## INDEPENDENT DIABETES TRUST Newsletter



DECEMBER 2023 Newsletter, Issue 119

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This is the final Newsletter of 2023 and the Trustees and Staff would like to send all our members and readers best wishes for Christmas and the New Year. We would also like to thank you for your help and support throughout the year, we are grateful for your donations to help IDDT to continue with our work of offering help to people with diabetes and their families.

Looking back over 2023, there has been a marked increase in calls from people to IDDT requesting information and support. As a result of the last three years, many of people are not receiving the help, support and information they need at diagnosis to manage their diabetes and others have been unable to receive the annual 9 key checks to which they are entitled. We have to add to this the lack of routine NHS podiatry services for many people which is making footcare unaffordable for many people.

This is a worrying for people's health now and in the future and so during this year, IDDT's work has involved listening to the needs of people with diabetes and supplying free booklets to provide the information they need to manage their diabetes. In addition, increasing numbers of healthcare professionals are requesting our booklets to give to their patients and we are very happy to provide these as part of our role to look after people who live with diabetes. We do our best to listen and to help where we can, so don't forget that we are at the end of the phone.

We look forward to being able to continue this help during 2024, a year that some of us will recognise as 30 years since IDDT formed. One of our main aims then, and one that is equally important today, was that people with diabetes must have information about managing their diabetes and an informed choice of treatment. In the meantime, Christmas is coming and is still a time to enjoy, with presents, may be not so many this year, and festive of food. If you or a member of your family has diabetes, it can also be a worrying and stressful time, especially if it is your first Christmas with diabetes.

We hope our FREE booklet "Diabetes at Christmas" will be of help as it offers help and advice about managing diabetes at Christmas. There is a range of recipes and ideas about food and eating, allowing you to enjoy Christmas and still manage your diabetes. For your copy, give us a call on 01604 622837 or email enguiries@iddtinternational.org



A charity supporting and listening to people who live with diabetes

## **Diabetes medications shortages**

#### Type 2 diabetes medicines

On 11th September 2023 the answer to a Parliamentary Question on this topic by the relevant Health Minister included the following points:

- The shortage of glucagon-like peptide 1 receptor agonist (GLP-1 RA) medicines guidance in the form of Medicine Supply Notifications issued a National Patient Safety Alert which made it clear that GLP-1 RAs, which are solely licensed to treat Type 2 diabetes, should only be used for that purpose and should not be routinely prescribed for weight loss. Ozempic, Saxenda and other glucagon-like peptide 1 receptor agonists have been added to the list of medicines that cannot be exported from, or hoarded in, the UK.
- The European Medicines Agency has announced similar shortages of Saxenda (liraglutide) and Victoza (liraglutide) both for the treatment of Type 2 diabetes in addition to diet and exercise.
- There is a global shortage of Wegovy, also semaglutide, but to be used as anti-obesity drug.

#### Insulin

- Tresiba® FlexTouch® (Insulin degludec) 100units/ml pens will be out of stock from August 2023 until January 2024.
- Tresiba Penfill® (Insulin degludec) 100units/ml solution for injection 3ml cartridges remain available and can support increased demand. If you are affected by this shortage, then you just need to ask your GP to change your prescription to Tresiba cartridges and a refillable pen.
- In September, it was announced that there is a temporary stock shortage of Fiasp® (fast-acting insulin aspart) FlexTouch® pre-filled insulin pens in the UK. Other presentations of Fiasp® are unaffected.

Note: All the above are manufactured by Novo Nordisk.

## **Update from Ukraine**

As we write this Newsletter, we have just received an update from Dymytro, our contact in Ukraine and here is what he tells us:

Almost 15 months and the front lines are at the same positions. People got used to living in such conditions. Mostly older people are there now, all young people have left the area. They live their lives with the specifics, go to shops, go to hospital, go to village councils, where they can get some aid, food, medicine from volunteers. Quite often they asked "Why don't you leave the area?" And they answer, "Everything is OK (by their perception),



we have our homes here, our gardens, chickens, cows, dogs, we don't have a place to go and it is late to start a new life in our sixties and seventies. Thank you for helping us."

We are still receiving donations of unwanted, in-date insulin and other diabetes items to help these people with diabetes in Ukraine. As the cold winter weather is now here, we also very much appreciate the knitted hats and other knitted items that 'our knitters' are sending. It is hard to imagine being without insulin and medications and at the same time, being without heating and other amenities but this is happening to people in some areas of Ukraine.

The support you, our readers, and many other people have offered to people in Ukraine has been huge and we have to say how grateful we are for your continued donations to help. We shall continue to give this support during 2024.



It's actually the nickname we gave to the largest promotional campaign that IDDT has ever launched, beginning at the start of September. For a long time IDDT has been aware of the growing numbers of people being diagnosed with diabetes without being given the support they need to successfully manage the condition. The main message of the campaign was **"Diabetes? You are not alone. We are here to help".** 

To develop the campaign we worked closely with a media planning and buying agency, TMH and long-term partner Orange Juice Communications. Together, we developed a set of adverts and promotional materials to try and encourage people to contact IDDT to get the support they were needing. These materials are being used on buses, bus shelters, hospital clinics, pharmacies, washrooms, beermats, selected radio stations, TV channels and social media. Here are some pictures of our adverts "in-situ":



The results have been astounding. With the campaign running until the end of December, at the time of writing (early October) we have:

Over 1000 new members
Over 500 new Facebook followers
Social media traffic increased by 4000%

We would like to welcome all our new members and also say a big thankyou to the teams at Orange Juice and TMH for helping to make Vera such a success.If you would like more information about the campaign then please email **martin@iddtinternational.org** 



#### Novo Nordisk uses Aspen to help produce insulin for Africa

Novo Nordisk is teaming up with Aspen Pharmacare to help to export insulin supplies to Africa, where more than 80% of its medicine are imported. Novo has enlisted South Africa's Aspen to make human insulin for the continent as part of an "expanded commitment" to reach more than 500,000 people with diabetes across sub-Saharan Africa. 16 million vials of insulin will be produced next year. Insulin manufacturer, Eli Lilly, is also making a similar move. (19th September 2023)

## Semaglutide for early Type 1 diabetes but a very small study...

In a small study involving only 10 people, semaglutide, a Type 2 drug, was given to people with Type 1 diabetes soon after their diagnosis. This led to the elimination of meal time insulin in most patients and reduced or elimination of basal insulin in most participants, along with improved glycaemic control. (The New England Journal of Medicine. September 2023)

Before building up our hopes, we have to recognise that this is a very small study and a much larger study is needed to provide sufficient evidence. In addition, we have to question whether there are any adverse effects and what they are.

#### What is semiglutide?

Semaglutide (Ozempic) helps reduce blood sugar levels by increasing the amount of insulin released, preventing glucagon release, and slowing how fast the stomach empties. It is given by a weekly injection under the skin. It is a safe and effective treatment for adults with Type 2 diabetes.

#### Taking this research further in the UK

Professor Timothy Barrett, a Professor of Paediatrics and Child Health at the University of Birmingham, is planning to test whether semaglutide can help children and young people with Type 1 diabetes manage their blood sugar levels alongside insulin. In most children and young people with Type 1 blood sugars are often too high, despite however hard they try to avoid this. This research is to establish whether semaglutide, along with insulin, can help young people to keep blood sugars lower and reduce the risks of complications.

The clinical trial will take place at four hospitals in Birmingham, Cambridge, Leicester and

Sheffield and 230 people with Type 1 between the ages of 10-24 years old will take part in the clinical trial. The participants will be given semaglutide for six months, plus their usual insulin treatment.

#### Adverse effects of semaglutide

In the US, the regulator, the FDA has updated warnings from Novo Nordisk about semaglutide – Ozempic, their Type 2 drug (which also causes weight loss) and Wegovy, also semaglutide but specifically for weight loss. The warning acknowledges the reports of what doctors call ileus, a blockage if the intestines. Mounjara, a similar drug made by Eli Lilly, has also had its label updated with similar warnings.

