



## DVLA changes to driving regulations from January 1st 2018



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Changes to the law concerning medical fitness to drive for diabetes have taken effect from January 1st 2018. The amendments on diabetes reflect developments in the diagnosing and treatment of diabetes since the 2006 Directive came into force. The changes to regulations apply to group 1 drivers only and the DVLA has not considered making a change in these regulations for group 2 drivers.

### The Amendments

#### Hypoglycaemia while asleep

Until these changes, there has been no distinction made between hypoglycaemia experienced while awake or while asleep but the new rules now state that hypoglycaemia should not be classified as severe when it occurs during sleep because it is more difficult to recognise the warning symptoms and to treat the event appropriately. As applicants or drivers cannot demonstrate an understanding of the risk and adequate control of the condition while asleep, it is considered unfair to continue with the current rules. The new regulations will apply only to hypoglycaemia experienced while awake.

#### Three Month Period

The current rules do not permit driving for those who suffer recurrent, severe hypoglycaemias within a rolling 12 month period. This can result in a wait of close to 12 months for the first episode to drop out of the 12 month period. The new rules now state that this time span is no longer medically justified and a 3 month period after the most recent of the two episodes within 12 months would be a more appropriate duration.

The effect of the new regulations is that if a person suffers two or more episodes of hypoglycaemia while awake within a 12 month period, their licence will be refused or revoked, unless they have been free of hypoglycaemia for the last three months. If the licence is refused or revoked, driving entitlement can be restored once that person has been free of hypoglycaemia for a 3 month period.

## Glucose Monitoring

There is an additional measure in the regulations that does not stem from the EU directive. The current regulations require group 1 drivers to undertake appropriate blood glucose monitoring. There are now methods available commonly described under the heading 'Continuous Glucose Monitoring Systems (CGMS)', which includes flash glucose measuring using the FreeStyle Libre. These methods measure the glucose level in interstitial fluid (a bodily fluid), but the specific reference to "blood glucose" in legislation precludes the use of these methods for driver licensing purposes.

The new regulations remove this restriction by replacing the requirement for "appropriate blood glucose monitoring" with "appropriate monitoring to assess glucose levels and any risk of hypoglycaemia."

## Be aware!

These new regulations do not mean that alternatives to the 'finger prick' blood test are automatically permitted. The new regulations enable alternative methods to be considered, but decisions will be made as to which methods are appropriate in consultation with the medical advisory panel.

At this point, no method other than the blood test has been deemed appropriate, so the current rules on glucose monitoring will not change on 1 January.

## Should this change, the DVLA will amend their guidance accordingly.

DVLA provides guidance for the medical profession "Assessing Fitness to Drive" available at: [www.gov.uk/dvla/fitnesstodrive](http://www.gov.uk/dvla/fitnesstodrive)

# Advice on vitamin D

Based on the recommendations of the Scientific Advisory Committee on Nutrition (SACN), in July, Public Health England (PHE) issued new advice on the intake of vitamin D. The advice is that 10 micrograms daily are needed to help to keep bones, teeth and muscles healthy.

Vitamin D is made in the skin by the action of sunlight and this is the main source of vitamin D for most people. However, the SACN could not say how much vitamin D is made in the skin through exposure to sunlight, so it is therefore recommending a daily dietary intake of 10 micrograms.

In spring and summer most people get enough vitamin D from sunlight and a balanced diet but PHE advises that in autumn and winter everyone will need to rely on dietary

sources of vitamin D. It is difficult for people to meet the 10 microgram recommendation from foods naturally containing or fortified with vitamin D, so people should consider taking a daily supplement containing 10 micrograms of vitamin D in autumn and winter.

Vitamin D is found naturally in a small number of foods including oily fish, red meat, liver and egg yolks and in fortified food like breakfast cereals and fat spreads.

## Some groups of people should consider taking vitamin D all year round

- People in institutions, such as care homes, who may get little exposure to sun,

- People who always cover their skin when outside,
- Ethnic groups with dark skin.

## Children

- Children aged 1 to 4 years should have a daily 10 microgram supplement of vitamin D,
- Babies should be exclusively breastfed until about 6 months old but as a precaution, all babies under 1 year should have 8.5 to 10 micrograms of vitamin D supplement.
- Children who have more than 500ml of infant formula daily, do not need additional vitamin D as formula is already fortified.

Vitamin D supplements are available free-of-charge for low-income families on the Healthy Start scheme.

# What can of Coca-Cola really do to the body?

Just a bit more information, following the article in the June Newsletter about sugar content of various drinks. As we said, the World Health Organisation recommendations are a maximum of 6 teaspoons per day, yet a 12oz can of Coca-Cola contains about 10 teaspoons. So what happens with Coca-Cola and all caffeine carbonated drinks?

- The high amounts of fructose corn syrup, refined salts, and caffeine found in these drinks contribute to high blood pressure, diabetes and obesity when regularly consumed. People who drink 1-2 cans of sugary beverages a day are 26% more likely to develop Type 2 diabetes.

- Within 20 minutes of drinking a 12-oz can of Coca-Cola, blood sugar levels spike causing a burst of insulin to be released.
- Caffeine absorption is complete after 40 minutes causing blood pressure to rise and adenosine receptors in the brain to be blocked preventing drowsiness.
- Dopamine production is increased after 45 minutes which stimulates the reward and pleasure centre of the brain, similar to how heroin works.
- The phosphoric acid masks the sweetness of the drink but binds to calcium, magnesium, and zinc, preventing them from being absorbed and used for processes

such as bone growth.

- After an hour, the diuretic effects of caffeine kicks in causing urinary excretion of the bonded calcium, magnesium, and zinc, as well as sodium, electrolyte, and water.
- Finally, a sugar crash occurs, causing irritability and drowsiness.

(Consumption of sugary drinks in the US, 2005-2008, accessed 31 July 2015 and Harvard School of Public Health, Soft drinks and disease, accessed 31 July 2015) While all this does not mean that these drinks should be completely banned from the public's diet as small amounts will not do any major harm, who wants to consume a drink with such effects?

## Latest on beef insulin discontinuation

As our members are aware, beef insulin is being discontinued because the raw materials, beef insulin crystals, are no longer being made and are not available anywhere in the world.

We have tried to reassure people that pork insulin will remain available, so this is the nearest available option. However, we have been very disturbed by reports from our members that their health professionals have told them that pork insulin is also being discontinued, even worse, those telling their patients this have said they were told this at a health professional conference! Who gives out such misinformation?

**PORK INSULIN WILL CONTINUE TO BE AVAILABLE, SO DON'T BELIEVE ANYTHING TO THE CONTRARY**

### Latest Hypurin® Bovine Insulin predicted depletion dates

Predicted depletion dates are based on current stock and average sales. Right are the latest updates for the withdrawals of beef insulin provided by Wockhardt on January 23rd

Description	Form	Predicted depletion date
Hypurin® Bovine Isophane	3ml Cartridges	<b>Depleted</b> (Dec 17)
Hypurin® Bovine Isophane	10ml Vial	April 2018
Hypurin® Bovine Neutral	3ml Cartridges	September 2018

Description	Form	Predicted depletion date
Hypurin® Bovine Neutral	10ml Vial	December 2018
Hypurin® Bovine Lente (I2S)	10ml Vial	May 2019 (Expiry)
Hypurin® Bovine PZI	10ml Vial	October 2019

## Regular IRN-BRU is reducing its sugar content

From January 2018 IRN-BRU will contain approximately 50% less sugar. The sugar content per 100ml will reduce from 10.3g to 4.7g. For a time old and new products may be on the shelf together so remember to check the label. The manufacturers warn that people with diabetes should be aware of the carbohydrate content change and should seek medical advice.



