40 years. In 2016, she was diagnosed with multiple sclerosis (MS). She says:

I was diagnosed with type 1 diabetes in 1984 and found things incredibly difficult at first. I was the only person in my school with diabetes which felt really isolating. I also felt self-conscious having to get my equipment, like my blood testing kit, out in front of people. Comparing my life now to then makes me realise how far things have moved in a relatively short amount of time.

I like to challenge people’s preconceptions about long-term conditions, and in 2000 I signed up to do the London Marathon to raise money for Diabetes UK. Some people told me I’d never be able to do it but that just motivated me more. I was on insulin injections at that point and had to keep a close eye on my blood sugar levels. There were stations dotted throughout the route where I could do finger-prick checks. I completed all 26 miles and didn’t walk any of it. It was incredibly difficult, but I tried to keep a positive attitude and felt so fantastic when I crossed the finish line.

Fast forward to 2007 and I got put on an insulin pump which was life changing. My nurse told me I wouldn’t have to do as many finger-prick checks, and I told her I’d need a minute because I couldn’t wrap my head around that! I felt so grateful for the tech and the support from the hospital. That was a really nice moment.

Then came my MS diagnosis in 2016. I’d experienced some numbness and tingling in my legs and feet in the lead up to the diagnosis, but I put this down to living with type 1 diabetes for 30 years.

I then had an incident where I couldn’t see out of one of my eyes and ended up being hospitalised. I had lots of tests and MRIs, and the doctors said it could be something called Clinically Isolated Syndrome (CIS) which can be a precursor to MS, but they wanted to see how I’d go. Within two months I’d relapsed and was diagnosed with Relapsing Remitting MS (RRMS).

I’ve tried to find other people with RRMS and type 1 diabetes but have had no success so I think it’s quite unusual to have both. I find both conditions have quite an impact on the other. For example, if my blood sugar levels aren’t well managed then I’m more unstable on

“I’ve surprised myself with the things I’ve achieved in my life. It might not work out, but why not give it a go?”

my feet and my balance isn’t so good. When my blood sugar levels are within target the better my mobility is and, if I’m still experiencing neuropathic symptoms, I’ll know it’s most likely from the MS. Sometimes it’s difficult to know if a symptom I’m experiencing is from

diabetes or MS but, as I’ve lived with both conditions for a while now, I’ve got better at figuring it out.

After my MS diagnosis, I had to medically retire from working as a midwife. I loved my job and was proud of the work I’d done so I found this difficult. But since leaving work, I’ve developed some new interests. A few years ago, my husband told me about a notice he’d seen in our local church about a bell ringing group. He told me to give it a go, but I said: “How on earth is somebody like me going to go up there and do something like that?” He kept encouraging me to try it, so I joined about four years ago and it’s been a breath of fresh air. The group have been so welcoming and adapted how I ring so I can join in. They’ve got a seat there so I can do everything seated and have been so inclusive. I’m proud that I’ve been able to learn a new skill.

If I had to give any advice to people who’ve faced challenges like I have I’d say if you have an idea about something and think you can’t do it, have a go and see if you can. I’ve surprised myself with the things I’ve achieved in my life. It might not work out, but why not give it a go?

■ For more information on MS, visit mssociety.org.uk





“I now need a lot more hypo treatments”

Martin Tetlaw, 62, was diagnosed with type 3c diabetes in 2010 following the removal of his pancreas after cancerous growths (neuroendocrine tumours) were discovered. In 2018, the cancer metastasised into his liver. He says:

Until my diagnosis of type 3c diabetes in 2010, I had no knowledge of the condition. I was lying in a hospital bed the night before an operation to remove some neuroendocrine tumours from my pancreas when I was suddenly told the operation had changed, and my whole pancreas needed to be removed. I realised this meant I was going to have diabetes but had no idea how this was going to impact my life going forward. At the time, the term type 3c wasn't used much, so I was told I was type 1 and treated as such. It was only in the last

few years the terminology has been used more widely. For years following the operation, I had regular check-ups and scans to monitor the cancer but, during this time, my personal focus was on diabetes management. I feel very lucky to have received exceptional care from my diabetes team. For the first two years following diagnosis, I was on multiple daily injections, and we tried to find an insulin regimen that worked for me. This proved very difficult, so my consultant put forward a case for me to be on an insulin pump, and I've now had one since 2012. After eight years of scans and check-ups, in 2018 my healthcare team found the cancer had spread to my liver. There were several tumours identified throughout the liver, so the doctors couldn't just remove the section that was affected. It was deemed inoperable and my wife, Nicky, now has to inject me with medication for my liver every 28 days. Because my liver was now affected, it could no longer produce glucose which

had a significant impact on my blood sugar levels so I'm more at risk of going hypo. Luckily, the discovery of cancer in my liver was timed with an expansion of access to continuous glucose monitors (CGM) in my area and I was able to get one. A couple of months later, I also changed pumps and started on a hybrid closed loop system which I still use today. The system works great for delivering insulin when my blood sugar levels are high but it's more limited in its use when my levels are falling because I no longer naturally produce any glucose. My pump can suspend my basal insulin but sometimes that's not enough. I need a lot more hypo treatments now and I get Glucogel on prescription. If I'm out and about, I carry a lot of sweets and chocolate with me. Sometimes, it feels like there's no rhyme or reason for my blood sugar levels acting the way they do. I find I tend to micro-manage my blood sugar levels which, in turn, can make me feel fatigued with diabetes.

A few years ago, I was introduced to the charity Neuroendocrine Cancer UK, and it was the first time in 20 years that I was able to talk to somebody else living with neuroendocrine cancer. It was great to have that support network bringing a new perspective to the challenges I faced with the liver complications and challenges with my blood sugar levels. Over the last few years, I've encountered a few people with type 3c also living with neuroendocrine cancer and it's been great to recommend the Diabetes UK Forum or Neuroendocrine Cancer UK to help them with their journeys. I like to keep active in my spare time and enjoy walking my two spaniels. I also bake and cook a lot but not always successfully! Since my diagnoses, my health has also impacted the lives of my wife and two daughters. It's always great to spend time together as a family. It's good to find enjoyment in things that help take my mind off anything health-related, even if it's just for a little while. **For more information, visit neuroendocrinecancer.org.uk**

Words: Lucy Evans. Photography: Nick Dawe

YOUR TECH REVIEWS

You might be new to diabetes tech, thinking about trying a device, or already using one and looking for tips. Whatever your situation, you might find reading tech reviews from people living with and affected by diabetes helpful on your tech journey



The opinions are the reviewer's own and not necessarily shared by Diabetes UK. This is not a paid advertisement or sponsored content. For individualised advice about your diabetes tech and management, speak to your diabetes team. **For more information about diabetes tech, visit diabetes.org.uk/bal-technology. To find out more about eligibility for diabetes tech, visit diabetes.org.uk/bal-tech-eligibility**

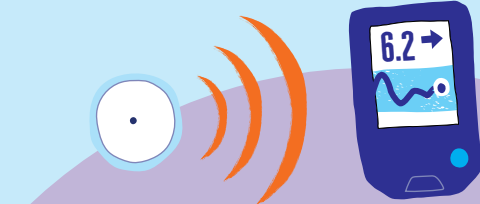
Photography: AdobeStock

KENNETH'S REVIEW



Kenneth was diagnosed with Latent Autoimmune Diabetes in Adults (LADA) in 2009 and uses a FreeStyle Libre 2 Plus continuous glucose monitor (CGM). He says:

The FreeStyle Libre 2 Plus helps me manage my blood sugar levels by allowing me to identify patterns that cause my highs and lows. When I eat something, I can soon see afterwards how it affects my blood sugar levels. I've worked out that I need a higher ratio of protein to carbohydrate, which I agreed with my healthcare team, and my blood sugars are more stable as a result. Since having my CGM, I no longer need to prick my fingers eight times a day. I drive for a living, and my CGM gives a good guide to my sugar levels during the day. If the reading is above 5mmol/l, I know I'm OK to drive. Before using the FreeStyle Libre 2 Plus and after moving on to insulin, which made me prone to hypos, I had to check my blood sugar levels every 2 hours with a finger-prick test while driving. I still need to check my levels every 2 hours with a CGM, but I've found it easier than finger pricking. I work at supermarkets and drive to six or seven of them every day. My job involves a lot of physical activity, and my blood sugar can suddenly drop without warning, so it's helpful to have the glucose alarm the device provides. If my blood sugar goes below a certain level, my phone will beep, and I know I need to eat some carbohydrates. My healthcare professional can also see my glucose data so they can help me tweak my insulin doses, if needed. This was particularly helpful when I switched insulins. There are no limitations for me in terms of the actual device. It works well for me, and I found it easy to set up and use the app, which shows the sugar level readings on my phone. My Libre 2 Plus is funded by the NHS. But I'd say it's a limitation that not everyone with diabetes is eligible for this device on the NHS. When I asked my GP for funding for a CGM, I think it helped that I'd tried one before in a free trial, and I could say it had worked well for me. I think being on insulin was the deciding factor. But I did push for the device. **For more information about diabetes and driving, visit diabetes.org.uk/bal-driving-licence. To find out more about LADA, visit diabetes.org.uk/bal-lada**



DIABETES AND EMOTIONAL EATING

Our experiences with food and emotions can vary widely and, for some people, they can be closely linked. Eating in response to emotions is normal from time to time, but if this happens often, it could have an impact on your health and diabetes management

Words: Lucy Evans. Photography: Adobestock, fizkes

➔ If you live with diabetes or prediabetes, you may experience all kinds of emotions from feeling overwhelmed if you're newly diagnosed to feeling anxious about an upcoming appointment. At other times, you might also be feeling positive emotions if your blood sugar levels have been within your target range. For some people, emotions can influence what or how they eat, sometimes referred to as 'emotional eating'. This may be linked to negative emotions such as anxiety, fear or frustration, or positive emotions such as feeling excited, happy or loved. Certain life events or experiences can also play a role. For example, being stressed at work or worrying about money may lead some people to seek comfort in food, while celebrations like weddings, holidays, or birthdays might involve eating foods you don't usually have or larger portions than usual as part of the occasion. Experiences with food and emotions vary widely, but recognising these patterns can help some people better understand their eating habits and food choices.

If you notice that emotions often influence your eating, it can help to develop strategies to help you identify, express and manage feelings rather than relying on food alone.

