Insulin Dependent Diabetes Trust

Registered Charity No 1058284

Parents' Bulletin

February 2011

Wilbert's Picnic In The Park

At IDDT we all know how difficult life with diabetes can sometimes be and most of us could do with a friend to talk to or email, play with and know they have a true understanding of what it is really like to live with diabetes. So lets all get together at Wilbert's Picnic in the Park and have some fun and meet new friends.

What's Going On At Wilbert's Picnic
Play area open as early as you can get there!

10.30	**Wicksteed's rides open.**
12.00	**Wilbert's Picnic lunch begins.**
1.15	**Children's giant chequers.**
1.40	**Bad Dad-dancin' Competition with live music from Off The Record.**
2.40	**Meet and greet Wilbert and his friend Wicky Bear**
3.20	**Wilbert's parents vs children's sports day**
4.00	**Medal collection.**
4.30	**Time to go home.**

As well as the main events there will be juggler, stilt walkers, our Famous Faces Tombola, the chance to sit in a Fire Engine and of

course, meet Wilbert who will be there to make everybody laugh. As you can see there is a load to do, so come along and enjoy the fun at Wicksteed Park, Kettering, Northants just off the A14. All of this, entry to the park and unlimited access to all the rides for just £4 per person.

For further information please contact Bev on 01604 622837 or e-mail bev@iddtinternational.org
To check out the rides at Wickstead Park go to wwwwicksteedpark.co.uk

Artificial Sweeteners

In this article we will take a look at artificial sweeteners, what they are, how they can be used and the effects that they may have on people with diabetes.

Artificial sweeteners are chemicals or natural compounds that offer the sweetness of sugar without as many calories. Because the substitutes are much sweeter than sugar, it takes a much smaller quantity to create the same sweetness. Products made with artificial sweeteners have a much lower calorie count than do those made with sugar.

People with diabetes may use artificial sweeteners because they make food taste sweet without raising blood sugar levels. But keep in mind that if you do have diabetes, some foods containing artificial sweeteners, such as sugar-free yogurt, can still affect your blood sugar level due to other carbohydrates or proteins in the food.

There are four commonly used types of artificial sweeteners
Saccharin (brand name: Sweet 'N' Low, Sweetex)
Aspartame (brand name: Nutrasweet)
Sucralose (brand name: Splenda)

Labelling Artificial sweeteners are often used in prepared foods and these can be labeled in a variety of ways - no sugar, low-sugar, naturally sweetened, no added sugar – and this can lead to confusion, so here are the definitions of each of these terms:

- **No sugar** means the product does not contain sugar at all. It may contain sugar alcohols or artificial sweeteners.
- **No added sugar** means that during processing, no extra sugar was added. However, the original source might have contained sugar such as fructose in fruit juice. Additional sweeteners such as sugar alcohols or artificial sweeteners might have been added.
- **Sugar free** means that the product contains no sugars. It may contain sugar alcohols or artificial sweeteners.
- **Dietetic** can mean a lot of things. It's likely that the product has reduced calories.
- **All natural** simply means that the product does not contain artificial ingredients. It may contain natural sweeteners, such as sugars or sugar alcohol.

The advantages of switching from Mixtard 30 to another biphasic human insulin include the possibility of switching dose for dose, and the fact that the timing of insulin administration in relation to mealtimes is the same.

- Humulin M3 is near-identical to Mixtard 30; it contains 30% soluble insulin and 70% isophane insulin. When switching to Humulin M3, no change in dose is required for patients with adequate glucose control. Some health professionals advise a 10% reduction in dose if hypoglycaemia is a particular concern.
- Insuman Comb 25 contains the same constituents as Mixtard 30 and Humulin M3 but in a different ratio: 25% soluble insulin and 75% isophane insulin. It may be an option for some patients whose blood glucose is not optimally controlled on Mixtard 30.

A final cautionary note about sugar alcohol sweeteners, such as sorbitol, mannitol and xylitol. These types of sweeteners contain carbohydrates so they do affect blood sugar levels. They are often found in reduced calorie sweets and chewing gum. So if you are in doubt check the nutritional information label. Under the Carbohydrate section, you can see how many carbohydrates the product contains.

You can also see how much of these carbohydrates are in the form of sugar or sugar alcohol.