# FREESTYLE LIBRE AVAILABLE ON THE NHS, BUT IS IT?

In the last Newsletter, we reported that the FreeStyle Libre by Abbott was made available on the NHS from November 1st 2017 for people with Type 1 and Type 2 diabetes. This device checks glucose levels by scanning a sensor worn on the back of the arm without having to prick the fingers, so it is a non-invasive way of checking glucose. It actually checks the glucose levels in the interstitial fluid (the fluid in the cells) and there is a 5 to 10 minute delay in this glucose response to changes in blood glucose. Glucose readings on the interstitial fluid have been proven to reliably reflect glucose levels.

It has been approved for use on the NHS across the UK for people with Type 1 and Type 2 diabetes who are treating their diabetes intensively with insulin. However, prescribing it is subject to local Clinical Commissioning Group (CCG) approval, which runs the risk of a postcode lottery of availability.

We asked Newsletter readers what was happening in their areas when they asked to be prescribed the FreeStyle Libre on the NHS and the results did not surprise us!

- Of all the people who responded, only one succeeded in being prescribed the device.
- All those already using the FreeStyle Libre by paying privately for it were refused it on the NHS. This was despite their reports of improved control, no severe hypos since using it, improved quality of life and comments such as, 'it has transformed my life'.
- Some people were offered a

free reader but only one sensor and then expected to buy them after using this one.

- More than one person has been told that they are 'too well controlled' for the device to be prescribed on the NHS which begs the question of whether this is due to the number of tests they are carrying out per day!

## What were the reasons for refusal?

- The most common was 'It is not being prescribed in this area'.
- Cost.
- Not accurate enough.
- No evidence of benefit.

## Cost

One member sent us their local CCG Position Statement on their reasons for not prescribing the FreeStyle Libre, one of which was cost. Below is the table in their Statement but there is one major fault with it – they are not comparing like with like.

The cost of self-monitoring test strips is the list price charged to the NHS (not the price we pay at the pharmacy) at about £11.00

including lancets. However, the cost for the FreeStyle Libre is worked out on the private cost charged to buy from Abbott at £57.95 but the equivalent list price to the NHS is £35.00! So the prices are not comparing like with like and if they were, then there would only be a difference of about £200 between testing 10 times daily with strips and using the Libre sensors and no difference at all if people test 15 times a day, and some do! Is this a mistake on the part of the CCG and are other CCGs using the same misleading figures?

## No evidence of benefit

It appears that some CCGs are prescribing the FreeStyle Libre for selected patients and monitoring the results and one of the four Regional Medicines Optimisation Committees has put out a Position Statement with recommendations of what information should be collected. So perhaps they will gather the evidence of the benefits which will enable the device to be available on the NHS.

It is hard to resist saying that if the evidence is good enough for the Prime Minister to use the FreeStyle Libre, surely it is good enough for other people with diabetes!

Recommended products for glucose monitoring	Cost per year per person
Self-monitoring strips and lancets – testing 4 times daily	<b>£320</b>
Self-monitoring strips and lancets – testing 10 times daily	<b>£790</b>
FreeStyle Libre sensors estimate with free sensors	<b>£1,511</b>

## Quality of life

Are CCGs best placed to judge about improvements in quality of life? What do they really know about living with diabetes and all this entails? We could make a long list but it is worth remembering that home blood glucose testing first became available in 1981, so some people have been pricking their fingers for over 30 years. Don't they now deserve a painless, non-invasive way of testing?

## What is IDDT doing about this?

Understandably, we have had some very angry calls and emails with demands to take action. IDDT

believes that everyone with Type 1 and Type 2 diabetes using insulin who wants to use this device, should be allowed to do so on the NHS.

There have been several Parliamentary Questions asking why the FreeStyle Libre is not available to everyone but the answers offered no explanations. In order to fight a case, we need to know on what basis these blanket refusals are being made. So we are sending Freedom of Information questions to all CCGs to ask:

- How many requests have you received from people with diabetes to have the FreeStyle Libre glucose monitoring system prescribed since September

2017 (when the announcement was made)?

- How many people have been successful in getting the FreeStyle Libre system prescribed since it was included on the NHS Drug Tariff in November 2017?
- What are the criteria on which decisions about whether people are prescribed the FreeStyle Libre are made and who is responsible for making these criterion-based decisions?

Hopefully, the information provided will enable us to fight the decision to refuse to pay. We will keep you informed.



## Facts you need to know!

### VAT free if buying privately

As the FreeStyle Libre is a medical device, it can be obtained without having to pay VAT when you are purchasing the device or sensors yourself. The way to do this may not be obvious on the website, so the best way is to telephone Abbott to place the order and tell them that you want to apply for VAT exemption, their number is: 0800 1701177. Once registered this way, all future orders will be VAT free.

### FreeStyle Libre and Swimming

One of our members asked if she could wear the sensor while swimming and we thought this may be a question other people may ask. The sensors are water-resistant and can be worn while bathing, showering, or swimming as long as you:

- Do not take it deeper than 3 feet (1 meter)
- Do not keep it under water for longer than 30 minutes at a time.

## Missed hospital appointments 'cost NHS 1bn a year'

Missed hospital appointments are costing the NHS £1bn a year, according to the Chief Nursing Officer, Jane Cummings, who says the cash wasted on missed appointments could be used to fund 250,000 extra hip replacements. Official figures show that 7.9m NHS appointments were missed last year with an average cost of £120 per slot which indicates that around £950m was wasted.

The official figures also show that between June 2016 and June 2017, 90% of hospital beds were classed as "occupied", the highest rate since 2010. This figure has consistently been above the so-called "safe occupancy rate" of 85%.

## NHS diabetes prevention programme update

The NHS diabetes prevention programme has succeeded in signing up significantly more people than expected. (Report in *Diabetic Medicine*, December 2017).

Highlights from the report show:

- The programme received 43,603 referrals between June 2016 and March 2017 – 16% higher than expected.
- Nearly half of those referred to the programme attended their first session – more than the 40% originally planned for.
- Attendance rates for men, for people from black, Asian and minority ethnic groups, and for people from the most deprived areas were higher than expected suggesting that the programme is reaching those who are at greater risk of developing Type 2 diabetes and who access healthcare less effectively.
- Further analysis shows that there has been an additional 70,000 people referred since March with

more than 110,000 referrals to date, so reflecting its growing popularity with the public and healthcare professionals.

In the last 18 months the roll-out has covered three quarters of the country. The aim is to achieve full national coverage next year, with as many as 200,000 people referred and 80,000 on programmes in 2018/19.

## The need for a standardised qualification for nurses specialising in diabetes

Dr Partha Kar, associate national clinical director for diabetes for NHS England, has asked Trend-UK to define the role of the diabetes specialist nurse because of concerns about the variation in skills, competence, experience, titles and problems with recruitment. The co-chairs of Trend-UK (Training, Research and Education for Nurses in Diabetes) also want the role to have a clearer definition and for there to be a single foundation specialist qualification.

At the present time there is no mandatory qualification available for a diabetes specialist nurse so anyone in nursing could call themselves a diabetes nurse. It is hoped that there will be a position statement for 2018 but it appears that the Nursing and Midwifery Council need to be persuaded to support the idea of a diabetes specialist nursing qualification.

## Over £4m spent to bring 50 nurses from Philippines

An overseas nurse recruitment scheme in Northern Ireland has secured just under 50 new staff after nearly two years and has spent £4.2million to do so. There is currently a 1,500 nurse shortage in Northern Ireland.

