



## Christmas Greetings

This is our last Newsletter of 2016, so the Trustees and staff wish all our readers best wishes for Christmas and the New Year. We would also like to thank you for your support throughout the year, it is very much appreciated by us all.

If it is your first Christmas with diabetes, you may feel apprehensive as food is a major part of the seasonal celebrations, so we have Christmas Tips to help you.



### In this issue...

- The common cold
- Christmas eating
- What is cholesterol?
- Accu-Chek pump warnings
- Revision of eye screening

## IDDT launches new booklet!

**We have just published our latest booklet, *Diabetes – Looking After Your Feet*, and in today's NHS, we consider it to be a very important booklet for everyone with both types of diabetes.**

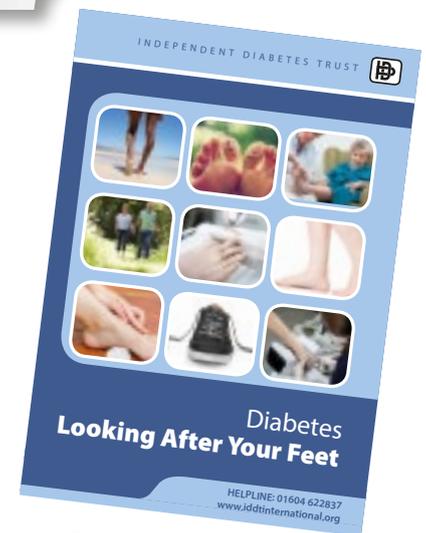
We don't need reminding that around 130 diabetes-related amputations take place every week in this country alone, mainly as a result of foot ulcers. Astonishingly, 80% of these are avoidable with proper foot care. If foot ulcers are left untreated they can eventually lead to amputation, which drastically changes a person's quality of life.

We know that people with diabetes should have their feet checked at least annually and should also be taught how to look after their feet themselves. However, we also know that in many cases, this is simply not being provided by the NHS. There is a shortage of podiatrists and many of the annual diabetes checks, which include assessments of the feet, are being carried out in primary care by health professionals who, through no fault of their own, are not receiving the training they need in order to carry out the right foot checks.

As there are nearly 4 million people with diabetes, we wonder when it will be possible for the NHS to provide them all with diabetes education and importantly, to provide proper foot care to reduce the risks of foot damage and amputations.

This is the reason for our new booklet – to help people to look after their feet by knowing what to look for and when to seek treatment to keep their feet healthy and avoid foot ulcers. In addition, the booklet explains how damage to the feet can occur, gives tips on ways to look after your feet and what to look for, such as simple conditions like hard skin to more complex issues like foot ulcers.

*'Diabetes – Looking After Your Feet'* is essential reading for everyone with diabetes, so if you would like your free copy, contact IDDT, Tel 01604 622837, email: [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org) or write to IDDT, PO Box 294, Northampton NN1 4XS.



# Childhood obesity strategy - IDDT issues press release

**The government's delayed Childhood Obesity Strategy was published in August, during the Olympics and when both the Prime Minister and Health Secretary, Jeremy Hunt, were on holiday!**

IDDT, and many other organisations, issued a press release in which Jenny Hirst, Co-Chair, said: "The government's plan to tackle obesity levels and the rise in Type 2 diabetes does not go far enough. We are pleased that the government has published this plan of action, but we are disappointed it does not go far enough to tackle childhood obesity. It lets down a whole generation of children.

"We hear continuously about the shortage of cash in the NHS but one certain way to save the health service money is to have an effective childhood obesity plan to prevent costly complications of obesity in future years."

The Public Health England document includes a voluntary target for the junk food industry to cut sugar in products aimed at children by 20% and also a drive for primary school children to exercise daily for an hour.

Former health ministers Norman Lamb and Dan Poulter described the Childhood Obesity Strategy as "A massive damp squib" and "not the 'game-changing' plan that it had been built up to be".

We question why other measures are not included in the strategy, such as regulating the food industry to reduce saturated fat, salt and added sugar content to many products, in addition to sugary drinks. What has happened to restrictions on TV advertising of unhealthy foods before the watershed and online advertising of these same products?

Experience has shown that asking the food industry to voluntarily take action does not work, so if this government is truly committed to the future health of the nation's children, it needs to look at the facts and think again.

- One in five children are obese or overweight by the age of 10 which puts them at greater risk of developing serious health conditions later in life.
- Obese adults are seven times more likely to develop Type 2 diabetes than adults of a healthy weight.

- Being obese doubles the person's chance of dying prematurely, which is why it is being targeted as not only will it help save lives, it will also help ease the strain of the financial burden the NHS has.
- It is estimated that NHS in England spent £5.1 billion on overweight and obesity-related ill-health in 2014/15.

## Supermarkets have more promotions on less healthy food and drink

Research carried out by Which? between April and June this year found that of 77,165 promotions in major supermarkets, over half (53%) were on less healthy foods compared to healthier products (47%).

- 52% of confectionery was on offer compared to only 30% for fresh fruit and 34% for vegetables.
- 69% of soft drinks that will fall into the 8% sugar tax category were also on promotion.

In a snapshot study of supermarkets, high street stores, clothes shops, chemists and toy shops in May, confectionery and other unhealthy snacks and fizzy drinks were still being promoted at the checkout.

If we are going to tackle obesity, then manufacturers and retailers have to play their part and this is not the way!





## Local Government Association – traffic light labelling should be mandatory

In 2013 the Department of Health introduced a voluntary traffic light food labelling system which is currently used on two thirds of products sold in the UK. However, the Local Government Association (LGA), which represents 370 councils, says that Government should make law a single, standard and universal food labelling system. This should be the traffic light system to avoid the present confusion. Shoppers on average take 15 seconds to choose an item and traffic lights would give people at-a-glance information to help them to make healthy choices and would help to tackle obesity, heart disease and diabetes.

## Simple but effective!

The Alfred Hospital in Melbourne has successfully rolled out a system designed to encourage people to choose healthier drinks in their on-site cafeterias. They used a traffic light system to split packaged drinks into 3 categories – green, amber and red.

**Green – water, carbonated water, flavoured mineral waters with no added sugar and reduced fat milk drinks.**

**Amber – artificially sweetened and “diet” drinks.**

**Red – sugar-sweetened drinks, as well as juices, flavoured mineral waters and all milk-based drinks. All drinks in this category were hidden from public display at the hospital cafe.**

Following these changes, sales of unhealthy beverages dropped by 12% over 6 months with no financial impact for the retailers. So a significant number of people moved from high sugar drinks to low sugar drinks. This is an important message for a hospital to send out and is one which could be followed by other health settings, such as sports and recreational areas and childcare facilities.

# The winners of IDDT's lottery draws!



**We are delighted to announce the winners of the draw of our monthly lottery for August 2016. They are as follows:**

**1st prize of £336.96** goes to Colin from Swindon

**2nd prize of £252.72** goes to Anon. from Newcastle upon Tyne

**3rd prize of £168.48** goes to Peter from Bromsgrove

**4th prize of £84.24** goes to Anon. from Ross on Wye

**Winners of the September 2016 draw are:**

**1st prize of £353.28** goes to Martin from Hornchurch

**2nd prize of £264.96** goes to Anon. from Milton Keynes

**3rd prize of £176.64** goes to Anon. from Bingley

**4th prize of £88.32** goes to Geoffrey from Doncaster

**Winners of the October 2016 draw are:**

**1st prize of £356.64** goes to George from Gt Wakering

**2nd prize of £267.48** goes to Geoffrey from Middlesbrough

**3rd prize of £178.32** goes to Kenneth from Tonyrefail

**4th prize of £89.16** goes to John from Bournemouth

**Note:** The winners of the draws for November, December and January will be announced in our March 2017 Newsletter and will be available on our website.

