

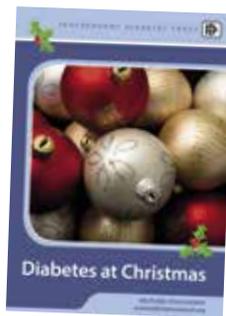


SEASON'S GREETINGS FOR CHRISTMAS AND THE NEW YEAR!

This is the final Newsletter of 2019 and the Trustees and Staff would like to send all our members and readers best wishes for Christmas and the New Year. We would also like to thank you for your help and support throughout the year, it is much appreciated. 2019 has been a successful year financially with some very generous legacies, for which we are extremely grateful.

IDDT continues to grow and requests for our booklets are increasing not only from people with diabetes, but also from health professionals to give to their patients, so it has been a busy year for IDDT and the staff and we look forward to 2020. In this Newsletter, we look at research that has taken place, developments for the future, changes in the NHS and promises in the NHS Long Term Plan.

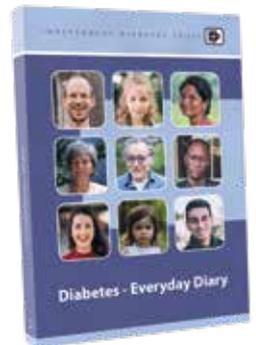
However, in the meantime, Christmas is a time for fun, presents and lots of food. If you or a member of your family has diabetes, it can also be a worrying and stressful time too, especially if it is your first Christmas with diabetes. We hope our FREE booklet "Diabetes at Christmas"



will be of help as it offers help and advice about managing diabetes at Christmas and a range of recipes and ideas about food and eating, allowing you to enjoy Christmas and still manage your diabetes. For your copy, give us a call on 01604 622837 or email enquiries@iddtinternational.org

2020 Diabetes Everyday Diaries still available!

For the first time we have published a Diary for 2020 for anyone who lives with diabetes, whether you have diabetes yourself, your partner has diabetes or you are a parent of a child with diabetes.



Each page is divided into two columns, the left column is headed, "Diabetes Diary" for recording blood glucose tests, mealtimes, medication and so on. The right column is headed "Everyday Diary" for recording things like medical appointments, social events and family occasions.

A lot of people have already purchased the Diary, but we still have copies left if you would like one, just use the form enclosed with this Newsletter.

Christmas cards

We would also like to thank everyone who has already bought Christmas cards from us and remind those who haven't that we still have cards available, they are £3.25 per pack of 10 plus 80p per pack p&p.



Food and drink news

Fruit juice and diet drinks linked with increased risk of Type 2 diabetes

New research shows that people who regularly consume sweetened drinks (including fruit juices) and those with artificial sweeteners had a greater risk of developing Type 2 diabetes. However, the design of the study was such that it can only show an association between these drinks and the risk of Type 2 diabetes, not a direct cause.

The study gathered information from two long-running studies of 192,000 healthcare professionals in the US who filled out food questionnaires every four years and had their health monitored through their health records. For the study a serving size was 8oz. The findings showed the following.

- Diabetes risk was greater for those who increased any sugary drinks (including fruit juice) intake by more than half a serving per day compared to those who did not have a significant change.
- The risk was also greater for those who increased their intake of sugar-sweetened drinks.
- Any increase in consumption of artificially sweetened drinks was associated with a higher risk of Type 2 diabetes, although this should be treated with caution because people already at high risk of Type 2 diabetes may switch from sugary drinks.

Reducing the risk of Type 2 diabetes

The research also showed:

- Diabetes risk was reduced if one daily serving of coffee was consumed instead of a sugary drink or instead of an artificially sweetened drink.
- This also applied to replacing a sugary or an artificially sweetened drink with a cup of tea or one daily serving of milk or water.

The study provides further evidence of the health benefits of decreasing sugary and artificially sweetened drinks in favour of the healthier options of water, coffee or tea. (Diabetes Care, October 2019)

This raises further questions – would people with existing Type 1 or Type 2 diabetes be better reducing their artificially sweetened drinks?



Most people do not need to reduce the red and processed meat they eat

Researchers from Dalhousie University in Halifax, Canada have made a weak recommendation that most people need not reduce their red meat and processed meat. They assessed four systematic reviews assessing the potential harms associated with red and processed meat consumption, and one systematic review assessing people's health-related values and preferences on meat consumption.

Researchers found that the evidence from 12 randomised control trials with 54,000 participants was low- to very-low certainty that a minimal red and processed meat intake may have little or no effect on cardiometabolic health and cancer risk and mortality.

New guidelines, approved by a panel from 7 countries, have been published recommending that most people do not need to reduce the amount of red and processed meat that they eat but these recommendations come despite previous findings that red and processed meat was associated with increased cancer risk, fatty liver disease, cardiovascular disease and other health conditions.

Researchers said that that they made these recommendations partly because the slightly reduced health risks associated with eating decreased amounts of red and processed meat would not be enough motivate people to change their eating habits. (Annals of Internal Medicine, October 2019)

CHRISTMAS IS COMING... ALCOHOL!



Self-reported alcohol consumption in adolescents and young adults

In people with Type 1 diabetes, the consumption of alcohol increases the risks of hypos. For parents, this can be a particularly worrying time as their adolescents and young people with Type 1 diabetes want to do what their friends without diabetes do and often, that is drink alcohol. This is understandable – they want to be like their peer group. However, they do need to understand that there are dangers associated with this and they need to learn how to handle alcohol.

The problems, whatever the age, are;

- if they go hypo while drinking, the people around them may just assume that they are drunk and not that their blood sugars are low, so no treatment is offered,
- alcohol lowers the blood sugar for many hours afterwards, so a hypo can occur during the night when they are asleep and blood sugars can still be low the next day,
- Alcohol also upsets metabolic control and so there is also a risk of diabetic ketoacidosis (DKA).

One study investigated the association between metabolic control and self-reported alcohol consumption in 29,630 young people with Type 1 diabetes between the ages of 12 and 30 years. The average age was 17 years, the duration of diabetes was 6.8 years, 53% were male and they were from Germany and Austria.

The young people were divided into abstainers,

low-risk drinkers, drinkers and at-risk drinkers. BMI, HbA1c, rates of severe hypoglycaemia and DKA were compared in the various groups and the results were as follows.

- 10.8% of the young people reported regular alcohol consumption.
- The amount of alcohol consumed increased with age and was higher in males than females.
- HbA1cs, rates of severe hypos and DKA rates were significantly lower in abstainers than in those who drank alcohol.
- Smoking was significantly associated with alcohol consumption.