Throughout June, the FDA received 8,571 reports of gastrointestinal disorders after use of semaglutide, both Ozempic and Wegovy. Ileus is specifically mentioned as a reaction in 33 cases listed by the FDA of people taking semaglutide, including two deaths.

The label says: "Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure".

Both Novo Nordisk and Eli Lilly are also facing a lawsuit over claims that the medications can cause a similar condition called gastroparesis, or paralysis of the stomach, which stops food from reaching the small intestine despite there being no blockage. The labels for Ozempic and similar medications already mention that they cause delay of gastric emptying. The FDA is continuing to monitor reports of gastroparesis and other related terms.

## **Diabetes and work**

As many of us are aware, living with diabetes can be challenging, often when it comes to managing the condition. Finding the right balance between job/career and health can be difficult.

#### Equality Act 2010

It's important that people with diabetes understand their rights in the workplace. Although you may not feel or see yourself as disabled, if you have any type of diabetes and need to take insulin or other medication for your diabetes, it's generally seen as a disability under the Equality Act 2010 (in Northern Ireland, it's the Disability Discrimination Act 1995).

This means that if your diabetes affects you on a daily basis while you are at work, your employer is legally required to make reasonable adjustments to help you, for example:

- offering you a flexible working pattern,
- allowing you to have more breaks to test your blood, eat or take your medication.

In addition to your rights in the workplace, you can also take steps to manage your diabetes and maintain your health while at work. This can include:

- scheduling regular breaks to check blood sugar levels,
- bringing healthy snacks to work to avoid hypoglycaemia
- staying active during the workday by taking short walks or stretching exercises.

#### Communicating with your employer and co-workers

It is important to communicate with your employer and co-workers to let them know about your condition and what you need in order to manage it effectively. This can include having a private place to check blood sugar levels, perhaps having access to healthy food options in the workplace and having a flexible schedule to attend medical appointments. If you have hypos, it may also be helpful to tell your colleagues of your warning signs, so that they are aware if you are having a hypo.

Finally, it can be helpful for people with diabetes to find support from other people living with the condition which could include joining a local diabetes support group or talking to a healthcare provider. Participating in online forums and communities can be helpful but it is worth being aware that not everything on the internet is necessarily factual!

#### £12.4 million has been awarded to help choices about work

£12.4 million awarded to six innovative new projects to understand barriers to getting into work. Projects being investigated will include the impact of endometriosis on women's work choices and how programmes to reduce obesity and Type 2 diabetes can improve workforce participation.

This project includes an Office for National Statistics (ONS) evaluation which will investigate the impact of endometriosis on women's participation and progression in the workforce. Endometriosis can affect around 1 in 10 women, with symptoms including chronic pain and fatigue and these can disrupt daily routines, fertility and mental health and time off work may be needed for coping with symptoms. This project will improve understanding and help inform government plans to support women with the condition in their careers.

A second project will evaluate whether programmes to reduce the risk of developing Type 2 diabetes and obesity improve people's ability to join the labour market. This will include reviewing the impact of the Healthier You NHS Diabetes Prevention Programme (DPP), a large nine-month, lifestyle change programme aimed at people at risk of developing Type 2 diabetes.



## The care we are supposed to receive from our NHS Integrated Care Boards

Integrated Care Boards (ICBs) have replaced Clinical Commissioning Groups and are responsible for our local health care and treatment. In November 2022, NHS England highlighted five areas where the care of people with diabetes can/should be improved by the new ICBs *"to improve outcomes and equity across socioeconomic deprivation, ethnicity, age, and type of diabetes."* These are:

#### 1. Population health management

ICBs should have a clear plan to recover diabetes care processes delivery to at least pre-pandemic (2019) levels by the end of 2022/23, to support more people to achieve NICE recommended treatment targets and reduce the risk of diabetes-related complications.

#### 2. Preventing Type 2 diabetes

Weight gain is putting more people at risk of Type 2 diabetes. It is vital that ICBs have a clear plan for referral into the National Diabetes Prevention Programme (NDPP). This programme showed a 7% reduction in the number of new diagnoses of Type 2 diabetes in England (2018 – 2019), with an average 37% of those who completed the programme less likely to develop Type 2 diabetes.

#### 3. Type 1 diabetes treatment and care

ICBs should provide access to specialist care and technology, structured education and peer

support to improve outcomes for people with Type 1 diabetes. Recent updates to NICE guidance indicates that all adults with Type 1 should be offered flash glucose monitoring. ICBs should be aware of this and consider workforce development and commissioning strategies to support access.

#### 4. Diabetic footcare

Lower limb amputation is one of the most feared complications of diabetes, with major impacts on somebody's quality of life and associated higher morbidity and mortality. Systems should ensure timely access to multidisciplinary footcare teams. Some ICBs have further to go to meet this commitment and can improve quality by implementing footcare recommendations.

#### 5. Patient care in hospitals

Up to 20% of people in hospital have diabetes at any one time. People with diabetes in hospital have higher complication rates, longer lengths of stay and higher re-admission rates. There is still variation in the quality and availability of inpatient diabetes services and the frequency of hospital-acquired harm. All trusts should have a diabetes inpatient specialist nurse service and ICBs should be satisfied that all hospitals have this in place.

Message – if you are not receiving the care or treatment that you should, then use these NHS statements to argue your case.

#### NHS England launch eLearning resource on aquatic activity and swimming for health

The healthcare benefits of swimming and aquatic activity for people with long-term health conditions, such as diabetes, is the focus of an eLearning resource launched by NHS England, in partnership with Swim England.

Research by Swim England has shown that healthcare professionals intuitively believe aquatic activity provides unique health benefits, but they lack specific knowledge to make this part of routine conversations with patients. A 20-minute eLearning session has been developed that raises awareness of the benefits of aquatic activity on health and wellbeing, with the hope of improving the confidence of health professionals in identifying who would benefit most.

Access is currently available to anyone with an nhs.net. gov.uk or ac.uk account and it is anticipated that universal access will be available from the end of September.

## NHS rolls out world-first programme to transform diabetes care for under 40s 'T2Day: Type 2 Diabetes in the Young'

In an NHS Press Release (29th August 2023) it was announced that tens of thousands of people in England living with early onset Type 2 diabetes will benefit from more intensive and targeted care. Around 140,000 people between 18 and 39 years will receive additional tailored health checks and support with diabetes management, such as blood sugar level control, weight management and cardiovascular risk minimisation.

Under the new programme, named 'T2Day: Type 2 Diabetes in the Young', patients will benefit from extra one-to-one reviews as well as the option of new medicines and treatments where indicated, to help better manage their diabetes. There will also be dedicated support available for women, including access to contraception and folic acid supplements.

Backed by £14.5 million, local health teams will roll out the new scheme to help minimise the risk of these people developing complications and severe illness and to support a reduction in health inequalities.

Eligible people may also be able to access the NHS Type 2 Diabetes Path to Remission Programme – a year-long programme, including 12 weeks of low-calorie total diet replacement products and support to re-introduce food, with the aim of supporting participants to improve their blood sugar levels, reduce diabetes-related medication and in some cases put their Type 2 diabetes into remission.

- Early onset Type 2 diabetes is more aggressive than later onset Type 2 and is more prevalent in people living within deprived areas and those from minority ethnic groups.
- The rate at which young adults are diagnosed with early-onset Type 2 diabetes has risen faster than the rate of diagnosis in over 40s in England (National Diabetes Audit)

## **Summary Care Records**

In case you are not aware, all patients registered with a GP have a Summary Care Record (SCR) unless they have chosen not to do so. This record contains information about the medicines you take, any allergies and any adverse reactions to medicines you may have had in the past.

If you are away from your usual GP practice, this information held on your SCR gives health and care professionals access to information to provide you with safer care and reduce the risk of prescribing errors.

Your medical information and history are not divulged so if you are treated away from home, the healthcare staff there, cannot access your GP medical records. According to the NHS, healthcare staff will always ask your permission to view your SCR, unless it is a medical emergency and you are unable to give your consent.

However, some people, including those with long-term conditions, have chosen to share additional information as part of their SCR including information about significant medical history, reasons for medications, care plan information and immunisations. Health problems are included in this, so diabetes could be included.

