



## New Year welcome!

**Welcome to our first Newsletter of 2024 and especially to our new members from our advertising campaign.**

In this Newsletter, we report on our 2023 /24 campaign to reach people living with diabetes. We remind new and existing members that our aims for 2024 have not changed and we will continue to offer help, support and information to people living with diabetes. Our quarterly Newsletters will continue and our free booklets on various diabetes-related topics are available on request. In addition, we are happy to receive your telephone calls, emails and letters and we will do our best to help.

We also welcome the increasing numbers of healthcare professionals who are requesting multiple copies of our booklets to give to their patients. We are grateful for this as it means that more people are receiving the information they need to manage their diabetes.

### **What we learned from you!**

During 2023 we learned that for many people who contacted IDDT, there is a great need for help, support, information and sometimes, just someone to listen to the worries and fears that people have! One of the most concerning but sadly, not untypical emails we received was this message:

*"Thank you for getting back to me. If at all possible could you send as much information as you can. I was told last Friday I had diabetes and for me to go away and Google it. No leaflets, just a prescription for my tablets."*

This is awful! Firstly, as the prescription was for tablets it has to be assumed that the diagnosis was for Type 2 diabetes. Treatment of Type 2 diabetes used to start with diet only before deciding that tablets are necessary, so where was the dietary advice? Is it just easier and quicker to put people on tablets to lower blood sugars? Then we have to remember that whichever type of diabetes it is, it is always a serious condition for which people need education/information to maintain their health and avoid long-term complications.

Secondly, just telling people to 'Google it' is unacceptable! If this advice has to be given then at least, people should be told which websites are reliable, such as the NHS ([www.nhs.uk](http://www.nhs.uk)). It is worth remembering that there is a lot of misleading or plain wrong information on the internet and people selling books some of which are based on opinion, are not evidence. Another message we receive far too frequently:

*"I don't know what type of diabetes I have."*

How does this happen? How can people be expected to manage their diabetes or find more information if they are not told what type of diabetes they have? This simply should not happen!

**These examples just show that there is a lot of work to be done and IDDT is here to do it!**

# NICE approve Hybrid closed loop systems for managing blood glucose levels in Type 1 diabetes

Access to hybrid closed loop systems will be through a 5-year phased roll out in line with NHS England's and NHS Wales' implementation plans.

In all cases where Hybrid closed loop systems are recommended, this is only if they are procured at a cost-effective price agreed by the companies and NHS England, and implemented following NHS England's and NHS Wales' implementation plans.

## Recommendations

- 1. Adults with Type 1 diabetes** - Hybrid closed loop (HCL) systems are recommended as an option for managing blood glucose levels in Type 1 diabetes for adults who have an HbA1c of 58 mmol/mol (7.5%) or more, or have disabling hypoglycaemia, despite best possible management with at least one of the following: (i) continuous subcutaneous insulin infusion (CSII), (ii) real-time continuous glucose monitoring, (iii) intermittently scanned continuous glucose monitoring.
- 2. Children and young people** - HCL systems are recommended as an option for managing blood glucose levels in Type 1 diabetes for children and young people.
- 3. Women, trans men and non-binary, people who are pregnant or planning pregnancy** - HCL systems are recommended as an option for managing blood glucose levels in Type 1 diabetes in these groups of people.
- 4.** HCL systems should only be used with the support of a trained multidisciplinary team experienced in CSII and continuous glucose monitoring in Type 1 Diabetes.
- 5.** Only use HCL systems if the person or their carer: (i) is able to use them, and (ii) is offered approved face-to-face or digital structured education programmes, and (iii) is competent in insulin dosing and adjustments.

These recommendations are not intended to affect use of HCL systems that were started in the NHS before this guidance was published. People using HCL systems outside these recommendations may continue until they and their NHS clinician consider it appropriate to stop. For children and young people, this decision should be made jointly by them, their clinician and their parents or carers.

### What is the Hybrid closed loop system?

Hybrid closed loop (HCL) systems use a mathematical algorithm to deliver insulin automatically

in response to continuously monitored interstitial fluid glucose levels (fluid in the cells, not blood).

They use a combination of real-time glucose monitoring from a continuous glucose monitor (CGM) device and a control algorithm to direct insulin delivery through CSII.

Different HCL systems are available, and some are built by combining interoperable components from different companies.

A large number of combinations of components are available to the NHS, so HCL systems are considered as a class of technologies rather than individual components or systems. Expert advice received by NICE suggested that in practice, minimal differences in outcomes would be expected between systems if used as intended. The choice of components or system is based on a person's preference and whether the system has the appropriate licence for use.

At the time of the NICE recommendations, the following systems and interoperable components were available:

- SmartGuard control algorithm (Medtronic) with Guardian 4 CGM sensor (Medtronic) and MiniMed 780G insulin pump (Medtronic). These components are not available for use with components from other companies.
- ControllIQ control algorithm (Tandem Diabetes Care/Air Liquide) with Dexcom G6 CGM sensor (Dexcom) and t:slim X2 insulin pump (Tandem Diabetes Care/Air Liquide).
- CamAPS FX control algorithm (CamDiab) with Dexcom G6 CGM sensor (Dexcom) and either:
  - (i) DANA insulin pump (Advanced Therapeutics UK Ltd)
  - (ii) mylife YpsoPump (Ypsomed)
  - (iii) other systems are available.

# Update from Ukraine

The news from Ukraine is not good and in November 2023, the BBC reported that in occupied areas Ukrainians are being denied food, passports, pensions and probably worst of all, medical services unless they become Russian.

The European Broadcasting Union (EBU), an alliance of public service media including the BBC, reported that one refugee from the occupied territories, told about one of her friends who was not provided with insulin for her diabetes unless she applied for a Russian passport.

Another friend had to become a Russian citizen to have her broken arm treated. At the end of 2023 IDDT sent another consignment of insulin, Type 2 tablets, glucose meters, needles, lancets and pump equipment to Ukraine to help people with diabetes. In addition, we have sent hats, scarves and gloves from our knitters to help adults and children through the cold winter weather.

We can only do this with the help of all the people who have donated unwanted diabetes items to IDDT. So a huge thank you to all of the families living with diabetes, thank the healthcare professionals who have sent the unwanted items from their practices and of course, our knitters thanks to the health professionals.



***IDDT will continue to support people with diabetes in Ukraine, so if you have unwanted, in-date diabetes items, please send them to IDDT at the following address: 210 Abington Avenue, Northampton NN1 4PR.***

Getting the consignments to Ukraine is not easy so we are very grateful to the drivers and our contacts in Ukraine. We also have to thank IDDT staff for collecting and sorting all the items you send and also for getting the parcels to the pick-up point at short notice!

## IDDT is Charity of the Year

With advice from IDDT and Orange Juice Communications, TMH Media Ltd ran our VERA campaign and were very pleased that it reached so many people living with diabetes.

So much so, that they made IDDT their Charity of the Year for 2023 and made a donation of £1,000 to our funds which they presented to Martin, IDDT's CEO.

We would like to say how grateful we are for their expertise and help and of course, being made their Charity of the Year.



Martin, CEO of IDDT accepts the cheque from Emma and Karen of TMH Media Ltd.