In May 2016 the Department of Health launched an overseas recruitment scheme to encourage nurses to come from the Philippines

and a small number from India, with the aim of delivering 622 nurses by March 2020. By August 2017, the scheme had cost £566,000 but only secured 12 new nurses. The scheme to recruit 200 international nurses is expected to cost around £10.5m over the four-year period but the expenditure for 2016/17 was £4.2million, nearly half of the £10.5million total allocated for the whole period. So nearly half the budget has been spent and only an eighth of the target number of nurses has been achieved so far!

## NHS hospitals made £174 million in car park charges last year

Overall hospitals made £174m in the last financial year from car parking charges to patients, visitors and staff. Shadow Health Secretary, Jon Ashworth, called the charges an "entirely unfair and unnecessary burden" and that a lack of central government funding was forcing hospitals to drum up more revenue and that "Even Jeremy Hunt has described this outrageous practice as a 'stealth tax.'" The Liberal Democrats described the charges as a "tax on sickness".

The people most affected are people with long-term conditions, such as diabetes, and disabilities who have to regularly attend hospitals. Let's also not forget the staff working in hospitals, many of whom have to pay to park their cars to go to work to care for us all.

A Department of Health spokesman said, "Patients and families should not have to deal with the added stress of complex and unfair parking charges. NHS organisations are locally responsible for the methods used to charge, and we want to see them coming up with flexible options that put patients and their families first."

This is yet another example of local decision-making and no national policy within what is called a National Health Service over which the Secretary of State, Jeremy Hunt, has no control.



# Dodgy slimming pills

The Medicines and Healthcare products Regulatory Agency (MHRA) is working in partnership with Slimming World as part of the Agency's wider FakeMeds Campaign to encourage those wanting to lose weight to turn to safe, legitimate and appropriate routes.

Recent research shows that online sellers of potentially dangerous slimming pills containing withdrawn pharmaceutical ingredients are putting dieters' health at serious risk by attracting them with the promises of quick-fix weight loss and bypassing discussions with their GP and pharmacist. According to a FakeMeds survey involving 1805 slimmers carried out by the MHRA and Slimming World, one in three slimmers have tried slimming pills purchased online. Since April 2013, the Agency has seized nearly £4 million worth of dodgy weight loss pills. The survey showed:

- 77% of slimmers were enticed by promises of rapid weight loss.
- 57% were attracted to being able to order discreetly.
- 44% ordered online because they didn't want to speak to a GP or pharmacist.

## The downside...

Almost two-in-three (63%) suffered unpleasant side effects after taking slimming pills bought online including diarrhoea, bleeding that wouldn't stop, blurred vision and heart problems but of concern is that 81% didn't report these side effects to anyone.

## Reputable groups

There are reputable groups in the community, such as Slimming World and Weight Watchers, which can support people to lose weight through healthy lifestyle changes. Your GP or healthcare professional can advise you on finding the right option for you.

However, if you're looking to buy medicines online, check if the seller is registered by using the following online checking system, [www.gov.uk/fakemedts](http://www.gov.uk/fakemedts) or check if they display the distance selling logo. If you think you've bought fake medical products, please report this via [www.gov.uk/fakemedts](http://www.gov.uk/fakemedts)

## Reporting adverse reactions

Reporting suspected side-effects makes medicines safer and helps save lives. As a result of the 2016 social media campaign run by the EU to raise awareness of adverse

drug reactions (ADR) reporting, there was an increase of 13% and the campaign reached over two and half million people.

Adverse reactions to medicines, whether prescription medicines (including insulin), or over-the-counter medicines can occur at any time and should be reported.

## How to report an adverse reaction

ADRs can be reported by health professionals, pharmacists or patients. Patients can report online at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk) or on a Yellow Card which can be found in pharmacies. Alternatively, they can call the Yellow Card line on 0800 731 6789 (10am to 2pm Monday to Friday only) or write to:

Yellow Card Scheme, Vigilance and Risk Management of Medicines, MHRA, 4.M, Buckingham Palace Road, London SW1W 9SZ

## How does reporting improve patient safety?

Information gathered from Yellow Card reports is continually assessed by experts. If a new side effect is identified, it is carefully considered in light of the overall side effect profile of the medicine and how it compares with other medicines to treat the same condition. Action is taken whenever necessary to ensure that medicines are used to minimise the risks to patients.

# Living with diabetes and depression

The winter months are a time when people are more likely to feel depressed – short days, miserable weather and post-Christmas blues and this is the case without adding diabetes or other conditions into the mix! There is a condition of Seasonal affective disorder (SAD) in which some people are particularly affected by depression in the darker, winter months. This kind of depression goes away when the days are longer but there are other forms of depression which are longer lasting.

**A large survey carried out by Diabetes UK of 8,500 people of different ages, ethnicities and backgrounds from across the UK showed that 3 in 5 people living with diabetes experience emotional or mental health problems as a result of their condition.**

The research showed:

- Emotional wellbeing stood out as a major issue for respondents, with 3 in 5 (64%) saying that they often or sometimes feel down because of their diabetes.
- One in three (33%) said that diabetes got in the way of them or a family member doing things they wanted to do.
- Only 3 in 10 (30%) said they definitely felt in control of their diabetes.



19% had used support or counselling from a trained professional to help them manage their diabetes, and at some point, nearly a third (32%) had used self-help materials, such as books, videos and the internet.

## **But depression is perhaps a stage further.....**

In the general population, as many as one person in three experiences an episode of depression in their lifetime and the presence of other illnesses may complicate or worsen depression. Research shows that people with chronic conditions, including diabetes, are three times more likely to have depression than the general population.

## **Research has shown that depression may occur in:**

- Up to 60% of stroke patients,
- Up to 40% of people with Parkinson's disease,
- Up to 42% of cancer patients,
- Up to 21% of people with irritable bowel syndrome,
- Up to 14-18% of people with diabetes.

Studies also suggest that people with lower HbA1cs tend to have lower levels of depression than those with higher HbA1cs. While it appears there is an association between high blood sugars and depression, it remains unclear whether high blood sugars cause the depression or depression causes high blood sugars.

Research published in 2010 found that:

- people with depression were 17% more likely to develop Type 2 diabetes,
- people with diabetes were 29% more likely to have depression compared with people without diabetes,
- the risk of diabetes was greater

in those with depressed mood, rising to 25% greater in those on antidepressants,

- People with diabetes had a greater risk of depression rising to 53% higher among those treated with insulin. (Arch Intern Med 2010;170:1884-9)

## **The risks associated with a diagnosis of depression in Type 1 diabetes**

Middle-aged people with Type 1 diabetes diagnosed with depression are at least twice as likely to experience a severe hypoglycaemic or hyperglycaemic event requiring an A&E visit or hospitalisation, compared with those without depression. The greatest risk was seen in the first 6 months after a diagnosis of depression.

An analysis of medical records also showed that people with Type 1 diabetes who experienced a hypo- or hyperglycaemic episode were at least twice as likely to later be diagnosed with depression compared with those who did not experience severe hypoglycaemia or hyperglycaemia.

Interestingly, the majority of research on depression and severe hypoglycaemic or hyperglycaemic events has been in people with Type 2 diabetes, despite these events being much more common in those with Type 1 diabetes. People with Type 1 diabetes are about 4 times more likely to experience severe hypoglycaemia and 3 times more likely to experience hyperglycaemia (DKA) than those with Type 2 diabetes. The study involved 3,742 people aged at least 50 years old with Type 1 diabetes between 1996 and 2015 and showed:

- Depression was associated with more than a twofold risk for severe hyperglycaemia and a



near doubling of risk for severe hypoglycaemia and this risk was markedly stronger during the first 6 and 12 months after a depression diagnosis.

