



Welcome

Welcome to the forty second issue of Type 2 and You. In this issue we continue our series of articles on different types of medicines for Type 2 diabetes and how to make lifestyle changes. We also write about problems that consuming grapefruit can cause and some advice on hospital admissions. As usual, we will update you on our latest round of lottery winners, as well as some international news and a round-up of articles to let you know what is going on in the diabetes world.



How to Change Your Lifestyle **PART 3**

Nearly there, one more article to go. This is part three of this series of articles and we hope that by the end you are able to see how the different elements of the advice given are starting to fit together. As we said at the outset, each of these pieces of advice are, without doubt, good advice and while valuable in their own right, are more valuable when taken in conjunction with each other.

So, you get advised to take more exercise? This isn't as hard as it sounds. It doesn't mean going to the gym twice a week or swimming off the Norfolk coast every weekend. There are plenty of ways to get exercise that don't involve you climbing Everest – it's up to you to decide which suits you best and that way you are more likely to succeed.

One of the best pieces of advice I have heard recently, comes from one of our Trustees,

who suggested that we think about taking more exercise differently. Her suggestion is that instead having to think about taking more exercise, we think about becoming less sedentary. In other words, it is easier to become less sedentary than it is to do more exercise.

Psychology aside, there are some very practical ways in which you can start to take more exercise. To start with let's define what we mean by exercise – it's not as daunting as you think. Exercise can be simply defined as “to engage in any physical activity for ten minutes or more that makes you mildly to moderately out of breath”. With this in mind, we all have different base levels when it comes to taking more exercise, so what activity might suit one person may very well not suit someone else. Before starting to take more exercise there are some basic safety concerns to have a think about.

EXERCISE AND SAFETY

- If you have already have a heart condition or other health condition, such as high blood pressure, you should speak to your doctor about what type and how much exercise you should do. There are some heart conditions where exercise is not advisable.
- If you are taking medication for your diabetes, then you should talk to your doctor before starting to take exercise as this may affect your blood sugar levels.
- Always stop exercising if you get any pain, feel dizzy, sick or unwell. If the symptoms don't go away or come back later, seek medical advice.
- It is unsafe to exercise when you have a viral infection, such as a sore throat.
- It is always sensible to gradually build up your physical activity in terms of both the time spent and the intensity. A sudden increase in exercise, especially vigorous exercise can be dangerous, especially in middle aged people.

SOME SUGGESTIONS FOR TAKING MORE EXERCISE.

Bearing in mind the above safety considerations, there are a whole range of activities that constitute exercise. There are the classic ones that we all know, such as jogging, cycling, walking, going to the gym or simply gardening. These are all well and good and will suit those that are already reasonably fit and able but for those that are not there are other safer and less challenging options. One option could be yoga, which, while not putting excess physical stress on the body, has proven benefits to both physical and mental health. Another option to consider may be hydrotherapy. This does not mean going swimming but rather involves moving around in water in a safe and controlled way that promotes muscle tone, strength and flexibility.

For those of us that may find it difficult to stand or get out of the house a range of "armchair exercises" have been developed that can allow people to exercise safely and comfortably while remaining seated.



If you have difficulty standing or walking it doesn't mean exercise is out of the question. If you want to remain physically active then chair exercises could be just the thing for you. These gentle exercises will help improve your mobility and can help prevent falls. Choose a solid, stable chair without arms, that allows you to sit with your feet flat on the floor and your knees at right angles.

Wear some loose, comfortable clothing and keep some water handy. Build up slowly and aim to gradually increase the number of repetitions of each exercise over time. Try to do the exercises at least twice a week.

There are several different exercises that are recommended, including

- Chest Stretches
- Upper Body Twists
- Hip Marching
- Ankle Stretches
- Arm Raises
- Neck Rotations
- Neck Stretches

IDDT has produced an expanded article with visual examples of how to complete these exercises. If you would like a copy of this article or you would like more information about exercise ask for our FREE leaflet "Diabetes and Exercise", using the contact details at the end of this newsletter.