The researchers concluded that alcohol consumption leads to worse glycaemic control, particularly DKA. Importantly, young people are likely to under-report their alcohol consumption in face to face settings, such as doctors' visits. (Paediatric Diabetes, January 2017)

Actions

It is important that alcohol consumption forms part of the education programme for young people with Type 1 diabetes (and everyone with Type 1 diabetes) whether they are abstainers or drink alcohol at any level. Parents may well prefer that their young people are abstainers but for many young people, this is unrealistic and peer pressure has a much greater effect. So, it is important that we as parents also educate our young people about the effects of alcohol and the precautions to take.



Ways you can look after your feet

While correct professional help at the right time is essential for the care of your feet, there are ways to take care of them at home to help you to prevent problems arising. Here are just some ways that can be useful.

Diabetes-Friendly Socks

Our Comfort Socks have been developed for use by people with diabetes, vascular disorders and other circulatory problems. No elastic is used in the top of the sock, relying only on the gentle control of the rib for support. We also produce a Fuller Fitting Longer Sock for people who find it difficult to wear ordinary socks.



These are made with a large circumference top and are suitable for people who may be suffering from oedema, for example.

Both socks come in a range of sizes

- The Comfort Sock comes in small [4-7], medium [6 1/2-8 1/2], large [9-11] and x-large [11-13].
- The Fuller Fitting Sock comes in small [4-7], medium [6 1/2-8 1/2], large [9-12].

Both are manufactured as a unisex sock from a high quality cotton blend. They both come in a range of colours - grey, navy, white, black and beige.

The Comfort Socks retail at £8, the Fuller Fitting at £12 per pair including p&p and can be purchased from our website shop, <http://www.iddt.org/shop> or by phoning IDDT on 01604 622837.

Flexitol



To be purchased at your pharmacy, not from IDDT

neuropad®



neuropad® can detect early complications of the feet which can lead to foot ulcers and even amputation. The test is completely painless and is an early warning system for your feet. Diabetes can result in the sweat glands not producing enough moisture, leading to dry and cracked feet.

A neuropad® is stuck to the sole of each foot like a small sticking plaster and left in place for 10 minutes. The pad is blue to start with and should turn pink in the presence of moisture from sweating. If the neuropad® patch stays blue, or if it turns a patchy blue/pink, this indicates that you may have some level of diabetic peripheral neuropathy and your sweat glands are not working properly.

Two test pads cost £14.99 and can be purchased from our website shop, <http://www.iddt.org/shop> or by phoning IDDT on 01604 622837.



Helping you to check your feet everyday

solesee™
focusing on foot health

YOU SHOULD CHECK YOUR FEET EVERY DAY

Solesee has been specifically designed for people with diabetes to check the soles of their feet.

- Easy to use independently
- Large shatterproof mirror
- Set at the perfect angle to see the whole of the bottom of your foot
- Portable and lightweight

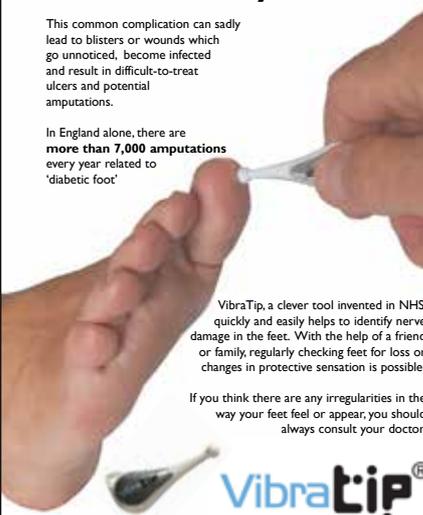
...also contains a handy guide on what you should be looking for on your feet

Solesee can be purchased online at www.solesee.com or on the IDDT online shop at www.iddt.org/product/solesee

Diabetes can damage the nerves in your feet

This common complication can sadly lead to blisters or wounds which go unnoticed, become infected and result in difficult-to-treat ulcers and potential amputations.

In England alone, there are **more than 7,000 amputations** every year related to 'diabetic foot'



VibraTip, a clever tool invented in NHS, quickly and easily helps to identify nerve damage in the feet. With the help of a friend or family, regularly checking feet for loss or changes in protective sensation is possible.

If you think there are any irregularities in the way your feet feel or appear, you should always consult your doctor.

VibraTip®

Available from IDDT website <http://www.iddt.org/shop> or by phoning 01604 622837
McCallan Medical Ltd - www.vibratip.com



FREESTYLE LIBRE UPDATE

It is noticeable that IDDT has received less calls from people who are struggling to obtain the FreeStyle Libre on an NHS prescription but we do have reports that some people have simply given up trying. Happily we are also receiving calls from people who have actually managed to achieve what they want – the FreeStyle Libre on the NHS!

Sooner or later, CCGs, and all involved in prescribing are going to realise not only the benefits to people with diabetes, the improvement in their quality of life but also the long-term cost savings of helping to prevent or delay the complications of diabetes. We look forward to the day when patients will be able to choose the device they use, in line with government promises of 'patient choice'.

Can the Freestyle Libre Flash glucose monitor perform accurately when challenged?

In previous studies, the Freestyle Libre Flash was shown to improve glucose levels in the blood but these studies also showed that the system's performance was impaired by high rates of glucose variability. The purpose of the study was to examine the glucose monitoring performance of the Freestyle Libre Flash in people with Type 1 diabetes when it came to certain tests including high carbohydrate meals, disturbances in bolus-insulin and physical exercise.

In this study, people had to attend four randomised trial visits which were 14 hours long in an inpatient setting. During these visits, the subjects had alternating pre and post-exercise bolus insulin dose administration. 19 of the subjects were given three meals that were high in carbohydrates and then asked to perform moderate-intensity exercise sessions. Venous blood glucose and capillary blood glucose during exercise were compared to the person's interstitial glucose concentration (fluid in the cells which is measured by the Libre).

The researchers concluded that the Freestyle Libre was not adequately accurate when it came to patients being within the hypoglycaemia range and when there were high levels of glucose in the blood. The glucose monitor also had issues during acute physical exercise and had to have confirmatory blood glucose tests done along with it.

