



Welcome... to the first Newsletter of 2021!

IN THIS ISSUE: POST-BREXIT CHANGES • INCREASE IN FOOT DISEASE • FOODY BITS AND PIECES • LATEST RESEARCH

While writing this Newsletter, the country is still in lockdown with no knowledge of when it will end or at least, when some of the restrictions will be lifted. We closed the office because this seems the responsible and safest thing to do, so we can only apologise that we have not been there for you in the usual way. There is work being done from home and one of us is going into the office once a week to check the building and the post. We are doing our best and ask for your understanding. Our booklets are available on our website, you can email any requests or of course, you can always use the old-fashioned method of communication and write to us!

Having said this, we hope that by the time you receive this, there may be some promise of a relaxation of the rules. One important message that we must give out is that if you develop health problems or difficulties coping with your diabetes, call your GP surgery, diabetes team or NHS 111 and A&E departments are open. The staff are there to help you. By the time you receive this, many of you will have had at least one vaccination. As the vaccination programme has been put in the hands of the NHS it is working very well and we must pay tribute to all the staff and volunteers involved.

We all receive plenty of news about Covid-19 so hopefully, this Newsletter will give you some other food for thought. We look ahead to beyond these strange times and we must expect some changes whether in the NHS or some of the systems may be different and perhaps we will all view life a little differently in the future. In the meantime, we need to look after

ourselves and our families in the best way we can. During lockdown and especially in winter, it is easy to eat more than we would normally, if only out of boredom, and equally, we may not be getting as much exercise as we should. Neither of these are good for any of us but especially for diabetes control, so perhaps this Newsletter can act as a little reminder to try to get ourselves back on track. In this issue, there is a short article about exercise and how it can improve mental wellbeing and we show some armchair exercises for those who have mobility difficulties.

We are aware that some people have concerns about their insulin supplies as a result of the UK leaving the EU and the pandemic. Only pork insulin is made in the UK and all human and analogue insulins are made outside the UK so have to be imported. The insulin manufacturers have stated that they already have stockpiles in the UK of more than the normal 6 ▶

weeks' supply recommended by the Government. They have also set up alternative delivery routes into the UK. However, they are urging people not to stockpile insulin themselves, or any other diabetes medication, because this disrupts supplies for everyone and could put some people at risk of not being able to get their particular insulin. However, it is recommended that you reorder your insulin and other medicine supplies early in case there are local delays. A statement from Royal Pharmaceutical Society also offered reassurances when they confirmed that "protecting patient care, supporting the pharmacy workforce,

and ensuring the continuity of medicines supply will continue to be high priorities for 2021."

In the present climate, it is easy to forget that Brexit has happened and we have left the EU, but we have, so in this Newsletter, we do cover some of the changes brought about by Brexit that affect us all and some changes are particularly important for people with long-term health conditions, such as diabetes.

Just a nice thought, as I write this, the snowdrops are coming out and bulbs are shooting up, so spring is coming to make us feel brighter.

NHS News

Expansion of the FreeStyle Libre on the NHS – but still limited

In November 2020, the NHS announced that pregnant women with Type 1 diabetes will be able to access a flash glucose monitor for 12 months. The device, the FreeStyle Libre, automatically alerts users if their blood sugars are high which will help them to control their diabetes throughout their pregnancy. Around 2,000 women are expected to benefit from this which will help them to give birth to healthier babies who will be less likely to need intensive care treatment after birth.

This is part of a major expansion of the roll-out of FreeStyle Libre by the NHS and according to the press announcement, the Libre being used will have an alarm to notify the person when their blood glucose levels are high or low – so the second version of the Libre which so far has not been available in the UK.

Also, as part of the rollout, people with a learning disability will now be eligible for a flash glucose monitor to help manage any type of diabetes, provided they are treated with insulin to treat their condition. Up to 3,000 people with learning disabilities are expected to benefit from this roll-out. The device, which sticks to the arm, lets people track their levels 24/7 and be notified by an alarm when their blood sugar is high or low and will help to reduce hypos, which can be fatal.

There are over 250,000 people with Type 1 diabetes in England and around 75,000 patients are already using this technology. National and international research has shown the use of the devices can improve glucose control, wellbeing and reduce in hospital admissions and Professor Partha Kar, NHS national speciality advisor for diabetes said in the press release: "This is a major step forward – as this novel technology can make a massive difference for those living with diabetes." IDDT has to ask, why there are still limits



placed on its availability on the NHS, we know it is not just cost when all the short and long-term benefits are taken into account. Why can't pregnant women with Type 2 diabetes treated with insulin have the Libre, or those with gestational diabetes? Why are children and adolescents not automatically included in the list of categories to whom it is available? Indeed, why is it not available to everyone who wants to improve the management of their diabetes and is able to do so?

Here's just an example: A study of 90 pregnant women with gestational diabetes has shown that the use of a continuous glucose monitor (CGM) helped identify night-time hyperglycaemia in pregnant women. Among those not taking insulin, CGM showed 61% exceeded blood-glucose targets more than 10% of the time between midnight and 6am but self-monitoring blood glucose only showed 5.4% of those not on insulin went above their targets after their evening meal. (Diabetes Technology & Therapeutics, November 16th 2020) If the pandemic has shown us anything, it is that people with both types of diabetes need to be able to manage their condition without as many regular face to face consultations and the FreeStyle Libre can give thousands of patients more confidence in living with their diabetes and in living healthier lives.

FreeStyle Libre 2

In the December Newsletter late news, we said that it had been announced that the FreeStyle Libre 2, which has optional alarms, will be available from World Diabetes Day (November 14th 2020) but it is now said to be available from January 2021. However, we have been contacted by people in the UK who have still not been able to access it. The statement from the manufacturer, Abbott, is as follows:

- The FreeStyle Libre 2 system, the second generation of Abbott's sensor-based technology for people living with diabetes, has been approved and added to the NHS Drug Tariff for England, Scotland, Wales and Northern Ireland from 1st November 2020.
- The FreeStyle Libre 2 system, with optional real-time alarms, has been given the go-ahead by the NHS Business Services Authority for inclusion on the tariff. This means it will now be available on prescription to patients currently on the current FreeStyle Libre system as well as new patients with diabetes who meet the NHS criteria. The GP prescribing system network needs to be updated, with wide availability expected by January 2021.
- All current users of the FreeStyle Libre system are advised to speak to their healthcare team from January 2021 to discuss voluntary replacement. New patients should also consult their healthcare team from that time, to discuss suitability and eligibility.