IDDT Thanks You

Christmas cards

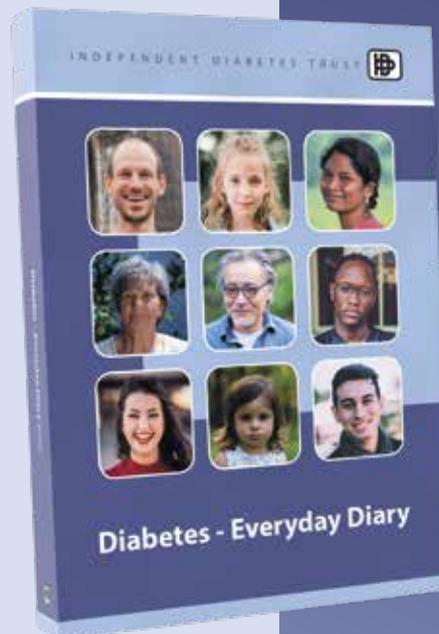
We would like to say a huge thank you to all of the people who supported IDDT by buying our products before and during the Festive Season, especially the Christmas cards and books.



An especially big thank you to the 11th Northampton Boys Brigade who all helped to sell our Christmas cards and raised £100 for IDDT.

Diabetes Diary 2020

For the first time, we published the Diabetes Diary 2020 and we were delighted with the number of people who not only thought this was a good idea, but also bought a Diary and sometimes one for a friend. We still have a few 2020 Diaries left for anyone who wants one. They are only £4.99, so just give us a call on 01604 622837 or go to our website www.iddtinternational.org



Dream Trust

As regular readers will know, some of our members sponsor children and young people at Dream Trust in India to help with their medical costs and education. We would like to say thank you to all of you who continue to sponsor a child at Dream Trust – last year you raised over £5,865!

Dr Pendsey who runs Dream Trust has sent an interesting story about one of the young people at Dream Trust who is training as an ICU assistant at the Government Medical College in Yawatmal. In addition, his area of interest is catching wild snakes. He hands them over to the Forest Department who then release them into the forest. He usually gets 6 to 8 calls a day to catch snakes in residential areas, here he is with a python!



Helping Developing Countries

IDDT acts as the UK arm of an organisation called Insulin for Life, collecting unwanted insulin and diabetes supplies and sending them to help people in developing countries. In 2019 we sent out over 4400 pens, vials and cartridges of insulin worth over £38,000, along with over 174,000 items of various diabetes supplies – so a big thank you to all of you who donated items.



STAYING IN HOSPITAL

A Personal Experience

Martin Hirst, CEO

It's not very often that, thankfully, I write from personal experience when it comes to hospital care. However, over the last few months I have had to be admitted to hospital on several occasions and will need to be admitted a couple of times more. I need to say, at the outset, that none of these admissions are diabetes related.

Professionally, I have spent several years supporting clients (the majority without diabetes) through hospital admissions, procedures and discharges but I have never had to spend periods of time in hospital, myself as a patient, and it has really given me something to think about

Just a bit of background before we start, I have needed two new hips for the last three years (another story) and was admitted for the first replacement a couple of months ago. While the operation was, personally, very stressful, never having had major surgery

before, the theatre team were brilliant, very supportive and reassuring. Next thing I knew I was in recovery and back on to the ward, with a sore hip but feeling fine. All went well and I was discharged in the planned three days.

Thankfully, I started feeling much better and relatively pain free. Then, over-ambition took me and resulting in me falling over and fracturing my operated hip. The ambulance crew were brilliant and got me into A&E with plenty of gas and air, x-rayed and onto a ward.

It is from here on that the differences in the nature of care that can be offered by the NHS care became apparent to me. This is not a criticism of the NHS but highlighted to me the different circumstances that surround your admission can affect the care you receive.

My first admission was an elective admission, meaning that I had chosen to undergo the surgery voluntarily and that a full assessment



of my condition and associated medical needs was made prior to a planned admission date. My second admission was under emergency circumstance, through A & E. This meant that hospital staff had to make an on-going assessment of my medical needs which they did very well.

Again, I need to say this article is purely a personal experience and the only advice that I can offer is from my own experience and is a mixture of both elective and emergency admissions.

I won't bore you with the details of my admissions but can give you some ideas as to how you, and those around you, can make sure your stay is as positive as possible, both for you and the NHS staff around you, whether your admission is planned or not.