For some people, emotional eating can become a cycle. It could look like this:

- **Feel an emotion – for example, bored, angry, excited**
- **Eat to regulate emotional state**
- **Feel better in the short-term**
- **Feel guilty or ashamed**
- **Eat to regulate negative emotions, and the cycle continues**

How do I know if it's emotional eating?

Emotional eating will look different for everyone. Some common signs that emotions may be influencing your eating include:

- **You reach for food as a reward**
- **You find food soothes or calms you**
- **You have an urge to eat when you feel strong emotions**
- **You notice it's hard to stop eating certain foods once you start**

- **You want to eat when you're not physically hungry**
Recognising different types of hunger can help you understand your eating patterns.
- **Stomach hunger is the signal that your body needs to be fed. You might have an empty feeling in your stomach, feel irritable, have a headache or feel fatigued.**
- **Mouth hunger is when one of your senses triggers a desire to eat. This could be smelling or seeing food/images of food or hearing food-related sounds such as a packet being opened.**
- **Heart hunger is a desire for food that stems from an emotion, memory or thought, or about your sense of self. It develops suddenly and occurs in your mind. Eating often leads to guilt and/or shame, rather than satisfaction that comes with eating in response to stomach hunger.**

Being aware of these signals can help you make more mindful choices, especially by noticing when you want to eat even when you're not physically hungry.

How might emotional eating affect my diabetes?

For some people living with diabetes, emotional eating may make blood sugar levels harder to manage, particularly if it leads to eating at times when you hadn't planned to, or choosing foods that affect blood sugar levels. Occasional short-term high blood sugar levels won't have an impact on your long-term management. But if your levels remain high for long periods of time, this can increase your risk of complications. It's important to work with your diabetes team to understand how best to manage your diabetes around eating and drinking. This is to help you keep your blood sugar levels within your individualised target range.

It's important for everyone to eat well, whether we live with diabetes or not, and eating a healthy, balanced diet is a key part of managing diabetes. Sometimes, when people eat food for comfort, they may choose foods that are

higher in fat and sugar, such as chocolate, cake or biscuits. These foods can activate the brain's reward system, releasing chemicals such as dopamine that may provide temporary positive feelings or relief from stress. Also, when we're stressed, our bodies release a hormone called cortisol which can make high-fat and high-sugar foods more appealing, sometimes leading people to choose foods they wouldn't normally eat.

"Once you understand what's causing your emotions, you can start to understand the reasons behind why you're reaching for certain food"

Although it may be common to have a desire for high-sugar, high-fat foods, especially during times of stress, noticing when you reach for them can help you manage emotional eating and support your overall health. We have some tips to help you.

How can I manage emotional eating?

Identifying your emotions and understanding where they're coming from is an important first step towards managing emotional eating. Once you understand what's causing your emotions, you can start to understand the reasons behind why you're reaching for certain foods. You might want to try using our Food and Mood Diary to monitor what you're eating and how it makes you feel before and after: diabetes.org.uk/bal-food-and-mood-diary. Tracking your eating habits in this way can also be a starting point to understanding the importance of a healthy, balanced diet for both your body and your mind.

Try to notice when you're eating without feeling physically hungry, and approach these moments without judgement. Once you've identified the reasons behind the impulse to eat, you can start to look for other ways to express your feelings. For example, if someone else is causing your emotions, such as a

friend doing something to upset you, you might be able to tell them how you're feeling. This might not always be possible and there are other ways you can express emotions without turning to food.

Figure your trigger

Use this template to identify when emotions may be influencing your eating: 'I am... at... because...'

Some examples of this could be 'I am cross at myself because I didn't get my work finished.' Or 'I am upset at my partner because they forgot our anniversary.'

Once you've identified the trigger, try expressing your emotions in a safe, risk-free way. This could include:

- talking to a trusted friend or family member
- journalling or writing down how you feel, even if you tear it up afterwards
- expressing yourself in a safe, physical way, such as exercise
- distracting yourself by doing something you enjoy like reading a book
- taking yourself somewhere quiet to have a cry.

It's normal if you sometimes continue to eat in response to emotions, but noticing and understanding the reasons behind it is a positive first step. Emotional eating can have roots in childhood and early experiences, and you may need support

in identifying the root cause. Managing emotional eating can be difficult and getting support can be an important step in your journey. Speak to your diabetes team as they'll be able to advise what support is available to you. There might be a psychologist or counsellor in the team they can refer you to.

Make healthy swaps

It's important for all of us to eat a healthy, balanced diet, and enjoying treat foods from time to time is OK in moderation. But if this is becoming a regular pattern, making a few simple food swaps can be a good step towards maintaining a varied, balanced diet. Here are some places to start, by swapping:

- a packet of crisps for plain popcorn
- milk chocolate for two or three squares of dark chocolate. Dark chocolate has a more intense flavour, so you'll need less
- ice cream for a frozen banana or frozen unsweetened yoghurt with berries
- sweets for frozen grapes or frozen blueberries
- sugary drinks, energy drinks and fruit juices with water, plain milk or tea and coffee without sugar.

Some people might find they have an increased urge to emotionally eat at night. Our emotions can feel heightened in the evenings when there are less things to distract us, so this desire may be

stronger later in the day.

Eating frequent late-night snacks over time can lead to weight gain and affect your diabetes management. This is partly because you're less able to use the calories in night-time snacks for energy as you need less energy when you're sleeping. If you do find yourself hungry and in the need of the occasional snack at night, try a piece of fruit or vegetable sticks. You could also try a small handful of unsalted nuts and seeds, oatcakes, rice cakes, wholegrain crackers or unsweetened yoghurt.

You might find it helpful to try alternative coping mechanisms if you notice you tend to snack in response to emotions in the evenings or at night. Try talking to a loved one, journalling, meditating or doing some light exercise like yoga.

Getting support

Many people notice they use food for comfort or as a reward – this is a common experience, but there are other ways to manage emotions or celebrate. If you find food is your go-to coping mechanism in response to emotions, there is support available to you. Speak to your diabetes team or GP for support. They'll be able to signpost you to services or resources to help.

If you live with any type of diabetes, prediabetes or look after someone with diabetes and you're worried about emotional eating call our helpline on 0345 123 2399 or email at helpline@diabetes.org.uk. You can also reach out to others on our forum to share your experience and get advice from others affected by diabetes at diabetes.org.uk/bal-forum

Support with eating issues is also available through Overeaters Anonymous, a community of people who support each other to recover from compulsive eating and food behaviours. Visit their website at oagb.org.uk

CROSSWORD

TO ENTER:
Send the grid to the Balance
address – Diabetes UK, 126 Back
Church Lane, London E1 1FH.
See T&Cs, below.



ACROSS

- 1 Water channel, trunking for electrical cable (7)
- 5 Large tooth (5)
- 8 Mother-of-pearl (5)
- 9 Modern-day witchcraft (5)
- 10 Anne Brontë novel, ___ Grey (5)
- 14 Small migratory bird of the thrush family (7)
- 16 Contagious respiratory disease (5)
- 17 Music for a film (5)
- 18 Additive in E10 petrol (7)
- 22 Coarse fibre derived from a Mexican agave plant (5)
- 25 Poster of a hearthrob (3-2)
- 26 Drug derived from poppies (5)
- 27 Hydrated magnesium sulphate, ___ salts (5)
- 28 Greek goddess of divine punishment, arch-rival (7)

DOWN

- 1 Large South American vulture (6)
- 2 Narrow part of a bottle (4)
- 3 Organic compound in urine (4)
- 4 Wrongdoing, sin (13)
- 5 Stables converted into dwellings (4)
- 6 Light delicate cloth (4)
- 7 (Eg, horse) of mixed colour (4)
- 11 Mass of insects (5)
- 12 November's birthstone (5)
- 13 Public outdoor swimming pool (4)
- 15 Latin term meaning 'behold the man' spoken by Pontius Pilate, ___ homo (4)
- 19 Material used for pH testing (6)
- 20 Fencing sword (4)
- 21 Burden (4)
- 22 Unwanted emails (4)
- 23 Weaving apparatus (4)
- 24 Partiality (4)

1		2		3		4		5		6		7
8								9				
				10								
			11						12		13	
14	15							16				
17							18					19
20		21		22				23		24		
25								26				
27							28					

Name _____

Address _____

Postcode _____

SOLUTION for last issue's crossword:
ACROSS: 1 Array, 6 Monorail, 7 Toll, 9 Rue, 10 Helm, 12 Cognac, 13 Tartan, 15 Custom, 17 Elixir, 18 Doll, 20 Eli, 21 Ankh, 22 Argonaut, 23 Float. DOWN: 1 Acetic acid, 2 Axel, 3 Anaesthetist, 4 Arthur, 5 Dill, 6 Morecambe Bay, 8 Lagos, 11 Monarchist, 14 Toxin, 16 Tallow, 19 Okra, 21 Aral.

T&Cs: 1. Opens 28 May 2026. 2. Closing date is 28 August 2026. 3. The prize is a voucher for M&S, worth £50. 4. Open to UK residents aged 18 and over. 5. Promoter: The British Diabetic Association operating as Diabetes UK (English charity no 215199 and Scottish charity no. SC039136), Wells Lawrence House, 126 Back Church Lane, London E1 1FH. 6. Go to diabetes.org.uk/bal-comp-terms for full T&Cs.



REWRITING THE SCRIPT

From film and TV to social media, portrayals of diabetes can shape our view of it. Accurate portrayals can help those with diabetes feel seen and heard, while inaccurate ones can stir up feelings of judgement or blame (also known as stigma). We explore how popular culture both helps and hinders understanding of diabetes...

➔ When type 2 was diagnosed as “a very mild case of diabetes” by a doctor on a home visit to a grandmother, adding “in a couple of days you’ll be as right as rain”, audiences watching the 1990 film ‘The Witches’ may have felt this was a way to reassure the character of the young grandson at the patient’s bedside. A holiday by the seaside was recommended by the doctor to help

restore the grandmother’s health, so she would be “as good as new”. It was an early and memorable reference to the condition on the big screen. Adapted from Roald Dahl’s book, the portrayal reflected misunderstandings about type 2 diabetes at the time.

And with type 1, it’s no surprise that Hollywood favours drama over reality, but this can lead to misrepresentations

of how health emergencies actually unfold and are treated. Take the 1997 action film ‘Con Air’. When one of the prisoners with the condition becomes increasingly unwell (around 30,000 ft in the air, no less), the tension and chaos rise until he receives an emergency insulin injection and makes an instantaneous recovery. This story arc overdramatises and distorts the

reality of managing type 1 diabetes – even during emergencies.