- People with diagnosed depression were 5 times more likely to experience a severe hyperglycaemic event and 4 times more likely to experience a severe hypoglycaemic event in the first 12 months vs. those without a depression diagnosis.
- People with Type 1 diabetes who did not have depression at the beginning of the study but subsequently experienced severe hyperglycaemia, were more than twice as likely to be diagnosed with depression during follow-up as those who did not experience severe hyperglycaemia.
- Patients without depression at the start of the study but who experienced a severe hypo, were 75% more likely to be diagnosed with depression compared to those who did not experience severe hypoglycaemia.

The researchers concluded that as the risk for severe hypo- and hyperglycaemic events was especially high during the first year after depression diagnosis, it is important for clinical staff to be vigilant during this vulnerable period. (Diabetes Care, December 2017)

### The practical aspects... Signs of depression include the following:

- No longer enjoying or being interested in most activities.

- Feeling tired or lacking energy.
- Being agitated or lethargic.
- Feeling sad or low much of the time.
- Weight gain or weight loss.
- Sleeping too little or too much.
- Difficulty paying attention or making decisions.
- Thinking about death or suicide.

If you have some or all of these symptoms over two weeks or more, then you should see your doctor.

### The need for diagnosis

It is estimated that in up to three quarters of people with diabetes, depression may go undiagnosed. This may be because of poor detection rates but it could also be that some people with diabetes don't report their symptoms of depression because they see them as 'just part of having diabetes'.

In the UK, the Department of Health recommends that all GPs use two simple questions to screen for symptoms of depression, in their patients, including those with diabetes. These questions are:

- During the last month, have you been bothered by feeling down, depressed or hopeless?
- During the last month, have you often been bothered by having little interest or pleasure in doing things?

If people answer 'yes' to either of these questions, they are given a questionnaire to answer to measure the extent and nature of the symptoms. So if you answer 'yes' to the two questions above or you have more mild symptoms, you are not alone and the clear message from research is to seek help from your doctor because there is a good chance that your life will improve. It is important that similar methods are used in diabetes hospital clinics where many people with Type 1

diabetes receive their treatment.

### How does depression affect people with diabetes?

Research using questionnaires has shown that depression in people with both Type 1 and Type 2 diabetes may have the following effects:

- They are less likely to eat the types and amounts of food recommended.
- Less likely to take all their medications.
- Less likely to function well, both physically and mentally.
- Greater absenteeism from work.

### Treatment

Treatment for depression in people with diabetes has been shown to be effective and has the additional benefits of improving blood sugar control. The evidence suggests that cognitive behaviour therapy and anti-depressant medicines are as effective in people with diabetes as in those without diabetes. One study found that not only did treatment improve blood sugar control but during treatment there was an improvement in mood and weight. As the treatment of depression can improve blood sugar control, it is also likely to reduce the risk of complications but importantly, it can also improve quality of life.

It is also well recognised that exercise helps to reduce depression, so although it may be the last thing that people feel like doing, it is worth increasing the amount of exercise being taken.

**Note: IDDT has two booklets that may be helpful: 'Diabetes, Anxiety and Depression' and 'Diabetes and Exercise'. If you would like copies, please call IDDT on 01604 622837 or email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org)**

# Laughter is good for you

We published this article in a 2007 Newsletter but it is worth revisiting.

We all know that laughter makes us feel better and this is because even for a few minutes, we are forgetting our troubles. So it appears that laughter improves our quality of life or does it? The research on laughter and its effects is mixed and there is not that much of it. Some 'humour experts' believe that laughter actually stimulates the immune system to help to ward off infections and illness. There is research that shows:

- People who survive one heart attack are less likely to have a second if they have 30 minutes humour a day.
- Laughter has been shown to stimulate the levels of steroid chemicals in the blood that are associated with stress.
- It has also been shown to improve the tolerance levels of pain.

However, the psychological aspects of humour are its best use. Often we use humour as a coping mechanism – it can defuse stress, humiliation, embarrassment and it can also help us to cope with pain. At the right time humour can be helpful, even in awful situations but if used inappropriately it can be destructive.

The research into humour is not conclusive. For instance 40% of people with heart disease are less likely to laugh in funny situations than people without heart disease, so does this mean that humour prevents heart disease or that people with heart disease lose their sense of humour?

Research evidence or not, perhaps we should all carry on believing what we have been told from the cradle, that laughter is good for us and it certainly helps to make the world seem to be a happier place.



## THE IDDT'S LOTTERY DRAW WINNERS

We are delighted to announce the winners of the draw of our monthly lottery for November 2017. They are as follows:

**1st prize of £455.28**

goes to Dorothy from Doncaster

**2nd prize of £341.46**

goes to Susan from Milton Keynes

**3rd prize of £227.60**

goes to Anon. from Newcastle upon Tyne

**4th prize of £113.80**

goes to Ruth from Alton

**Winners of the December 2017 draw are:**

**1st prize of £462.40**

goes to Jane from Farnborough

**2nd prize of £347.04**

goes to Avice from Cheltenham

**3rd prize of £231.36**

goes to John from Dryslwyn

**4th prize of £115.68**

goes to Anon. from London

**Winners of the January 2018 draw are:**

**1st prize of £469.92**

to John from Farnborough

**2nd prize of £352.20**

goes to Barbara from Kirkheaton

**3rd prize of £234.96**

goes to Anon. from Chorley

**4th prize of £117.48**

goes to Anon from Middlesbrough

Note: the winners of the draws for February, March and April will be announced in our June 2018 Newsletter and will be available on our website.

**In 2017, the Lottery raised over £7800.00 to help to fund IDDT!**

**A huge 'Thank You' to everyone who has supported 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](mailto:jo@iddtinternational.org)

# From our own correspondents

## More on toenail cutting

Dear Jenny,

Further to the letter in the December Newsletter about toenail cutting and this being carried out by Age Concern, your readers may not be aware that if you are taking blood thinners, such as heparin or warfarin, then Age Concern cannot cut toenails.

As a result of this, my husband is still left with no podiatry service on the NHS and we are now appealing to the local CCG.

**Mrs M.H. - Kent**

## Benefit cuts and Type 1 diabetes

Hi Jenny,

Like others, I have had my benefits cut through government policy and I know others who are awaiting payments. In these situations, there is no allowance made for people with Type 1 diabetes. While insulin is free on the NHS, we need sufficient food in conjunction with it – one is no good without the other!

I highlight the case of David Clapson, who had Type 1 diabetes and sadly died within 18 days of his benefits being stopped. He had worked for 30 years, served 5 years in the army and gave up work to look after his mother with dementia. After her death, he was applying for jobs but he missed attending the Job Centre and his benefits were stopped. He died of diabetic- ketoacidosis, no food in his stomach and only £3.44 in his pocket.

Are health conditions not taken into account when these decisions are made?

**By email**

## C-peptide test after 47 years

Dear Jenny,

Recently I went to my diabetic clinic and I was given a new blood test, called the C-peptide test, which apparently gives the doctors an indication of the amount of insulin my pancreas is able to make itself.

I have had Type 1 diabetes for about 47 years, so there can surely be little doubt that the insulin capabilities of my pancreas ceased a very long time ago. I cannot see what benefit such a blood test would have for me, or indeed, for anyone with longstanding Type 1 diabetes. Surely this is a waste of very valuable NHS funds?

**Mr E.J. - Scotland**

## Received on New Year's Eve!

Dear Jenny,

All the best for the New Year and to all at the IDDT. After over 50 years on beef insulin, sitting here comfortably with my pork insulin !!!!!!!

**By email**

## Diabetes – Everyday Eating

Dear Jenny,

At the beginning of December 2018, I was advised I was pre-diabetic and the nurse suggested that I joined a diabetes prevention programme and she also gave me a copy of your booklet, Diabetes – Everyday Eating. I found the 4 week menu plan extremely helpful, so much so that by the first meeting a month later, I had lost 2 kgs. Please could the other members of the group have copies too!