- Try to make sure you have a family member, partner or advocate around who is aware of the care you need and the care you are receiving.
- Prepare a list of the medicines you are taking, what time they are given, when and what they are for. If possible, try to bring in a list of medicines that you would normally take at home.
- If an unplanned admission is a possibility, then try to put together a 'Grab Bag' of items that you or yours, can take in with you; practical things like night wear, toiletries, pen and paper but, importantly, details of your medication.
- Try to keep a written record of the medicines you have been given, drug name, time and dosage. If you think you have not been given a medicine on time then ask a member of the nursing staff.
- Don't be afraid to ask questions and, without being rude, try to get the answers you need. A smile, please or thank you will get you surprisingly far.
- Hit the call button if you need to – after



all that is what it is for, and again a smile goes a long way, especially at 4.00am 😊

- If you have a planned admission then make sure you have plenty of things to keep you occupied, books, magazines and the like. If you are going to take in electronic devices like mobile phones or i-pads then don't forget chargers and more importantly headphones. On the other hand, disposable foam ear plugs can also come in handy to block out the sound of snoring!

This is not an exhaustive list of tips and ideas and if you have any more then please let us know.

This is just my experience of my hospital admissions which hopefully can bring you some helpful advice. If you want any help then don't be afraid to ask but equally give thanks to the staff who go the extra mile to make you comfortable, they will thank you for it.

IDDT produce a FREE 'Hospital Passport' which we hope can support you through the hospital experience, either as a patient or carer. If you would like a copy then please get in touch with IDDT, using the contact details at the end of this newsletter.



GRAPEFRUIT AND DRUG INTERACTIONS

Grapefruit and grapefruit juice, in all its forms, the commonest being white, pink and ruby red, are a very popular fruit, particularly at breakfast. It has been known for some time that grapefruit and grapefruit juice can interact with certain drugs, several of which may be taken by people with diabetes.

HOW DOES GRAPEFRUIT INTERACT WITH SOME DRUGS?

Let's get the science bit out of the way first, as the method of interaction is basically the same for each drug affected.

- Grapefruit juice decreases the activity of the body's own enzyme (CYP3A4 to be precise) that is responsible for breaking down many drugs and toxins.
- This is because grapefruit juice contains compounds (called furanocoumarins) that block the above enzymes from doing their job, so when grapefruit juice is consumed the body's ability to break down a drug is decreased.
- This means that blood levels of the drug may rise, resulting in a risk for new or worsening side-effects.

SO, WHAT DRUGS CAN INTERACT WITH GRAPEFRUIT?

The list below is by no means exhaustive and we have tried to highlight those most commonly taken by people with diabetes. It is important to remember that not all drugs within a certain group will interact with grapefruit, so, it is likely that alternatives are available.

- Anti-cholesterol drugs – atorvastatin, simvastatin
- Antibiotics – erythromycin, clarithromycin
- Drugs for heart conditions – felodipine, losartin, ranolazine

Again, we would stress that this list is not exhaustive and if you have concerns then speak to a medical practitioner.

GRAPEFRUIT AND METFORMIN

A few years ago, a couple of British newspapers (who shall remain nameless for the purpose of this article) printed reports on a US study that professed to prove that the consumption of grapefruit juice could reduce or even negate the need to take metformin. What they failed to report was that the study was carried out only

in mice, with questionable methodology and, surprise, surprise, was funded by an American citrus fruit grower's association. The current professional advice is that metformin and grapefruit juice do not interact, so you should not stop taking metformin even if you drink grapefruit juice.

SO, CAN I TAKE MY MEDICATION AT A DIFFERENT TIME TO MY GRAPEFRUIT TO AVOID THE INTERACTION?

In short, unfortunately, the answer is no. The effects of grapefruit on certain drugs can last for over 24 hours. So, even if you take a medicine that is only given once a day, grapefruit and grapefruit juice should still be avoided.

In some cases, it may be possible to drink smaller quantities of grapefruit juice but you should always follow the directions given on the Patient Information Leaflets (PILs) **but always talk to your medical practitioner first.**

ARE THERE OTHER FRUITS/JUICES THAN CAN AFFECT MY MEDICATION?

Other types of fruit juices may rarely interact with other medications. Most fruit juices, such as orange, apple and grape juice may occasionally cause an interaction with some drugs but not those usually used to treat Type 2 diabetes. These fruits and juices can be taken as part of a healthy, balanced diet.

SO, DO I NEED TO WORRY?

This article may seem to have presented grapefruit as the bad boy in the fruit bowl but as far as your diabetes medication is concerned the answer is it's not. However, if you are taking long-term medications, such as statins or medication for cardiovascular conditions then you may want to discuss this with your doctor, especially if you are considering a change in diet. In the meantime, it is worth remembering that grapefruit is a healthy source of vitamins and minerals as part of a healthy, balanced diet, so enjoy it!



