

## UKRAINE – IDDT appealed to you and you responded!

At the start of the Ukraine crisis, IDDT was contacted by Dmytro with a desperate plea for help:

**“Still, here, in Ukraine, we are simply out of stock of the vital simple necessities. They are all gone. The supplies were interrupted and they are not expected in the nearest future. If you have an opportunity to provide any**

**small or bigger help or know someone who can be of help, please respond to this letter.”**

IDDT has always supported all people with diabetes and this is one of the most important appeals we have ever had to make. In early March, we appealed to our members who use insulin asking for donations of any unwanted, in-date diabetes supplies.

## Your response was, and still is, amazing! A huge thank you!

By mid-April, we received and sent £150,000 worth of diabetes items for Ukraine including the following:

- 2622 prefilled insulin pens
- 1965 Insulin pen cartridges
- 262 vials of insulin
- 299 blood glucose meters with 66,380 matching test strips
- 23,333 lancets and 71,600 pen needles
- Many other needed items including plenty of jelly babies!

We didn't ask for money but you have sent this too which has enabled IDDT to buy test strips to match blood glucose meters and to help with the transport costs to Ukraine. One anonymous person even knitted rabbits in Ukrainian colours and this picture brought tears to the eyes of those receiving them!



Consignment leaving IDDT for Ukraine



Rabbits arriving safely in Ukraine.

The desperate need is still present in Ukraine so we are still collecting any in-date, unused items for the people requiring insulin. In addition, there is now a need for the following Type 2 tablets: Metformin, Glibenclamide, Diamicon, Glimepiride, Glucophage. So, if you can help, please send any unwanted items to IDDT.

Our thanks to everyone who has responded and given help to the people of Ukraine – their plight is unimaginable and their courage is tremendous. We have to also thank the volunteer drivers for their commitment and bravery in transporting the parcels from the UK to Ukraine and helping to save lives.

We have to say a huge thank you to everyone who has donated to help the people of Ukraine but perhaps Dmytro says it best:

**“Yesterday we received priceless parcels for us. You cannot even imagine the joy of the doctors who have sorted these elements. The entire Ukrainian people are very grateful to you for the contribution you have made, for the humanity and condolences that you have surrounded us. Already today we have distributed insulin as needed and have begun sending it to different regions. Thank you very much.”**



How happy these ladies are to receive a blood glucose meter



Children from the orphanage receiving their sweets for Easter

## Good news on the availability of technology!

### More on closed loop systems and the artificial pancreas

Closed loop systems are when people with Type 1 diabetes use an insulin pump and a continuous glucose monitor that 'talk to each other'.

An artificial pancreas combines an insulin pump and a continuous glucose monitor (CGM) which then provides the right amount of insulin at the right time.

### Artificial pancreas to revolutionise diabetes care in England

Almost 1,000 adults and children with Type 1 diabetes have been given a potentially life-changing 'artificial pancreas' by the NHS in England as part of the first nationwide test into the effectiveness of this technology. Around

35 NHS diabetes centres across the country are piloting the hybrid closed loop system and 875 people have benefitted for a year so far.

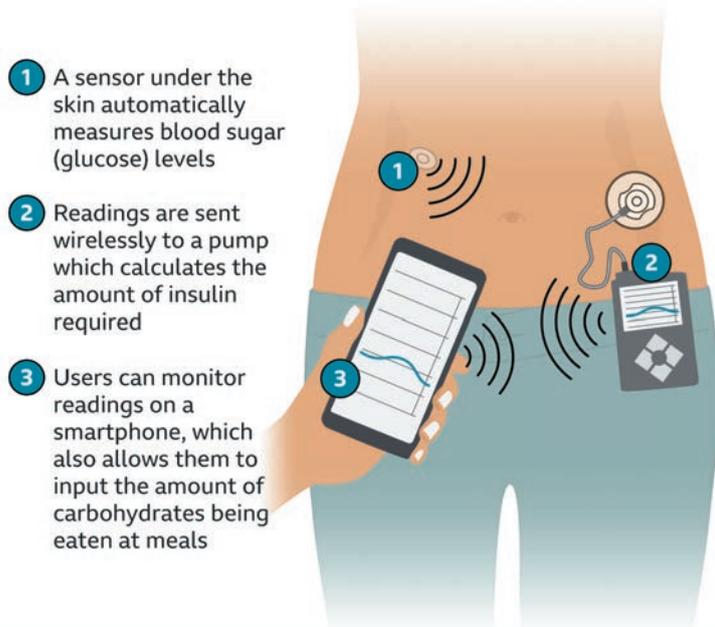
As we know, the 'hybrid closed loop technology', continually monitors blood glucose and automatically adjusts the amount of insulin given through a pump. This system is not completely automated, because the amount of carbohydrates being eaten at mealtimes needs to be inputted.

It can eliminate finger prick tests and help to prevent hypoglycaemic and hyperglycaemic attacks. Research has also shown that using this system can also help relieve some of the mental burden on people with Type 1 diabetes or their carers who otherwise must remain constantly vigilant to blood sugar levels.

NHS experts want to discover whether this technology can help people with diabetes of all ages to safely and effectively control their condition in a real-world setting. They hope that this is not far away from the ultimate goal of a fully automated system, where people with Type 1 diabetes can get on with their lives without worrying about glucose levels or medication.

The data collected from the pilot, along with other evidence, will be considered by the National Institute for Health and Care Excellence (NICE) as part of a technology assessment. NICE will make a recommendation about wider adoption within the NHS following a review of the evidence.

### Artificial pancreas: how does it work?



Source: NHS England/BBC research



### UK Healthcare professional attitudes to automated insulin delivery systems

Automated insulin delivery (AID) systems, as described, are likely to be in greater use, so this survey looked at how healthcare professionals feel about the use of these systems for their patients.

#### Results

317 responses were obtained from a range of healthcare professionals in adult and paediatric services and their key views include:

- these systems were seen as “risky in the wrong hands” (43%).
- 91% felt uncomfortable initiating discussions about them because of lack of regulation (67%) and/or their own lack of knowledge (63%).

- Half of healthcare professionals (47%) reported that they would choose to use these systems if they themselves had Type 1 diabetes.

### Conclusions

Healthcare professionals are generally supportive of AID users but many feel uncomfortable with the technicalities of the systems given the lack of approval. Knowledge around the use of these systems was limited. The researchers feel that re-assessment of healthcare professionals’ perceptions should be performed in the future given the developments in diabetes technology and emerging ethical and legal perspectives. (Diabetes Therapy, January 2022)

### NICE recommends flash glucose monitoring (Freestyle Libre) for everyone taking insulin

Press release 31st March 2022

- New guidance from NICE has recommended the use of real-time continuous glucose monitoring (CGM) for adults and children living with Type 1 diabetes for the first time. It will give them a continuous stream of real-time information on a smartphone about their current blood glucose level.
- Alongside new CGM technology, the use of intermittently scanned glucose monitoring devices – known as flash monitoring (the Freestyle Libre) has been expanded to the whole of the Type 1 population. So more than 250,000 people will be offered this technology and it will reduce the need for finger-prick testing by up to 50%.
- Although it didn’t hit the headlines, NICE has also recommended extending the use of flash monitoring to adults with Type 2 diabetes on insulin therapy, making this technology available to a further 193,000 people.