FreeStyle Libre 3

While we in the UK are waiting, Abbott has secured CE Mark for its next-generation FreeStyle Libre 3 system which is now approved for use by people living with diabetes in Europe. The FreeStyle Libre 3 technology provides continuous, real-time glucose readings automatically delivered to smartphones every minute, offering 14-day accuracy in the smallest and thinnest sensor design at the same affordable price as previous versions of the device.

In addition to the sensor, the system includes the FreeStyle Libre 3 mobile app, which is designed to enable users to capture and view their real-time glucose levels, glucose history and trend arrows showing how their glucose is changing with just a glance at their smartphone. This next-generation FreeStyle Libre 3 system is designed to be more environmentally friendly with a smaller more discreet sensor, reducing the total volume by more than 70% giving a 41% reduction in plastic use and 43% reduction in carton paper.

Abbott is launching the FreeStyle Libre 3 system in Europe in the coming months with no news yet of plans for release in the UK, as it's Libre 2 sensor has only just been made available here!

For more about FreeStyle Libre in the UK, see www.freestylelibre.co.uk

No need to sign NHS forms

Matt Hancock has approved a temporary measure in England which means that patients will not need to sign prescription, dental and ophthalmic forms for a period of five months, up until 31 March 2021. This suspension has been brought in to help avoid cross-contamination in the handling of paperwork when collecting medicines or receiving dental and eye care.

Get a 'season ticket' for your prescriptions

People with Type 2 diabetes treated with diet only are not entitled to free prescriptions and yet they may be taking many of the drugs that people taking tablets or insulin are using, such as blood pressure or cholesterol tablets.

The latest NHS figures show that more than a million patients in England paid more than they needed to for prescriptions during last year by not having what is described as a 'season ticket' or an NHS 'prescription payment prescription certificate' (PPC)

- Information from the NHS disclosed as a result of a Freedom of Information Act shows that 1,058,147 people paid for 12 or more prescribed items in the 2019/20 financial year, but could have saved an average of £40 with an NHS 'prescription payment certificate' (PPC).

- With a PPC, the patient only pays once and then gets free prescriptions for the period covered. Each prescription item in England cost £9 over this period so each patient paid out a minimum of £108 but with a PPC the costs would have only been £104 for 12 months.

The prescription charge went up in April 2020 to £9.15 per item so the PPC cost went up to £105.90. A three-month PPC is also available to purchase, which costs £29.65 and will save cash for those who pay for more than three prescribed items in three months.

This reminder is not only for yourself but members of your family who may be eligible. So be aware and don't be one of the million!

Exercise is good for mental health

As we hear frequently on the news, one of the major concerns during this difficult time is people's mental wellbeing as it is hardly surprising that anxiety and depression may increase. It has been known for some time that exercise helps to reduce these problems but as people get older or have other health conditions as well as diabetes, they are not always able to do the aerobic and endurance-type exercises. However, a recent study from Sweden has shown regular exercise, such as walking every day, may have a more significant effect on reducing anxiety and depression than the exercises such as running, swimming and high intensity sports.

We must not forget that some people have difficulty standing and walking but this doesn't mean that exercise is out of the question, there are chair-based exercises which can be done at home but make sure you choose a chair that is stable, solid and doesn't have wheels.

If you, or someone you know has access to the internet, then the NHS website shows the exercises you can do. There are 3 basic types that will improve your flexibility, increase your strength and improve your balance. Here are some the exercises that you can do.



POST BREXIT CHANGES

Perhaps it is difficult to see at present, but there will come a time when we can safely travel abroad again. We are all aware that the UK has left the EU but because of the pandemic, perhaps we are not as aware of the changes as we would otherwise have been. The changes affect us all but some are particularly important for people with long-term health conditions, such as diabetes, so below is a brief outline of the key changes.

Health insurance

EHIC and GHIC - for travel within most European countries we have previously had a free European Health Insurance Card (EHIC). This remains valid until it runs out and then you have to apply for a free Global Health Insurance Card (GHIC). Just like an EHIC, it is possible to apply for this new card on behalf of yourself, but also your spouse/ partner, your children (under 16) and other family members. However, you and each person on the application must meet the conditions which basically are focused on making sure that you and they are UK citizens.

You get a GHIC card by applying on the NHS website: <https://www.nhs.uk/using-the-nhs/healthcare-abroad/apply-for-a-free-ehic-european-health-insurance-card/> Be aware that there are some websites that try to 'sell' these cards, so do not fall for this, the official cards are free.

A still valid EHIC or the new GHIC enables you to benefit from prompt, largely free health services in the 27 countries which are part of the European Union but from 1st January 2021, neither a GHIC nor most EHICs will cover you in Norway, Iceland, Liechtenstein or Switzerland. When visiting these countries, you must make sure your travel insurance covers you for healthcare.

NOT a replacement for travel insurance – it is important to remember that the GHIC (or valid EHIC) is NOT an alternative to travel insurance. It helps you to access types of healthcare quickly and usually free at the point of delivery, but not all countries offer



the same free services that you would receive on the NHS so you could have to pay for some services. In addition, travel insurance is still needed for many reasons including getting you home following an injury, illness or specialist treatment for existing health conditions, such as diabetes.

Just a reminder too, that you need to check that any travel insurance you take out, covers your pre-existing health conditions and this is not always the case with insurance offered by travel agents.

Passports

- You need at least 6 months on your passport to travel.
- Your passport must be no older than 10 years, even if it has 6 months or more left on it.
- You can apply online for a new passport at: <https://www.gov.uk/apply-renew-passport> and the cost is £75.50. A paper application form can be obtained from a Post Office and the cost for this is £85.00. (This annoys me because if you don't have internet access because you can't afford, you don't want or you are the wrong generation, then it costs you £10 more to have a passport!)

New research could lead to more treatment options for diabetes patients

FUNDED BY IDDT

As many of our members are aware, the reason IDDT formed was because some people had adverse reactions /side effects when genetically modified 'human' insulin (GM) was introduced in the 1980s but sadly many of them were not believed by organisations that were supposed to represent them, by the insulin manufacturers and by their doctors and healthcare professionals. This happened even despite a change back to animal insulin and subsequent disappearance of the side effects! When insulin analogues were introduced in the early 1990s many people were transferred to them and there were similar experiences.

IDDT formed in 1994, to try to represent these people and to gain recognition of the fact that some people have adverse effects with the genetically modified insulins, also referred to as synthetic insulin. Eventually, we were

believed by the government of the day and in 2005, the promise was made that animal insulin would remain available for the people who need it. Unfortunately, individual people were not, and all too often still are not, believed by their healthcare professionals when they refuse to be changed to GM insulins. To this day, we are surprised by this as everyone knows that all drugs can have side effects in some people, so why not insulins? For this reason, IDDT has funded research that looks at how insulins behave in the body and in January one of the papers was published.

