INDEPENDENT DIABETES TRUST
Newsletter
MARCH 2023 Newsletter, Issue 116
PO Box 294 Northampton NN1 4XS Telephone: 01604 622837

Your Life in YOUR Hands

It is hard to write this opening article without acknowledging the situation in the NHS. As people living with diabetes, we have reason to use the NHS more than most, good reasons to be grateful to nurses, doctors and paramedics, so the present situation is bound to be of concern to us all.

Watching the news early in the year, I was so sad to hear of a man whose wife died while he waited 16 hours for an ambulance to arrive. He was helped on the phone by the paramedics but he had to watch his wife gradually becoming confused and losing consciousness. This avoidable death brought a lump to my throat!

Let us be under no illusion, the present NHS situation has been coming for years, during which time systemic failures have been letting us down and leading to care and treatment varying according to where you live – the infamous postcode lottery!

Treating hypoglycaemia cannot wait 16 hours. Some of us remember the days when in addition to the person with diabetes, families were taught to recognise hypos and how to treat them. Now more than ever, this is important, even vital.

All of this is particularly true for people with hypoglycaemia unawareness (about 15% of people with Type 1) - when a person has reduced or total loss of hypo warnings before the hypo becomes severe. A severe hypo requires urgent intervention from another person to prevent loss of consciousness, seizure, coma or at worst, death. Assuming the person does not live alone, when this occurs at home, especially in the night, the 'other person' is a family member. Some family members may be able to handle this situation but some people will rely on calling an ambulance. But in today's climate, is this safe?

We have to have a safety net and that has to be our knowledge, our ability to recognise problems and deal with them, hypos being the obvious one. This is true not only for the person with diabetes but also husbands, wives, partners and even children'. We have to be more independent and also have to learn to be more assertive to ensure our needs are understood and answered.

Being realistic, the NHS is not going to improve any time soon, so overleaf we look at ways that we as patients, can make changes to make our lives safer.

Ukraine

'Please see overleaf for the latest update'

Taking more care of ourselves - what can we change?

- **Improve our own knowledge.**
- **Improve the knowledge of our family members and involve them.**
- **Ensure that we receive the 9 key checks at least annually.**
- **Remember that we are entitled to informed choices about our treatments and medicines, exercise them.**
- **Become more assertive in terms of making our choices and expressing our needs to our healthcare teams and where possible have them answered.**

Finally, here are some thoughts on dealing with hypos

Glucagon - for people taking insulin and severe hypos that happen at home, we can be prescribed glucagon, providing we have someone who is able to inject it. It stimulates the production of glucose from the liver stores so raising blood sugars to prevent or bring us round from coma and/or seizures. This can prevent a 999 call. While this may not be suitable for everyone who has severe hypos, it is an option to discuss with your healthcare team, especially now it is available in a pre-filled pen and pre-mixed, called Ogluo. This version is much easier to use than the original version which had to be mixed – not easy in emergency and in the middle of the night!

Modern technology - should make preventing or managing hypos easier nowadays. We have continuous glucose monitoring or the FreeStyle Libre with alarms which not only tell us what glucose levels are at any moment in time but show trends in levels, so we know if glucose levels are going up or down.

Following a recent decision, everyone with Type 1 diabetes and people with Type 2 diabetes using insulin is now entitled to the FreeStyle Libre or CGM so surely this will avoid hypos? However, despite approval from NICE and NHS England, the prescribing of this technology is still a local decision, now by the Integrated Care Boards so whether you can have this technology is decided at local level. The usual problem of the postcode lottery! If this option is not made available to you, you may well need to be assertive!

Blood glucose testing availability - generally, blood glucose test strips are not available on the NHS for people with Type 2 diabetes not using insulin. This decision has always been questionable as many people would benefit from knowing their blood glucose levels.

A recent study found that people with Type 2 diabetes who didn't take insulin but self-monitored their blood glucose had better HbA1c control than those who didn't self-monitor their blood glucose. These findings were based on data from 22 studies involving 6,204 people and also showed that HbA1cs were better among those who monitored 8-11 times weekly with lifestyle adjustments. (Journal of General Internal Medicine, November 2022) Better control is likely to mean less GP visits, less checks and less hospital admissions.

If you fear hypos – you're not alone
Hypoglycaemia fear is high for 30% of adults
A recent study has found that 30% of Type 1 diabetes patients scored high on a measure of fear of hypoglycaemia. Importantly, fear of hypoglycaemia was associated with higher self-reported HbA1c and higher rates of comorbidity. (Association of Diabetes Care & Educational Specialists Annual Conference, December 2022) In this latest study, the participants had an average age of 38.9 years with 64.6% being women. They completed several questions for assessing their fear of hypoglycaemia relating to overeating, lack of physical activity and keeping glucose levels high to avoid hypoglycaemia. Most participants agreed or strongly agreed that they experienced fear of hypoglycaemia while driving, sleeping, out in public or alone and the majority also stated they ate more than they needed to avoid low blood glucose levels. While this study was carried out in people with Type 1 diabetes, we know from experience that people with Type 2 diabetes treated with insulin also fear hypos.

Note: IDDT has an information booklet about hypoglycaemia and if you would like a copy, please call 01604 622837 or email: enquiries@iddinternational.org

Update from Ukraine

During 2022, you have donated over £400,000 worth of diabetes items to help people with diabetes in Ukraine!

Our latest collection for Ukraine consisted of 102 boxes thanks to the ongoing help of so many people with diabetes wanting to help those with diabetes in Ukraine. In total during 2022 we have sent diabetes items worth over £400,000 so a huge thank you to everyone who has helped.

We have received donations of unwanted diabetes items from people with diabetes and healthcare professionals in the UK for which we, and the people in Ukraine, are very grateful. In addition, IDDT's partners in Insulin for Life (IFL) made donations to us - IFL in Australia sent us meters and test strips and IFL USA sent us insulin pens. This might sound strange but IDDT and our contacts have managed to get supplies across the borders to where they are needed.

We must not forget the people who collect from us and deliver to Ukraine. This time getting transport was more difficult but at the last minute, Paul saw a plea on the internet for anyone able to transport 102 boxes to Woolwich for Ukraine and he gave his time to do this.

He was also prepared to give the diesel but thanks to our members donations specifically for Ukraine, we could pay for this.

Finally, thanks to all the people who knitted toys for children and hats, gloves, scarves and blankets which were given to children in orphanages for Christmas to protect them against the very cold weather and the toys and jelly babies just gave them some pleasure!

Here are just some of the main items you helped to collect in 2022

- 1,414 blood glucose meters
- 112,825 test strips
- 4,452 insulin cartridges
- 4,902 pre-filled insulin pens
- 404 vials of insulin
- 6,902 metformin tablets
- 167,910 pen needles
- 96,200 lancets

We are still collecting to help people with diabetes in Ukraine, so we welcome any donations of unwanted items that you are able to make.

Working together, we can achieve a great deal – thank you!

NHS in England to offer artificial pancreas to help manage Type 1 diabetes

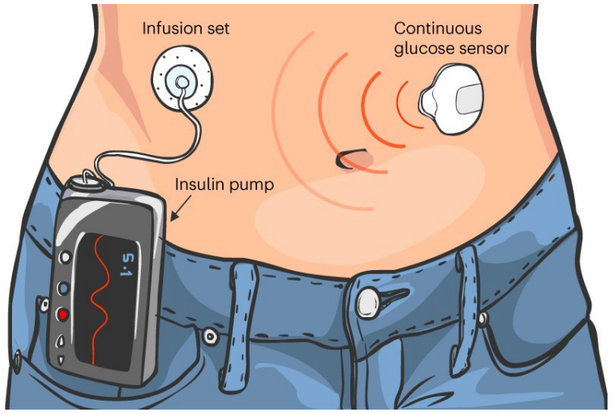
In early 2023, NICE announced that some people with Type 1 diabetes are to be offered an artificial pancreas, also known as the closed-loop system. NICE has recommended its use for managing blood glucose levels in people struggling to manage Type 1 diabetes. Pregnant women are also eligible because blood glucose levels are harder to manage during this time.