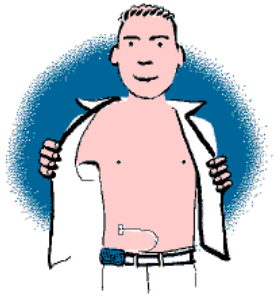
September 2010 - New natural sugar substitute

A new all natural sugar substitute with no potentially harmful ingredients was launched in the UK and Ireland in September 2010. It contains no calories and is called Zsweet and is aimed at people with diabetes and people who are health conscious.It does not contain saccharin, sucralose or aspartame about which there is considerable debate. Zsweet is a blend of erythritol and natural fruit extracts to improve the flavour. Erythritol is a naturally derived sugar substitute made from plant sugars that looks and tastes like sugar and is found in grapes, melons and pears.It can be used for baking or sweetening of hot and cold drinks. It can be purchased on line at www.zsweet.eu or you can write to Zsweet Europe, 50a Leinster Road, Rathmines Dublin 6 IRELAND.

Getting The Most From A Pump

By Dr Jane Essex

An insulin pump can be a fantastic aid to getting great control of blood sugars, but like all tools it is only as good as its user. So how can you get the most out of your pump?



Be well-informed. Diabetes is a condition which favours the well-informed. Apart from the initial training, further information is available from a variety of sources. Self-help groups can be invaluable and include parents and carers; the UK on-line pump support group, INPUT, is a good source of information and support , on http://www.input.me.uk. There are a (surprising) number of readable books, though most are written for the American market. Popular ones include 'Pumping Insulin', by John Walsh and Ruth Roberts; 'Think Like a Pancreas' by Gary Scheiner has useful insights into using pumps. Some hospitals run Pump Users' Support Groups; if yours doesn't, think about starting one.

Keep reviewing the settings

Successful pumping relies on some vital numbers, including the insulin infusion rate at different times of the day, and the ratio of insulin to carbohydrates, which may also vary during the day. These will not be completely fixed, but you need to keep an eye open for blood glucose test results that suggest that the ratios or rates are no longer correct. Adjusting the basal rate can be trickier; it may help to break the day into 'blocks' of 4 to 6 hours and monitor the glucose level over this period for several days, adjusting the basal settings until the target period of the day is stable. Then move your focus on to the next 4 to 6 hour block and repeat the process.

Some pumps can remotely connect to a Continuous (Blood) Glucose Monitor sensor inserted under the skin, which lets you read your blood glucose levels from your pump display. This is a very elegant way of combining data on glucose levels and insulin dose; even if you don't use CGM continuously it provides high levels of data over a short period which will help you adjust your pump settings.

Keep reviewing the 'wider picture'

You don't have to live many days with diabetes to realise that insulin is only one of a multitude of factors which affect blood glucose. You will undoubtedly have experienced different results in consequence of changes in diet, activity, illness and stress level. Then there those aberrant blood sugars that you never find an explanation for. In between these lie those factors which act over the longer term, which may not strike you immediately as you analyse day-on-day results. Growth and specifically puberty can both alter insulin requirements, and puberty is an especially difficult time as the changes in insulin needs are commonly sporadic, rather than steady and predictable. However the pump may be helpful even here because you can set for a global rise (up to 200% or double the normal basal rate) or decrease in basal rates, judging each day's need on the early blood sugar readings. An additional difficulty during adolescence is the psychological response

to the diabetes, which commonly involves ignoring the practical demands and denying the longer term implications of the disease. For some teenagers the pump will no longer be a welcome addition but a badge marking them out as different to their peers.

Be vigilant for impending trouble

Whilst pumps can be an invaluable tool in 'engineering' tight control of blood sugars, the risk of things going catastrophically wrong are higher than with injections too. The reason for this is that the pump user has no long-acting insulin to prevent blood sugars from rising and uncontrolled fat breakdown. A failure in the pump, most commonly due to a disconnected cannula or a line blockage, leaves the pump user vulnerable to soaring blood sugars, and even more dangerously, high levels of ketones from fat breakdown. For this reason pump users need to carry syringes or pens, short- and long-acting insulins, a ketone testing kit, spare giving line and cannula, spare battery for the pump. And they were only going down the road for a comic!

Your pump trainer should provide you with a protocol, telling you what to do if blood sugars rise, and especially if ketones are present in high concentrations. **Ketones are linked to a potentially lethal change in the body's biochemistry, and if you can't get them down quickly you must seek emergency medical help.**

High Early Morning readings

Have you ever found that your child goes to bed with a blood sugar reading that you are both happy with but they wake up in the morning with a reading that is higher than you expected? Many people with diabetes, including me, find this happens and also find there seems to be no explanation for these high morning readings. For years I looked for an answer, too much carbohydrate before bed, night hypos, not enough insulin in the evenings or was the insulin not lasting as long as it was supposed to? Eventually I spoke to my doctor and explained that my morning readings were higher than they should be and I could not find an answer as to why. I explained all the things that I had tried and he told me about the **Dawn Phenomenon**.