The study was carried out by experts from the Universities of Nottingham, Manchester and Imperial College London, along with the Diamond Light Source - the UK's national synchrotron science facility. For the first time, scientists have come up with a precise atomic level explanation for why synthetic glulisine is faster acting than insulin. They set out to establish the exact structure of glulisine and how this structure might affect the way in which it behaves physiologically. Glulisine

is a synthetic rapid-acting insulin developed by Sanofi-Aventis with a trade name of Apidra. It is used to improve blood sugar control in adults and children with diabetes.

Dr Gary Adams Associate Professor and Reader in Applied Diabetes Health at the University of Nottingham, and lead author of the study, said: "For the first time, our research provides novel, structural information on a clinically relevant synthetic insulin, glulisine, which is an important treatment for those patients presenting with diabetes. This information sheds light on the dissociation of glulisine and can explain its fast dissociation to dimers and monomers and thereby its function as a rapid-acting insulin. This new information may lead to a better understanding of the pharmacokinetic and pharmacodynamic behaviour of glulisine and, in turn, might assist in improving its formulation and reducing side effects of this drug."

This is complicated for those of us who are not scientists but in response to this, Dr Gary Adams said to IDDT, "The important message here is that when insulin is structurally different, this may be why some patients respond differently towards it."



For a bit more science – the researchers created a perfect glulisine crystal then applied a combination of methods to provide a detailed insight into its structure and function. but differences were found which are interesting:

- The key molecular level comparisons between this crystal structure of glulisine and of previous insulin crystal structures showed that a unique position of the glutamic acid (an amino acid), not present in other fast-acting analogues, pointed inwards rather than to the outside surface. This reduces interactions with neighbouring molecules and so increases preference of the more-active-for-patients dimer form, giving the experts a better understanding of the behaviour of glulisine.
- An unexpected finding was that the glulisine formulation is documented as a zinc-free insulin analogue for its rapid absorption action. Insulin crystallography has shown that zinc is pivotal for hexamer formation. The new glulisine crystal structure showed zinc bound in the same way as in native insulin, by three histidine amino acids. This finding must mean that traces of zinc ions are present in the commercial, as supplied, formulation solution. A further optimisation for glulisine is now clear, that of finally removing the zinc. (The Journal Scientific Reports, 18 Jan 2021 and here is the link: <https://www.imperial.ac.uk/news/212753/perfect-crystal-could-lead-more-diabetes/>)

Well-deserved awards



Professor Andrew Hattersley wins Belgium's highest scientific award for work in diabetes research

Professor Andrew Hattersley, Professor of Molecular Medicine at the University of Exeter and diabetes consultant at the Royal Devon & Exeter NS Foundation Trust, has won the Baillet Latour Health Prize 2020, which supports outstanding scientific, academic and artistic achievements. This is Belgium's highest scientific award, worth £250,000, and he received it for discoveries that have changed the understanding, diagnosis, and treatment of genetic forms of diabetes.

With his colleague, Professor Sian Ellard, Prof Hattersley founded a genetics laboratory which is the world leader in the diagnosis and research of monogenic diabetes – a type of diabetes caused by a mutation in a single gene. We previously reported one of the breakthroughs – the Exeter lab showed that mutations in the potassium channel of beta cells were the most common cause of neonatal diabetes. Professor Hattersley demonstrated that these patients could replace their insulin injections with sulfonylurea tablets and remarkably, improve blood sugar control. The team offered free genetic tests to anyone in the world diagnosed with diabetes before the age of six months and have helped thousands of patients who otherwise would be on insulin injections for life.



OBE for NHS diabetes specialist, Professor Partha Kar

Professor Kar is National Specialty Advisor for Diabetes with NHS England and Consultant in Diabetes and Endocrinology at Portsmouth Hospitals NHS Trust, was awarded the OBE in the New Year's Honours List for his services to people living with diabetes. He has also restructured the way diabetes is treated in Portsmouth and helped develop an app to help people manage their health by tracking their diabetes with a simple scan on their phone. With more than 100,000 users, this has proved especially useful where people are isolated at home during lockdown.

IDDT News

Thank you from Jenny Hirst, Co-Chair of IDDT

None of us need reminding of the difficult times we are all having. Charities are facing financial challenges, so as Co-Chair of IDDT, I want to say a huge thank you for the many generous donations we received from so many of our members and supporters. However large or small, every one of them is welcome and helps us to continue with our work. In addition, thank you to everyone who bought IDDT Christmas Cards – for the first time in our history we actually sold out!

I would also like to thank IDDT staff for their hard work and dedication through these difficult times and to all the unseen people who have helped us to keep going throughout the year.

IDDT Event

As a charity for people with diabetes, IDDT usually holds an annual Event. It is informal and an opportunity for people with both Type 1 and Type 2 diabetes and their spouses and partners to meet other people who live with diabetes as well learn more about their diabetes from doctors and health professionals.

Like many other organisations our already delayed 2020 Annual Event was postponed until April 2021 but at the time we were not expecting a third lockdown. As we are all only too well aware, the third wave has struck the UK and so we will not be holding our Event and Annual General Meeting in April 2021 but we have rebooked it for Saturday, 23rd October 2021. We hope this will be possible and that it will be safe to meet up again and we will keep you informed about the Event through the Newsletters and our website.

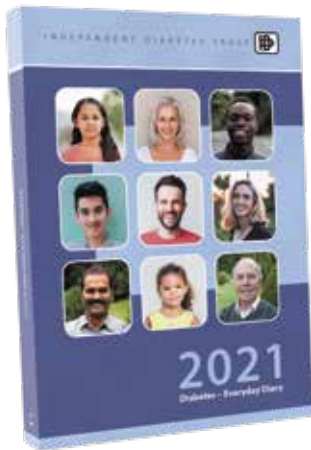


For our German readers

There have been some difficulties for people in Germany to obtain their pork insulin from Wockhardt UK because it was on the list of drugs that could not be exported. This now appears to be resolved but for our German readers, there is plenty of information about animal insulin on the following website: www.modernes-tierisches-insulin.de

For our Australian readers

For various reasons, there have also been difficulties for people in Australia to obtain the pork insulin that they need. This now seems to have been resolved and our members in Australia are very grateful to Aspen Pharmaceuticals for their continued help in ensuring that pork insulin availability is maintained for those who are unable to use human or analogue insulins due to adverse effects. Thank you, Aspen!



Diabetes Everyday Diary 2021 – still some left!

This diary is for anyone who lives with diabetes, whether you have diabetes yourself, you have a partner with diabetes or you are the parent of a child with diabetes. We still have some 2021 copies left and we are selling them at the reduced price of £3.00. If you would like one, get in touch with IDDT in the usual way.