**Miss M.E. - North East**

*Note: this is by far our most popular booklet and we are happy to supply it free of charge.*

## If you have a smart phone...

Dear Jenny,

I noticed the product Solesee in the December Newsletter and I think this is excellent for patients who cannot bend down or raise their legs. I fall into that category but have come up with another solution that may benefit your members. If you have a smart phone and a selfie stick try doing a selfie of the sole of your foot. This can then be retained for future reference to show your health professional if there are any problems.

**By email**

*Note: C-peptide is produced in the pancreas at the same time as insulin, so the test is used to check whether or not people are producing their own insulin. In grey areas where it is not clear whether people have Type 1 or Type 2 diabetes, the C-peptide test is used. For example, Type 1 diabetes is usually diagnosed at a younger age but it can occur in older people and the C-peptide test helps to ensure the diagnosis is correct. So if the test shows C-peptide is not present, then the person is not producing insulin and therefore is likely to have Type 1 diabetes.*

# The late Colin Johnson

Colin lived through 67 years of diabetes before his death in August 2017 and has supported IDDT for many years. He never really came to terms with his diabetes and always resented the effects it had on his life but he learnt to stay well by living well, getting to know his body so that he could respond appropriately to its signals - when he chose to do so. He was always as active as he could be, both mentally and physically, working in the woodland burial ground he co-founded with his partner Arabella after the loss of one foot and other disabilities resulting from MRSA contracted in 2000.

He was an exceptional man in many ways. Despite leaving school at the age of 14 to join the local fairground, Colin became a design engineer, responsible,

among other things, for the legendary Ford Cortina gearshift which set a new standard for car gearboxes. He designed buildings using radical new techniques and the then-novel material of GRP (fibreglass), but left this career when he became involved in the Alternative Press in the late 60's, setting up a wholesale and distribution business which became the main outlet for radical publishing.

Deliberately bankrupted by the mainstream press in 1977 (who saw his libertarian attitudes as a threat to their business), Colin moved with his partner Arabella Melville to South Wales, from where he started industrial co-operatives before becoming a writer. *Cured to Death: the Effects of Prescription Drugs* was published in 1982 to considerable

acclaim.

Colin continued writing books and articles (sometimes jointly with Arabella), mainly about health, politics, and the environment, for the next fifteen years, after which he decided it was time to get an education. Despite having no qualifications whatever, he was offered a place by Hull University to study philosophy and was awarded an MA in 1998. His last book, *Creating Health*, was based on his Master's dissertation.

He responded characteristically to his brush with death in 2000 by setting up The Eternal Forest Trust, a charity dedicated to natural woodland and offering woodland burials. The wood at Boduan in North Wales opened to the public in 2007 and Colin was buried there ten years later.

## PREGNANT WOMEN WITH DIABETES NOT GETTING THE SUPPORT THEY NEED

In a press release, the Royal College of Midwives expressed their concerns about the findings of the National Pregnancy in Diabetes Audit 2016 which showed that many women with diabetes are not getting the support they need before and during pregnancy. The report, published in October 2017 by NHS Digital, measured the quality of care and outcomes for women with pre-gestational diabetes who were pregnant in 2016.

The audit which covered England, Wales and the Isle of Man, looked at 3356 pregnancies in 3297 women across 172 antenatal diabetes services. Of these women, 1608 had Type 2 diabetes.

It showed:

- The stillbirth rate for women with diabetes is twice as high as that of the

general population, and the neonatal death rate is more than four times as high.

- Nearly half of the babies born to women with Type 1 diabetes, and nearly a quarter born to women with Type 2 diabetes were larger than gestational age.
- Few women living with diabetes are well prepared for pregnancy, with only one in 12 women (8%) achieving all three key recommended pre-pregnancy health measures.

**Note: IDDT has a booklet, 'Pregnancy and Gestational Diabetes' which we are happy to supply free of charge, just contact IDDT on 01604 622837, email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org) or write to IDDT, PO Box 294, Northampton NN1 4XS.**

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# Jeremy Hunt Watch

## Cabinet reshuffle - Jeremy Hunt to remain

In the Cabinet reshuffle in early January, Jeremy Hunt refused to take another job and so not only remains as Secretary of State for Health but now also takes responsibility for Social Care. So his official title is Secretary of State for Health and Social Care - not an enviable task in today's climate!

## Jeremy Hunt taken to judicial review

Professor Stephen Hawking and leading healthcare professionals have won permission to take Jeremy Hunt and NHS England to court over proposals to restructure the NHS. Mr Hunt has put forward a plan which could allow commercial companies to run health and social services across a whole region in what some would call back-door privatisation. They have argued that an act of parliament is required to change the law before this could be implemented and regulations changed.

Not unexpectedly, lawyers from the Department of Health and NHS England have rejected these claims but a court has now ruled that a full judicial review will be granted to find out how lawful Mr Hunt's proposals are.

In the proposals, the boundaries between different parts of the NHS that pay for and provide care, such as hospitals, GPs and clinical commissioning groups, would be dissolved.

Responsibility for patients in these areas would then be held by new bodies, called Accountable Care Organisations (ACOs). This could lead to newly merged NHS super-organisations or a non-NHS body being awarded contracts to manage and provide entire packages of care as the ACOs could choose to subcontract the service or provide it themselves.

Those campaigning for the judicial review say that this would allow ACOs to control allocation of NHS money but the accountability for spending it and their obligations to the public would be under commercial contracts and not parliament.

Even as mere patients, we have to say that the last changes by this government were only made in 2012/13 and how successful have these been? Yet here we are again, with more changes which appear to be getting rid of some of those made only a few years ago! With billions of pounds of tax payers' money being spent, we need to know that the changes are firstly, legal and secondly, will benefit everyone using the NHS. Finally, depending on your political persuasion, moves to privatise the NHS, albeit by the back door, mean that somewhere a slice is being taken off the top for commercial company profit. Time will tell....

## Plans to boost the number of 'home- grown' doctors

Jeremy Hunt plans to train an extra 1,500 doctors a year from 2018/19, which is the largest



ever increase of the NHS medical workforce. It is part of a drive to increase the number of UK trained doctors to reduce the reliance on foreign doctors after Brexit.

Part of the plan is a 'return to service' scheme whereby doctors would repay some of their training costs if they refuse to remain working in the NHS. A public consultation will consider the length of service required between two and five years, while officials will set a proportion of repayment.

Taxpayers pay around £230,000 to train each doctor in addition to the fees paid by the students themselves and Mr Hunt said, "By expanding our supply of home-grown doctors and proposing that they serve patients in the NHS for a minimum term, we will ensure taxpayer investment in the NHS is returned".

## Animas stopped selling insulin pumps in the UK and Ireland

Animas, a leading manufacturer of insulin pumps has stopped making and selling insulin pumps in the UK and Ireland. The company, owned by Johnson and Johnson, announced in October 2017 that they were leaving the insulin pump business in the US.

They will continue to offer pump support, providing pump supplies and upholding its warranty support for the Anima Vibe for a transition period. Pump supplies will be available until the end of the pump's 3-year warranty.

The transition period gives people time to change to a different pump and Animas are recommending that people change to the Medtronic pump, although they do not have to change to this brand.

Animas encourages users of the Animas Vibe with any questions to contact the Animas Customer Support team on 0800 0288039 (UK users) or 1800 812715 (Ireland users).

Note: Animas has stated that the closing of their UK insulin pump business will not affect LifeScan (makers of the OneTouch blood glucose monitoring products), Dexcom (continuous glucose monitors) or Diasend (data sharing software) products.