You can opt out of having a Summary Care Record but this means that no information will be shared, not even in emergency. You can make any changes to your SCR by informing your GP practice.

# Joint and muscle issues that may occur in diabetes

#### Myopathy

Myopathy is a general term used to describe any disease of muscles, such as the muscular dystrophies and myopathies associated with thyroid disease. It can be caused by endocrine disorders, including diabetes, metabolic disorders, infection or inflammation of the muscle, certain drugs and mutations in genes.

In diabetes myopathy is thought to be caused by neuropathy, a complication of diabetes. General symptoms of myopathies include muscle weakness of limbs sometimes occurring during exercise although in some cases the symptoms diminish as exercise increases. Depending on the type of myopathy, one muscle group may be more affected than others.

**Treatment** - this varies according to the type of myopathy but may include drug therapy such as immuno-suppressants, physiotherapy, bracing or surgery.

#### Chiroarthropathy (diabetic prayer)

This is often called limited joint mobility and in people with diabetes generally involves the small joints of the hands, although it can affect larger joints such as wrist, shoulder, knees or hips. It is usually painless but there may be numbness and pain if there is also neuropathy or angiopathy of the hand. Most people do not report the problem



until there is some deformity or loss of movement of the fingers. The affected fingers are swollen with a thick, tight and waxy skin and there is an inability to press both hands together which is why it is often referred to as diabetic prayer.

Other disorders of the hand, have different and distinct clinical features. Chiroarthropathy is linked with more serious microvascular complications of diabetes eg retinopathy, nephropathy and neuropathy, so diagnosis is important. The causes of chiroarthropathy are not really understood but its prevalence is:

- 4 -14% of the nondiabetic population
- 8.4 55% of people with Type 1 diabetes
- 4.2 -77% of people with Type 2 diabetes

Studies show a wide variation which could be due to genetic or racial factors or incorrect diagnosis. However, it does increase with the duration of diabetes

**Treatment** - because of the relationship with the microvascular complications of diabetes, improved diabetic control is advised but there is no well established treatment. Physiotherapy is important to maintain movement and prevent further deterioration. Surgery and corticosteriod injections may help in severe cases.

#### Frozen Shoulder (adhesive capsulitis)

An early sign of frozen shoulder is when it is difficult to lift the arm above the head, reach across the body or behind the back. This is followed by pain, often worse at night, the pain then reduces but the range of movement is more limited and may last for 4-12months. In the final stage the condition begins to resolve although surgery may be needed to restore movement.

The cause is unknown but thought to involve an underlying inflammatory problem. The capsule around the shoulder joint thickens and contracts leaving less space for the upper arm bone to move around. It can also occur after long periods of immobilisation eg after injury or surgery.

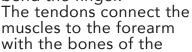
Frozen shoulder affects more women than men, usually starts between ages 40 and 65 and affects 10-20% of people with diabetes.

**Treatment** - drugs such as aspirin or ibuprofen to reduce the inflammation and pain, muscle relaxants, physiotherapy, exercises, heat or ice therapies, corticosteroid injections but surgery only if there is no improvement after several months. Some people have reported a positive response from acupuncture.



#### Trigger finger

This is a common condition which results in a bent finger, as if pulling a trigger on a gun. The finger may be swollen, stiff and painful and there may be a bump over the joint in the palm of the hand. It involves the tendons and pulleys in the hand that bend the finger.



finger and each tendon is covered by a sheath. As the fingers are bent, the tendons glide backwards and forwards guided by a restraining pulley. If the tendon sheath becomes inflamed it swells and may develop a nodule or thickening of the tendon.

The nodule passes through the pulley as the finger bends but gets stuck as the finger straightens which causes further irritation and swelling until eventually the finger locks in this bent position. The exact cause is unknown. It affects people over 40 and people with a history of diabetes or rheumatoid arthritis are particularly at risk of developing it.

**Treatment** - aims to reduce the swelling and cycle of irritation so treatment is as follows:

- 1. In the stage of acute inflammation, resting of hands is required, heavy hand workload should be paused. Use a cold pack and wear a splint to prevent your fingers from locking. Intake of medication is also required to relieve swelling, pain, and inflammation.
- 2. Place your fingers in warm water for 5-10 minutes in the morning and exercise your fingers while they are soaked by making a gentle fist then spread all fingers apart.
- **3.** Stretching exercises for hand muscles and tendons should be done appropriately.

- Tendon sheath Pulley Tendon Inflammed Nodule
- 4. Steroid injections will be used to reduce inflammation, pain, and swelling.
- 5. If necessary, surgery is done and this can restore movement immediately and the condition does not recur.

#### **Dupuytren's Contracture**

This is a fairly common condition in the palm of the hand that can cause the fingers to contract. It occurs when



the connective tissue under the skin in the palm of the hand begins to thicken and shorten and as the tissue tightens it may pull the fingers down towards the palm of the hand. The first sign is a nodule near the base of the little finger and the ring finger. Gradually other nodules may appear across the first joint of the fingers, the skin puckers and the finger is pulled towards the palm. It usually affects the ring finger first followed by the little, the long and the index fingers, although there is evidence that in diabetes different fingers are affected. The problem is not pain but the restriction of movement.

Although again the cause is unknown, there is a genetic link because it affects people of northern European decent. It is seven times more common in men than women and usually does not show up until after 40 years of age. People with diabetes, alcoholics and those taking anticonvulsant drugs have a higher risk of Dupuytren's contracture.

**Treatment** - the only treatment is surgery but this is usually only if the contracture has developed into a deformity. The outcome is usually good.

## **NICE News**

## Children with Type 2 diabetes NICE Guideline updated (NG18)

In May 2023, NICE (National Institute for Health and Care Excellence) issued new guidance for children and young people with Type 2 diabetes which are similar to those for children and young people with Type 1 diabetes. They are to make sure they, and their family and carers:

- get all the help they need to manage their diabetes, including medicines, education, and advice on diet and exercise,
- are involved in decisions about their care, such as choosing an average blood sugar target (HbA1c level) – usually 48 mmol/mol (or 6.5%), but for some a different target can be better,
- are encouraged to see a dentist regularly to check for gum disease,

- are taught how to stop their blood sugar levels getting too high and how to manage these when they happen,
- know what to do if their diabetes gets out of control and they think they have diabetic ketoacidosis (very high blood sugars).

The new guidance also recommends that some children and young people with Type 2 diabetes should be offered continuous glucose monitoring, which has already been recommended for children with Type 1 diabetes.

## New treatment for people with Type 2 diabetes approved by NICE

Around 180,000 people with difficult to manage Type 2 diabetes could benefit from a new treatment option recommended by NICE. Tirzepatide, also known as Mounjaro and made by Eli Lilly, has been recommended in final draft guidance by NICE for treating poorly controlled Type 2 diabetes in adults with diet and exercise. Tirzepatide is injected weekly by the patient.

Evidence from clinical trials showed using tirzepatide resulted in significant reductions in blood sugar levels and body weight compared with semaglutide, insulin treatment or a placebo.

- Using tirzepatide resulted in 81% to 97% of people reaching better glucose control.
- 54% to 88% reached a 5% or greater reduction in body weight, which were significantly more than any of the comparators.

Once final guidance is published the product will be made available in the NHS within 90 days

## Draft guidance from NICE recommends four digital weight management platforms

In August 2023, NICE shared draft guidance indicating that four digital programmes can be used to help the NHS in delivering specialist weight management services.

Platforms Liva, Oviva, Roczen or Second Nature can enable specialists to provide virtual care via an app or computer. Some of the digital programmes include the ability to prescribe weight management medication, with others capable of collecting and sharing data to support weight management prescribing and supporting plans.

NICE explained that there is "unequal distribution" of specialist services in England, with some Now, children and young people with Type 2 diabetes will be able to access the devices if they:

- have a need, condition or disability (including a mental health need) that means they cannot monitor their blood glucose by finger prick testing,
- would otherwise be advised to self-test at least 8 times a day,
- have recurrent or severe low blood sugar levels,
- have impaired blood sugar awareness.



dependent on the supply of licensed product by the manufacturer. It is licensed to treat adults with insufficiently controlled Type 2 diabetes alongside diet and exercise when metformin cannot be tolerated. The manufacturers positioned it as an option for a narrower population - adults with Type 2 diabetes inadequately controlled with 3 or more antidiabetic drugs.