**Thank you to everyone who joined in IDDT's lottery.**

If you would like to join in for just £2.00 per month, then give us a call on 01604 622837 or email [tim@iddtinternational.org](mailto:tim@iddtinternational.org)

# For the ladies

## For women worried about the research showing a link between HRT and breast cancer

**In August, the British Journal of Cancer published new research showing a link between Hormone Replacement Therapy (HRT) and increased risk of breast cancer. This may be causing worry for women who are taking HRT.**

The study of 100,000 women over 40 years found those who took the combined oestrogen and progesterone pill for around five years were 2.7 times more likely to develop breast cancer compared to women who took nothing, or



only the oestrogen pill.

The Royal College of GPs put out a helpful statement. They point out that the menopause can cause great distress for many women and for some specific symptoms, such as hot flushes, HRT is the only medical treatment for which there is good evidence. This new research shows that there are no adverse effects from the simpler type of

HRT given to women who have had a hysterectomy (oestrogen only) and only a slightly increased risk from the combined treatment used in women who still have their womb.

However, it is important to remember that the increased breast cancer risk is closely related to prolonged use of HRT in older women and that these risks reduce substantially after treatment is stopped – usually within a year or two.

When HRT is prescribed, best practice is to prescribe the lowest possible dose, for the shortest possible time and the decision to use HRT should be after a discussion between the patient and their GP about the pros and cons of treatments, and how to achieve the best possible health outcome. Women shouldn't panic and stop taking HRT as result of reading about this study, but instead see their GP in a routine review appointment if they want to discuss the matter fully.

## Lipohypertrophy

Lipohypertrophy is an accumulation of fat underneath the surface of the skin. Repeated insulin injections in the same place can cause fat and scar tissue to accumulate which causes hard lumps under the skin, usually in the abdomen or on the thighs. It is most often seen in people with Type 1 diabetes and less commonly in people with Type 2 diabetes. One study showed that nearly 29% of people with Type 1 had lipohypertrophy but it only occurred in 4% of those with Type 2 diabetes. Researchers also found that half of those with Type 1 and lipohypertrophy developed it within 2 years of diagnosis.

These lumps can be unsightly but more importantly, they can slow down the absorption of insulin. This can cause a spike in blood glucose levels and later the delay can cause blood glucose levels to become low. So lipohypertrophy makes diabetes management more difficult.

### Insulin absorption rates

Insulin is absorbed at different rates depending on where it is injected. Generally, when insulin is injected into the stomach it is absorbed the fastest, followed by the arms, then the thighs and it is absorbed the slowest when injected into the buttocks.

### Here is a collection of information to help to prevent lipohypertrophy

- As the main cause is using the same injection sites too often, the best way to avoid it is to rotate the injection sites with each injection.
- Injection sites should be rotated, so it is important to keep track of the position of the last injection.
- Try to avoid injecting in the same place for at least 2 weeks and when injecting near a previous site, leave about an inch between the two.
- A fresh needle should be used for each injection.
- Make a habit of routinely inspecting the injection sites. The lumps may not be obvious at first but firmness under the skin can be felt and injections may be less painful in these areas.

Following this advice and avoiding injecting into the affected areas, over time the lumps usually get smaller. If you are concerned about your injection sites and the effect of lipohypertrophy on your diabetes control, you should discuss this with your diabetes nurse or doctor.

# A million people unaware they have diabetes and other figures

In September, Public Health England issued new figures based on a Diabetes Prevalence Model stating that an estimated 940,000 are unaware that they have diabetes (obviously Type 2 diabetes), equivalent to one in four people. The Model also estimates:

- 3.8 million people had diabetes in 2015, 90% of which is Type 2.
- The proportion of people who have diabetes increases with age.
- Around 9% of people aged 45 to 54 have diabetes, but for people over 75 the figure increases to 23.8%.
- Diabetes was also found to be more common in men at 9.6%, compared with 7.6% in women.
- Based on current population trends, by 2035 4.9 million people will have diabetes.

## Latest figures for children with Type 2 diabetes

Latest figures from the National Child Measurement Programme show that there are 533 children and young people in England and Wales with Type 2 diabetes including 11 children aged nine or under.

The first cases of Type 2 diabetes in children were diagnosed in overweight girls of Asian ethnic origin in 2000 and in white adolescents in 2002. The single greatest risk factor for Type 2 diabetes in children is being overweight, which in turn can lead to obesity. One in ten 4 and 5-year-olds and one in five 10 and 11-year-olds are obese.

A separate UK survey of children under 17 found that 95% of those diagnosed with Type 2 diabetes were overweight and 83% were obese.

## Higher rate of diabetes due to longer survival, not more cases

According to research at Edinburgh University, the huge increase in numbers of people with Type 2 diabetes in the early 2000s was due to improvements in diagnoses and that cases of new diagnosis have stabilised in recent years suggesting that more people are living longer with the condition.

The Scottish study also highlighted inequalities in cases of Type 2 diabetes by age, gender and socioeconomic status and the researchers say that tackling these inequalities will be crucial for improvements in treatment and management. (Diabetologia, 29.07.16)

Similar findings have been shown in the US where Type 2 diabetes rates increased continuously for about a decade but part of this increase was put down to 1 in 4 people with diabetes not knowing they had the condition.



## Children of women who have had gestational diabetes have an increased risk of obesity between the age of 9-11 years

Researchers have found that the children of women who have had gestational diabetes can have increased blood sugars and insulin levels. They analysed 7,372 children from 12 countries, all of whom were aged between 9-11 years where 4.3% of the mothers had gestational diabetes.

- Overall obesity levels in the children were 12.3% and high body fat was 8.1%.
- The increased risk of obesity for children of mothers with gestational diabetes was 53% compared to mothers without gestational diabetes.
- The risk was 73% for central obesity and 42% for high body fat.

The researchers say that the mechanisms by which exposure to diabetes in the womb increases the risk of obesity in the children are not fully understood but suggest that the mother's gestational diabetes may influence foetal genetics, so influencing the expression of genes that direct the accumulation of body fat. (Diabetologia, 18.08.16)

# neuropad®

**neuropad® is a patented 10-minute screening test for the early detection of diabetic foot syndrome; a condition which can lead to serious complications such as foot ulceration and even amputation. The test is completely painless and is an early warning system for your feet.**

Nerve damage to the feet is a common complication of diabetes but is often not noticed until it has become quite advanced, potentially leading to serious complications. neuropad® helps solve this problem with a simple colour change test.



## Here's how it works.

Damage to the nerves in the feet because of diabetes can result in the sweat glands not producing enough moisture, leading to dry and cracked feet (called sudomotor dysfunction).

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, to indicate a normal result. If the neuropad® test 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 because there is not enough moisture to complete the colour change.