## Smart insulin

In September it was announced that Eli Lilly and Company are acquiring Glycostasis, Inc., a new company aiming to create "smart insulin." Lilly's intention is to develop the technology further.

"Smart insulin" consists of a molecule that attaches to insulin and only releases insulin when blood glucose levels rise past a

certain level. This would allow insulin to more closely mimic how the molecule is controlled in people without diabetes. The response of this drug is rapid and proportionate to glucose levels and has the potential to do away with the need for insulin injections and glucose monitoring. It could also protect people from hypoglycaemia by lowering insulin levels as blood glucose levels decrease. There is still a long way to go.....

## Oral insulin

Biopharmaceutical firm Biocon has received funding from the Juvenile Diabetes Research Foundation (JDRF) in the US to test its oral insulin, Tregopil, on people with Type 1 diabetes. The JDRF will fund Biocon's global multiple ascending dose study of oral insulin to evaluate the safety and tolerability in people with Type 1 diabetes.

Another insulin manufacturer, Novo Nordisk, withdrew from producing oral insulin in 2016 but Biocon announced positive clinical data in 2016 for insulin Tregopil following a set of Phase I studies carried out in the US. One of the studies showed that the fast action of Tregopil showed distinctive properties compared to other mealtime insulins, so Biocon has decided to carry out further clinical trials in larger numbers of patients.

## Another insulin copy

Admelog made by Sanofi has been approved by FDA in the US as follow-on biologic of Lilly's Humalog. Admelog is an insulin lispro injection and a treatment for adults with Type 1 and Type 2 diabetes and children with Type 1. It is the first biologic version of Humalog, the fast-acting insulin by Lilly. (11th December 2017)

## Roche has acquired distribution rights to an implantable long-term continuous glucose monitoring system.

Roche will sell the Senseonics' Eversense CGM system implant in Germany, Italy and the Netherlands and has options to expand to other countries. The Eversense combines a small sensor that works for up to 90 days, a wearable, removable smart transmitter and mobile application. It is inserted below the patient's skin and communicates with the smart transmitter, which then wirelessly sends blood glucose results to the mobile app.

## A new mobile app for people with Type 2 diabetes using insulin from Sanofi

This new tool, described by Sanofi as a 'digital insulin titration solution', will be a mobile app that assists people with Type 2 diabetes on basal insulin (long-acting) with decision-making and self-management. The app will allow remote monitoring by the person's health care team and is due to be piloted in North America and several European countries. Last year the new app received regulatory approval in the US and the European CE mark.

## A new technology that stops the need for insulin injections

A new way of administering insulin could eliminate the need for injections. A capsule of genetically engineered cells implanted under the

skin to release insulin as required, has been tested in mice.

As we know, scientists have attempted to artificially cultivate pancreatic cells from patients' stem cells but they have struggled to manufacture the cells at the scale necessary for clinical use and the cells naturally tend to die off once introduced into the body. However, in this research human kidney cells, known as HEK cells, were re-engineered to perform the function normally carried out by the pancreas. Two genes were introduced into the cells – one to make them sensitive to glucose levels and a second to instruct the cell to pump out insulin when glucose levels exceeded a threshold.

If this proves as safe and effective in human beings, then people with diabetes could be given an implant that would only need to be replaced three times a year.

Diabetic mice have been treated with the cells and found to have normal blood glucose levels for several weeks. The researchers hope to have a licence to test the cells in humans within 2 years. (Science, December 2016)

## Researchers developing ways to make lab-grown insulin-producing cells safer

It is thought that the future treatment of Type 1 diabetes is likely to come from living cells that can produce and release insulin inside the body and scientists have been using new techniques to allow human stem cells to grow an unlimited number of insulin-producing beta cells. The advantage of this is that living cells have the potential to directly respond to changing blood glucose levels and release insulin as needed to keep glucose levels stable.

Researchers from the Copenhagen University are developing a way to purify the cells to eliminate the

risk of them developing tumours and growing uncontrollably. The type of cells being used are human pluripotent stem cells and the researchers have found that the cell surface protein glycoprotein 2 allowed them to isolate the pancreatic endoderm cells. From these purer cells, the researchers were able to obtain a purer sample of cells which could increase their effectiveness and safety when implanted into humans. (Cell Reports Journal, August 1st 2017)

## A wearable patch to control Type 2 diabetes

Researchers at the US NIH's National Institute of Biomedical Imaging and Bioengineering are working on an alternative therapeutic approach to regulating blood sugar levels for people with Type 2 diabetes using a painless wearable skin patch that can last up to several days.

A proof of concept study was performed in mice to test the ability of the patch to respond to blood chemistry and manage glucose automatically. It uses the fact that people with Type 2 diabetes can still produce some insulin.

To make the experimental patch an alginate is used. This is a sticky natural substance that is extracted from brown algae mixed with a formula of biochemical particles that stimulates the body's insulin production when it's needed and shuts off when normal blood sugar concentration is obtained. This is all poured into a microneedle form to create the patch. The dissolvable microneedles make the patch a responsive delivery system for the therapeutics to be absorbed by the body over a period of time and not all at once.

The study showed that just a half inch square of the patch on mice could control blood sugar levels for a week. Researchers said the patch needs to be modified for use with human skin including increasing the size and extending the microneedle. (Nature Communications, November 2017)

## Soft contact lens to measure glucose levels

This is not the first contact lens to be developed to measure glucose levels, the South Korean researchers say this device addresses a lot of the problems encountered with the first lenses. They believe the first lenses were too rigid and the electronics too brittle so the new device is more stable, comfortable and less prone to breaking. Previous attempts also hindered vision and could damage the eye.

The lens works by measuring glucose in tears and transmitting the results wirelessly to a handheld device. An LED display has been embedded in the lens, which emits a non-intrusive light if glucose levels become too high. The LED display can be emitted into the eye of the user or into the opposite direction.

Up to now it has only been tested on animals but no signs of discomfort have been observed. It has yet to be tried in humans and is unlikely to be available commercially for at least 5 years. (Science Advances, January 2018)

## The importance of oral hygiene in Type 2 diabetes

A study has shown that people with Type 2 diabetes who received oral health instructions and underwent deep cleaning of their teeth and gums had significant improvements in HbA1c levels and fasting plasma glucose after 3 and 6 months compared with no improvements in the control group that received regular cleanings. The research took place in Spain and involved 90 adults and found that the improvements correlated with oral bacteria levels, and that the non-surgical treatment of periodontitis led to improved blood glucose control and HbA1c levels. (Journal of Clinical Periodontology, February 2018)

# Parents Part

## Chronic illness in children linked to mental health issues later

A study at the University of Sussex found that childhood chronic illnesses can cause emotional and mental health problems in adulthood. Thirty seven studies involving 45,000 people were analysed and a link was found between 8 chronic conditions and emotional problems later in life. The chronic conditions included asthma, cancer, chronic renal failure, congenital heart diseases, cystic fibrosis, Type 1 diabetes, epilepsy and arthritis.

All of those reviewed who experienced chronic conditions in childhood were at an increased risk of developing depression or anxiety and emotional problems that continued through adulthood. Cancer was particularly associated with depression but when this was removed from the analysis, the link was still there. So it is not just cancer that is associated with adult emotional problems. (University of Sussex, May 12, 2017)

## Children with Type 1 diabetes and asthma need more insulin

Results from an observational study involving 51,926 children in Germany and Austria found that those with asthma and

Type 1 diabetes (1755) are more likely to require a higher insulin dose, are shorter in height as adults and have a higher BMI than those with Type 1 diabetes that do not have asthma. Those with both conditions were more likely to be boys (61% versus 52%), were older and had a longer diabetes duration and were more often using insulin pump therapy than a conventional insulin regimen.

