



# Insulin Dependent Diabetes Trust

January 2010 Newsletter



## Seasonal Greetings

This is the January Newsletter a few weeks early, but for a good reason. We wanted to wish all our members and supporters a Happy Christmas but more importantly, we also wanted to give you some thoughts and tips for the festive season. Despite what the shops would have us believe, our October Newsletter is too early to think about Christmas so we decided to send you the January Newsletter a little early. Traditionally, it is a time for indulgence, eating, drinking and generally 'being merry' – not too literally – but it can seem a bit daunting if you live with diabetes, so I hope you find the articles inside useful.

**As the end of 2009 approaches**, I look back over IDDT's activities for the past year and not only have we had another successful year in terms of growth in membership, but we have expanded our work beyond what many people would think possible with such a small staff. So huge thanks to Bev, Josie, Martin and Rita for their tremendous efforts throughout the year.

With our booklet '*Understanding Your Diabetes*' we fulfilled our 2009 pledge to try to help people to understand the differences between Type 1 and Type 2 diabetes and to have an understanding of both types of diabetes and the various treatments. Hundreds of these booklets are now in many hospital clinics and GP practices for nurses to give to patients - what better way to help people with diabetes and their families.

Our Children's Department has grown with the quarterly Parents'

Bulletin being a welcomed publication by parents. Of course, the Goodie Bags and the Hall of Fame go down very well with children with diabetes and their brothers and sisters. It is IDDT's opportunity to show that we recognise that living with diabetes, especially for children, is not easy and they deserve something special- so do their brothers and sisters because sometimes they can have a tough time too.

IDDT's new publication *'Type 2 and You'* has been a great success - clearly much needed practical help for people with Type 2 diabetes, especially those who are not taking insulin. We have received hundreds of requests for it and while this new venture is a mark of our success in answering people's needs, it is abundantly clear that in many areas, this group of people are not receiving the education and information they need to manage their diabetes and look after their future health. Many are confused and lost reporting that the only advice they receive on diagnosis is 'cut down on sweet stuff'! It is not rocket science to know that the huge emphasis on diagnosing the 'missing millions' is wasted if the health system then fails to treat them properly. Several years ago I remember IDDT saying that the system for treating these increased numbers has to be in place before their diagnosis otherwise people will suffer and sadly, they are. They have been diagnosed with a lifelong, progressive condition and are suffering anxieties and fears because they don't know what they are supposed to do.

On a more positive note, I look forward to 2010. We are expanding our office space to cope with the increasing workload and our new website will be going live, so keep your eye on it [[www.iddtinternational.org](http://www.iddtinternational.org)]. We are developing a resource pack for teachers, not only to help them understand the needs of children with diabetes but also to help them produce lesson plans to teach their pupils about diabetes so that they grow up with a better understanding of life with diabetes. We will be asking for your help too - no not to raise money although this always helps, but to let us know where the health system serves you and fails you, so that we can take action to try to make improvements.

But for now, many thanks for your help, encouragement and support throughout the last year, it has been vital to our success. Have a good Christmas and a happy, healthy 2010!

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## Here And Now - Adolescence, Diabetes & Christmas

by Dr Gary Adams

**It is fast approaching** that time of the year again when the majority of us look forward to finishing work and enjoying the luxury of eating, drinking and being merry. We have time to relax from the stresses of work and the comforts of family, friends and other indulgences.

Before you start dreaming about the thirst quenching and much needed glass of wine or favourite tippie washing down your turkey roast, I wonder if we should spare a thought for those people who cannot merely eat and drink at will but who need to continually consider what they consume. I am of course talking about those people with diabetes, some of whom have had this debilitating disease for ages and those that have only just been recently diagnosed.

In adolescents, "sticking to the schedule" or adhering to the regimen is of particular significance. The World Health Organisation defines an adolescent as a person between the age of 10 and 19 years, and although this is not the only definition of an adolescent, it is widely accepted. Diabetes can interfere in an adolescent's life as they not only have 'normal' adolescent problems to deal with but also the impact their condition may have, in many aspects of their life. Research has found that boys and girls differ in coping with their diabetes through adolescence. Studies have found that girls regard diabetes as important and incorporate it into their identity by taking responsibility of their own care, while boys dismiss their diabetes and try to separate it from themselves, by choosing the regimen with the

least injections so they could administer all their injections at home, and therefore have reduce stigma attached to them. Studies have also found mothers had overall control of the boy's diabetes so they had good control, while girls were reported to only have moderate control, due to the flexibility of controlling their diabetes themselves, allowing them not to adhere to treatment.

Much research has focussed on non-adherence of young people to their diabetes regimen, as their actions are extremely important. This is because diabetes care is usually carried out by the person(s) with the diabetes themselves and so nonadherence puts them at greater risk of complications associated with diabetes.

Adherence tends to decrease during adolescence possibly because adolescents are more interested in the 'here and now' rather than the future and the Christmas period is a case in point. The physical and psychological effects of injecting oneself become much more evident over this period because of the increased social gatherings, whether they be with family or not. For some adolescents, the physical trauma of injection is compounded by increased anxiety and the low self-esteem during this festive period. Moreover, these psycho-social problems exhibited by adolescents with diabetes are enhanced because they feel that they should be behaving in a manner similar to their non-diabetic friends; a feeling, which makes them estranged, anxious and depressed still further.

So by sparing a thought for those anxious adolescents, and providing help as and when required, we may be able to help them "stick to the schedule" and have a much more enjoyable Christmas. Just a thought!

## Christmas Tips - Don't Let Diabetes Spoil Your Day!

**As Dr Adams says** Christmas is a mixture of many things - presents, excitement for children [and adults] and a busy time for adults but if you or a member of your family has diabetes, it can be a worrying and stressful time too, especially if this is your first time with diabetes. It doesn't seem fair but whether you have Type 1 or Type 2 diabetes you can't take a day off from it but it is also important to remember that it is a time to be enjoyed with family and friends. Here are a few tips to help.

- Excitement tends to lower blood glucose levels, this especially applies to children with diabetes.
- Stress tends to raise blood sugars so stay active – exercise reduces stress, burns excess calories and helps control blood sugars. Pamper yourself - whether this is taking a relaxing bath or curling up with a book, make time for yourself as this can help to prevent holiday stress from building up. Get plenty of rest to prevent holiday tiredness.
- Eating more than usual can raise blood sugars, so go for a walk after a big Christmas dinner.
- Try to keep meal times as near as possible to your usual times but if meals are later, then remember to have a snack.
- Maintain your blood glucose testing routine as far as possible and test more often if you're eating frequently or at irregular times.
- Planning - make sure that you have enough insulin and other medications to cover the Christmas and New Year holidays.

**Christmas Dinner** - in terms of carbohydrate content, it is similar to Sunday lunch with some extras, such as cranberry sauce and stuffing. You aren't obliged to eat everything, so choose what you like best and pass on the rest but if you want to eat everything, do so but just have smaller portions. Take a family walk after lunch to walk off the extras - it's good for everyone and a convenient way of lowering blood sugars without anyone else thinking about it!

**Mince Pies** - make your own so that they have thinner pastry and are smaller than Mr Kiplings! You can also add finely chopped apples to bought mincemeat to reduce the sugar content.

**Nibbles** - as well as the usual carbohydrate-containing nibbles, have plates of raw vegetables and low calorie dips around. Nuts and dried fruit are a good idea too - two tablespoons of nuts and half to one tablespoon of dried fruit are only 10 grams of carbohydrate. Fruit is always good too – there are 10 grams of carbohydrate in a small banana, apple, orange, two plums, two tangerines and a handful of grapes or cherries.

### **Then there's alcohol!**

When you drink, your liver decreases its ability to release glucose so that it can clean the alcohol from your blood. As glucose production is shut down, hypoglycaemia [low blood sugar] becomes a risk for people with diabetes. It takes 2 hours for just one ounce of alcohol to metabolise and leave your system so the risk continues long after your glass is empty! The effect can last for over 24 hours.

Alcohol impairs judgement, so you may not realise that you are hypo and will not treat it with sugary food. You may also be mistaken for being drunk by others around you and so they will not offer help. Both of these situations could lead to severe hypoglycaemia.

The alcoholic drink may contain carbohydrates but these do not offset the glucose-lowering effect of the alcohol, so they should not be counted as part of your overall carbohydrate consumption.