In clinical trials, the sensitivity and specificity of neuropad® was comparable to that of well-established hospital-based tests.

The price of the test comprising of two test pads is £14.99, no VAT payable and can be purchased from our website shop, <http://www.iddt.org/shop> or by phoning IDDT on 01604 622837.

## The Freestyle Libre

**IDDT has received many enquiries about the new Freestyle Libre sensor - a small device worn on the upper arm which automatically checks blood glucose levels every 15 minutes and stores the information. A separate reader device, when held close to the sensor, can display current glucose level, glucose readings over the past 8 hours, and whether glucose has been rising or falling. This can be repeated as often as required.**

Research published online in The Lancet (12.09.16) has shown that the Freestyle Libre cuts down on the number of episodes of hypoglycaemia in people with Type 1 diabetes. 23 European hospitals compare the Libre with conventional self-monitoring for the prevention of hypoglycaemia in 239 adults with well-controlled Type 1 diabetes. It showed:

- There was a marked increase in self-monitoring frequency after they started using the Libre which resulted in an almost immediate reduction in hypoglycaemia during both the day and the night.
- The time spent in hypoglycaemia decreased by 38%, from almost 3.5 hours a day to 2 hours a day with the Freestyle Libre but hardly changed with conventional monitoring.
- People in the Libre group checked their blood sugar on average 15 times a day compared with only about 6 times a day in the conventional monitoring group.

The researchers suggest that these improvements resulted from increased attention to blood glucose levels but surely to some extent this must be because finger pricks are not required.

However, the reductions in time spent in hypo and hyperglycaemia did not translate into differences in HbA1cs, insulin doses or quality of life between those using the Freestyle Libre and those using conventional monitoring.

### Not available on the NHS!

At the time of writing, the Freestyle Libre is not available on an NHS prescription and our understanding is that is largely due to the cost of the sensors compared to test strips for conventional finger prick testing. This is a decision which we find difficult to understand.

Firstly, if the Freestyle Libre prevents so many hospital admissions, then this is a huge saving to the NHS. Secondly, it is often assumed that people carry out between 4 and 6 finger prick tests a day but many people with tight control or hypo unawareness carry out a great many more daily tests than this, we hear from people doing 15 to 17 tests a day. For these people there cannot be any difference in costs, so surely the Freestyle Libre should be available on the NHS if only for specific groups of people?

# Metformin

## Metformin and Type 1 diabetes

Metformin is the most commonly prescribed drug to treat Type 2 diabetes and for several years some people with Type 1 diabetes have been prescribed it in addition to insulin. It was never quite clear why, but now a study has shown that metformin may help to preserve cardiovascular health in people with Type 1 diabetes by reducing blood vessel damage.

The new study was only small, involving 23 healthy adults with Type 1 diabetes treated with metformin for 8 weeks. They were then compared with 23 healthy volunteers without Type 1 diabetes and 9 people with Type 1 diabetes who weren't given metformin.

The results showed a number of markers indicating blood vessel improvement in those taking metformin and improvements in other cells. The researchers maintain this shows the mechanism behind the cardiovascular protective effects of metformin. (Cardiovascular Diabetology, Online August 26, 2016)



## Another use for metformin

Metformin is also the world's oldest drug for treating Type 2 diabetes but new research provides evidence that it could be used for other purposes, particularly to treat heart disease. It is thought that inflammation contributes to cardiovascular disease and metformin has anti-inflammatory properties.

Metformin works by making the body more sensitive to insulin. It is also very cheap! Studies in patients are taking place and if successful, it will be an excellent way of preventing heart attacks.

# Jeremy Hunt Watch



## Is a 7-day NHS realistic?

As readers of the Newsletter will appreciate, IDDT has always had reservations about Jeremy Hunt's 7-day NHS. This was never just about the junior doctors but we could not understand, how a 7-day NHS would be staffed when there is already such a shortage of nurses and other health professionals.

It seems that we are not the only ones holding such views. On August 23rd The Guardian leaked government documents stating that the NHS does not have enough staff or money to deliver 7-day services and even if it did go ahead, patients may not notice the difference. It outlined 13 'major risks' which included:

- One of the most dangerous risks was 'workforce overload' as officials said that it would not be possible to fill all the roles with sufficiently skilled/trained staff to agreed timetables.
- The risks also showed that the Department of Health sees staff as a barrier to the 7-day service because 'they do not believe in the case for change'.
- Department of Health officials were concerned that the plan did not deliver on certain aims including improving hospital care and reducing death rates at the weekend.

Many organisations have raised all these same concerns but have been ignored. However, it is very disturbing to see that the government also ignored its own risk assessment warnings!

## Promises of improvement

In a speech at a Diabetes UK event on July 18th in the House of Commons, Jeremy Hunt discussed the importance of encouraging better education for those diagnosed with Type 2 diabetes and the prevention of it.

In laying out his plans to improve diabetes care for everyone living with the condition, he said, "We've got to improve education, we've got to reduce foot amputations and we've got to improve inpatient care, so, what are we doing to try and improve these things?"

First of all I'm very proud to say for the first time..... we're introducing Ofsted style ranking for the quality of diabetes care throughout all CCGs. That's a really important step alongside the major Type 2 diabetes Prevention Programme put together by NHS England, which I feel goes hand in hand with the Childhood Obesity Strategy to help combat Type 2 diabetes."

## Restaurants must step up

At Jeremy Hunt's meeting with food industry leaders, he said that restaurants must "step up" and reduce the amount of sugar in their food or face being publicly named and shamed. He told them that they need to reduce the sugar content of puddings, cakes and croissants and cut calories from fatty savoury foods like burgers and pizza. Apparently consumers will be able to check the companies' efforts to be healthier on a government-run website, although exactly how they will be compared has not been decided. (30.09.16)

# WARNINGS!

## MHRA warning: Accu-Chek Insight pump and leaking cartridges

People with diabetes using an Accu-Chek Insight pump and pre-filled insulin cartridges should insert their cartridges correctly to avoid them leaking and potentially giving an under-dose of insulin. This can lead to high blood glucose (hyperglycaemia) with serious health implications.

The Medicines and Healthcare products Regulatory Agency (MHRA) has issued this advice after feedback from people who were experiencing leaking insulin cartridges.

Users of Accu-Chek Insight insulin pump system with NovoRapid PumpCart cartridges, can check for any leaked insulin in the cartridge compartment by regularly checking the pump a few hours after changing the cartridge, as any leaked insulin would be visible.

This warning from the MHRA was issued on August 16th 2016 although several weeks before, one of our members reported having had this experience twice and on the last occasion she had to be admitted to hospital with diabetic ketoacidosis.

If you experience this problem, you should report it to the MHRA via the Yellow Card Scheme as follows: email: [yellowcard@mhra.gsi.gov.uk](mailto:yellowcard@mhra.gsi.gov.uk) Tel: 0808 100 3352 or write to: Yellow Card Scheme, MHRA, 4.M, 151 Buckingham Palace Road, London SW1W 9SZ

## MHRA Warning: over TRUResult, TRUResult twist, and TRUtrack blood glucose meters home blood glucose test strips

Warnings have been issued (August 10th 2016) for certain lots of test strips for TRUResult, TRUResult twist, and TRUtrack blood glucose meters.