There were no between-group differences for HbA1c, but those with Type 1 diabetes and asthma experienced more severe hypoglycaemia compared to those without asthma.

There was a difference in medication to treat asthma with 62% on specific medications:

- 28% were prescribed inhaled corticosteroids,
- 24% were prescribed sympathomimetic drugs,
- 6% were prescribed leukotriene receptor antagonists,
- 4% used unspecified drugs.

Researchers found that patients prescribed sympathomimetic drugs had a higher average HbA1c (8.42%) compared to those prescribed inhaled corticosteroids (8.18%) and leukotriene receptor antagonists (7.97%).

The study also found that the prevalence of asthma in children with Type 1 diabetes was lower compared with the general population, 3.4% versus 4.7%. However, this was not the case in studies carried out in the United States where there was a higher prevalence of asthma in adolescents with Type 1 diabetes compared to the general population, 10.8% versus 8.7%. It has been suggested that as being overweight is a risk factor for developing asthma, this could be an influencing factor for the higher prevalence of asthma in young people with Type 1 diabetes in the United States. (Pediatric Diabetes, December 2017)

## The Adverse Childhood Experiences (ACE) Study

Nearly 20 years ago the above study broke new ground by showing a strong relationship between adverse childhood experiences (ACEs) and health-risk behaviour and disease in adulthood. In November 2016, Public Health Wales published a report that focused on the relationship between ACEs and chronic disease based on questions answered by more than 2000 adults about their experiences of maltreatment and household dysfunction as children.

Almost half of those surveyed had experienced one ACE and 14%



experienced 4 or more ACEs. In this high risk group, the rate of adults diagnosed with chronic diseases was more than twice as high as that of adults with no ACEs but interestingly, more than 4 times higher for people with Type 2 diabetes.

One of the aims of this study was to understand which communities in Wales are most affected by ACEs so that support services can be directed accordingly.

### **DKA at diagnosis of children with Type 1 diabetes increases the risk of higher HbA1cs later**

A 14 year study in the US has shown that children who had diabetic ketoacidosis (DKA) when diagnosed with Type 1 diabetes had HbA1c levels that remained 0.3 to 1.0% higher throughout the 14-year study period when compared with those who had milder symptoms at diagnosis. Researchers used 3,364 children aged 0 to 17 years and also found that those who presented with DKA were less likely to have first-degree relatives with Type 1 diabetes and were more likely to be younger and more often from ethnic minorities. (Diabetes Care, July 2017)

### **Change in gut bacteria may precede Type 1 diabetes in kids**

A small study found that in some young children who develop Type 1 diabetes there can be a change in normal stomach bacteria for up to a year before the condition is diagnosed. The study was carried out in 33 children at an increased genetic risk of Type 1 diabetes.

Experts stress that it is too early to know what this could mean. One hope is that this could lead to an early diagnostic test for Type 1 diabetes or the possibility of

developing new treatments for Type 1 diabetes that would target the gut system.

In the study, by the age of 3 years four children who went on to develop diabetes showed a decline in 'good bugs' that produce beneficial fatty acids, and an increase in organisms linked to inflammation. It is not clear whether that change in the gut helps to cause the abnormal immune reaction which causes Type 1 diabetes or results from it. This requires further research. It is equally not known whether this happens in older children and adults with Type 1 diabetes because being diagnosed at the age of three is fairly rare. (Cell, Host & Microbe, Feb 5, 2015)

### **Risk of Type 1 diabetes with early infections in children**

A German study has shown that children who had a respiratory or viral infection during the first six months of life had a 17% and 19% increased risk respectively, of developing Type 1 diabetes later, compared with those who had no infection. Researchers involved 295,420 babies born in Germany between 2005 and 2007 and found that 96.7% of those with Type 1 diabetes had at least one infection in the first two years of their lives. (Journal of the American Medical Association, May 3rd, 2016)

### **Perception of Type 1 diabetes is worse in adolescent girls than boys**

Teenage girls with Type 1 diabetes are more likely to have negative perceptions of the condition than teenage boys, according to a study carried out in Norway. Researchers at Oslo University Hospital, Norway stress that a tailored treatment approach could be warranted for males and females with Type 1 diabetes.

The researchers looked at 105 males and females all with Type 1 diabetes and between 12 and 20 years with the aim of investigating psychological barriers to achieving optimal insulin treatment therapy, such as illness perceptions and coping strategies. The researchers focused specifically on gender differences and type of treatment: 66% used insulin pumps and 34% used insulin pens.

The participants completed 3 questionnaires and diabetes clinical information was collected from the Norwegian Childhood Diabetes Registry.

- On the brief illness perception questionnaire, girls had a higher score, meaning they had significantly more negative illness perceptions.
- Females also scored significantly higher than males for concerns about insulin but there were no differences between boys and girls for perception of insulin necessity.
- Those using an insulin pen had more negative views on treatment control than those using an insulin pump.
- On the whole, although girls tended to be more concerned about insulin and their condition, girls were found to score significantly higher with the positive coping strategies of 'being social' and 'solving family problems'.
- The researchers concluded that addressing psychological aspects may be a clinically important supplement to standard care and the consistent finding of gender differences in psychological measures implies that a tailored treatment approach for males and females with Type 1 diabetes may be warranted. (BMJ Open Diabetes & Care, July 12th 2016)

# Bits and pieces

## Teenagers with diabetes, statins and ACE inhibitors

Research carried out in the UK looking at 443 adolescents with Type 1 diabetes found that statins, ACE inhibitors or both had no effect on glomerular rates, albumin excretion changes or progression to retinopathy. (The New England Journal of Medicine, November 2017)

## Higher use of statins increases the risk of Type 2 diabetes

Researchers found a higher likelihood of developing Type 2 diabetes among at-risk adults who were treated with statins before being diagnosed with diabetes. The study involved 3,234 people in the Diabetes Prevention Program Outcomes Study and showed that a longer duration of statin use was associated with a higher diabetes risk among those in the lifestyle intervention group than those in the metformin and usual care groups. (BMJ Open Diabetes Research & Care, October 2017)

## Porridge or statins?

In November the Newspapers had various headlines about porridge being a better option to lower cholesterol than statins. This was based on the views of Professor Chris Seal from Newcastle University from various studies showing that porridge is low in fat, high in fibre, low in sugar and contains minerals and B Vitamins. It is also high in beta glucan which is a soluble fibre that forms a thick gel in the stomach which reduces the appetite after eating while lowering the absorption of low-density lipoprotein (LDL or bad cholesterol).

According to studies, eating 3g of beta glucan a day (found in a 70g bowl of porridge) can reduce LDL cholesterol by approximately 7%, similar to the effects of statins. Beta glucan also forms acids including butyric acid which has an effect on the DNA of cells in the colon, so having an anti-cancer effect.

Professor Seal believes that if everyone started the day with porridge, it would have a significant benefit on public health as the effects of beta glucan have the potential to rival those of statins with no side effects.