The artificial pancreas is an "all-in-one" diabetes management system that tracks blood glucose levels using a continuous glucose monitor (CGM) and automatically delivers insulin when needed using an insulin pump. The device uses an algorithm to determine the amount of insulin that should be administered and reads blood sugar levels to keep them steady.

It also eliminates the need for finger-prick tests to check blood sugar levels.
The press release quoted Mark Chapman, the interim director of medical technology at NICE who said: "Some people living with Type 1 diabetes struggle to manage their condition, even though they are doing everything asked of them by their diabetes team.

This technology is the best intervention to help them control their diabetes in the absence of a cure."Research found it was more effective at managing diabetes than current devices and required far less input from patients.

The draft recommendations require NHS England to agree a cost-effective price for the device on behalf of relevant health bodies.



Currently, the average annual cost for the technology is £5,744, higher than NICE considers a cost-effective use of NHS resources.

Introduction of Dexcom G7

In October 2022, Dexcom launched its newest product, Dexcom G7 continuous glucose monitoring (CGM) system. Compared to other CGMs on the market, the technology is consistently a step ahead – eliminating finger-pricks and scanning, providing predictive alarms, real-time connectivity that can drive integrated insulin delivery systems and now, the fastest warm up time of any CGM. It is an all-in-one, discreet wearable device that is 60% smaller than its predecessor.

- Dexcom G7 can complete warm up within 30 minutes, whereas other CGM brands require up to an hour or longer.
- Its low-profile, all-in-one wearable warms up faster than any other CGM on the market, sending real-time glucose readings automatically to a compatible smart device or receiver, no finger-prick required.
- Dexcom G7 also offers a range of alerts that can be customised to warn of high or low glucose levels and help users to spend more time in range.
- Industry-leading remote monitoring and reporting capabilities also allow users to stay connected with their loved ones and care teams anytime, anywhere.

Diabetes and oral diseases affect each other

Research shows that common chronic diseases, such as diabetes, and problems associated with oral health have a detrimental and long-term reciprocal effect on each other. The University of Helsinki conducted research over a 10-year period using 70,000 people to look into the association between oral health and chronic diseases and a key finding was that periodontitis (gum disease) has a particular link with diabetes.

The results
The study showed that the following conditions, (i) periodontitis, a severe gum infection that can lead to tooth loss and other serious health complications and of public health importance and (ii) apical periodontitis, inflammation of the apex of the tooth root, are associated with common metabolic diseases such as:

- Metabolic syndrome
- Type 1 and Type 2 diabetes
- Gestational diabetes.

However, the study showed there were no similar associations with other common chronic diseases, such as connective tissue diseases, rheumatoid arthritis, inflammatory intestinal diseases or serious mental diseases.

It also showed a two-way effect exists between diabetes and other metabolic diseases and periodontitis. Diabetes accelerates the progression of periodontitis and complicates its diagnosis and treatment, especially if diabetes has not been diagnosed or the disease is poorly controlled.

What is periodontitis?
Most often periodontal disease occurs without signs or indications but there are 4 stages of gum disease that might help you spot it before it gets worse:

Stage 1 Gingivitis – this is the first stage of gum disease and is inflammation of the gums without loss of bone. In the absence of good oral hygiene, nearly all people will develop gingivitis but only 10 to 15% of them will develop more advanced stages of the disease.

Stage 2 Initial Periodontitis – this is when gingivitis advances into the deeper periodontal structures, the tissues that connect the teeth to the bone resulting in early or initial bone loss. About 10% of the population develops full-blown periodontitis that results in drastic bone loss.

Stage 3: Mild Periodontitis – this is when gum disease results in significant bone loss (20 to 50%) of the teeth's root surfaces due to continued tissue and bone destruction. Periodontal disease is cyclical going through cycles of activity bursts, followed by a period in which the body is attempting to recover. This is known as frustrated healing or chronic inflammation.

Stage 4: Progressive Periodontitis – this stage is when there is significant bone loss (50 to 85%) from the root of the tooth in the final stage of gum disease. It involves teeth looseness, shifting teeth, red, swollen and painful gums, often forming an abscess.
The end result is that eating and even smiling is hard and painful and you may lose most of your teeth.

Important: all the above is preventable with regular oral hygiene and routine cleaning at the dentist.

Treatment
The research findings indicate that successful treatment of periodontitis has a positive effect on the treatment outcomes for diabetes. Similarly, the successful treatment of diabetes slows down the progression of periodontitis.

The researchers suggest that people's general and oral health should be considered as a whole in healthcare, as their research demonstrates that even latent diseases have a harmful and long-term effect on one another. Periodontal disease can usually be treated successfully. One effective treatment option for periodontal disease is scaling and root planning. However, good dental care at home is vital to help keep it from recurring or becoming more serious. (Frontiers in Oral Health, September 2022)

Insulin News

Once-Weekly Insulin for Type 1 Diabetes
This study will evaluate the safety and glucose-lowering effect of an investigational once-weekly insulin compared with degludec (brand name Tresiba), a long-acting insulin analogue. This is a multicentre, worldwide study sponsored by Eli Lilly in 87 locations across the United States, Puerto Rico, Argentina, India, Japan, Poland, Slovakia, and Taiwan.

The investigation into this once-weekly insulin, called Insulin Fc, or BIF, in adults with Type 1 diabetes is to evaluate its safety and compare its glucose-lowering effect with degludec. The trial will enroll 670 participants and measure changes in HbA1c over 26 weeks and will investigate BIF's effects on time in range and time in hypoglycaemia compared with degludec.

Currently, there are no once-weekly insulin options available, but the researchers suggest that there are several potential benefits to a once-weekly insulin option for people with Type 1 diabetes. The obvious advantage means fewer injections, which could improve the likelihood that people may be more likely to take their medication as needed. (Published November 2022)

Having said this, we have to ask exactly what is being put into the insulin to make it last for a week and are there other effects? How long are the trials going to be and will they be long enough to identify any adverse reactions?

We will need a lot more information than we had when so-called human insulin was introduced.

Oral insulin is an efficient treatment option for early-stage Type 2 diabetes

New research has shown that Capsulin oral insulin administered twice a day at a dose of 150iu per capsule is a safe and efficient treatment option for people with Type 2 diabetes. It shows that oral insulin results in significant decreases from baseline in HbA1c, fasting plasma glucose and triglycerides.

One hundred people with Type 2 diabetes and treated with metformin took part in the study and were randomly assigned to one of three groups and either received (i) 75iu BD of formulated regular insulin, (ii) 150iu BD in enteric-coated capsules or (iii) 300iu BD in enteric-coated capsules.

- it met its primary clinical endpoint of a decrease in HbA1c ≥ 0.5% in the dose group receiving 150iu BD. A decrease of 20% for triglycerides was also seen in the 150iu BD dose group.
- In a subset of this population, with starting HbA1c values between 9 and 9.5%, an average decrease of 1.575% was seen.
- In the total population, there were decreases in HbA1c for groups 75iu BD and 300iu BD were -0.11% and -0.42% respectively.
- No significant increases in body weight were seen and significant decreases in systolic blood pressure were seen in all groups.
- No serious treatment-related adverse events were recorded, and no incidence of hypoglycaemia was reported throughout the whole 12-week study period.

