INDEPENDENT DIABETES TRUST
Newsletter
June 2014 Newsletter, Issue 81
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People diagnosed with Type 1 diabetes in their 40s

In this issue…

Type 1 diabetes is commonly diagnosed between the ages of 10 and 14 years and one of the definitions of Type 1 diabetes has been that it is usually diagnosed in people under 40 years old and only rarely in those over 40. However, new figures show that more than 1 in 5 people are over the age of 40 when they are diagnosed.

The National Diabetes Audit shows that of the 8,952 people diagnosed with Type 1 diabetes in 2011-2012, more than a fifth (2,035) were aged 40 and over when they were diagnosed and of those, more than 500 were aged over 69.

These findings show that Type 1 diabetes which is an autoimmune condition, can develop at any age.

These figures were announced at the same time as research from The Royal Gwent Hospital which suggests that some people are not being diagnosed early enough because of a lack of awareness of late onset Type 1 diabetes. This puts them at greater risk of diabetes complications and diabetic ketoacidosis before they are diagnosed correctly.

The National Audit figures and the research from Gwent highlight the importance of the public and more importantly, health professionals being aware of the symptoms of Type 1 diabetes and that it can occur in people over 40 and even in those over 69 years old.

We are already aware that people with Type 1 are often assumed to have Type 2 diabetes simply because they are older, even by health professionals. There seems to be a lack of appreciation that even though people may have been diagnosed when they are young, they do get older!

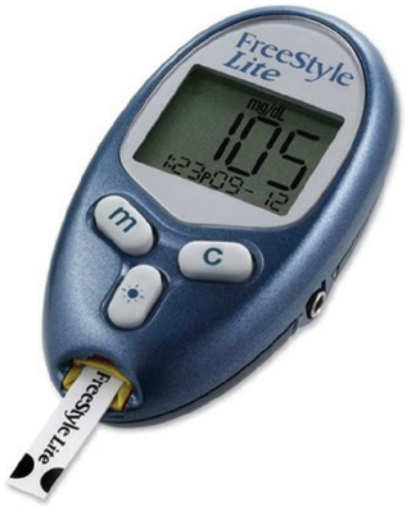
While talking numbers…….

New figures from official NHS figures show that there were 3,208,014 people with diabetes in 2013, an increase of 163,000 compared to 2012. This means that 6% of UK adults have diabetes.

The increase could be partly explained by the inclusion of people with rarer forms of diabetes as well as those with Type 1 and Type 2 diabetes and of course, improvements in rates of diagnosis. However, even taking these points into account, the figures show that the sharp rise in diabetes seen in the UK over the last 10 years shows no signs of slowing down. This confirms the need for the prevention of Type 2 diabetes which would be helped if the NHS Health Check was fully implemented. It should be offered to everyone between the ages of 40 and 74.

Comment from the Royal College of Nursing (RCN)

Dr Peter Carter, chief executive of the RCN expressed his concerns that at a time when diabetes is increasing so rapidly, there is a lack of investment in diabetes specialist nurses. He rightly pointed out that this is an example of where you could invest now in the NHS to save money in the long-term by providing essential support to help people to manage their diabetes and avoid complications.



Faults found in FreeStyle Mini and FreeStyle meters

Faults have been found in some glucose monitors, which could show incorrect low blood sugar results. Abbott Diabetes Care has recalled their FreeStyle Mini Blood Glucose Meter and FreeStyle Blood Glucose Meter because they may give incorrect low blood glucose results when they are used with FreeStyle Lite and FreeStyle blood glucose test strips.

Around 11,000 people in the UK are using these models although they have not been sold in the UK since 2007. Users have been urged to contact the retailer to receive a free updated meter. Alternatively they can telephone Abbott Diabetes Care on 0500 467 466 who will provide a new meter.

While waiting for a replacement meter, the Medicines and Healthcare products Regulatory Agency (MHRA) has advised people to continue to monitor their blood glucose levels using their existing models but to take extra care to notice any signs of high blood glucose levels. (19 March, 2014)

New insulins in **the pipeline**

While animal insulins are still available and are preferred by some people, most people are now using human and analogue insulins. The aim of insulin treatment is that the basal (long-acting) insulin helps to stabilise blood glucose levels between meals with no significant peaks and troughs. Ideally there should be no weight gain. Short- or rapid-acting insulin helps to cover the increased blood glucose levels as a result of meals and ideally without side effects, the main one being the avoidance of hypoglycaemia.

Insulin is usually injected although there are increasing numbers of people with Type 1 diabetes using rapid-acting analogue insulins via continuous subcutaneous insulin infusions (insulin pumps).

However, there are no insulins or regimes that truly mimic the way the body naturally produces insulin in someone without diabetes. Therefore new insulins are continually being developed.

Insulin degludec (Tresiba)

As previously reported in our Newsletter, this is a new long-acting basal insulin which is slowly released into the circulation. It has been approved for use in Type 1 and Type 2 diabetes in the UK and other EU countries but not in the US.

It is available in U100 strength and also in U200 which is twice as concentrated as U100. This 50% reduction in volume for each unit of insulin means that people can inject up to 160 units of insulin in a single injection from a pre-filled pen.

Glargine U300

Insulin glargine (Lantus) in strength U100 is a long-acting basal insulin that has been used for several years. The manufacturers are now developing a U300 version which gives a two thirds reduction in volume compared to U100 Lantus. This U300 insulin is currently under evaluation for people with Type 1 and Type 2 diabetes.

PEG lispro

This is another long-acting insulin under development. Early trials have shown that it is non-inferior to insulin glargine (Lantus) but it does appear to have adverse effects on lipids, increasing LDL (bad cholesterol) and decreasing HDL (good cholesterol) levels.

IDegAsp

This is a fixed combination of insulin degudec and insulin aspart (NovoRapid). It is under development and in trials has been given before the evening meal. At this stage it appears to compare favourably with aspart 30 (NovoMix 30).

Also under development

Ultra-rapid acting insulins are being explored to try to increase the speed of onset when taken before meals. These are only in the early stages of development, so will not be available in the near future.

Extending the driving licence period for people with diabetes

The Driving Licence Vehicle Licensing Agency (DVLA) has put forward proposals to extend the licensing periods for people with insulin-treated diabetes to up to 10 years. At present the period for people with licences for cars and motorcycles is at least every 3 years. The key point to remember about this is that it is up to 10 years, so it must not be assumed that everyone with insulin-treated diabetes will automatically receive a 10 year licence, just as they do not now automatically receive a 3 year licence.