This makes it an alternative to similar treatments such as dulaglutide, liraglutide and semaglutide (ozempic/rybelsus) which are already recommended for use in the NHS.



areas having long waiting lists and others having no services at all. It is hoped the digitally-enabled services will support people with access difficulties, such as those who cannot or do not wish to travel for appointments, offering flexibility and convenience for patients who are content to be treated virtually.

NICE has also commented: "Early evidence suggests that weight loss of those using these digital platforms is similar at 2 years, compared with faceto-face specialist weight management services."

## NICE: Obesity: identification, assessment and management

Clinical guideline [CG189] Published: 27 November 2014 was updated on 26th July 2023

This guideline covers identifying, assessing and managing obesity in children (aged 2 years and over), young people and adults. In July 2023, the evidence on bariatric surgery for people living with overweight and obesity was reviewed and the recommendations on surgical interventions were updated.

NICE has also produced guidelines on obesity prevention, maintaining a healthy weight, and managing overweight and obesity in adults and in children and young people.

#### www.nice.org.uk/cg189

## IDDT 2023 Get Together

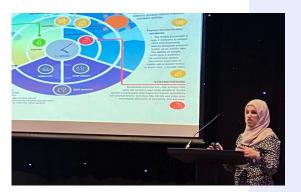
Tips, Techniques, and Trials Kettering Park Spa Hotel - Saturday 30 September 2023

The staff and trustees were delighted to welcome old friends and new, to our get together. Slightly lower attendance than in previous years (the train strike had an impact) led to longer conversations and new connections – this is an event well worth attending!

We started with IDDT's Annual General Meeting.

Full minutes are available to any member who requests them.

Notable points were the huge increase in healthcare professionals requesting FREE leaflets, the success of the Ukraine appeal, and the generous increase in donations and legacy bequests from members.



## Newer Treatments in Diabetes and the Role of the Diabetes Specialist Pharmacist

A warm welcome was given to **Samina Ali**, especially as she came all the way from Glasgow! Samina is the lead pharmacist with a special interest in diabetes in general practice – an initiative for improving the care of people with diabetes in that area.

Samina reminded us of the huge and increasing number of people living with diabetes in the UK (4.3 million, with 850,000 probably undiagnosed).

Her talk covered topics as varied as optimum physical exercise for those living with Type

2 diabetes, shortages of certain drugs used to reduce HbA1c and cause weight loss and new developments, such as once-weekly dosing of insulin (which could optimise control in those who cannot self-manage their diabetes). Samina also spoke about trials into reduced calorie diets, and the difficulties transposing research results from clinical trials to real life. for example, on an 800 calorie diet, 36% of participants were still in remission at 2 years.

It is now possible to purchase a kit privately to test HbA1c, a few pharmacies offer this as a service too.

There were lots of questions from the floor, including impact of low calorie diets on

hypoglycaemic risk and danger for drivers, and poor support from many NHS sectors-New insulin delivery devices were also discussed – wider availability will help more insulin users, and the potential improvements in blood glucose levels are impressive.

Samina also led a discussion group where individual issues to do with medication and lack of access to primary care services were discussed.

#### Primary Care Guidelines of Diabetes Care for Older Adults

Professor **Alan Sinclair** again delivered the keynote address at our event and this is a brief summary. Up to 40% of adults aged 70-80 will have Type 2 diabetes. Clinical manifestations of diabetes can be vague and non-specific in older adults and the diagnosis may be missed. Type 1 diabetes is also much commoner in older adults than previously thought.



Management of diabetes in older adults can be problematic as there is a higher rate of co-morbidity and higher sensitivity to drug side effects. It is not uncommon for older adults to be on 6 or more drugs – and not all of them may be necessary.

Professor Sinclair stressed the importance of "small gains", even minor improvements in day-to-day functioning can make a big difference. Frailty can be reversed by use of resistance training, such as using weights. People with diabetes have a higher risk of needing care home treatment in later life, so any small improvement in cognitive or physical function can reduce this risk. In older life, aiming for "tight control" and reduced HbA1c may not be ideal if there is no gain in quality of life.

National guidelines for managing diabetes in care homes advise reducing medications or their doses if risk outweighs benefit.Primary care guidelines focus on safety and early detection of risk for dependence, considering de-escalation of drug treatments as well as assessing frailty and preventive measures such as exercise, nutrition, oral health care and immunisations.

A new frailty test involves a list of simple questions and no equipment. If a person answers 'Yes' to three or more they are likely to have frailty.

- Are you fatigued?
- Are you able to walk 1 block (200 m)?
- Do you have five or more illnesses?
- Can you walk up one flight of stairs?
- Have you lost more than 5% of your weight in less than six months

Professor Sinclair's take-home message was to ask questions of your prescriber or pharmacist if you are unsure why you are taking a drug.

- Why am I on this drug?
- How will I benefit?

What are the potential risks?

## The Latest on the Freestyle Libre

Jane Cheetham and a colleague from Abbott Laboratories again joined us at our event. The Libre is a sensor which is worn for two weeks then replaced and reduces finger prick tests markedly. It can be read by a smartphone app, and **importantly a handheld scanner is available for the Libre 2 which means a smartphone is unnecessary.** 

Libre users can share data with a healthcare professional or carer. There is access to monthly webinars and the Abbot helpline. Since April 2022 anyone with Type 1 can request a Libre on the NHS. The new Libre 2 is very small and has connectivity to the Ypso pump and an algorithm meaning micro-adjustments in insulin are automatic, leading to better control. Connectivity will soon be available with the Omnipod pump. Those with Type 2 diabetes controlled by multiple daily doses of insulin who have recurrent or severe hypoglycaemia or reduced hypoglycaemic awareness, are also eligible for a Libre 2.

## Workshop 1 – Coping with diabetes-related stress

John Birbeck and Anne Aubin facilitated this discussion group, which was attended by people with Type 1 and Type 2 diabetes and carers. The stresses which were identified by participants included having multiple health problems, being unable to reach targets, being unable to focus on self-care because of external stresses, like someone else's illness, lack of support/the wrong kind of support, sudden increases in workload, worry about a person with diabetes eg night hypos, being unable to stick to routine, frustration – at lack of control or with other people, lack of routine checks, hypos and loss of warnings, the relentlessness of diabetes and lack of possible spontaneity, and finally the impact of the menopause.

The group then looked at the body's reaction to stress – we release adrenaline, which can lead to us feeling panic, over-thinking, becoming irritable, or freezing and being unable to act. Adrenaline is also released as we go hypo. Cortisol is another stress chemical which is released in the early hours of the morning and is one of the chemicals that can cause insulin resistance leading to higher blood glucose.

Many women going through the menopause also have insulin resistance. When our body can no longer pump out helpful stress chemicals, we can become fatigued, ill, depressed or burned out. Some people find themselves eating too much when stressed – this is because "something to settle my stomach" does alter the body's chemical system and reduces adrenaline. Obviously, this can only be a short-term solution for those of us with diabetes.

The group looked at coping strategies such as deep breathing exercises, walking in nature, talking to others (like attending this event!), and prioritising feel-good activities like hobbies. For more information on this topic, ask for your copy of the FREE updated booklet "Stress, Anxiety and Depression" from IDDT.

## Workshop 2 – Neuropathy, Not to be Ignored

Professor Alan Sinclair and John Simpson of Neuropad led this workshop. Neuropathy is damage to nerves – microvascular (eg eyes, kidneys) or macrovascular (eg heart, brain). The resulting effects are sensory or motor problems. Patients experience pain, sleep disturbance and mood disorders. The longest nerves travel to the hands and feet which is why neuropathy affects the extremities most commonly.

Neuropathy was described as one of the most important complications of diabetes. All too often it is allowed to progress until a major symptom occurs. The only treatment for the symptoms is drug treatment, but lifestyle changes can help. Prevention is the key way forward with improved screening and treatment.