Fast forward over a decade to the 2009 action comedy, ‘Paul Blart: Mall Cop’, and we see type 2 used as a punchline, again, rather than an accurate portrayal, with the film positioning hypoglycaemia (low blood sugar) as an amusing inconvenience. A scene where the character instantly recovers from a hypoglycaemic event after eating a lollipop can be seen as trivialising the condition, risking public misunderstanding of diabetes with this inaccurate portrayal of a hypo.

There are many more portrayals in popular culture, some that may pass people by and some that stand out more than others. But when you’re living with diabetes, the occasional inaccurate ‘jokes’, exaggerated emergencies or simplistic storylines can feel frustrating. They can also translate into real-life judgement – from being ‘blamed’ for a diagnosis to having symptoms dismissed or misunderstood. This can leave people living with diabetes feeling pressured to repeatedly explain their condition or correct assumptions around areas such as food. When media representations fall short, that burden can grow, resulting in stigma rather than understanding.

While writers and producers aren’t expected to be experts in health, it’s important that health-related storylines and plots are more realistic in how they portray people living with diabetes and the situations surrounding the condition.

Positive portrayals

But it’s not all doom and gloom. Recent years have seen a more positive, realistic uptake of diabetes representation on the big screen.

The 2022 children’s movie ‘Turning Red’ shows how subtle representation can have a positive impact. Two characters are seen wearing diabetes tech, with no explanation or acknowledgement. This doesn’t affect how they are perceived or what they can do, quietly supporting the message that

diabetes doesn’t define a person or limit their potential. Last year, toy company Mattel even launched a Barbie doll with type 1 diabetes, complete with a continuous glucose monitor (CGM) and insulin pump. The company, which designed it in partnership with Breakthrough T1D, says it is intended “to enable more children to see themselves reflected and encourage doll play that extends beyond a child’s lived experience”.

Another thoughtful approach towards diabetes representation is the portrayal of characters like Stacey McGill in the Netflix series ‘The Baby-Sitters Club’. She has type 1 and wears a CGM and insulin pump. Again, these are just part of her daily life, and, while not the focus of her character or story, she does talk about her diabetes, acknowledging the emotional side that is part and parcel of living with the condition.

“It’s important that health-related storylines and plots are more realistic in how they represent people living with diabetes”

There are times when Stacey expresses how she feels that her mum is ashamed of her, encouraging her to buy clothes that hide her pump. Stacey says she wishes things could go back to before she was diagnosed with type 1. They serve as thoughtful examples of the stigma someone living with type 1 can face.

At Diabetes UK, we’re well aware of the importance of diabetes representation, and we’ve stepped in to support various storylines in the entertainment industry.

Back in 2021, we worked closely with the producers of ‘Coronation Street’ to support an accurate portrayal of type 1 diabetes following teenager Summer Spellman’s diagnosis. By advising writers, reviewing scripts and sharing lived experiences, we helped raise awareness, improve understanding of symptoms, and challenge common misconceptions around living with type 1 diabetes.

Diabetes UK’s work on stigma

Diabetes UK has put tackling misconceptions and misinformation at the heart of its work on stigma, recognising that negative assumptions about diabetes harm people’s wellbeing and access to support.

Our ‘Strike Out Stigma’ campaign, launched around World Diabetes Day last November with the message, ‘Let’s change how we talk about diabetes’. We challenged the misconceptions and judgemental comments directed at people living with diabetes which contribute to blame and shame. The campaign urges for accurate media reporting, more empathetic healthcare appointments, and better support from friends and family.

To further understanding of stigma’s roots and effects, we have committed significant funding to research projects focused on the experiences of people with type 1 and gestational diabetes. This is our largest investment into stigma research to date, and its findings will be used to inform future actions and educational resources.

To help strengthen this work, we have worked with our Stigma Volunteer Panel, which is made up of people living with different types of diabetes, ensuring our plans are shaped by those with lived experience. Panel members help shape resources, campaign messaging and future initiatives aimed at challenging misconceptions.

■ You can join the campaign and access resources to challenge stigma by searching ‘Strike Out Stigma’ or visiting diabetes.org.uk

STRIKE OUT STIGMA

Monitoring social media

With UK adults now spending an average of four-and-a-half hours online each day,* it's important to be aware of the role social media plays in forming our perceptions. It influences how people understand and discuss many topics, including important health conditions like diabetes. It's also a hotspot for misinformation.

Of course, there's plenty of credible and valuable information on social media platforms, including those from healthcare professionals, charities and patient advocates, who use them to explain complex health issues, share lived experiences and challenge outdated ideas. But it's best to speak

to your healthcare team about any health concerns you have to ensure that you are getting the right support.

On the flip side, posts may suggest that diabetes is only caused by 'eating too much sugar' or 'having an unhealthy lifestyle', for example. And some influencers without medical expertise may share claims that are too simple, inaccurate or lack context. This kind of content can circulate faster than evidence-based information, especially when it connects to diet or wellness trends.

Misinformation can also be mixed with partial truths, making it even harder to spot. Consumer group Which? found that it's not just misleading posts we need to watch out for, but also health ads for

diabetes products on social media. It's important to be cautious and never buy health products online without first discussing them with your diabetes healthcare team.

"Misinformation can also be mixed with partial truths"

To find out more about how to spot misleading or incorrect information, see the box 'Misinformation and disinformation: What's the difference?' on the left of this page. There's also an additional concern about deepfakes – AI-generated images, videos or audios designed to impersonate real people or scenes. Last year, news outlets reported that some videos posted to social media mimicked well-known UK doctors and promoted fake cures for diabetes and other conditions. This makes misinformation harder to recognise and more convincing.

You can read more about AI and health information in our special report 'A matter of fact', right.

Although we have greater awareness of diabetes today, and there are many more positive examples in popular culture, social media is a fast-moving space where misinformation and stigma can still thrive. It's vital that trusted messages from charities, healthcare professionals and people with real lived experience continue to be heard, and that misleading information takes a back seat.

Misinformation and disinformation: What's the difference?

Misinformation is when someone shares incorrect or misleading information without realising it's false. It's sometimes referred to as 'fake news'. Misinformation can be shared really quickly on social media, and algorithms will then show content that is similar to what a person has previously viewed. This content may also be inaccurate or untrustworthy, but because people are repeatedly seeing it, this can make false claims seem more believable and lead to trust in these unreliable sources.

Disinformation is when someone shares false information on purpose to mislead people, change their opinions or cause harm. This can include fake stories, edited images like deepfakes, or content intended to unfairly target or stigmatise a group.

WHY IT MATTERS

- Both misinformation and disinformation can affect how people think and act.
- Disinformation can be especially harmful because it often leads to fear, blame or hostility toward others.

HOW TO SPOT

UNRELIABLE CONTENT

- Check whether images or videos have been edited or used in the wrong context.
- Be careful with dramatic headlines or language that tries to create strong emotions.
- Try to check information with trustworthy, independent sources.

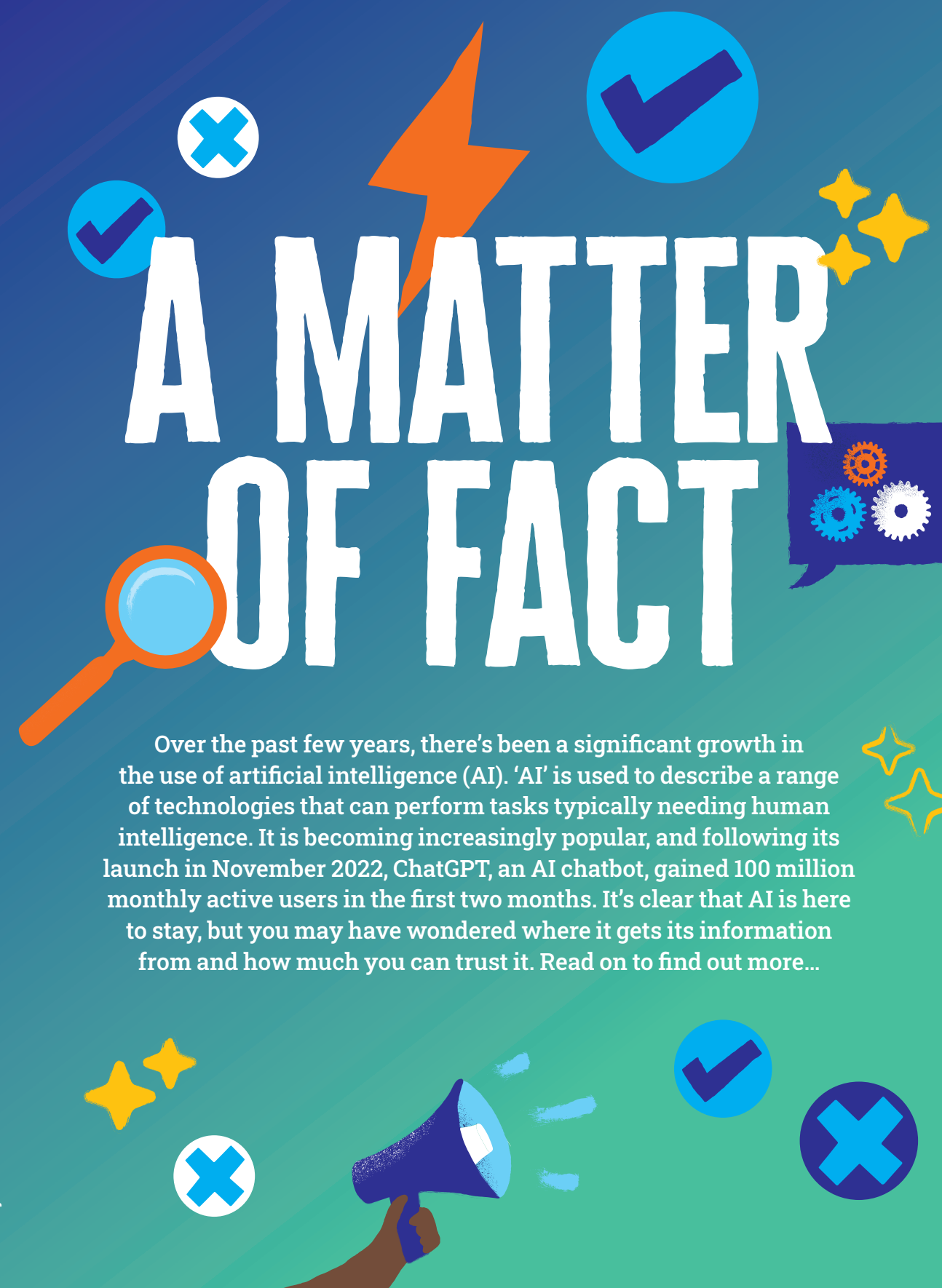
WHAT YOU CAN DO

- Question what you see.
- Encourage others to think about where information comes from and why it is being shared. But remember, not every post needs a response from you. It's important to look after your mental health and wellbeing.
- You can learn more about misinformation and 'fake' news from organisations like Stop Hate UK at www.stophateuk.org
- If you find the portrayal of diabetes in the media upsetting or inaccurate, you can get in touch with us by emailing helpline@diabetes.org.uk or calling 0345 123 2399.