### Freestyle Libre

Until now NICE had only recommended technology for continuous glucose monitoring for adults with Type 1 diabetes according to specific criteria. This has meant that around only 50% of those with Type 1 having a Freestyle Libre but nobody taking insulin for Type 2 diabetes having access to it. However, now people will be able to choose the technology which is right for them. The flash devices require users to consciously scan a sensor on their arm to obtain blood sugar data or it can be passed to a smartphone.

People who are eligible should speak to their diabetes team to access real-time or flash monitors on prescription.

### It should remove the postcode lottery!

IDDT welcomes this news and we hope that it will remove the postcode lottery that has applied to the availability of the Freestyle until now. The interpretation of the prescribing criteria has varied across the country according to the decisions of local health systems (CCGs). We have to hope that local health systems and healthcare professionals deliver these NICE guidelines and enable anyone taking insulin to have the informed choice of the way they carry out blood glucose testing.



### Finally, the FreeStyle Libre 3 system is now available in the UK

In March, Abbott announced that the FreeStyle Libre 3 continuous glucose monitoring (CGM) system is available via the NHS Supply Chain Framework for people with more complex

diabetes management needs who require a real-time CGM device, such as those with impaired hypoglycaemia awareness.

The FreeStyle Libre 3 automatically delivers continuous, real-time glucose readings every minute to users' smartphones. It provides 14 days of results with the smallest and thinnest sensor design available, making it even more convenient and discreet. This reduces the system's total volume by more than 70% and is more environmentally friendly, including a 41% reduction in plastic and 43% decrease in carton paper.

The system comprises of the sensor and the FreeStyle Libre 3 smartphone app, which allows users to record their real-time glucose levels, glucose history and trend arrows and see them every minute. A quick glance at their compatible smartphone is all it takes to see changes in glucose levels and adjust their diabetes management accordingly.

The FreeStyle Libre 3 app is initially available for Android operating systems only, with the iOS version expected in the coming months. Abbott's FreeStyle Libre and FreeStyle Libre 2 systems remain listed on the NHS Drug Tariff and available on prescription for people with diabetes who are eligible.

If you think you may be eligible for the Libre 3, you should discuss it with your healthcare professional.

## Changes in diagnosis of Type 1 and Type 2 diabetes in the UK

Year	Type 1	Type 2
2011	7,615	150,105
2012	8,055	165,220
2013	8,165	182,515
2014	8,365	173,895
2015	9,080	196,730
2016	9,270	202,940
2017	8,970	195,445
2018	9,210	220,545
2019	9,820	237,530
2020	11,730	198,600

This table shows the numbers of people who have been diagnosed with Type 1 and Type 2 diabetes each year from 2011 to 2020.

It is interesting to note that between 2019 and 2020, there was the largest increase in people being diagnosed with Type 1 diabetes – was this connected to an increase as a result of Covid?

For the same years, less people were diagnosed with Type 2 diabetes, so was this because less people went to the doctors for tests? Just thoughts...

# The link between newly diagnosed diabetes and Covid 19

A study in The Lancet found that people with few or no risk factors for diabetes had a 38% greater risk for the disease after being infected with Covid. In addition, those with Covid who were treated in intensive care had a 276% higher diabetes risk compared with those without Covid. It is suggested that steroid treatment, known to raise blood glucose levels, maybe a factor. (28 March 2022)

In addition, a review by US researchers showed that between March and September 2020 the numbers of people admitted to hospital with Covid were as follows:

- 1902 people admitted with Covid and 594 had diabetes, 77 of these had newly diagnosed diabetes.
- Compared to pre-existing diabetes, newly diagnosed diabetes was more common in younger people and less common in those of non-Hispanic White race/ethnicity.
- Of 64 survivors with newly diagnosed diabetes, 36 continued to have diabetes, 26 regressed to normoglycemia or pre-diabetes, and 2 were unable to be classified after 323 days. (Journal of Diabetes and its Complications, February 2022)

## Paediatric Type 1 diabetes cases rose during the pandemic

The number of children diagnosed with Type 1 diabetes during the Covid pandemic was significantly higher than in previous years and there were also more cases where children initially presented with paediatric diabetic ketoacidosis during the one-year pandemic period. However, there was no significant difference in the percentage of children that had to be admitted to paediatric intensive care and there were also no differences in average age at presentation, HbA1c levels or BMI. (JAMA Pediatrics, January 2022)

## Review of Covid and new-onset diabetes link

Several studies have reported that Covid is associated with hyperglycaemia in people with and without known diabetes. A review of these studies shows that early identification and treatment of people who fall into this category could improve their long-term outcomes.

They identified 4 possible reasons for the link between Covid and new onset diabetes:

- **Pre-existing undiagnosed diabetes**  
People admitted to hospital may have undiagnosed Type 2 diabetes before admission.
- **Stress hyperglycaemia and new-onset diabetes following acute illness**  
This has been identified previously but in Covid, stress hyperglycaemia may be even more severe.
- **Viral infections and new-onset diabetes**  
These infections may affect the pancreas. Previous studies have shown acute inflammation in the pancreas due to other viruses.
- **In hospital steroid-induced hyperglycaemia**  
Steroid-induced hyperglycaemia is common and studies have shown that between 53% and 70% of non-diabetic people develop steroid-induced hyperglycaemia. (Diabetes Care, November 2021)

## What is stress hyperglycaemia?

Stress hyperglycaemia (also called stress diabetes or diabetes of injury) is a medical term referring to transient elevation of the blood glucose due to the stress of illness. It usually resolves spontaneously, but must be distinguished from various forms of diabetes.

## Why does stress cause hyperglycaemia?

The cause of hyperglycaemia in critically ill patients is multifactorial. Physiologic and emotional stress leads to intense activation of counterregulatory hormones such as cortisol and adrenalin. The release of inflammatory cytokines causes an increase in peripheral insulin resistance and glucose production from the liver.

## How long does stress hyperglycaemia last?

The good news about stress hyperglycaemia is that it often subsides as soon as the stress recedes. But the bad news is that between 30% and 60% of non-diabetic patients who develop transient stress hyperglycaemia while hospitalised will have confirmed diabetes within a year.

# Speeding up driving licence applications

IDDT has received questions about the delay in renewing driving licences, particularly important for people with diabetes because they have medically restricted licences. On February 24th 2022, the responsible Minister made the following points:

- The quickest and easiest way to apply for a driving licence is by using the Driver and Vehicle Licensing Agency (DVLA)'s online service. There are no delays in successful online applications and customers should receive their licence within a few days.
- Many people still choose or have to make a paper application and the DVLA receives around 60,000 items of mail every day. The DVLA is working hard to process paper applications as quickly as possible for all drivers, including those with health conditions. They have recruited more staff, increased overtime working and secured extra office space in Swansea and Birmingham.