(Prescription drugs, November 2022)
People with Type 2 diabetes are often loathe to go on to insulin because they fear injections, so one of the advantages of oral insulin could be that people are more willing to use it and have better glucose control sooner.

Obtaining an emergency supply of insulin

One of our members was away from home for a few days and he took a new insulin pen with him to be sure he had enough but the new pen was faulty and didn't work. He went to the nearest pharmacist with his driving licence and NHS card to try to get a replacement.
He thought his was all he needed in such an emergency but the pharmacist said that he needed to register with them first and they would get in touch with his GP to get a prescription. *(This can't happen at the weekend or after hours!)* Our member asked IDDT what was the correct way to handle this situation, should it happen again and we thought it would be useful for our readers.

The NHS website says:

If you run out of prescription medicine and do not have a prescription with you, you can get an emergency supply from a pharmacy without a prescription.
Take an old prescription or the medicine's packaging with you, if you have it. (He didn't!)

At Pharmacies

You'll be assessed by the pharmacist to find out:

- if you need the medicine immediately
- who previously prescribed the medicine, to make sure they're a trusted source
- what dose of the medicine would be appropriate for you to take

The pharmacist needs to know the answers to all of these questions before they can supply a prescription-only medicine without a prescription in an emergency. They will keep a record of your details, the medicine they provide and the nature of the emergency. If the pharmacist is not satisfied that the medicine and dose is appropriate for you, they may not supply the medicine.

The pharmacist may provide an emergency supply of up to 30 days' treatment for most prescription medicines, with these exceptions:

- insulin, an ointment, a cream or an asthma inhaler – only the smallest pack size will be supplied
- the contraceptive pill – only enough for a full treatment cycle will be supplied
- liquid oral antibiotics – only the smallest quantity to provide a full course of treatment will be supplied

Only a limited range of controlled medicines can be prescribed in an emergency, such as those for epilepsy (phenobarbital). Many commonly used controlled medicines, such as morphine or diamorphine, cannot be supplied without a prescription by a pharmacist in an emergency. You may need to pay for this service and medicine, even if you do not normally, because they're being provided without a prescription. This may vary between pharmacies.

GPs and walk-in centres

If you run out of medicine while you're away from home, you may be able to have a consultation with a local GP and get a prescription for a limited supply of medicines. You can also go to an NHS walk-in centre. They may be able to organise a GP consultation and sometimes, they can give you medicine after you've seen a nurse. Some walk-in centres are open from early morning to late evening, 7 days a week, 365 days a year.

NICE updates

Statins could be a choice for more people to reduce the risk of heart attack and stroke

According to new NICE guidance, new evidence on the safety of statins means more people could benefit from them. Draft updated guidance (January 2023) recommends that the risk threshold at which statins should be offered to prevent cardiovascular events (CVD), such as heart disease and strokes, remains unchanged but they can also now be considered for people at a lower threshold.
Until now people with a 10% or higher risk over 10 years of CVD should be offered a statin but this is now set to change after the NICE considered new evidence on the side effects and safety of statins, so more people could be given them.
Although statins can sometimes cause side effects such as muscle pains, the best evidence shows that most people don't get muscle pains with statins, and many more people will get muscle pains whether they take statins or not than will have muscle pain caused by statins.

The draft guideline recommends that:

- **Statins can now be considered as part of shared decision-making for people who haven't had a CVD event with a 10-year CVD risk score of less than 10%.**
- **Doctors should consider atorvastatin 20 mg for the primary prevention of CVD for people at this level of risk where the person is happy to take a statin or the person's risk of a cardiovascular event may be underestimated.**
- **Risk factors which can be addressed should be managed - including stopping smoking, reducing alcohol consumption, taking exercise and eating a healthy diet.**

As we know, people with diabetes are at greater risk of CVD. High cholesterol is also a significant risk factor for CVD and in England, it leads to over 7% of all deaths and affects up to 60% of adults. However, people can be at risk from CVD from factors they cannot change such as age, sex, ethnicity and family history.

NICE also say that taking statins is a choice!

Paul Chrisp, director of the Centre for Guidelines at NICE, said: "We are not advocating that statins are used alone. The draft guideline continues to say that it is only if lifestyle changes on their own are not sufficient, and that other risk factors such as hypertension are also managed, that people who are still at risk can be offered the opportunity to use a statin, if they want to. They don't have to, and their decision should be informed by an understanding of the risks and tailored to their values and priorities."

New treatment for diabetic macular oedema recommended by NICE

An estimated 22,000 people in the UK could benefit in the first year after a new treatment option for diabetic macular oedema (DMO) was recommended by NICE in July 2022.

Diabetic macular oedema is a condition affecting the retina where blood vessels supplying nutrients and oxygen become damaged and leaky due to the high levels of glucose in the bloodstream in some people with diabetes.
Brolucizumab (also known as Beovu) is being recommended in final draft guidance as an option for treating visual impairment due to DMO in adults, the main cause of sight loss for people with diabetes in the UK.
Brolucizumab is administered as an eye injection once every six weeks for the first five doses. After that point, clinicians decide how often the treatment should be given depending on how the disease is responding.

The approval process was completed using the NICE fast-track cost comparison appraisal process taking half the time of an average appraisal. A fast-track appraisal can be used when a cost comparison shows the new treatment is likely to provide similar or greater health benefits at similar or lower cost than treatments already recommended.
Diabetic macular oedema is usually treated first with NICE recommended aflibercept or ranibizumab, which are anti-VEGF injections to reduce oedema (swelling). Brolucizumab is another anti-VEGF injection which works in a similar way and evidence shows it is as effective as aflibercept. The NICE committee found that brolucizumab is likely to be cost saving or have similar costs compared with aflibercept and ranibizumab.
NHS England has agreed a commercial arrangement through a simple discount patient access scheme to make brolucizumab available to the NHS with a confidential discount.
Details can be found at:
www.nice.org.uk/guidance/ta799

NHS News

UK spent about 20% less per person on health than similar European countries over the past decade

In Autumn 2022, the Health Foundation shared data showing that the UK has spent about 20% less per person on health each year over the past decade than similar European countries. In addition, health spending in the UK would have needed to rise on average by £40bn per year in the past 10 years to match health spending per head across 14 EU countries.
This lag in expenditure between the UK and similar countries is matched by survival rates for some conditions. In the UK, just 13% of those diagnosed with lung cancer live for at least five years, according to the most recent available - the lowest among the countries studied, with Japan at the top on 33%.

Meanwhile, 9% of people in the UK who had the most common type of stroke died within 30 days in 2019, compared with 6.2% in Germany.

This research also shows that the UK would have had to spend an additional £73bn, or 39% more, in every year between 2010 and 2019 to match Germany. Only Spain, Portugal, Italy and Greece spent less per person than the UK over the same period. However, it was pointed out that this shortfall mainly resulted from a lack of spending on social care, reflecting a southern European tradition of families caring for loved ones.

NHS Press Release - Rapid NHS rollout sees 200,000 diabetes patients get life changing devices (31.12.2022)

Around eight in ten people with Type 1 diabetes now have access to life-changing technology. Just over 200,000 patients are now using non-invasive glucose monitoring devices (CGMs) that allow people to check their glucose levels more easily and regularly – up by a third from the spring.
Last summer, the NHS announced people with Type 1 diabetes would be eligible for continuous glucose monitors after securing a deal to ensure they cost a similar price to flash monitors. Already almost two-thirds of local NHS areas are offering these devices.
The newer wearable arm gadget sends information automatically to a mobile app and allows people with diabetes to always keep track of their glucose levels without having to scan or take a finger prick test.