Just to remind you, the daily pages are divided into two sections, on the left side is a column headed “Diabetes Diary” where you can record things like blood glucose test results, mealtimes, medication, on the right side is a column headed “Everyday Diary” for medical appointments, social events and birthdays. Basically, you can record what is important to you. There are other pages included – pages to record the 9 Key Checks you should receive on an annual basis, pages to record monthly goals and achievements as well as a section just to record any notes/thoughts you may have had.



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 November 2020 draw are:

1st prize of £566.44 goes to Anon. from Eastbourne

2nd prize of £423.90 goes to Kenneth from Luton

3rd prize of £282.60 goes to Anon. from Morpeth

4th prize of £141.30 goes to Janet from Scarborough

Winners of the December 2020 draw are:

1st prize of £579.36 goes to Anon. from Halifax

2nd prize of £434.52 goes to Jeremy from Colchester

3rd prize of £289.68 goes to Sylvia from Kettering

4th prize of £144.84 goes to Patricia from Waltham Abbey

Note: Our apologies for only announcing the Lottery results for two months due to lockdown but the winners of the draws for January, February, March and April 2021 will be announced in our June 2021 Newsletter and on our website as soon as possible.

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

Audit of hospital inpatients with Type 1 and Type 2 diabetes for 2019 shows improvements

According to the National Diabetes Inpatient Audit (NaDIA) 2019, inpatient diabetes teams have reduced medication errors, severe hypoglycaemia episodes and hospital-acquired diabetic foot lesions. NaDIA measures the quality of diabetes care provided to people with diabetes while they are admitted to hospital, whatever the cause, and aims to support quality improvement. The information is collected and submitted by hospital staff in England.

The annual report for 2019 has shown the following:

- 75% of those surveyed in 2019 were seen by the diabetes team where appropriate compared to only 54% 2010.
- Inpatient diabetes teams have also reduced the proportion of inpatient drug charts found to contain medication errors by 15% since 2010, from 45% to 30%.
- Severe hypoglycaemic episodes in hospital have been reduced from 12% to 7% in 2019 and the need for injectable rescue treatment for severe hypoglycaemia has been lowered from 2.4% of inpatients during the last seven days of their hospital stay in 2010 to 1.4% in 2019.
- The number of people developing foot ulcers at any point during their hospital stay has gone down from 2.2% of inpatients audited in 2010 to 1.1% in 2019.
- However, the occurrence of some important and life-threatening harms remains unchanged, including severe hypoglycaemic episodes in inpatients with Type 1 diabetes, hospital-acquired diabetic ketoacidosis (DKA) and hospital-acquired hyperosmolar hyperglycaemic state (HHS). (HHS occurs mainly in people with Type 2 diabetes who experience very high blood glucose levels, often over 40mmol/l, which can develop over weeks through a combination of illness, such as infection and dehydration.)

Gerry Rayman, Clinical Lead for this Audit, said in the press release (November, 2020), “DKA and HHS are preventable and should not occur during a hospital admission. It is of interest that all medication errors have reduced with the exception of one, the failure to increase insulin when the capillary blood glucose is persistently above 11 mmol/L, suggesting that focusing on staff training in hyperglycaemic management and insulin dose adjustment may reduce these life threatening harms.”

National Diabetes Audit, non-diabetic hyperglycaemia 2019-20

The NHS Diabetes Prevention Programme (NHS DPP) is designed to prevent or delay the onset of Type 2 diabetes by delivering behavioural interventions to people who have been identified as having non-diabetic hyperglycaemia. In other words, people who have blood sugars that are the high end of normal but not in the diabetic range.

A short report has been issued using information collected from GP practices alongside the National Diabetes Audit (NDA) for the period January 2019 to March 2020, for England only. The key facts in the report are:

- Non-diabetic hyperglycaemia refers to blood glucose levels that are above normal but not in the diabetic range (HbA1c 42-47 mmol/mol (6.0-6.4%) or fasting plasma glucose 5.5-6.9 mmol/l).
- People with non-diabetic hyperglycaemia are at increased risk of developing Type 2 diabetes and also other cardiovascular conditions.
- 2.1 million people in England were recorded as having non-diabetic hyperglycaemia for the period January 2019 to March 2020. This is an increase from 1.8 million in 2018-19. However, the difference is most likely due to an increase in the recording of the diagnosis during 2019-20.

Note: It is interesting that the audit refers to ‘non-diabetic hyperglycaemia’ and not ‘pre-diabetes’. As regular readers will be aware, IDDT has never liked the term ‘pre-diabetes’ because it implies a diagnosis of a condition when in fact, it means an increased risk of Type 2 diabetes in people who have blood glucose levels at the high end of normal. It is NOT a condition in itself but an increased risk of developing Type 2 diabetes and one that can be reduced in many people if they take steps to change their habits, such as eating a healthier diet or taking more exercise.

New NHS report

All trusts must have a dedicated multi-disciplinary team of specialist diabetes inpatient practitioners

This is just one of several recommendations in the Diabetes GIRFT Programme National Specialty Report by Professors Gerry Rayman and Partha Kar published to mark World Diabetes Day 2020.

Getting It Right First Time (GIRFT) is an NHS improvement programme delivered in partnership with the Royal National Orthopaedic Hospital NHS Trust and the Diabetes GIRFT Report recommends that all Trusts should work towards providing base-level specialist diabetes cover at weekends where this does not exist.

The report states that in 2017: “Some trusts’ inpatient teams required further development; one in six hospitals in England did not have a multidisciplinary foot care team and a quarter of hospitals did not have a

single diabetes inpatient specialist nurse.” These figures will have improved since 2017, but the report states: “All trusts must have a dedicated multi-disciplinary team of specialist diabetes inpatient practitioners as indicated in the NHS Long Term Plan. Trusts should work towards providing base-level specialist diabetes cover at weekends where this does not exist.”

The report identifies the areas of diabetes care that need most attention and which offer the most significant opportunities for improvement and they are:

- Type 1 diabetes
- Inpatient care
- Diabetic footcare

Here are some of the recommendations

TYPE 1 DIABETES

- All trusts should have a dedicated transition service with a clear pathway between paediatric and services for 16-18year olds and a service for 19-25year olds. These services should provide support for those on insulin pumps and new technologies in addition to psychological support.
- Diabetes technology should be available to everyone with Type 1 diabetes who needs it, in line with the NHS Long Term Plan and NICE guidelines. Staff should be trained to help patients using these technologies and this should form part of their annual appraisal process.
- All people with Type 1 diabetes should be offered a quality-controlled education programme to manage their condition.
- All trusts should have a system to enable blood glucose test results to be downloaded and provided to all diabetes clinical areas.