# Shattering myths: Study reveals new insights on Type 1 diabetes and obesity link

Researchers have reviewed recent advancements in information about Type 1 diabetes and weight disorders. Their findings shatter the myths that Type 1 diabetes is a chronic condition only affects slim children and adolescents.

## Background of obesity and diabetes

More than 1 billion people worldwide are obese. Changing trends in diet and physical activity are driving these increases in obesity, which have almost tripled since 1975 and Western countries are the worst affected.

Compared to the far more common Type 2 diabetes, Type 1 diabetes is often seen as rare - it affects between 3-10% of people with diabetes. It is an autoimmune disorder and is characterised by the reduced or complete inability of the pancreas to produce insulin which results in a toxic buildup of sugar in the bloodstream. Historically, the onset of Type 1 was seen in adolescents, but recent research has discovered that it can develop in people of any age group.

## Study findings

- Unlike previously thought, overweight and obesity are significantly positively associated with Type 1 diabetes.
- Research has shown that in adolescents between the ages of 16 and 19, every incremental standard deviation (SD) from average body mass index (BMI) was associated with a 25% increased risk of developing Type 1 diabetes.
- Unexpectedly the study found that children with severe obesity, therefore, high Type 1 risk, could drastically reduce this risk by up to 22% for every 10% of weight loss. This suggests that weight management interventions before the onset of Type 1 diabetes has the potential to prevent the development of the condition which would improve the futures of thousands of children and adults at risk of diabetes.

This review highlights that research shows significant differences in the association between Type 1 diabetes and obesity in different parts of the world.

In addition, the last few decades have seen increases in poor health behaviours, particularly the consumption of energy-dense foods (eg the Western diet) and the shift to highly sedentary lifestyles, especially after Covid and working from home. It is now known obesity arises from a combination of genetic, political, socioeconomic and cultural factors.

In Type 1 diabetes, treating obesity is complicated by intensive insulin therapy, which causes weight gain and is a challenge for achieving weight management goals. Type 1 diabetes characterised by the induction of beta-cell inflammation but this is made more difficult by obesity due to the other conditions this causes, including lipotoxicity, mitochondrial dysfunction, glucotoxicity, adipose tissue damage, endocrine alterations and the recently described imbalances in gut microbial communities.

However, current research fails to incorporate these effects in its predictions and intervention recommendations which often result in suboptimal outcomes. Future clinical research should account for the holistic effects of Type 1 diabetes and obesity rather than focus on one at the cost of the other.

## Conclusions

For many years Type 1 diabetes has received less research interest than Type 2 diabetes which has resulted in myths and misinformation about its risk factors and treatments. Recent research has begun to shatter these myths showing that Type 1 is more common than previously thought and is expected to rise in coming years. In addition, Type 1 is not restricted lean young people but can occur at any age.

The review recommends that future research, policy and interventions must be patient-specific and tailored to address Type 1 diabetes. Obesity and their comorbidities simultaneously. (International Journal of Obesity, December 2023)

# Be aware!

## Physician associates and GP associates – do you know who they are?

In August 2023, a high profile death led to doctors expressing concerns about the role of physician associates (PAs) which have been widely discussed in the media, on social media and by MPs. This case involved the care of a 30 year old woman who died from a pulmonary embolism after seeing a physician associate (PA). This case raised questions about the wider use of PAs in the NHS and particularly about allowing the provision of unsupervised one-to-one consultations in general practice (GP associates).

In November more than 2,800 doctors expressed 'grave concerns' about the lack of regulation governing PAs in an open letter to the General Medical Council. It added that current proposals, which include granting PAs the right to prescribe medicine, were 'unsafe, premature and lacking the necessary safeguards'.

Dr Latifa Patel, a BMA representative made the following points:

- 'We are very concerned about the role that PAs are playing in the NHS.'
- 'We have had reports of PAs falsely telling patients that they are doctors or that they went to medical school. This is extremely confusing for patients, who have a right to know who is treating them. (BMJ 2nd August 2023)

Later in 2023, in what is thought to be the first survey of its kind by the British Medical Association, with over 18,000 responses. UK doctors are reporting overwhelming concern about patient safety in the NHS due to the current ways of employing physician associates and anaesthesia associates. (AA)

- 87% of doctors who took part said the way AAs and PAs currently work in the NHS was always or sometimes a risk to patient safety.
- 86% reported that they felt patients were not aware of the difference between these roles and those of doctors, showing the immense scope for patient confusion about the level of care they are receiving.
- In a separate survey of the public, 29% of patients said they did not know whether or not they had been seen by a PA.

## What are physician associates, Anaesthesia associates and GP associates?

Physician associates support doctors in the diagnosis and management of patients. They might work in a GP surgery or be based in a hospital, but wherever they work, they have direct contact with patients. They work alongside doctors and surgeons providing medical care as an integral part of the multidisciplinary team but work under the supervision of a doctor but can work autonomously with appropriate support. GP associates perform similar tasks to a doctor but don't have the same medical training so are not direct substitutes. They will assess patients, make referrals, order certain tests and start a treatment plan.

## What training and qualifications do physician associates have?

PAs trained in the UK have undertaken postgraduate medical training in PA studies which are spread over at least 90 weeks (about 3,200 hours, divided into 1,600 hours of theory and 1,600 hours of clinical practice) but there is no comparison between this 2 years and 4 to 6 years of a qualified doctor!

## What do physician associates do?

Physician associates are trained to work within a defined scope of practice and limits of competence and can perform the following duties:

- taking medical histories from patients
- carrying out physical examinations
- seeing patients with undifferentiated diagnoses
- seeing patients with long-term chronic conditions
- formulating differential diagnoses and management plans
- carrying out diagnostic and therapeutic procedures
- developing and delivering appropriate treatment and management plans
- requesting and interpreting diagnostic studies
- providing health promotion and disease prevention advice for patients.

## Physician associates are not able to:

- prescribe - PAs are not doctors, they are not regulated and cannot prescribe.
- request ionising radiation (eg chest X-ray or CT scan).
- PAs cannot be used as a substitute for GPs, or in place of a GP when supervising GPs in training.

## The future of Physician Associates/ Associate GPs/Anaesthesia Associates

According to plans released in August 2023, next year (2023-24) 1300 PAs will be trained, increasing to over 1500 by 2031-32. By 2036, the NHS in England should have a supply of 10,000 PAs, which is three times the current number.

However, the Government are planning that physician associates are regulated by the General Medical Council (GMC) but this is strongly opposed by the medical profession

as the GMC regulates doctors and Physician Associates are NOT doctors and they believe that it will further add to the confusion for patients. At the time of writing, over 10,000 doctors have so far written to their MP to urge them to oppose this damaging change.

### As patients we need to be aware!

If we are told that the people seeing us are regulated by the same body that regulates doctors, it is likely that we will think we are receiving a doctor's standard of care, when we are not!

## Warning about buying prescription only medicines online!

Many people choose to use online pharmacies for convenience. These pharmacies can sign-off prescription-only drugs as long as they employ qualified pharmacists and prescribers. However, an investigation by the BBC found 20 online pharmacies selling restricted drugs without checks, such as GP approval. In their investigation they bought 1,600 various prescription-only drugs by entering false information without challenge.