What Would You Like IDDT To Do?



Many of you will know, whether you are a long-standing member, or are comparatively new to IDDT, that one of our founding principles is that we are here to support you, our members. With that in mind, we would like to ask you, what we can do for you – you support us and we always want to return the favour.

You will know that we have limits as to what we can do, so stuff like fundraising by climbing Everest is not really an option (unless you are going to volunteer to carry the oxygen and inhalers) but what we can do is ask you to let us know what is important to you. Then we can try to support you and those around you as best we can. This could be by phone, email or newsletter articles.

Your thoughts and contributions are important to us and we value them greatly, so please get in touch, using the contact details at the end of this newsletter and let us know what we can do to support you and the diabetes community.

We look forward to hearing from you.

Kind regards,

Jenny and the IDDT team.

Diabetes Nurses' Titles

We have reported that when the last survey was carried out in 2010 amongst nurses specialising in diabetes, there were an amazing 238 different job titles. However, a recent audit of Diabetes Specialist Nurses (DSNs) in England has been carried out by TREND-UK, an organisation that represents all diabetes nursing groups. This has shown that there are 1,872 nurses in diabetes care and 117 different job titles.

TREND have called for just two nursing titles as a result of the audit to avoid the confusion that presently exists amongst patients and NHS employers. The proposal for the two titles is:

- Diabetes Specialist Nurse at Band 6. All new DSNs should meet basic competencies measured as part of an appraisal and be prepared to undertake diploma-level modules.
- Senior Diabetes Specialist Nurse at Band 7. Band 7 DSNs should have Non-Medical Prescribing qualification as pre-requisite/

on course and be willing to undertake a Master's degree.

TREND say that this is to ensure that people with diabetes are receiving excellent diabetes care and support from a highly trained and knowledgeable nurse.

Latest figures suggest there are more than 3,222,500 people with diabetes in England, which show that there are 0.58 nurses for every 1,000 people with diabetes. Preliminary analysis also shows wide variations in provision of DSNs in major cities and other areas. These are facts that need further investigation and action.

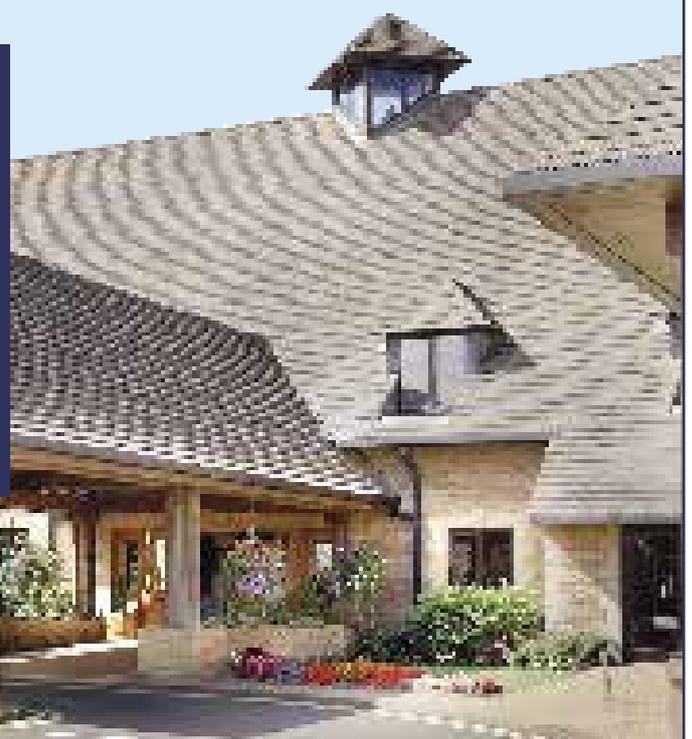
Finally, the nurses' pay bands were analysed and showed:

- There were 41.47% Band 6 nurses.
- There were 48.57% Band 7 nurses.
- 48.6% of the nurses worked in hospitals, 36% in the community and 15.4% worked in both settings.

IDDT'S ANNUAL EVENT!

This year we will be holding our annual event again. The date for your diary is Saturday, October 17th 2020 and it will be at the Kettering Park Hotel and Spa, so please do make a note of it now.

The programme for the day will be sent out with the June and September Newsletters, and we hope as many people as possible will be able to attend.