### **Having diabetes does not mean that you cannot drink but there are some golden rules that people with diabetes should follow:**

- Only drink in moderation - sensible advice whether or not you have diabetes.
- Take the appropriate steps to prevent a hypo - never drink alcohol before a meal, on an empty stomach or immediately after taking your insulin or glucose lowering medication. If necessary lower your insulin dose at the meal prior to going out for a drink.

- The best time to drink alcohol is with a meal, if you are not having a meal with your alcohol, then it is a good idea to nibble carbohydrate [eg crisps] throughout the evening.
- Have an extra bedtime snack before going to bed. Remember that alcohol could lower your blood glucose during the night while you are asleep, resulting in a night hypo. The alcohol may make you sleep more soundly so hypo warnings may not wake you.



## **Is This The Answer To Children Having To Inject At Lunchtime At School?**

**Although it is not always appreciated**, the problem of children using rapid-acting insulin analogues is that they don't last very long and therefore they need to inject at lunchtime. Parents and schools are finding this a difficult situation because of the responsibility issues around injecting.

This problem has been recognised by paediatricians in the US, if not in the UK. So research was carried out at Texas Children's Hospital to find out if Lantus [glargine] can be mixed with rapidacting insulin analogues to reduce the number of daily injections for children newly diagnosed with Type 1 diabetes.

The researchers compared twice-daily Lantus plus a rapid-acting analogue in the same syringe with twice daily NPH [intermediate-acting insulins such as Insulatard] with a rapidacting analogue in the same syringe for a year.

19 children in the Lantus group and 17 children in the NPH group completed the study. And the results showed:

- HbA1cs in the Lantus group were 6.7% and in the NPH group they were 7.6%.
- Two children in the Lantus group required additional lunchtime injections in the last month of the study.



- Both groups were encouraged to contact the researchers with all queries and more in the Lantus group did so.

The researchers concluded that Lantus mixed with a rapid-acting insulin analogues and given twice daily 'seems' to be significantly more effective than NPH and a rapid-acting analogue in newly diagnosed children. [[Pediatrics, online Feb 25 2008](#)]

### **What should we interpret from this study?**

We are very aware that the number of daily injections for children is an important issue, not only because they are not happy about having injections per se but also because injecting at school at lunchtime is proving difficult but this study does not provide all the answers.

Firstly, this study was carried out in newly diagnosed children, many of whom would be going through the honeymoon phase of requiring less insulin. Therefore a question remains about whether or not they would be able to avoid the lunchtime injection once they are out of the honeymoon phase, highlighted in the study by the two children who did require injections at lunchtime. Nevertheless, even if a lunchtime injection does become necessary, mixing long and rapid-acting insulins in a syringe will reduce the overall number of daily injections.

This raises a further issue. In the UK, unlike the US, the vast majority of children and adults use pen injection devices not syringes. So although this study shows that it is possible to reduce the numbers of injections by mixing the insulin analogues, this can only be done by using syringes. Insulin manufacturers advise that insulin analogues should not be mixed at all but human and animal insulins can and always have been mixed safely in a syringe. The use of pens has always increased the number of daily injections - a disadvantage of pens that has rarely been pointed out! So the question actually amounts to which device do parents and their children want to use - a pen with more injections or a syringe and less injections? This is a choice that should be offered to parents, children and adults with diabetes.

### **While talking about Lantus and children...**

The rate of improvement in blood sugars in children with Type 1 diabetes using Lantus depends on age. A study carried out in 70 children in Poland with Type 1 diabetes on multiple daily injections found the rate of improvement in blood sugars depends on age.

[[Exp Clin Endocrinol Diabetes. 2007 Nov;115\(10\)](#)]

Lantus was given instead of their normal intermediate-acting insulin and analysis of home blood glucose monitoring and HbA1cs after 12 months gave some interesting findings.

- There were differences in average blood glucose control between pre-pubertal children and teenagers with a reduction in average blood glucose levels after 12 months in the teenagers and at various times of the day but in the prepubertal children only at bedtime and at 3am.
- There was an improvement in HbA1cs in both age groups but with different blood glucose results at the testing times during the day ie the insulin had different effects on blood sugars during a day in the two age groups.
- In both age groups there was a trend towards less hypos [note a trend is not the same as an actual reduction in the numbers of hypos] and there were no changes in body mass index or the amount of daily insulin required.

The researchers concluded that Lantus provided these 70 children with more stable blood glucose profiles but there was a slower reduction of blood glucose levels in younger children suggesting a 'great individuality in the regime of children using Lantus'.

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## **Diabetes Medication Cost £600 Million**

More money is spent on diabetes medication in primary care [through GPs] than on any other treatments for any other conditions. The NHS

Information Centre has issued a report, Prescribing for Diabetes in England, that nearly £600million of medicines were prescribed for diabetes last year.

- In the past year 32.9 million diabetes drugs were prescribed as a cost of £599 million.
- In 2004-5 24.8 million were prescribed as a cost of £458 million.

### Insulin

- Last year the number of insulin items prescribed rose to 5.5 million at a net cost of £288.3 million from £267 million in the year before.
- The proportion of analogue insulins prescribed [the most expensive insulins] compared with all other insulin items varied greatly between Primary Care Trusts [PCTs] – from 34% to 94.1% in 2008/09.
- Analogue insulins are the most commonly prescribed insulin from 22.3% of the total in 2002/03 to 77.5% of the total items in 2008/09. Last year 4.2 million items of analogue insulin were prescribed at a net cost of £238.6 million.

### Anti-diabetic drugs [for Type 2 diabetes]

- In 2008/09 21.2 million items were prescribed at a net cost of £168.1 million. This is a 9% increase in items on 2007/08 but a 9.6% reduction in cost.
- Metformin is the most commonly prescribed anti-diabetic drug and has a relatively low cost.

### Overall conclusions in the report

Metformin accounts for the greatest number of items prescribed. However the greatest costs are now associated with analogue insulins which 'have become the major driver for increases in cost.' It goes on to say: *'Despite savings being made in other areas [for example, in anti-diabetic drug prescribing] it appears that the high costs of human analogue insulins are offsetting the savings.'*

### Comments

One of the causes of increased costs is not just the rise in numbers of

people with Type 2 diabetes but that they are diagnosed at a younger age. As Type 2 diabetes is a progressive condition, this means that they are likely to need more expensive drugs and insulin at an earlier age and therefore for longer. As the report shows, the main insulin increased cost is due to the increasing use of insulin analogues.

Regular readers of IDDT Newsletters know that reviews of studies have shown there is no evidence that insulin analogues are of greater benefit than cheaper human [or animal] insulins for the majority of people requiring insulin, not to mention their unknown long-term safety. Despite this, the UK fails to investigate the cost effectiveness of insulins - the National Institute for Health and Clinical Excellence [NICE] has refused IDDT's request to consider this question. The German equivalent to NICE has done so and recommends that insulin analogues should not be prescribed except in exceptional cases. The result of this is that Germany has the lowest use of analogues in Europe with considerable savings on their diabetes drugs budget - money that can be spent in other areas of diabetes care, such as education.

It is well worth remembering the paper 'Nice insulins, shame about the evidence' [[Diabetologia \[2007, 50: Holleman F, Gale EAM\]](#)]. This questioned whether people with diabetes are getting the best deal when the choice is between treating 150-200 patients with long-acting analogues instead of human insulin or employing a full time specialist nurse educator at the same cost. Looking at the bigger picture, if my arithmetic is correct and if the 4.2 million analogue insulin items were human or animal insulin there would be a saving of about £75 million - we could have an awful lot more specialist nurses with that sort of money!

If there was evidence of benefit for patients from the use of insulin analogues, then no doubt the cost of insulin analogues could be justified but in this economic climate, with NHS cutbacks, the reduction in specialist nurses and lack of school nurses we remain strangely mystified by unwillingness to look into this.

## Dry Skin And Diabetes

**As we reported** in IDDT's April 2009 Newsletter, diabetes is known to be associated with skin disorders with one study [[Diabetes Care, August 2007](#)] showing that about two thirds of young people with Type 1 diabetes have at least one skin disorder.

Dry skin is a common skin problem which seems worse in the winter months. It can be associated with diabetes. If dry skin occurs than it is important to find out why.