- Drivers with diabetes, epilepsy, Parkinson's disease, a visual impairment, a sleep condition or a heart condition can renew their licence online.
- The DVLA has recently introduced a simplified licence renewal process for drivers with epilepsy and multiple sclerosis which has significantly reduced the need for the DVLA to seek further information from medical professionals and is looking at adding more medical conditions to this process.
- The length of time taken to deal with an application depends on the medical condition(s) involved and whether further information is required from medical professionals. The majority of those renewing their licence will be able to continue driving while their application is being processed.

## Diabetes and Tears

Significant amounts of research have been carried out around the subject of tears and diabetes. These have tended to focus on two main areas:

- Diabetes, dry eye disease and neuropathy
- Tears and blood glucose levels

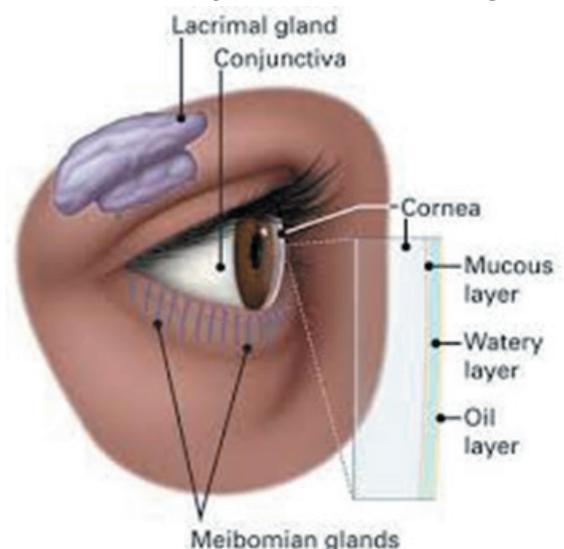
### What are tears made up of?

It is tempting to think of tears as a comparatively simple fluid produced to lubricate the eye. The reality, as ever, is more complicated. Tears do indeed lubricate the eye and are made up of three layers. These three layers together are called the tear film.

- The mucous layer is made by the conjunctiva and keeps the tears attached to the eye. The watery part of the tears is made by the lacrimal gland. It is the thickest layer, hydrates the eye, keeps bacteria away

and protects your cornea. The eye's lacrimal gland sits under the outside edge of the eyebrow (away from the nose) in the orbit.

- The meibomian gland makes the oil that becomes another part of the tear film. The oily layer prevents the other layers from evaporating and also keeps the tear's surface smooth so that you can see through it.



Tears drain from the eye through the tear duct.

### **Some other facts about tears:**

Not all tears are the same, there are three different types of tears:

- **Basal tears** – always in your eyes to protect from debris and keep them lubricated and nourished.
- **Reflex tears** – form when your eyes are exposed to irritants, such as smoke and onion fumes.
- **Emotional tears** – are produced when you're sad, happy, or feeling other intense emotions.

### **Cry all you want — you won't run out of tears!**

According to the American Academy of Ophthalmology, you make 15 to 30 gallons of tears every year. While tear production can slow down due to certain factors, such as health and aging, you don't actually run out of tears. You produce fewer basal tears as you get older, which is why dry eyes are more common in older adults, especially true for women after the menopause due to hormonal changes.

### **Emotional tears may actually help you**

Some researchers believe that crying is a social signal to get help from others when you're in pain, sad, or feeling any type of distress or extreme emotion. Often, when you cry, it prompts others to offer support, which makes you feel better. There is evidence that emotional tears contain additional proteins and hormones that aren't found in the two other types of tears. These may have relaxing or pain-relieving effects that help the body return to its normal state.

### **Crocodile tears are real if you're a crocodile!**

The term "crocodile tears" is used to describe someone who is pretending to cry. According to a 2007 study, crocodiles may actually cry when they eat.

### **A lack of tears can seriously damage your eyes**

Tears keep the surface of your eyes smooth and clear while also protecting against infection. Without enough tears, your eyes are at risk of:

- injuries, such as corneal abrasion
- eye infections
- corneal ulcers
- vision disturbances.

### **Diabetes, dry eyes and neuropathy**

Dry eye syndrome is a common condition that occurs when the eyes do not make enough tears, or the tears evaporate too quickly. Symptoms usually affect both eyes and include a gritty, sandy feeling in the eyes, burning, itching, blurred vision, light sensitivity and strangely,

increased watering of the eyes. Peripheral neuropathy is the most common complication of diabetes and occurs when there is damage to the nerves connecting the brain and spinal cord to the rest of the body. Symptoms include pain, numbness, imbalance, weakness, pins and needles, and recurring foot ulcers.

**Type 2 diabetes** – the link between Type 2 diabetes and neuropathy and Type 2 diabetes and dry eye disease is well established so it is not unreasonable to assume that there may be a direct link between the three. Even if there is not a direct link, then there may be an increased likelihood of the conditions occurring together.

**Type 1 diabetes** – Australian researchers investigated the relationship between dry eyes and neuropathic pain and found that peripheral nerve damage in people with Type 1 diabetes can be traced in tear film. They found that people with such damage have significantly lower levels of a protein called 'substance P' in their tear film.

### **Tears and blood glucose levels**

- Research into the comparability of the blood glucose levels in the blood and that in tears has tended to show that the two measures are comparable which has given rise to hopes that tests from tears could be developed as a pain free alternative to blood glucose testing. Work is now underway to develop sensors/monitoring devices that can utilise this link.
- A further development is smart contact lenses - lenses that could help to treat retinopathy by detecting blood glucose levels then delivering controlled medication via electrical signals. The device has proved successful in animal trials and further work needs to be carried out to establish its suitability for human use.
- A research team in the US, has developed prototype contact lenses that change colour according to blood glucose levels.

We hope that research, testing and development in this area continues and can improve the quality of life of all people with diabetes.

**Note: IDDT has a free booklet, 'The Eye and Diabetes', if you would like a copy, please ring, 01604 622837, email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org) or write to IDDT, PO Box 294, Northampton NN1 4XS.**

## NICE guidance updates

NICE (National Institute for Health and Care Excellence) issues evidence-based recommendations developed by independent committees, including professionals and lay members and consulted on by stakeholders. Recently NICE has updated their recommendations on Type 1 and Type 2 diabetes in adults and children and the information for the public can be found at the following links:

- Diabetes (Type 1 and Type 2) in children and young people: diagnosis and management NG18 <https://www.nice.org.uk/guidance/ng18/informationforpublic>
- Type 2 diabetes in adults: management NG28 <https://www.nice.org.uk/guidance/ng28/ifp/chapter/About-this-information>
- Type 1 diabetes in adults: diagnosis and management NG17 <https://www.nice.org.uk/guidance/ng17/ifp/chapter/About-this-information>

## Diabetic eye screening for housebound people

Health Minister, Maria Caufield said in answer to a Parliamentary Question, that if a person with diabetes is unable to attend a community-based setting for retinal screening, then a retinal assessment can be provided through their general practitioner and by the

community domiciliary optometry service. People can be referred for further investigation or treatment at hospital eye services which can provide facilities to support attendance and assist patients who are housebound. (March 2022)

## Waiting for elective surgery?

The Government has announced that a new 'My Planned Care' platform will be launched to help to provide information and support for patients waiting for elective surgeries. The intention is that the new platform will help to address the backlog of care which has been exacerbated by the pandemic.