Everyone has the dawn phenomenon, whether they have diabetes or not. The body will naturally release hormones between 4am and 8am (dependent on sleep patterns). These hormones are called counterregulatory hormones which work against the action of insulin.

During the night your child will have a surge in the amount of hormones their body releases and then a surge of cortisal. This effectively increases the amount of glucose your child's liver produces. It is thought that this occurs to prepare your child's body for daytime activities after a time of fasting.

In people who don't have diabetes, the increased amount of glucose is counter-acted by an increase in insulin secretion from the pancreas and blood sugars remain relatively stable. Unfortunately for people with Type 1 diabetes, the body does not make insulin to counter-act this increase in glucose and this has a profound effect on our morning blood sugar readings.

The dawn phenomenon is a very frustrating part of diabetes. No matter what you do your morning readings remain high and it can be very disheartening as you continually try to get it right. As with most things with diabetes, there is no straight forward answer to solving the problem of the dawn phenomenon but here are a few suggestions. Try talking to your doctor about reducing carbohydrate intake after your evening meal. This can work with children whose dawn phenomenon is not too high. Not eating after dinner keeps the blood glucose reading lower and so when the production of glucose occurs during the night, the readings do not go too high. There are problems with this as it will heighten the risks of night hypos and if you have a hungry child before

bed, it can be very difficult to stop them eating.

There is a temptation to skip breakfast when blood sugars are high due to the dawn phenomenon but eating breakfast often turns off the continued rise in blood sugar. With no food intake blood sugars can continue to rise until 10 – 11 am (dependent on sleep patterns).

Talk to your doctor about how an insulin pump may help as it allows the insulin to be administered during the early hours of the morning which will stop the blood glucose levels rising.

Warning – do not confuse Dawn Phenomenon with the **Somogyi Effect**, so named after Dr Somogyi who discovered that high morning blood glucose (BG) readings could be due to low BG readings [night hypos] during the night.

A low overnight reading could cause the body to react by releasing the hormone glucagon. The glucagon tells the liver to provide enough glucose for the body to survive. This is sometimes referred to as a liver dump. Often this process will cause an over production of glucose thus causing a high BG readings in the morning.

Setting a bedtime BG reading a bit higher than the day time reading may prevent low BG readings during the night.

But I Was Never Fat

I have had Type 1 diabetes for 35 years and I was never fat as a child. From what I can remember, at the tender age of 5 years old, I never told people I had type 1 diabetes, I always simply said I have diabetes. People understood what this meant and there was never a huge issue. As I got older I found when I told people I had diabetes several comments would follow and here are my top 5 classic comments:

1. My friend's grandma has diabetes.
2. Aren't you young to have diabetes.
3. But you aren't fat.
4. Did you eat a lot of sweets when you were younger?
5. Have you been on a diet since you were diagnosed?

I have found this problem has increased dramatically over the past 10 years and I have found myself asking the question, 'Is this because Type2 diabetes has increased or because of the media frenzy that has surrounded this increase?'

It is easy for the media to run an article suggesting people with 'diabetes' are draining our NHS of funds because of their life style choice to over eat and take too little exercise. Comedians can crack jokes about the 'fat diabetic' or create, as the Simpson's have done, an obese character who stuffs her face until she is sick and called her Diabetty.

These things can be seen as funny to someone who doesn't have diabetes and can lead them to believe that if a person has 'diabetes' it is of their own making. As a grown up with Type 1 diabetes I find it easy to brush these joke aside. I know the world can be a little bit cruel especially when people lack the knowledge they need to understand conditions such as Type 1 and Type 2 diabetes. But for children with diabetes who are developing, learning about themselves and about the world around them, these articles, jokes and characters could damage how the next generation of children with diabetes see themselves and generate feelings of self blame, guilt and insecurity.

The perception that 'diabetes' is self-inflicted is certainly not the case for anyone with Type 1 diabetes. No doctor or researcher is completely certain what causes Type 1 diabetes so why on earth do the general public think that they know that Type 1 diabetes is caused by over eating and a lack of exercise? The answer to that is simple - the media portray one condition and call it 'diabetes' and indicate that 'diabetes' has been caused by an individual's life style choice. This is wrong in so many ways:

Facts

There are 2 conditions Type 1 diabetes and Type 2 diabetes.