The aim is that the proposals will form part of the Government's Deregulation Bill which is expected to receive Royal Assent by the autumn, so the changes could be introduced as early as 2015.

Readers may remember that on behalf of IDDT, Jenny Hirst attended a consultation meeting called by the DVLA. At this meeting she expressed the view that if these proposals come into effect, then IDDT hopes that the efficiency of the DVLA will improve and people will not be kept waiting for weeks and months for the renewal of their licence. The delays that have been, and still are, occurring cause anxiety and stress not only to the person with diabetes but to their families, especially when this means an inability to drive and livelihoods are at risk. Unless the DVLA intend making staff redundant, the fact that they will have significant less applications, should improve their efficiency and the speed of dealing with applications. Time will tell…

Just to remind you: changes in the period of the licence do not alter the fact that people with diabetes taking insulin have to notify the DVLA if they develop loss of hypo warnings, if they have more than one severe hypo in any 12 month period and if they have any changes in their health or complications that materially affect their ability to drive.

While talking about driving - new drug drive limit approved

Following two government consultations, it was decided that 16 different drugs should be restricted for driving. Of the list, 8 are prescription drugs and 8 are illicit drugs. This is expected to come into effect in Autumn 2014 and will mean that it will be an offence to be over the generally prescribed limits for each drug and drive a vehicle, in the same way as the drink driving regulations.

The limits are not set at zero as drugs taken for medical conditions can be absorbed by the body to produce trace effects. In addition, different drugs are broken down at different speeds and this is reflected in the different limits.

In the meantime, the government is working closely with the medical profession to ensure healthcare professionals and patients are informed about the new drug driving offence.

2014: Our 20th Anniversary Conference and AGM

2014 is our 20th Anniversary, so we are holding a conference that hopefully is a little bit special to celebrate the formation of IDDT and some of our achievements. You will see from the conference booking form accompanying this newsletter that it should be an interesting day and we hope that many of you will be able to attend. A date for your diary - October 18th 2014!

Because the conference is celebrating our 20th anniversary, we have decided to hold our Annual General Meeting on a separate day. The meeting will be held at the Kettering Park Hotel and all members are welcome to attend. The meeting will start at 2.00pm on Wednesday, October 29th 2014.

Holiday Tips

Holidays are approaching and whether staying in this country or going abroad, for families with diabetes, this means more planning and a bit more care when you are away. If you would like one of our packs of Holiday Tips just call IDDT on 01604 622837, email enquiries@iddtinternational.org or visit our website homepage www.iddtinternational.org

NHS NEWS

More about electronic prescriptions

We are hearing more about electronic prescriptions but do we know what this means? The Electronic Prescription Service (EPS) is a free NHS service which reduces the need for patients to visit the GP surgery to collect their prescription.

The patient chooses a pharmacy they want to use, this is then recorded by the GP surgery or the nominated pharmacy. When a new prescription is ordered in the usual way, the GP signs the electronic prescription with a card and a PIN (like a credit card). The prescription is then sent to the pharmacy via a secure NHS server. The prescription is received by the pharmacy within minutes and prepared in the usual way.

For people living with a condition such as diabetes where regular prescriptions are needed, the EPS cuts out the visit to the GP just to collect a prescription to then take to the pharmacy.

At present over 17% of GP surgeries and 92% of pharmacies are able to offer the Electronic Prescription Service and over 10% of the population have signed up to the service. If this is of interest to you, then ask your GP surgery if it offers the EPS.

NHS short of senior nurses

A report by the Royal College of Nursing (RCN) has described the government policy as "reckless" because it has left the NHS with almost 4,000 fewer senior nursing posts than in 2010. According to the report, issued in March 2014, the policy has drained valuable leadership, experience and specialist knowledge from the health service. The RCN warns:

- that the health service has been treating staff with years of experience as 'disposable' and a quick way to save money so specialist clinical knowledge and leadership is being lost.
- reveals 'downbanding' as a way the NHS is attempting to save money. This is when senior staff are forced into lower pay grades. The RCN believes this sends a message that experience and leadership is not valued in the NHS.

Dr Peter Carter, CEO of the RCN said, "In the community, senior and specialist nurses often work with a great deal of autonomy and are often solely responsible for patients. It is these patients who are affected when these posts are removed."

Local hospital closures

MPs in England have approved a new rule that allows the health secretary to close local hospitals irrespective of their performance. Clause 119 in the Care Bill gives power to special administrators to close or downgrade a hospital if a nearby NHS Trust is struggling financially. Critics of the clause say that it prioritises finances and power over patient care.

Sharing Your UPDATE

In the March Newsletter we reported that NHS England has commissioned the Health & Social Care Information Centre (HSCIC) to collect patient information from all providers of NHS care on a monthly basis. The programme is called care.data. However, just before going to print, it was announced that due to pressure, the date for this has been delayed until August 2014. The pressure came from medical organisations, from civil liberties and privacy campaigners, charities and Healthwatch groups.

The concerns expressed were that information pulled from GP records is so important that patients must be fully aware of the implications and all their concerns must be dealt with. Although NHS England had agreed to leaflet every household, by early March a survey showed that fewer than a third of households had seen the leaflet. So NHS England agreed to delay the programme until the autumn.

IDDT received quite a lot of calls about the sharing of information from their medial records and indeed, some people had already informed their GPs that they did not give consent and some GPs had even advised their patients not to give their consent. Clearly there is a lot of unhappiness about the proposal and people are unsure what it means now and perhaps more importantly, what it could mean in the future. If this is the case for you, it is important to remember that unless things change, if you don't opt-out you will automatically be giving your consent for information to be taken from your medical records. It is also important to remember that you can always change your mind and opt-in later if you want to do so.

What next?