The manufacturer, Nipro Diagnostics, found problems with the packaging as test strips in specific lots are not sealed properly. This can affect how the strips measure blood glucose levels and could lead to undetected high blood glucose (hyperglycaemia) which can have serious health implications.

The affected batch numbers can be found at:

<https://www.gov.uk/government/news/medical-devices-regulator-issues-alert-on-faulty-glucose-test-strips>

If you are concerned about your blood glucose readings when using this meter, you are advised to contact your healthcare professional.

## Batches of GlucaGen HypoKits for severe hypoglycaemia are being recalled

A medical safety alert has been issued by Novo Nordisk, warning that seven batches of Hypokits may contain a small number of needles which have become detached from the syringe. Clearly it is not possible to use a syringe with a detached needle but finding this could delay emergency treatment of severe hypoglycaemia.

People are asked to return their GlucaGen HypoKit to their pharmacy for a replacement pack. The affected batches are as follows:

Batch number	Expiry date	First distributed
FS6W939	31.05.2018	26.02.2016
FS6X059	31.05.2018	03.03.2016
FS6X196	30.09.2018	11.03.2016
FSX590	31.08.2018	29.03.2018
FS6X717	31.08.2018	22.03.2016
FS6X899	31.08.2018	18.04.2016
FS6Y024	30.09.2018	06.05.2016

## Warnings of a different kind – apps are medical devices

The MHRA has updated its guidance on whether a health app should be regulated as a medical device. Several apps and pieces of stand-alone software already on the market have been classed as medical devices and so fall within the MHRA's regulations. These include apps that gather patient information such as diet, heartbeat or blood glucose levels and then analyse the information to make a diagnosis, prescribe a medicine or recommend treatment.

The MHRA advises that people using such apps or stand-alone software should check for CE-marking (kitemark) before using them. This shows that they are regulated, safe to use and perform as intended. Safety or performance problems with such apps should be reported to the MHRA via the Yellow Card Scheme.



## US - J&J issue warnings about Animas OneTouch Ping insulin pump

Johnson & Johnson has learned of a security vulnerability in one of its insulin pumps that a hacker could exploit to overdose diabetic patients with insulin. Although the risk is low and J&J know of no examples of attempted hacking attacks on the device, the J&J Animas OneTouch Ping insulin pump, they are warning customers and providing advice on how to fix the problem. Hackers could order an insulin dose from 25 feet away.

Letters have been sent to doctors and 114,000 patients who use this device in America and Canada. They say that it would require technical expertise, sophisticated equipment and proximity to the pump, as the OneTouch Ping system is not connected to the internet or to any external network.

The device has a wireless remote control that patients can use to order the pump to dose insulin so that they do not need access to the device itself. The system is vulnerable because these communications are not encrypted or scrambled, to prevent hackers from gaining access to the device.

J&J's letter said that if patients are concerned, they could take several steps to thwart potential attacks including discontinuing use of a wireless remote control and programming the pump to limit the maximum insulin dose.

The problems have been found with the Animas OneTouch Ping, but not the Animas Vibe insulin pumps.

# IDDT News

## We welcome a new Trustee

We are pleased to welcome Gill Coleman as a new Trustee of IDDT. She was elected at our recent Annual General Meeting. Gill has two, now adult, children. Her son was diagnosed with Type 1 diabetes when he was 9 years old. He has since developed MS, so Gill and her family know what it is like to live with not just one long-term condition, but two.

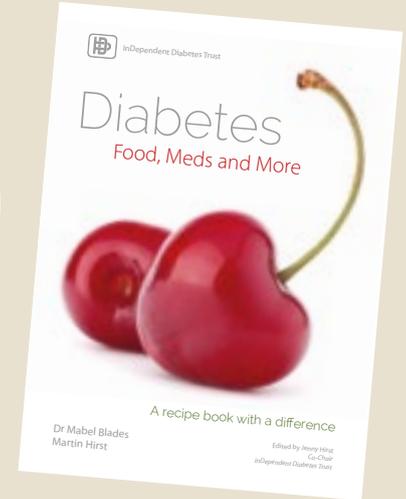
We look forward to working with Gill in the future and listening to her fresh ideas.

## Cyclist completes 46 mile fundraiser for IDDT

Una Loughran, an accountant from Northampton, rode 46 miles from the Queen Elizabeth Olympic Park in London to The Mall, on behalf of the InDependent Diabetes Trust (IDDT). She wanted to raise much needed funds for IDDT because both her sister and her cousin's little boy have Type 1 diabetes. Una said the bike ride round London was "extremely enjoyable" and she was satisfied with her finish time of 3 hours, but she still had to cycle 11 miles back to her car!

## Diabetes – Food, Meds and More

You will see from the flyer enclosed with this Newsletter that our book, Diabetes – Food, Meds and More has been reduced in price as a special offer for Christmas. It is available for £5.99 + £1.50 p&p. IT makes a good stocking filler!



## Christmas cards

We would like to thank everyone who has bought IDDT Christmas cards this year. It is a great boost to our funds and much appreciated!

For those who haven't bought them yet, they are still available to order, either on our website: <http://www.iddt.org/product-category/christmas-cards> or just give us a call on 01604 622837.



# Christmas Tips



**Christmas is a mixture of many things – presents, excitement for children [and adults] and a busy time for everyone. But if you or a member of your family has diabetes, Christmas can be a worrying and stressful time too, especially if this is your first time with diabetes.**

Celebrating Christmas is not just a time for presents but also about food! We all eat a lot more than we should and we tend to eat much more of the sort of food that is not exactly ideal for children or adults with diabetes. You can't really take a day off from it but it is important to remember that it is a time to be enjoyed with family and friends.



# Christmas dinner and carbs

**By Dr Mabel Blades, Consultant Dietitian**

**Christmas is a time for celebration and enjoying lovely food. Many people go out to several functions at this time of year when a Christmas dinner is offered.**

Here are some ideas for how to cut calories and carbohydrate in an easy way. All calculations have been based on average portion sizes, so if you eat large ones then the calories and carbohydrate will add up even more.



## Traditional dinner

Portion of roast turkey, chipolata wrapped in bacon, stuffing, roast potatoes, brussel sprouts and gravy

Christmas pudding and brandy butter

Mince pie

3 small glasses of wine

123g carbohydrate, 83g fat, 33.6g saturated fat and 4g salt, 1736kcal





# ***dinner - cutting calories but not the enjoyment***



## **Traditional dinner with a few reductions**

*Saves over 300 calories*

**Portion of roast turkey, chipolata wrapped  
in bacon, stuffing, roast potatoes,  
brussel sprouts and gravy**

**Christmas pudding and custard  
made with skimmed milk**

**Mince pie**

**2 small glasses of wine but drunk  
as 3 glasses as a spritzer**

**145g carbohydrate, 51g fat, 13.0g saturated fat  
and 3.7g salt, 1450kcal.**

*(Note the carbohydrate increases as the milk in the custard has more  
carbohydrate than the brandy butter but less calories and fat).*



## **Traditional dinner with no mince pie or wine**

*Saves a further 400 calories and  
halves the amount of fat*

**Portion of roast turkey, chipolata  
wrapped in bacon, stuffing, roast  
potatoes, brussel sprouts and gravy**

**Christmas pudding and custard made  
with skimmed milk**

**114g carbohydrate, 39g fat, 13.0g  
saturated fat and 3.2g salt, 1040kcal**



### **Further reductions can be made by:**

- Cutting down on the potatoes and dry roasting them.
- The chipolata wrapped in bacon can be omitted.
- The plate can be filled up with extra vegetables, such as carrots or brussels.
- The Christmas pudding can be home made to a lower calorie recipe. Fruit salad can be substituted for the Christmas pudding.