Neuropathy is growing in prevalence because of multiple factors including inactivity and food, especially in less-developed countries. The impact of sedentary behaviour was discussed. People should get up and move about at least every hour, not only to keep mobile but also glucose metabolism changes when sedentary.

- Assessment The most simple assessment is "Can you feel this?"
- Palpation and observation will pick up ulcers, infection oedema, swelling and check the arch of the foot. A tuning fork will check by using vibration. Neuropad tests are subjective and can be used at home to pick up problems early so that treatment or
   lifestyle change can take place.
- Costs £1 billion is spent on foot ulcers per year in this country. There are 90,000 foot ulcers at any one time in the UK.

### IDDT initiatives, concerns, and work in progress

• Jenny reported on the huge response to our Ukraine appeal – financial donations used to help to pay transportation costs and donations of unwanted, in-date insulin, meters, test strips, pens, toys and even sleeping bags. There was some concern expressed at this amount of this NHS waste.

• IDDT has had a stand at several professional conferences and will be the charity sponsor at the Diabetes Professional Care (DPC) conference at Olympia in November.

• Huge numbers of free leaflets are being sent out to healthcare professionals. Over 5,000 copies of the latest publication "Diet and Diabetes" were requested in the first month of issue. 6000 GP practices now stock our leaflets (one sixth of total). 32,000 free booklets were sent out to healthcare professionals in the last three months.

• IDDT recently partnered with TMH, a media purchasing company and Orange Juice, a PR company, on a publicity campaign to raise public awareness of IDDT and what we offer with the slogan 'Diabetes? We're here to help.' This came about as a result of feedback from last year's conference, and from frequent calls to the helpline, that people are getting a diagnosis and then not being given information or support.

The aim of the campaign is to increase membership and already there has been a marked increase in social media interactions, with over a 1000 new members signed up at the time of writing.

More Type 1 and Type 2 insulin users have approached us than anticipated. Looking ahead the Trust will continue to provide quality publications to healthcare providers in the hope that fewer people will leave their surgery without information on diabetes and how to manage it, and we will continue to offer direct support.

Other conference highlights included: \* a fabulous lunch \* great conversations \* like-minded people \* sharing tips \* meeting the staff and trustees \* Christmas cards at only £1 for 10\* nice hotel \* goody bags \* hope and optimism\*

## Supplier of Hypurin Porcine Insulins in Germany

Sabine Hančl from Germany is allergic to synthetic insulins and has continued to try to ensure that she, and others like her, can obtain pork insulin. As we are all aware, the UK is the only country where pork insulin is made, so Sabine recently wrote to the manufacturers and received the following reply from Wockhardt UK: "We are still making this product for our patients in the UK and have recently supplied to a company in Germany. The company is called Runge Pharma and can be contacted at: info@runge-pharma.de " September 2023

### A rare genetic form of diabetes – the Schofield family

We are a family (and household) of four adults, three of whom have diabetes – Paul (age 65, diagnosed 1999 aged 41), Ally (age 34, diagnosed 2001 aged 13), and Peter (age 36, diagnosed 2020 aged 33). Not forgetting Valerie (age 64, not yet diagnosed!) who holds everything together!

#### Features and events that we now understand to be relevant to the situation.

**Paul:** On two annual work medicals several years apart, both early morning, he was referred to his GP for glucose in the urine. First time he had a finger prick test, 30 seconds wait at that time, during which the nurse said she would expect less than 6.0 as it was coming up to evening meal – 5.9, "ok". Second time they took blood, the result was positive. He was sent to the hospital (again, first thing in the morning) for a glass of glucose followed by half hourly blood and urine tests. He saw the consultant at lunchtime who stated he had never come across such a set of numbers in his entire career. He would give him a finger prick test kit and see him the following week to start on insulin.

The nurse showed him how to use the test kit, looked at the measurement and said she would go and have the meter calibrated! She then said the meter was fine and his reading was perfectly ok! He did a week's worth of pre-meal and pre-bed finger prick tests, then saw the consultant again, who looked at the readings and wrote a prescription for one tablet (Gliclazide) at breakfast every day and not insulin. A year or two later his diabetes nurse changed. The new one asked him (knowingly) what his most recent testing regime had been – 2 hours after meals (all previous and future periods it was the standard: before meals and bed). After a short while she said that she could possibly see why it was the case. And that was the end of that! We're now thinking the previous nurse was aware of the consultant's glucose test results. For over twenty years he has taken gradually increasing amounts of tablets until, in early 2020, he had his tablets halved and long-acting insulin was added once daily. He tried three types of long-acting insulin over the next two years with standard pre-meal and pre-bed finger prick tests, later making minor insulin dose adjustments depending on the bedtime reading, and eventually bringing his HbAlc towards acceptable levels, but also with some hypos, measured or felt, at various times. Paul has had a C-peptide test and is not Type 1.

**Ally:** She showed some minor symptoms of diabetes, which was proven in a test. Being thirteen she was obviously Type 1 and hospitalised, but wasn't showing any difficulties or complications so was sent home after two nights. She has continued to be treated as Type 1 until last year, when she had the C-peptide test that showed she is still producing insulin which explains the particularly low levels of injected insulin she has always used. She was then put on tablets and gradually weaned off insulin. Currently she no longer uses any rapid insulin as a regimen but does use very small amounts to adjust the current situation, and is now on a very low dose of slow release insulin. Her CGM generally shows she is well controlled without any large peaks, but this may be because she has had decades of experience in honing her blood sugars with multiple injections.

**Peter:** In April 2020 he was unwell which, as a side issue, resulted in him being diagnosed as having diabetes, thought probably to be Type 1. However he is also needle phobic, so they decided to monitor the situation and he was referred to the hospital diabetes service.

All three of us get CGM readers or 'how we came to see the light': A hospital nurse visited us at home during Covid, initially to check on Peter after his very recent diagnosis. She first sourced a CGM kit for him so that he didn't have to have finger prick tests. From this we found the typical pattern of readings to be very high very fast after each meal, generally with an equally fast descent soon afterwards. She then sourced a CGM kit for Ally because, at the time, she was believed to be Type 1. When they were both changed over to version 2 CGM, Peter cheekily asked whether dad could use the left over sensors. Paul used a total of eight sensors over a period of around 18 weeks, and it was clear that he had the same type of diabetes that Peter shows. This also explains the early oddities of his diagnosis described above. Some months later the nurse suggested he change to a different type of long acting insulin, to which he said only if he could have a CGM reader because of the unusual patterns he had found on the earlier 'trial' and the fact that clearly his response to food was not normal. This she agreed to.

**Genetic testing.** After Peter's diagnosis all four of us were put forward for genetic testing (a very long slow process). So far, the results show Peter and Ally have "a rare genetic condition to do with the gene DNAJC3". Diabetes, deafness, and short stature are known to be associated with this condition and both of them suffer from all three. This is now known to have been (partially) inherited from mum. They have not yet found a connection with dad but arguably there must be one.

## What's New?

#### FDA approves CellTrans' Lantidra as first cellular therapy to treat Type 1 diabetes

The US Food and Drug Administration (FDA) has approved CellTrans' Lantidra (donislecel) as the first cellular therapy to treat patients with Type 1 diabetes.

The authorisation specifically applies to adults who are unable to meet their target blood glucose levels and have repeated episodes of severe low blood sugar (hypoglycaemia), despite intensive disease management and education. Some people with Type 1 have difficulty managing the amount of insulin needed every day, and dose adjustment becomes difficult. In addition, they may also develop hypoglycaemia unawareness, where they are unable to detect that their blood glucose is dropping and may not have a chance to treat themselves. Lantidra is administered initially as a single infusion and aims to replace the insulin-producing beta cells in the pancreas, reducing the need for people to take insulin. The therapy was evaluated in two single-arm studies in which 30 patients with Type 1 diabetes and hypoglycaemic unawareness received one to three infusions.

#### The results:

• Overall, 21 patients did not need to take insulin for a year or more, with 11 not needing insulin for one to five years and 10 not needing insulin for more than five years.

• The FDA noted that the majority of patients involved in the study experienced at least one serious adverse reaction, some of which required immunosuppressants to be discontinued, leading to the loss of the transplanted beta cells.