NHS England will hold talks with the British Medical Association, the Royal College of

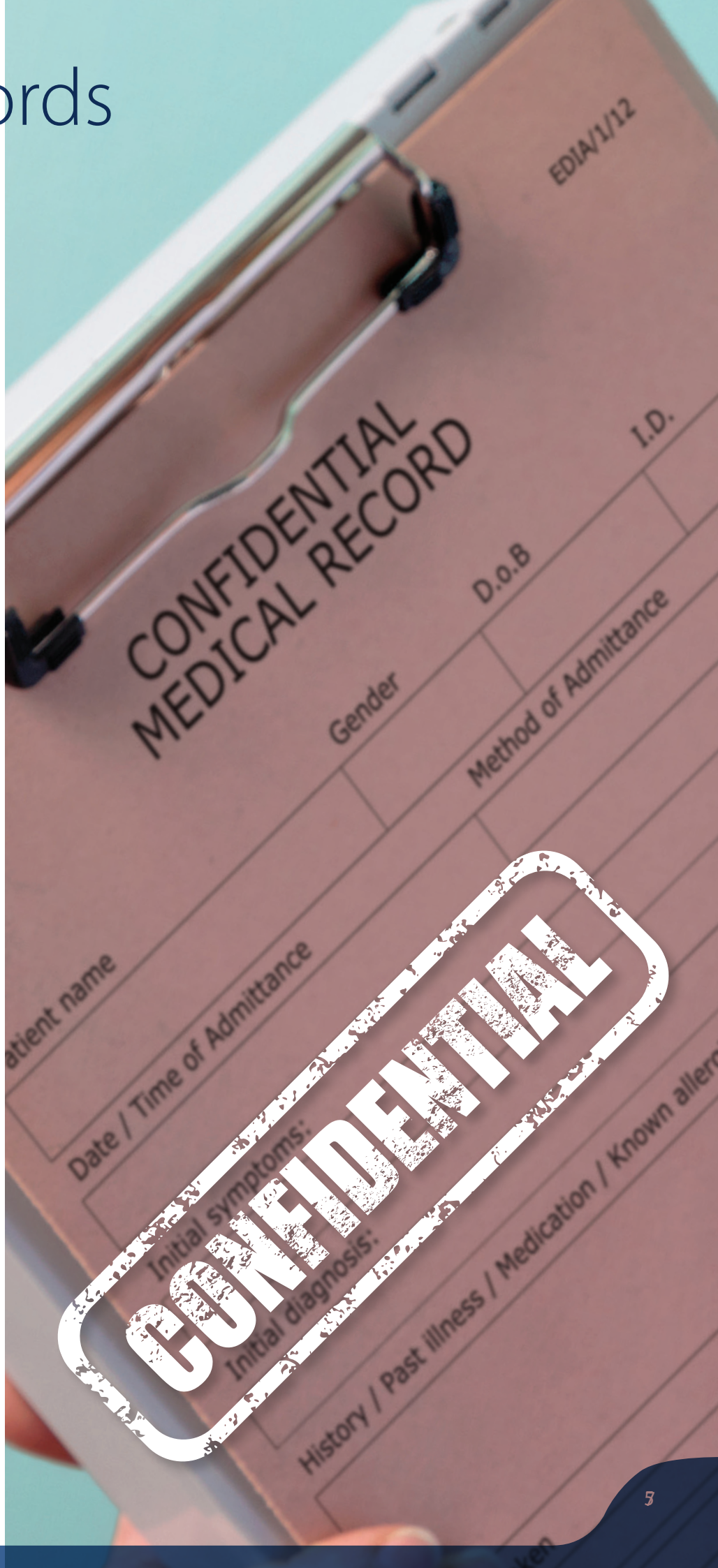
Health Records

GPs, Healthwatch and other bodies to 'develop additional steps to promote awareness with patients and the public.' Campaigners are calling for a range of changes including the following.

- A switch to an opt-in system not the proposed opt-out system.
- NHS England to write individually to patients explaining the scheme and what it means so that people can make an informed choice.
- Improved safeguards to control the disclosure of identifiable, or potentially identifiable information, and confirmation that the information will not be sold for profit.
- Guarantees that the data will not be sold outside the NHS for commercial purposes.

But there is a better solution

A letter in The Lancet (April 5th 2014) points out that many of us would be prepared to share our information for research in the NHS but we are less trusting of various other institutions and private companies who would also be able to access the information. In addition, patients may be happy to share some of their information but not all of it, for example, medical information but not anything relating to mental health problems. With the present proposals, anyone who objects to sharing data outside the NHS or who objects to sharing certain types of their information, has no option but to opt-out altogether. The author of the letter suggest that a sensible solution would be a sensitive and specific opt-out system, where patients can select which type of information they are prepared to share and with whom.



Fundraisers get behind £20 challenge

From running 14 miles to cake sales and coffee mornings, the fundraising drive launched to commemorate IDDT's 20th anniversary is gathering pace. The £20 Challenge aims to generate much-needed funds by calling on every supporter and member to raise an 'attainable' amount to help guarantee another 20 years of IDDT. We would like to thank all those people who have sent in extra donations to help with our £20 Challenge.

Thanks go to supporter David Hughes who raised £300 by taking part in the Silverstone Half Marathon on 2nd March. He said: "It was the first organised run I have done and despite being tough, it was very rewarding. I finished it in 2 hours 11 minutes, which I was happy with considering it was my first run.

Brothers Oliver Jelley and Ben Jelley are going to run from Market Harborough to Northampton on Saturday, June 7, along a disused railway line, known as the Brampton Valley Way and covers 14 miles. Oliver, who works with IDDT, said: "It started out with just me but my little brother was keen to get involved – so, as we're quite competitive, it has inevitably turned into a race. Since he decided to join me, my training has increased, but it's not just about who reaches the finishing line first, it's also now turning into who raises the most money as well."

IDDT Postroom Operative Caroline York will be meeting the pair half way on her bike and joining them for the remainder of the challenge. She said: "Having been here for 4 years, I have seen the valuable job carried out by IDDT, so I jumped at the chance to do a £20 Challenge."

Caroline isn't the only IDDT team member embarking on a challenge, Co-Chair Jenny Hirst is staging a coffee morning and Database Manager Rita East will be completing a 10-mile sponsored walk. Tina Freeland, a supporter of IDDT, is staging a cake sale.

Martin Hirst, IDDT Acting IDDT Chief Executive, said: "We, like every charity, are reliant on donations but whereas other fundraising drives can be quite demanding, our £20 Challenge is attainable for both our challengers and sponsors."

If you can help or would like more information, just call IDDT on 01604 622837 or email enquiries@iddtinternational.org

Confusion

With the increased publicity that even 5 portions of fruit and vegetables is not enough, there has also been publicity about whether fruit juice counts as one of our five-a-day. Many of us remember that it did when the five-a-day message was first given out. However the message now appears to be:

For the first time, IDDT has published a book which is entitled '*Diabetes – Food, Meds and More*'. It is a recipe book with a difference for people with Type 1 and Type 2 diabetes and for those at risk of diabetes.