Sulfonylureas

Sulfonylureas are a well-established group of drugs, widely used to treat Type 2 diabetes and many of you will be familiar with them. Sulfonylureas were originally discovered in 1942 by a chemist, Marcel Janbon and his team, and have subsequently been developed to produce the range of drugs available today. The table below lists the medications licensed for prescription in the UK. All are presented in tablet form.

Generic Name	Brand Name	Dose & Admin. Frequency
Glibenclamide	Glibenclamide	2.5-15mg Once Daily
Gliclazide	Diamicron	40-320mg Twice Daily
Gliclazide MR	Diamicron MR	30-120mg Once Daily
Glimipiride	Amaryl	1-6mg Once Daily
Glipizide	Minodiab	5-20mg Once - Twice Daily
Tolbutamide	Tolbutamide	500-2000mg Once – Three Times Daily

(Please note: All of the above are to be taken before, with or after food. The dosages listed are minimum to maximum dosages and your prescribing health professional should discuss with you what is the appropriate amount for you to take and when to take it.)

Sulfonylureas are most commonly used as an add-on, second-line treatment for Type 2 diabetes. They are most commonly prescribed when treatment with Metformin is failing. Metformin allows the body to use the insulin it still produces more effectively. However, over time the amount of insulin your body produces can lessen so the Metformin becomes less effective, Sulfonylureas act to stimulate the insulin producing cells in the pancreas (beta cells) to produce more of the body's own insulin, which means that carbohydrates eaten can be used more effectively.

Taking sulfonylureas as a second-line treatment, alongside Metformin, is generally considered safe but, as with any drug, it

does have its side-effects. Because they increase insulin production, the most common side effect is low blood sugar levels (hypoglycaemia), which can cause a range of symptoms, initially including:

- Sweating
- Trembling
- Pallor
- Weakness
- Hunger

And if left untreated, by something like a sugary drink, can lead to:

- Confusion
- Irritability
- Behavioural changes such as aggression, excitement or violence
- Sensory changes such as blurred vision

If you are concerned then you may want to consider testing your blood sugar levels, recording the results and discussing these with your nurse or doctor. If you want more details about blood glucose monitoring and/or safe levels then contact us using the details at the end of this newsletter.

Other, less immediate, side effects can include:

- Nausea/vomiting
- Constipation/diarrhoea
- Allergic skin reactions
- Sensitivity to light
- Liver function problems, including jaundice

This list is not exhaustive and, as ever, if you have any concerns then contact your prescribing health professional.

Ramadan 2020 and fasting



Ramadan is based on the ninth month of the lunar calendar, so this year that the fast of Ramadan 2020 will start on April 23rd and will continue for 30 days until May 23rd. During this month it is expected that Muslims who participate will abstain from food, water, beverages, smoking, oral drugs and sexual intercourse from sunrise to sunset.

Fasting has special consequences for people with diabetes, especially those taking insulin and the risk of complications increases with longer periods of fasting.

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

People have to rely on expert advice from doctors and their personal experiences as there are no evidence-based guidelines for fasting. However, a study carried out in Pakistan in people with Type 1 and Type 2 diabetes has shown that with active glucose monitoring, alteration of drug dosage and timing, dietary counselling and patient education, the majority of patients did not have any serious acute complications during Ramadan.

In addition, the researchers have quoted an observational study which showed people with Type 2 who did not have education about fasting were 4 times more likely to have hypos. Therefore, they recommend that those who do not normally carry out self-monitoring of blood glucose should be provided with meters (Diab. Med. February 2016).

RECOMMENDATIONS

The findings of this and other studies suggest that people with Type 1 and Type 2 diabetes should have an assessment with their diabetes team 1 to 2 months before Ramadan about drug/insulin adjustments, exercise and awareness of the risks of hypo- and hyperglycaemia. If they are ill during the fasting, then they should seek advice from their diabetes team.

BREXIT

MEDICINES

Now that the BREXIT situation is clearer, well a little, the three main insulin manufacturers – Lilly, Novo Nordisk and Sanofi have confirmed that the previous arrangements are still in place. This means that they are keeping at least 16 weeks of additional stock. People should continue to get prescriptions and use their medicines in the normal way. As animal insulin is manufactured in the UK, supplies will continue as normal.