Despite this, for the future the approval does provide people living with Type 1 diabetes and recurrent severe hypoglycaemia an additional treatment option to help achieve target blood glucose levels.

#### Latest update to glucose reading app will improve confidence in diabetes management

Real-time minute-by-minute glucose readings are now automatically displayed on an app device after latest software updates. An update to the FreeStyle LibreLink app will allow people who use the FreeStyle Libre 2 system to see their glucose levels and trends with a quick glance at their smartphone. This latest update means there is no need to regularly scan sensors however, a more proactive approach will still be available for users to scan their continuous glucose monitor sensor with their phone or reader. A statement from device manufacturer Abbott said: "Having glucose readings every minute will enable people to manage their diabetes even more confidently, allowing them to recognise a change in their glucose levels sooner and act faster to avoid potential issues like hypoglycaemia or extremely low glucose.

All users of the FreeStyle Libre 2 system will receive information on how the update will work and make the system even easier to use, through emails, in-app messaging and brochures. Last year, NICE recommended CGM technology be made available to all people living with Type 1 diabetes and is currently used by over 70% of all adults living with **Type 1 diabetes**. Updated NICE guidelines also mean that eligible people living with **Type 2 diabetes** who use insulin – including some children, as of May this year, can also now benefit from this technology.

### Paramedics to screen children for Type 1 diabetes

For the first time, ambulance paramedics will screen children for Type 1 diabetes to provide earlier treatment. This is being carried out by South Central Ambulance Service (SCAS) and is the first ambulance trust to do the testing.

The trial is part of a national research project - Early Surveillance for Autoimmune Diabetes (Elsa). The screening will take place in GP practices, schools and community centres in Berkshire, Oxfordshire, Hampshire and Buckinghamshire.

Elsa is designed to assess children's risk of developing Type 1 diabetes at the earliest possible stage. Those identified as high risk in the trial and their families, will be offered support and education to prepare for diagnosis. They could also get access to clinical trials of the newest treatments which could prevent or delay the condition.

Screening for Type 1 diabetes is not presently standard in the NHS. Of the 400,000 people in the UK with Type 1 diabetes about 29,000 are children.

### NOT new but worth thinking about for children's future health!

## Time spent watching television in childhood and adolescence is associated with metabolic syndrome at age 45 years, according to a study published online.

Research carried out in New Zealand monitored a population-based birth group born in 1972 and 1973. Parent and self-reported weekday television viewing times were recorded from ages 5 to 32 years. The primary outcome was metabolic syndrome, assessed at age 45 years and overall 870 of 997 surviving participants had reported television viewing time and metabolic syndrome data.

- There was an association for average television viewing time between ages 5 and 15 years with metabolic syndrome at age 45 years.
- After adjustment for gender, socioeconomic status and body mass index (BMI) at age 5 years, this association persisted.
- After further adjustment for adult television viewing, the association remained significant.
- There was also an association seen for childhood television viewing with lower cardiorespiratory fitness and higher BMI at age 45 years.

The researchers concluded that this adds further evidence of the adverse health effects of television viewing across the life course and that interventions to reduce the time that children and young people spend in screen-based activities may have substantial long-lasting benefits for health. (Pediatrics. July 2023)

## In the News

#### Drug firms funding UK patient groups that lobby for NHS approval of medicines

In July 2023, The Observer revealed that drug companies are systematically funding patient groups that lobby the National Institute for Health and Care Excellence (NICE), the NHS medicines watchdog, to approve the rollout of their drugs. Their investigation found that of 173 drug appraisals conducted by NICE since April 2021, 138 involved patient groups that had a financial link to the maker of the drug being assessed, or have since received funding.

Often, the financial interests were not clearly disclosed in NICE transparency documents. Many of the groups that received the payments went on to make pleas to England's medicines watchdog calling for treatments to be approved for diseases and illnesses including cancer, heart disease, migraine and diabetes. Others made submissions appealing against NICE decisions when medicines were refused for being too expensive. The payments made to patient groups were six-figure amounts, so certainly a significant amount to the charities. When the diabetes drug, AstraZeneca's Forxiga, was refused by NICE on cost grounds, the unnamed charity submitted an appeal saying the decision had led to "great disappointment". It said it had "always provided the required information" to NICE and was not influenced by the funding.

The article quoted Prof Martin McKee, a public health expert and former president of the British Medical Association, who said industry funding of patient groups was a "longstanding concern" and, "Mechanisms for managing conflicts of interest are not fit for purpose."Dr Leeza Osipenko, who worked for NICE from 2012-19 as its former director of scientific advice, said: "It's a massive problem. It's a massive conflict of interest. There needs to be a discussion at a government level to decide what is the solution."

Steve Goodrich, head of investigations at anti-corruption organisation Transparency International UK, said the payments raised "serious questions as to whose interests" the groups were representing. "Even when this funding is declared, which isn't always the case, there's an argument to say transparency is necessary but not sufficient in managing the conflicts of interest that arise. There needs to be a fundamental rethink about the resourcing of patient groups to ensure they don't just act as puppets for the industry".

NICE has said it is looking into the issues raised. It said its appraisals were "greatly enhanced by the patient voice" and that it had "robust processes" that enabled it to "make recommendations based on careful analysis of all the evidence".

Concerns about industry funding of patient groups have been highlighted before. Earlier this year, the Observer revealed how Novo Nordisk, the drug company behind the Wegovy obesity injections, paid millions to experts and groups that in some cases went on to praise the drug in submissions to NICE without always making their links to the company clear. NICE subsequently carried out an internal inquiry which found that some of those who advised it on the use of Wegovy in the NHS had not properly declared their interests.

The reason for writing about this is to assure members and readers that we, IDDT, do not and never have, accepted any funding from the pharmaceutical industry so we are independent and uninfluenced by funding sources. All our funding is voluntary, for which we are very grateful.

## **Bits and Pieces**

### Poor hypoglycaemia awareness linked to Type 1 diabetes distress

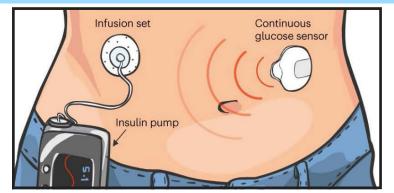
A recent study has found that diabetes distress is greater among adults with Type 1 diabetes who had impaired hypoglycaemia awareness (loss of warnings). Impaired hypoglycaemia awareness was also associated with hypoglycaemic events that were more severe and upsetting as well as fear of hypoglycaemia. (Diabetic Medicine, July 2023)

In addition, another study presented at the American Diabetes Association Scientific Sessions found that people with Type 1 diabetes can reduce their diabetes distress by going through an intervention involving a diabetes educator-led programme focused on education and management or through an intervention involving a psychologist-led programme focusing only on the emotional aspect of diabetes.

However, going through an intervention that combines the two approaches yields a greater reduction in diabetes distress

**Note:** just to remind you, IDDT has FREE booklet 'Diabetes – Stress, Anxiety and Depression'. If you would like a copy, call IDDT on 01604 622837 or email enquiries@iddtinternational.org

## Automated insulin delivery system is NOT an artificial pancreas



There has been some confusion about the difference between an artificial pancreas (closed loop system) and an automated insulin delivery system (AID). So let us be clear, an artificial pancreas is an old name for what we now know to be automated insulin delivery (AID). AIDs are not fully closed-loop systems because the user has to interact with the system to provide meal insulin doses and adjust for exercise.

Systems such as the Omnipod IQ and the Medtronic 780 G, do not belong to the category of an artificial pancreas because they work by an insulin pump 'talking' to a continuous glucose monitor (CGM), then based on glucose levels and the direction they are heading, the device will automatically adjust the amount of basal insulin the pump delivers. These systems are good at basal insulin because when somebody is not eating or if it is overnight, they can keep glucose levels really flat. Some systems can also correct for high glucose levels by delivering a dose of quick-acting insulin but the device still needs to be told when and how much carbohydrate is eaten to receive quick-acting insulin at mealtimes.