The book was co-written by Martin Hirst and Mabel Blades, the authors of '*Diabetes – Everyday Eating*' - IDDT's most popular booklet, nearly 160,000 copies of which have been supplied in less than two years.

'*Diabetes – Food, Meds and More*' is not a typical recipe book, as it aims to cover real life, the day to day situations that happen. It not only includes everyday meals but also what to eat if you are ill, when you are taking exercise, if blood glucose levels are low, if you are travelling or if you are having a party. It also has sections for people with diabetes and coeliac disease, a lifestyle essential, and for vegetarians and vegans with diabetes, lifestyle choices.

around fruit juice

Fruit juice should NOT count in our five-a-day because some versions 'contain as much sugar as fizzy drinks'.

This statement comes from researchers from Glasgow University who have asked the UK government to change its guidelines. They also recommend that labels on fruit juice containers should advise people not to drink more than 150ml (¼pt) a day.

- **A 250ml serving of orange juice contains 115 calories - and many people drink more than this. In many high street cafes, 500ml servings are the norm.**
- **Even pure fruit juice is said to contain a large amount of naturally-occurring sugar but people end up drinking too much of it because it is not seen as unhealthy.**

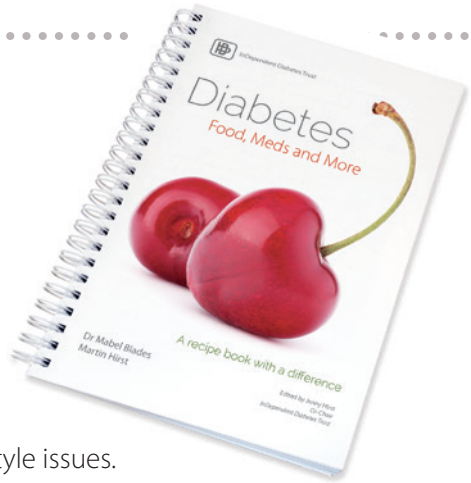
The researchers believe that cutting fruit juice intake could have major health benefits such as reducing obesity and heart disease. An article in The Lancet Diabetes and Endocrinology identified a possible link between high fruit juice intake and an increased risk of Type 2 diabetes. The article also pointed out that although fruit juices do contain important vitamins and minerals not contained in sugar-sweetened drinks, this may not be enough to offset the adverse consequences of excessive fruit juice consumption.

Here are some facts:

- 250ml of apple juice typically contains 110 calories and 26g of sugar.
- 250ml of cola typically contain 105 calories and 26.5 g of sugar.
- Fruit juice contains significantly more sugar than a piece of fruit and much of the goodness in fruit, such as fibre, is not found in fruit juice. For example, an apple contains only 50 calories and there is the benefit of fibre.

Just a note – orange juice has been one of the standard recommendations for treating a hypo for many years, so surely it should come as no surprise that it has a high sugar content!

Diabetes
Food, Meds and More
The recipe book with a difference



The book aims to cover:

- **Management** – the different types of diabetes and information on lifestyle issues.
- **Medication** – the ways Type 1 and Type 2 diabetes are treated, including information on different types of meals and how these link with insulin, medication and physical activity.
- **Meals** – recipes and ideas for meals and snacks, including those for special occasions.

Thanks go to the people living with diabetes who have asked our charity for more information about food, drink and meals that they can eat safely. They and their needs are the inspiration for this book.

'Diabetes – Food, Meds and More' costs £8.99 but is available to IDDT members for £7.99

An order form is enclosed with this Newsletter so to order your copy, complete the form and return to IDDT, PO Box 294, Northampton, NN1 4XS.
Alternatively you can order by telephone on **01604 622837** or online at **www.iddt.org/iddt-shop**

Thinking about your thyroid

People with one autoimmune disease, such as Type 1 diabetes, are more susceptible to developing other autoimmune conditions and thyroid disease fits into this category. There are estimates that around 30% of people with Type 1 diabetes have thyroid disease but only around 7% with Type 2 diabetes have it.

About the thyroid gland

The thyroid gland is situated in the lower part of the neck. It is part of the endocrine system and releases the thyroid hormone, thyroxine, which controls how quickly the body burns energy.

When there is too little thyroid hormone released, energy is burned at a slower rate - this is hypothyroidism or an under-active thyroid and tends to be more common than an over-active thyroid. When too much thyroxine is released, the body burns energy at a faster rate - this is called hyperthyroidism or an over-active thyroid.

Testing for thyroid disease

According to the American Thyroid Association people with diabetes should have their thyroid tested once a year. There are two hormones that should be measured:

- The thyroid hormone, Thyroxine [T4]
- The Thyroid Stimulating Hormone [TSH]. This is a hormone, produced by the pituitary gland, which controls thyroid function and is a more sensitive test. A low TSH indicates hyperthyroidism and a high TSH indicates hypothyroidism.

There is also another test that is recommended and this is a test for Anti Thyroid Peroxidase Antibodies and this shows whether someone has a predisposition to thyroid dysfunction. If this test is positive, then it indicates that the thyroid should be watched more carefully and regular T4 and TSH tests carried out.

Pregnant women should have their thyroid tested because undiagnosed hypothyroidism can cause still birth, premature delivery and high blood pressure at the time of delivery. Tests should also be carried out after pregnancy as this is a common time for thyroid antibodies to damage the thyroid.

Symptoms of hypothyroidism - an under-active thyroid

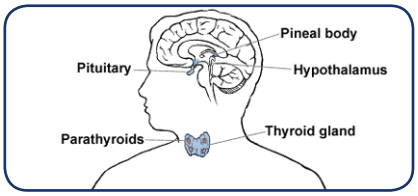
- Fatigue
- Sluggishness
- Slow pulse
- Low blood pressure
- Depression
- Feeling cold when others don't
- Constipation
- Weight gain unrelated to an increase in appetite

Treatment

An under-active thyroid is treated with tablets of thyroxine to bring up the levels of thyroxine necessary to prevent the symptoms. Until the mid 20th century thyroxine was a natural product taken from the thyroid glands of pigs and this contained all the necessary hormones needed for full replacement therapy. Then the pharmaceutical industry developed a synthetic version but this only contained one hormone, T4.