**If you would like a full copy of our Christmas Tips, just call IDDT on  
01604 622837, email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org) or visit our  
website [www.iddtinternational.org](http://www.iddtinternational.org)**



## New classifications of diabetes may be on the way

Researchers in Sweden suggest that it may now be possible to classify people with diabetes into 5 subgroups by using genetics and non-genetic markers. This would be a move away from just Type 1 and Type 2 diabetes which may be useful in predicting disease outcome or guiding treatment.

The researchers have set up the ANDIS project (All New Diabetics in Scania) in Southern Sweden, which combines information on genetic and non-genetic markers and includes records from 10,785 newly diagnosed diabetes patients aged 0 to 97. They combined this with registers from other parts of Sweden and then carried out an analysis. From this they were able to identify 5 subgroups of diabetes which predicted change in HbA1cs over time and the development of early diabetic complications.

The 5 categories had distinct genetic profiles and some showed changes in metabolites..

- **Cluster 1 (11%) comprised mostly of Type 1 diabetes.**
- **Cluster 2 (20%) included patients who showed impaired beta-cell function of non-autoimmune background.**
- **Cluster 3 (6%) included the most insulin-resistant patients with the highest risk for kidney disease.**
- **Cluster 4 (20%) included the most obese patients.**
- **Cluster 5 (43%) was age-related and most type 2 diabetes-like.**

The researchers say that the study enables the development of a road map for the diabetes patient, paving the way for early intensified treatment and thereby a way to possibly prevent late diabetic complications. (American Diabetes Association Scientific Sessions, July 2016)

# NHS News • NHS News •

## The NHS – workforce cuts are inevitable, it is time for debate with the public

According to a King's Fund report in July, 'Deficits in the NHS 2016', cuts in staffing and quality of care are "inevitable" if the NHS deficit is to reduce. The deficit in total is £1.85 billion and is three times higher than the previous year. Despite controls and short-term ways to reduce cost, this is the biggest deficit in NHS history. Evidence suggests the deficit is increasing pressures on general practice and community health services.

The number of community nurses has fallen by 30% since 2009. When the plans are to increase out-of-hospital care, it would be expected that the community workforce would actually grow, in contrast to what is actually happening.

The report says: "If restoring financial balance is the government's highest priority, it is inevitable that staffing levels will need to be reduced. This presents a clear and present danger that patient safety and quality of care will be compromised and staff morale damaged further."

Helen McKenna of The King's Fund, said: "Politicians need to be honest with the public about what the NHS can offer with the funding allocated to it. It is no longer credible to argue that the NHS can continue to meet increasing demand for services, deliver current standards of care and stay within its budget. This is widely understood within the NHS and now needs to be debated with the public. We are drawing attention to these issues now while there is still time to have an informed and honest debate about the best way of sustaining and transforming care."

## 'Staffing matters: funding counts'

This is another report, this time by the Health Foundation, which says that the 'associate nurses' should not be seen as a quick fix for the nursing shortage. The report warns that there has not been enough discussion about how training will be funded and how many nurses will be needed or when. It highlights the "mixed" track record of the NHS in implementing new roles, including the physician assistant, which was piloted 10 years ago and is still not widely implemented. The shortage of 28,000 nurses could derail the NHS Five Year Forward Review and longer sustainability of the NHS but the new role will not solve the problem.

## Public health cuts risks 'destabilising' NHS warns health committee

A report from the Health Select Committee, published on September 1st 2016, found that local authorities are planning further cuts across a range of public health services in 2016/17. The cuts include the following:

- 72% are planning to cut drugs and alcohol services, up from 46% the year before.
- 56% are planning funding cuts for health visitors compared with just 13% last year.
- 12% are decommissioning weight management services, a further 52% cut in funding.

The MPs urged the Government to stop these cuts or risk "destabilising" the NHS and also described the cuts as "a false economy" because they will add to future health and social care costs and risk widening health inequalities.

The Committee said that local authorities are being crippled by budget costs which include a £200 million cut in public health funding last year with further cuts on the way.

Just a comment: a small fortune is being spent on preventing Type 2 diabetes, yet local authorities are cutting weight management services. Is this not a contradiction?

## Wide variations in CCG diabetes drug spending per patient

A report, Prescribing for Diabetes 2005/6 to 2015/16 (August 2016) has shown that the amount spent on diabetes drugs per patient varies in different CCGs from £239 in Northumberland CCG to £415 in Warwickshire CCG. So it is nearly twice as high in some parts of the country as others.

- A total of 50m items were prescribed for diabetes over the last year, at a cost equivalent to £2.6m a day.
- Diabetes drugs now make up 11% of total primary care prescribing and 5% of all prescription items.

However, this spending varies regionally and although the prevalence of diabetes ranges from almost 4% in Richmond CCG to 10% in Bradford City CCG, the information collected makes it clear that there is also significant variation in the amount each CCG spends per patient with diabetes in their area.

## CCGs cutting services

### North Yorkshire CCG restricts gluten-free prescribing

In a previous Newsletter we warned that some Clinical Commissioning Groups (CCGs)

were considering not prescribing gluten free foods for people with coeliac disease. Now, Hambleton, Richmondshire and Whitby CCG has joined an increasing number of CCGs that are restricting the prescription of gluten free foods.

There was a consultation which showed:

- 53% of the respondents were patients or carers who currently receive prescribed gluten free products and the majority of these people disagreed with the decision.
- Of the 42% of respondents who agreed with the proposals, 61% did not have coeliac disease.

Despite this, the decision went ahead and GPs will only be able to prescribe gluten free foods in exceptional circumstances which are defined as people who are 'vulnerable' - when there is a genuine risk that they will become undernourished if they do not receive these products on prescription. The CCG will develop guidelines for GPs to identify vulnerable people.

Coeliac UK submitted evidence to the consultation and said "The measures taken by the CCG to save money will affect people's ability to stick to the gluten-free diet. This will in turn increase the likelihood of complications of coeliac disease, which will cost the NHS more in the long term."

### Another CCG cost-cutting exercise – 4 month suspension of GP referrals

In August, St Helens' Clinical Commissioning Group (CCG) proposed suspending all non-urgent GP referrals to local hospitals for 4 months over the winter as part of its 2 year financial recovery plan. The logic is so that hospitals can concentrate on people who need urgent referrals, such as suspected cancer and sick children.

This CCG is facing a £12.5 million funding gap over the coming year with a £3 million overspend last year. The CCG also proposes suspending the provision of gluten-free foods, specialist fertility services to women under 37 and using over-the-counter medicines for short-term, self-limiting conditions such as painkillers, cough and cold remedies antihistamines and some skin conditions.