It has to be noted that this study had the limitation of only being a small study. It is also worth noting that although the researchers concluded that some people may think there is no point in using this device if they have to do back up blood glucose tests, the real advantage of the FreeStyle Libre is that you can test as many times as you want to get a pattern of what is happening throughout the day and night. (Practice Update, 5th August 2019)



TAKING YOUR MEDICINES CORRECTLY

People with Type 2 diabetes not taking their medication

A study of 228 people with Type 2 diabetes at the University of Leicester showed that 28.1% were non-adherent to their anti-diabetic medicines, anti-cholesterol drugs (lipids) and/or their blood pressure drugs. The highest non-adherence drugs were for statins and the lowest for their oral diabetes drugs. Urine samples from the participants showed that those who were non-adherent had significantly higher HbA1cs, lipids and albumin-to-creatinine ratios than those who took their medication correctly. The researchers suggest that a single urine spot sample in primary care can be used to screen for non-adherence to enable treatment alteration and improve patient outcomes. (Diabetes Care, June 2019)

Patients should disclose all medications to your GP

As a result of a study on natural remedies interfering with prescription medications, the Chair of the Royal College of GPs highlighted that as more people are living longer, often with more than one long-term condition, they are, quite appropriately, taking multiple prescribed medications. However, it is important that the patient's GP is aware of all the different medicines and supplements they are taking.

She said that patients may not think to mention to their GP any herbal medications or dietary supplements they may be taking, but all of the medication, including any natural or herbal drugs should be disclosed so that the GP can weigh up all of the benefits and risks and advise of any potential adverse interactions.

She also said that it is important that patients are

not over-medicated and that they are only taking the medication they really need and that have evidence of benefit, so they are not spending money on supplements that won't help and may cause harm. (British Journal of General Practice)

A third of people don't get rid of their leftover medication

Research from Co-op Health shows that over a third of people in the UK admit that they never get rid of leftover medication and a further third confessed to having used medication past its expiry date with almost half not realising that it was out of date.

In addition, 1 in 7 people have taken a prescription that wasn't prescribed for them! Over half (54%) said they did so because a family member or friend had given it to them, a third (32%) had taken them before so felt it would work and almost a fifth (18%) simply didn't have time to go to their GP to pick up a prescription for themselves.

Over two thirds (70%) of people admit that wasting medication makes them feel as though they're draining NHS money and a further quarter (27%) feel as though it could have been given to someone else. However, people are still willing to over order prescriptions and failing to complete courses of medication.

Top 5 tips on tackling medical waste from Co-op Health:

1. Always check the expiry date on medication before taking it.
2. Do not share prescribed medication.
3. Always finish a course of prescribed medication – even if you start to feel better

before completing it.

4. Order via an app to reduce the chance of you ending up with prescriptions you may not need – this way, you can manage your own repeat prescriptions in real time, ordering them as and when you need them.
5. Always dispose of medication by returning it to a pharmacist.

Report on Penalty charge notices for exemption certificates

The Public Accounts Select Committee have published a report on penalty charge notices (PCNs) saying the system is not fit for purpose. PCNs are supposed to discourage people from claiming free prescriptions or dental treatment when they are not entitled to do so. The report says that the current PCN process is heavy-handed and penalises those who fail to navigate the overly-complex exemption criteria and neglects clear evidence of abuse by repeat offenders.

It goes on to say that the Department and NHS England have lost sight of the fundamental importance of helping people to claim what they are entitled to. In addition, the NHS Business Services Authority (NHSBSA), which runs the system, has not attempted to identify those who are entitled to an exemption but pay for treatment and the Department recognises that some people may not seek treatment because they are worried about getting a PCN.

There are trials of basic improvements now going on but the Committee remains highly sceptical about the speed with which these can be rolled out, particularly where they depend on new IT systems. While supporting efforts to deter fraud, they do not believe that the current system achieves this efficiently and fairly.

Exemption certificates and diabetes

Medical Exemption Certificates for free prescriptions are available to people with diabetes who take insulin or medication to control their diabetes but people on diet-only are not entitled to one unless they meet other criteria. You should be told by your GP or pharmacy if you are entitled to free medication.

The certificate lasts for 5 years and application forms (FP92A) can be obtained from your GP or Post Office. You fill in parts 1 and 2 and your surgery must confirm your information is correct.

Note: people in Wales, Scotland and Northern Ireland qualify for free prescriptions regardless of how their diabetes is treated.

Two thirds of people put off seeing their GP when they needed to

Research by Co-op Health has shown that two thirds of UK adults have chosen to delay or put off making an appointment with their GP, when they needed to. This can lead to serious consequences. It has to be said that there has been a considerable focus on encouraging people to only use their GP when absolutely necessary but there has to be a balance! Remember that NHS111 is there to advise.

Reasons why people put off seeing their GP

- 15% admitted to putting off booking a GP appointment over 8 times.
- 38% didn't feel their problem was bad enough to warrant an appointment.
- 30% thought they would get better without their GP's advice.
- 24% gave up because they couldn't get an appointment that was convenient for them.

The consequences were:

- 23% admitted that it resulted in their symptoms becoming worse.
- 22% felt their illness had lasted much longer than it should have.
- 9% had to go on to antibiotics as a result of their decision to not seek medical advice.



Dapagliflozin with insulin for treating Type 1 diabetes

NICE has approved the use of dapagliflozin (Forxiga), a drug to treat Type 2 diabetes, for treatment with insulin in people with Type 1 diabetes not controlled by insulin therapy alone. This is in adults with a body mass index (BMI) of at least 27 kg/m². Although NICE's decision was based on evidence, the FDA in the US has not approved it for use in people with Type 1 diabetes.

High dose statins could be available direct from pharmacies

According to the NHS Chief Executive, as part of the NHS Long Term Plan high dose statins could be made available without a prescription in high street pharmacies. Statins are cholesterol-lowering drugs frequently used as part of diabetes care because people with diabetes are more at risk of heart attack and stroke. They help to reduce the level of 'bad cholesterol' in the blood, which leads to fatty deposits building up causing increased risk of heart attack, stroke and coronary heart disease.

An NHS England and Improvement review has promised to look into how statins could be provided by high street pharmacies. Low dose statins can be given over the counter but they are generally not made available by pharmaceutical companies. It is believed that the new proposals of making more powerful versions safely available without a doctor's prescription could prevent thousands of deaths, heart attacks and strokes.

The findings of the review will be presented to manufacturers and the Medicines and Healthcare products Regulatory Agency (MHRA), the medicines watchdog, which will have the final say. Hopefully, they will take into account the risks which have been expressed - mainly that the reasons high dose statin users are more likely to develop diabetes are not fully understood and there appears to be a risk of swapping one condition for another. Questions have also been asked about whether this is

short-term cost saving to help with staffing shortages in GP surgeries.

Suliqua – another new treatment for Type 2

Suliqua is the brand name of a new combination treatment for Type 2 diabetes. It is a combination of insulin Lantus (glargine) and a GLP-1 receptor agonist Lyxumia (lixisenatide). It is designed to be injected once daily and is available in two different strengths so that dosages can be tailored to suit individual needs.