For a significant minority of people, this synthetic product does not relieve their symptoms because they need the other hormones contained in the natural product.

Just a note: All this sounds just a little familiar to those people who cannot use synthetic insulins and are better suited to natural animal insulins. The similarity is even greater when we remember that unlike synthetic insulins, animal insulins also contain a minute amount of glucagon, the hormone that triggers warnings of hypoglycaemia and the most common adverse effect people have reported with synthetic insulins is loss of hypo warnings!



Symptoms of hyperthyroidism - an over-active thyroid

- Pounding heart
- Quick pulse
- Increased sweating
- Shortness of breath after exercise
- Weight loss despite normal or increased appetite
- Muscle weakness or tremors
- Diarrhoea
- Difficulty concentrating
- Thickening of the skin on the knees, elbows and shins
- Change in menstruation

Hyperthyroidism in particular also tends to give worsening blood sugars and increased insulin requirements.

Treatment

The treatment for an over-active thyroid depends on the condition itself and is more complex but here is a brief outline.

- Betablockers, often given to treat high blood pressure, may be prescribed to improve some of the symptoms [to improve palpitations, slow down the heart rate and improve tremor] but they do not cure the thyroid over-activity.
- Antithyroid drugs are effective in reducing the production of the thyroid hormones and the dosage can be adjusted every 6 to 8 weeks to keep the thyroid hormone levels in the normal range. They are not a cure but provide a reduction in hormone levels.
- Radioiodine is a radioactive isotope of iodine that is taken up by the thyroid. In most people a small, single dose will gradually destroy the thyroid tissue. In many cases, this can result in an under-active thyroid which then has to be treated with thyroxine tablets.

Thyroiditis

Thyroiditis is inflammation of the thyroid gland. There are several types but the most common is Hashimoto's Thyroiditis [also called autoimmune or chronic lymphocytic thyroiditis].

The thyroid gland is always enlarged, although only one side may be enlarged enough to feel. The cells of the thyroid become inefficient in converting iodine into thyroid hormone and so compensate for this by enlarging. The net result of this is that the thyroid becomes under-active [hypothyroidism] and eventually the TSH levels become higher because the pituitary is trying to make the thyroid produce more thyroxine. This process can take weeks, months or years to develop.

Treatment

Treatment is thyroid hormone replacement [as with an under-active thyroid] to prevent or correct the under-active thyroid. In most cases the thyroid gland will decrease in size with this treatment.

Thyroid dysfunction in children and adolescents with Type 1 diabetes

A published study confirmed that autoimmune thyroiditis and thyroid dysfunction occurred 'frequently' in children and adolescents with Type 1 diabetes. Over 12 years, the researchers investigated 148 children and adolescents with Type 1 diabetes aged between 1 to 21 years.

- 15.5% developed autoimmune thyroiditis and this was significantly higher in girls. There was no difference in growth and metabolic control between those with and without thyroiditis.
- 8.1% developed hypothyroidism and there was no significant difference between boys and girls but of those with raised thyroid antibodies, boys were more likely to develop an under-active thyroid.

The researchers recommend annual screening for thyroid antibodies in everyone with Type 1 diabetes

Thyroid disease, Type 2 diabetes and treatment with insulin

Recent research looking at Type 2 diabetes and thyroid disease has shown some interesting facts.

- In the majority of people with Type 2 diabetes and thyroid disease, thyroid disease is diagnosed after the Type 2 diagnosis.
- People with Type 2 diabetes who had thyroid disease before the diagnosis of Type 2 diabetes required insulin treatment significantly earlier (after 2.5 years) compared to people who had thyroid disease after the onset of their diabetes who were insulin free for 8 years.

The researchers suggest that this information is useful to GPs treating people with diabetes and thyroid disease to make them aware of the possible need for insulin treatment at an early stage.

Further information about thyroid disease is available from the following organisations:
British Thyroid Foundation,
www.btf-thyroid.org
Tel 01423 709707 and website only:
www.thyroid-disease.org.uk

Pharmaceutical News

Animal insulin now only available in the UK

Some people need pork and beef insulins to control their diabetes because the genetically engineered human and analogues insulins cause them to have adverse effects, particularly loss of hypo warnings. Wockhardt UK is the supplier of animal insulins in the UK and also supplies people in other countries through personal use programmes. However, some people in other countries have been obtaining their animal insulin from Argentina or from Poland. Sadly, these companies have now stopped manufacturing animal insulin, leaving Wockhardt UK as the only company in the world supplying animal insulins.

Launch of home blood glucose monitor that estimates HbA1c

In March 2014, Sanofi launched a new blood glucose meter called the MyStar Extra which not only measures finger prick blood glucose tests but also provides estimated HbA1c results in people with Type 1 and Type 2 diabetes.

This is not done by simply averaging the finger prick tests but it uses special technology. Just averaging the finger prick tests does not take into account if there have been either highs or lows close together which can bias the results. However, the MyStar Extra uses technology that takes into account the closeness of the tests, so avoiding such bias.

The new meter also calculates a 3-day average of fasting plasma glucose so is likely to benefit people with Type 2 diabetes because they are able to assess how their fasting plasma glucose levels vary with treatment, diet and exercise.

Sanofi warn that the MyStar Extra is not a replacement for the tests carried out by your healthcare team but may be a useful addition.

Transparency in trials

The European Parliament has voted in favour of draft legislation that will force pharmaceutical companies to publish clinical trial information in a public database within 2 years of completion of studies. At present harmful effects of negative results of trials do not have to be available to the public and this can bias the overall findings in reviews. The legislation is expected to come into effect in 2016.

Sharp rise in BME diabetes diagnoses

Research shows there has been a sharp rise in the diagnosis of people from black and minority backgrounds (BME) with Type 2 diabetes.

Since 2009/10 the number of people with Type 2 diabetes has risen by 21% with a 26% increase amongst people from black backgrounds and a 23% increase in people from Asian or Asian British backgrounds.

There was an increase of 31% amongst those from African backgrounds and 26% in those from Pakistani origin.

The increase in those from white backgrounds was 14%.

A new report from the House of Commons aims to provide NHS commissioners with the tools to raise awareness and understanding of the significant impact that diabetes can have in BME communities. It also recommends that NHS commissioners should raise awareness and understanding in BME communities through working with community groups and local authorities, providing culturally sensitive dietary advice and through targeting the NHS health check at people from the age of 25 onwards.