Licensed online pharmacies are regulated by the General Pharmaceutical Council (GPhC) and employ qualified pharmacists and prescribers. They are expected to carry out risk assessments to determine which medicines can be safely sold online, which could include contacting the person's GP. The regulator can take action if they are deemed to be practising dangerously.

Current guidance from the regulator, the GPhC, says online prescribers must get "all the information they need" to ensure a medicine is



safe and appropriate for an individual patient. It also states that "high-risk, habit-forming medicines" should not be sold online without additional safeguards. One woman told the BBC she bought a prescription-only weight loss drug by falsely claiming to be roughly double her real weight in a questionnaire. She was asked to verify her identity by showing her driving licence, but was not asked to provide any evidence of her weight. There were no further checks to ensure the drug was suitable. "After taking it for a few days, I felt really bad - I couldn't eat, I was exhausted and basically stopped functioning," she said. "If I'd had to send a picture, or any proof of my weight, I don't think I would have been prescribed it."

So if you are contemplating buying medicines at an online pharmacy, just be aware!

## Making your Will for Free

Last year we wrote about the importance of making a Will, in order to protect the future of our loved ones. We also explained about how important it is to consider leaving a gift to charity and how reliant IDDT is on the generosity of people who have remembered us when drafting their Will.

With this in mind IDDT has joined with The Goodwill Partnership to offer its members the opportunity to draft a new Will at no cost to themselves. The Goodwill Partnership is a well-established organisation that currently works with over 150 charities to assist their supporters to make their Will at no or reduced cost. All Wills are drafted by fully qualified solicitors. In recognition of the value IDDT places on the support it receives from its members, we are not making this offer open to the general public, unlike other charity schemes you may have seen advertised on television. Accompanying this newsletter is a flyer that gives more information about the scheme. If you are considering making or updating your Will we do hope you will take us up on this offer and possibly give us favourable consideration when you do so.

If you would like to discuss making your **Will for Free** further, then please contact IDDT on **01604 622837** or email [martin@iddtinternational.org](mailto:martin@iddtinternational.org)



# Long-term conditions report: Future Health, The Forgotten Majority?

This report was commissioned by AbbVie and is of interest to us because diabetes is a long-term condition. It found the following



- 25 million people in England are estimated to have one long-term condition.
- 13.4 million people now have two or more.
- People with long-term conditions account for 50% of GP appointments and 70% of hospital beds.
- A patient with one condition is estimated to cost £3,000 per year, a patient with three conditions £8,000. In total the researchers find that long-term health conditions are costing healthcare services a staggering £115.2 billion a year.
- Regionally the impact is not equally distributed as four of the five health systems with the highest estimated proportions of people with multiple long-term conditions are in the South West – Cornwall, Isles of Scilly, Somerset, Dorset and Devon – with rates of 27% or more.

The report points out that health services, especially in hospitals, traditionally were designed to treat people with a single disease and points out that for many people this is no longer a suitable model of care. Many policies and incentives are outdated because they are aimed at managing single diseases. This is placing increased pressures and challenges on health services and results in people reporting mixed experiences.

Recent information from the Patients Association showed:

- **only a third of patients said their care had been well co-ordinated with a third disagreeing.**
- **40% felt they had been kept informed about what was happening to their care, a third did not.**
- **Two in three patients struggled to access at least one of the services they needed.**
- **The wider impact is that due to long-term sickness, the number of people out of the labour market has increased sharply since 2019 restricting efforts to increase economic growth.**

As we have previously reported, the Government is developing a 'Major Conditions Strategy' to address these issues. The report suggests that the Strategy needs to take into account the changing needs of the population and improve the care of people with long-term conditions. This means adopting a patient centred approach of putting patients and patient needs as the priority rather than the condition-centred approach we have now.

However, the strategy being developed still puts a group of conditions as the priorities - cancer, cardiovascular disease, dementia, mental health, musculoskeletal conditions and respiratory disease. (Diabetes usually comes under the category of cardiovascular disease.)

Finally, the report says the present NHS crisis presents an opportunity for change, to work differently and such change is imperative to meet the more complex and varied long-term health needs of the population. Improving services will require putting patients rather than conditions first. (Published December 2023)



# Brainstorm of doctor/ patient consultations

**One of our members belongs to a self-support group and at their recent meetings they have discussed getting the best from GP or specialist appointments. Their suggestions may be useful for us all.**

## **What does a patient see as a good consultation with a GP or Consultant?**

- He/she is welcoming, shows interest in me, shows caring and respect for me and has a sense of humour.
- Makes eye contact and not just looking at the computer.
- Helps to make me feel good and treats me like an adult with a brain.
- Makes it personal to me, operates a 2 way conversation and listens.
- Has access to my notes and has evidently read them.
- Recognises that the patient's carer needs ought to be included in the conversation.
- Answers questions and gives time to deliver and complete a relevant discussion. Will talk with me about more than one issue when they are connected. Will explain test results and their implication (not just "normal" or "a bit low") Will discuss options and involve me in implementing a course of action and explain why a medication is being proposed.
- Doesn't contradict my knowledge of my treatment events history ("You have not had this test....Yes I have around 2 years ago")
- Says "I don't know" when out of his / her knowledge limit. Will contact other experts and refer me to someone else to bring in more expertise.
- Sends me a copy of his/her letters and summarises the discussion and confirms action plans.

## **What can Patients do to help ensure a good consultation with a GP / Specialist?**

### **Pre - Consultation**

- What is the type of consultation? (First meeting / Review of progress /follow up from last meeting)
- Before the consultation decide "What do I want from this?"
- Prepare and take a list of questions - written, patient's reference during the consultation. Is it appropriate to give the list to the doctor or will it frighten them?
- Have a clear understanding of your problem and rehearse what you are going to say.
- Take a partner / friend with you to listen - and maybe ask questions if invited to do so.

### **During Consultation**

- Try to sit face to face with the doctor.
- Keep it simple if you can and let the doctor know you have questions and ask, when is it a good time to ask them.
- Maintain eye contact with doctor, encourage a two-way conversation and demonstrate a desire to build a working relationship with the doctor.
- Briefly summarise your symptoms – both direct symptoms and indirect.
- Ask clarifying questions eg Why do you advise me to take these medications? Don't just assume and ask if there is an alternative treatment.
- Answer questions honestly - not what you think you ought to say eg I am not taking these tablets you prescribed.
- Be positive.

### **At the end of the Consultation**

Summarise your understanding of the key points and action plan to confirm to the doctor that you have listened. Double check what you need to start / stop / continue doing before any next appointment.





# Statins and diabetes

While eating healthy and being active are an important part of managing diabetes, a combination of medicines may be prescribed to help to manage diabetes and reduce the risk of complications. As heart disease is one of the most common complications of diabetes, taking statins to lower cholesterol levels can be an important part of preventing heart disease and stroke.

A common cause of heart disease for people with diabetes is plaque (cholesterol) that builds up in the arteries. When this continues to build, the arteries narrow, making it harder for blood to flow to the heart. This can cause heart muscles to weaken, which may increase the risk of heart attack and stroke, so doctors may prescribe a statin (blood cholesterol-lowering medicine) to reduce this risk.