Flash monitors work in the same way as continuous monitors, except a patient using a flash monitor uses a device to run a check on their smartphone (or scanner) to get a reading.
The NHS aims for all integrated care boards (ICBs) to be offering both monitors in 2023 which will help improve diabetes management in addition to reducing diabetes complications and hospital admissions which will ultimately ease the pressure off the NHS.
In line with NICE guidance, patients should be offered either monitor depending on their needs following consultation with a local clinician.
The newer wearable arm gadget sends information automatically to a mobile app and allows people with diabetes to always keep track of their glucose levels without having to scan or take a finger prick test.

Millions of invitations for the UK's largest health research programme

In the Autumn of 2022, it was stated that 3 million letters are being sent out inviting members of the public to join a major new health research programme called 'Our Future Health' to help develop new ways to prevent, detect and treat diseases.
Some people have previously been under-represented in health research, including people from Black, Asian and other ethnic backgrounds and people with lower incomes.
By ensuring that a diverse range of people who truly reflect the UK population take part, it aims to enable discoveries that benefit everyone.
By analysing health data and blood samples from millions of people, researchers could unlock new ways to detect diseases earlier and more accurately predict who is at higher risk of diseases such as cancer, diabetes, heart disease, dementia and stroke. Volunteers joining the programme will be given the option in the future to receive feedback about their health, including their risk of common diseases, based on their health data and analysis of their DNA. They will also be offered the results from blood pressure and cholesterol measurements.

Trial of NHS Digital Health Checks

The Department for Health and Social Care has launched a trial in Cornwall of a digitised version of the NHS Health Check. The NHS Health Check is designed for people aged 40-74 to detect risks of stroke, kidney disease, heart disease, Type 2 diabetes and some types of dementia. The checks are currently carried out at face-to-face appointments but the digital version is intended to make it easier for patients and to save GP time. Patients complete an online questionnaire, use a kit to take a blood sample at home and complete a blood pressure check at their local pharmacy or in their GP's waiting room.
This move has been welcomed by the Royal College of General Practitioners but with some reservations saying: ***"Health checks can play an important role in prevention and early diagnosis, but they must be based on evidence that the checks improve health outcomes for our patients."***

The following points were highlighted:

- There must be a robust evaluation of this initiative, before further decisions to roll it out more widely are made. Specifically, to look at how digital health checks would link up with GP patient records and how 'red flag' symptoms or recommendations for lifestyle change picked up by the health checks are managed.
- Concerns must be addressed around the potential for causing unnecessary worry for patients who may not know how to interpret their findings, practice staffing implications regarding the running, interpretation and explanation of tests, and additions to GP workload.
- It will also be vital that patients themselves receive clear instructions as to how to conduct these health checks and are consulted as to the functionality of the service.
- Any changes to the NHS Health Check programme must be properly communicated both to patients and healthcare professionals.

Number of GP diabetes prescriptions increased by 5% last year

The number of patients prescribed drugs for diabetes by their GP increased by almost 5% in 2021/22.

- A total of 3.2 million patients were prescribed medicines for diabetes by GPs in 2021/22 at a cost of £1.25 billion. This is a 4.95% increase from the previous year – the largest increase since 2015/16.
- The drugs budget for diabetes has increased by 30.5% in the past 6 years and now accounts for 13% of the NHS prescriptions in England (used to be 10%). This coincides with the number of patients on diabetes medication rising by 18% from 2.7 million in 2015/16.
- More men than women are receiving diabetes drugs and those in deprived areas are most affected by the increasing trends. In the most deprived areas of England there were two and a half times as many patients receiving prescriptions for diabetes compared the least deprived.
- The cost of prescribing of diabetic, diagnostic and monitoring agents was £139 million last year, a 6.26% decrease from £148 million reported in 2020/21. (NHS Business Services Authority, August 2022)

These figures raise questions!

We know there has been a large rise in overweight and obesity which increases the number of people with or at risk of Type 2 diabetes so more people are being diagnosed. Remember the days when the first line treatment of Type 2 diabetes from a dietitian was diet and exercise and when this failed to control blood sugars medication was introduced and if necessary,

insulin later. Now, it seems that there is a much greater tendency to prescribe drugs and insulin earlier rather than encouraging diet-only initially and involving dietitians in the day-to-day management. There are less than 10,000 dietitians in the UK and 4 million people with diabetes, and they have to treat a lot of other conditions as well as diabetes!

IDDT Conference 'Changing Times' 29 October 2022

This year's conference was well attended and many attendees used the opportunity to network with others living with diabetes, sharing stories, online resources and forums, and arranging to meet up. For those who were unable to attend, here's a brief summary of what took place.

Ageing with Diabetes Professor Alan Sinclair of the Foundation for Diabetes Research in Older People

The number of older people with diabetes is rising globally. Currently there are 3.8 million people with diabetes in England. Nearly 1 million have diabetes but are undiagnosed. 90% have Type 2 diabetes. In 2020 the number with Type 1 diabetes in England was 218,670.

- It is now clear that Type 1 can present at any age with an unexplained fall, change in personality, fatigue or with a memory problem. People over 70 do not have the same symptoms as younger people.
- Type 2 in older adults is often missed for up to 9 years by which time complications have set in.
- The risk of hypos increases with age – and not just in those aiming for "tight control".
- In older people it is better to aim for a stable level of blood glucose rather than a lower HbA1c.
- The prevalence of diabetes is even higher in care homes and mental health facilities than in the general population.

Frailty and dementia are complications of diabetes.

- Frailty can be reversed. Diabetes accelerates the loss of muscle tissue. This risk can be lessened with regular exercise and good nutrition.
- Frailty is marked by weight loss, exhaustion, slow walking, low grip strength, and low physical activity.
- Frailty should be screened for in all people over 65 as it is a risk factor for falls, mobility, length of hospital admission and death.

Older people with diabetes + frailty + Covid had very high mortality rates. Unfortunately, European guidelines to administer dexamethasone and oxygen were not picked up in the UK.

Research on diabetes in older people indicates that the way forward is with good screening and individualised diabetes care.

Delegates had a choice of discussion groups to attend before lunch.

Some important messages came from the Groups:

- The importance of physical activity to reduce insulin resistance as well as to maintain muscle mass - keep walking even if painful. Resistance exercises, like using full bottles as weights, can help reverse frailty.
- While there are positives of continuous glucose monitors and pumps, there are negatives too – lack of sufficient education to use technology optimally, the risk of losing basic diabetes knowledge, being over-reliant on technology, doubtful reliability, anxiety about travel/loss of devices, risk of infection and becoming obsessive about blood glucose levels at the expense of a relaxed life.

- Using the Expert Patient Programme, Shared Decision-Making guidelines, to prepare for medical appointments. PART was recommended:
  'P' is **Preparing** for the appointment - identifying what is most important to you, and taking along an advocate or carer if it is a struggle to get your point across.
  'A' stands for Ask – ask three questions: What are my treatment options? What are the Pros and Cons of each? Where can I get support with whichever option I choose?
  'R' is Repeat – telling the professional what you believe the plan to be so there are no misunderstandings.
  'T' - having a clear Target outcome.

- Complaining in writing is better as there is a duty to respond to complaints. If a complaint is not adequately addressed, copying the complaint to the practice Senior Partner, to PALS, to the ICB, the GMC, the CQC, one's MP or the press may bring results.