Socials you can trust

For sources of accurate and trustworthy information, find our channels and connect:

- facebook.com/diabetesuk
- instagram.com/diabetesuk
- x.com/DiabetesUK
- tiktok.com/@diabetesuk



Words: Lucy Evans.

➔ Generative AI

There are different types of AI, and the one you’ve most likely come across is generative AI (GenAI). GenAI creates text, images, video or audio using patterns it has learned based on a question or prompt inputted by a user. Large Language Models (LLMs) are one type of GenAI that generate text by predicting likely sequences of words that usually go together. Rather than thinking like a person, LLMs and GenAI work like a sophisticated prediction engine, generating content based on what it’s learned from training data. Some GenAI systems search the internet for data. Other tools, like chatbots, generate answers from older training information, which means the answers could be incomplete or out of date. The AI then provides an overview of relevant information it has found. ChatGPT is an example of a GenAI.

You may have seen AI used at the top of search engine results when you’ve been looking for information and advice online about diabetes. These are AI summaries and are another type of GenAI. They work by very quickly searching the internet for data relating to your question or search and providing a succinct summary of this information. Some people find AI overviews convenient, as it saves them from navigating search results to find the answers they need. However, there are some things to be aware of when using any type of GenAI, especially when looking for information about your health.

Potential risks

Some health charities and organisations have concerns about the rise of AI summaries as they can contain misleading or incorrect health information, which could put people at risk of harm.

But if AI is using information that already exists, how can it be misleading? That’s because it will search a large number of available sources, meaning that any incorrect, outdated, or exaggerated answers could be included

in its summary. Also, if most online information focuses on one particular group, for example, men rather than women, AI may repeat the same gaps. It might leave out symptoms that present differently in some groups or overlook important risks.

AI tools may also produce an ‘AI hallucination’. This is when it generates information that sounds confident but isn’t true. It may invent facts, misinterpret information or mix ideas together in a way that is wrong. This can happen because the tool generates information based on patterns rather than verifying information.

“AI tools will search a large number of available sources meaning that any incorrect, outdated, or exaggerated answers could be included in its summary”

Health charities and organisations are urging the public to look beyond AI summaries and visit trusted, evidence-based sources for additional information and context. Read on for our tips on finding trusted health information.

Finding information you can trust

With lots of different information available to us at all times, both AI-generated and not, it can be tricky to know what you can trust. And it can feel overwhelming to sift through all the available information and decide what’s reliable.

Here are our tips for finding accurate, reliable health information online:

- Health information from the NHS and Diabetes UK is reliable and trustworthy and has gone through a rigorous process before being published. Information from other national health charities may also be reliable.
- Check that any type of information you come across is correct for where you live. Information and services can differ by region or the four UK nations. For example, eligibility for diabetes

technology can differ between England, Scotland, Wales and Northern Ireland.

- Check whether the information has a review date. Diabetes UK health information should be stamped with two dates: the date it was last reviewed and the date it will be reviewed next. You can find these dates at the bottom of some of our health information on our website.
- It can help to double-check information you come across. Check another organisation’s website about the same topic to see if they say the same thing. If they do, it can help you feel more confident in what you’re being told.
- Look for mentions of sources or medical evidence. The information might refer to credible research studies.

Diabetes UK has lots of trusted health information that you can access for free. Our website provides evidence-based information on all types of diabetes, advice for living well with diabetes, and details on treatments and technologies.

We also have a range of printed resources available for free on our online shop. Our information has been created alongside our dedicated clinical team who ensure information is accurate and appropriate for our audience, as well as people living with diabetes so that it’s relevant to you. All our content goes through several quality checks, including the articles you read in Balance, before being published.

- You can find our online health information at diabetes.org.uk and order or download a guide at diabetes.org.uk/bal-shop

Look for the PIF TICK

The Patient Information Forum (PIF) TICK is a logo that appears on health information webpages or printed guides, leaflets and posters, which shows the information can be trusted. It means the information was created following a rigorous process to ensure it is accurate, up to date, and reliable. It also means it has passed certain quality checks. If health information has a PIF TICK, it means:

- It’s been written based on the most up-to-date medical evidence.

- It’s been written or checked by people with medical expertise.
- People living with or affected by the health condition have been involved in developing the information.

The PIF TICK looks like this:



Checking AI sources

If you read an AI summary, you might notice website links to the side or below the overview. These are clickable links that will take you to the sources the AI used. You might find it helpful to click on these links and read the source information yourself. This can provide more in-depth answers to your query and offer more context that the AI summary may have been missing.

However, it’s important to check that the sources linked are reputable and reliable themselves, as AI gets its information from a large database of sources with varying degrees of accuracy. Website links to information from the NHS or Diabetes UK can be trusted. Links to other national health charities may also be trustworthy. You can click on the link and use our tips to determine if you think the information is reliable and accurate. Links to Wikipedia articles or forum threads, such as Reddit, may be less trustworthy. If you’re not sure if the sources are reliable, check the actual search results underneath the AI summary instead.

Health information and videos

Health information is available online in several formats, not just text. For example, social media and video-sharing apps such as TikTok, YouTube, and Facebook host an abundance of videos providing viewers with health advice. Some of these videos will be more

reliable than others, and GenAI can even be used to make them.

Earlier this year, a hospital trust in London issued an alert after AI-generated videos circulating on social media falsely showed doctors endorsing weight-loss products. The video claimed they were real doctors working at the trust. However, the trust confirmed that these doctors didn’t work there and weren’t real people. The video signposted viewers to a product that could be bought on reputable online marketplaces, but real doctors said they couldn’t confirm whether it would work. Experts believe this was likely a scam product.

Videos like this can spread very quickly online, leading to further disinformation and viewers potentially buying into a scam. It’s important to check any health information videos you come across to ensure the advice they’re giving, and any products they’re selling, are legitimate.

“With AI-generated videos and images becoming increasingly realistic, it can be tricky to work out what’s real or fake”

AI-generated videos and images are becoming increasingly realistic, so it can be tricky to determine what’s real or fake. Here are some things to spot:

- Logos: Sometimes, logos of software used to create an AI-generated video may appear on the video itself. Examples of logos to look out for are Veo and Firefly.
- Unnatural movements and expressions: AI mimics broader human expressions well, but it can struggle with subtleties. Look for stiffness, jerky movements or inconsistencies in blinking. These can be hard to spot, so it’s best to trust your instinct.
- Lighting, shadows and textures: AI-generated videos often show inconsistencies in lighting and shadows, which may appear unnatural or strange. If you notice flickering lights, unnatural shadows, or objects suddenly appearing/disappearing, looking warped

or moving into unusual shapes, the video is probably AI-generated.

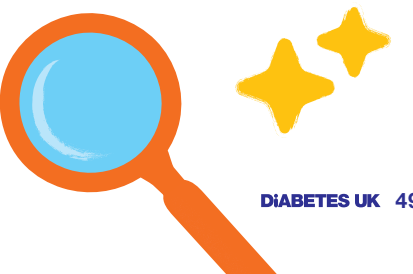
If you come across a video you think is AI-generated and is trying to sell you a product, such as parts of a diabetes kit, like a blood glucose meter, it’s best not to interact with it and report it if you think it’s a scam. You can find a ‘Report’ button on social media platforms or report it to the Advertising Standards Authority at asa.org.uk/make-a-complaint/report-an-online-scam-ad.html If you aren’t sure if a video is AI-generated or if the product is a scam, ignore it and talk to your healthcare team for their advice.

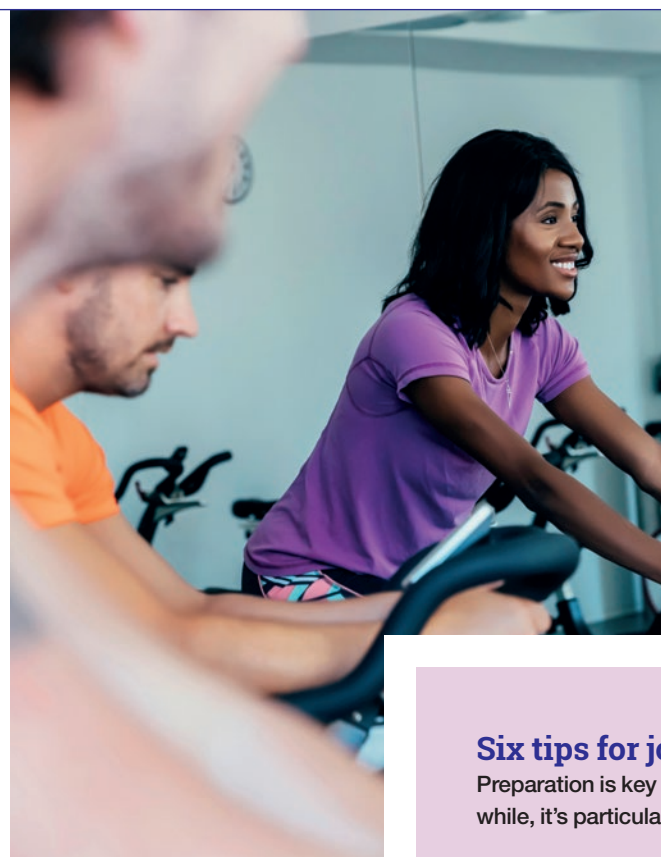
Videos on the Diabetes UK YouTube channel go through a rigorous process of development, in the same way as our online and printed content. They’re a part of YouTube’s Health Shelf scheme, a feature that highlights trustworthy health information from verified sources. Our videos are checked by our clinical team who specialise in diabetes and involve people living with diabetes in their development. Our videos provide accurate, trustworthy and reliable health information. You can view our YouTube channel at diabetes.org.uk/bal-youtube

Getting extra support

It’s always best to speak to your healthcare team if you have any questions about health information you’ve read online, whether it’s generated by AI or not. Your healthcare team will be aware of your individual circumstances, so they will be able to offer specialised advice and signpost you to reliable sources of information.