Patients and carers will be able to access information ahead of planned surgeries, on issues such as waiting times, as well as tailored information relating to personalised support in preparation for surgery. The support could include information on prevention services, or advice and guidance relating to diet and exercise.

A third of on-the-day cancellations are due to people not being clinically ready for treatment,

such as having a long-term condition including diabetes or high blood pressure which has not been diagnosed or properly managed.

In addition, the NHS Elective Care Recovery Plan outlines plans to roll out access to specialist teams made up of nurses, care co-ordinators and doctors, who will screen patients and work with them to develop personalised plans ahead of their surgical procedure to boost people's chances of recovering quickly as well as cutting the number of operations that are cancelled on the day.

The dedicated care teams will be in place from April 2023 and there will be a rollout of more than 100 community diagnostic centres and extra surgical hubs.

# Foody Bits and Pieces

## Eating potatoes may lower salt retention and lower blood pressure

Research has shown that consuming dietary potassium through potatoes could help people with high cardiometabolic risks to reduce their body's sodium retention, which could then result in lower systolic blood pressure. The findings also showed that a 330-calorie serving of baked French fries had no negative effects on blood vessel function or blood pressure. (Nutrients, June 2021)

## Ketogenic diet and pregnancy

A recent review has found a higher risk of gestational diabetes and birth defects among pregnant women on a ketogenic diet. A ketogenic diet is low in carbohydrates and high in fat. The researchers say that current evidence suggests that for most people, the risks of such diets outweigh the benefits but others say the findings should be treated with caution. (Frontiers in Nutrition, August 2021)

## Celebrities' social media promotes junk food often for free

Images of people eating and drinking are a staple of social media, but new research finds such posts from celebrities often puts the spotlight on junk food.

Profit isn't always the reason why as celebrities often highlight unhealthy food favourites without getting paid for it because they were eating and

drinking in their everyday lives. They have the right to post whatever they want, but as they are often idolised, this exposes followers on social media to unhealthy profiles of foods and beverages.

For the study, investigators tracked all food and drink-related posts made by 181 athletes, actors, TV personalities and musicians on Instagram between May 2019 and March 2020.

More than 3,000 food-related celebrity posts were cited, containing nearly 5,200 different foods and drinks. The results showed:

- Almost 90% of celebrity food and drink posts were unhealthy enough to be essentially illegal under current British youth-related advertising regulations.
- Less than 5% of all the food/drink-related posts linked back to a paid sponsorship by a food or beverage manufacturer.
- Celebrity posts that featured relatively healthy food choices were significantly less likely to receive "likes" or comments from followers.

So, celebrities wanting to promote follower engagement, less healthy foods are an additional incentive for celebrities to post.

(JAMA, January 2022)

Celebrities and athletes can be very powerful role models, especially for young people, so the message has to be - don't get your nutrition advice from celebrities or athletes online!

## Just a few reminders!

### Prescription charges – over a million people overpaid for prescriptions

People with diabetes who are treated with medication / insulin receive free prescriptions but those treated with diet only, have to pay. At the time of writing, prescription costs are £9.15 per item (but they may increase), and it is not unusual to be taking several medicines such as for treatment of blood pressure or high cholesterol. The following information may also be of value to family members without diabetes.

Figures from the NHS Business Services Authority, disclosed via a Freedom of Information (FOI) request, that 1,063,648 people paid for at least 12 prescriptions in the 2020/21 financial year, with 16 being purchased on average.

- One prescription a month for a year will cost £109.80 but obtaining a prescription prepayment certificate (PPC) costs £106 covering the cost of all pharmacy-dispensed medication for a year.

- For people having the average 16 prescriptions a year, the cost is £146.40, so the prepayment certificate saves about £40.00 a year.

1,063,648 people could have saved using the annual prepayment certificate in 2020/21! If you or someone you know has more than 12 prescription items a year, you can purchase a PPC on the NHS Business Services Authority website, by calling 0300 330 1341 or in person at many pharmacies. If you are entitled to a medical exemption certificate, form FP92A, your GP will sign the form to confirm that you are eligible.

### **Covid vaccinations**

Initially, only people with severely weakened immune systems were eligible for a fourth vaccination after 2 doses and a booster. Now in addition to those with severely weakened immune systems, a second booster is being offered to:

- adults aged 75 and older,
- residents in a care home for older adults,
- those aged 12 years and over who are immunosuppressed.

Adults are offered Pfizer or Moderna while children aged 12-18 receive Pfizer.

### **Smoking is tied to worse outcomes in Type 1 diabetes**

A recent study has found that people with Type 1 diabetes who are currently smoking had

worse diabetes-related outcomes compared to people who had never smoked or had given up. The smokers had higher HbA1cs, greater diabetes distress, less frequent self-monitoring and poorer self-care. (Journal of Diabetes and its Complications, (February, 2022)

### **Vaping and the risk of diabetes**

A new study suggests that people who vape may be at risk of Type 2 diabetes, even if they don't smoke traditional cigarettes. Among more than 600,000 US adults, researchers found that those who vaped were more likely to have pre-diabetes (at risk of Type 2 diabetes) than people who'd never vaped or smoked traditional cigarettes.

The findings do not prove that vaping directly raises the risks of diabetes but nicotine, as well as chemicals in tobacco smoke, can alter the body's ability to control blood sugar. E-cigarettes also contain nicotine, along with their own blend of "e-liquid" chemicals whose effects are not yet fully understood, so it is plausible that vaping could influence the risk of diabetes.