THREE KEYNOTE ADDRESSES

The Latest on the Freestyle Libre – Jane Cheetham, Abbott Laboratories

A surprisingly large number of delegates were wearing their Libres! It is possible to get individual tuition from Abbott if you self-fund a Libre. Abbott's trials have shown that their sensors are accurate with only a marginal difference from finger prick testing (though some in the audience disagreed). Readings from the Libre are acceptable to the DVLA. Libre 1 is being phased out at the end 2022. Libre 3 is coming out which continuously monitors glucose, rather than at intervals and has an even smaller sensor.The Customer Care Line will answer questions and will replace any sensor that is faulty or falls off before the end of its life. When going through airport security it is preferable if a guard uses the wand rather than you going through a whole-body scanner. Spare sensors should be in hand baggage, not the hold. You don't have to have a mobile phone – Abbott will supply a free scanning device.

Protein includes cheese, eggs (no longer felt to be a cholesterol risk), meat, fish and pulses.

Good quality bread and pasta also contain 8% protein. Adults need 0.8 g /kg body weight per day and protein requirements increase in older age. It is recommended that we eat no more than three portions of red meat a week and two portions of fish – one oily. Vegans can obtain enough protein but must proceed knowledgeably as only soya contains all of the essential amino acids and other pulses needed to be combined with a whole grain. Calcium is important to prevent osteoporosis and may not be present in all plant-based milks. Check that such a milk is fortified with calcium, protein and iodine. Mono-unsaturated oils like rapeseed and
olive oils are best for us. Fish oil supplements contain Omega 3. We should have 400g fruit and vegetables per day, for fibre, vitamins and minerals. Most people manage 3 portions or less but 5 are recommended. Frozen vegetables are more nutritious than canned. Dr Blades recommends we all take Vitamin D supplements as we don't absorb calcium without it.

Newer Treatments for Type 1 and Type 2 Diabetes – Dr Gary Adams

Dr Adams delivered a thought-provoking talk asking us to reflect on the following questions:

- How much do you really know about your current insulin(s)?
- Do you want to see new insulins and sensors being developed?
- What impact do you want a new treatment to have?
- Will you accept new insulins despite risk?

Dr Adams pointed out that we are all individuals and will respond differently to different insulins.
Ultra-long-acting insulins that will stay in the system for a whole week are being developed. Several amino acids in the insulin chain have to be modified and different preservatives will be needed. People without diabetes metabolise their natural insulin within an hour – will we want to have something that lasts a week?
Closed loop systems (sensor communicates with pump) are supposed to respond to your blood glucose (BG) levels but the algorithm (mathematical programme) can be unreliable. This can lead to non-stable BG levels and anxiety. There are also risks from inflammation, infection and itchiness. Insulin sticks to the inside of pump tubing, so dosing may not be as accurate as we think.

Some technology is being developed by the diabetes community which will be unregulated, but may still be very good. One such piece of kit is the K-watch developed by PK Vitality. Online groups can be helpful. Take home message – our bodies, our insulin, our choice?

Close of the Day

Jenny Hirst closed the conference by thanking all our members and supporters for their generous donations of insulin, medication, testing strips, meters and money for our efforts in Ukraine. Everything, including knitted toys, hats, gloves, and scarves, has been much appreciated by those in the warzone. IDDT has used donated funds to purchase necessary supplies and to pay for van deliveries. Every penny is being spent where it is most needed.

The staff and Trustees very much look forward to seeing you in 2023

Foodie Bits & Pieces

Eating potatoes can be good for you if they are "prepared in a healthy way"

A study in Australia has reversed the previous advice that said potatoes are bad for your health and increase the risk of developing complications, such as Type 2 diabetes. Around 54,000 people took part in the study by self-reporting their daily food intake to outline how often they eat potatoes. The findings show that the people who regularly eat vegetables were 21% less at risk of developing Type 2 diabetes compared to those who rarely eat vegetables.
According to the researchers, potatoes do not prevent the development of Type 2 diabetes, but they do not have a negative impact. In previous studies, potatoes have been positively linked to incidence of diabetes, regardless of how they're prepared, but this study found this not to be true. In Denmark, people consume potatoes prepared in many different ways; in this study, it was possible to distinguish between the different preparation methods.

- Boiled potatoes were separated from mashed potatoes, fries or crisps, boiled potatoes were no longer associated with a higher risk of diabetes.
- People who ate the most potatoes also consumed more butter, red meat and soft drinks, foods known to increase the risk of Type 2 diabetes. When this is accounted for, boiled potatoes are no longer associated with diabetes.
- It's only fries and mashed potatoes that are linked to Type 2 diabetes and the latter is likely to be because it is usually made with butter and/or cream.

The study reported that the vegetables that can prevent the development of Type 2 diabetes are spinach, broccoli, cauliflower and lettuce. As for potatoes, the researchers concluded that they can't say that they have a benefit in terms of Type 2 diabetes, but they also aren't bad if prepared in a healthy way. In terms of diet generally, the researchers made the following points:

- **Replacing refined grains such as white rice and pasta with potatoes can improve your diet quality because of fibre and other nutrients in potatoes and these are good for you.**

These days there is much talk about carbs being bad, but it's more about the type of carbs you're having; compared to something like white rice, boiled potatoes are a good quality of carbohydrate. The message is - take care how you prepare them: don't eat fries or mash with extras in it all the time. (Diabetes Care, December 2022)

Pizza is a big challenge for people with diabetes, especially for insulin users!

When you eat any food that's packed with both fat and carbs, the fat slows down the absorption of those carbs, making the glucose rise more unpredictable. Many sweets and junk foods will cause this sort of blood sugar unpredictability but the problems with pizzas are particularly difficult.

Pizza is mostly just dough and cheese and contains loads of carbohydrates and loads of fat, a combination that is almost bound to cause blood sugar changes. The starch in the dough is almost bound to send your blood sugar shooting up but the fatty cheese makes the timing of that rise extremely difficult to predict, not helped by the toppings! For those that use insulin with every meal, a healthy and uneventful night of eating pizza can seem to require both advanced maths and a lot of luck!

Choices!

Whether you have Type 1 or 2 diabetes, it is worth remembering that while pizza maybe delicious, it really isn't nutritious. So, bearing in mind that high sugars are not healthy and not good long-term, do you eat pizzas and if so, how do you cope with the effects on blood sugars? The choices may be obvious:

- Just eat less pizza – one slice, half a slice or just a bite to enjoy the flavour.
- Abstinence – just don't eat any.
- Enjoy your full share of pizza - but make it once a month instead of once a week.

There is no real medical advice on how to deal with the challenging blood sugars as a result of eating pizza, there are ideas from the experiences of people with diabetes which may be worth considering. However, we have to warn that before making any significant changes to the way that you eat and use medication, you should talk to your healthcare provider.

Eat your protein and veggies first

Filling up with lower glycaemic index foods seems help to flatten out the impact of the high-carb ingredients you eat next, as a minimum, a salad should be available. For some people with Type 2 diabetes, this can be sufficient to prevent the high sugars but for people taking insulin, it is a bigger challenge.

Splitting your insulin dose

Many people with diabetes find that counting carbs and using a single insulin dose before eating doesn't work for pizza. You might go low first and then go very high later which happens when the insulin you've given gets into the blood before the glucose from the dough does. Then you may need to consume some sugar to avoid a hypo, which will just make that late glucose spike even bigger. Scientists have found that people with diabetes eating pizza can still need extra insulin up to 8 hours later. These ideas may help:

- Split your initial insulin dose – the first one followed by a second one sometime shortly after eating. If past pizza experiences have resulted in fast blood sugar drops and/or late blood sugar rises, it may be better to give the bulk of your insulin after you begin eating.
- Others find that pizza takes such a long time to digest that it is hours before the peak glucose rise occurs. Again, to avoid this, consider splitting your insulin dose – give only half of your total insulin before the meal begins and the rest an hour or two later.
- Instead of using one injection before the meal and one injection after it, take two or three smaller injections after you've finished eating, one every hour or two.
- Pump users have better options.