- For more reliable and accurate information about diabetes, visit diabetes.org.uk or our shop at diabetes.org.uk/bal-shop





fitness

BEST IN CLASS

There are lots of benefits to being part of a group when you're trying to keep fit or are getting physically active for the first time in a while. From spin and dance classes to Pilates, tai chi or walking football, there's a world of group activities out there just waiting for you to join in. Read on for ways to get the most out of exercise classes

➡ Some things are best done together. Take physical activity – studies indicate a wide range of advantages to exercising as part of a group versus going solo. This includes lower drop-out rates, higher exertion levels and greater long-term physical and mental health benefits. Plus, it's more fun.

When you begin a new physical activity with new people, it can feel daunting, especially if you're living with diabetes and have been inactive for a while. But don't let that put you off – the benefits of moving more outweigh the risk, no matter your level of fitness or mobility, as long as you take the right precautions. So, where to start?

"Wherever you live, you're often not far from a wide range of local group activities," says Neil Gibson, Diabetes UK Senior Physical Activity Advisor. "Start by looking at the local council's website, notice boards or local leisure centres to get an idea of what's available before taking the plunge."

We all know that first step can be the hardest, so Neil has some tips for putting your best foot forward. "Even sports pros can get that fear of the unknown or imposter feelings," he says. "Enlisting a friend for a first session or visiting as an observer before you start can help overcome it. First-time nerves are natural, but things are never as scary as you imagine."

Words: Robert Brown. Photography: AdobeStock, Centre for Ageing Better

Six tips for joining classes with confidence

Preparation is key for anyone starting a new activity. If you're living with diabetes or have been less active for a while, it's particularly important. We've put together a checklist so you can start that new class with confidence...

1 VISIT YOUR HEALTHCARE TEAM

Before starting any new activity, it's a good idea to speak with your diabetes care team to discuss the best ways to manage your diabetes before, during and after exercise. Things to consider include nutrition, varying your insulin dosage on class days and monitoring your blood glucose levels.



2 ARRIVE EARLY ON YOUR FIRST FEW SESSIONS

Getting to know your instructor before a class helps dispel any last-minute nerves, as well as giving you an opportunity to inform them that you have diabetes. Any trained sports instructor should be familiar with the condition, but it's worth explaining what they should do if you need help during the class. Point out where your hypo treatment and diabetes kit are, in case they're needed.



3 PACK YOUR DIABETES KIT

This goes without saying, but it's easy to forget. Always make sure you have hypo treatment to hand while exercising, as well as a blood glucose monitor and insulin, if you're taking it. If you wear them, consider how secure your continuous glucose monitor and/or insulin pump is, and how exercise may affect this – some people secure their kit with sports tape, or remove it during activities.



4 CHECK YOUR LEVELS

Physical activity can raise or lower blood sugar. That's why it's important to monitor your levels before, during (if possible) and after taking part in a class. Lower intensity activities like walking or water aerobics are more likely to cause blood sugar levels to fall over time, while more intense exercise like lifting weights or HIIT (high-intensity interval training) can cause them to rise and then drop.



5 BE REALISTIC

Join a class that suits your current fitness level – not where you'd like to be. Going too hard too soon increases the risk of injury and can make managing your blood glucose levels more difficult. Slowly building up intensity, duration and how often you take part in classes is the best way to progress and stay motivated.



6 ENJOY!

Forget 'no pain, no gain'. Physical activity should be fun. People don't just join exercise classes for the physical benefits – they also do it to meet like-minded people and enjoy themselves. So, if a certain activity isn't doing it for you, find something that does, put on your best smile and get out there!





Walk one million steps with Diabetes UK and Better Gyms

This summer, we're asking people to step up and support people living with diabetes by taking on our One Million Step Challenge, from 1 July to 30 September 2026.

Your support – through stepping and raising funds – will help us fund more vital research into new treatments and keep campaigning for better care and support for people living with the daily juggle of diabetes. There are three distances to choose from:

- Half a million steps (or 5,400 steps a day)
- 1 million steps (or 10,800 steps a day)
- 1.7 million steps (or 18,400 steps a day).

We know these distances might sound like a lot, but breaking it up into smaller daily chunks helps it feel more manageable, and you may just surprise yourself!

All you need is a pedometer, smart phone or watch, to track your steps and every step counts – walking the dog, doing the housework, or having a boogie! And you can take it at your own pace, building the challenge into your daily routine and creating lasting habits.

We've also teamed up with Better Gyms to give everyone taking part in this year's challenge a special, reduced-rate Flex Membership for a fixed four-month period at any of their leisure centres across the UK.

Participants get up to 30% off the gym, pool sessions, and fitness classes. Many of Better Gyms' facilities also run walking groups, giving people a great way to get their steps in while making new friends.

■ Visit diabetes.org.uk/bal-better-gyms to find out more.

Spoilt for choice

Once you start looking, you're likely to be pleasantly surprised at just how much choice in group activities there is out there. Those with a competitive streak could consider local sports teams, or walking versions of football, cricket, netball or basketball if you're a little less active. Dance workouts, high-intensity interval training (HIIT) and spin classes might appeal to thrill seekers, while yoga, Pilates or tai chi may suit people looking for something more sedate.

"Any activity that raises the pulse counts towards the 150 minutes of physical exercise the NHS advises we should all be getting every week – start at the level you are at and not the level you'd like to be at," says Neil. "And remember that you don't have to be pumping iron five times a week to stay active."

Getting out for nature walks or going birdwatching with local groups can also be fun ways to get more active. There's a wide range of chair-based classes that incorporate yoga and resistance bands, for example, run by your local council if you're not used to being out and about. Joining bowls or golf clubs, or even water aerobics classes, are also fun options worth considering.

Be prepared

Neil advises contacting your diabetes care team before starting any new activities to ensure you're properly prepared. It's also important to have your diabetes

kit to hand while taking part in group activities. This could include anything you normally need to use, such as hypo treatment, your blood glucose monitor and insulin.

"We understand people might not want to tell everyone about their condition, but it is worth telling at least one person in your group about your diabetes in case you need help during an activity," adds Neil. "Because people

"56%

of Brits say they're more likely to stick to a fitness plan if there is a social element to it"

who have diabetes can be prone to foot problems, you should also ensure your footwear is appropriate and fits well – and inspect your feet regularly for any injuries."

It's worth taking these steps because the rewards of moving more are huge. Physical activity can help people maintain a healthy weight, build muscle and boost circulation and flexibility. Crucially for people who have diabetes, it also helps our bodies use insulin more effectively, lowers blood sugar levels and can even help people with type 2 diabetes stay in remission.

Reap the benefits

The benefits aren't just physical. "Exercise helps release those feel-good hormones that can really boost your mood, self-esteem and confidence while lowering stress levels and anxiety," says Neil. "Exercising with others has that extra feel-good factor because of that social connection with like-minded people. You're all in it together."

This makes people more resolved to continue taking part. More than half (56%) of Brits say they're more likely to stick to a fitness plan if there is a

Photography: Diabetes UK, Unsplash



fitness

social element to it, one 2025 study found. The same study revealed that one in four people in Britain (25%) are already part of a fitness community, and 31% of those people view exercise as their main way of socialising.

"You get a real sense of community and camaraderie by exercising with other people, as well as a heightened

sense of accountability because you don't want to let people down by not showing up if the weather's bad or you don't feel motivated," adds Neil. "The data shows the social side of things really helps people stay consistent and keep showing up."

And the more often you do that, the healthier and happier you'll be.

SPEAK WITH YOUR HEALTHCARE TEAM

It's good to be active, but it also needs to be done safely. Before trying any new physical activity or exercise, including those you do at home, it's important to check with your healthcare team first. They can help you decide what's safe and consider any complications you have.

KEEP YOUR INSULIN SAFE FROM THE HEAT

BreezyPacks keep your medication safe from the heat all day, and regenerate overnight.



No refrigeration



No soaking in water



No electricity



TSA approved

Trusted by over 50,000 users

Get yours at
[WWW.BREEZYPACKS.COM](https://www.breezypacks.com)

10%
OFF
Using Code:
BALANCE



BreezyPacks

Breezy_packs

Bring the sunshine home

Back from holiday? Now's the time to try these delicious recipes to help you recreate healthy versions of the dishes you loved on your travels

Kisir salad

This lightly spiced Turkish salad is traditionally served as part of a meze with other dishes like hummus at the start of a meal

Serves 1 | Prep: 5 mins,
plus soaking time

VEGAN

- 50g bulgur wheat
- 120ml boiling water
- 1 tsp tomato purée
- 1 small tomato, roughly chopped
- 1 baby cucumber, chopped
- 1 spring onion, thinly sliced on the diagonal

- ½ red chilli, deseeded and very finely chopped
- 1 tbsp chopped pickled jalapeños
- 10g dry roasted, chopped hazelnuts, no salt added
- 1 tbsp fresh chopped mint
- 1 tbsp fresh chopped flat-leaf parsley
- 2 tbsp pomegranate seeds
- 1 lemon wedge
- Freshly ground black pepper
- 2 iceberg outer lettuce leaves

1 Place the bulgur wheat in a small saucepan and pour over the boiling water. Bring to the boil, turn off the heat, cover with a lid and set aside for 15 to 20 mins or until all the water has been absorbed.

2 Fluff up the bulgur wheat with a fork

and stir in the tomato purée, and combine until all the grains are coated. Stir in the remaining ingredients, and season to taste with a squeeze of the lemon wedge and freshly ground black pepper.

3 Line a serving bowl with the iceberg lettuce and spoon the kisir into the centre and serve.

PER SERVING 383g

CARBS
44g

CALS
297

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
7.0g	7.8g	0.6g	0.01g	9.3g	7.1g

1.5 portions of fruit and veg



Sicilian lemon and basil granita

Sicily is home to this centuries-old refreshing dessert, which used to be made with mountain snow

Serves 6 | Prep: 10 mins | Freeze: 4 hrs

VEGAN | GLUTEN FREE

- 7 unwaxed lemons
- 550ml cold water
- 2 fresh basil leaves, plus extra to serve
- 40g stevia or other granulated sweetener

1 Finely grate the rind from 1 lemon, then juice it along with 5 more lemons. Place the lemon rind and juice, water, basil leaves and granulated sweetener into a food processor and process until the basil is finely chopped. Cut the remaining lemon into wedges.