In a truly closed loop system (artificial pancreas) these tasks would not have to be done by the user but by the system. With AID people need to give a dose in advance of a meal and work out how many carbohydrates they're eating and if they are going to exercise, reduce the insulin they are giving 1-2 hours before exercise.

It is also important to remember that when insulin is given by AID, it is given subcutaneously so works differently from when it is naturally produced by the pancreas. When given subcutaneously, the action of insulin cannot be stopped which means that it works for several hours (and during a hypo if one occurs) as the insulin will work for the length of time for which it was designed.

#### How different is this for people who prefer to inject than use a pump and automated insulin delivery?

The simple answer is 'not a lot'! People who inject their insulin also have to:

- remember that once injected, the insulin works for its designed time and cannot be stopped,
- take into account the carbohydrates eaten at a meal and inject accordingly,
- take into account any exercise, especially if it is not part of the everyday routine eg playing football on a Saturday compared to a weekday in the office or classroom,
- take into account any situations that may be stressful.



#### Diet rich in magnesium linked to brain health

A study involving 6,001 cognitively healthy adults found an association between a diet high in magnesium and brain health. The research showed that over a 16-month period higher consumption of magnesium-rich foods, such as leafy greens, legumes, nuts, seeds and whole grains, was linked to larger brain volumes and possibly better brain health. (European Journal of Nutrition, April 2023)

#### Study links added dietary sugar to poor health outcomes

A review of 73 meta-analyses found that a diet high in added sugar was linked to 45 poor health outcomes, including diabetes, cancer, gout, hypertension, cardiovascular disease, asthma, depression and early mortality. The researchers recommend a combination of widespread public health education and policies worldwide is urgently needed, especially for children and adolescents. (The BMJ, April 2023)

#### Does a common artificial sweetener increase anxiety?

Aspartame is an artificial sweetener commonly found in diet drinks and food. Researchers have found that it may raise the risk for anxiety. They found that mice that drank water containing aspartame at doses equivalent to less than 15% of the recommended maximum daily human intake showed pronounced anxiety-like behaviours.

When consumed, aspartame becomes aspartic acid, phenylalanine and methanol, all of which can have potent effects on the central nervous system. Exposing the mice to aspartame also produced changes in the expression of genes in a brain region that regulates anxiety and fear but giving the mice diazepam alleviated the anxiety behaviour.

The researchers suggest: "Extrapolation of the findings to humans suggests that aspartame consumption at doses below the recommended maximum daily intake may produce neuro-behavioural changes in people who consume aspartame drinks, and their descendants." *(Proceedings of the National Academy of Sciences, January 2023)* 

## Paediatricians caution against low-calories diets for children and young people with diabetes

The American Academy of Pediatrics has cautioned against the use of low-carbohydrate diets for children and adolescents with or at risk of developing diabetes. The safety concerns include growth deceleration, poor bone health, nutritional ketosis and disordered eating behaviours.

The clinical report stated that low-carbohydrate diets and very low-carbohydrate diets were only recommended for children with Type 1 diabetes under close supervision of a diabetes care team and that children should continue to eat healthy carbs found in vegetables, fruits, whole grains and legumes. (Pediatrics, September 2023)

#### Higher salt intake may raise atherosclerosis risk

According to a study involving 10,788 adults, high levels of salt consumption was associated with an increased risk of atherosclerosis, even for people who did not have hypertension. An editorial by the researchers said: "We should look more extensively on the role of dietary salt, as it affects many pathological mechanisms, by which, especially with the coexistence of other risk factors, atherosclerosis may progress very fast." (European Heart Journal Open, April 2023)

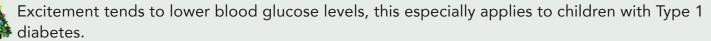
#### Mediterranean, low-fat diets linked to lower mortality risks

According to a meta-analysis of 7 diets, following Mediterranean or low-fat eating patterns was associated with a reduced risk of death overall and cardiovascular mortality, as well as a lower likelihood of stroke and nonfatal myocardial infarction, especially for patients with higher cardiovascular risk factors. (BMJ, April 2023)

#### Healthy drinks linked to reduced mortality in people with Type 2 diabetes

A long-term study involving 13,000 adults with Type 2 diabetes found that replacing just one serving of a sugar-sweetened drink like lemonade or fruit drink with coffee, tea, low-fat milk or plain water reduced risk of early death by 18%. The study showed how even small dietary changes can make a difference. It is advised that making a deliberate change to this is made slowly so that it is comfortable and can be maintained. (The BMJ, April 2023)

## AND THEN THERE'S CHRISTMAS!





Stress tends to raise blood sugars.

Eating more than usual can raise blood sugars.



Exercise lowers blood sugars, so a walk after a big Christmas dinner will help to lower them.



Try to keep meal times as near as possible to your usual times but if meals are later, then remember to have a snack.



Avoid keeping extra food around as this will tempt you to eat what you want, when you want.



Maintain your blood glucose testing routine as far as possible and test more often if you're eating frequently or at irregular times.



Stay active - exercise reduces stress, burns excess calories and helps control blood sugars.



Pamper yourself – whether this is taking a relaxing bath or curling up with a book, make time for yourself as this can help to prevent holiday stress from building up. Get plenty of rest to prevent holiday tiredness.

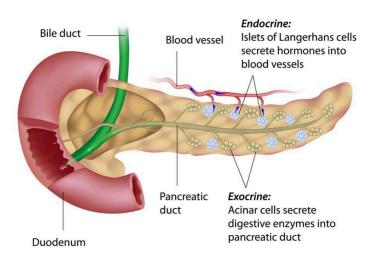


Planning – make sure that you have enough insulin and other medications to cover the Christmas and New Year holidays.

## RESEARCH

## Pancreatic ductal cells sense and release insulin

A research project in Australia funded by the JDRF has turned human pancreatic ductal cells into insulin-producing cells which gives hope that people with Type 1 diabetes may be able to have the ability to make insulin restored. The researchers stimulated ductal cells taken from a human pancreas with small molecule inhibitors to influence the cells to sense glucose and release insulin. In 2022, this team of researchers used the same drug to turn the insulin gene back in cells taken from the pancreas donated by someone who was living with Type 1 diabetes.



#### What are ductal cells?

The tubes running through the pancreas are lined with ductal cells which thanks to certain genes, can turn into hormone-producing cells. However, this function is lost by adulthood so people with Type 1 diabetes cannot grow new insulin-producing beta cells to replace those destroyed by the immune attack. This new research suggests that it may be possible to influence the ductal cells to restore insulin production. This is early research, a proof-ofconcept study and such studies are essential to establish how theories work so that new treatments can be developed from a solid foundation ofknowledge.

#### Being divorced linked to amputation risks!

Adults with diabetes who smoke or exercise less than once per week are among those at higher risk for a lower limb amputation, but adults with obesity may have a lower risk for amputations, according to this study. The risk for lower limb amputations for people with diabetes increases with age and for those who smoke or exercise less. However, the study also found that being divorced was linked with a 67% higher risk of lower limb amputation among people with diabetes compared with being married. Men were at 57% greater risk than women and the researchers suggest that this may be due to a change in self-care and food habits, particularly self-isolation and lower physical activity among men. Adults with obesity may have a lower risk for amputations than those with normal weight. (European Association for the Study of Diabetes annual meeting, August, 2023)

## Intermittent fasting diet trend linked to disordered eating

Intermittent fasting (IF) is defined as fasting for more than eight hours at a time. It is a trend that is increasing in popularity, but new research suggests is may be linked to eating disorders and disordered eating behaviours. Researchers from the University of Toronto analysed data from more than 2700 adolescents and young adults and found that for women, intermittent fasting was significantly associated with overeating, binge eating, vomiting, laxative use and compulsive exercise. The lead researcher maintained that evidence on the effectiveness of IF for weight loss and disease prevention is mixed and it is important that we all understand the potential harms of IF - even if there are benefits for some. The researcher commented: "If anything, this study shines light on the fact that engagement in intermittent fasting may be connected with problematic eating disorder behaviours. It is important that healthcare professionals are very aware of this, despite proponents on social media touting the effectiveness and benefits." (Medscape Medical News, March 2023)

#### Deadly gas could treat diabetic retinopathy

Carbon monoxide from engine exhaust kills hundreds of people each year. However, an Australian study has shown that a tiny controlled amount might be a potential therapy for a leading cause of adult blindness, diabetic retinopathy.