- High blood glucose levels can cause dry skin, so it is important to test frequently.
- Dehydration can be a cause, so try drinking more water.
- Moisturise your skin while it is moist after showering or bathing but do not apply moisturiser between the toes.
- Regularly examine your skin for redness or damaged areas, especially your feet, and if there is anything unusual, then contact a doctor or health professional.

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## A Date For Your Diary...

IDDT's Annual conference will be held on Saturday, October 9th 2010. Our feedback forms from this year's conference provided some interesting topics that participants would like to see covered in 2010, so we will do our best to answer at least some of these in 2010. We hope that many of you will be able to attend.

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## Some Outstanding Questions

**HbA1c follow up-what should it be?**

In the July 2009 Newsletter we discussed HbA1c targets, how they vary from country to country and how we are supposed to know which one is right. These targets are important because they are an indication of the risks of developing the long-term complications of diabetes - the higher the HbA1c the greater the risk. Well one of our members pointed out that not only do the targets vary from country to country but they vary within a country - different professional organisations have different targets! Home blood glucose targets vary too.

**The American Association of Clinical Endocrinologists (AACE)** recommends the following blood sugar testing goals for adults with type 1 and type 2 diabetes:

- Preprandial (fasting, or before a meal) – less than 6.1 mmol/l [110 mg/dl]
- Two hours postprandial (after the start of a meal) – less than 7.8mmol/l [140 mg/dl]
- HbA1c (three month blood sugar average) – 6.5% or lower

**The American Diabetes Association (ADA) suggests slightly different targets:**

- Preprandial – 3.9 -7.2 mmol/l [70-130 mg/dl]
- Postprandial (1-2 hours) – less than 10.0 mmol/l [180 mg/dl]
- HbA1c (three month blood sugar average) – 7.0% or lower.

This suggests that as ever, the answer really is that targets need to be set according to the needs and situation of each individual person. Meantime, we can only try to do our best...

**Is there a good reason for adding metformin to insulin in type 1 diabetes?**

Metformin is a drug used to treat Type 2 diabetes which improves the action of insulin but as this Newsletter has reported previously, it is now often used to treat some people with Type 1 diabetes in combination with their insulin treatment. There has seemed to be very little evidence from research for this but Danish research investigated the effect of twice daily metformin in people with Type 1 diabetes with what was classed as persistent poor control [HbA1c of 9.48%]. The research compared treating with metformin and treating with a placebo

[dummy pill] for 12 months. The results showed that metformin did not improve overall glycaemic control as measured by the HbA1cs, no difference in minor or major hypoglycaemia but there were sustained reductions of insulin dose and body weight.

[\[PloS One 2008;3\(10\):e3363. Epub 2008 Oct 9.\]](#)

**Note:** Increased insulin doses tend to increase weight, so was the reduction in weight due to taking less insulin?

### **Am I supposed to take aspirin everyday?**

There has been conflicting advice about the use of daily aspirin for primary prevention of cardiovascular disease. [This means healthy people] As aspirin can cause serious intestinal bleeding, we need to know whether the risks outweigh the benefits.

Low-dose aspirin is widely used to prevent further episodes of cardiovascular disease in people who have already had problems such as a heart attack or stroke. This approach - known as secondary prevention - is well-established and has confirmed benefits.

Increasing evidence suggests that aspirin is not effective in primary prevention of cardiovascular disease [CVD] in people with diabetes. A recent edition of the Drugs and Therapeutic Bulletin stated: *“Current evidence for primary prevention suggests the benefits and harms of aspirin in this setting may be more finely balanced than previously thought, even in individuals estimated to be at high risk of experiencing cardiovascular events, including those with diabetes and high blood pressure”*.

The National Prescribing Centre suggests that for prevention of CVD in Type 2 diabetes, consideration for aspirin should be on an individual basis but the British Hypertension Society recommends prevention with aspirin for people over 50 whose blood pressure is controlled who have various conditions, including diabetes.

A recent article in the Lancet [\[2009;373:1849-60\]](#) has shown that the risks of taking aspirin for prevention outweigh the benefits and that

the current guidelines recommending the use of aspirin in healthy people are not justified. All this makes it a bit clearer, I think!

### **Do Avandia and Actos cause macular oedema?**

We have warned of the increased risk of heart failure on people with Type 2 diabetes taking the class of drugs known as glitazones, brand names Avandia and Actos. This is thought to be due to fluid and sodium retention. There has also been some evidence that they can cause macular oedema which seems to be reversible if the drugs are stopped. This evidence is now much stronger - as the result of a large 170,000 strong study which showed an association between diabetic macular oedema and the use of glitazones, Avandia and Actos. The advice to clinicians and ophthalmologists is that people taking these drugs should be aware not only of the risks of heart failure but also the risks of developing macular oedema, which is a sight-threatening condition. [\[BMJ Sept 22 2009\]](#)

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## **20% Discount For IDDT Newsletter Readers**

**Medical Shop** is pleased to offer IDDT Newsletter readers 20% off at [www.medicalshop.co.uk](http://www.medicalshop.co.uk) until the end of December 2009. Simply use the promotional code DEC in your basket. Medical Shop offers quick and easy online shopping and stocks a wide range of products to help people manage their diabetes. Products include:

**Glucotabs®** - A fast acting dextrose tablet that comes in a strong refillable tube - no more pockets full of crumbled tablets. Available in two great-tasting flavours.

**Gluco™** Juice - A new fast acting treatment for hypoglycemia from the makers of Glucotabs. Ideal for people who prefer a glucose drink to chewing tablets

**Frio®** Wallets - Keep your insulin at a safe temperature even when you don't have access to a fridge - simply add water! Available in a choice of sizes and colours

**Sharps Bins** - Small sharps bins for safe sharps disposal at home



or away.

**Merino®** – Skincare products from New Zealand containing lanolin - a fantastic natural moisturiser

Medical Shop orders can also be placed over the 'phone on Freephone: 0800 731 6959 (Open Monday to Friday: 8.30am to 5.30pm) Medical Shop is a UK only service.

## New European Directive For Drivers With Diabetes

**October 2009:** the European Commission has passed a directive which could introduce individual assessments for people with insulin-treated diabetes to hold Group 2 driving licences. These licences cover large goods vehicles [LVGs] and vehicles carrying more than 6 passengers.

### The current position

#### Group 1 includes motorcycles and cars

**People are legally obliged to tell the DVLA or DVA in N. Ireland if the following applies:**

- They are treated with insulin alone or insulin and tablets.
- They have been diagnosed with complications including neuropathy, nephropathy and retinopathy.
- They have an existing medical condition, deterioration of a disability or develop another condition that may affect safe driving.
- They have had one episode of disabling hypoglycaemia requiring outside assistance or are at high risk of developing disabling hypoglycaemia.
- They develop hypoglycaemia unawareness and if they experience hypoglycaemia while driving.
- They have a whole pancreas transplant or pancreatic cell transplantation and still need insulin treatment.
- There are changes in treatment eg change from tablets to insulin or

- develop gestational diabetes that requires treatment with insulin.
- They have diabetes and are applying for a licence for the first time.

**Unless they are applying for the first time, people don't have to inform the DVLA or DVA if the following applies:**

- Treatment is diet only, diet and tablets.
- Treatment is with incretin mimetics, including Byetta and Victoza.
- Treatment with gliptins, including Januvia and Galvus.

### Group 2 licences for large goods vehicles [LVGs] and vehicles carrying more than 6 passengers.

The UK has a blanket ban on all insulin-treated drivers of Group 2 vehicles. The exception to this is for category 1 [C1] licence holders [small lorries and vans between 3.5 and 7 tonnes] who have to have a satisfactory individual medical assessment and meet the strict criteria including:

- Evidence of good diabetic control.
- Applicants must have had no hypoglycaemia attacks while driving.
- They must undergo an annual examination by a diabetes specialist to enable the DVLA to assess whether their condition is adequately controlled.
- They must regularly monitor their condition and at least 2 months records will be required.

**Due to the increased risk of hypoglycemia, people are legally obliged to inform the DVLA or DVA if the following applies:**

- Treatment is with incretin mimetics, including Byetta and Victoza in combination with sulphonylureas.
- Treatment with Januvia in combination with sulphonylureas or Actos.
- Treatment with Galvus in combination with metformin or sulphonylureas.