It is given with metformin where diabetes is not being managed by metformin alone or with metformin in conjunction with other oral blood glucose lowering drugs or basal insulin. Suliqua has been available in the US for nearly two years and although it is generally well tolerated, the most commonly reported side effects are hypos and gastrointestinal problems.

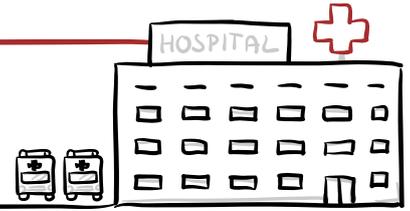
Lawsuit in the US over SGLT2 drug, Invokana, for Type 2 diabetes

The wife of a New York man (Mr Le Roe) is suing Johnson & Johnson, the manufacturers of Type 2 drug Invokana, after the death of her husband from sepsis after Fournier's gangrene infection, a side effect of the drug. Invokana belongs to the class of drugs known as SGLT2s and is sold all over the world with 1.5 million people taking it and sales of \$1.1 billion in 2017.

Johnson & Johnson has requested that the case joins an ongoing court battle involving more than 1,100 related cases including kidney failure, amputations and ketoacidosis at normal blood glucose levels. The lawsuit claims the drug companies knew the risks associated with Invokana were greater than the risk with other diabetes drugs, yet knowingly made material misrepresentations and omissions of fact. More than a year after this gentleman's death, the FDA issued a warning about the increased risk of Fournier's gangrene, a rare but serious genital infection, for Invokana and related Type 2 diabetes.

Hospital characteristics 2018

IMPROVEMENTS BUT...



National Diabetes Inpatient Audit for England and Wales is an audit of the quality of diabetes care of people with Type 1 and Type 2 diabetes while they are admitted to hospital, whatever the cause. Hospital Characteristics for 2018 collected through the National Diabetes Inpatient Audit showed that the number of Diabetes Inpatient Specialist Nurses has increased by 19%. It also showed that:

- the number of diabetes consultants has gone up by 14%,
- podiatrists have increased by 47% but 20% of hospitals do not have a multi-disciplinary footcare team,
- dietitians have increased by 87%.

The increase in staff numbers was funded by transformation funding and it is reported that 90% of NHS organisations that received transformation funding used it to expand diabetes workforces.

Not everything in the report was positive!

Despite all the above, the report also showed:

- 22% of the participating hospitals still have no Diabetes Inpatient Specialist Nurses,
- concerns were expressed about access to Diabetes Specialist Pharmacists in the NHS,
- there was an increase in the use of electronic prescribing and the use of electronic patient records increased slightly but 65% of participating hospitals still did not fully use electronic prescribing technology.

This Audit takes place every two years and the latest one took place in autumn 2019. In addition, the results of an audit into diabetes specialist nursing will be available for the next IDDT Newsletter. The last time a survey focussed on diabetes nursing was in 2010 and there were 838 respondents giving 238 different job titles! No wonder people don't know or understand the level of qualifications for the various nurses they see.

Survey if harms - hypos in hospital lead to longer stays

The first nationwide survey of harms affecting people with diabetes in hospital took place in September last year as part of the audit. The results showed that severe hypos are the leading diabetes-related inpatient emergency!

More recently University of East Anglia and Cambridge University Hospitals NHS Foundation Trust researchers reviewed 15 international studies comparing outcomes for people with diabetes who were exposed to hypos in hospital with those with diabetes who were not. They found:

- people with diabetes exposed to hypoglycaemia during their admission, had an increased average length of stay of 4.1 days compared to those with diabetes who did not become hypoglycaemic during their admission,
- not only were there longer hospital stays for those exposed to hypos, but the risk of inpatient mortality almost doubled in this group.

Reading these findings implies that the 'patient' is responsible for this as the researchers say how important it is to keep on top of glucose levels when you're in hospital but really it's something you need to be aware of wherever you are. So, it is recommended that if you are admitted you should:

- bring your normal equipment with you,
- talk to the team caring for you,
- tell them if you're eating less as this means you'll require less insulin,
- keep your regular hypo treatment at your bedside along with your glucose meter,
- if you don't feel well then tell somebody.

However, we know that many people are not given control of their blood sugars while in hospital, their hypo kit is locked away in a fridge or they may be too ill to be able to manage their own control.

New guidance for online pharmacies (19th April 2019)

New guidance has been issued that says pharmacies operating online or providing services at a distance must carry out identity checks on patients before prescribing a medicine. This updates the 2015 guidance and is effective immediately, although the National Pharmacy Association (NPA) states that inspectors will understand that pharmacies that do not meet all standards must be able to demonstrate there is a plan in place to do so.

The safeguards for everyone now focus on the following two key areas:

Making sure medicines are clinically appropriate for patients

Online pharmacies will have to make sure:

- there are robust processes in place to carry out identity checks on people obtaining medicines,
- the pharmacy team can identify requests for medicines that are inappropriate, including being able to identify multiple orders to the same address or orders using the same payment details,
- the pharmacy websites do not allow a patient to choose a prescription-only medicine and its quantity before there has been an appropriate consultation with a prescriber.

Safeguards for certain categories of prescription-only medicines

These have to be in place before supplying the following categories of medicines:

- antimicrobials (antibiotics),
- medicines liable to abuse, overuse or misuse, or where there is a risk of addiction, for example, opiates, sedatives, laxatives, pregabalin and gabapentin,
- medicines that require ongoing monitoring or management, such as those used to treat diabetes, asthma, epilepsy and mental health conditions.



High street pharmacies to get a revamp

As part of the NHS Long Term Plan high street pharmacies have been set ambitious targets to prevent strokes and heart attacks over the next 10 years, in addition to offering advice on medicines, prescriptions and consultations for minor illnesses.

GP practices will identify people at risk of these conditions and optimise treatment in those with conditions that most commonly cause heart disease and stroke - high blood pressure, high cholesterol and irregular heart rhythms (atrial fibrillation). In addition, as part of their new £13 billion, 5-year contract starting on 1st October 2019, community pharmacists will start to develop and test an early detection service to identify people who may have undiagnosed high-risk conditions like high blood pressure for further testing and treatment. If successful this could be rolled out to all community pharmacies in 2021-22.

Work to identify and treat people with high blood pressure and atrial fibrillation in the community has been tried in Lambeth and Southwark, Dudley and West Hampshire. Here they have successfully detected and treated people at risk of these serious conditions while, at the same time, freeing up clinical time for GPs.