INPATIENT CARE

- All trusts must have a dedicated multi-disciplinary team of specialist diabetes inpatient practitioners (MDiTs) and provide

diabetes cover at weekends where this does not exist.

- MDiTs should meet daily to discuss errors and safety issues and report to a quarterly trust-level safety board that reviews overall quality of the inpatient service.
- All trusts should have a robust system to identify all people with diabetes on admission to hospital and there should be a triage system to identify those at risk and refer them to the diabetes team.
- To reduce insulin errors, every healthcare professional who dispenses, prescribes and/or administers insulin should be provided with training appropriate to their level of responsibility.
- All hospital trusts should have clear, audited pathways before people have operations from pre-assessment to discharge. In addition, all trusts should promote a self-management policy so that people who want to self-manage their diabetes safely while in hospital should be allowed to do so.

DIABETIC FOOTCARE

- All trusts should have a dedicated multidisciplinary footcare team so early identification and treatment of foot problems are not missed. These teams should include nurses, pharmacists, dietitians, psychologists and podiatrists who are experienced in diabetes care and can offer support where needed.

We have to agree that all these recommendations will benefit people with Type 1 diabetes but having been involved in diabetes since my daughter was diagnosed 46 years ago, I thought we already knew that all of this was necessary! Indeed, some of it used to happen many years ago! For instance, when someone with diabetes was admitted to hospital, the diabetes specialist nurse was alerted and one of the reasons U100 strength insulin was introduced as mandatory was to reduce hospital insulin errors but we’ve still got them, not to mention that all nurses wanting to become diabetes specialist nurses had to go on a in-depth education course.

Worrying surge of advanced foot disease cases reported at hospitals



People with diabetes-related foot disease are often frail and elderly, often have other conditions and also have been shielding and so fearful of seeking help. In addition, local community foot health services closed and so the risk of worsening complications has increased. A recent report in the press states that there has been a sudden surge of people with diabetes, both Type 1 and Type 2, and advanced foot disease being admitted to hospital or requiring the input of acute foot services. This is something that IDDT warned about during the first lockdown in 2020. The report also says that one of the reasons for this is that people are afraid to seek the help they need because of Covid-19. This may be true for some people, but IDDT's largest number of calls during the first and second lockdowns were from people who were unable to have their usual foot checks with podiatrists or at their GP annual check because they were simply not being carried out. This was understandable as the pandemic required changes to the NHS as medical and allied health professionals had to be redeployed to meet frontline care demands.

However, it now seems that the situation has improved as Professor Gerry Rayman MBE, GIRFT Diabetes Co-lead and Diabetes UK inpatient clinical lead, has stated "I really do want to reassure people that foot care services are running and stringent measures are in place to prevent COVID-19 transmission in these settings. We know that the quicker people with diabetes seek help with a foot problem, the better their chance of successful outcomes and the less likely it is that they will require hospital admission or foot surgery. We understand that it is a worrying time and people are keen to avoid hospitals and health care settings". It is worth noting that the NICE recommendations have not changed throughout the pandemic - all new diabetic foot ulcers should ideally be reviewed within 24 hours of referral and by the multidisciplinary diabetes foot care team (MDFT).

So, the message appears to be simple – insist on having your feet checked and treated if necessary, because the foot care services are up and running.

Can you help to raise funds for IDDT the easy way?

With so many of us shopping online, there are ways you can help IDDT to raise funds without it costing you a penny

If you shop on Amazon, here's how you can help IDDT

AmazonSmile is a simple and automatic way for you to support IDDT every time you shop, at no cost to you and you'll find the exact same low prices, selection and convenient shopping as amazon.co.uk, with the added bonus that Amazon will donate a portion of the purchase price to your selected charity, IDDT.

How do I shop at AmazonSmile?

AmazonSmile simply go to smile.amazon.co.uk from the web browser on your computer or mobile device and you can add a bookmark to smile.amazon.co.uk to make it even easier to return. Millions of products on AmazonSmile are eligible for donations to charities by Amazon and the eligible products are marked "Eligible for AmazonSmile donation" on their product detail pages. You can use the same account on amazon.co.uk and AmazonSmile.

How do you select a charitable organisation to support when shopping on AmazonSmile?

On your first visit to smile.amazon.co.uk you need to select a charitable organisation to receive donations from eligible purchases before you begin shopping. Our full name is Insulin Dependent Diabetes Trust so please look for this name when signing up.

Amazon will remember your selection, and then every eligible purchase you make at smile.amazon.co.uk will result in a donation to IDDT. Amazon will donate 0.5% of the net purchase price (excluding VAT, returns and shipping fees) of your eligible AmazonSmile purchases.

And here's another way...



Help us get 2021 off to a great start for Insulin Dependent Diabetes Trust by signing up to support us for FREE on #easyfundraising. You can raise donations for IDDT whenever you shop online with over 4,300 retailers including John Lewis & Partners, eBay, Argos, ASOS, M&S and more. This will make a BIG difference to us during this difficult time. Sign up today: https://www.easyfundraising.org.uk/causes/iddt/?referral-campaign=c2s&utm_source=refsharebox

NOTE: We are registered with easyfundraising in our full name Insulin Dependent Diabetes Trust so please look for this name when signing up.

Vitamin D and Covid 19

In collaboration with Public Health England and the Scientific Advisory Committee on Nutrition (SACN), NICE has published rapid guidance on vitamin D in relation to COVID-19. During 2020, SACN conducted an assessment on nutrition and immune function in relation to COVID-19, which also included vitamin C and zinc. They found a lack of robust evidence to suggest that specific nutrients or supplements can prevent people from catching COVID-19 or reduce its effects. The guidance also concluded that there is not enough reliable evidence to support taking vitamin D solely to prevent or treat COVID-19. NICE recommends that more research needs to be done and stresses the use of high-quality randomised controlled trials in future studies. The guidance can be found by visiting: <https://www.nice.org.uk/news/article/nice-phe-and-sacn-publish-rapid-covid-19-guidance-on-vitamin-d>

From January 2021, the Government is providing a free 4 month supply of daily vitamin D to adults on the clinically extremely vulnerable list who have opted to receive the supplements and to residents in residential and nursing homes in England. There are 2.7 million vulnerable people in England being offered free vitamin D supplements including automatic deliveries to all care homes. Letters are being sent to clinically extremely vulnerable people (as designated during the pandemic) inviting them to opt in for a 4 month supply to be delivered directly to their homes.