The more closely you can pay attention to your blood sugar the easier this will be so checking your blood sugars frequently is important and this is much easier now we have the FreeStyle Libre and CGM. Your body is unique, and the only way to really learn what works for you is to experiment on yourself.

Bits and pieces of research for young people

Educational attainment keeps pace for children with Type 1 diabetes
A recently published study found that having diabetes was not associated with any difference in educational attainment or higher education entry rates among children with Type 1 diabetes. Children with Type 1 diabetes missed an average of nine sessions of school a year more than children without the condition. Findings were based on 263,426 children without diabetes and 1,212 with Type 1 diabetes. (Diabetes Care, December 2022)

Rapid C-peptide loss tied to worse HbA1cs in young people with Type 1 diabetes
Young people who had a rapid decline in C-peptide during the first six years after their diagnosis of Type 1 diabetes also had a greater likelihood of having higher HbA1cs and more episodes of severe hypoglycaemia, compared with those who didn't have a rapid decline in C-peptide. The researchers said the findings also showed that multiple autoantibodies and low age at diagnosis predict a rapid decline in the beta-cell function. (BMJ Open Diabetes Research & Care, November 2022)

Trabecular bone volume falls for teenage girls with Type 1 diabetes
Teenage girls with Type 1 diabetes, especially those with higher HbA1cs, lost trabecular volumetric bone mineral density after a year when compared with matching teenage girls without diabetes.
The researchers stated that these findings highlight the unfavourable impact of hyperglycaemia on the growing skeleton of young people with Type 1 diabetes and reiterates the importance of adequate glycaemic control beyond vascular complications and early in the disease course. (American Society for Bone and Mineral Research, October 2022)
The trabecular bone score is a measure of bone texture correlated with bone microarchitecture and a marker for the risk of osteoporosis. Its main use is alongside measures of bone density in better predicting fracture risk in people with metabolic bone problems.
The connection with diabetes is that people with diabetes tend to have low vitamin D levels that help the body absorb the calcium needed to maintain bone density. Raised blood glucose levels lead to chronic inflammation which directly affects the quality and strength of the bone.

HbA1c remains suboptimal for most people with Type 1 diabetes
In an analysis of HbA1c data from 22 nations including over a million people, most children and adults with Type 1 diabetes do not have an HbA1c of less than 7.5%, though glycaemic control varies greatly by age and country. The first study was published in 2014 and this analysed information from 2010 to 2012 from 324,501 people with Type 1 diabetes.
The research, from the Scottish Diabetes Research Network Epidemiology Group, showed in the first study glycaemic control varied greatly across data sources and age groups, but most people with Type 1 diabetes had an HbA1c of greater than 7.5%. They then conducted a follow-up study which analysed HbA1cs from 2016 to 2020 which showed:

- Youngsters less than 15 years old are more likely to have HbA1cs of less than 7.5% compared with adults.
- However, young adults aged 15 to 24 years are less likely to have an HbA1c under 7.5%.
- Women were less likely to meet this target than men.

The researchers comment that further research is needed to better understand whether apparent differences between health systems may relate to such influences as societal factors, structure and delivery of clinical care and resource allocation. Better understanding could help the development of cost-effective interventions to improve outcomes.
(Diabetes Medicine 2021)

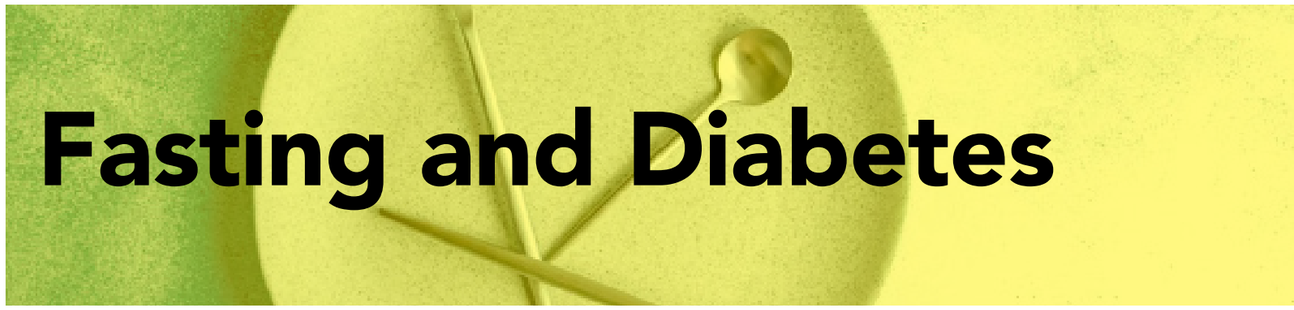
Global increase in Type 2 diabetes in young adults in past 3 decades
Many of us will remember the days when Type 2 diabetes was rare in young people but this has changed. Type 2 diabetes rates and associated number of years lost due to poor health, disability or early death increased substantially among adolescents and young adults from 1990 to 2019, particularly in low- and low-middle income countries.
Among people aged between 15 and 39 years for Type 2 diabetes the incidence rate and disability-adjusted life-year rate has increased with only a modest increase in the mortality rates for Type 2 diabetes in adolescents and young adults.

- Incidence rate went from 117.22 to 183.36 per 100,000 population.
- Disability-adjusted years went from 106.34 to 149.61 per 100,000 population. Disability-adjusted years are the years of healthy life lost due to disability for people living in states of less than good health from a specific cause, in this case diabetes.)
- Mortality rate went from 0.74 to 0.77 per 100,000 population.

The causes - in all regions, high BMI was the main attributable risk factor for disability-adjusted life years for early-onset Type 2 diabetes in this population. Similar to older-onset Type 2 diabetes, the major predisposing risk factors are obesity, family history and sedentary lifestyle. Other risk factors varied across regions, with higher proportions of ambient particulate air pollution and smoking in countries with high sociodemographic index and higher proportions of household air pollution from solid fuels and low-fruit diets in these countries. The researchers call for urgent actions to deal with the issue from a global perspective. (BMJ, November 2022)

The dangers of Type 2 diabetes in children and young people
Evidence is accumulating that young-onset Type 2 diabetes is a more aggressive disease than in adults leading to premature development of complications, with adverse effects on quality of life and long-term outcomes, raising the possibility of a future public health catastrophe. Unlike Type 1 diabetes, the risk of developing Type 2 in this young age group is greatly increased by being overweight or obese they are more likely to have insulin resistance which can often develop into Type 2 diabetes. Type 2 diabetes is more likely to be diagnosed during puberty, as hormonal changes can lead to increased insulin resistance.
Looking at the childhood overweight and obesity rates in England, we need to be concerned!

- 14.4% of reception age children (age 4-5) are obese, with a further 13.3% overweight.
- At age 10-11 (year 6), 25.5% are obese and 15.4% overweight.
(The National Child Measurement Programme,16 Mar 2022)



Fasting and Diabetes

This year Ramadan and Easter falls earlier than 2022, so we are looking at religious fasting and its impact on the management of diabetes during periods of abstinence and fasting.
Two major religions, Islam and Christianity, have periods of fasting around this time of year (many other religions also have fast periods). Many readers will have fasted before, so this article may be just a reminder but for those of you who have not, we look at fasting practices and general issues around diabetes and fasting and hope we provide some helpful tips for staying safe and well during your fast.

Islam - Ramadan
Ramadan is based on the ninth month of the lunar calendar and moves forward each year by about 11 days which means the length of fasting is greater in certain years than others. This year the fast of Ramadan will commence at sunset on 22nd March and will last until 21st April. During Ramadan it is expected that Muslims who participate will abstain from food, water, beverages, smoking, oral drugs and sexual intercourse from sunrise to sunset.