EU approval change for Victoza

The EU CHMP adopted a new indication to include the combination of Victoza with basal insulin. This now reads: "Victoza is indicated for treatment of adults with type 2 diabetes mellitus to achieve glycaemic control in combination with oral glucose-lowering medicinal products and/or basal insulin when these, together with diet and exercise, do not provide adequate glycaemic control"

Oral insulin recommended for approval in the US

In April 2014 the US Food and Drugs Administration (FDA) recommended approval of AFREZZA, an inhaled human insulin for adults with Type 1 diabetes and Type 2 diabetes. The FDA is not bound to accept this recommendation but if it does, this will be the first ultra-rapid mealtime, inhaled insulin.

AFREZZA is a powder delivered by a small, discreet and easy to use inhaler. It is given at the beginning of a meal and dissolves immediately after being inhaled into the deep lung and then delivered quickly into the blood stream. Peak insulin levels are reached within 12 to 15 minutes compared to 45 to 90 minutes with rapid-acting insulin analogues.

Novo Nordisk is also developing a long-acting oral insulin and this is a long-acting, slow release drug made as specially coated tablets. These target the duodenum, part of the lower gut, where the drug they contain passes through the duodenal wall. Novo Nordisk believes their insulin will not completely replace injections and it would only be suitable for people with Type 2 diabetes.

Drug companies announce payments to healthcare professionals

As part of the move towards greater transparency by the pharmaceutical companies, in early April they announced that the total amount of money paid to doctors, nurses and other healthcare professionals was £38.5million in 2013, slightly lower than the £40 million paid in 2012. The total is broken down as follows:

- £27.7 million on consultancy services
- £10.8 million on sponsorship to attend third party meetings.

The next stage of this transparency will be the declaration of payments to named healthcare professionals in certain categories, including fees for consultancy services and sponsorship. This will begin in 2016 for the year 2015.

Prescription charges rise

People with diabetes taking insulin or medication to control their diabetes are exempt from prescription charges. However, people in England who treat their diabetes with diet only are not exempt from prescription charges unless they meet other criteria. People in Wales, Scotland and Northern Ireland are entitled to free prescriptions regardless of how their diabetes is treated.

From April 1st 2014, for people not exempt, prescription charges rose by 20% from £7.85 to £8.05 for each drug or appliance. It is also intended that the single charge will increase by 20% to £8.25 in 2015. However, for the next 2 years the cost of a prescription prepayment certificate will remain at £29.10 for a 3 month certificate and the annual certificate will stay at £104.

In England around 90% of prescription items are dispensed free and this includes:

- those on specific benefits or through the NHS Low Income Scheme,
- those who are age exempt,
- those with certain medical conditions.

Following the announcement, the Prescription Charges Coalition carried out a survey of over 5,000 people with long-term conditions and found that of those who responded:

- Prescription charges stop 37% of people from taking the medicines they need.
- 75% of these people said their ability to work was affected, with 70% taking sick leave.
- Over half also reported that their performance at work had suffered as a result of not taking their medicines.

How to obtain free prescriptions

You need a valid Medical Exemption Certificate. For people with diabetes, these last for 5 years and it is important to remember to re-apply before your current Certificate expires. You can ask your healthcare team for an application form or obtain one from your local post office. It is important to carry this Certificate with you whenever you need a prescription.

Nutrition and older people with diabetes

By Dr Mabel Blades, Independent Freelance Registered Dietitian and Nutritionist. Mabel's Blog; mabelonamission.blogspot.co.uk

Introduction

All too often for people with diabetes the focus is on the condition and other aspects of health and diet can be overlooked. Adequate nutrition and hydration are important to maintain health and this is important for anyone but particularly as we age.

The number of older people is increasing and it is estimated that by 2033 a third of the population will be over the age of 60 years. Among this group more than 3 million will be over the age of 85 years. It is known that more than 40% of this group of older people have a chronic condition, which obviously includes diabetes.

Fluid

Adequate fluid intake is vital as it is needed for various body functions. Two litres of fluid per day are recommended and this can be from various sources, except drinks containing strong caffeine and alcohol. Unfortunately, as people age the thirst sensation is reduced. Dehydration is associated with confusion, headaches, irritability as well as constipation, urinary tract infections, joint problems and dry skin.

Dietary factors

People with diabetes are encouraged to follow a diet which is:

- low in fat,
- low in added sugars,
- carbohydrate controlled,
- contains over 400g of fruit and vegetables per day,
- low in salt.

The aim of such a diet is to maintain an ideal body weight. It is associated with preventing cardiovascular risk, such as raised blood cholesterol levels, hypertension, obesity, and Alzheimer's disease.

Of particular consideration to the prevention of cardiovascular disease is the increasing interest in the Mediterranean diet. This diet is based on fruit, vegetables, grains, olive oil, pulses and nuts herbs and spices. It also includes some fish and sea-foods. Poultry, eggs cheese and yoghurt are included in smaller amounts, as is wine. Sweets and meats are advocated less often. Consequently, such diets are low in saturated fat, rich in antioxidants beneficial in preventing oxidative damage, contain olive oil which provides monounsaturated fat to help to reduce cardiovascular risk, and include foods with a low glycaemic index (longer-acting carbohydrates).

Vitamins

- Lack of vitamin D is associated with a fall in bone strength and the Department of Health recommends that people over 65 years who are not exposed to much sun, should also take a daily supplement containing 10 micrograms (0.01mg) of vitamin D.
- The National Diet and Nutrition Survey shows that for groups of older people, vitamins A, B2, B6, folic acid, iron, calcium, magnesium, zinc and iodine fall below recommended levels.
- Multivitamins may be recommended due to the potential benefits of folate and B vitamins in reducing cardiovascular risk. Multivitamin and mineral supplementation may be beneficial.
- Omega-3 fatty acids have also been shown to have a protective effect in preventing cardiovascular disease and cognitive decline. Again this may be a further reason for consideration of a Mediterranean diet.

Protein

The reduction of muscles and the muscle strength that occurs in older people is called "sarcopenia". A diet adequate in protein accompanied with exercise, particularly of the strength type, can be helpful. Therefore having protein at all 3 meals per day can be particularly beneficial.