Vitamin D is important for bone and muscle health and the current government advice is for everyone to take a 10 microgram (400IU) vitamin D supplement every day throughout the autumn and winter. This dose is safe and effective at maintaining the correct levels. Most people have been indoors more than usual this winter and spring which means they might not have been making enough vitamin D from sunlight. Some people are more at risk of not receiving enough vitamin D even in spring and summer including those with dark skin (such as those with African, Afro-Caribbean or south Asian backgrounds), those who are not outside very often, people in care homes and those who cover up most of their skin when they are outside. It is advised that these people take a vitamin D supplement all year round.

Final Guidance for Type 1 diabetes and Type 2 diabetes in children and young people

This final guideline has been published on the NICE website with the supporting evidence, as well as all the stakeholder comments and responses that were made during consultation.

The recommendations from this guideline have been included in the NICE Pathways on Diabetes in children and young people and Bedwetting in children and young people, which bring together everything NICE has said on Diabetes (Type 1 and Type 2) in children and young people: diagnosis and management in interactive flowcharts. There is brief information about the guideline for people using services, carers and the public at 'Information for the public'. The links are as follows:

<https://www.nice.org.uk/guidance/ng18/informationforpublic>

<https://pathways.nice.org.uk/pathways/diabetes-in-children-and-young-people>

<https://pathways.nice.org.uk/pathways/bedwetting-in-children-and-young-people>

NICE guideline on diabetes in pregnancy: management from preconception to the postnatal period

This final guideline has now been published on the NICE website: <https://www.nice.org.uk/guidance/ng3>. The recommendations have been included in the NICE Pathway on Diabetes in Pregnancy, which brings together everything NICE has said on Diabetes in pregnancy: management from preconception to the postnatal period in an interactive flowchart and again there is brief information for people using services, carers and the public. The links are as follows:

<https://pathways.nice.org.uk/pathways/diabetes-in-pregnancy>

<https://www.nice.org.uk/guidance/ng3/ifp/chapter/About-this-information>

From our own CORRESPONDENTS



Responses to reader from Switzerland

Gastroparesis?

Dear Jenny and the team,

I have just been reading the letter from one of your readers in Switzerland with Type 1 diabetes regarding their question about unexplained spikes in blood glucose levels mid-morning.

I have a son with Type 1 and a husband with Type 2 diabetes, and I understand a little about diabetes. We always say "it's not an exact science" and I realise it is a very complex condition with multiple factors to consider. I acknowledge too that Type 1 is a different condition than Type 2 although they display similar symptoms.

I wondered if I might suggest that your reader's experience may be caused by gastroparesis, or delayed stomach emptying, which can be a common but not necessarily diagnosed feature of both types of diabetes? I first read about this in "Diabetes Solution" by Dr Richard Bernstein, a medical doctor and diabetes specialist who himself has lived with Type 1 for decades. I just thought it may be helpful to mention this for your reader and anyone else who might experience similar unexplainable fluctuations in their blood sugar levels. It's certainly worth investigating and while not straightforward to get a definitive diagnosis, there are suggested dietary changes which can help to address the problem.

By email

Timing of morning injection?

Dear Jenny,

I was interested to read the letter in the latest newsletter. I am 78 so am rather older than your member from Switzerland and have been using animal insulin for 65 years - except for that disastrous period on 'human insulin' - but I started experiencing this same problem some years ago.

My consultant made various suggestions over time - some of which made matters worse! Finally, he told me that as I had been treating my diabetes for longer than he'd been alive he would leave me to try to adjust things with my Hypurin insulins to try to overcome the problem. I slowly reduced my soluble doses (short-acting) and increased my isophane (intermediate-acting) by the same amount. In recent years, my FreeStyle Libre has been invaluable in helping me develop this further.

I had already changed my diet on his advice by including more fat in my breakfast and I now have less carbohydrate at that meal. I also now do my morning injection 1 or even 1.5 hours before breakfast. However, the change which I have found was most effective was gradually changing my teatime isophane dose to bedtime. That started to reduce the massive increase in blood glucose levels during the morning and I now inject only soluble at teatime and the whole of the isophane which I used to inject at that time, at bedtime. I now obtain 85-90% in range on Libreview.

Unfortunately, that consultant has now left and his successor had passed me down to his nurses. I met one of them a few weeks ago, and she told me I was her star patient!

By email

Note: Our member in Switzerland is grateful for the suggestions and she is going to investigate the possibility of gastroparesis. This condition of slow gastric emptying affects up to 50% of people with diabetes to a greater or lesser extent and it can affect blood glucose levels.

Insulin allergy – emails from the US!

Hi Jenny,

I have had Type 1 diabetes for 39 years and I have taken good care of myself and kept my HbA1c levels below 7 for most of my life. I have had issues that seem insulin related with pain in my left heel and sometimes my groin area. I have used a Medtronic insulin pump for 25 years with Novalog insulin (called NovoRapid in the UK) and I eat a very low carb diet (60 carbs or less per day). I have experienced this pain several times in the past 20 years but it always seems to go away when I move my pump needle to another place. Lately it seems that I experience the pain more and I was reading an article from your organisation about insulin allergies and thought that's a lot like I am experiencing. I would love to find out if this is my problem, because I'm almost certain that it's not a circulation issue. I have considered changing insulin, but in the last 15 years all I have used is Novalog or Humalog. I don't necessarily need the fast response in insulin time because I barely eat carbs. Is there any advice on what insulin I could ask my doctor to prescribe, as she isn't the best at trying new things?

Hi Jenny,

Thank you for the response. Since we last emailed my problem became more and more prevalent. It even affected my urinary function (urine flow) and erections. I did take your advice and saw a doctor about my circulation and all checked out to be fine with my feet. I also saw a urologist who gave me a clear bill of urinary health – all he really did was offer Viagra for E.D.

It turns out my problem was related to the insulin. I apparently have some sort of allergy or rejection to Humalog and Novalog (both analogue insulins). I started taking Tresiba once per day for my long acting and Humulin R, yes the cheap Walmart brand (human insulin, not analogue) for short acting. My problem in left foot and groin subsided immediately (within 12 hours) and completely went away after a week. I even tried the Humalog for one day again and my problem started reoccurring. So back to the cheap insulin which is slower reacting but not too big of an issue since I am on such low carbs. The pain stopped, urination was completely back to normal, and erections have been like I'm 29 again for about 3 months now.

I know it sounds stupid but the answer was insulin. My own endocrinologist does not believe me, but I absolutely feel soooo much better! Time to find a new doctor but I don't have many options in my area.

Thank you for helping me in my time of need - you gave me the push I needed to keep searching for the answer. You may absolutely use my experiences in your newsletter. I struggled with this, on and off for 20 years so I am happy if this helps anyone with similar issues.

By email

Are the elderly being overlooked?

Hello Jenny,

Hope you are well and thank you for the latest Newsletter. I read "Are the elderly being overlooked?". This is what is happening to me.