Cigarette smoking creates low-grade inflammation throughout the body, so too can vaping. Given that systemic inflammation underlies a host of disease processes, it is unsurprising to see vaping linked to a condition like pre-diabetes. As vaping is a relatively recent practice, it is not yet clear whether it carries long-term disease risks similar to smoking. (American Journal of Preventative Medicine, March 2022)

## **BITS AND PIECES**

### **Home blood pressure checks more accurate than clinic readings**

A study has found that regular home blood pressure monitoring is more accurate for diagnosing hypertension than readings taken at clinics, pharmacies and other locations. Researchers who studied 510 adults at high risk of hypertension found that blood pressure readings done at home were consistent with ambulatory blood pressure monitoring, the gold standard for diagnosing hypertension. A related study found that patients also preferred home monitoring. (Journal of General Internal Medicine, March 2022)

### **Vitamin C linked to lower diabetic retinopathy risk**

A published study has found that people with diabetic retinopathy had lower levels of circulating vitamins C, D and E when compared to those without diabetic retinopathy. (American Journal of Ophthalmology, January 2022)

### **Benefits of cycling for people with diabetes**

A study of more than 7,000 adults with diabetes showed that those who rode bicycles regularly had much lower odds of dying of cardiovascular disease. The research showed the greatest risk reduction was seen in adults who reported cycling between 150-299 minutes per week. (JAMA Internal Medicine, July 2020)

### **Delays in prescribing for Type 2 diabetes**

A UK study involving 120,409 people with Type 2 diabetes carried out in Leicester found that among people who were recently diagnosed with Type 2 diabetes, the delay to prescribe glucose-lowering treatments was longest in older adults, those who were black or of other ethnicities and those with multiple morbidities. The findings also showed that those from the most deprived areas got first-line treatment earlier, compared with those from the least deprived areas. (Diabetes, Obesity and Metabolism, June 2021)

### **First immunotherapy drug delayed**

In a previous Newsletter we reported that teplizumab, the first immunotherapy for Type 1 diabetes, was granted 'breakthrough therapy designation' in the US. This is when a treatment is considered to hold huge promise and means it is fast-tracked for review. Immunotherapies are new treatments that reprogramme the immune system so that it no longer attacks and destroys insulin-producing cells in the pancreas, dealing with the root cause of the condition for the first time.

The FDA has been considering whether to approve teplizumab for people who don't yet have Type 1 diabetes but have a high risk of developing it in the future but they have decided that more data is needed. In the UK, the Medicines and Healthcare products Regulatory Agency (MHRA) would need

to approve teplizumab as safe and effective and it hasn't yet been submitted for approval in the UK. A number of other Type 1 immunotherapy drugs are being tested in clinical trials right now.

### **Medications that may lead to weight gain**

A survey carried out by the National Health and Nutrition Examination Survey for 2017-2018 showed that 20.3% of participating adults said they had prescriptions for drugs that may lead to weight gain. This was compared with 13.2% in 1999-2000. Beta blockers were the most frequently prescribed type of medication reported to cause weight gain. (Obesity, January 2022)

### **Glomerular filtration rate abnormalities in children with Type 1 diabetes**

A notable proportion of children with Type 1 diabetes show that early signs of kidney abnormalities may be seen in the early years of living with Type 1 diabetes. This was shown by measuring the glomerular filtration rate (eGFR) to check the kidney function. This finding along with evidence of eGFR declining over time is concerning because of the long-term risk of chronic kidney disease (CKD). As a result, the researchers recommend systematic serum creatinine monitoring at diagnosis and regular intervals thereafter in children with Type 1 diabetes. (Canadian Journal of Diabetes, February 2022)

## **WHAT'S NEW?**

### **FDA Approves Eversense 6-Month Implantable Glucose Sensor**

After a long wait, in February, it was announced that the first-ever implantable continuous glucose monitor (CGM) known as Eversense, from Senseonics, was approved by the US Food and Drug Administration (FDA). The latest version, Eversense 3, can stay in the body for a full 6 months rather than needing to be surgically replaced every 90 days, as happened with the original version. Many people did not like having to visit a doctor for an incision in their upper arm every 3 months to replace the unit so now, people in the US also have access to the longer-wear sensor which is already available in Europe sold by Ascensia Diabetes Care.

With this approval, Ascensia plans to launch the Eversense E3 by July 2022, and the manufacturer says it will pursue the needed research for paediatric use, as well as making this model compatible with existing insulin pumps and Automated Insulin Delivery (AID) systems.

### **What is the Eversense E3 implantable CGM?**

Eversense is entirely different from other CGMs. It is implanted under the skin for a number of months, rather than days. To get readings, you have to wear a transmitter on top of your skin over the sensor insertion site and this stays in place with a silicon-based adhesive backing, like a Band-Aid.

The sensor is a miniature transparent rod, that's implanted several inches under the skin. The FDA has approved it to go in the upper arm, though some users internationally have reported having had it inserted on their abdomen. Once inserted, the sensor has a one-time warmup period of 24 hours where no data is displayed as it gets used to the person's body. The transmitter is a black square, so not particularly discreet but it can be taken off whenever you wish, without wasting anything but a single adhesive backing.

### **Medtronic Issues Urgent Basal Insulin Reminder for Pump Users**

Medtronic is sending out a letter to everyone who received one of its new or replacement

insulin pumps within the last 6 months to remind them to make sure they have saved their basal (background) insulin rates on their devices. The "urgent medical device correction" notice was prompted by a series of injuries due to the use of pumps that had not been properly programmed.

Medtronic's insulin pumps do not arrive pre-programmed with their basal insulin rates so this advice is so that users are aware of this and to remind them to manually enter and save this information to complete the pump's setup. From the beginning of February 2022, the company began notifying doctors and people who have received a MiniMed 600 series or MiniMed 700 series insulin pump in the last 6 months.

# INTERNATIONAL *News*

## **Human Rights Watch says unaffordable US insulin is a human rights abuse**

As we have reported in previous Newsletters, the price of insulin in the US is very high and this high cost has led an estimated 1 in every 4 people with diabetes to ration or skip doses. (JAMA Internal Medicine, 2019).

In April, Human Rights Watch, an international advocacy organisation, declared that insulin's price is an abuse of human rights. In its new report, this organisation argues that the human rights of people with diabetes are being violated when they're unable to afford their insulin.

It maintains this makes insulin manufacturers, who set those high prices, are contributing to human rights abuses. While the top three insulin makers, Sanofi, Eli Lilly, and Novo Nordisk, have been the subject of multiple congressional investigations, class action lawsuits and even protests from the families of loved ones who died because of insulin rationing, they've never been said to be human rights abusers by an organisation with the reach and power of Human Rights Watch. (12th April 2022)

## **A non-profit drug maker will provide insulin for no more than \$30 a vial**

There are political moves to cap the price but recently Civica Rx, a non-profit generic drug maker backed by hospitals, insurers and philanthropies, has announced that it plans to manufacture and sell insulin for no more than \$30

a vial. It is expected to be available as soon as early 2024, pending approval. Though insulin costs little to make, in the US the list price of the brand name products is roughly \$300 per vial. The cost has nearly tripled since 2010. (March 8th 2022)

## Good news for people with diabetes in the US

Congress could soon send to the president's desk a bill that would cap the cost of insulin at \$35 per month which could significantly reduce the costs for millions of Americans with diabetes. The House has approved the bill by a vote of 232-193 and at the time of writing, the

bill is due to go to the Senate and could be taken up in the upper chamber in a matter of weeks. Experts say it costs less than \$10 a vial to manufacture, yet there are still American families with insurance paying hundreds of dollars per vial of insulin. (1st April 2022)

## World Health Assembly – a breakthrough moment in diabetes

The 74th World Health Assembly has adopted a first-ever resolution that could help “turn the tide on diabetes” which is described as a “breakthrough moment” for global policy action and investment. Targets to halt the rise in diabetes were agreed in 2013 but governments have not delivered on those targets. In fact, the opposite has happened, global trends are

heading dramatically in the opposite direction, with diabetes deaths having risen by 70% worldwide since 2000. The recommendation is that the WHO now needs to work with governments, civil society, the private sector and people living with diabetes to develop those targets and present them for adoption in 2022.