## What Are Statins?

Statins reduce the amount of cholesterol made in the liver and help to remove LDL (“bad”) cholesterol that’s already in the blood and raise your HDL (“good”) cholesterol. They can also:

- Reduce the buildup of plaque on the artery walls.
- Stabilise plaque so that it doesn’t break off and block blood flow to the heart or brain.
- Decrease swelling in the walls of the arteries.
- Decrease the chance of blood clots forming.

There are several types of statins, each with different dosage levels and intensity (strength). A statin prescription will be based on your individual factors. These include your blood cholesterol levels, your risk for heart disease, and your tolerance of a specific statin. Your health care team will work with you to determine the best type and dosage to reduce your risk of heart disease and manage your diabetes.

## Can statins increase blood sugars?

There is research that shows that using statins increases blood sugar because statin use can stop the body’s insulin from working properly. This can put people who use statins at higher risk of developing Type 2 diabetes or raise blood sugars in people who already have Type 1 or Type 2 diabetes. If this is the case then medication or insulin may need to be increased. If treatment with statins is to be stopped then it has to be done gradually and it is important to be aware that insulin needs to be lowered gradually too to avoid hypos.

For people who cannot tolerate statins, there are other non-statin drugs that can be used such as ezetimibe. This should be discussed with your doctor.

## Recent research - new clarity for managing statin intolerance in diabetes

In clinical practice guidelines, diabetes is a statin-indicated condition. Reducing LDL (bad) cholesterol by 1 mmol/L with statin therapy reduces overall mortality by 9% and cardiovascular mortality by 13% in people with diabetes, reinforcing this treatment’s foundational role.

Non-statin agents that reduce LDL cholesterol, such as ezetimibe and monoclonal antibodies directed against PCSK9, have also shown cardiovascular benefits in those with diabetes, but only in secondary prevention among those already receiving background statin therapy.

A small but clinically relevant proportion of people are unable to tolerate statin therapy, the effectiveness of LDL cholesterol reduction by non-statins in the prevention of atherosclerotic cardiovascular disease among patients with diabetes requires evaluation and clarification. (The Lancet, Diabetes and Endocrinology, December 2023)

# Fasting and Diabetes

This article looks at religious fasting and its impact on the management of diabetes during periods of abstinence and fasting. Two major religions, Islam and Christianity (many other religions also have fast periods), have periods of fasting around this time of year so, we will have a look at their fasting practices and then some of the general issues around diabetes and fasting. Many of you will have fasted before, so this article may be nothing more than a reminder, for those of you who have not, we hope it provides some helpful tips for staying safe and well during your fast.

## Islam - Ramadan

The dates for Ramadan are calculated using the Muslim or Hijri calendar. Ramadan is based on the ninth month of the lunar calendar, so this year it is expected that the fast of Ramadan will commence at sunset on 10th March and will last until 9th April. During Ramadan it is expected that Muslims who participate will abstain from food, water, beverages, smoking, oral drugs and sexual intercourse from sunrise to sunset.

## Christianity - Lent/Easter

Easter Sunday is celebrated on the first Sunday following the full Moon that occurs on or just after the spring equinox. Easter Sunday is a feast day following Lent and this year is on Sunday 31st March. Although not followed by all Christian denominations, during Lent, certain days are regarded as fast days, and again have implications for people with diabetes.

## Exemption from fasting

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

## Diabetes and fasting

If you have diabetes fasting can cause complications in managing the condition. The best first

step is to speak to your doctor or diabetes nurse to discuss the potential risks and problems associated with fasting and to formulate a plan to manage the period of your fast. Things you may want to think about and discuss could include:

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

Research has shown that both education about the effects of fasting and relevant advice can dramatically reduce the likelihood of problems occurring, both low and high blood sugar levels. High blood glucose levels can develop during a fast if you do not take prescribed medication or if you are less physically active than normal, which, in turn, could lead to diabetic ketoacidosis (DKA) – a serious condition requiring hospital treatment.

If you are still happy to proceed with your fast then there are some simple, common-sense tips and tricks to help manage your diabetes:

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

**Above all – Stay safe and well!!!**

# The impact of physical activity on the management of people with diabetes

Adapted for this issue from a presentation by Abban Qayyum, first contact physiotherapist and clinical specialist physiotherapist

## Types and classifications of diabetes and pre-diabetes

Physical activity recommendations may vary depending on the diabetes type:

- Type 1 diabetes (5%-10% of cases) is the autoimmune destruction of the pancreatic beta cells.
- Type 2 diabetes (90%-95%) is the loss of insulin secretion usually with insulin resistance.
- Gestational diabetes occurs at 24-28 of gestation in pregnant women not previously known to have diabetes.
- Pre-diabetes is when blood glucose levels are above normal but not high enough to be classified as diabetes.

## Types of exercise and physical activity

- **Aerobic exercise** involves repeated and continuous movement of large muscle groups.
- **Flexibility exercises** improve the range of motion around the joints.
- **Resistance (strength) training** includes exercises with free weights, body weight, machines or elastic resistance bands.
- **Balance exercises** benefit gait and previous falls.
- **Activities like tai chi and yoga** combine flexibility, balance and resistance activities.

## Aerobic exercise benefits

- Medium to high volumes of aerobic activities are associated with substantially lower cardiovascular and overall mortality risks in Type 1 and Type 2 diabetes.
- In Type 1 diabetes, aerobic training increases cardiorespiratory fitness, decreases insulin resistance and improves lipid levels and endothelial function.
- In Type 2 diabetes, regular training reduces HbA1c, triglycerides, blood pressure and insulin resistance.

Alternatively, high intensity interval training promotes rapid enhancement of skeletal muscle oxidative capacity, insulin sensitivity and glycaemic control in adults with Type 2 diabetes and can be performed without deterioration in glycaemia control in Type 1 diabetes.

## Resistance exercise benefits



- The effect of resistance exercise on glycaemic control in Type 1 diabetes is unclear but it can assist in minimizing the risk of exercise induced hypoglycaemia in Type 1 diabetes.
- When resistance and aerobic exercise are taken in one exercise session, performing resistance exercise first results in less hypoglycemia than when aerobic exercise is performed first.
- Resistance training benefits for people with Type 2 diabetes include improvements in glycaemia control, insulin resistance, fat mass, blood pressure, strength and lean body mass.

## Benefits of other types of physical exercise

- Flexibility and balance exercises are important for adults with diabetes. Limited joint motility is frequently present accelerated by normal aging and hypoglycaemia.
- Stretching increases the range of motion around joints and flexibility but does not affect glycaemic control.
- Balance training can reduce falls risk by improving balance and gait even when neuropathy is present. Group exercises (resistance and balance training and tai chi) may reduce falls by 28% - 29%.