- **Type 1 diabetes** is a condition caused by the immune system attacking the insulin producing beta calls in the pancreas. The body no longer produces insulin causing blood glucose levels to rise. The only treatment for people with Type 1 diabetes is insulin. The cause of Type 1 diabetes has not been established and there may be several causes, with some people being born with a genetic predisposition to it. Recent research shows that a common virus may trigger the body's immune system to attack its own insulin-producing pancreatic cells.

- **Type 2 diabetes** is much more common in adults than Type 1 diabetes but is rare in children. In Type 2 diabetes, the pancreas often still produces some insulin but it is not utilised properly by the body. Type 2 diabetes is not always caused by over eating and lack of exercise and people with Type 2 diabetes are not always overweight. Type 2 diabetes can be caused by hereditary factors in some cases there is a genetic link to Type 2 diabetes.

These facts have helped me over the years when people have informed me that my condition is self-inflicted and tell me things that simply are not true and in some cases totally ridiculous. I am able to correct individuals and hopefully educate them so they do not make the same mistake again.

IDDT has also used these facts to write to the press when they have given incorrect information to change the misconception that Type 1 diabetes is the same as Type 2 diabetes and that the reasons for diagnosis are the same. If you hear of any of the media doing this, give IDDT as much detail as possible and we can write to them to correct their mistakes or we can email you a letter so that you have the power to correct them yourself. Let's start putting them right.
E mail bev@iddtinternational.org

Hall of Fame

Stella has sent in a photo of her Grandson Matthews celebrating World Diabetes Day. Matthew was diagnosed with diabetes when he just three and a half years old and also has been diagnosed with Coeliac disease. This World Diabetes Day was extra special for Matthew as he is now doing his own injections.

Stella and all of us here at IDDT would like to say well done to Matthew for doing your own injection and also for coping so well with your dietary restrictions. We can't believe how very brave you are, Matthew, and we are all very proud of you.

Russell Clark doesn't let diabetes and coeliac disease stop him from doing whatever he wants to do. In fact, having diabetes and coeliac disease has spurred him to achieve more than most people who can boast perfect health. Russell, now 15, became the under-13 British National Squash Champion as well as the North East Derbyshire Junior Sportsperson of the Year, and Sheffield, Avon, Herts, SE Wales and English U13 Junior Open Champion.

Russell is now helping others with the same conditions by offering advice and trying to inspire others with his willpower and drive to succeed, while still sharing an understanding of just how hard that can be.

With the support of his friends and family, especially his mum, dad

and sister Abigail, who are very proud and supportive of Russell, he is living out his dream of conquering the world of squash.

Matthew is a big Everton supporter and he and his Mum, Helen, contacted the club and asked if they could help to raise awareness of diabetes for World Diabetes Day last year. Here is one of Matthew's favourite Everton players, Victor Anichebe, with his IDDT T-Shirt. Victor deserves to be in our Hall of Fame. Well done Matthew, and his Mum!

Insulin for Life

You may or may not be aware that IDDT acts as the UK arm of an organization called Insulin for Life. On behalf of the Insulin for Life campaign, IDDT collects unwanted, unopened and in-date insulin and other diabetes supplies and distributes them to clinics in developing countries, where children die for lack of affordable insulin. In developing countries the cost of insulin for one person can be as much as 50% of a family's income, meaning that poor families find it extremely difficult to commit this amount of their income to the treatment of just one child.

Just one little girl in India:
Kalpana was a 5 year old little girl with diabetes who regularly attended her diabetes clinic. One day she was brought to the clinic in a coma and ketoacidosis. Her parents had stopped giving her insulin because they simply could not afford it and in desperation had resorted to alternative medicine. Kalpana died.

In 2010 IDDT collected and distributed over 9,000 pens, cartridges and vials of insulin to those who so desperately need them. All this unwanted insulin totalled a value of over £60,000. This cost is paid for by the NHS and would have gone to waste were it not for the Insulin for Life campaign and the kind actions of those who make the effort to send us their unwanted insulin and diabetes supplies.

For more information about how we help developing countries visit http://www.iddt.org/here-to-help/helping-developing-countries/ or contact us on 01604 622837.