Note: for people in residential care, IDDT has a 'Passport for Diabetes in Care Settings which provides information about the person's individual needs in relation to their diabetes and helps to prevent unnecessary hospital admissions. Copies of the Passport can be obtained by ringing IDDT on 01604 622837 or emailing enquiries@iddtinternational.org

Audit of insulin pump therapy

The first UK wide insulin pump study was carried out in 2012 to find out how many adults in the UK use an insulin pump and whether the National Institute for Health and Clinical Excellence (NICE) guidelines for insulin pumps are being followed. NICE recommend that between 15 and 20% of people with Type 1 diabetes should be using pumps. However, the results were as follows:

- 183 centres were identified as offering pump services and 178 of these participated in the survey.
- 13,428 people were using insulin pumps, 6% of the Type 1 population.
- 93% of centres did not report any barriers in obtaining funding for people who fulfilled the NICE criteria for insulin pump treatment.

Conclusions of the Audit

The use of insulin pumps in the UK falls well below the expectation of NICE and European countries (greater than 15%) and the US (40%). Part of the reasons for this is thought to be linked to the low numbers of healthcare professionals qualified to train people to use a pump, with the lack of diabetes specialist nurses being a particular problem.

The right to access to insulin pumps

NHS England is responsible for making sure that people with Type 1 diabetes get the right to access to insulin pumps, according to a statement by Health Minister, Jane Ellison, on March 28th 2014. She stated that it is down to NHS England to ensure that local NHS organisations make pumps available to people with Type 1 diabetes who meet the NICE criteria. She said that insulin pumps should be available to:

- Children with Type 1 who are under 12 if having multiple daily injections is impractical or inappropriate.
- Anyone with Type 1 diabetes over the age of 12, provided that multi-daily insulin injections have not worked. This means people who do not meet recommended blood glucose levels despite multiple daily injections and a high level of care or if they cannot do this without disabling hypos.

From the US - some helpful hints with pump problems

As we have read 40% of people with Type 1 diabetes in America use insulin pumps so there is a great deal of experience amongst pump users. One pump user has published some tips about what to do if the pump delivers the message 'No delivery'. This message means that the pump is no longer providing insulin, so understandably this is a stressful situation that needs to be dealt with quickly to ensure that blood glucose levels don't start to rise too quickly and too high. Here are some tips.

- **Stay calm** – the pump problem cannot be resolved if you are panicking.
- **Ask yourself these questions** – when was the infusion set last changed? Is there insulin in the reservoir? Is there a bend/kink in the tubing and is the battery level low? Any of these can lead to 'No delivery'.
- **Check what supplies you have with you if you are at school or work.** If you have an insulin pen containing rapid-acting insulin with you, you can use this for the rest of the day if you don't have time to go home. If you have time to go home, remove your pump and put in a new infusion set or do it when you get home.

One of the biggest problems is that people can rely so much on their pumps always working correctly that they forget that occasionally they'll face challenges like no delivery.

Ramadan
Fasting & Diabetes

Ramadan is based on the ninth month of the lunar calendar, so this year it is expected that the fast of Ramadan will commence on Saturday June 28th or Sunday June 29th 2014 and last for 29 or 30 days.

During this month it is expected that Muslims who participate will abstain from food, water, beverages, smoking, oral drugs and sexual intercourse from sunrise to sunset. Ramadan moves forward each year by about 11 days which means the length of fasting is greater at certain times of year than others. The length of fasting has special consequences for people with diabetes, especially those taking insulin and the risk of complications increases with longer periods of fasting.

People with diabetes may be exempted from fasting but the majority of people with diabetes do fast. Those who fast during Ramadan can have acute complications, such as hypoglycaemia, hyperglycaemia, diabetic ketoacidosis and dehydration, most of which are as a result of a reduction of food and fluid intake and the timing of meals.

There are no evidence-based guidelines for safe fasting so people have to rely on expert advice from doctors and their personal experiences. However, a study in people with Type 1 and Type 2 diabetes carried out in Pakistan, has shown that with active glucose monitoring, alteration of drug dosage and timing, dietary counselling and patient education, the majority of patients did not have any serious acute complications during Ramadan.

Two educational sessions were given to patients, one about drug dosage and timing and one about dietary and lifestyle modifications. Patients were asked to test their blood glucose levels twice daily for at least 15 fasting days with one test being during the fasting period. Following these education sessions and the advice given, the researchers found that the majority of people did not have any serious acute complications – none developed diabetic ketoacidosis and the highest frequency of hypo- and hyperglycaemia occurred before dawn. [Diab. Med. 29, 709-715 (2012)

The findings of this and other studies suggest that people with Type 1 and Type 2 diabetes should have an assessment with their diabetes team before Ramadan about drug/insulin adjustments, exercise and awareness of the risks of hypo- and hyperglycaemia. If they are ill during the fasting, then they should seek advice from their diabetes team.

Research News

Research to look at self-management of long-term conditions

Three UK universities have been awarded £480,000 by The Health Foundation, an independent healthcare charity. The aim is to find out patients' preferences for the type of self-management support they need for coping with long-term conditions, including diabetes. According to the press release, the results will provide NHS commissioners, providers and clinicians with the evidence they need to bring into effect support for patients whose lives can be improved through supported self-management. University of Sheffield will look specifically into the value of self-management support interventions for people with diabetes in both quality of life and monetary terms. It is expected that the results of the three studies will be available in 2016.

Vitamin D deficiency does not affect the progression of Type 1 diabetes

It has been known for some time that there is often vitamin D deficiency before the onset of Type 1 diabetes but new research has shown that this deficiency does not seem to influence the progression of the condition.

Vitamin D is a major regulator of calcium levels and bone metabolism and it also influences the immune system. Previous studies have shown that people who have been recently diagnosed with Type 1 diabetes had significantly lower vitamin D levels.

Pre-diabetes [for Type 1] is defined as the presence

Good news about diabetic eye disease!

For the first time in 50 years diabetic eye disease is no longer the leading cause of blindness in adults of working age. The prevalence of diabetes increased during this period, so it could be expected that the rates of blindness would have increased but this is not the case. These findings are from a new study by Moorfields Eye Hospital and UCL Institute of Ophthalmology which compares the causes of blindness in England and Wales from 1999 to 2000 with 2009 to 2010.

The researchers say that there are many factors that are likely to have contributed to this but retinopathy screening has played a key role. The National Diabetic Eye Screening Programme was introduced in 2003.