### Taxis and private hire vehicles

The DVLA recommends that local authorities apply the Group 2 medical standards to drivers of these vehicles but the responsibility for the standards rests with the local authority, so can vary from

authority to authority. In Northern Ireland, the DVA prohibits anyone treated with insulin from holding a licence to drive a taxi or private hire vehicle.

### **The new directive**

The new directive now allows for individual assessments for drivers of Group 2 vehicles, which is a relaxation of the current ban and allows for people with good control to continue in their driving employment. It must be complied with by all European member states within a year and provides criteria for those on medication, as well as covering those who have had no severe hypoglycaemic events in the previous 12 months. It states: *“In these cases, such licences should be issued subject to the opinion of a competent medical authority and to regular medical review, undertaken at intervals of not more than three years.”*

### **Be warned - the current restrictions are still in place!**

The new directive must be complied with by all European member states within a year. However, the UK has to await a formal response from the DVLA or DVA as to how it will be implemented across the UK. Until then, the current restrictions are still in place and must be complied with. They are:

- Insulin-treated drivers are issued with a Group 1 licence for one, two or three years, with medical certification checks each time.
- People treated with insulin are not allowed to hold Group 2 licences, other than C1.
- If anyone begins using insulin, they must inform the DVLA/DVA and stop driving the vehicle immediately.

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## **How Accurate Are Blood Glucose Meters?**

**This the question** frequently asked of IDDT. As far as we are aware, by international standards, blood glucose meters and their strips only have to be accurate to within 20%. So we are relying on an up to 20% inaccuracy of meter readings to make adjustments to insulin doses

but at last someone seems to be doing something about this!

The FDA in the US has already pressured for the international standards to be improved indicating that it may set its own standards if sufficient changes are not made. The American Association of Clinical Endocrinologists recently wrote a letter to the agency supporting new standards for meters. The letter stated that the current variation in meter accuracy and in glucose testing strips could pose patient safety problems.

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## **NHS Update**

By Martin Hirst

### **GP out-of hours service criticised**

The GP out-of-hours service provides vital care to people outside normal surgery hours. Changes to GP's contracts meant that from April 2004, GP surgeries could opt out from providing these services. In turn this left a shortfall in the number of doctors providing this services and Primary Care Trusts (PCTs) found themselves commissioning services from other out-of-hours providers.

An on-going investigation by the Care Quality Commission (CQC) into one such provider, Take Care Now, has revealed alarming shortfalls in the quality of services provided, potentially on a national scale. The investigation was triggered by the tragic case of Mr. David Gray, who died after the administration of 100mg of diamorphine by a locum doctor from Germany.

The CQC looked at the five PCTs commissioning services from Take Care Now and their interim report concluded that although PCTs monitor response times, in order to rigorously monitor performance, they must also look in detail at the quality of clinical decisions, the efficiency of call handling and the adequacy of staff and doctors training.

The CQC observed that Take Care Now also needs to improve certain issues, such as unfilled shifts, its policies on action for people suffering from suspected stroke and for managing medicines.

The CQC is expected to publish its final report in early 2010. The five PCTs where Take Care Now provides services are:

- NHS Worcestershire
- NHS Cambridgeshire
- NHS Suffolk
- NHS Great Yarmouth and Waveney
- NHS South West Essex

### **NHS and its finances**

A report from the NHS Confederation, 'Dealing with the downturn', predicts that there will be a £15 billion shortfall in resources available to the NHS between 2011 and 2016. This is due to the economic situation and rising costs. The concerns are that lack of funds will lead to longer waiting lists for tests and treatment, and poorer training of staff.

### **Medication errors when patients leave hospital**

A study by the Care Quality Commission [CQC] has shown that failure by GP surgeries and hospitals to communicate could result in patients being given drugs without their GP knowing. It also showed that patients may be given drugs that interact badly with other medicines they are taking, or to which they are allergic. The CQC visited 12 Primary care trusts and 280 GP surgeries and found that 98% of GP surgeries did provide information about medicines to hospitals for non-emergency patients but they did not systematically list previous drug reactions, other illnesses a patient had or known allergies. However, according to 81% of GP practices, the quality of information given by hospitals when they discharge patients was incomplete or inaccurate 'all of the time' or 'most of the time'. Nearly half of GPs also complained that it took too long for hospital discharge notes to arrive so patients were being seen without a full set of records.

### **What does this mean for us as patients after a hospital stay?**

I am sure that many of us have had the experience of our GP not being aware that we are home from hospital when we have been told to expect a visit. So this report suggests that perhaps we have to be more assertive and chase up the GP surgery once out of hospital, we have to ensure that our medicines are correct by asking questions, especially if we feel we are not being given all the tablets we normally take or are being given some that we know cause an allergic reaction.

### **Ageism in the NHS to be addressed in 2012**

Legal rights are set to ensure that pensioners receive fair access to NHS services, in line with new equalities legislation being debated by Parliament. Health Secretary, Andy Burnham, announced at the National Children and Adult Services Conference that from 2012, age discrimination in the NHS and social care would be banned. This was expected to happen at a later date.

This follows a review into the treatment of the elderly by Sir Ian Carruthers, the chief executive of NHS South West, when he was asked to investigate health barriers faced by older people after a number of ageist claims.

Researchers found elderly stroke patients received less adequate care than younger stroke patients and there are other reports warning that over-65s lose out on mental health services. A poll found almost half of doctors who cared for older people believed the NHS was "institutionally ageist".

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## **IDDT Housekeeping**

### **New computer system - have patience with us!**

We would like to thank you for filling in the questionnaire we sent out in October. The need for this was to have more accurate information about you so that we are better able to answer your specific needs through our new computer system. In addition our old system could

no longer handle the increase in membership. We would again like to assure you that this information is entirely confidential. This has involved migrating [computer speak for 'shifting'] our existing membership database to the new system so it is possible that there could be errors. Please have patience with us and do let us know, if there are any inaccuracies with your mailings.

### **Christmas Cards**

We still have IDDT Christmas cards for sale, so if you would like some, please give IDDT a call on 01604 622837 or e-mail enquiries@iddtinternational.org Every little helps to support IDDT, so please remember to buy some.

### **Recycle bags**

Many of you are already recycling for IDDT and a big thank you for this. We are including another recycle bag with this Newsletter because who knows, you may receive a new mobile phone for Christmas! If so, please be kind enough to donate your old one to IDDT in the recycling bag. Don't forget that your empty inkjet cartridges help us too - just follow the instructions on the recycle bag.

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## **IDDT's 2009 Conference 'Understanding Your Diabetes'**

Jenny welcomed over 100 people to the Conference with a special welcome to the people who joined us from other countries. As this year is IDDT's 15th Birthday she reminded everyone of the beginnings of IDDT. How IDDT started with about 5 people and virtually no money - even having to count the petty cash to find out if we could afford postage stamps!

She explained that IDDT has grown steadily over the years and the main reason for this is that we have stayed focused on what is important to people with diabetes. Seeking recognition for the adverse reactions

some people have to synthetic insulin and maintaining supplies of animal insulin started out as our aims and have remained so. Above all, we have kept out core beliefs that people with diabetes should have an informed choice of treatment and that this information should be independent, unbiased and not influenced by industry. IDDT's way of doing this is to remain an independent organisation run entirely by voluntary contributions and it is thanks to you and all our members and supporters that we are here today - stronger than ever.

The programme continued with speakers, discussion groups and plenty of informal discussions during the breaks.

### **Confessions - Twenty things I wouldn't necessarily tell the medics**

Jane Essex

1. I don't make confessions; if I think it's absolutely wrong I generally don't do it, and if I did I wouldn't advertise it to other people! (See points 2 and 3).
2. This isn't a morality contest, I prefer the term 'effective' to 'good' when applied to control. Use of the word 'naughty' in conjunction with diabetes is liable to trigger a knee jerk reaction of the fist! I know (Geoff Gill and co-authors) that not all unstable diabetes is patient-induced.
3. For me, effective diabetes control is far more about making an informed choice than achieving a statistically desirable blood glucose or HbA1c value. (But even I was upset when it reached 10.4 % recently.)
4. I understand the difference between population statistics and individual determinism; I also understand that researchers can find outliers frustrating. I should do, most days I have outlying blood glucose levels that don't correspond to what might have been predicted from prior experience!
5. Outliers in terms of long-term outcomes are commonly skewed by socio-economic class, the last great unmentionable it seems. In this respect, diabetes hasn't changed much since 1922 (see Chris Feudtner's book, Bittersweet).
6. There's only so much sacrificing of the present that I'm willing to



do to offset a future with no guarantees! Control for me is about finding the balance point for these conflicting pressures. Good care is about prioritising the things that matter most to me.