## Insulin action and physical activity

- Insulin action in muscles and the liver can be modified by acute bouts of exercise and regular physical activity. Acute aerobic exercise increases muscle glucose uptake by fivefold through insulin and independent mechanisms.
- Improvements in insulin action may last 24 hours after shorter duration activities (around 20 minutes) if the intensity is elevated to near-maximal effort intermittently.
- Even low intensity aerobic exercise (lasting 60 minutes or more) enhances insulin action in obese, insulin resistant adults for at least 2 hours. If enhanced insulin action is a primary goal, then daily moderate or high intensity exercise is likely optimal.

## Overcoming our barriers and getting moving

- I'm too shy to exercise in a group.
- I just don't have the time.
- I worry I'll make myself worse.
- I find exercise boring.
- I don't have the motivation to exercise.

**Note:** If you would like copy of IDDT's booklet, Diabetes and Exercise, contact IDDT by calling 01604 622837, email enquiries@iddtinternational.org or write to IDDT, PO Box 294, Northampton NN1 4XS. It is worth noting that for people with mobility difficulties, we do give a guide to armchair exercises.

# Parental fears of night hypos

There are many things for a parents of a child with Type 1 diabetes to worry about but probably top of the list are night hypos! When my daughter was little, and even when she was bigger, I always wondered if the healthcare professionals managing her diabetes understood how big a worry night times can be for parents. It is easy to be aware of more obvious worries parents may have - daily management, blood sugar variations while at school and any social impacts of having diabetes but night hypos is another concern altogether!

Previous studies have suggested that nighttime blood sugar fluctuations are a very real problem for children with Type 1 diabetes and their parents but how big a worry this is has not been fully studied. A new study, published in the Journal of Diabetes Science and Technology, has tried to identify specific fears that parents of children with Type 1 diabetes have in relation to night hypos. Researchers used a revised version of the Hypoglycemia Fear Survey for Parents (HFS-P) to make additional assessment of overnight concerns. Some of the additional survey questions focused on factors such as:

- overnight glucose maintenance
- feelings of helplessness
- negative social consequences

The goal of the study was to broaden the understanding clinicians have of the fear parents face while their children are asleep with the aim being for clinicians to be able to offer more comprehensive screening for nighttime hypoglycaemia. Another recent study suggests that parental fears of night hypos increases with fluctuations in glucose levels. It is worth noting that today's use of continuous glucose monitoring and insulin pumps raises awareness of fluctuating blood sugars and even if their use improves better glucose control, it may well increase anxiety for parents about night hypos.

For parents, it is important that they can talk to someone about this and who understands so, hopefully try to reduce the anxiety. It is not just the fear of the hypo but waking in the middle of the night and having to deal with a nearly unconscious child, using glucagon, the fear of not getting it right and the responsibility to get it right.

## Tracking the progression of pre-diabetes

As regular readers know IDDT prefers the term 'at risk of Type 2 diabetes' to 'pre-diabetes' because the latter implies a diagnosis of an actual condition, when it is not, but it is a risk. It has also been known for some years that only 1 in 10 people of those told they have pre-diabetes actually go on to develop Type 2 diabetes. There is now new research which goes further!

### Recent study

A study published in 2023 involving 552 patients with pre-diabetes found that only 6.5% of them developed Type 2 diabetes over the 7 years of the study – this is only around 7 in 100 people!

The people that went on to develop Type 2 diabetes had a higher body mass index, HbA1c, two-hour glucose and C-peptide. The study also showed that males progressed more commonly and more quickly to Type 2 diabetes, while those taking metformin were slower to progress. (Journal of the Endocrine Society, October 2023)

In addition, further research involving adults with pre-diabetes found that those who lost 5% of their body weight over a year-long study were more likely to experience remission of pre-diabetes and lower risk of developing Type 2 diabetes. (The Lancet Diabetes & Endocrinology, October 2023)

## Our questions

As time passes and we receive increasing numbers of calls from worried people who tell us that have been told they have 'pre-diabetes' when their HbA1c results are actually within the NHS chart normal / excellent range. Why?

Another question arises is about the people who call IDDT and tell us they have had pre-diabetes for many years, with one example close to home! The father of a member IDDT staff was told that he had pre-diabetes 10 years ago and this has remained on his doctor's notes ever since.

He has never been overweight and has several other health conditions so regularly attends GP

and hospital appointments.

However, at no time during this 10 years has he been told he no longer has pre-diabetes, nor has he developed Type 2 diabetes. When he has been admitted to hospital, his apparent pre-diabetes is completely ignored.

So how many people are in the same position? Is there a point when you no longer have 'pre-diabetes'? Just as importantly, being told you have pre-diabetes can cause anxiety and worry which if this is no longer the case, is unnecessary. Finally, does this make government statistics about numbers of people with pre-diabetes an over-estimate?

# INTERNATIONAL News

## Europe's mental health crisis: Which country uses the most antidepressants?

The world is grappling with a mental health crisis. In Europe, antidepressant consumption has more than doubled in the last 20 years. The average antidepressant consumption across 18 European countries was 30.5 defined daily dose (DDD) per 1,000 people per day in 2000 rising to 75.3 DDD

in 2020, a 147% increase. Iceland, which was the second happiest country in the world in 2020 according to the World Happiness Report, has the highest antidepressant consumption in Europe.

(Euro News, 9th September 2023)

## Rheumatoid arthritis drug could slow the progression to Type 1 diabetes

A drug commonly used to treat rheumatoid arthritis, baricitinib, was trialled in 60 people recently diagnosed with Type 1 diabetes and 31 people with Type 1 taking a placebo (dummy pill).

Baricitinib is an immunotherapy drug which works by retraining the immune system to delay its attack on the pancreas. In recently diagnosed people, the destruction of the beta cells that produce insulin is not complete and it is estimated that 20% may still be alive. The trial showed that baricitinib helped to keep more of these remaining beta cells alive to preserve the body's own supply of insulin. Baricitinib is taken as a single tablet each day.

In the trial the participants levels of C-peptide were measured. C-peptide is produced at the same time as insulin and so is a measure of how much of their own insulin is being produced. The researchers also checked HbA1c levels, daily insulin doses and continuous glucose monitoring was carried out. The trial took place over 48 weeks.

## Results

- C-peptide levels in those taking baricitinib were significantly higher than the placebo group and their levels stayed fairly constant over the course of the study.
- After 48 weeks the placebo group saw a decline in C-peptide.
- The baricitinib group also used less daily insulin via injections or pumps, had less variability in their sugar levels, and spent more time in target blood sugar range, compared to the placebo group.

These results suggest baricitinib helped to slow the immune system's destruction of beta cells in people who have recently been diagnosed with Type 1 diabetes. People who have had the condition for many years have very few, if any, surviving beta cells so the drug will not work for them. The benefits of baricitinib could be reduced risk of hypoglycaemia, delay in the development of long-term complications and possibly making daily management easier and less unpredictable.

However, it is not licensed for use in Type 1 diabetes and larger and longer trials are necessary to prove the safety and benefits of baricitinib in people with Type 1 diabetes. (New England Journal of Medicine, December 2023)

## Psychosocial burdens can be high with diabetes

A recent study has found that out of 478 adults with Type 1 or Type 2 diabetes, 69% reported having anxiety, 65% reported depression and 62% reported fear of low blood glucose. Worryingly, about half reported not discussing mental health with their diabetes care team.