2 Strain the mixture through a sieve into a large, shallow freezer-proof dish.

Freeze for at least 4 hrs, or until solid. Remove from the freezer 15 mins before serving and set aside. Using a fork, scrape over the mixture to break the granita into small shards. Spoon into bowls and serve immediately, decorated with fresh basil leaves and lemon slices to squeeze over.

PER SERVING 142g

CARBS
6.6g

CALS
28

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
6.6g	<0.5g	<0.1g	<0.01g	0.3g	0.1g

0.5 portion of fruit and veg



COOK'S TIP

You can make this recipe vegan by using vegan sausages.

Veggie cassoulet

Rich and delicious, this legendary Southern French stew is said to date back to Medieval times

Serves 4 | Prep: 15–20 mins | Cook: 50 mins

VEGETARIAN

- 3 vegetarian sausages
- 1 tbsp olive oil
- 1 large red onion, peeled and roughly chopped
- 3 sticks celery, thickly sliced
- 3 large carrots, peeled and cut into chunks
- 3 garlic cloves, peeled and crushed
- 1 tbsp tomato purée
- ½ small swede (about 400g), peeled and cut into chunks

- 1 fresh bouquet garni (bay leaf, thyme and rosemary)
- 1 low-salt vegetable stock cube, dissolved in 550ml boiling water
- 1 large courgette, trimmed, halved lengthways and thickly sliced
- 400g tin cannellini beans, rinsed and drained
- Small handful fresh flat-leaf parsley, roughly torn

1 Grill the sausages according to the pack instructions and set aside to cool slightly. 2 Meanwhile, heat the oil in a deep-frying pan and add the onion, celery and carrot and fry for 4 to 5 mins, stirring occasionally until beginning to soften. Stir in the garlic and tomato purée and cook for 2 mins, stirring. Add the swede, bouquet garni and stock. Bring to the boil, cover and simmer for 20 mins or until the vegetables are tender.

- 3 Stir in the courgette and cannellini beans and simmer for 10 mins. Remove a ladleful of the mixture and blend in a food processor until smooth, then stir it back into the cassoulet to thicken the sauce. 4 Cut the sausages on an angle into 1cm-thick slices and scatter over the cassoulet and cook for 5 mins to warm through. Discard the bouquet garni and scatter over the fresh parsley to serve.

PER SERVING 550g

CARBS	CALS
26.6g	246

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
15.7g	7.4g	1.5g	1.28g	12g	12.6g

3 portions of fruit and veg

Piri-piri sardines with tomato salad

Sardines, synonymous with Portugal, are paired up with the country's favourite accompaniment – piri piri

Serves 4 | Prep: 15 mins | Cook: 10–12 mins

DAIRY FREE | GLUTEN FREE

- 2 red chillies, deseeded and finely chopped
- 3 garlic cloves, peeled and crushed
- 2 tbsp olive oil
- 4 tsp red wine vinegar
- ½ tsp paprika
- 2 tsp dried oregano
- Finely grated rind and juice of 1 lemon
- 8 fresh, ready-to-cook small sardines (about 350g total weight), or thawed if frozen
- 2 large vine tomatoes, sliced
- 200g mixed cherry tomatoes, halved
- ½ small red onion, peeled and thinly sliced
- ½ cucumber, halved, thinly sliced
- 2 tsp fresh oregano leaves, torn
- 1 lemon, cut into wedges to serve

- 1 Place the chillies, garlic, 1 tbsp olive oil, 2 tsp red wine vinegar, paprika, dried oregano and lemon rind and juice into a small saucepan and heat gently for 2 to 3 mins. Brush the marinade on the inside and outside of the sardines. 2 If using a coal barbecue – cook for 3 to 4 mins on each side, brushing with more marinade until the skin is blistered and charred and the eyes have turned white. Or cook under a hot preheated grill for 4 to 5 mins on each side. The skin will still blister and char, and the flesh will flake easily when pressed with a fork. 3 While the fish is cooking, scatter the tomatoes, onion, cucumber and oregano onto a serving platter. Whisk together the remaining olive oil and red wine vinegar and drizzle over the salad. Serve immediately with the sardines and lemon wedges to squeeze over.



COOK'S TIP

Sardines naturally have quite a few small thin bones – these are very soft and safe to eat, as well as being a good source of calcium. However, if you do not like bones, simply remove the head and discard, then using a fork, pull the flesh from the backbone of the fish before eating.

PER SERVING 285g

CARBS	CALS
5.4g	239

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
5.1g	13g	2.9g	0.4g	23.9g	2.5g

2 portions of fruit and veg



Easy paella

Named after the large cooking pan it's made in, paella is one of Spain's best-known dishes

Serves 2 | Prep: 10 mins | Cook: 35–40 mins

GLUTEN FREE

- Pinch saffron threads (see Cook's tip)
- ½ low salt, gluten-free chicken stock cube
- 350ml boiling water
- 1 tbsp olive oil
- 140g skinless chicken breast, cut into chunks
- 1 onion, peeled and roughly chopped
- 1 small red pepper, cored, deseeded and chopped
- 1 small orange pepper, cored, deseeded and chopped
- 2 garlic cloves, peeled and crushed
- 1 small courgette, trimmed and cut into chunks
- 1 tsp paprika
- 100g paella rice
- 227g can chopped tomatoes
- 40g frozen garden peas
- 4 cooked jumbo prawns with shells on, thawed if frozen, and rinsed (140g total weight)
- Small handful fresh flat-leaf parsley, chopped
- Lemon wedges to serve

- 1 Place the saffron and stock cube in a jug, pour over the boiling water and stir until dissolved.
- 2 Heat the oil in a large, deep frying pan. Add the chicken to the pan and cook for 6 to 7 mins until the meat begins to brown and is cooked through, with no pink meat visible in the middle and the juices run clear. Remove with a slotted spoon and set aside.
- 3 Add the onion and peppers to the pan and cook for 3 to 4 mins until softened. Stir in the garlic, courgette and paprika and fry for 2 to 3 mins, stirring.
- 4 Add the rice and pour over the saffron mixture, scraping up any crispy bits from the bottom of the pan. Add the chicken and tomatoes. Bring to the boil, cover the pan and cook over a low heat for 20 mins. Stir well and add the peas and prawns. Cover and cook for a further 5 to 10 mins until the rice is plump and tender and nearly all the stock has been absorbed. The prawns are cooked when they are completely pink in colour. Remove from the heat and scatter over the parsley. Serve with the lemon wedges to squeeze over.

COOK'S TIP

Saffron threads add the golden colour to the rice, but they are expensive. So, as an alternative, add ½ tsp ground turmeric and fry with the courgettes.

PER SERVING 730g

CARBS	CALS
58g	445

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
14.2g	7.9g	1.3g	0.95g	31.6g	7.7g

3 portions of fruit and veg

Veggie lentil moussaka

Served up in many tourist tavernas, this classic Greek dish has its roots in Arabic cuisine

Serves 6 | Prep: 20–25 mins | Cook: 1 hr

VEGETARIAN | GLUTEN FREE

- 2 tbsp olive oil
- 1 large onion, peeled and finely chopped
- 2 garlic cloves, peeled and crushed
- 400g tin chopped tomatoes
- 1 tbsp tomato purée
- 1 tsp dried oregano
- ½ tsp ground cinnamon
- 400g tin green lentils in water, drained and rinsed
- 1 large aubergine (about 450g), trimmed and thinly sliced lengthways
- 2 large courgettes (about 425g), trimmed and very thinly sliced

lengthways (see Cook's tip)

- Freshly ground black pepper
- 2 beefsteak tomatoes, thinly sliced
- 300g half-fat cream cheese
- 2 large eggs, lightly beaten
- 75ml skimmed milk
- 20g finely grated vegetarian Parmesan-style cheese or vegetarian hard cheese
- Pinch grated nutmeg

- 1 Heat 1 tbsp oil in a saucepan and fry the onion and garlic over a medium heat for 4 to 5 mins until beginning to soften. Stir in the tomatoes, tomato purée, oregano, cinnamon, lentils and 150ml cold water. Bring to the boil, then simmer for 25 mins, stirring occasionally until slightly thickened.
- 2 Meanwhile, preheat a griddle pan until hot. Brush the aubergine and courgette sparingly with the remaining olive oil. Griddle the aubergines for 3 to 4 mins on each side, pressing down well so the juices are released and they are completely softened.

Griddle until pleasantly charred with lines. Griddle the courgettes for 2 mins on each side. Season with freshly ground black pepper.

3 Preheat the oven to 190°C/fan 170°C/gas 5. Spoon half the sauce into a 2-litre lasagne dish. Top with a layer of aubergine to cover. Spoon over the remaining sauce, then add the courgette and sliced tomatoes.

4 Whisk together the cream cheese, eggs and milk and pour over the top to cover. Sprinkle over the cheese and nutmeg and bake for 30 mins until bubbling and golden brown. Serve with a crisp green salad.

PER SERVING 469g

CARBS	CALS
17g	269

Sugars	Fat	Sat Fat	Salt	Protein	Fibre
11.2g	13.6g	5.6g	0.5g	16g	7.4g

3.5 portions of fruit and veg

COOK'S TIP

Use a wide swivel head peeler to prepare the courgettes into wafer-thin ribbons.



Photography: Vinny Whiteman. Recipes and food styling: Lorna Brash. Props: Morag Farquhar

➡ Picnics, barbecues and outdoor parties are highlights of the summer months for many of us. They're a chance to socialise, play games and eat delicious food in the fresh air – and hopefully enjoy the weather. But they can also be tricky to manage when you're living with diabetes.

Meals can stretch out over hours, and activity can vary drastically from lazing in the heat to swimming laps in a pool. As the days stretch into the night, it can be hard to keep track of what you're eating and drinking, and how activity might affect your blood sugar levels. But that doesn't mean people with diabetes can't enjoy the summer months as much as anyone else. With the right planning, it's much easier to relax and enjoy the summer.

Food for thought

Enjoying a picnic in the park or barbecues often means eating over a few hours, rather than eating distinct meals. It can also be harder to estimate portion sizes when food is shared from big serving bowls or platters. And when there's lots of treats on offer, it's easy to eat more than you realise.