7. When things are going well, I panic in case there is going to be a compensatory problem later to even out the glycaemic karma!
8. Choosing my insulin type is emblematic of the type of informed choice that I want to exercise more generally. I don't know it all, and will consider other people's ideas, but I don't like it when staff assume that I have learnt nothing from 40 years' experience. Ask me where I've been before you tell me where I'm going.
9. Gin and slimline tonic with a slice of lime is low carb. Thank goodness!
10. I eat chocolate, sometimes when I'm hypo, and other times when I'm not, including the 'pariah' chocolate, sugarfree. It's a calculated risk and I'm willing to chance it ... on occasions!
11. I know the value of being part of an economically and politically significant population. I keep a glass syringe and a set of re-sharpenable needles in my drawer to remind me of how far we've come as a consumer group.
12. I understand the (often unmentioned though far from unknown) relationship between insulin and body weight. I choose to keep my dose low and resist the common response to step it up repeatedly.
13. I don't believe that changing insulin dose gives a response directly proportional to the size of the change; our bodies adjust. We are stuck with the problem of always trying to hit a moving target!
14. I test when I judge it's needed for safety / well-being (e.g. before I drive), to get a picture of what's happening, but only very reluctantly to satisfy the clinical fixers. My needs vary, so does my testing frequency (0-15 times a day).
15. I wonder why clinical staff so rarely ask about why we do things (including inducing unstable diabetes).
16. I am surprised by how little use diabetes care staff routinely make, even selectively, of my day-to-day records.
17. Conversely, when staff do look at my results, I am surprised by how unrealistic many health care workers' expectations of good control are (a flatline at 5 mms!). It's a disorder of carbohydrate metabolism, get over it!

18. Diabetes is a big but involuntary part of my life. I don't want it made into a bigger feature if it can be avoided e.g. attendance for duplicitous tests, fighting bureaucrats over the refusal of an indwelling BG monitor.
19. I wasn't prepared for how the condition would age, independent of my own aging and have felt cheated recently when I couldn't straighten it out despite strenuous efforts. It was foolish (in light of point 12) to expect diabetes to behave like a sewer, 'you get out of it what you put into it.'
20. Diabetes is an integral part of me but I wish it was covered by EU working directives. Paid annual diabetes leave would be great!

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## Myths and Misunderstandings - Please don't let me be misunderstood

Dr Laurence Gerlis

### Christopher's story

- Type 2 diabetes on a very strict diet and tablets for 8 years.
- Slight increases in sugars to 7 – 11.
- Switch to insulin 3 times daily, 4 – 6 units.
- Sugars went up.
- Insulin up to 14 units 3 times daily.
- Sugars up to 12 – 19.
- Stopped insulin, back to tablets
- Sugars now 6 – 8.

### Myths

- Insulin doesn't make you fat.
- The higher the insulin dose the better.
- Most doctors understand diabetes more than most patients.
- You either have Type 1 or Type 2 diabetes.
- If you need insulin you must be Type 1.
- Human insulin is superior to animal insulin.
- Breast feeding is better than bottle feeding.

### **More myths**

- Analogues are superior to human and animal insulin.
- Low fat, high carbohydrate diet is best.
- Regular 3-4 times daily exercise are the worst part of diabetes.
- There are lots of jobs that cannot be done by those with diabetes.
- Diabetes is scary and people often become suddenly very ill.

### **Even more myths**

- You must eat every time you take insulin.
- If you are on insulin you must eat 6 times a day.
- If you have diabetes, even Type 2, you must have a high carb / low fat diet.
- If you have diabetes, there are certain foods you can never eat.

### **Misunderstandings**

- If your sugars are high, just keep on increasing the insulin.
- If you want to eat more, just take extra insulin (?)
- Patients are better if they have some higher sugar readings.

### **The Truth**

- No insulin has ever been shown to be superior to purified pork insulin.
- Good control is difficult if there are frequent hypos – get rid of the hypos first!
- Treat insulin with great respect – it is a potent protein. It is also very sensitive to heat and can go off easily.
- Exercise, fluid intake and low carb diet are as important as insulin dose in managing diabetes.
- Try to get the insulin dose to the minimum, especially in Type 2 diabetes, to avoid hypos and weight gain.
- Alcohol is a carbohydrate which is toxic to the pancreas.

### **Insulin Pump Therapy - the pros and cons**

John Hughes

There was a lot of interest in pump therapy and people who had

thought they would never consider using an insulin pump, were tempted to look into it further. The following points were made:

- Pump therapy is a matter of choice.
- Contrary to the information people are often given, pumps can be used with all types of insulin, including pork and beef insulins. It is a matter of adjusting the timings according to the type of insulin being used.
- Pump therapy requires blood glucose testing several times a day and training in carbohydrate counting.
- Pump therapy can reduce the number of hypos.
- The next development is the link up of a continuous blood glucose monitor and a pump. These have already been under trials in the UK but the manufacturers have withdrawn them for further developments.

### **Points from Discussion Groups**

- Discussion of insulin regimes and as most of the participants were using animal insulin, there was a sharing of adverse experiences of their time on synthetic human insulin. There was a shared sadness at the feeling of lost years during the time they experienced these adverse effects, years that cannot be recovered.
- Many of the participants in the 'Become aware of your care' group felt encouraged to go home and find out more about what their local services offered and get involved in improving care for people with diabetes and their families.
- It was clear that the education people received about carbohydrates is very varied with some people counting carbs and others not knowing what this meant. Generally people who had been diagnosed a long time counted carbs but for more recently diagnosed people, it appeared to depend on local policy as to whether they received education in carb counting.

The conference closed at 4.30 with thanks to the speakers, group leaders and IDDT's staff for organising the day

## More On Transplantation

### Genetically engineered beta cell transplants

As we know, pancreatic cell transplants are limited because the immunosuppressant drugs needed to prevent rejection can have toxic effects and do leave patients vulnerable to infections. Now US scientists have taken a step towards getting round the problem of immune rejection - they have transplanted genetically engineered cells in mice which have lasted for a few months before being rejected. The genetically insulin-producing beta cells included three genes from a virus capable of evading detection by the immune system. Progress but this is still a long way off being used in people so we should not get our hopes up.

### Comparing islet transplantation and intensive insulin treatment

People treated with islet cell transplantation and with intensive insulin therapy [multi-dose insulin] for 3 years were compared to find out the difference in the following outcomes: glucose metabolism, renal function, retinopathy, and neuropathy. The results showed that glucose metabolism as measured by the HbA1cs improved and there was less progression of retinopathy in the transplantation group. Renal function declined in both groups and neuropathy remained stable in both groups. [[Transplantation. Dec 2008 27;86 \(12\):1762-6](#)]

### First patient to be treated with pig cell transplant

On October 7th 2009 it was announced that in a new trial, the first New Zealand patient received an implant of pig cells to treat Type 1 diabetes. This is a resumption of a programme that was halted 13 years ago because of concerns about cross infections. The man is the first of 8 patients who will receive the transplants. It follows a similar trial in Moscow which showed that the insulin-producing cells taken from the pancreas of neonatal piglets improved the patients' control of their diabetes. Thousands of minute clusters of cells are infused into the abdomen and release insulin in response to blood glucose levels. The cells are protected from the immune system by being coated in a seaweed based gel.

People from all over the world have applied to enter the trial but there are strict protocols in place because of the potential risk of introducing pig viruses into the human population. The company involved, Living Cell, say that the risk of cross infection is minimised by the pathogen-free status of its specially bred pig herds. Worldwide more than 200 patients have received transplants of the pig cells and have not demonstrated evidence of cross species infections.

Participants in this new trial must fit into a government stipulated protocol. The participants must be between 35 and 65 with diabetes that cannot be well controlled and women must be past the menopause and men must agree to use condoms afterwards. In the first year after receiving the transplanted cells, the participants have to visit the hospital for tests at least weekly and they will be monitored for the rest of their lives.