# Research and children

### American HbA1c targets for children and young people with Type 1 diabetes

The 2021 American Diabetes Association guidelines are upholding 2020's recommendation for paediatric patients with Type 1 diabetes to maintain target HbA1c levels at less than 7% (53 mmol/mol), instead of 7.5% (59mmol/mol) as recommended in 2019. However, the target of 7.5% (59mmol/mol) or lower is being maintained for the following:

- children and young people who are unable to say they are hypo,
- those unable to recognise the symptoms of hypos,
- those without access to advanced diabetes technologies or who can't regularly monitor their blood sugars,
- those who do not have access to diabetes technologies. (Diabetes Care, January 2021)

The UK HbA1c targets for this age group are lower than the US at 6.5% (48mmol/mol), in other words the aim in the UK is for tighter control. Tighter control increases the risk of hypos, so which country has got it right?

### Does current diabetes technology improve metabolic control in the paediatric population?

This Norwegian research examined the use of multiple daily injections (MDI), insulin pumps, self-measured blood glucose (SMBG), and continuous glucose monitoring (CGM) systems, and their association with glycated haemoglobin (HbA1c), diabetic ketoacidosis (DKA), and severe hypoglycaemia. It involved 2623 participants up to 18 years of age with Type 1 diabetes and analysed information on HbA1cs, the incidence of diabetic ketoacidosis and severe hypoglycaemia according to the use of multi-dose injections, insulin pumps, self

-measured blood glucose and continuous glucose monitoring.

### Results

74.7% of participants were using an insulin pump and 52.6% were using a CGM system.

- The HbA1c of pump users was 0.14 percentage points higher than that of MDI users.
- Fewer pump users than MDI users achieved an HbA1c of less than 7.5% (38.3 vs. 41.6%).
- CGM users had a 0.18 percentage points lower HbA1c than SMBG users, with 40.5 and 38.0%, respectively, achieving an HbA1c of less than 7.5%.
- The incidence of severe hypoglycaemia or hospitalization due to DKA was not different in pump and CGM users compared with nonusers.
- Compared with other insulin pumps, patch pump use was associated with a significantly lower odds ratio for DKA.

### Conclusions

The researchers concluded that despite the

broad use of diabetes technology, as many as 61% of the paediatric group did not reach the HbA1c target recommended by the International Society for Pediatric and Adolescent Diabetes (ISPAD). Lower HbA1c was associated with continuous glucose monitoring use but not with insulin pump use.

Acute complications were not less frequent in the groups using insulin pumps or CGM compared with those using multi-dose injections (MDI) and self-measured blood glucose (SMBG). Further research is required to explore the lower incidence of DKA among patch pump users. (Diabetes Therapy, August 2021)

The researchers also suggest that expectations for the use of technical devices, at least those prevalent in 2017, should be modest. Insulin pumps and CGM systems that are more user-friendly and more sophisticated, especially newer closed-loop systems, might lead to better metabolic control than the devices used in our 2017 cohort.

## Feedback from the 2021 IDDT Event



At last year's Annual IDDT Event, there was an overwhelming view that services and care for people with diabetes varies according to where you live – the postcode lottery within the NHS. The pandemic resulted in usual care being put on hold, which everyone understood, however, many of the concerns expressed were present before the pandemic. It is important to note that at the same time, some of the delegates could not fault the treatment and care they receive – making it clear that treatment and care varied according to where people lived and where they received their treatment.

The members concluded that IDDT should lobby for improvements and equality of care. It was explained that this is not easy because decisions about levels of care are made at local levels, hence the variation across the country. Some of the issues raised by delegates included the type of blood glucose meter and the number of test strips they are allowed, how often an HbA1c test is carried out and how and when people get their feet checked. The Trustees and staff have discussed this at length. We are aware that there is no way of

lobbying nationally because all decisions are taken at local level by Clinical Commissioning Groups (CCGs) for an area - the standard answer from government. In addition, we are now facing changes to remove CCGs in favour of Integrated Care Systems (ICSs).

### What are Integrated care systems (ICSs)?

They are new partnerships between the organisations that meet health and care needs across an area, to coordinate services and to plan in a way that improves population health and reduces inequalities between different groups.

The intention was that all parts of England would be served by an ICS from April 2021, however, not every area has converted yet so there is a state of flux. Many of us remember that when CCGs came into being in 2012/13, it was a good couple of years before the system settled down, so it is not unreasonable to assume that this will happen with ICSs! For most people their day-to-day health and care needs will be met locally in the town or district where they live or work. Partnership in

these 'places' is therefore an important building block of integration, often in line with long-established local authority boundaries.

It is also intended that a statutory NHS ICS body will oversee NHS functions across the whole system, and a statutory health and care partnership made up of a wider group of organisations will bring together a wider group of partners to develop overarching plans across health, social care and public health. So, there will be changes at local, county and national levels.

### **The conclusions?**

Exactly who do we raise these issues with when

the systems and personnel are not yet in place? At this time, the Trustee and staff cannot see a clear way forward in order to raise the issues of concern. However, we will not forget these issues and indeed, we can't because people ring us up for help, information and advice!

What we do try to do is provide information to people through information booklets, especially the '9 Key Checks' booklet that tells people what diabetes checks they should have. Of course, we are available on the phone to talk to people and to encourage them to not be afraid to stand up for what they need.

# Dr Laurence Gerlis retires as a Trustee of IDDT

By Jenny Hirst, Co-Chair

It is with sadness that I have to report that Dr Laurence Gerlis has resigned as a Trustee of IDDT, for reasons that apply to so many of us. Here are his words of explanation:

***"This is nothing to do with IDDT but more to do with my age and overall responsibilities. I have much to be grateful to IDDT for. I have made a lot of friends and enjoyed my time over the many battles and so many years. I wish the charity well."***

Many of you have met Laurence when he has spoken at our Annual Meetings where he has shown understanding and kindness to so many of us. He was one of the founding members of IDDT in 1994 and we have much to be grateful to him for, especially those who needed, and still need animal insulin. Like the late Professor Arthur

Teuscher and our present Co-chair Dr Matt Kiln, he spoke out and supported people with adverse effects of synthetic insulin when the majority of the medical profession did nothing and even worse, did not believe their patients and when the insulin manufacturers refused to acknowledge any problems existed for anyone taking synthetic insulin. He, and the others, suffered criticism and what would now be classed as abuse for their stance but he helped to save lives and just as importantly, enabled people who need animal insulin to maintain their warnings of hypoglycaemia, maintain their quality of life and live long and healthy lives.