(Diabetic Medicine, October 2023)

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

## Low-carb diet inadequate for children with diabetes risk

The American Academy of Pediatrics recommends against the use of low-carb diets in children at risk for diabetes, noting that very low-carb and ketogenic diets may be nutritionally inadequate for these patients and may factor into

growth problems or disordered eating behaviours. Instead, they recommend a balanced dietary plan with nutrient-rich foods and 45% to 65% of daily calories from carbohydrates. (Contemporary Pediatrics, December, 2023)

## Longer CGM use has benefits in pregnancy with Type 2 diabetes

A study of 41 pregnant women with Type 2 diabetes using continuous glucose monitoring (CGM) did not show improvements in GCM metrics unless they used the devices more than 50% of the time.

The researchers commented that significant improvement in glucose levels was observed in the subgroup that had greater sensor activity time. (Diabetes Technology & Therapeutics, November 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.

Hillhurst has found carbon monoxide gas can be turned into something that can be given in a pill. The lead researcher explained that they came up with a liquid formulation that can carry a gas,

which can deliver a controlled amount of carbon monoxide. In a very controlled environment, they can time how much carbon monoxide they want to release. In this case they are a very ultra-low dose of carbon dioxide.

Much of that early damage in retinopathy is caused by oxidative stress and inflammation harming the fine blood vessels in the eye. The tiny amounts of carbon monoxide seek to trigger natural antioxidant forces in the body which should give some protection in preventing or at least delaying the effects of diabetic retinopathy.

Like all research, it is a wait and see situation!



### **The effects of the economic crisis for people with diabetes**

We are all only too aware of the effects of the present economic situation on the NHS but we are also aware, the cost of living has increased for the vast majority of people. People with long-term health conditions, including diabetes, can be among the worst affected in times of health and economic crisis. There are practical effects such as the rising cost of travelling to appointments with healthcare professionals.

### **Lack of podiatry treatment**

The most common effect we hear at IDDT, is that people can no longer receive podiatry treatment on the NHS but they can't afford to pay privately. In addition, for people living with diabetes-related foot conditions there can be a substantial risk of worsening neuropathic pain during periods of cold weather, made worse for those who switch off the heating for long periods to avoid further rise in costs.

### **Rising food costs**

Rising food costs are particularly important to people with diabetes - not just the higher cost of healthy foods but many people with diabetes at risk of hypoglycaemia (low blood glucose levels) need sugary snacks, which have also increased in cost.

### **The effects of income differences**

- Higher income is associated with better health. Improvements in wellbeing can be achieved by higher earning with greater access to healthier food options and opportunities to exercise by attending fitness classes and gyms.
- The cost of living crisis can worsen health outcomes for people with lower incomes and risks increasing health inequalities which are already worse than they should be.
- Recognition that not everyone has access to mobile phones and the internet, so 'virtual' appointments are not an option for this group of people!

### **Action**

Action is necessary to minimise the effects on people with long-term health conditions. Perhaps diabetes is even more important than many other conditions because of the need to try to prevent the development of complications in Type 1 and Type 2 diabetes for the long and short term health of people with diabetes. This means improving access to screening programmes, ensuring that people have their 9 key checks and the necessary appointments availability, hopefully close to home.

# IDDT News

## A Diary Date – The IDDT Event, Saturday 28th September 2024

The day will start with our Annual General Meeting which will give you the opportunity, among other things, to nominate someone to become a Trustee. The programme for the rest of the day will be an informative mix of speakers and discussions along with plenty of opportunity to meet other people living with diabetes. The Event will take place as usual at The Kettering Park Hotel which is easy to access from all directions.

We hope that as many of you as possible will be able to come - it is as nice to see new faces as much as it is to see those who have been before.

Tea, coffee and a lunchtime meal will be provided on the day and we will be sending out more details of the programme with a booking form with the June newsletter. If you have any questions, then please ring IDDT on **01604 622837** or email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org).


### Just to remind you....

2024 Diabetes Everyday Diaries still available!

Thank you to everyone who has bought IDDT Diaries. We still have some copies left and these are available for the reduced price of £3.99

### Christmas cards

We would like to thank everyone who bought Christmas cards from us in 2023. We still have some cards available and these now cost only £2.50 per pack of 10, with no additional charge for p&p. If you would like to order any of the cards or the Diabetes Diary, then please contact IDDT as above.

				
<b>Holy Mother and Child</b>	<b>Victorian Partridge</b>	<b>Pigs in Blankets</b>	<b>Patterned Stag</b>	<b>Dressing the Tree</b>

## Just a practical issue!

When you receive an invitation to renew your membership, please could you complete the form and return this to us in the pre-paid envelope provided even if there are no changes because it enables us to keep your information up to date which is particularly important if you have moved house recently. It also enables us to ensure that we make sure you receive the correct Newsletters.

**For our new members the explanation of why we have two Newsletters is:**

'The Newsletter' is for people who take insulin, so people with Type 1 diabetes and people with Type 2 diabetes who are taking insulin.

'Type 2 & You' is for people with Type 2 diabetes treated with diet only or diet and tablets or non-insulin injectables.

However, we are happy to send both Newsletters to anyone who wants them but if you are receiving both and don't want both, then just get in touch and we can make the necessary changes, just call IDDT on 01604 622837 or email [karl@iddtinternational.org](mailto:karl@iddtinternational.org)

**Just a note:** some items are in both the Newsletter and Type 2 & You because we think they may be of interest to anyone any type of diabetes.



# From our own correspondents

## Modern hospitals seem to have fixed protocols

Dear Jenny,  
I had a fall in which I was unlucky enough to land on my side across a rock which resulted in 7 broken ribs, some in two places. Because of this I ended up in Raigmore Hospital in Inverness. But I also had a quite separate issue in that I have Type 1 diabetes and, because I was on an old and not-easily-available insulin, it was decided to change me over to a basal/bolus regime of Tresiba and NovoRapid. I was happy enough with this decision.

Throughout my stay at the hospital I have to say that I found more or less everyone both kind and considerate. But as so often before in my visits to hospital, this was not always so, not at least when it came to my diabetes. A number of nurses, and even some doctors, clearly did not want to hear what I had to say, namely everything that I'd learned about my own condition in the 55 years since being diagnosed. What they appeared to be inferring was that they were the experts and I just a member of the public - who knew nothing. The net result was that, in spite of my protests, the early doses of NovoRapid were far too small. This, with the hospital menu being extremely carb-heavy, inevitably resulted in some very high blood-sugar readings. The problem throughout was that the person who administered/handed me the insulin was a nurse and the dose had already been set by a doctor who was not present. Having dealt with starting a new insulin regime myself on a number of occasions, I was aware that the correct procedure was to start with doses set on the low side. But that if this produces high blood sugars, you must set about increasing the dosages.

It was because this didn't happen - or the increases were not sufficient - that I ended up in Intensive Care with DKA (diabetic ketoacidosis). Unfortunately, however once I was back in the general ward again, it was still obvious to me that the bolus dosage needed to be increased. At one stage I remember saying to the nurse that if it weren't, I'd end up back in Intensive Care with DKA again. Which is exactly what happened. Eventually however I got home where I was soon able to balance my diet and the insulin. And I'm now glad to say that I'm getting some very good readings.