## Next steps to implement the NHS Five Year Forward View in 2017/18 and 2018/19

In September, NHS England and NHS Improvement published planning guidance for the above years for trusts and commissioners along with tools they need to plan for the years ahead so they can take action on the national priority areas - cancer, mental health, learning disabilities, primary care and Urgent and Emergency Care. Other measures include:

- Incentives of over £100m to help tackle unnecessary delays in discharging patients from hospital.
- Incentives to reduce people with mental health problems attending A&E as this group are three times more likely to present to A&E than the general population.
- Further steps to ensure the sustainability of general practice with further local recurrent funding to improve and increase capacity in general practice. So from April 2019 every CCG can expect a minimum additional £6 per head to improve access to general practice.

This new planning guidance places a requirement on CCGs to develop local action plans detailing how they will deliver on the aims set out in the General Practice Forward View.

# The common cold

**Colds are usually harmless and go away on their own but they can affect blood glucose levels. Colds are very common, especially in children who can catch 6 to 10 colds a year. Adults have about 2 to 4 colds a year, usually during winter. Cold symptoms are a nuisance and a severe cold can make you feel weak and ill too. A sore throat or stuffy nose may go after a few days but it can take up to 3 weeks for a cough to disappear.**

Most colds are caused by viruses so antibiotics are not effective against colds because they only fight bacteria.

## What's the difference between a cold and flu?

- A cold usually takes a few days to develop.
- Typical symptoms include runny nose, sneezing, sore throat and coughing.
- Sometimes there can be a mild fever, headache and aching joints.
- Flu symptoms are much worse and they usually start all at once with high fever, chills and aching muscles and joints.

## The effects of colds

After the viral infection that causes a cold, bacteria can spread through the airways and cause problems in the sinuses, in the voice box (laryngitis), in the throat causing soreness or tonsillitis. In babies and young children the infection can spread to the ear causing a middle ear infection.

Rarely, infections of the upper airways can cause serious complications like pneumonia. So, if you have a high fever, chest pain, shortness of breath or difficulty breathing, you should see a doctor. This is especially important for people with COPD.

## Colds and diabetes

People with diabetes are at an extra risk when they have a cold because infections can raise blood glucose levels, especially in people with Type 1 diabetes. This is because the body sends out hormones to fight the infection and this can make it harder to manage blood glucose levels which can lead to DKA (diabetic ketoacidosis). So it is important to check your blood sugars more often than usual.

## Can colds be prevented?

There are many different types of cold viruses which is why you are not protected against further colds and why it is not possible to vaccinate against them. The best way to prevent colds is to avoid catching them in the first place!

Cold viruses are spread through small droplets of liquid spread in the air when someone sneezes or coughs and the droplets end up on the objects around – doorknobs, keyboards, handrails. So when you touch these, your hands pick up the viruses and then easily spread to your nose or mouth. Here are some of the best ways to avoid colds:

- Wash your hands frequently with soap.
- Avoid touching your face with your hands.
- Throw away tissues immediately after use.
- Vitamin C or echinacea are sometimes recommended for the prevention of colds but they offer limited protection and there is little evidence to assess their advantages and disadvantages.

## Treatment

There are no medicines that fight all cold viruses but there are medicines that can relieve some of the symptoms a little. These include painkillers and decongestant nasal spray.



# Remember the flu jab!

People with diabetes take priority for having the flu jab and they are also entitled to a pneumonia vaccination.

## Flu vaccination may help to keep people with diabetes out of hospital.

People with Type 2 diabetes who have the flu vaccine may be less likely to be hospitalised for cardiovascular or respiratory problems, according to study carried out at Imperial College, London.

The researchers examined 7 years of records on almost 125,000 people in England with Type 2 diabetes, both during the flu season and the summer months. Vaccination was associated with:

- 30% lower hospital admission rates for stroke,
- 22% lower rates for heart failure,
- 15% lower rates for pneumonia or influenza.

Most severe influenza complications occur in the elderly and people with long-term conditions such as diabetes, heart disease and asthma. People who had the flu vaccine had 24% lower death rates from all causes during the study period.

A limitation of the study was that it is possible people who get vaccinated are generally healthier in other ways but nevertheless, the findings suggest that having the flu jab is beneficial for people with diabetes. (CMAJ, July 25, 2016)

## Diabetic eye screening programme



The aim of this screening programme is to reduce the risk of sight loss for people with diabetes by early detection, appropriate monitoring and treatment of diabetic retinopathy. Screening standards have been revised and these come into effect in April 2017. All programmes are expected to exceed an acceptable threshold and to agree service improvement plans. Where this is not achieved, recovery plans are expected to be put in place to ensure rapid and sustained improvement.

While this is the technical side, there are changes that affect people with diabetes:

- Programmes should operate a 12 month screening interval or 24 month interval for people with diabetes classified at low risk – this is the main change from a patient perspective.
- To ensure that these intervals are maintained, the invitation to attend should occur within 6 weeks of the due date.
- Pregnant women with diabetes should be screened within 6 weeks of notification of the pregnancy to the local screening programme.
- All newly diagnosed people should be invited to attend for routine diabetic retinopathy screening as soon as possible after diagnosis.

## New research to find out the risk of diabetic retinopathy in each person

In July 2016 it was announced that more than 4,500 people with diabetes have signed up to take part in a diabetic retinopathy trial in Liverpool. The participants in the Institute of Ageing and Chronic Disease study will undergo a new innovative screening method which has been developed to better calculate the risk of diabetic retinopathy for each person.

Professor Simon Harding, from the University of Liverpool said: "Attending high numbers of clinics each year is a huge problem for people with diabetes so it is important to shape methods of detection to the individual's needs so that it causes minimal disruption to their lives and crucially catches signs of the disease at the earliest opportunity. The new detection method will see those thought to be at low risk checked every two years and those who are believed to be at high risk will be screened twice a year."

# Let us not forget our reason for being – animal insulin!

**It is important to remember that IDDT formed because of the need to maintain supplies of pork and beef insulin because some people cannot tolerate the synthetic human and now analogue insulins.**

Without going into a very long saga, before the 1980s everyone used natural animal insulin derived from the pancreases of pigs or cattle. Then the major insulin suppliers removed animal insulins from the market in favour of their new synthetic 'human' insulin which was made by genetic engineering from either yeast or e coli. Although this was never proven to be better than pork or beef insulin, by the mid-1980s, in the UK 84% of people using insulin were transferred to synthetic 'human' insulin. Needless to say, some people had adverse effects, the main one was loss of hypo warnings but there were others – feeling tired or unwell, increase in weight, lack of concentration and memory loss.

However, people with these symptoms were not believed and word went about that animal insulins were going to be removed. So IDDT formed to fight for continued supplies of pork and beef insulins and although it was over a 10 year battle, we won and the then Minister of Health made a statement that some people need animal insulin so it had to remain available.

Sadly, pork and beef insulins were removed from the market in most countries. However, this does not alter the fact that there are still people who cannot tolerate synthetic insulins and they still contact IDDT from other countries continues. If people can afford, they can obtain it from the UK by means of personal importation.

Here are the experiences of just one man, Roland, in Belgium.