Since this time, he has always supported IDDT in very many ways, so on behalf of all our members, I thank him for his many years of help and support to IDDT and to me and I wish him well.

# From our own correspondents



## A day in the life of an 81 year old with Type 1 diabetes on 4 injections a day

I received a letter from a gentlemen of 81 years and there are some interesting messages perhaps for us all to learn.

Dear Jenny,

This is my daily routine:

- Get up in the morning and check my blood sugars, do my injection before breakfast and then have bran flakes and fruit.
- At 11.00am, I have coffee and 2 digestive biscuits.
- At 1.00pm, check my blood sugars, and inject, then have a light lunch such as sandwich and yogurt.
- If I have to go to the shops in the car, I check my blood sugars to make sure I am not low before driving.
- In the evening, I check my blood sugars, inject before dinner.
- Before bed. I inject a slow-acting insulin, so just have 3 cream crackers.

My motto is once your insulin is in your body, you don't always know what your blood sugars are. I have also had a good wife who looks after me and it is important to remember that diabetes affects partners as well!

Mr B.M.Yorkshire

### Jenny Comment:

Not everyone wants to live a routine life but Mr B.M. is 81 years old and it is worth remembering that he has had Type 1 diabetes for many years and is still fit, healthy and driving to the shops! Maybe it is worth thinking about whether a more routine lifestyle would be of help to others?

### We swear by it!

Dear Jenny,  
My husband has been receiving the Newsletter for a very long time and we swear by it as it saved his life after his insulin was changed to human and he became extremely depressed!!! He's had Type 1 diabetes since he was 13 years

old and he's now 84 and we've been married for 60 years. So, I've been living with it by looking after him. He has got the beginnings of dementia and his mobility isn't brilliant but we're very fortunate as we moved into a retirement village 8 years ago so now have carers on site for which we are very grateful.

Mrs S.T.  
West Mids

## Adverse effects of synthetic insulins have not gone away for some people

### Here is an email sent to IDDT's Trustee in Canada

Dear Carol,

Thank you again for sharing your journey with us. You gave us that extra boost to help us decide to proceed with the change to porcine insulin for our daughter. Well, it's been one week now and she is doing amazingly with the change! Her transient pains have basically completely subsided and she can for the first time, distinctly feel when her blood glucose is dropping. Everything that you said and what we've read from other IDDT members on animal-sourced insulin is true. We are so thankful for you helping us personally and for everything you've done with IDDT. If not for people like you, we would not have had the opportunity to try and use the porcine insulin. With great appreciation!

Name supplied

## Recycling

Dear Jenny

I read with interest your article on "disposable pens" in the March newsletter. As these companies are making significant amounts of money selling these pens to the NHS, they should take on the responsibility of recycling. I think it should also be on the NICE agenda when agreeing to the introduction of new medicines.

A disposable pen weighs 20g. However, I weighed the throwaway plastic which is discarded each time a Freestyle Libre sensor is

replaced, these items combined weight is just over 70g. I will expect to apply 26 new sensors over the year.

Easy to do the maths here - 1.82 kilograms of plastic waste for everyone using Freestyle sensors each year. With increased uptake of people using this blood monitoring device the plastic put into landfill will be quite significant. Maybe Abbott would like to take a lead on this, similar to that of Novo Nordisk.

By email

**Note:** Interestingly the Libre 3 has already taken this into account!

## I worry that people may misinterpret the results

Dear Jenny,  
I use a Freestyle Libre and I know that it measures interstitial fluid and not blood glucose making the results different. Sometimes, I receive odd results with my Libre so I always check with a finger-prick test before changing my insulin dose.

I am aware that there is a warning that if insulin dose changes are to be made, they should be made on finger-prick blood glucose results but I worry that not everyone will be aware of this and dose increases could be made which should not be made and which could result in severe hypos. This especially applies to people who get so used to the Freestyle Libre that they stop all finger-prick blood glucose tests.

Phone call Mr H.S

## Diabetic Foot Ulcer Study

Are you suffering from a diabetic foot ulcer?  
Have you had the ulcer for at least 10 weeks?

If so, this research study may be of interest

We are looking at whether wound healing can be improved using a product called the **RAPID™** Biodynamic Haematogel. This gel is made up of your own blood and vitamin C, aiming to boost the natural healing process, and ultimately improve wound healing.

If you would like more information about this research, please ask about the RAPID study in your appointment today, or contact the clinical research team directly:

To contact the Royal London Hospital:

Chief Investigator: Sandip Sarkar  
e: Sandip.Sarkar@nhs.net

Research Nurse: Vish Ramoutar  
e: Vish.Ramoutar@nhs.net  
t: 020 3594 0754

To contact Bradford Royal Infirmary:

Research Nurse: Joanne Thorpe  
e: Joanne.Thorpe2@bthft.nhs.uk  
t: 01274 38 3361

Research Nurse: Wendy Green  
e: Wendy.Green@bthft.nhs.uk

To contact Loughborough Hospital:

Podiatrist: Lesley Weaving  
e: Lesley.Weaving@nhs.net

Principal Investigator: Lynn MacDiarmid  
e: Lynn.Macdiarmid@nhs.net  
t: 07876 560643

To find out more please visit:



[www.rapidstudy.co.uk](http://www.rapidstudy.co.uk)

## Late News!

Insulin icodec is a long-acting basal insulin analogue, intended for once-weekly treatment, being developed by Novo Nordisk, for the treatment of Type 1 and Type 2 diabetes.

Insulin icodec is a long-acting insulin analogue designed to cover basal insulin requirements with once-weekly injection. It is considered to be an 'ultra long-acting insulin'. It is not yet approved and Novo Nordisk are carrying out trials of its use in both Type 1 and Type 2 diabetes and some of the findings so far are as follows:

ONWARDS 2 trial was a 26-week efficacy and safety trial comparing icodec and degludec (Tresiba) in 526 people with Type 2 diabetes. The results showed non-inferiority between the two insulins in reducing HbA1cs at week 26. (Non-inferiority means icodec was not worse than degludec.)

The development programme for once-weekly insulin icodec currently comprises of six trials, including a trial involving more than 4,000 adults with Type 1 or Type 2 diabetes. The Type 1 trial is a 52-week trial comparing once-weekly icodec with once-daily degludec, both in combination with mealtime insulin.

# Holiday Tips



As far as limitations on holidays and foreign travel are concerned, we finally seem to be seeing the last Covid 19 restrictions being lifted. With the holiday season practically upon us, our freedom to travel abroad seems, finally, to be a reality again!