## Use of mouthwash linked to the risk of diabetes

A study has found that adults who used mouthwash at least twice daily had a significantly increased risk of developing 'pre-diabetes' or diabetes, compared with people who used mouthwash less frequently or those who never use it. The researchers analysed information from 1,206 overweight or obese adults without diabetes or major cardiovascular disease, aged 40 to 65. (Nitric Oxide Journal, June 2017)

## Study links glycaemic control to reduced CVD risk in Type 1 diabetes

Researchers evaluated 952 Type 1 diabetes patients and found an association between better blood glucose control and a reduced risk of developing cardiovascular disease among those who had the condition for a longer period. The researchers also emphasised that exercise could help to prevent the risks of cardiovascular disease and all-cause mortality. (The Journal of Clinical Endocrinology and Metabolism, July 2017)

## Diabetic peripheral neuropathy in young people with diabetes

Research has shown that 7% of young people with Type 1 diabetes and 22% of young people with Type 2 diabetes had diabetic peripheral neuropathy (DPN). The risk of DPN was associated with glycaemic control in those with Type 1 diabetes but not in those with Type 2 diabetes. The study involved 1,992 young people with diabetes and found that there was an almost twofold increase in the prevalence of DPN with every 5-year increase in the duration of diabetes in both Type 1 and Type 2 diabetes patients. (Diabetes Care, July 2017)

## Should there be routine screening for erectile dysfunction in diabetes?

A French study suggests that men with diabetes should be screened for erectile dysfunction as part of a routine assessment of their cardiovascular health. The researchers carried out a meta-analysis of 145 studies involving 88,577 men with an average age of 56 and found a higher prevalence of erectile dysfunction among those with Type 2 diabetes than men with Type 1 diabetes. They also showed that the risk of the condition increased after age 60. (Diabetic Medicine, July 2017)

## HbA1c variability tied to intensive treatment in Type 2 diabetes

UK researchers found that adults with Type 2 diabetes who were prescribed triple oral therapy or insulin therapy had greater odds of having higher HbA1c than those who received monotherapy or dual therapy. The study involved 10,130 adults from the Scottish Care Information-Diabetes Collaboration and also showed that those in the high and low average HbA1c groups treated with triple therapy or insulin therapy had an increased risk for HbA1c variability, compared with those treated with diet alone. (Diabetic Medicine, August 2017)

## Reducing medicines in elderly people

Doctors in Australia are suggesting that elderly people may be taking too many medicines. They have suggested that 'polypharmacy' (taking many medicines) is a growing threat to Australia's ageing population.

Two articles make a case for doctors to consider a careful trial of withdrawing potentially unnecessary medications, particularly in elderly people and those taking 10 or more medicines. They suggest that drugs initially prescribed appropriately can become inappropriate with ageing and new medical conditions. In Australia, 20% of older people take 10 prescription or over-the-counter drugs and there is an 82% risk of adverse events with people taking over 7 drugs..

While many people benefit from taking multiple drugs, many others suffered adverse effects. Potentially inappropriate medicines included cardiovascular drugs, anticoagulants, hypoglycaemic agents, steroids and antibiotics, which accounted for large numbers of adverse drug events as a result of misuse.

The researchers found that up to 30% of hospital admissions for patients over 75 years were medication related and up to 75% were potentially preventable. Polypharmacy in older people is associated with the following.

- Decreased physical and social functioning.
- Increased risk of falls.
- Delirium and other geriatric syndromes.
- Hospital admissions and death.
- Reduced adherence to taking essential medicines.

Some of the barriers to de-prescribing are:

- Lack of understanding by patients and doctors that polypharmacy can cause harm.
- Various incentives to prescribe.
- Reluctance by doctors and patients to remove medicines because of possible adverse consequences and uncertainties about strategies for their removal.

The researchers said that patients should be monitored in the same way after de-prescribing as they would be after a new drug was prescribed. They also said that reducing medicines is the same as prescribing them – there are risks and benefits, it needs monitoring and it is done to improve outcomes for the patient.

Of course, they do comment that de-prescribing is cheaper, but from a patient perspective, it is worth remembering that drugs are not always removed for this reason, it could be that it is better for us. (MJA Insight, Sept 2014)

# SNIPPETS

## Screen time before bed may reduce sleep, increase BMI in youths

Children who watched TV or played video games before going to bed had 30 minutes less sleep on average but those who used cellphones or computers before bed, received an hour less sleep on average, compared with those who didn't use such devices. The findings also showed an association between increased technology use before bedtime and higher body mass index. (Global Pediatric Health, December 10th 2017)

## Dietary behaviour may be tied to academic achievement in children

Australian research has shown that young people who ate vegetables every night scored significantly higher on most parts of a standardized academic test when compared with those who didn't eat vegetables. The findings also showed higher writing scores among those who ate more fruits but lower test scores, especially in reading, among those with increased sugary drink intake. (Appetite, July 2017)

## Link between menopause age and Type 2 diabetes risk

A Dutch study has found that early onset of menopause was associated with an increased likelihood of developing Type 2 diabetes when compared with late menopause. The findings were based on 3,639 women and showed the risk for Type 2 diabetes was lower with every additional year in age at natural menopause. (Diabetologia, July 2017)

## Men with high life satisfaction at lower risk of Type 2 diabetes

German researchers evaluated data from two population-based surveys involving 7,107 adults with an average age of 47.8 years, and found that men with high life satisfaction had a 28% lower risk of developing Type 2 diabetes than those with medium or low life satisfaction, but no association was found between life satisfaction and diabetes risk among women. (Diabetes Medicine, December 2017)

## Teenagers more likely to eat junk food after TV Adverts

According to Cancer Research UK, teenagers who watch more than three hours of commercial TV a day are more likely to eat hundreds of extra junk food snacks. Their report maintains that being bombarded with TV adverts for unhealthy, high calorie food could lead teenagers to eat more than 500 extra snacks like crisps, biscuits and fizzy drinks during a year compared to those who watch less TV. The findings were from a YouGov survey questioned 3,348 young people between the ages of 11 and 19 and it shows the power of advertising!

## Spicy food may lower salt intake

A study found that people who ate the most spicy food ate 2.5gms less of salt per day and had lower blood pressure than those who ate a bland diet. The researchers suggested that spicy food may make people more salt-sensitive, so reducing the amount of salt they eat. (Hypertension, October 2017)



## A Couple of Thank You's

### Christmas Cards

We would like to say a big thank you to all of you who bought our Christmas cards last year. We sold over 700 packs and every pack sold raises funds that help us continue our work. We will be selling cards again later this year and hope you will buy your cards from us again.

### Helping Developing Countries

As you may be aware IDDT acts as the UK arm of an organisation called Insulin for Life, collecting unwanted insulin and diabetes supplies and sending them out to developing countries, in our case Tanzania. In 2017 we sent out over 4,100 pens, vials cartridges etc. of insulin worth over £45,000, along with over 104,000 items of various diabetes supplies – so a big thank you to all of you who donated items.

We would also like to say thank you to all of you who continue to sponsor a child looked after by the Dream

Trust in India – last year you raised over £7,000! We also need to thank the Dream Trust for their support for World Diabetes Day. The day was celebrated by educating diabetic children with diabetes and their parents through lectures and interactive session. It was jointly organized by AMS, & DAI, Dr. Sanket Pendsey, Dr. P. P. Joshi, Dr. Pramod Gandhi, Dr. Attal.



## 2018 Conference a date for your diary!

In 2018 we will be holding our biennial Conference at the Kettering Park Hotel and Spa. As usual it will consist of discussion groups, talks and an open forum to discuss 'Hot Topics' for people with diabetes and for IDDT.

The date is **Saturday, October 6th 2018**, so please put the date in your diary if you would like to come along. There will be further details with our June 2018 Newsletters.

### And 2020...

This sounds a long way off but the Trustees have to consider the venue for our 2020 Conference. We would like your views of where this should be held, so please let us know your preference by ticking the appropriate box below.

When making your choice, please bear in mind that for venues in London a minimum of 90 people have to attend and the hotels and accommodation are more expensive. Also for London and the North, the costs will be higher because IDDT will have to pay for the organisers, such as speakers, staff and Trustees to stay overnight and this will have to be reflected in the delegate price for the day.

**Therefore, would you prefer the Conference to be held in:**

- (a) London
- (b) The North eg York/Leeds
- (c) The regular venue in Kettering

Please tick a box and return by post to: **InDependent Diabetes Trust (IDDT), PO Box 294, Northampton NN1 4XS**