Just a note - women and heart attacks

An editorial in The Lancet (March 9th-15th 2019) stated that if asked to describe a typical heart attack, most people, including most doctors, would describe a man with crushing chest pain, probably with a background of hypertension (high blood pressure). However, cardiovascular disease is also the leading cause of death in women globally. Information from the US last year showed that women with heart attack were less likely to receive aspirin, resuscitation or be blue lighted into hospital. The symptoms in women having a heart attack are different from in men and are feeling generally unwell or unexplained weakness.

The future of Clinical Commissioning Groups

In 2016, as part of the NHS Long Term Plan, a plan was developed for the NHS to ultimately get rid of Clinical Commissioning Groups (CCGs) as we know them. The NHS and local councils came together in 44 areas covering all of England to develop proposals to improve health and care. They formed new partnerships, known as Sustainability and Transformation Partnerships (STPs), to run services in a more coordinated way, to agree system-wide priorities and to plan collectively how to improve people's day-to-day health. STPs become Integrated Care Partnerships (ICPs) where, for example, GPs, community nurses and social care staff work together as a team for large populations.

This system is developing at different rates across the country but it is difficult to see how the changes are going to occur alongside running the present system. Once again, the NHS system is changing making it difficult for us, as patients, to understand.

It's time to think about the

SEASONAL FLU JAB

The flu jab is offered first to people in 'at risk' groups and this includes people with diabetes, pregnant women, the elderly and now children. It gives good protection [70-80% reliability] against all strains of flu and lasts for a year. Flu viruses are spread rapidly by coughs and sneezes from infected people.

The pneumo jab

What has become called the pneumo jab protects against pneumonia [inflammation of the lungs]. Pneumococcal infections are caused by a bacterium with many different strains and can lead to serious health conditions. They can affect anyone but some groups of people have a higher risk of the infection developing into a serious health condition. These include:

- children who are under two years of age – they are vaccinated as part of the childhood vaccination programme,
- adults who are 65 years of age or over,
- children and adults with certain chronic [long-term] health conditions.

Pneumococcal infections are easily spread from person to person by close or prolonged contact with someone who has the infection. The bacteria are present in tiny droplets that are expelled when someone who is infected breathes, coughs or sneezes. You will also be infected if you breathe in these droplets or if you touch any droplets that might have landed on a surface and then transfer them to your face.

Once the bacteria have entered your body, usually through your nose or throat, they can either lie dormant or they can multiply and cause health problems such as pneumonia.

When you see your GP for a seasonal flu jab, ask whether you also need the 'pneumo jab' to protect you. It's available to everyone aged 65 or over, and for younger people with some serious medical conditions, including diabetes.

MATT HANCOCK WATCH



Matt Hancock says vaccinations could be compulsory in the future

At the Conservative Party Conference Health Secretary, Matt Hancock said there is a “very strong argument” for forcing parents to get their children immunised after the UK lost its measles-free status earlier this year. He said that “should be a real wake-up call” for the country.

Mr Hancock also said, “the social media companies have got a lot to answer for in terms of spreading anti-vaccine messages online”. He added, “I’ve said before that we should be open-minded. And frankly what I’d say is that we or the state provide services to people, then it’s a two-way street, you’ve got to take responsibility too. So, I think there’s a very strong argument for having compulsory vaccinations for children when they go to school.”

His comments came after it was revealed that take-up rates for the measles, mumps and rubella (MMR) triple vaccine have fallen in England for the fifth year in a row to 90.3%.

Matt Hancock has announced a review into the NHS Health Check

The NHS checks are offered to everyone between the ages of 40 and 74 to pick up the early signs of conditions including stroke, kidney disease, heart disease and Type 2 diabetes. However, the checks pay little attention to people’s individual risks or needs and this review will look into ways of improving the system with an emphasis on such factors as age, where people live and DNA.

Mr Hancock said: “Personalised, preventative healthcare is critical to the future-fit healthcare service we want to build. We must harness the latest technology and techniques to move away from the one-size-fits-all approach of the past. The review will be an important step towards achieving that, helping us to find data-led, evidenced-based ways to support people to spot, manage and prevent risks to their health through targeted intervention.”

Matt Hancock and his emphasis on digital technology

We have previously reported on how Matt Hancock wants digitalisation in the NHS and for patients, as well as health professionals to move into the digital age. IDDT and no doubt other organisations have raised concerns about whether this will suit everyone and we were pleased to see The Lancet published comments from the Royal College of General Practitioners (Lancet 394, 10.08.19) saying:

- New technology needs to be accessible to everyone, not just people who have the latest 4G-enabled smartphones.
- Those who have access are fitter, healthier and more affluent.
- 8 million Britons do not even have access to email.
- If we move towards a digital-first NHS without having the infrastructure /population, then we are doing a disservice to rural populations, frail populations and deprived populations.

How true!



From our own correspondents

72 years on...

Dear Jenny,

I am pleased to say that I am still on animal insulin after more than 72 years and even my consultant says I am doing well. My determined use of the FreeStyle Libre over the past 3 years has reduced my HbA1cs by a very satisfactory amount since I started self-funding. Now I get the sensors from my local Health Authority, which is a great relief to us pensioners! I have been able to hone timing and numbers of injections, even reducing my doses, while achieving more satisfactory results.

The main problem I have is that so very few medical practitioners actually know how animal insulin works and some don't even know that it is still available. Anyway, I have prevailed and proved that it works for me, so I am happy and continue with my usual activities such as gardening, dancing and driving.

Keep up the good work, especially on the prescribing of cheaper needles. In the past I have had several experiences of cheaper needles and they have left me badly bruised. I took photos of my bruises to show my GP and thankfully, I am now back on my favourite needles but, if necessary, I will pay for them.

T.J.

Gwynedd

Here's hoping

Dear Jenny,

Reading the front page of your September Newsletter made me think that not much has changed in 50 years. I was diagnosed with Type 1 when I was 5 years old in 1965 and since then it's only got more painful, finger pricking instead of putting a tablet in a test tube with wee and watching it change colour. My Mum would only let me have ice cream if the van came around and my test went blue. If not, I had to sit with my friends on the kerbside watching them eating theirs. It was an awful feeling.

I also remember cutting test strips in half to make them last longer. Insulin pens were not quite so painful as normal syringes but I remember those big glass syringes and being only five, giving my Mum a kiss and saying "Please don't hurt me Mummy" every time she gave me an injection. So, 50 years on and the majority of us are still having to inject. I don't think there will be a cure in my lifetime but here's hoping.