Christianity - Lent/Easter
Easter Sunday is celebrated on the first Sunday following the full Moon that occurs on or just after the spring equinox. Although not followed by all Christian denominations, Lent lasts for 40 days, concluding on Maundy Thursday, immediately prior to Easter Sunday. This year, Lent is from 22nd February to 6th April and Easter Sunday is on 9th April. During Lent, certain days are regarded as fast days, which again has implications for people with diabetes.

Diabetes and fasting
People with diabetes of either faith may be exempted from fasting but the majority of people with diabetes do fast so run increased risks of health adverse effects, such as hypoglycaemia, hyperglycaemia, diabetic ketoacidosis and dehydration. Most of these are as a result

of a reduction of food and fluid intake and the timing of meals.
If you have diabetes fasting can cause complications in managing the condition, some, arguably, more serious than others.
The best first step is to speak to your doctor or diabetes nurse to discuss the potential risks and problems associated with fasting. This will help you to formulate a plan to manage the period of your fast. Things you may want to think about and discuss could include:

- Complications of diabetes, such as poor vision or heart or kidney disease, can be aggravated by fasting and you may want to consider whether to fast or not.
- If you take insulin and/or certain tablets, you may need to think about changing the amount and timing of your insulin dose to control blood sugar levels. You may also need to change the type of insulin you are using, for example, pre-mixed insulins are not recommended during fasting.

Research has shown that both education about the effects of fasting and relevant advice can dramatically reduce the likelihood of problems occurring, both low and high blood sugar levels. High blood glucose levels can develop during a fast if you do not take prescribed medication or if you are less physically active than normal, which, in turn, could lead to diabetic ketoacidosis (DKA) – a serious condition requiring hospital treatment.
If you are still happy to proceed with your fast then there are some simple, common-sense tips and tricks to help manage your diabetes:

- Before starting the fast, you should eat foods containing slowly absorbed carbohydrates, such as rice, dhal, potatoes and pasta, along with fruit and vegetables.
- You should check your blood glucose levels more often than you normally would.
- When you break the fast, have only small quantities food and avoid eating only sweet or fatty foods.
- Try to eat just before the break of dawn, when you commence the next day's fast.
- At the end of fasting, you should drink plenty of sugar-free and decaffeinated fluids to avoid being dehydrated.

Above all – Stay safe and well!!!

Making your Will for Free

What is Legacy Giving?
The Charities Aid Foundation (CAF) says that a legacy gift is: "A gift that someone leaves to a charitable organisation in their Will". IDDT is reliant on the generosity of people who have remembered us when drafting their Will.

To remain truly independent IDDT does not accept funding or grants from the pharmaceutical industry, so we are entirely reliant on donations and gifts. We are very grateful for donations which help the charity on a day-to-day basis, but it is gifts in Wills that truly keep the charity alive and can be truly transformative for the people it supports, now and importantly, in the future.

What are the benefits of leaving a gift in your Will?
There are several different benefits to leaving a legacy to IDDT:

- For those of you who have diabetes or have loved ones with diabetes, a gift can help ensure that we can continue to support everyone that lives with the condition in the future.
- By leaving a gift in your Will you can make a significant donation that will not cost you anything now.
- Certain types of gifts, such as residuary gifts, hold their relative value over a long time.
- A legacy gift to us helps "future-proof" our charity, the research it funds and the support it can give to people with diabetes while a cure remains elusive.

In return IDDT promises to use, as best it possibly can, any gifts it receives to achieve its core aims and objectives, most importantly to continue offering free care and support to all people living with diabetes, their families, carers and supporting health professionals. With this in mind IDDT has joined with The Goodwill Partnership to offer our members the opportunity to draft a new or updated Will at no cost to themselves. The Goodwill Partnership is a well-established organisation that currently works with over 150 charities to assist their supporters to make their Will at no or reduced cost. In recognition of the value IDDT places on the support it receives from its members, we are not making this offer open to the general public, unlike other charity schemes you may have seen advertised on television.

Accompanying this newsletter is a flyer that gives more information about the scheme. If you are considering making or updating your Will, we do hope you will take us up on this offer and possibly give us favourable consideration when you do so. If you would like to discuss making your Will for Free further, then please contact Martin on **01604 622837** or email **martin@iddtinternational.org.**

Your gift, any gift, will help people living with Diabetes

From our own correspondents

Driving and using a flash glucose meter

Dear Jenny
Thank you and the team for providing such wonderful care and advice. I read your article about continuous glucose monitoring being made more widely available for Type one patients.As an early adopter of the Flash Free-Style Libre system I can highly recommend it. One question that is not clear is how this will affect driving. My Libre came with a separate reader and I have always felt this to be best used when driving so as not end up holding a phone whilst at the wheel. Most providers of CGMs now seem to assume that users will have a smart phone. I wonder if they should consider how users will use this when driving. The DVLA should also consider the reality of driving with diabetes. For example the reassurance of being notified or being able to read your levels regularly whilst driving when it may not be easy to stop, eg smart motorways!

By email

Clarification!

In 2019, the DVLA approved that drivers with diabetes will no longer be required to test their blood through finger-pricking when driving and instead will be able to use flash or continuous glucose monitoring, although, they can still use finger-pricking if they prefer.
If drivers choose to use flash or CGM devices, there are times when they MUST use a finger prick test if:

- their glucose levels are 4.0 mmol/L or below;
- they experience symptoms of hypoglycaemia;
- the glucose monitoring system gives a reading that is not consistent with the symptoms they are experiencing.

JUST A FEW REMINDERS!

Some people are told that they have to have a smartphone in order to have a Libre and this means that people who don't have a smartphone, don't want one or can't afford one are being denied the Libre. This is clearly neither right nor fair and Abbott are perfectly happy to send separate readers to people at no charge if they need them.

Alarms on RT-CGM devices must not be used as a substitute for symptomatic awareness of hypoglycaemia. For Group 1 driving, you must recognise hypos through the symptoms you experience. If you become reliant on these alarms to advise you that you are hypo you must stop driving and notify the DVLA.

You must not actively use a glucose monitoring system (CGM or Flash) while driving but you must pull over in a safe location before checking your device.

You must inform the DVLA if you use insulin to treat your diabetes.

The DVLA is very clear that it is illegal to use your phone for the CGM while driving

RESEARCH

New drug approved to delay Type 1 diabetes drug approved in US

What is being described as a "game-changing" immunotherapy drug has been proved to delay the development of Type 1 diabetes and has been approved by regulators in the USA.

It works by reprogramming the immune system to stop it mistakenly attacking pancreatic cells which produce insulin. It is an injectable drug taken once daily for 14 days that binds to and modifies cells in the immune system called T-cells. In people with Type 1 diabetes, T-cells destroy the insulin-producing beta cells in the pancreas and with the help of this drug, the self-destructive process is interrupted.

It is called Tzield (teplizumab-mzwv) and it is hoped that it will be approved in other countries. Worldwide about 8.7 million people have Type 1 diabetes and in the UK, there are 400,000 people with it, including more than 29,000 children.

In 2019, a trial showed the drug delayed some people at high risk of the condition from developing it for an average of two years. Experts say this delay can be very significant, particularly for young people who would not have to take daily insulin or monitor their sugars as intensively for that period of time. In addition, people could spend more years with their blood sugars in a healthy range, giving more time to be protected from complications such as kidney and eye disease.

This is the first and only treatment to delay onset of stage 3 Type 1 diabetes in adults and children aged 8 and older with stage 2 Type 1 diabetes.