Facts about eye screening

- Before the launch of the eye screening programme, less than half of people with diabetes had regular eye screening. Even when they did, the quality of the screening varied from area to area and many people developed preventable serious eye complications.
- 2.5 million people with diabetes are invited for retinopathy screening and last year more than 74,000 were referred to hospital eye departments for further investigations. This led to about 4,600 people with diabetes receiving treatment to prevent sight loss.

And in Scotland…

Compared to the previous 10 years, in Scotland blindness caused by diabetes has decreased in people with diabetes and the trend is towards a continued decline. During the years between 2000 and 2009, the incidence of blindness due to diabetes fell by over 10% per year. (Diab Med 30, November 2013)

Important messages

- Everyone with diabetes is entitled to free eye screening once a year and this research shows just how important it is to attend these appointments.
- Eye screening only examines the retina for damage but does not look for other eye conditions, so it is important to still attend the optician for regular eye checks

Remember: IDDT has a leaflet 'Diabetes and the Eye' which explains the conditions that can affect the eye. If you would like a copy, telephone 01604 622837, email enquiries@iddtinternational.org or write to IDDT, PO Box 294, Northampton NN1 4XS.

of multiple autoantibodies and within the children with positive autoantibodies, a few children went on to quickly develop Type 1 diabetes but this was independent of their vitamin D levels.

The researchers suggest that vitamin D deficiency precedes the onset of Type 1 diabetes and this may be a consequence of an immune response. Therefore they suggest in the case of prediabetic children, vitamin D deficiency should be considered and it may be that supplements of vitamin D should be considered at an early stage in Type 1 diabetes. [Diabetologia March 2014]

Insulin use in Type 2 diabetes increases sevenfold

A study carried out at Bristol University has found that the use of insulin to treat people with Type 2 diabetes has risen sevenfold over the last 20 years. The total use of insulin for people with Type 1 and Type 2 diabetes trebled from 136,800 to 421,300 between 1991 and 2010. This was largely due to a rise in the number of people with Type 2 diabetes and the numbers using insulin injections increasing from 37,000 to 277,400. The estimated cost of insulin to the NHS has risen from £156 million in 2000 to £359 million in 2009.

The lead researcher suggests that most insulin use in Type 2 diabetes was unrelated to clinical need. He also said that insulin is very expensive and there is a belief that it involves too many serious side effects in people with Type 2 diabetes. This increase should be a wake up call for all – not only in terms of lifestyle choices but also how people with Type 2 diabetes are treated. [Diabetes, Obesity and Metabolism online, February 2014]

INDEPENDENT DIABETES TRUST SNIPPETS

Pump therapy in Type 2 diabetes

For the first time, research has been carried out to investigate whether using an insulin pump in people who have had Type 2 diabetes for around 10 years and whose blood sugar levels are less than the target ranges, can restore beta cell function [the cells that produce insulin]. The results were very positive.

- After 6 months HbA1cs had dropped from 8.7% to 6.3% and were maintained between 6.3% and 6.5% for the next 2 years.
- At 12 months C-peptide levels began to increase and this was maintained for 30 months. C-peptide is produced at the same time as insulin, so testing for the levels of C-peptide shows that insulin is being produced.

This research showed that by long-term use of an insulin pump alone, beta cell function was significantly improved, so the cells produced more of the body's natural insulin and reduced HbA1cs. [Diabetes/Metabolism Research and Reviews]

Stem cells may help to prevent amputations

Research carried out at the University of Ireland has shown that when a specific type of stem cells is mixed with a collagen product, they can help to prevent amputations in people with diabetes.

25% of people with diabetes are affected by foot ulcers at some time in their lives which can increase the risk of amputations by poor wound healing caused by reduced blood flow to the feet. The research showed that the stem cells increased the blood flow and therefore could reduce the risk of amputations. The stem cells are easily isolated from adults and grown in a laboratory. [Diabetes, March 2013]

Gene therapy effective as a cure for Type 1 diabetes in dogs

Researchers in Spain used injections of a harmless virus to deliver two extra genes into the skeletal muscle of five dogs with artificially induced diabetes. The genes worked to sense and control blood glucose levels to reduce the highs. After a single session the dogs showed improved blood glucose levels when fasting and fed compared to diabetic dogs given daily injections of insulin. The gene-treated dogs also did not have any hypoglycaemia, even after exercise.

The treated dogs were monitored over 4 years during which time they showed improved body weight and did not develop complications of diabetes. Interesting – but it was only a small study and dogs aren't the same humans! [Diabetes, February 2013]

Stress linked to increased risk of Type 2 diabetes

Research suggests that living a stressful life can increase the risk of developing Type 2 diabetes by as much as a third. Responses to a survey of 9,514 British adults found that people with general psychological distress were 33% more likely to develop Type 2 diabetes during the following 20 years compared to people with low levels of distress. The survey was carried out in 1991 and when the participants were followed up 18 years later, 472 had developed Type 2 diabetes.

Informed patients cost less!

Although this research was based on 33,610 American patients, it is reasonable to think it will apply in other developed countries. The research showed that patients who showed the greatest knowledge and confidence in making informed medical decisions and choices that benefitted their health, had 8% lowed projected health costs than those with the lowest knowledge and confidence. [Health Affairs, February 2013]

All this goes to show that while cuts may be being made in providing education for people with diabetes, it is a short-term saving that ultimately will be paid for not only in terms of patients' health but also by the NHS.

Coffee may reduce the risk of Type 2 diabetes

Recent studies have found that coffee may have health benefits, such as lower risk of depression and Alzheimer's disease. In a recent review published in the European Journal of Nutrition, researchers found that two cups of coffee per day reduced the development of Type 2 diabetes by 12%. Coffee contains many polyphenols, one of which, chlorogenic acid, has been shown to delay glucose absorption.

Public Health England pilot a campaign for blood pressure checks

A new 4-week campaign is being launched in Wakefield to identify people with undiagnosed high blood pressure. It is estimated that nearly a third of people in the Wakefield area [84,000 people] have high blood pressure but around 30,000 are undiagnosed.

The campaign is to encourage people aged 40 and over to visit one of the 50 drop-ins set up in the area. Awareness is being raised by community pharmacies, the council, the police and local businesses who are encouraging their employees and customers to have the quick test. Health workers will be on hand to provide lifestyle advice and information.

Almost a third of people in Yorkshire and Humberside are unaware that high blood pressure rarely has any symptoms so the campaign aims to raise awareness and reduce the numbers of people at risk of heart attack and stroke.

From your editor – Jenny Hirst

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