By email

Representatives on CCGs

Dear Jenny,

The existing system where CCGs make decisions for their local area is obviously unfair as people with diabetes across the country do not have access to the same levels of care, treatment or devices. Who are the people on CCGs making these decisions? How many patient representatives are on these Groups? Surely the best way to fight the decisions that are unfair is for more patients with diabetes to be on their local CCG? This way, perhaps CCGs would see other perspectives.

M.P.

By telephone

RESEARCH

Another reason to try to keep good control - the link between HbA1cs and infections

We have always known that infections are more common in people with diabetes because diabetes weakens the immune system. However, researchers at the University of London investigated the impact of blood glucose levels on the risk of infections and this has shown that people with the poorest blood glucose control are at greater risk of infections, especially bacterial infections.



They used GP and hospital electronic health records in England over 5 years to look at HbA1cs of 85,000 adults aged 40 to 89 years with Type 1 or Type 2 diabetes.

- Those with an HbA1c of 97mmol/mol (11%) or higher were at greater risk of hospitalisation due to infection.
- Those with optimal HbA1cs of 43-53 mmol/mol (6-7%) had a lower risk of infection, although it was still a greater risk than in people without diabetes.
- Poor diabetes control accounted for around 20-46% of some of the most serious types of infections seen in people with diabetes.

People with the worst control were almost three times as likely to need hospital treatment for an infection compared to those with good control. This was particularly so for people with Type 1 diabetes with very poor control who had an 8.5 times greater risk of needing hospitalisation compared to those without diabetes. Higher blood glucose levels were also linked to an increased risk of pneumonia, particularly in older people. So yet another reason for trying to achieve good control! (Diabetes Care, October 2018)

Controlling HbA1c associated with lower risk of complications in Type 1 diabetes

Swedish researchers investigated the impact of HbA1c levels on risks of diabetic retinopathy (eye disease) and nephropathy (kidney disease) by analysing more than 10,000 adults and children with Type 1 diabetes for between 8-20 years.

As expected, higher HbA1c levels were linked to increased signs of complications but the researchers also warned of the dangers of people with Type 1 diabetes keeping their HbA1cs too low.

- Those with HbA1c levels above 70.5 mmol/mol (8.5%) had increased risks of damage to the eyes and kidneys compared with those who had HbA1c levels of 48-52 mmol/mol (6.5-6.9%).
- Milder complications were observed among people whose HbA1c levels remained above 53 mmol/mol (7%).
- More severe complications mainly occurred in people with an HbA1c above 70 mmol/mol (8.6%).

The researchers concluded that keeping HbA1cs at 52 mmol/mol (6.9%) or below reduced the risk of complications but keeping HbA1cs below 48 mmol/mol (6.5%) showed no further risk reduction.

In Sweden, the HbA1c target is 52 mmol/mol or below, and 47 mmol/mol or lower in children, whereas in the UK the target HbA1c level for those with Type 1 diabetes is 48 mmol/mol or below. (BMJ, August 2019)

The lead researcher said: "Attaining a low HbA1c value may, in some cases, require children to be woken up several times a night, plus extra glucose monitoring and strict attention to diet and physical activity day after day, which can be extremely burdensome."

Overtreating people with diabetes increases hypoglycaemia risk

According to US researchers, overtreating people with diabetes is leading to many preventable incidences of hypoglycaemia (low blood glucose). This study showed that intensive glucose-lowering can sometimes lead to people receiving more medication than required and this has led to thousands of diabetes-related hospital admissions.

The lead researcher is urging healthcare professionals to shift their focus from being overly focused on glucose-lowering to being more about the individualising treatment which will lead to better long-term outcomes. Treatment regimens and goals should take into account each patient's clinical health status, psychosocial situation and reality of everyday life.

High blood glucose levels over time can increase the risk of diabetes-related complications, such as diabetic retinopathy, kidney disease and neuropathy. However, it is important to remember that severe hypoglycaemia is linked with greater risks of heart disease, falls, bone fractures and poorer quality of life. The key with treatment is getting the right balance. (Mayo Clinic, July 2019)

Note: setting national targets for HbA1cs does not acknowledge the need for individualising targets for each person. For instance, people with reduced hypo warnings or those who live alone, should have higher targets than people not in these situations.

Insulin pill

An insulin pill that could prevent people with Type 1 diabetes from taking daily injections has been developed by scientists from Massachusetts Institute of Technology and Novo Nordisk. They have developed a capsule that will survive the journey through the gastrointestinal tract as it is coated with a polymer that can survive the highly acidic

environment of the stomach before reaching the small intestine. Previous attempts to give people insulin pills have failed because they cannot withstand stomach acid and they release the hormone too early.

When this capsule reaches the small intestine, the higher pH (around

6) triggers it to

break open and three folded

arms inside the

capsule spring

open. Each arm

contains patches

of 1-millimeter-long microneedles

that can carry insulin

or other drugs. When the

arms unfold open, the force of their release

allows the tiny microneedles to penetrate the

topmost layer of the small intestine tissue and

the insulin is released into the blood stream.

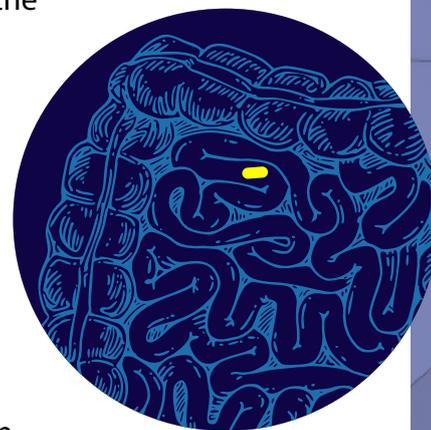
After insertion, the needles dissolve and

release the drug.

Tests in pigs using the 1.18in (30mm) capsule loaded with the same amount of insulin as an injection, showed that the capsule was able to deliver insulin to the bloodstream just as fast.

Calculator to diagnose whether someone has Type 1 or Type 2 diabetes

In the last Newsletter, we reported that 40% of people with Type 1 diabetes were initially wrongly diagnosed as having Type 2 diabetes. Now the University of Exeter has developed a model to help prevent people from being wrongly diagnosed. The calculator, called the T1DT2D Prediction Modeland, is designed to be used by adults between 18 and 50 years and combines health information and blood test results to speed up diagnosing whether a person has Type 1 or Type 2 diabetes. It has been tested on more than 2,000 people and shown to be effective.