Carbon monoxide is an odourless, colourless gas that in Australia kills at least 430 people and sends 50,000 to the Emergency Room each year but AU researchers at Hillhurst Biopharmaceuticals of Montrose, Calif., are studying it in diabetic retinopathy.

### From our own correspondents



#### I still need a finger-prick blood glucose test

Dear Jenny,

Some time ago I told you how good the FreeStyle Libre 2 is. I like that it warns you when you are going low at 4.2 and when you are going low when you are in bed. However, I don't like it when it stays at 4.2 after eating, sometimes for up to 15 minutes, so I am tempted to eat more. At times like this I go back to finger-pricking blood glucose tests for a true blood glucose reading.

B.M. Yorkshire

### **Dream Trust participants in Pulse Marathon**



Dream Trust team and 20 young adults and teenagers with Type 1 diabetes participated in Pulse Marathon on 20th August 2023 in Nagpur, India. Some of the participants will have been sponsored by IDDT members as children.

With a little support from Dream Trust, plenty of hard work and a positive attitude many of these children have now become successful businessmen, badminton player, engineer, lawyer, fitness enthusiast, professional photographer and so on.

These children overcame Type 1 diabetes to fulfil their dreams, so their message is 'don't allow Type 1 diabetes to hold you back'.

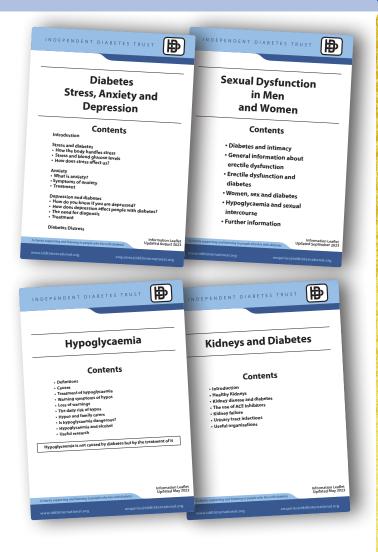
### Lifetime Achievement Award for Dr Sharad Pendsey



Diabetic Association of India (DAI), Nagpur conferred Life Time Achievement Award to late Dr. Sharad Purushottam Pendsey for his outstanding achievements in the field of diabetes, especially diabetic foot and Type 1 diabetes.

He was one of the founder of DAI, Nagpur. The award was given by senior physicians Dr. S. M. Patil and S. D. Suryawanshi and was received by Mrs. Swati Sharad Pendsey & family members.

### **Updated IDDT booklets**



We have updated several of our booklets, so if you would like copies of any of them, please give us a call on 01604 622837 or email enquiries@iddtinternational.org

- Diabetes Stress, Anxiety and Depression
- Sexual Dysfunction in Men and Women
- Hypoglycaemia
- Kidneys and Diabetes

The winners of IDDT's lottery draw!

now!

Enter the

We are delighted to announce the winners of our latest monthly lottery draws. They are as follows:

#### **IDDT LOTTERY RESULTS**

Winners of the July 2023 draw are: 1st prize of £482.88 goes to Sylvia from Barton Seagrave 2nd prize of £362.16 goes to Anon. from Wakefield 3rd prize of £241.44 goes to Julie from Barnsley 4th prize of £120.72 goes to Anon. from Bridgnorth

Winners of the August 2023 draw are: 1st prize of £487.20 goes to Peter from Nelson 2nd prize of £365.40 goes to Anon from Caralisle 3rd prize of £243.60 goes to Anthony from Rhyl 4th prize of £121.80 goes to Neil from Thetford

Winners of the September 2023 draw aret 1st prize of £487.20 goes to Jeff from Loughborough 2nd prize of £365.40 goes to Richard from Stondon 3rd prize of £243.60 goes to Sandra from Kettering 4th prize of £121.60 goes to James from Rainham

Note: The winners of the draws for October, November and December 2023 will be announced, in our March 2024 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 karl@iddtinternational.org

#### Lottery Jackpot - there's still time to enter!

Just to remind you that as a thank you to our members and Lottery players and as a celebration that 2024 is 30 years since IDDT formed, we are having JACKPOT Lottery draw in early January. The prizes will be:

#### • First prize: £1,000 • Second Prize: £750 • Third prize: £500 • Fourth prize: £250

If you are already a Lottery player, then you will automatically be entered into the JACKPOT. However, if you would like to join the Lottery for just £2 per month to have a chance of winning the JACKPOT, act NOW as you still just have time to set it up. Just contact IDDT for a Lottery form by calling IDDT on 01604 622837 or email karl@iddtinternational.org

If we can be of help in any way, please contact: InDependent Diabetes Trust (IDDT), PO Box 294, Northampton NN1 4XS Tel: 01604 622837 email: **enquiries@iddtinternational.org** Or visit our website: **www.iddt.org** 

## INDEPENDENT DIABETES TRUST



## **SNIPPETS**

## Weight loss drugs becoming a booming industry

Morgan Stanly have predicted that the market for weight loss drugs will reach \$54 billion by 2030, a 400% increase from today. This is not just due to the weight loss drugs already on the market but Eli Lilly and Novo Nordisk together have at least 12 more obesity medications in development.

#### Spinal pain among people with diabetes

A recent study has found that spinal pain that negatively affects work and physical activities was prevalent among patients with either Type 1 or Type 2 diabetes and especially among women. The prevalence was the same in Type 1 and Type 2 diabetes for thoracic and cervical pain, but the predominance for lumbar spine pain was greater among people with Type 2 diabetes. (European Spine Journal, September 2023)

### Diabetes management more complex in women

Women have more complex diabetes management compared with men. This is due to the various hormonal changes women experience in their lifetime. The researchers said that diabetes management for women changes greatly depending on which stage of life they're in, such as puberty and menopause. They also said that only including women in research studies isn't enough to gain full understanding. (The Association of Diabetes Care and Education Specialists annual meeting, July 2023)

#### Weight loss drugs dangerous for children

Researchers have expressed concerns the use of glucagon-like peptide-1 receptor agonists in weight-loss drugs like Ozempic and Wegovy (semiglutide) to treat childhood obesity and Type 2 diabetes may have unintended and adverse effects on children's health.

This is due to the unbalance and inappropriate r eductions in calorie or energy intake associated with these weight loss drugs.

Unlike in adults, children and adolescents need energy and sufficient calories not only for physical activity but for growth and development. (Journal of Clinical and Translational Science, August 2023)

### Older adults may have lower risk of Type 2 diabetes with daily aspirin

Recent research has shown that older people taking low-dose aspirin may carry a lower risk of developing Type 2 diabetes and may see a slower increase in fasting plasma glucose levels over time. Researchers analysed results from the ASPREE trial and found a 15% lesser risk for developing Type 2 diabetes in the group who took aspirin compared to a placebo group.

However, the recommendation continues to be that older adults use daily aspirin only when a medical justification exists, such as after a heart attack. (European Association for the Study of Diabetes Meeting, 2023)

#### Changes in blood sugars days after COVID 19 booster in Type 1 diabetes

A study has found that average daily glucose among people with Type 1 diabetes increased for two or three days after a COVID 19 vaccine booster.

The researchers advise that while some people may experience temporary changes in blood glucose levels, being proactive, monitoring and adjusting insulin doses as needed can help manage these fluctuations effectively. (Diabetes Research and Clinical Practice, September 2023)

## Type 1 diabetes often not diagnosed until adulthood

Data on 947 adults with Type 1 diabetes showed that 37% did not receive a diagnosis until after the age of 30 years.

Delayed diagnoses were most common among male patients and those with diverse racial and ethnic backgrounds. The researchers suggest that nearly two-thirds of Type 1 diabetes cases develop after the age of 20.

Previous studies have suggested that the higher numbers of diagnosis of Type 1 diabetes in children and young people but this is probably because such studies have not looked at a sufficiently wide population range. (Annals of Internal Medicine, September 2023)

A charity supporting and listening to people who live with diabetes

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