The overall impression I had from this was that modern hospitals seem to have fixed protocols. That, for instance, when a patient like me comes in, late seventies and diabetic, the

medical staff function as if all old diabetics were the same. The nurses have their training and the doctors their experience - and that should be enough. But the patient? The person who may, as in my case, have many decades of experience in dealing with his/her version of the condition?

Apparently, this knowledge has no place in what happens. For the patient this is both humiliating and deeply frustrating. The diabetic consultant I've always seen has often said that while she is the expert on diabetes in general, I am the expert on my own condition.

Dominic Cooper

## More on Dupuytren's disease

Dear Jenny,  
I read with interest your article mentioning Dupuytren's disease in the December 2023 Newsletter. It is not correct that the only treatment for this disease is surgery, which can be more unpleasant and disabling than your article suggests. I developed Dupuytren's three years ago, the only symptom at that stage being sore nodules appearing under the skin on my tendons on both palms. The number of new nodules appearing was on average 1 per month, and it was progressive. Having researched it on the internet, the only possible pre-surgical treatment was radio-therapy, Germany being the most interested. The success outcome of radio-therapy treatment declines sharply according to how far the disease has progressed and is not usually recommended once several contractures have started.

Luckily for me, I had private health cover which allowed me to have two one-week 10 minute sessions of continuous radio therapy on my palms over 5 days, one set in the spring of 2021 and one in the autumn. The first session stopped any more nodules developing. Just over 2 years later I have had no recurrence of new nodules, and the old nodules are gradually flattening.

I would add that even finding a hand surgery consultant who would carry out this procedure was difficult. On enquiry, most said that it was useless. Even Germany does not seem to have collected data on the outcome over time. The key of this successful treatment is to catch it early. An awareness on the symptoms at an early stage might help but I'm afraid that by the time the NHS could offer treatment the opportunity would be gone.

By email

# "VERA" - IDDT's Promotional Campaign update

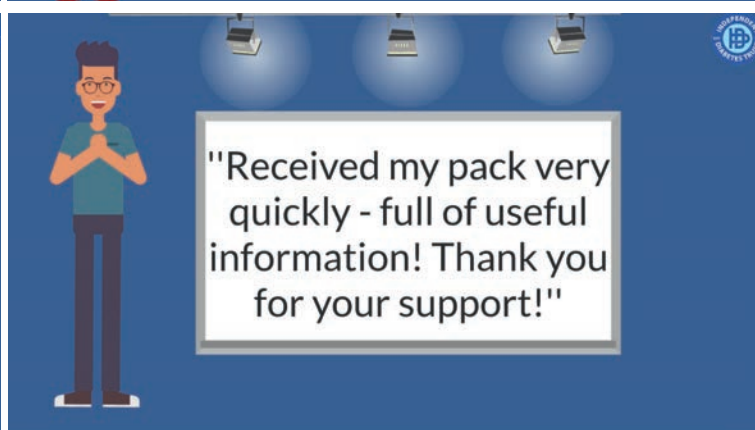
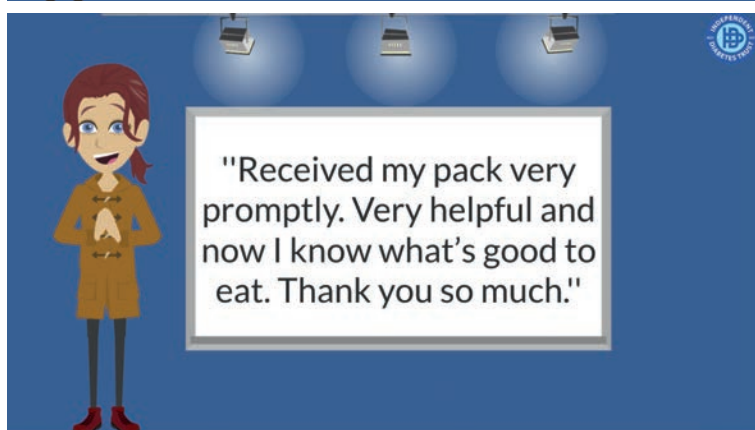
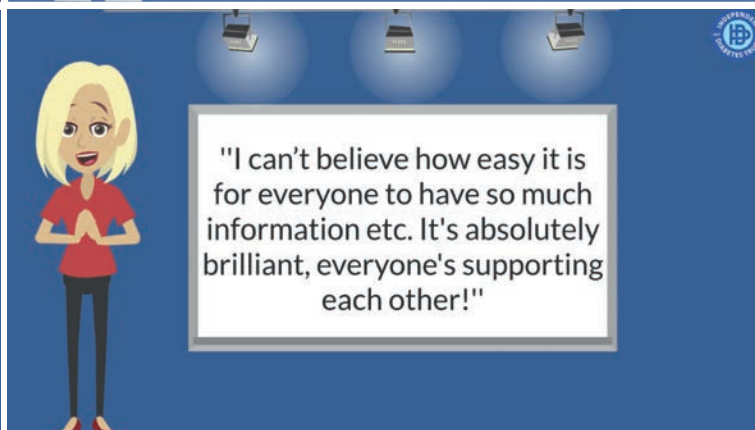
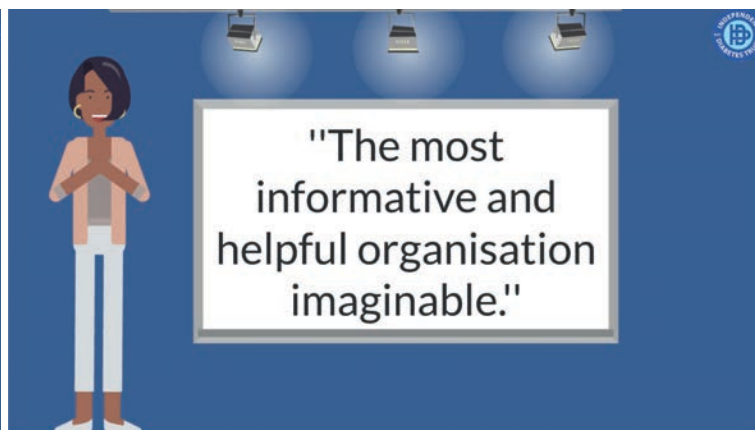
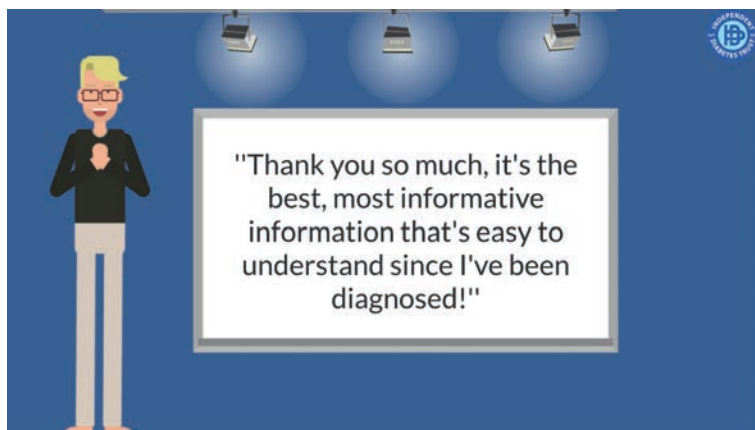
The main message of our campaign was **"Diabetes? You are not alone. We are here to help"**.