BRING YOUR OWN

But it's by no means impossible to enjoy nutritious, varied and delicious foods at barbecues and picnics. If you want to avoid foods high in calories, saturated fat, sugar or salt, try bringing alternatives that still taste fantastic and fill you up better than standard party fare. For picnics, good options include vegetable platters, hummus, wholegrain bread, colourful salads with lentils or beans, coleslaw made with natural yoghurt and a little low-fat mayonnaise. For a barbecue, fish, prawns and lean meat like chicken all taste delicious grilled – as do peppers, aubergines, mushrooms and corn on the cob.

If you're at a celebration, you may want to enjoy some treats. If there are lots of choices on offer, try choosing small portions of a couple of things you particularly enjoy.

STAYING OUT FOR THE SUMMER

As the days get longer and the warmer weather invites us outdoors to enjoy get-togethers with friends and family over picnics, barbecues or summer parties, managing diabetes may feel stressful and need some planning. Read on for tips to help you take the heat out of summer socialising...

ALL DRESSED UP

Remember, 'healthy' food doesn't have to be boring. The right combination of herbs and spices can give a meal a bit of a kick without any extra salt or calories. You can make dressings and marinades healthier by reducing added sugar and choosing unsaturated oils like olive or vegetable oil instead of butter. Using a teaspoon or tablespoon to drizzle oils or dressings can help you manage portions.

LOVE YOUR LEFTOVERS

If the idea of preparing a dish to bring – or even hosting a whole event – feels daunting, try using it as a way to reduce the amount of food preparation you'd normally do for the rest of the week. Make extra portions you can eat another night, and save leftovers that you can turn into easy meals. So long as you store them safely, you can use them up over the next few days. Leftover

meat can be shredded and added to salads or sandwiches, for example.

To keep food fresh, bring and store items in a cool bag. Use reusable boxes to keep leftovers airtight and put anything you're saving back in the cool bag or a fridge within two hours on a warm day, or within one hour if it's hot (30°C or more). If they're left out for too long, it's safest to throw them away.

PICK AND MIX

It's very easy to graze at a picnic, buffet or barbecue. If you're trying to reduce how much you eat, or if you use insulin to manage your diabetes, it can make these events harder to enjoy. It can help to think about these scenarios ahead of time. Coming armed with a few strategies can help you make more satisfying choices on the day. It can also help if you think about a few polite ways of saying

'no' to a persuasive host offering you extra portions when you feel you've had enough.

For a long al fresco lunch, approach it like any other meal. Serve your portion onto a plate and eat it in one sitting. Filling half your dish with salad, a quarter with lean protein and the remaining quarter with wholegrain carbohydrates will give you a balanced meal that keeps you full all afternoon.

nutrition

If you find yourself snacking throughout the day or know you'll find it hard to say 'no' to food on offer, try bringing or choosing a few items that will have a minimal effect on your blood sugar levels: things like cherry tomatoes, carrot sticks or cucumber, or olives. Vegetables will also help you stay hydrated, which is particularly important in the heat.

Managing insulin doses

For people who take insulin to manage their diabetes, grazing at summer events can be particularly difficult. It can be hard to know exactly how much insulin to take – and when. If food packaging is available, check how much carbohydrate is in the various items you're eating. You can always ask the host to save packaging ahead of time or send you photos of labels before they throw them away.

Of course, this won't be possible for many meals, especially when everyone's bringing a dish to share. Apps or books like 'Carbs and Cals' provide pictures of food alongside nutritional information, which may help you estimate portions or get a rough idea of the carb content in what you're eating. You can always practise serving food on paper plates in your own kitchen for a few meals to get

an idea of what various portions look like.

As well as carbs, it's important to consider how much fat, fibre and protein are in the foods you're eating, as these nutrients can all help slow down the release of sugars into the bloodstream. At a summer event, you might find there are more foods high in fat and high in protein than usual – think sausage rolls, burgers and hot dogs. Including foods high in fibre, such as vegetables, beans, and lentils, and choosing lean protein, like chicken or fish instead of red and processed meat, can support blood sugar management while also benefiting overall health.

If you use insulin to manage your diabetes, unusual eating schedules or prolonged meals can make blood sugar levels harder to manage. For personalised strategies, such as adjusting doses, timing, or using tools to help track insulin, speak with your diabetes team. They can advise you on what's safe and what might work for events where meals and snacks are spread out.

Know your limits

If you choose to drink alcohol, try to have water or a sugar-free soft drink between each alcoholic drink. This is to help you pace yourself and stay hydrated.

Different drinks affect blood sugar in different ways. Drinks containing carbohydrate and sugar, like some beers and cocktails, can raise your blood sugar levels quickly. Alcohol can also increase your risk of low blood sugar (hypos), especially if you use insulin or certain diabetes medications such as sulphonylureas. The effect on blood sugar levels can last for many hours, so if you have more than one drink, monitor your levels more often and be aware that you may go low later in the day, overnight or even into the next day.

“Consider the sugar content of your drinks”

If you are taking insulin or any diabetes medications that can cause hypoglycaemia, talk to your diabetes team for individual advice on adjusting your doses and preventing hypos when you're drinking alcohol.

It's also important to be aware of what is in any soft drinks you have – especially if you're enjoying alcohol-free cocktails, mixers or punches. These can contain quite a lot of added sugar and quickly raise blood sugar levels. Water is the best choice for hydration and health. If you would like another option, choose diet, sugar-free or 'no added sugar' options, and if you're at a party or event, you may want to ask the host what they have included in their soft drinks.

Hot weather and summer activities

If it's a hot day, you may also want to keep a closer eye on your blood sugar levels. Hot weather can make injected insulin become absorbed more quickly, making the effect on your blood sugars harder to predict and increasing the risk of hypos if you use insulin. At the same time, spending time in the sun can lead to dehydration, which can push blood sugar levels up. It's important to drink plenty of water throughout the day, whether or not you're drinking alcohol.

You may also find yourself doing more activity at a summer party than you might usually. You might play games, go for a



swim, or end up running around after children. If you take insulin or other medication that can cause hypos, you may want to speak to your healthcare team about whether you need to adjust your doses when you're more active. Different insulins and diabetes medications work in different ways, and the approach to managing them around activity will be individual to you.

Sun protection

Just as the sun can damage your skin, leaving blood sugar testing kits and insulin out in the heat can affect how well they work. So try to keep yourself and your diabetes equipment out of direct sunlight. Seek shade, apply sunscreen regularly and wear a hat and sunglasses to protect yourself. Consider keeping your insulin inside a cooling pouch (available from the Diabetes UK shop).

If you inject insulin, it's important to rotate injection sites regularly. But in practice, clothing can make that difficult. It's worth thinking about which clothes will make it as easy as possible to deliver insulin, especially if you'll be doing it in the middle of a busy social event. If you're

“If you think there's a chance you're going low, check your sugars to make sure”

worried about injecting in public, small things like this may make it less daunting.

Keeping your levels on track

If you're eating on an unusual schedule or doing more or less activity than usual, you may want to keep a closer eye on your blood sugar levels. It may be harder to recognise highs and lows if you're active or busy, so try to stay attuned to the symptoms you're used to. Check in with your body to see how you feel whenever you remember, but don't rely on symptoms alone. You might be light-headed from spending time in the sun, or because of low blood sugar, for example. If you think there's a chance you're going low, check your sugars to make sure. If you think you're likely to forget to check them, try setting an alarm to remind you every now and then.

Treating diabetes al fresco

Many people are comfortable checking their blood sugars and injecting insulin, or taking other diabetes medication, in front of others. For some, however, it can be nerve-wracking. People may also feel uncomfortable if others draw attention to their diabetes – whichever type they have – or make comments about their food choices. But it's really important not to delay tests, injections, or taking your diabetes medication, especially if you're

eating in a different way than usual.

If you're nervous, try to look out for somewhere with a little privacy when you arrive at a party or event in a public place like a park. If you're going to someone's garden, you can always ask for permission to use a bedroom or similar if you'd prefer to take your insulin in private. If you're organising a party and you know someone with diabetes will be there, they might benefit from having easy access to a private space (that isn't a toilet) throughout the event.

If you use insulin pens or a blood sugar testing kit, it's a good idea to carry your diabetes equipment and any hypo treatments in a small, separate bag you can keep with you all the time, so you can put anything else bulky out of the way during the event.

Sharing the load

Diabetes involves a huge amount of focus and decision-making every day, and there's no such thing as 'perfect.' Summer events are great fun, but they can involve more of those day-to-day challenges than usual – strange eating times, exercise, heat and alcohol.

If you're struggling with the idea of enjoying a picnic or a barbecue, you're certainly not alone. Speaking with other people who manage diabetes can help. That might mean looking for a local support group or speaking with your diabetes team. Lots of people with diabetes also share their experiences online on the Diabetes UK Support Forum (forum.diabetes.org.uk). It's a great place to swap tips, share experiences or just have a rant.



A WHOLE LOT OF GOOD!

‘Whole foods’ is a commonly used term when it comes to healthy eating, but including these foods needn’t be complicated or expensive. We explain what whole foods are, why they can help support diabetes management, and how small, realistic swaps can make a difference to your health



➔ The term ‘whole foods’ tends to go hand in hand with healthy, balanced diets, managing diabetes and looking after your heart health. But does whole food mean cooking everything from scratch? Are frozen vegetables or canned beans off limits? And is it even realistic if you’re pressed for time or sticking to a budget?

As confusing as it may first seem, whole foods don’t have to be complicated, expensive or difficult to include day to day. And you might already eat more of them than you think. That said, adding more whole foods to your meals can help with managing your blood sugar levels, heart health and your overall wellbeing, especially if you have diabetes.

We look at what whole foods are, why they’re important and ways you can add more of them to your meals without completely changing your diet.

What are whole foods?

“A simple way of describing whole foods is foods that are as close as possible to their natural state,” says Stephanie Kudzin, Diabetes UK’s Nutritionist. “They’ve either not been processed at all or have been minimally processed in ways that don’t add extra sugar, salt, unhealthy fats or artificial ingredients. It can also describe a way of eating these foods – whether they’re left ‘whole’ in their natural state, or whether they’ve been cooked, ground or broken up in some way.”