BITS AND PIECES

Worldwide HbA1c levels in Type 1 diabetes

A multinational study showed that overall, just 24.3% of adult patients with Type 1 diabetes worldwide achieved an HbA1c level of less than 7%, while 43.4% had an HbA1c of at least 8% and 20.1% had an HbA1c of at least 9%. The researchers analysed information from the SAGE study involving 3,858 adults, ages 26 and older, and found that only 19.9% of patients used insulin pumps, 5.6% still used premixed insulin and 43% used physician-driven insulin titration. (Presented at the 2019 European Association for the Study of Diabetes annual meeting)

Health care costs higher with insulin pump therapy

Type 1 diabetes patients who used insulin pump therapy spent \$3,923 more in health care costs annually than multiple daily injection users. Swedish researchers analysed data from the Swedish National Diabetes Register involving 14,238 adults, with an average age of 33.8 years, and found that insulin pump users also had more annual outpatient visits, higher overall inpatient costs, spent more on medication and had higher average costs for outpatient treatment, compared with multiple daily injection users. (Diabetes Care, February 2019)

Delaying blood pressure treatment in diabetes linked to strokes and heart attacks

People with diabetes who are hypertensive (high blood pressure) and delay treatment are more likely to have fatal heart attacks and strokes. A study of 43,986 people who underwent treatment for high blood pressure between 2002 and 2007 found that those who begin blood pressure treatment when their systolic blood pressure (top number) exceeds 130 mmHg may be less likely to die from heart attacks and strokes than those whose systolic blood pressure exceeds 140 mmHg when they begin treatment. (Diabetes Care, September 2019)



Falling asleep with the light on linked to obesity

A US study has shown that sleeping with the television or light on has been linked to a higher risk of developing obesity. This research involved 43,722 healthy women between the ages of 34 and 74.

- 17,000 slept with a night light in the room,
- 13,000 left a light on outside the room and
- 5,000 slept with the TV or room light on.

At the beginning of the study women were overweight but not obese but after 6 years of follow-up, women who slept with the TV or room light on were 22% more likely to be overweight and 33% more likely to have obesity than women who slept in total darkness. The researchers concluded that exposure to artificial light at night while sleeping appears to be associated with increased weight suggesting that this should be addressed in obesity prevention. (JAMA, June 10, 2019)

Islet transplantation versus insulin treatment after kidney transplantation

This study assessed whether islet transplantation effectively improves metabolic outcomes in people with severe, unstable Type 1 diabetes or severe hypoglycaemia after kidney transplantation who are not responding to intensive medical treatments. The researchers say that although longer studies are needed, islet transplantation seems to be a valid option for this group of people, however, immunosuppression can affect kidney function, necessitating careful selection of patients. (The Lancet Diabetes & Endocrinology, May 2018)

Enteroviruses tied to Type 1 diabetes in children

According to Australian researchers, five enterovirus-A viruses were among the 129 viruses that were more prevalent in the gut of children with islet autoimmunity, which often leads to Type 1 diabetes development later in life, compared with similarly aged children. The researchers collected blood and stool samples from 93 children without Type 1 diabetes but with at least one relative who had the condition and found that enteroviruses could trigger autoimmunity in the cells that help regulate blood glucose by spreading from the gut into the pancreas. (Scientific Reports, February 2019)

Links between work stress and the risk of diabetes in women

Research has shown that women whose jobs involved “very mentally tiring” work were 21% more likely to develop Type 2 diabetes compared with those with “little or not mentally tiring work”. The researchers studied more than 70,000 women and found that the association between stressful work and Type 2 diabetes remained even after adjusting for other factors, including cardiometabolic risk factors and unhealthy lifestyle habits. (European Journal of Endocrinology, March 2019)



Study finds no link between gluten intake and diabetes risk in children

A recent study has shown that high-risk older infants and toddlers who consumed an average of 11.4 grams per day of gluten between ages 1 and 2 were not at an increased risk of developing islet autoimmunity or progressing from islet

autoimmunity to Type 1 diabetes. Researchers studied 1,916 high-risk children from the DAISY study and found an 8.69 fold increased adjusted risk for progressing from islet autoimmunity to Type 1 diabetes among those who started eating gluten before age 4 months, compared with those who first consumed gluten between 4 months and 5.9 months. (Diabetes Care, March 2019)

Living in deprivation linked to higher blood glucose levels

UK researchers who studied more than 30,000 people with Type 1 diabetes in Scotland and found that those who live in deprived areas were at an increased risk for higher blood glucose levels than those living in less deprived areas. The researchers also said that links between social deprivation and higher blood pressure and physical inactivity levels, unhealthy diet and smoking all increase the risk for diabetes-related complications. (Diabetes UK Conference, March 2019)

C-peptide testing important after Type 1 diabetes diagnosis

UK researchers recruited 757 patients with Type 1 diabetes with a duration of at least 3 years and found that 13 of 14 of those with C-peptide levels greater than 900 pmol/L were reclassified as having Type 2 diabetes, while other patients at varying C-peptide levels were reclassified as having different genetic types of diabetes. (C-peptide is produced at the same time as insulin.)

The findings also showed that some patients with diabetic ketoacidosis actually had Type 2 diabetes. (Presented at Diabetes UK Professional Conference, March 2019)

Text-based reminders tied to HbA1c goal achievement in teenagers

A recent study showed that teenagers with Type 1 diabetes who were high responders to daily text reminders to check their blood glucose levels at a predetermined time were more likely to reply with their blood glucose readings and had lower A1C levels at six and 18 months than those considered to be low responders. The researchers concluded: “To protect against glycaemic decline, teenagers may benefit from increased support and innovative ways to improve self-care.” (Diabetic Medicine, March 2019)



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 August 2019 draw are:

1st prize of £514.56

goes to Denise from Birmingham

2nd prize of £385.92

goes to Anon. from Matlock

3rd prize of £257.28

goes to Celia from Southampton

4th prize of £128.64

goes to Emma from Penbury

Winners of the September 2019 draw are:

1st prize of £504.80

goes to Anon. from Rugeley

2nd prize of £378.72

goes to Geoffrey from Bristol

3rd prize of £252.48

goes to Paul from Glossop

4th prize of £126.24

goes to Anon. from Worcester

Note: Apologies that the winners of the October draw are not in this Newsletter due to going to press early for Christmas but the winners will be notified in early November and will be on our website. So the winners of the draws for October, November, December 2019 and January 2020 will be announced in our March 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

GOOD NEWS FROM DREAM TRUST, INDIA

For many years some of our members have been sponsoring children with diabetes at Dream Trust in Nagpur, India. In addition to supporting their medical needs, sponsorship has also included helping with their education. This has applied especially to girls with Type 1 diabetes so that they can financially support themselves if they do not marry as a result of having diabetes.