If you are going on holiday this summer, it may be the first time you have travelled since your diabetes was diagnosed. Whether you are staying in this country or going abroad, for people who live with diabetes, going on holiday means more planning and a bit more care when you are away. IDDT has a leaflet on Holiday Tips which contains information and useful tips for holidays whether at home or abroad. It covers things like:

- Travelling by air
- Jetlag
- Medication Safety
- Diabetic Holiday Foot Syndrome

If you would like a copy of this handy FREE leaflet, please contact IDDT, using the details at the end of this Newsletter. Alternatively, Holiday Tips can be downloaded from our website: <https://www.iddt.org/news/holiday-tips?highlight=Holiday%20tips>

## Paperwork for 2022

- Don't forget, if you are going abroad, you need to check the individual entry requirements for the country you are visiting and that it remains valid for the duration of your stay.
- Equally, don't forget that if you have an in-date EHIC card (European Health Insurance Card) you can still use it but if it is out of date it needs to be replaced with a GHIC card (Global Health Insurance Card). Remember, GHIC and EHIC cards do not replace travel insurance.

While the UK may have lifted the majority of its foreign travel restrictions, it cannot be guaranteed that other countries have done the same. We would advise that you check for restrictions before you travel.

The Government guidance on foreign travel and Covid 19 for England, Wales, Scotland and Northern Ireland respectively, can be found using the links below:

<https://www.gov.uk/guidance/travel-abroad-from-england-during-coronavirus-covid-19>

<https://gov.wales/international-travel-and-wales-coronavirus>

<https://www.gov.scot/publications/coronavirus-covid-19-international-travel-quarantine/>

<https://www.nidirect.gov.uk/articles/coronavirus-covid-19-travel-advice>

## IDDT Event 2022 – 'Changing Times'

We are glad to announce that this year we are holding an Event for you, again at the Kettering Park Hotel. You will see from the event booking form accompanying this newsletter that it will be an interesting day with speakers and group discussions. The title is 'Changing Times' to reflect some of the issues that are affecting people living with diabetes.

We are pleased to tell you that we are being joined by Professor Alan Sinclair who is an international expert in in diabetes in older people and is a former Professor of Medicine at the University of Bedfordshire and a former Dean at the Bedfordshire & Hertfordshire Postgraduate Medical School.

We are also joined by Abban Qayyum, Senior Specialist Physiotherapist, by Jane Chatham from Abbott Laboratories, manufacturers of the Freestyle Libre, and ending the day for us as speaker is Dr Gary Adams.

So, something for everyone and we hope that you and your family - the spouses, the partners and the parents of those with diabetes, will be able to join us at the event. Just complete the form and return it to IDDT. Remember, the date for your diary is 29th October 2022!



**Tel: 01604 622837**

**email: [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org)**

**Or visit our website: [www.iddtinternational.org](http://www.iddtinternational.org)**



## LOTTERY RESULTS

### WINNERS OF THE JANUARY 2022

#### DRAW ARE:

- 1st prize of £550.56 goes to Joyce from Newport
- 2nd prize of £412.92 goes to Jeremy from Colchester
- 3rd prize of £275.28 goes to ANON from Broxbourne
- 4th prize of £137.64 goes to Geoff from Sidford

### WINNERS OF THE FEBRUARY 2022

#### DRAW ARE:

- 1st prize of £550.08 goes to Ron from Gloucester
- 2nd prize of £412.56 goes to Haydn from Porthcawl
- 3rd prize of £275.04 goes to Rosemary from Newtownabbey
- 4th prize of £137.52 goes to Shirley from Scarborough

### WINNERS OF THE MARCH 2022

#### DRAW ARE:

- 1st prize of £549.60 goes to Glenn from Bury
- 2nd prize of £412.20 goes to Kenneth from Leyland
- 3rd prize of £274.80 goes to Grant from Bury St Edmunds
- 4th prize of £137.40 goes to Myrna from West Wickham

Note: The winners of the draws for April, May and June 2022 will be announced in our September 2022 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 on 01604 622837 or email [jenny@iddtinternational.org](mailto:jenny@iddtinternational.org)



## SNIPPETS

### Profits by vaccine companies

In the US there are law suits taking place about patent infringements between manufacturers in relation to covid 19 vaccines. The reports said Modernas vaccine earned the company \$17.7 billion in revenue in 2021. Pfizer said last month that it expected \$32 billion in revenue from its vaccine this year.

### Huge inequalities in amputations

The latest podcast from the English Diabetes Footcare Network features leading footcare professionals and academics sharing their expertise on the diabetic foot. Dr Ahmad, from Manchester University Foundation Trust, talks about the "huge inequalities" after he examined data from 100,000 amputations across England over a 10-year period. He found:

- there were three times more amputations in men than women,
- 70% more amputations in the black population compared to the white population,
- 30% more amputations in the north of England compared to the south of England.

### Researchers assess impaired hypoglycaemia awareness in pregnancy

A recent study found pregnant women with Type 1 diabetes and impaired hypoglycaemia awareness had more episodes of severe hypoglycaemia than those with normal awareness, especially in the first trimester. Impaired hypoglycaemia awareness was also associated with lower gestational weight gain. (Diabetic Medicine, February 2022)

### US diabetes deaths top 100,000 for second year running

More than 100,000 Americans died from diabetes in 2021, marking the second consecutive year this has happened. The new figures come as an expert panel urges Congress to overhaul diabetes care and prevention, including recommendations to move beyond a reliance on medical interventions alone. An earlier report calls for far broader policy changes such as promoting healthier foods, paid maternal leave from the workplace, levying taxes on sugary drinks and expanding access to affordable housing.

High costs for doctor's visits, medications and supplies force many people with diabetes to forgo or delay routine care. In addition, many patients and US lawmakers have expressed outrage at the rising price of insulin. (Reuters 31 January 2022)

### Global estimates of incident and prevalence of Type 1 diabetes in children and adults

Data on Type 1 diabetes incidence and prevalence are limited, especially for adults but this study estimates global numbers of incident and prevalent cases of Type 1 diabetes in 2017 for all age groups, by country and areas defined by income and region. High-income countries, with 17% of the global population, accounted for 49% of global incident cases and 52% of prevalent cases. Globally, Type 1 diabetes represents about 2% of the estimated total cases of diabetes, ranging from less than 1% in certain Pacific countries to more than 15% in Northern European populations in 2017. This study provides information for the development of healthcare and policy approaches to manage Type 1 diabetes but the estimates need further validation due to limitations and assumptions related to data availability and estimation methods. (Diabetologia, October 2021)

### Young People with Type 2 Diabetes Report

This report by NHS Digital, shows that nearly 1600 children and young people in England are now living with Type 2 diabetes, previously only seen in adults. Factors such as ethnicity play an important role but research shows that obesity and overweight is the cause of this rise. Type 2 diabetes is more serious in children and young people as it can lead to serious complications later in life, including kidney failure and heart disease. If left untreated, it can be severe and it is of concern that only 30% of children with the condition are receiving the care and support they need to properly manage their Type 2 diabetes.

Nearly a third of children in the UK between 2 and 15 years are currently overweight or obese which could be the cause of the increase in Type 2 diabetes in this age group. It is yet another reason for the government to succeed in their policies to reduce overweight and obesity.