Up until about 2 years ago I was getting regular appointments to see my GP about my Type 1 diabetes. Lately I have just been seeing a practice nurse with no specialist knowledge and to top it all, I have to make my own appointments and I think I would probably be ignored if I didn't.

If the roll out of the Covid-19 vaccine is like the flu vaccine, I shall be waiting a long time. My husband who is a few years older than me with no underlying health problems and a friend the same who is younger than us both received plan 1 letters to say they were priority. I heard nothing and had to make my own appointment.

Best wishes

Mrs G.J.

Note: This is not the first person with Type 1 diabetes to make such comments to IDDT, some people say that they are often thought to have Type 2 diabetes just because they are old but this does not seem a satisfactory answer. We were receiving these comments before the pandemic, so while we all appreciate the difficulties caused by pandemic, it cannot be blamed for everything.

FOODY BITS & PIECES



Eating less at night may reduce overall calorie intake

A recently released study, the UK National Diet and Nutrition Survey carried out between 2012 and 2017, has shown that eating most of the total daily calories in the evening is associated with a less nutritious diet and a higher calorie intake. Unfortunately, hunger pangs are often strongest later in the day so this could influence both the type and amount of food we eat. The researchers analysed information from 1,200 adults and commented that the timing of energy intake may be an important modifiable behaviour to consider in future nutritional advice. Further research is necessary to find out whether spreading out meals and snacks and/or the types of food eaten in the evening affect body composition and health. (European and International Congress on Obesity, August 31, 2020)

Some vegetarian diets are much healthier than others

Worldwide millions of people are giving up eating meat and focussing on plant-based diets but new research in Greece shows that not all vegetarian diets are healthy, especially for people who are obese. The researchers used a questionnaire to assess the diets of 146 obese people with normal blood pressure, cholesterol, blood sugar levels and no heart disease. They were asked about typical eating habits and about 156 foods commonly consumed in Greece.

Within 10 years, nearly half of the participants developed high blood pressure, high cholesterol and high blood sugars.

- Unhealthy plant-based items such as juices, sweetened drinks, refined grains eg white bread and pasta, potatoes and any kind of sweets caused these problems.
- Healthier plant-based foods were grains, fruits, vegetables, nuts, olive oil and tea/coffee as well as foods made with the least amount of processing. These were associated with normal blood pressure, cholesterol and blood sugars.

The researchers point out that just cutting out meat does not guarantee healthier food choices or better health. They say that simply defining plant-based diets as 'vegetarian' or 'low in meat' suggests that all plant foods are thought of as equal but this study highlights the variable nutritional quality of plant foods. In addition, just going vegetarian and avoiding meat will leave more room for highly processed carbohydrates which raise insulin levels making weight loss more difficult. (Insulin is a fat-storing hormone.)

They concluded that well informed vegetarians look to reduce insulin, to reduce blood pressure, triglycerides and cholesterol by including nuts, seeds, fish and eggs in their diet. This way they can maintain moderate protein levels and avoid adding excess carbohydrates. (European Society of Cardiology meeting, August 2020)

Grapefruit and Drug Interactions

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

How does grapefruit interact with some drugs?

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.
- Grapefruit juice also 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 there may well be alternatives available.

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

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.

If you have concerns then speak to a medical practitioner.

NOTE: In the past, some newspapers reported on a US study suggesting that the Type 2 drug, metformin, was affected by grapefruit juice. However, they failed to report that the study was carried out only in mice with questionable methodology and the current professional advice is that metformin and grapefruit juice do not interact.

WHAT'S NEW?

3C Patch® System

The 3C Patch® can be used for the management of exuding cutaneous wounds, such as leg ulcers, pressure ulcers and diabetic ulcers and mechanically or surgically debrided wounds. It is made from the patient's own peripheral blood with no additional reagents or additives. The three - layer patch includes fibrin for moisture retention and strength, platelets for growth factor release and leukocytes from the patient's blood. Under the supervision of a healthcare professional the therapy only takes a few minutes.

How it works

- A small blood sample is drawn directly into the 3C Patch® device. No additives are needed.
- The nurse places the blood sample directly into the 3CP® Centrifuge. The process takes about 20 minutes.
- After the 3CP® process is complete the moist 3C Patch® is ready.
- The 3C Patch® is applied directly to the wound surface and covered with the supplied non-adherent dressing. Multiple patches can be used for larger wounds.

A large randomised controlled trial published in The Lancet (2018) showed the 3C Patch® system to be safe, effective, easy to use and cost effective. The system has been approved by the FDA in the US and has received a CE mark in Europe. In the UK, NICE have started an evaluation of the system to see whether it should be used by the NHS.

Contraindications

This system should not be used on actively infected wounds, malignant wounds, people with sepsis or bacteraemia, people with large wounds, active systemic disorders and abnormal laboratory tests.

Smart insulin

The University of Denmark is developing a form of insulin that senses how much sugar is in the blood. The insulin contains a molecule that becomes more active as the blood sugar level rises and the molecule then releases more insulin. It also reduces the amount of insulin released when the blood sugars drop. Research so far shows that the new 'smart' insulin was effective in animal studies. (Chemistry, November 2020)

RESEARCH NEWS

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Drug lets newly diagnosed children and young adults with Type 1 diabetes produce insulin

A drug called golimumab currently on the market to treat other autoimmune conditions can help children and young adults newly diagnosed with Type 1 diabetes still produce insulin, according to new research. The study shows that the drug can preserve the insulin-producing beta cells of children and young adults newly diagnosed with Type 1 diabetes for at least a year after diagnosis. The findings represent a major step forward in the effort to find ways to preserve the insulin-making capabilities of children and young adults with Type 1 diabetes. This new study reports on the 52-week treatment period and researchers will now follow with a period where they monitor participants when they don't take the drug. (New England Journal of Medicine, November 2020)



An old blood pressure drug may protect the beta cells

A 60-year-old blood pressure drug called paragyline, could help protect insulin-producing beta cells from immune attack and can increase the cells' survival rate by defending them from stress. This could cure or prevent Type 1 diabetes.

The researchers screened the insulin-producing beta cells for any genetic differences that might shield them against the immune system. They switched off the cells' genes one by one and found that cells without the ability to make a protein called renalase were particularly promising. These cells were then tested in mice with a condition similar to Type 1 diabetes and they found that the cells without renalase survived but the 'normal' beta cells were killed by the immune system. In addition, when they compared the two types of cells, those without renalase were less susceptible to a kind of stress that would normally trigger the cells to die.