Plenty of everyday whole foods are convenient, affordable and help support your health. There isn’t an official definition or list of whole foods, but there is a general agreement that examples include:

- **vegetables** (fresh, frozen or tinned, without added sugar or salt, all count)

“Food processing just means altering food from its natural state, whether it’s chopping, freezing, cooking, pasteurising or canning”

- **fruits** (fresh, frozen or tinned in juice rather than sweet syrup)
- **pulses** such as beans, lentils and chickpeas
- **wholegrains** like oats, brown rice and wholemeal bread
- **nuts and seeds**
- **eggs**
- **plain yoghurt**
- **fresh meat, poultry and fish**
- **milk**
- **cheese**

These foods provide nutrients such as fibre, vitamins, minerals, protein and healthy fats that support your body’s regular functions.

“A ‘whole food diet’ doesn’t mean eating only raw or unprocessed foods,” explains Stephanie. “Instead, it means building most of your meals around these nutrient-rich foods.”

What are processed foods?

“It’s helpful to understand what we mean by processing because almost all food is ‘processed’ in some way,” says Stephanie.

Food processing just means altering food from its natural state, whether it’s chopping, freezing, cooking, pasteurising or canning. So processing itself isn’t automatically a negative thing. Processing can make food safer, last longer, reduce food waste and make meals more convenient and affordable. For example:

- **freezing vegetables** helps retain vitamins and makes them last longer
- **canning beans** makes them affordable and convenient
- **pasteurising milk** makes it safer to drink.

Researchers at the University of São Paulo in Brazil developed the NOVA system, which classifies foods into four groups – from unprocessed or minimally processed foods to processed ingredients and foods, and then ultra-processed foods. However, simply labelling a food as processed or ultra-processed doesn’t tell you how healthy it is. This system describes how a food is made, not its overall nutritional value or how it might

Your daily dose of whole food

Want to get more whole foods into your diet? Here are some practical, realistic swaps you can consider that also support blood sugar levels and help you feel fuller for longer. You don’t need to make all these changes at once – start by making one swap, then build from there. Over time, these small changes can make a big difference.

BREAKFAST SWAPS	Sugary cereals ➤ Rolled or steel-cut oats White toast with chocolate spread ➤ Wholegrain toast with eggs, cheese, 100% peanut butter or avocado Sweetened flavoured yoghurt ➤ Plain yoghurt with fresh or frozen berries Fruit juice or smoothie ➤ Piece of whole fruit
	Whole food breakfasts: ■ Rolled oat porridge , topped with banana, seeds and cinnamon ■ Scrambled eggs with spinach and mushrooms ■ Leftover dinner (for example, veg, sweet potatoes and grilled or baked fish) ■ Plain Greek yoghurt topped with walnuts and berries
	White bread sandwiches ➤ Wholegrain bread, wraps or wholemeal pitta Instant noodles ➤ Brown rice or wholegrain noodles with vegetables and chicken, tofu or soybeans Shop-bought sandwiches with processed meats ➤ Homemade sandwich with fresh fillings like chicken, boiled egg, hummus or tuna
LUNCH SWAPS	Whole food lunches: ■ Lentil soup ■ Jacket potato with tuna and salad ■ Omelette with mushrooms and peppers ■ Mixed bean salad with olive oil, lemon and herbs
	White rice ➤ Brown rice, quinoa, or bulgur wheat White pasta ➤ Wholewheat, chickpea or lentil pasta White bread, naan or garlic bread ➤ Wholemeal or wholegrain alternatives (for example, homemade garlic bread on wholemeal bread) Processed meats like sausages and burgers ➤ Fresh chicken, fish, eggs, tofu or lentils
DINNER SWAPS	Whole food dinners: ■ Baked chicken with vegetables and new potatoes ■ Homemade lentil curry with brown rice ■ Stir-fry with vegetables and tofu or chicken ■ Baked fish with sweet potatoes and greens
	Crisps ➤ Small handful of plain nuts Biscuits ➤ Fruit with plain yoghurt Chocolate bars ➤ Two squares of dark chocolate Sugary snack or protein bars ➤ Oatcakes with peanut butter or homemade oat, fruit, nut and seed bars
SNACK SWAPS	Grab-and-go whole food snacks: ■ Apple with a small handful of plain nuts, or banana with plain yoghurt ■ Carrot sticks with a small portion of hummus ■ Boiled eggs ■ Plain popcorn , or unsweetened dried fruit

Whole food wins

- **Pack a snack:** When out and about, take fruit, chopped veg like cucumber or carrot sticks, or a small handful of unsalted nuts, so you're less likely to grab something on the go.
- **Make your meals go further:** You can stretch dishes and add more fibre by mixing lentils or kidney beans into mince, or by adding extra chopped veg to sauces and curries.
- **Try simple tweaks:** Swap part of the meat in chilli con carne for beans, or add an extra tin of chopped tomatoes to pasta sauce to increase veg content.
- **Double up:** Batch-cook when you can and freeze leftovers for those busy days when you might be tempted to reach for a ready meal.
- **Convenience is key:** Frozen veg, tinned pulses, and microwaveable wholegrains can save time while still supporting healthy eating. Just go for products without added extras like sugars and salt.
- **Check the label:** Look for added sugar, salt and saturated fat. A long list with unfamiliar ingredients can be a sign that a food is more heavily processed.
- **'Add' rather than 'avoid':** Focus on adding more whole foods to your plate rather than cutting out other foods.

fit into a healthy, balanced diet.

For example, baked beans are classified as ultra-processed, but they are low in fat and a source of fibre and protein. Half a large tin of reduced-salt-and-sugar baked beans also counts towards your five-a-day, and can be the basis of a healthy meal.

An exclusively whole foods diet is also hard to stick to and limits the range of healthy foods you can eat.

“The goal for a whole-foods pattern

“The goal for a whole-foods pattern of eating is not perfection or cooking everything from scratch, but about aiming to include more whole foods in a way that feels realistic”

of eating is not perfection or cooking everything from scratch, but about aiming to include more whole foods in a way that feels realistic,” explains Stephanie. “In practice, this might mean choosing things like wholemeal bread more often than white bread, including beans or lentils regularly, and aiming to fill half your plate with veg.”

WHOLE FOODS AND DIABETES

There's no one diet to follow when you have diabetes. But following one that's rich in fibre, vegetables, fruit, pulses and wholegrains and limiting free sugars and high salt foods can help you naturally include more whole foods and help you manage your diabetes in various ways. Here are just some of the benefits of including more whole foods in your diet when you have diabetes:

- **Helps manage blood sugar levels.** Foods like wholegrains, beans, veg and fruit are high in fibre. Fibre slows how quickly sugar enters your bloodstream, helping avoid sharp rises in your blood sugar levels after eating.
- **Keeps you fuller for longer.** Protein and fibre help you feel satisfied, which can reduce snacking and support weight management.
- **Helps heart health.** Your heart health matters, especially when you have diabetes. Fruits, vegetables and wholegrains are linked to a lower risk of heart disease and stroke. Many whole foods are naturally lower in salt and saturated fat, which can help manage blood pressure and cholesterol.
- **Boosts the nutrients in your diet.** Whole foods naturally contain vitamins and minerals that your body needs to work well.

The structure of food can affect how the body absorbs nutrients in foods, too. For example, the sugar

Whole foods are:

- ✓ minimally processed
- ✓ typically contain few or no added ingredients
- ✓ close to natural form

in whole fruit is absorbed more slowly than the sugar in fruit juice because it comes with fibre and other nutrients that help slow down absorption. It is generally better to eat whole fruits and vegetables rather than drink fruit juices or smoothies. Fruit juice, on the other hand, has had most of the roughage removed or broken down, and the sugars from the fruits or vegetables become free sugars, which is why adults are advised to limit juice to no more than 150ml per day.



SHOP WITH US

We've got a whole host of items for you to buy on our online shop.

And with every purchase, you're helping us drive life-changing research and be there for people with diabetes.

Go to diabetes.org.uk/bal-shopping

Or call 0800 585 088*

*Phone lines open Monday to Saturday 8am to 8pm and Sunday 9am to 6pm.



Diabetes UK Hoodie

Run by Diabetes UK Services Ltd (company no: 891004) for The British Diabetic Association (Diabetes UK), reg. charity in England & Wales (215199) and Scotland (SC039136)

DiABETES UK
KNOW DIABETES. FIGHT DIABETES.

ACCU-CHEK®
SmartGuide



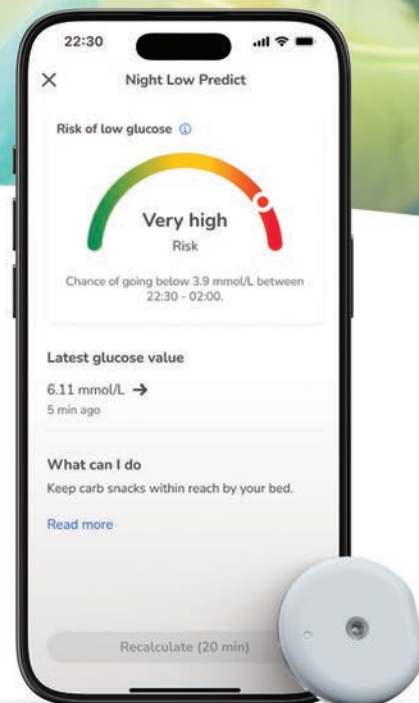
Know your risk of a hypo in advance

The **Accu-Chek SmartGuide CGM solution** Night Low Predict feature helps you prepare before bedtime.*



Find out more!

accu-chek.co.uk/balance2



Please speak to your healthcare team about the most appropriate technologies for you.

The Accu-Chek SmartGuide CGM solution is intended for adults with diabetes aged 18+. | The screens you see may differ from the screens in the app. Smartphone required, not included in the solution. | The persons shown in these photographs are models for illustrative purposes only and are not real life patients.

*The Accu-Chek SmartGuide Predict app predicts the general estimated glucose development within the next 2 hours (Glucose Predict), the estimated high risk of low glucose within the next 30 minutes (Low Glucose Predict), and the estimated risk of a night-time hypoglycaemia for the upcoming 7 hours (Night Low Predict, active between 21:00 and 02:00).

©2026 Roche Diagnostics Limited. All rights reserved. ACCU-CHEK, ACCU-CHEK SMARTGUIDE and ACCU-CHEK SMARTGUIDE PREDICT are trademarks of Roche. All other product names, trademarks and brand names are the property of their respective owners. Roche Diagnostics Limited, Charles Avenue, Burgess Hill, West Sussex, RH15 9RY. Company Registration Number: 571546 | Date of preparation: March 2026. | Document number: MC-UK-01557 | For use only in the UK.