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## Children & Young People

### More children diagnosed in winter

Research [[Diabetic Medicine, August 2009](#)] suggests that children are more likely to develop diabetes in winter than in summer and the further away from the equator, the greater is the number of winter cases. 31,000 children were tested for diabetes at 105 centres in 53 countries and a link was found between the seasons and diabetes in 42 of the centres. The winter cases were also more likely among boys and older children over the age of five years. This supports previous research that has shown a connection between winter and Type 1 diabetes. It is still not known why onset this happens but the researchers suggest possibilities - variations in blood sugar during colder months, the increased number of infectious diseases, children getting more exercise in the summer months but none of these fully explain the differences seen in age groups and genders.

The research had several shortcomings, one of which is that most of

the centres where the information was collected were in the northern hemisphere and there was little information from Africa and Asia.

### Top teen concerns are losing weight and fitting in

The NHS Teen LifeCheck is a website giving 12 -15 year olds the support to make decisions and choices that can help them to be healthy and happy. The website can be found by visiting: [www.nhs.uk/teenlifecheck](http://www.nhs.uk/teenlifecheck)

In just 3 months since its launch more than 100,000 teenagers have completed a 'Lifecheck'. The findings from this are that most of them worry about losing weight and fitting in with their friends. It also found that there are significant differences between teenagers from low income and high income families.

- Nearly twice as many teenagers from low income families worried about bullying whereas teenagers from higher income families were more likely to worry about peer pressure.
- 43% of low income teenagers and 30% of high income teenagers worried about losing weight.
- Those from low income backgrounds were more likely to worry about drugs and smoking than their more well-off peers.

Importantly and perhaps worryingly, almost half of those surveyed said they would feel unable to share their concerns with their friends because of fear of being considered silly. Nearly 75% of all teenagers said they like to get confidential advice.

### We must remember that teenagers with diabetes are likely to have similar feelings, simply because they are teenagers.

There are some points in the results that are particularly important for teenagers with diabetes and need to be taken notice of by both health professionals and parents.

- Worrying about weight increase - in teenagers with diabetes this can mean missing injections to lose weight.
- Being bullied - they may feel more at risk of being bullied because they have diabetes.
- Feeling they cannot share their worries with friends - they have

more worries than a lot of children, so not feeling able to share them can make them feel very isolated and alone.

- They want confidential advice – important for clinic

## Reminders

### Changes in the reporting of HbA1c

Just to remind you, HbA1cs will be reported in units of 'mmols/mol' and not the percentage figure we are used to. If this looks a little familiar it is because our home blood glucose test results are measured in 'mmols/l' which is not the same. From June 2009, HbA1c results in the UK will be given in both percentage and mmol/mol to give everyone time to get used to the new units. From April 1st 2011, the results will be reported only in mmol/mol.

### The relationship between the old and the new measurements

| Old HbA1c [%] | New HbA1c [mmol/mol] |
|---------------|----------------------|
| 6.0           | 42                   |
| 6.5           | 48                   |
| 7.0           | 53                   |
| 7.5           | 59                   |
| 8.0           | 64                   |
| 9.0           | 75                   |

- So if you are aiming for HbA1c targets of 6.5% and 7.5%, the new units will be 48mmol/mol and 59mmol/mol.
- Normal blood glucose [in someone without diabetes] is 4 - 6% but in the new units it will be 20 - 42mmol/mol.

### Animal insulins are still available

We are still finding that some people are being told that pork and beef insulins are no longer available. Wockhardt UK [formerly CP Pharmaceuticals] are still supplying pork and beef insulins - it was



only Novo Nordisk that chose to discontinue pork insulin. Wockhardt UK's pork insulin continue to be available in vials and cartridges.

This chart shows Wockhardt equivalent pork insulins:

|                           |                           |
|---------------------------|---------------------------|
| Wockhardt Pork insulin    | Novo Nordisk Pork insulin |
| Hypurin Porcine Neutral   | Pork Actrapid             |
| Hypurin Porcine Isophane  | Pork Insulatard           |
| Hypurin Porcine 30/70 Mix | Pork Mixtard              |

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## From our own correspondents...

Here is a selection from the many letters we have received and which the writers have kindly allowed us to reproduce:

### **Misinfomation at its worst - type 1 becomes type 2!**

Dear Jenny,

I am a retired physiologist and pharmacologist and I have had Type 1 diabetes for 60 years. Like many other people with Type 1 diabetes I have been moved from the hospital diabetes clinic to my GP surgery. I haven't seen a doctor for 18 months - just the practice nurse and a diabetes specialist nurse.

My blood glucose testing strips have been reduced with the explanation from the nurse that I only need to test twice a week and even the specialist nurse said that I should not test more than 3 times a day because my finger ends would be damaged - even if this were so, has she never heard of testing at the sides of the fingers?

On asking for more blood testing strips, I was told I wouldn't understand how to interpret the results and that it is normal for elderly people to only test twice a week. On pointing out that I had Type 1 diabetes and needed to test regularly to manage my diabetes, I was told that this was now normal practice and on further enquiries believe it or not, I was told that this was "new thinking and Type 1 becomes Type 2 in

older people". And this by a health professional dealing with diabetes patients at my GP surgery!

But the story gets worse - my short-acting insulin for meal time injections was removed and I was told to manage on long-acting insulin twice daily. [This is the first stage of insulin treatment for people with Type 2 diabetes.] After several days of extremely high blood sugars of 20 to 30 mmols/l I managed to acquire some short-acting insulin from a friend, buy my blood glucose test strips and get my sugars down to between 5 and 7.

During this time, I had my routine visit to my ophthalmologist who asked why my control was so dreadful. He has written an 'appropriate' letter to my GP and I am being referred back to the hospital clinic for my future diabetes care. My reason for writing is to raise awareness among the readers of IDDT Newsletters that this appalling misinformation is being peddled by at least one health professional. Type 1 diabetes can never become Type 2 diabetes. My concern is for people who aren't in my position and don't have any background information about diabetes. How would they handle this situation, they wouldn't know the information was wrong. Would they question the information given by a health professional?

Please print my name, so that people know this experience is real and I am genuinely concerned about the state of diabetes care, certainly in my area.

*Roger Waring, North West*

**Note:** We are left speechless! We know sometimes people with Type 2 think that when they go on to insulin, they become Type 1, which they don't, but for a health professional to tell a patient that Type 1 becomes Type 2 when they get older, is unbelievable. To take a patient with Type 1 diabetes off short-acting insulin that they have been using for 60 years strikes us as negligent – he could have died of ketoacidosis.

## Taking Q10 for years

Dear Jenny,

I was glad to read in the October Newsletter that we can expect a care plan from the NHS as I feel our local Trust is failing patients with diabetes. The other point I would like to make is that my GP has taken me off statins due to the side effects and put me on Ezetrol [Ezetimibe] and so far so good - no side effects. Also in the last Newsletter, you discussed Q10 and I thought I would let your readers know that I have been taking it for years and I do feel it protects my immune system.

*V.M. , The North*

**Note:** Ezetrol is a cholesterol absorption inhibitor which works by preventing cholesterol eaten in the diet from being absorbed from the small intestine into the blood stream. It also prevents cholesterol released from the bile duct into the intestine from being reabsorbed into the bloodstream. It is normally used when statin with a low cholesterol diet and increased exercise, has not lowered cholesterol sufficiently.

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## Research Of Interest

### Closing the loop - the artificial Pancreas

In September 2009, it was reported that scientists have developed an artificial pancreas which they believe will free people with Type 1 diabetes from daily insulin injections and self-monitoring and will reduce the risk of complications.

The 'artificial' pancreas consists of a glucose sensor under the skin, an insulin delivery pump worn on a belt and a controller to regulate the amount of insulin delivered. So it will monitor glucose levels and in response, will deliver the appropriate amount of insulin.

Early trials show the device to be effective at managing control and

importantly, reducing hypoglycaemia, including during the night.

The researchers believe that the device could be widely available in the next few years but there are still some developments needed including sensors that have more than one signal. The next step in the research is to keep blood glucose levels under control for longer periods of time than in this first trial.