Gold Star to Helen Lovelock

Helen, currently has 2 children with Type 1 diabetes in her Year 4 class. Helen said 'As a school we'd never thought about diabetes and its impact until this year. There are 3 of us trained to monitor blood sugar levels and administer the insulin injections at school. We find it stressful enough with 3 adults being responsible, I don't know how our parents manage!'

After 'World Diabetes Day', Helen organised a school assembly to raise awareness about the condition using IDDT's power point presentation 'All About Diabetes' which can be downloaded free from the IDDT website, www.iddtinternational.org

Helen has done loads to educate the next generation about Type 1 and Type 2 diabetes by holding the school assembly and passing out the lesson plan details to other teachers. A gold star for Helen Lovelock.

If you want to dedicate someone for a Gold Star for educating others about diabetes, email bev@iddtinternational.org and let me know why you think they should get the Gold Star.

JUST TO REMIND YOU – New HbA1c units

From April 1st 2011, HbA1c results will be reported only in the new units, mmol/mol. The HbA1c will be reported in units of 'mmols per mol' or 'mmols/mol' and not as a percentage figure. This measurement is going to be international so that all laboratories will be using the same measurements.

The relationship between the old HbA1c and the new measurements will be:

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.

Handy Tips

Information for those of you who count carbohydrates.

Did You Know?

Micro waved jacket potatoes contain more carbohydrate than oven baked.

Weight	Oven Baked	Microwave
100g of potato	20g of carbohydrate	30g of carbohydrate
180g of potato	35g of carbohydrate	55g of carbohydrate
330g of potato	70g of carbohydrate	100g of carbohydrate

- A Sachet of McDonald's tomato ketchup contains 6g of carbohydrate.
- Medium size onion ring from Burger King contains 46g of carbohydrate.

For more information about the importance of carbohydrate counting simply email bev@iddtinternational.org

Notice Board

Wilberts Party in the Park
26th June 2011
Come and join the fun at Wiksteed Park in Kettering. Meet new friends and enjoy all the fun that Wilbert is providing.
Tickets are now available at £4 each for early bird bookings.
Simply email bev@iddtinternational.org

IDDT's Conference
15th October 2011
Whether you are looking for education on diabetes, to talk to others or simply a day away come along and joint us.
For further information bev@iddtinternatiomal.org

The next phase of Change4life

The next phase of change4life has been launched by the Government and is called the Great Swapathon. The idea is to make small changes to your life by swapping a bad habit for a good one. Families are also entitled to a £50 book of vouches that can be cashed in at Asda, Unilever, Warburtons, JJB Sports and Haven Holiday.

Latest News – Mixtard 30 Withdrawal

Mixtard 30 was withdrawn from the market at the end of December 2010 and IDDT is aware of the distress that this has caused people with diabetes. This particularly applies to children who have been able to manage their diabetes by using Mixtard 30 twice daily so avoiding the problems that arise with having to inject at school at lunchtime. This has also been especially difficult for those using Mixtard 30 in the InnoLet injection device because no other company supplies an InnoLet or similar device.

IDDT investigations

On further investigations, IDDT found that Actraphane, a pre-mix 30/70 insulin made by Novo Nordisk which is similar or near-identical insulin to Mixtard 30, is licensed and available in Europe, including the InnoLet. We followed this up with the UK licensing authority, the Medicines amd Healthcre products Regulatory Agency [MHRA] and we were informed that:

- Actraphane is a licensed product in the UK [MHRA to IDDT, 17.12.10]
- As a licensed product in the UK it can be prescribed by a doctor. A product prescribed can be sourced by a pharmacy through their wholesalers or by contacting the company directly. [MHRA to IDDT, 21.12.10]

So it appears all that was necessary with the withdrawal of Mixtard 30 was a simple change to Actraphane and importantly, those needing an InnoLet could have had it.

I apologise for the lateness of this information but we had to wait for official responses. We realise that many adults and children will have already changed their insulin and will not want to go through another change, unless they are experiencing difficulties with their new insulin. However, if you want to use Actraphane and people need the InnoLet because of visual impairment or manual dexterity problems, your GP can prescribe it on an NHS prescription and your pharmacy has to obtain for you. As with any change, you should discuss this with your doctor.

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

IDDT
PO Box 294
Northampton
NN1 4XS

Name: ———————————————————————————

Address: ———————————————————————————

———————————————————————————

Postcode: ———————————————————————————

Tel No: ———————————————————————————

From Your Editor – Bev Freeman

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