Dr Pendsey, who runs Dream Trust, has written to IDDT with good news about 3 girls that have been sponsored by IDDT members since they were little.

- Aditi Kothari has completed her physiotherapy course and came first in the entire state of Maharashtra with 79.78%. She is now doing an internship with an Orthopaedic clinic.
- Snehal Kale has completed her graduation in Ayurvedic medicine, BAMS. She intends to do post-graduation in Gynaecology. In the entrance exam she secured 94.6%. She has also been looking after her father for the last 3 years as he is undergoing treatment for throat cancer.
- Radha Wath has completed her graduation in commerce and is working with a Chartered Accountant firm.

Dr Pendsey says that it is always a gratifying experience to see spectacular performance of our sponsored children and this is what we all want for these under privileged girls with Type 1 diabetes - to lead a life with pride and dignity.

Thank you to everyone who sponsors the children at Dream Trust.

And talking about hypos by family members...

Researchers in Canada surveyed 4,300 family members of people with Type 1 or Type 2 diabetes. They found that because they feel anxious or worried about their loved one having a hypo, 76% believe that having conversations about the condition would help to reduce the hypoglycaemia-specific burden but only 34% reported having regular conversations with their relative with diabetes. The most common barriers to conversations about hypos were reluctance of the patient, a lack of knowledge or confidence and a feeling that it was not the role of the family member. (Diabetes Therapy, September 2019)



Poor sleep linked to diabetes management in teenagers with Type 1 diabetes

Researchers found that adolescents with Type 1 diabetes and greater sleep variability between weekdays and weekends had poorer glycaemic control. They were also less likely to monitor their blood glucose levels regularly. The study was based 65 adolescents and their caregivers. (Pediatric Diabetes, April 2018)

And in young children...

Interestingly, a more recent study has found that some of the benefits of using continuous glucose monitors (CGM) for children with Type 1 diabetes included improved sleep. Other advantages of CGM were increased sense of safety, decreased worry, increased time spent in target blood glucose range and making informed decisions about management. (Diabetes Technology & Therapeutics, September 2019)

Neonatal diabetes, babies can be treated with tablets instead of injections

Neonatal diabetes is a rare type of diabetes type that affects babies under the age of six months. It is a genetic disorder that often requires treatment either with insulin or a drug called glibenclamide, a class of drugs called sulphonylureas used to treat Type 2 diabetes.

Research has been directed towards investigating tablet treatment as injecting babies is very unpleasant. This research involved 81 patients from 20 countries starting in 2006 at Exeter University. All of them were diagnosed with neonatal diabetes and they were all switched from insulin injections to high doses of sulphonylureas. The results were:

- Before the change to sulphonylurea

treatment, the participants' average HbA1c was 65 mmol/mol (8.1%).

- After 10 years of sulphonylurea treatment, their average HbA1c was 46 mmol/mol (6.4%).

This represents an excellent improvement in control and there were only mild side effects after the changeover from insulin but none of the participants needed to stop treatment. This is the first study to establish that this tablet treatment is safe and improves blood glucose control, not to mention the great improvement in the quality of life of the people with neonatal diabetes who have been treated with insulin all their lives. (The Lancet and Endocrinology, June 2018)



SNIPPETS

Should people with diabetes be screened for sleep apnoea?

A French study has shown that because of the high incidence of obstructive sleep apnoea syndrome (OSAS) in people with Type 1 and Type 2 diabetes, consideration should be given to screening these people for OSAS, sometimes even in the absence of symptoms. The researchers carried out a systematic review of scientific literature and found that treatment of OSAS helped improve insulin sensitivity and night-time blood glucose control. (Diabetes and Metabolism, September 2018)

Diabetes linked to vitamin D deficiency and periodontitis

Researchers analysed information on 3,000 people with and without Type 2 diabetes, aged 30 and older and found an increased risk of Type 2 diabetes among those with vitamin D deficiency and periodontitis. Each factor was independently associated with risk, but when combined, the risk increased further. (BMJ Open Diabetes Research and Care, August 2018).

It is also worth noting that a number of recent studies have reported reduced vitamin D levels in people with diabetic peripheral neuropathy, although many of these did not assess major other factors, such as seasonal sunlight exposure and daily activity. There is some evidence that vitamin D supplementation improves painful neuropathic symptoms.

Vitamin C linked to reduced glucose levels in Type 2 diabetes

A small study, involving only 31 people with Type 2 diabetes,

suggests that taking Vitamin C supplements is associated with improved blood glucose levels. In this Australian study those who took a 500g Vitamin C tablet twice a day reduced their post-meal high blood sugars by 36% and spent 3 hours less a day with high blood sugars. This dose is about 10 times the normal dose. The participants who took the Vitamin C supplementation also had lower blood pressure. (Diabetes, Obesity and Metabolism, February 2019)

Spending the Soft Drinks Levy

Answering a Parliamentary Question in June 2019, it was explained that the Soft Drinks Industry Levy has been allocated to the Department of Education. Over 2018/19 the Healthy Pupils Capital Fund has spent £100 million. The PE and Sport Premium has spent £160 million. The Essential Life Skills Programme has spent £13.85 million and up to £26 million has been allocated the National Schools Breakfast Programme over 2018-2010.

British pharma giant stops visits to general practitioners in the Netherlands

The British pharma giant GSK has stopped visiting general practitioners in the Netherlands because the company believes that GPs are sceptical about information provided by pharmaceutical manufacturers. As far as we know, never before has a pharmaceutical manufacturer made such a decision. The scientific branch of the Netherlands National General Physicians Association is very happy with this step because for a long time they have been advising

GPs not to receive physician visitors, because they fear selective information will be given. (Dutch 'Financial Daily, 8th April 2019)

Duckweed can control blood sugar and appetite in people with diabetes

Researchers from the Ben-Gurion University have studied mankai duckweed, a small aquatic plant that floats on top of ponds and lakes, and they believe its health benefits could make it a popular superfood in the future. It has been a common food in southeast Asia for hundreds of years and researchers say it contains six amino acids and nine essential amino acids. It's chock-full of flavonoids, catechins, phenolic acids, minerals, vitamin A, vitamin B12, vitamin B complex, and dietary fibre.

The study participants drank a mankai duckweed shake every day for two weeks and they were compared to participants who drank yogurt shakes. Those who drank duckweed shakes had lower peak blood sugar levels, improved fasting blood glucose levels and faster removal of glucose from the blood.

FROM YOUR EDITOR – JENNY HIRST

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