*I have had diabetes for several years, firstly trying to keep it under control with diet and exercise. In recent months I developed pains in my toes and fingers and my doctor said it was because my blood glucose control was not well enough controlled. Therefore, it was agreed that I needed insulin, firstly Lantus, then Toujeo followed by NovoRapid three times a day.*

*The pains in my feet suddenly became unbearable but the doctor said I would have to live with it. I went to another doctor who carried out allergy tests for all three insulins and their excipients. I was allergic to all three synthetic insulins so I am using pork insulin and my pains have already significantly reduced.*

*In Belgium, it is very difficult to get animal insulin and the AutoPens. I am very thankful to the people who helped me to be able to use Hypurin pork insulin because many complications are attributed to the patient and poor control, when synthetic insulin may be the real cause, as in my case.*

## Glycaemia Index may be too unreliable to manage diabetes

The glycaemia index was created to show how fast blood sugars rise after eating specific types of food and many people consider that it is useful to help people with diabetes to control their blood sugar levels. For some people it may work and for others, it seems too complicated.

A new study has shown that the glycaemic index values of the same foods can vary widely and may be unreliable as an indicator of blood sugar response. The study involved 63 healthy adults who had their blood sugar measured after eating the same amount of white bread 3 different times over 12 weeks. The results showed:

- Glycaemic index values varied by an average of 20% in each person.
- It varied 25% between the different study participants.

The authors maintain that glycaemic index values seem to be an unreliable indicator even under highly controlled conditions. It is reasonable to expect that if someone eats the same amount of the same food 3 times, their blood sugars should be similar each time, but this study did not show that. A food with a low glycaemic index for one time a person eats it, could be high the next time the same person eats it.

Based on these findings the researchers suggest that using the glycaemic index for food labelling and dietary guidelines isn't practical at the individual level. (American Journal of Clinical Nutrition, Sept 7 2016)

Note: The variations with the Glycaemic index have been known for many years, but it is worth a reminder!

## News from the American Diabetes Association Annual Conference

This conference was attended by 14,000 clinicians from 118 different countries and the news items that excited delegates were as follows:

### The artificial pancreas

Medical device company, Medtronic, presented studies of their MiniMed 670g insulin pump system due to be released in the US in April 2017. This pump system is a closed loop device that modifies basal insulin delivery rates based on constant glucose monitor (CGM) information, but still requires extra boluses for carbohydrate meals. The studies showed that average HbA1c was reduced from 7.4mmol/L to 6.9mmol/L but they did see slightly more insulin use and weight gain in some people.

### Faster-acting insulins

Pharmaceutical company, Adocia, announced a new rapid acting insulin called BioChaperoneLispro. It has been modified from insulin lispro (Humalog) to make it work faster. It was tested in 36 people with Type 1 diabetes and after 14 days, there was a 42 % reduction in blood glucose levels over the first two hours after injecting at a mealtime compared to insulin lispro.

### Detection dogs

A study investigating whether using medical alert dogs was comparable with CGM in detecting hypos showed that people with detection dogs tended to overestimate the accuracy of their dogs in alerting for hypos.

Dogs alerted owners between 10 minutes before and 30 minutes after onset of a hypo in 36% of all hypo events. CGMs would have alerted before the dog in 73% of hypos when both the dog and CGM reached the hypoglycaemia threshold. The study suggests that people with Type 1 who have a hypo alert dog should be careful to not overestimate the accuracy of their dog, and therefore rely too heavily on their dog's alerts at the expense of regular glucose monitoring.

# Increase in hospital admissions for hypos over the last 15 years

**Research at Leicester University found an annual increase of thousands more people with diabetes going into hospital for low blood sugars (hypoglycaemia) during the last 10 years, amounting to a 39% increase during the last 15 years.**

The records for 101,475 hospital admissions for hypoglycaemia in England were reviewed.

- 72% of the people admitted for hypoglycaemia were over 60 years and 18% had more than one admission during the 15 years.
- The number of admissions increased steadily from 2005 with 7,868 admissions to 11,756 in 2010, a 49% increase.
- It stabilised in 2014 when there were 10,977 admissions for hypoglycaemia.

The increase in admissions for hypoglycaemia is worrying because there was a decrease in admissions for diabetes, length of hospital stay, mortality and one-month readmissions.

The lead researcher said in a press release, "Given the continuous rise of diabetes prevalence, aging population and costs associated with hypoglycaemia, individual and national initiatives should be implemented to reduce the burden of hospital admissions for hypos." (The Lancet Diabetes and Endocrinology)

## Looking at the questions that arise from this

- Are people not having hypo warnings?
- Are people not being sufficiently educated about what to do if a hypo occurs?
- The target blood glucose levels have been lowered in both Type 1 and Type 2 and we know that tight control increases the risk of hypos, so should more people be given individual targets according to their particular circumstances?
- People using insulin are supplied with test strips but often not enough and most people with Type 2 diabetes not taking insulin are denied test strips even if they are taking tablets that cause hypos. So maybe this cost-cutting exercise is just not working?

These are just some of the possible causes of the increase in hospital admissions for hypoglycaemia.

**Note: IDDT has a leaflet about hypoglycaemia, so if you would like a copy, ring 01604 622837 or email [enquiries@iddtinternational.org](mailto:enquiries@iddtinternational.org)**





# From our own correspondents

## Research – the small print

*Dear Jenny,*

I recently went to my hospital to take part in a study looking at why some people with Type 1 diabetes develop complications sooner than others. Seemed like a good thing, and the leaflet I was sent mentioned they would also be looking at the genetic component of this. Again this seemed very sensible.

What concerned me when reading through the fine print of the consent form was that at the end of a paragraph it said that my genetic material would be stored in their human tissue bank. Wait a minute - for how long? What for? Who gets access?

This seemed to be utterly unknown and a cause for concern for me. Surely this is creating a DNA bank through the back door? I consent to a study, but my DNA may go on to be used for many other things I have no control over and no consent is needed. I'm not the only one with concerns, it seems: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917846/>

It took me 3 reads of the sentence to realise the implications and I think many people would not have questioned it. I was fortunate the nurse was willing to discuss and each separate line needed an initial, but even so I don't think the full implications were made clear. So I wonder if anyone else has had a similar experience or is only now starting to wonder what exactly it was they consented to.

M.C.  
South East

**If you have any information,  
just let Jenny know on [jenny@iddinternational.org](mailto:jenny@iddinternational.org)  
or call her on 01604 622837**

## Confusing information!

*Dear Jenny,*

I have had Type 1 diabetes for 37 years and inject a minimum of 5 times a day. It is essential that I do a minimum of 4 blood glucose tests a day.

I use Contour meters which are available on the NHS, as the strips for this make of meter. However, my nurse has told me that these are no longer on my Healthcare Trust's formulary, although they have served me well for many years, so I have to change to a new Gluco Lab meter.

A week later I saw my hospital consultant who told me that the Gluco Lab meter was substandard and no one in his care should use it and he kept it! He advised me to use the FreeStyle Libra but as this is not available on the NHS so not an option for me, he told me to carry on with my previous Contour meter.

In 37 years, I have never received such confusing advice! Are CCGs / Hospital Trusts cutting costs at the expense of accuracy? Who do I believe?

M.T.  
South West

## But 'it's old-fashioned' – how many times?

### A phone call

Many people who are happily using animal insulin will have experienced the same frustration as one of our members. She rang us in exasperation after her usual clinic check and yet again, the doctor tried to persuade her to change from animal insulin to one of the synthetic insulins. Considering that she has had Type 1 diabetes since 1973 and has no complications, she quite reasonably asked why? The only answer was that 'animal insulin is old-fashioned'.