### Macular oedema - cancer drug may offer an alternative to laser treatment

Laser treatment is usually used to treat diabetic macular oedema which is the type of retinopathy that affects fine vision such as reading. Laser treatment can stop macular oedema and other forms of retinopathy from getting worse but it does not lead to an improvement in vision.

Researchers have been carrying out trials with the drug bevacizumab, which is used to treat various forms of cancer. They gave the drug to 115 patients with macular oedema, 24 of whom had both eyes treated. Improvements in vision were seen within a month and after 2 years, vision had improved in 51% of cases and 91% of eyes were either stable or had improved. While the researchers said these results are 'very promising', they stressed that using this and other drugs was still experimental and requires further investigation.

### Just being part of a clinical trial improves glycaemic control

Research has shown that simply being part of a clinical trial improves blood glucose control as measured by HbA1cs. Using the global research programme of an insulin manufacturer, patients with Type 1 and Type 2 diabetes were entered on to a screening programme and their HbA1cs measured at the beginning. Their treatment was not changed. At their second visit their HbA1cs were measured again - for Type 1 diabetes at 28 days and for Type 2 diabetes at 14 days. In both cases the HbA1c improved with the biggest improvement in those that had the poorest control at the start.

All of this goes to show that simply entering a clinical trial improves HbA1cs. So what does this mean? The significance when we look

at results of clinical trials where HbA1cs are an outcome measure is that there would have been some improvement without the new treatment. So we need to take this into account, especially if the new treatment only shows a small improvement.

But why does this happen? The answers can only be a guess - perhaps it is because trial participants feel they are being watched more closely and therefore should be more careful [or more compliant] with their diet, exercise or medication. Perhaps it is that they are being seen more regularly by doctors and feel that they are receiving more attention which in turn, encourages them to manage their control more carefully. If either of these explanations are correct, then perhaps it is worthy of note for future treatment.

### **Research shows the changes in the skin can lead to limb loss**

Leg ulceration caused by peripheral vascular disease is one of the complications of diabetes, particularly in Type 2 diabetes and sometimes ulcers will not heal and the only solution is amputation, usually below the knee. Lowering blood pressure and cholesterol levels and keeping good blood glucose control cuts the risk of this complication which often goes undetected. Research carried out at Bristol University found that damaging changes occur in the connective tissue that supports the skin so that the skin is not as strong as it should be and can break down more easily, allowing ulcers to form which in some cases can lead to amputations. Understanding what happens in the tissue ie understanding the causes, could allow new treatments to be developed that help to prevent ulcers forming and therefore avoiding amputations.

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## **Awareness Of Glaucoma In Siblings**

**It is said that glaucoma** is more common in people with diabetes, although the reality could be that it is detected in people with diabetes because they have their eyes checked more frequently in the general

population. Glaucoma is raised pressure within the eye. Early detection is important to prevent damage to the optic nerve which can lead to visual impairment. It does run in families, so if it is diagnosed in one family member it is important that close family relatives over the age of 40, have the pressure in the eye measured.

The Royal Institute for the Blind [RNIB] has launched a pilot campaign aimed at increasing awareness of glaucoma among siblings of people already receiving treatment for glaucoma. People with glaucoma will be encouraged to send letters to their siblings to encourage them to have regular eye checks. The aim of the pilot is to check how many siblings actually visit an optometrist after being advised to do so. So it is worth remembering that if you have glaucoma, you should advise your siblings to have an eye check. All people over 40 are entitled to a free eye test if they have a close relative with glaucoma.

### **Weight lifting and glaucoma**

If you have glaucoma or a family history of it, this may be of interest...

Research carried out by New York Eye and Ear Infirmary suggests that weight lifting as a form of exercise may cause pressure to build up in the eyes especially if people hold their breath when lifting the weights. [\[Archives of Ophthalmology, 15 September 2006\]](#) The researchers advise that people with glaucoma should be cautious about this form of exercise and that those with a family history of glaucoma should have an eye examination before taking up weight lifting.

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## **NHS Health Checks**

**On 1<sup>st</sup> April 2009** the NHS launched a programme of health checks for over-40s in England. The checks are to be implemented through Local Primary Care Trusts [PCTs]. Every five years healthy people between 40 and 74 will be invited for a free health check to identify their risk of diseases such as coronary heart disease, stroke, kidney

disease and diabetes.

According to The Lancet [[Vol 373, April 11, 2009](#)], screening 15 million people aged 40-74 could prevent 9500 heart attacks and strokes a year [2000 fatal], prevent at least 4000 people a year developing diabetes and 25,000 people would be diagnosed with diabetes or kidney disease a year earlier. The DoH maintains that the increase in staff numbers required will only be 'modest' even though per year of implementation, the staff increases will be an extra 800 GPs, 470 nurses and 750 healthcare assistants.

### **Will it become big business?**

But where is the extra staffing going to come from? It still takes 2 weeks to get an appointment at my daughter's GP practice, so what will happen when they start screening? Maybe PCTs will buy in the services of private companies, in which case screening becomes a business with vested interests and the possibility of incentive payments for the number of people prescribed various drugs. Who will carry out the screening, what qualifications will they have and how will the screeners be monitored? Call me cynical but as a 66 year old, I want to know the answers before giving my consent to being screened.

### **Here's another view...**

Writing in the British Medical Journal [[BMJ, March 4th 2009](#)], Michael Oliver, Professor in Cardiology at Edinburgh University said that many people are being prescribed medicines that may actually be harming their general health.

He partly blames the Quality and Outcomes Framework (QOF) payments system under which GPs are rewarded for taking action to prevent conditions like diabetes and heart disease. He highlights the "tick-box" culture that pays "scant attention" to the potential side effects of drugs and sends older patients home with pills, despite the fact that they actually feel quite well. He cites beta-blockers used to lower blood pressure, but which can lead to vertigo and slow mental and physical activity, and statins that can cause muscular discomfort

or weakness. Professor Oliver concludes that older people may feel reasonably well when they enter the surgery but return home feeling "scared and no longer comfortable with aging."

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## **Warnings**

### **Buying medicines online**

The Royal Pharmaceutical Society has urged the public to be aware of the risks when purchasing medicines online. A survey in the magazine, GP, showed that one in four GPs has treated patients for adverse reactions to medicines bought on the Internet. The Society has created the Internet Pharmacy Logo to help the public identify genuine pharmacy websites where they can purchase medicines safely. They also recommend that we carry out other checks, for instance looking for the name and address of the pharmacy on the website as it should be connected to a 'bricks and mortar' pharmacy. Online pharmacies that offer prescription only medicines without a prescription should be avoided.

In June 2009 a UK man was jailed for 2 years for operating an illegal online pharmacy. Between 2003 and 2007 his turnover for unlicensed or counterfeit drugs was £6 million -mainly for drugs for erectile dysfunction!

### **Warning about health testing kits and screening by private companies**

The running of health tests and body scans by private companies has become an industry worth about £99million a year. A report drawn up by Sense about Science, the Association of Clinical Biochemistry, the PHG Foundation charity and the Royal College of Pathologists criticises DIY health testing kits, which can be bought over the counter and via the internet, because the public are often unaware of their limitations. Unlike medicines and national screening programmes, there is no regulation or requirement for research on the effectiveness



of such testing, so anyone can set up a lab and sell diagnostic testing kits.

The report says the accuracy of tests taken outside the GP surgery or hospital setting cannot be relied upon, with selftesting there is a risk of inaccurate results and results may not be interpreted properly. The report calls on the government to improve regulation of such tests.

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## Interesting Evidence About Organic Food...

**The present stance** of the Food Standards Agency [FSA] is that there is no evidence that organic food is better. However, a £12 million European Union funded study led by Newcastle University found a general trend showing that organic food contained more antioxidants and less fatty acids, although the researchers did admit that the study showed some variations.

The researchers grew fruit, vegetables and reared cattle on adjacent organic and non-organic sites across Europe, including a farm attached to Newcastle University and they found:

- Levels of antioxidants in milk from organic cattle were 50- 80% higher than in normal milk.
- Organic wheat, tomatoes, potatoes, cabbage, onions and lettuce had between 20% and 40% more nutrients than nonorganic equivalents.

But the study, which will be published over the next year, also showed significant variations and the researchers are now going to try to find out where the differences between organic and non-organic food comes from and why there is so much variability.