The reason for this is that for some time IDDT has been aware from people making contact that there are growing numbers who are being diagnosed with Type 1 or Type 2 diabetes without being given the information and support they need to successfully manage their condition. We welcome to all our new members and remember: You are not alone.

## **We are here to help.**

At the time of writing (January 2024) over 2,000 new members have joined IDDT since the start of the campaign. Here are some of the comments we received which have shown that our concerns are justified.



## New insulin mixture could make life easier for people with Type 1

Researchers in Norway have developed a new solution, called MicroGlucagon and tests shows that it works faster and is more effective than the fastest-acting insulins on the market. The Artificial Pancreas Trondheim (APT) research group has now applied for a patent for Micro-Glucagon. It can help people with Type 1 diabetes by inhibiting the rise in blood sugar after meals, giving better control over their blood sugar levels. As we know, insulin is needed to lower blood sugar levels but in people with Type 1 diabetes the pancreas has stopped making it. Therefore they must take an accurate dose themselves, at the right time, several times a day and this can be a fine balancing act.

### More about MicroGlucagon

MicroGlucagon is made up of micro-amounts of glucagon have been added to regular rapid-acting insulin mixtures. Glucagon is a hormone that increases blood flow in the exact area of the dermis where insulin is administered. The solution provides the body with extra impetus to quickly absorb the insulin the patient takes with their meals. The amount of insulin absorbed by the body appears to increase when the Micro-Glucagon mixture is used, possibly by as much as 30%. Importantly, when insulin is absorbed faster, it also disappears from the body faster.

The researchers believe that their solution may also reduce the risks of hypos for as long as 3 to 5 hours after meals. MicroGlucagon can be used by anyone who injects daily themselves with daily doses of insulin. It can also be used in insulin pumps and in semi-automatic, artificial pancreas systems. A lot of research and documentation remains to be done. If the researchers succeed in bringing the solution to the market, it will pave the way for significantly better blood sugar management in all patients with Type 1 diabetes, regardless of the type of insulin treatment they use.

Worth noting - Norway has the highest number of new cases of children, young people and adults with Type 1 diabetes. Currently, approximately 26,000 Norwegians live with this condition, and more than 400 young people under the age of 18 are diagnosed with type 1 diabetes every year in Norway. According to the Norwegian Institute of Public Health, the number of new cases in this group has doubled every year since the 1970s. (Norwegian University of Science and Technology, January 2024)



### The winners of IDDT's lottery draw!

We are delighted to announce the winners of our latest monthly lottery draws.

They are as follows:

## IDDT LOTTERY RESULTS

Winners of the October 2023 draw are:

- 1st prize of **£480.96** goes to Claudine from Manchester
- 2nd prize of **£360.72** goes to David from Newport
- 3rd prize of **£240.48** goes to Barbara from Calver
- 4th prize of **£120.24** goes to Brian Glasgow

Winners of the November 2023 draw are:

- 1st prize of **£483.36** goes to Susan from Hinton
- 2nd prize of **£362.52** goes to Anon from Northwich
- 3rd prize of **£241.68** goes to Frances from Chester
- 4th prize of **£120.84** goes to Richard from Stondon

Winners of the December 2023 – the **JACKPOT DRAW!**

- 1st prize of **£1,000.00** goes to Brenda from Chester
- 2nd prize of **£750.00** goes to Anon from Doncaster
- 3rd prize of **£500.00** goes to John from Preston
- 4th prize of **£250.00** goes to Mark from Leeds

**Note:** The winners of the draws for January, February and March 2024 will be announced in our June 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](mailto: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](mailto:enquiries@iddtinternational.org)  
**org** Or visit our website: [www.iddt.org](http://www.iddt.org)



## SNIPPETS

### **Social media overuse in young people**

Research has found that young people tend to be at higher risk for Internet overuse than adults. Young minds are not yet fully developed to resist temptation or control impulses and the adolescent brain is particularly open to social connection opportunities that the online platforms offer. Dr. Michael Rich of Boston Children's Hospital says "problematic Internet media use" is a more apt term than "Internet addiction," and psychologist David Greenfield says excessive use can cause problems with schoolwork, sleep and other daily activities. (Boston Children's Hospital, October 23)

### **Risk of gestational diabetes greater in PCOS with obesity**

Research has found that patients with polycystic ovary syndrome (PCOS) have a higher risk of developing gestational diabetes, especially when they also have obesity. Researchers said there was a 5% increased risk for gestational diabetes in women who had PCOS, compared with the general public, but nearly 90% of the association was related to obesity. They suggest that this highlights the need for patient education on lifestyle changes and weight management. (Journal of Obstetrics and Gynaecology Canada (October 2023)

### **Pre-menstrual cravings tied to changes in insulin sensitivity**

An observational study suggests that increased appetite or cravings for chocolate or carbohydrates immediately prior to menstruation may be due to a decrease in insulin sensitivity. Researchers say the hormonal fluctuations during a woman's reproductive cycle may impact insulin sensitivity, but more study is needed. (Nature Metabolism, September 2023)

### **Puberty occurring at a younger age in recent years in Type 1 diabetes**

An analysis of 130,000 children suggests that onset of puberty in children with Type 1 diabetes is occurring at a younger age than at the turn of the century. According to new research carried

out in Germany. There was a significant trend for this in girls with a similar trend in boys. This is particularly important to know because of the interaction between diabetes control and puberty which results in decreased insulin sensitivity. Results suggested that the puberty onset in girls decreased from 11.48 in 2000 to 10.93 years in 2021. In boys the age of puberty onset decreased from 12.62 to 11.98 years in 2021. The study also showed that longer duration of Type 1 diabetes, greater BMI and lower HbA1 levels were associated with earlier puberty in both boys and girls.

### **Advances in the treatment of diabetic retinopathy**

Diabetic retinopathy, one of the leading causes of blindness, requires effective management to slow down progression, including tight control of blood glucose and blood pressure. Strides have been made in treating diabetic retinopathy, including laser treatment, anti-vascular endothelial growth factor medication and steroid implants, and ongoing research into innovative therapies offers hope for those affected. (Forbes, November 2023)

### **Activity may protect against polyneuropathy in Type 1 diabetes**

A recent study has found that moderate-to-vigorous physical activity of at least 600 minutes per week had a protective factor against the onset of diabetic polyneuropathy in people with Type 1 diabetes. (Journal of Clinical Medicine, November 2023)

### **Adding salt to food increases diabetes risk**

A study in the US followed over 400,000 people who did not have diabetes, chronic kidney disease, cancer or cardiovascular disease at the beginning. They found that over 11.9 years, those who added salt to their food had a significantly increased risk of developing diabetes. These findings provide support that reduction of adding salt to foods may act as a potential behavioural intervention approach for preventing Type 2 diabetes. (Mayo Clinic Proceedings, November 2023)