We haven't noticed that metformin is classed as old-fashioned, yet it is the oldest drug for the treatment of Type 2 diabetes!

It is not very comforting to think that our medicines are prescribed on the basis of fashion as we still hope that they are prescribed on the basis of evidence of benefit or superiority over other drugs! However, it is worth remembering that NICE guidance for Type 1 still recommends that people should have the insulin that suits them best and does NOT state that one type of insulin is best for everyone.

## Update on Growing Feet!

In the last Newsletter, Mr M.D. wrote in to say that his shoe size used to be 12 and 2 years later he is a size 14 but his feet are not swollen. Even more strange is that the toes next to his big toes are now longer than his big toes, which they never used to be.

He asked if anyone else had growing feet! Well, two men have responded to say that they too have growing feet. Have we discovered something new???

## The impact of parenting styles on children with Type 1 diabetes

**According to a study carried out in Israel, children of fathers who parent authoritatively show improved glycaemic control based on their HbA1c values. The study examined parents and children aged 11 to 18 years old of different socio-economic backgrounds with Type 1 diabetes for at least a year.**

Parenting styles were classified as:

- authoritative, meaning setting clear limits but not being domineering;
- permissive, meaning parents made few efforts to direct and limit their child's behaviour,
- authoritarian, where parents were harsh and punitive.

### The results were interesting!

- Authoritarian fathers, but not mothers, were associated with children who showed better adherence to their treatment plans. However, boys with mothers who showed authoritarian traits had poorer treatment adherence.
- Children of both genders with permissive mothers did not stick to their treatment plan very well.
- When both fathers and mothers showed a sense of helplessness, children showed poorer control and less adherence to treatment overall.

The lead author concluded that the association between paternal level of authoritativeness and diabetes control highlights the importance of fathers' involvement in their children's diabetes management. He also added that compared with mothers, fathers tend to take too small a role in dealing with their children's diabetes.

Earlier studies have shown that an authoritative parenting style and high expectations of self-control are associated with children who are less likely to be overweight and there are also studies that show that children of mothers who tend to be permissive are twice as likely to be overweight as those with authoritative mothers.

An accompanying editorial suggests that clinicians should be trained to help parents achieve an authoritative parenting style as this is not only

valuable when dealing with Type 1 and Type 2 diabetes but also helps children from becoming overweight. (J Epidemiol Community Health doi:10.1136/jech-2016-207588)

## Low bedtime glucose and daytime physical activity increase the risk of night hypos

As many of our readers know, night hypos occur frequently in children with Type 1 diabetes and they are mainly asymptomatic (without symptoms).

Research in Switzerland examined the frequency and duration of night hypos in 51 children who had Type 1 diabetes for more than 6 months and the influence of physical activity. Continuous glucose monitoring was performed on 6 days and physical activity was recorded and the results were as follows.

- There were 128 episodes of night hypos and only 8 were symptomatic.
- One or more night hypos occurred on 32.7% of nights.
- The duration of hypoglycaemia ranged from 10 to 665 minutes, with 36% of episodes lasting less than an hour.

There was an association between daytime physical activity and night hypoglycaemia:

- One hour of moderate to vigorous physical activity increased the risk of night hypos by 58%. One hour of vigorous physical activity increased the risk by 82%.
- Bedtime blood glucose levels of less than 6 mmol/l resulted in a 2.5 fold increased risk of night hypos. (Diabetes Care, May 2016)

Comment: as parents, many of us discover the hard way, (by experience!) that on a day when our child or adolescent has been physically active, playing sports for instance, then a night hypo can follow. This can happen even if all the right steps have been taken at the time of the physical activity, so it is worth considering a significant bedtime snack of long-acting carbohydrate on these days.

We also discover that going to bed with blood sugars below 6 mmol/l is too low to be safe for the night. Having a blood sugar of less than 6 might look good on the results, but not if a night hypo follows! It is always worth remembering that good control is not just about avoiding high blood sugars but also about avoiding lows.



## SNIPPETS

### Lilly Bluetooth insulin device

US regulators, the FDA, have approved a Bluetooth-enabled insulin pen and associated smartphone app from Companion Medical. With funding from insulin manufacturer, Lilly, Companion has called this the InPen system which can be used with Humalog and Novolog (NovoRapid in the UK). They say that the InPen and mobile app combines the benefits of sophisticated insulin pumps with the simplicity and affordability of pens and syringes to improve diabetes management. The company plans to release an Android version and has also applied for a CE kitemark in Europe.

### Smokers beware!

Austrian researchers found that people with Type 1 diabetes who smoke had significantly higher HbA1cs, LDL cholesterol and triglyceride levels than non-smokers. The findings were based on information from the T1D Exchange Registry in the US and the Prospective Diabetes Follow-up Registry in Austria and Germany which involved 20,405 adults with Type 1 diabetes, also showed smoking may increase the risk of vascular complications. (Diabetes Care, 23.08.16)



### A bit more about eggs!

The risk of salmonella from eating raw or lightly cooked eggs is now "very low" according to the Advisory Committee on the Microbiological Safety of Food (ACMSF). The "very low" risk of salmonella especially applies to eggs produced under the Lion Code quality assurance scheme.

The Lion Code is a set of quality measures for eggs, including vaccination and enhanced testing for salmonella, a cool chain from farm to retail outlets, improved farm hygiene, effective rodent control, date stamping on individual eggs and traceability.

Eggs not produced in the UK are now also said to be "low" risk for salmonella. However, the committee warns that eggs should be stored properly and eaten within the best before dates to be considered "very low" risk.

### From your editor – Jenny Hirst

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At the time of this report, the Food Standards Agency (FSA) advised vulnerable people, including pregnant women, against eating undercooked eggs. It is carrying out an eight week consultation, so we shall see whether the FSA advice will change.

### Under reporting of daily calorie intake

A study carried out by the Behavioural Insights Team shows scientific and economic information which suggests that people are actually eating 3,000 calories as opposed to 2,000 calories which are quoted in official surveys. One of the miscalculations that people seem to make in working out their calorie intake is how much is eaten and drunk outside the home. The authors suggest that policy makers who are trying to curb obesity levels should concentrate more on reducing calorie intake rather than promoting exercise. If policy makers are deciding the amount of exercise needed to 'run off' the calories, it is bound to be wrong if they are working on 2,000 calories instead of 3,000!

### Global trends in sugar consumption

Researchers analysed global nutritional information and found the fastest increasing sugar consumption is in low- and middle-income countries - in Africa, Asia, the Caribbean, Latin America, the Middle East and Oceania, with Australasia, Latin America, North America and Western Europe having the highest consumption. (The Lancet & Endocrinology 02.12.15)

### Cystic fibrosis-related diabetes research

The Cystic fibrosis Trust is setting up a Strategic Research Centre which will explore the underlying causes of cystic fibrosis-related diabetes (CFRD). The study aims to investigate how the defective CFTR gene causes increased blood sugar levels.

Approximately 50% of adults living with cystic fibrosis have diabetes which can have a detrimental effect on lung function and quality of life. Discovering how the defective gene makes it hard for bodies to regulate insulin levels is crucial to working out how to prevent diabetes from developing. If the researchers could find a way of preventing CFRD it would help to lift some of the burden people with cystic fibrosis have to live with on a daily basis.