DEVICES

The government have said that the key medical technology companies have confirmed that they are in regular discussions with all the major companies who provide continuous glucose monitors (CGM), FreeStyle Libre, insulin pumps and blood glucose monitors and strips. The majority of tech companies have confirmed to the DHSC that they have alternative transport routes in place if disruption occurs and have built up buffer stocks.

During the 12month implementation period, the UK will continue to stay aligned to EU law, and existing regulatory and customs procedures will remain in place. The government expect that supplies, including medicines and medical goods, will continue as usual.

TRAVEL

If you are a UK national travelling to the EEA or Switzerland, you can continue to access healthcare as you do now until at least the end of the implementation period at the end of December 2020.

If you have an EHIC, this will be valid until the end of the implementation period.

Bits & Pieces

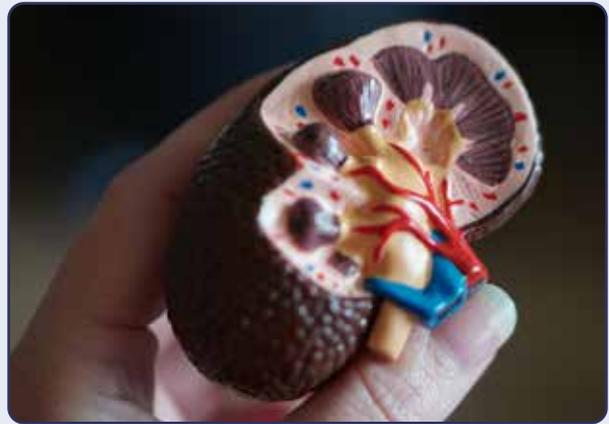
SGLT2 Inhibitors, Kidney Function (and Gout)

A newly published study has found that Sodium-glucose co-transport 2 inhibitors (SGLT 2s or Gliflozins) reduce the risk of kidney complications in people with Type 2 diabetes.

Having high blood glucose levels over a number of years is a well-established risk factor for the development of diabetic nephropathy (diabetic kidney disease) which can progress to impaired kidney function and, ultimately, kidney failure.

The study compared patients given an SGLT2 inhibitor to those given a placebo. The results showed that the group given an SGLT2 inhibitor had:

- A 25% reduction in acute kidney injury.
- A 35% reduction in end-stage kidney disease.
- A 33% reduction in dialysis, transplantation or death due to kidney disease.



The researchers concluded that “These data provide substantial evidence supporting the use of SGLT2 inhibitors to prevent major kidney outcomes in people with Type 2”.

Another study carried out in the USA showed that patients prescribed SGLT2 inhibitors, as opposed to those prescribed Glucagon-like peptide-1 receptor agonists (GLP -1 agonists), had significantly fewer gout events.

Tears and Neuropathy

A team of researchers in Australia have said that using samples of tears could help detect early peripheral nerve damage.

The research was carried out in people with both Type 1 and 2 diabetes. The study found that people with Type 1 had lower levels of proteins, called neuropeptides, associated with peripheral neuropathy. Similar results were not found in those with Type 2 but it will be interesting to see if further research can find a similar effect.





THE IDDT'S LOTTERY DRAW WINNERS

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

Winners of the October 2019 draw are:

- 1st prize of £571.68**
goes to Mrs D. from Petersfield
- 2nd prize of £428.76**
goes to James from Rainham
- 3rd prize of £285.84**
goes to David from Kettering
- 4th prize of £142.92**
goes to Anon. J. from York

Winners of the December 2019 draw are:

- 1st prize of £563.52**
goes to Jeanette from Merseyside
- 2nd prize of £422.64**
goes to David from Bradford on Avon
- 3rd prize of £281.76**
goes to Anon. from Northampton
- 4th prize of £140.88**
goes to Susan from Milton Keynes

Winners of the November 2019 draw are:

- 1st prize of £569.76**
goes to Neil from Thetford
- 2nd prize of £427.32**
goes to Denis from Highcliffe
- 3rd prize of £284.88**
goes to William from Solihull
- 4th prize of £142.44**
goes to Mary from Norwich

Winners of the January 2020 draw are:

- 1st prize of £579.84**
goes to June from Selby
- 2nd prize of £434.88**
goes to Marie from Burntwood
- 3rd prize of £299.92**
goes to Ian from York
- 4th prize of £144.96**
goes to Raymond from Darlington

Note: The winners of the draws for February, March and April 2020 will be announced in our June 2020 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 jo@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.iddtinternational.org