The 3 stages of Type 1 diabetes are:

- Stage 1 is when blood sugar levels are normal and the person experiences no symptoms of Type 1 diabetes, but the person has two or more autoantibodies associated with the condition. People who test positive for at least two autoantibodies are almost certain to develop Type 1 at some point in their lives.
- Stage 2 is when there are no symptoms of Type 1 diabetes but blood sugar levels are not normal, and the autoantibodies for Type 1 diabetes persist.
- Stage 3 is when blood sugar levels are high and the person experiences the typical symptoms of Type 1 diabetes (frequent urination, dry mouth, fatigue, and/or diabetic ketoacidosis). It is not usually diagnosed until stage 3.

Tzield is indicated for people with a family history of Type 1 diabetes who have stage 2. Previous research has shown that Tzield is not as effective in stage 3, once beta cells have already been destroyed.

Risks

While there are benefits in delaying the onset of Type 1 diabetes with Tzield, as with any drug, there are risks. The most common side effects included decreased levels of certain white blood cells, rash, and headache and the warnings include premedicating and monitoring for symptoms of cytokine release syndrome (when the immune system responds too aggressively to an infection or immunotherapy drugs); risk of serious infections; decreased levels of white blood cells; risk of hypersensitivity reactions; the need to administer all age-appropriate vaccinations before starting Tzield; as well as avoiding certain vaccines while using Tzield.

The future - Tzield is currently being investigated in a phase 3 clinical trial of children and adolescents ages 8 to 17 within 6 weeks of stage 3 Type 1 diabetes diagnosis to determine if the drug may have benefits in that group.

New material helps diabetic wounds heal quickly

Diabetes can make wound healing slow and difficult which can lead to infection and in extreme cases, amputations. Scientists have discovered a new material that can be applied to diabetic wounds to heal them faster with just one application.

Researchers from the University of Nottingham discovered a new class of polymer that can provide instructions to both immune and non-immune cells to aid healing in hard-to-treat diabetic wounds. Wound healing is a complex process that involves various cell types working together, with a cell type called fibroblasts playing a critical role in forming new tissue required for healing. Diabetes can disrupt these processes in cells.

A polymer is a chemical compound made up of molecules bonded together in long, repeating chains. This structure gives polymers unique properties that can be tailored for different uses. The researchers showed that this new material produces three times more fibroblast activity over a period of up to 96 hours and achieved more than 80% wound closure.

This new polymer could be applied as a coating to standard wound dressings to provide a fast and effective treatment. (Advanced Materials, November 2022)

Just to remind you....

2023 Diabetes Everyday Diaries still available!

For the last two years we have published our Everyday Diary for anyone who lives with diabetes, whether you have diabetes, your partner has diabetes or your child has diabetes. This proved very popular, so we have published another Diary for 2023. We still have some copies left and these are available for the reduced price of £3.99

Christmas cards

We would like to thank everyone who bought Christmas cards from us in 2022. The postal strike meant that we didn't sell as many as usual because we didn't receive postal requests and we couldn't send them out either! So, we are selling off 2022 cards for **£2.50** per pack of 10 with no additional charge for p&p which could help you to save you money for Christmas 2023! Just give us a call on 01604 622837 or order online by visiting our shop on the website: **https://www.iddt.org/shop**

If you would like to order any of the designs below, or the Diabetes Diary, then please contact IDDT as above.

				
Silent Night Holy Night	Victorian Partridge	Christmas Veggies	Blue Trees	Santa and Reindeer

A Date for your Diary

Just an early warning that our AGM and Event for this year will be on Saturday, 30th September and will be held at our usual venue, the Kettering Park Hotel and Spa. As usual, the day will be a mixture of speakers, group discussions and of course, an opportunity to meet other people who live with diabetes. We hope that you will put this date in your diary and will join us on the day.

Enter the IDDT Lottery now!

LOTTERY RESULTS

WINNERS OF THE OCTOBER 2022 DRAW ARE:

1st prize of £569.76 goes to Pearl from Yeovil

2nd prize of £427.32 goes to Anon from Cardiff

3rd prize of £282.88 goes to Jeremy from Colchester

4th prize of £142.44 goes to Anon from Dorking

WINNERS OF THE NOVEMBER 2022 DRAW ARE:

1st prize of £500.40 goes to Geoff from Sidford

2nd prize of £375.50 goes to Anon from Nottingham

3rd prize of £250.20 goes to Anon from Bradford

4th prize of £125.10 goes to Margaret from Wolverhampton

WINNERS OF THE DECEMBER 2022 DRAW ARE:

1st prize of £498.72 goes to Veronica from Glasgow

2nd prize of £374.04 goes to John from Nottingham

3rd prize of £249.36 goes to Anon from Dorking

4th prize of £124.68 goes to Anon from Solihull

Note: The winners of the draws for January, February and March 2023 will be announced in our June 2023 Newsletter and on our website.

A huge 'Thank You' to everyone who supports IDDT through the lottery.

If you would like to join in for just £2.00 per month, then give us a call on01604 622837 or email jenny@iddtinternational.org

INDEPENDENT DIABETES TRUST

SNIPPETS

Study highlights gender-based differences in paediatric Type 1 diabetes

According to a meta-analysis of studies, girls with Type 1 diabetes were more likely to have higher HbA1c levels than boys when first diagnosed and continued to have higher levels after treatment began. It is suggested that different activity levels, eating patterns and hormones may be contributing factors to the difference.
The researchers found that girls needed higher basal insulin and total insulin doses than boys and girls were more likely than boys to be prescribed insulin pump therapy or continuous subcutaneous insulin infusions. (European Association for the Study of Diabetes annual conference, September 2022

Study links exercise timing to insulin resistance

A study has found that adults who performed moderate to vigorous activity in the afternoon or evening experienced significant reduction in insulin resistance and improvement to their blood glucose control compared with those who had an equal amount of activity throughout the day. However, afternoon or evening moderate to vigorous activity had no effect on liver fat content and there were also no significant differences in insulin resistance and liver fat content based on timing of light physical activity. (Diabetologia, November 2022)

Metformin may cut knee replacement risk in Type 2 diabetes

A published has found that the incidence of total knee replacement over four years was 19% lower among patients with Type 2 diabetes who were regular metformin users, compared with non-users. The researchers said that in addition to reducing glucose levels, metformin also modulates inflammatory and metabolic factors, leading to reduced inflammation and plasma lipid levels. (Scientific Reports, September 2022)

More evidence on 'pre-diabetes'

IDDT prefers to refer to 'pre-diabetes' as 'being at risk of Type 2 diabetes' because this is what it is! Initially, although not a popular view. some people estimated that only 10% of people who were told that they had pre-diabetes actually went on to develop Type 2 diabetes. Over the years. nothing has changed from the original 10% estimate and we have to wonder whether there should be some re-thinking and re-naming of 'pre-diabetes'.

IDDT's concerns have always been that the expression 'pre-diabetes' causes upset to many people, often unnecessarily and it is not actually a diagnosis!

A recent study of 3,888 people with 'pre-diabetes' found:
- only 6% of developed diabetes after 12 months,
- 63.4% had repeated glycaemic testing during that time and only 10.4% had a diagnosis of 'pre-diabetes',
- 1% were referred to nutrition services and 5.4% were prescribed metformin.

(Journal of General Internal Medicine, March 2022)

Drop in hospitalisations seen with glucose sensor

A retrospective study that analysed the hospitalisation data of patients with Type 2 diabetes who used Abbott's FreeStyle Libre glucose sensor system for a year or more and are on basal insulin therapy administered once daily found a 67% decrease in acute diabetes event -related hospital admissions. (Diabetes Technology & Therapeutics, September 2022)

www.iddtinternational.org PO Box 294 Northampton NN1 4XS enquiries@iddtinternational.org