The FSA currently states: *“Consumers may also choose to buy organic food because they believe that it is safer and more nutritious than other food. However, the balance of current scientific evidence*

*does not support this view.”*

The choice is yours!

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## Cystic Fibrosis & Diabetes

**Diabetes is very common** in people with cystic fibrosis, especially as they get older. It is also more common in women aged 30 to 39. Lung function is worse in patients with cystic fibrosis-related diabetes compared with patients without diabetes.

Research in the US which collected information from 1992 to 2008 has shown that cystic fibrosis-related diabetes is present in 2% of children, 19% of adolescents and 45% to 50% of adults aged older than 30 years.

In the past the added diagnosis of diabetes meant that people with cystic fibrosis were at risk of early death but this review has shown that this is no longer the case. It is thought that the improvements are due to early diagnosis of diabetes through screening and if diabetes is diagnosed, then it is treated aggressively. Better antibiotics, digestive enzymes and respiratory therapies may have also contributed to the improvements. [[Diabetes Care, 2009;32](#)]

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## How Do I See My Own Medical Records?

**From time to time** people ask IDDT “How do I see my own medical records?” Everyone is entitled to see their own medical records within 21 days of requesting them. A health record may be in computerised form or manual form or a mixture of both. They may include such things as hand written clinical notes, letters to and from other health professionals, tape recordings of telephone conversations and lab

reports etc.

- Under the Access to Health Records Act 1990, which has been superseded by the Data Protection Act 1998, you have the right to access your personal medical records. You write a letter to your GP and/or your Consultant/Hospital Trust stating that you wish to have copies of all your medical records on file and computer which includes all results, observations and drug charts.
- There may be a charge for photocopying and charges may vary. The fee for records totally computerised is up to a maximum of £10.00 and for manual or a mixture of manual and computerised records the fee is capped at £50.00. Difficulties can arise if the copy is not available or the amount of work involved requires 'disproportionate effort'. This is not always simply a matter of how much copying has to be done and is often decided on a case by case basis.
- If the doctor or Trust fails to disclose your medical records, then you can make a complaint to the Data Protection Commissioner who will investigate.
- If your complaint to the Data Protection Commissioner fails then you are entitled to claim for your records in your local court under the Access to Health Records Act. You can seek legal advice or it is possible to do this yourself. Your local court will have a claim form pack.

Details of how to access your medical records can be obtained from the Department of Health website: [www.dh.gov.uk](http://www.dh.gov.uk)

The details of the Data Protection Commissioner are:

**Data Protection Commissioner**

Wycliffe House, Water Lane,

Wilmslow

Cheshire

SK9 5AF

Tel: 01625 545 745

Website [www.dataprotection.gov.uk](http://www.dataprotection.gov.uk)

E-mail: [mail@dataprotection.gov.uk](mailto:mail@dataprotection.gov.uk)

## Foody Facts

### Salt is back on the agenda

Over the years we have seen the advice about salt vary but most recommendations advise that daily intake of salt should be 6grams. Generally people are eating twice as much as this with most of it being hidden in the food we eat, especially in processed and fast foods. Reducing salt intake helps to lower blood pressure and allows blood pressure medications to work more efficiently.

Food labels about the salt content are not always clear as they often just give the sodium content and salt is sodium chloride. 99% of the sodium in food comes from the sodium chloride [salt]. To calculate the salt content you need to multiply the sodium content by 2.5.

### Additives in everyday diets

In January 2007 the results of a survey of 1006 people in the UK showed that on average people eat 20 different additives every day with some people eating up to 50. Food additives are substances added to food for specific reasons, such as to alter the colour, the taste and/or texture of foods or to preserve them for safety.

- Nearly half of those surveyed thought they were eating about 10 a day.
- Many people do not understand which foods are the most likely to contain additives and more than 75% of them thought that cooking from scratch will help to avoid them.
- Those who ate home cooked food actually ate an average of 19 additives, only one less than the average throughout the whole study.
- Almost half of those surveyed believed that frozen foods contain more preservatives than chilled foods but actually the ready meals consumed by those in the survey, on average, contained 6 times more preservatives than frozen ready meals.

There are reports that suggest that some additives can cause behavioural changes in some children but the evidence from research is unclear.

Mushrooms - have no cholesterol and virtually no fat or sodium and they can be an important part of a healthy diet. So if you are weight watching, mushrooms are great.

Mushrooms come in several varieties and their flavours vary from rich and earthy to extremely mild. The common white mushroom and button mushrooms are mild in taste and when buying them, they should be evenly coloured, have tightly closed caps and be firm to the touch.

More exotic wild mushrooms are more strongly flavoured and more readily available but it is important to remember that many wild mushrooms are poisonous.

Mushrooms contain vitamin B and are also a good source of the antioxidant, selenium, and therefore they may offer health benefits. Recent research has also studied the phytochemicals contained in mushrooms as these may stimulate the immune system.



## Snippets...

### **Bias against overweight people, and from health professionals!**

Research at Yale University has discovered that health professionals specialising in obesity treatment have a bias against overweight people. The study involved 389 healthcare professionals and the results showed that they had an implicit 'pro-thin, anti-fat' bias unless they were themselves overweight or had obese friends. They also 'significantly endorsed the implicit stereotypes of overweight people being lazy, stupid and worthless'. The researchers say that understanding this anti-fat bias will help in developing strategies to eliminate these attitudes.

### **Life expectancy has risen in the United States**

The official figures in the US show that life expectancy has reached an all time high, increasing by 1.4 years from 76.5 years in 1997 to 77.9 years in 2007. Strange that the percentage of obese adults is also rising.

### **Blood glucose sensor in the eye**

German scientists are working on a sensor that is implanted in the eye to measure blood glucose levels. It is smaller than a grain of rice and contains a chemical that gives off a fluorescent light when it comes into contact with glucose - if glucose levels are high, the light shines brighter. This type of light cannot be seen by the eye but is picked up by a device held close to the eye to get a glucose reading. The sensor tests interstitial fluid, the fluid that surrounds the body's cells, so the results may be similar to those of the continuous glucose monitors which use interstitial fluid. This results in a time lag behind actual blood glucose measurements, so fingerprick tests are still needed for accurate results on which to base insulin doses. This is in the early stages of development and perhaps some people would rather fingerprick that have a piece of rice in their eye!

### **The dangers of Red Bull and similar high energy drinks**

A study of 30 university students has shown that drinking one can of Red Bull increased blood-platelet 'stickiness' so increasing the risk of blood clots. The researchers said that just an hour after drinking one can of Red Bull, the students cardiovascular systems were abnormal and like those they would expect to see in people with cardiovascular disease. [[Heart Lung Circ, 2008;17 \(suppl 3\)](#)] This latest research follows a report by the German Federal Institute for Risk Assessment which lists more serious adverse reactions such as heart dysrhythmias, seizures and kidney failure. The adverse effects are thought to be due to the high caffeine content of these drinks. Some countries such as Germany and France have already placed tight restrictions on the sale of energy drinks for safety reasons.

### **Diabetes becoming more common on dogs and cats too!**

Recent figures from the US suggest that 1 in every 400 cats has diabetes with similar figures for dogs. They can both develop Type

1 and Type 2 diabetes but dogs mainly have Type 1 and cats are much more likely to have Type 2 diabetes associated with obesity. The symptoms before diagnosis are pretty similar to those in humans. The first step in treatment for both cats and dogs is to set up a proper diet. For cats with Type 2 it is a low carb diet and if they have Type 1 then it is twice daily long-acting insulin with a low carb diet. For dogs it is usually a high fibre diet with moderate levels of carbohydrates with short-acting insulin before meals although some dogs do better with additional long-acting insulin twice a day.



## Health Food

### **Health food claims rejected**

The Wall Street Journal reports that European scientific authorities rejected on October 1st 2009, dozens of health claims made by food companies. It says a panel of the European Food Safety Authority issued nearly a hundred opinions on health claims, about two thirds of which were negative. The Independent also reports that the European Food Safety Authority threw out two thirds of 523 applications for 200 vitamins, minerals, fibre, fats and carbohydrates and 'probiotic' bacteria.



If you would like to join IDDT, or know of someone who would, please fill in the form (block letters) and return it to:

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NN1 4XS

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## From Your Editor – Jenny Hirst

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