The researchers then searched existing drugs that could block the production of renalase to see if this would have the same effect. Paragyline was found and it protected the beta cells very well in both isolated cells. The advantage of finding an existing drug is that it is already approved and therefore safe. The researchers hope to test pargyline in a small number of people with newly diagnosed with Type 1 to see if it slows the immune attack on their beta cells and so slowing the progress of Type 1 diabetes in newly diagnosed people.

Early introduction of gluten may lower the risk of coeliac disease

Coeliac disease is an autoimmune disease whereby eating gluten causes the body's immune system to attack its own tissues. There

are currently no strategies to prevent coeliac disease and treatment involves long-term exclusion of gluten from the diet.

Researchers studied 1,004 infants in the UK. They found that 1.4% of children who avoided allergenic foods and followed the infant feeding recommendations of exclusive breastfeeding until age 6 months developed coeliac disease after 3 years but none of the infants who were introduced to gluten from age 4 months developed coeliac disease. This suggests that early introduction of high-dose gluten may be an effective prevention strategy for the disease but the researchers say further studies are needed before being applied in practice.

The lead author commented, “This is the first study that provides evidence that early introduction of significant amounts of wheat into a baby’s diet before six months of age may prevent the development of coeliac disease. This strategy may also have implications for other autoimmune diseases such as Type 1 diabetes.” (JAMA Pediatrics, September 2020)

Risk for Type 2 diabetes developing after gestational diabetes remains for more than 2 decades

It has been known for some years that for women who have had gestational diabetes, there is an increased risk of them developing Type 2 diabetes later in life. However, a recently published 23- year follow up study carried out in Finland has shown that the risk for Type 2 diabetes developing remains high for more than 2 decades after pregnancy but the risk for Type 1 diabetes subsides after 7 years.

Researchers conducted a cohort study with 391 women with gestational diabetes and a single pregnancy who delivered a baby at Oulu University Hospital between 1984 and 1994. Women who were diagnosed with gestational diabetes through an oral glucose tolerance test or treated with insulin were included in the study. The women were

matched by age, parity and date of delivery with a control group. The participants completed a questionnaire in 1995 and 1996 between 1 and 11 years after pregnancy and a follow up questionnaire in 2012 and 2013 when 297 women with gestational diabetes and 297 matched controls participated. In the follow up period, the following results were found:

- 53.2% of women with gestational diabetes developed Type 1 or Type 2 diabetes,
- 5.7% developed Type 1 diabetes, all occurring within 7 years of pregnancy,
- 50.4% developed Type 2 diabetes,
- only 5.5% of women in the control group developed Type 2 diabetes and none of them developed Type 1 diabetes,
- researchers analysed a subgroup of women from the gestational diabetes group who had a fasting glucose of 7 mmol/L or higher or a 2-hour glucose of 11.1 mmol/L or higher during pregnancy and in this subgroup, 46% developed Type 2 diabetes and 27% developed Type 1 diabetes.

Participants who received insulin treatment for gestational diabetes had greater odds of receiving a diagnosis of Type 1 or Type 2 diabetes than those who did not receive insulin. For those who were diagnosed with

Type 1 diabetes, only 1.2% did not have insulin treatment for gestational diabetes. The

sensitivity of insulin therapy to predict Type 1 diabetes was 90.5% and for Type 2 diabetes was 56.9%.

The diabetes diagnosis time was also longer for women who were not treated with insulin.

The researchers concluded that women with gestational diabetes, especially those on insulin treatment, should be carefully monitored for the first 10 years after the pregnancy, after which the risk for Type 1 diabetes becomes negligible. However, the risk for Type 2 diabetes remains and warrants an individualised, lifelong follow-up. (Diabetologia, Vol 63, 2020)





SNIPPETS



Pet dogs with Type 2 diabetes share the risk with their owners

Having a dog with Type 2 diabetes raises the risk for their owners to develop Type 2 diabetes by 38%, compared with having a dog without diabetes. Research shows that pugs are amongst the breeds with the highest risk of diabetes. Previous research has suggested that overweight pet owners tend to have overweight pets possibly because they share the same behaviours of overeating and/or not taking enough exercise. The same association was not found for cats with Type 2 diabetes and their owners. This could be because cats prefer more independence from their owners and get more exercise. Like humans, Type 2 diabetes in dogs and cats is on the increase.

The research was carried out at Uppsala University in Sweden using information from Sweden's largest pet insurance company. The researchers suggest that shared environmental exposures to pollutants or chemicals between dogs and their owners could be worth exploring. This may seem strange research but the researchers also suggest that a diagnosis of Type 2 diabetes in any household member, including dogs, could be a signal to assess the health behaviours of the whole family. (The BMJ, 10th December 2020)

High-protein diet may have benefits for people with pre-diabetes

A small study found that adults with pre-diabetes who had a high-protein diet for six months had greater pre-diabetes remission rates compared with adults who had a high-carbohydrate diet. The study also found that the high-protein diet increased incretin hormone levels which may result in partially improved insulin sensitivity and beta cell function as well as improvements in cardiovascular risk factors, metabolic parameters and oxidative stress. (Nutrition, Metabolism & Cardiovascular Disease. 16th December 2020)



Eating dried fruit is beneficial

A study has found that people who regularly ate dried fruits have better overall diet quality and a better chance of filling nutrient deficiencies than those who didn't consume dried fruit. The researchers analysed data from 25,590 participants in the National Health and Nutrition Examination Survey, also found that average body mass index, systolic blood pressure and waist circumference were lower in dried fruit eaters compared to those who ate no dried fruit. (Journal of the Academy of Nutrition and Dietetics, 17th November 2020)

Low-fat vegan diet improves weight loss and metabolism

Research has found that overweight adults who followed a low-fat, plant-based diet lost more weight and body fat, as well as burned more calories after 16 weeks, compared with those who followed their usual diet. These findings were based on information data from 244 overweight adults and also showed that the low-fat vegan diet was tied to improved insulin sensitivity. (JAMA Network Open, 1st December 2020)

Maternal overweight tied to fertility issues in sons

A Scandinavian study suggests that women who are overweight or obese during pregnancy may be more likely to have infertile sons, and the researchers say that maternal overweight may be tied to hormone imbalances that affect the development of male offspring's reproductive system. The study, which included 9,232 men and women aged 31 to 34, found that sons born to overweight mothers were 40% more likely to be infertile than those born to mothers of normal weight. No association between maternal overweight and infertility was observed in daughters (AOGS, January 2021)

How much revenue has been raised by the Soft Drinks Levy?

HMRC's October publication of receipts for the year to date shows that the Soft Drinks Industry Levy (SDIL) has provisionally raised £223m in revenue in 2020-21. There is no formal link between SDIL revenues and individual programmes but the Government will continue to invest in supporting public health and tackling obesity, including the Department for Education's primary sports premium.