

### **A Word From The Editor**

This Newsletter is different from usual and some of our regular features are missing. The situation with 'human' insulin has had to take precedence, not only because more information has come to light but also because the threat of global withdrawal of animal insulins becomes greater. This Newsletter specifically aims to demonstrate the problems that face us, the people who need natural animal insulin wherever we may live, the power and control the pharmaceutical industry has over our lives and the lack of support that we have been given over the years.

Jenny Hirst

### There Has To Be Action!

A recent statement from one of the three largest insulin manufacturers in the world has caused IDDT great concern and to some extent confirms our worst fears. It is not only that the implications are very serious for people using 'human' insulin, but despite these serious implications, the systematic discontinuation of animal insulins goes on throughout the world leaving many people with no choice and no alternative.

The statement is very disturbing and IDDT is only too well aware that it will cause alarm. It was not put in the public domain by IDDT but by Aventis Pharmaceuticals, one of the three major insulin manufacturers in the world.

"Human insulin therapy may be associated with hypoglycaemia, worsening of diabetic retinopathy, lipodystrophy, skin reactions (such as injection-site reaction, pruritus, and rash), allergic reactions, sodium retention and oedema."

#### Aventis Pharmaceuticals, dated April 24th 2000.

The Trustees of IDDT debated long and hard how to deal with this and, indeed, even whether we should pass on the information to you and other people with diabetes. However, IDDT knows that all the adverse reactions described in the statements are supported by patients' experiences, even the worsening of retinopathy, but all too often they have been dismissed. We concluded that we have a duty and commitment to keep people informed and had to follow our usual approach – one of being honest and making known all the information at our disposal so that people who live with diabetes are able to make truly informed choices. If we had not done this, then we would have been guilty of the same lack of openness of which we have accused others. Our decision was influenced by several factors:

- Both Aventis and the recent statement from Novo Nordisk could have said just 'insulin therapy' but neither of them did. They specifically say 'HUMAN insulin therapy'.
- The adverse reactions that Aventis have said may occur with 'human' insulin no longer centre around hypoglycaemia and have serious implications for everyone using it. The most worrying is 'worsening of retinopathy' because there is no national eye screening for people with diabetes to detect who has or has not got retinopathy and therefore no way of knowing who is at risk of this adverse reaction. [see 'Retinopathy Facts' later]
- The Aventis statement followed closely on the heals of Novo Nordisk's statement, September 1999: "Historically, improving glycaemic control with soluble human insulin has been associated with an increased risk of hypoglycaemia."
- We believe that no responsible pharmaceutical company would make such serious statements unless they were based on evidence, especially as they concern the insulins they actually produce. We contacted Aventis on two occasions for the evidence

to support their statement but they did not reply.

Having made our decision to inform you, our members, our concerns were confirmed by an article in Pulse, May 20th, containing a statement from the Medical Defence Union – the largest legal organisation for the medical profession in the UK. It confirms yet again that 'human' insulin can cause loss of hypo warnings:

"The data sheets for human insulin specify the potential for lowered hypoglycaemia awareness but doctors should take care to discuss this with their patients. Provided they did this (and the patient is happy with this) any claims in connection with human insulin would be directed against the manufacturers under product liability." [And not at the doctors.]

# The Implications Of The Medical Defence Union Statement

#### What does the MDU statement mean for you, the patient?

Firstly it confirms that there are problems of loss of warnings with 'human' insulins and gives support to those people who have lacked the courage to face their doctors and insist on changing to animal insulin. Secondly, it means that the doctor that prescribes 'human' insulin should warn you that 'human' insulin could cause a loss of warnings of hypos and this must be recorded in your notes. If he/she does not do so then they have failed in their duty and have put themselves at risk of legal action. I just wonder how many people have actually been warned of this and if all newly diagnosed patients are warned and also given the choice of animal insulins that do not contain this warning? The Patients' Charter Right 5 gives you, the patient, the entitlement to information about risks and benefits of treatment and information about alternative treatments.

#### What does the MDU statement mean for doctors?

We do have sympathy with GPs because in prescribing insulin, especially for people with Type 1 diabetes, they are often acting under the instructions of the consultant at the diabetes clinic, yet they it appears they are legally responsible because they actually write the prescription – this doesn't seem quite fair. If the original prescribing decision is actually made by the consultant then it would seem that bulk of the responsibility must also lie there, both for warning the patient about hypo unawareness and for giving the patient their rights to choice. Nevertheless, this statement from the Medical Defence Union is clearly a warning to all doctors who prescribe 'human' insulin that to avoid possible legal action, they must warn patients about loss of warnings.

Point to remember for us all. The data sheets for 'human' insulins started to include warnings of hypo unawareness in 1990/91 as a result of the complaints from people who had been using it. So everyone after that date should certainly have been warned. It should also be remembered that there was evidence from patients and research prior to this that did show an increase in hypoglycaemia and loss of warnings with 'human' insulin but this was largely ignored or even condemned as 'not scientifically correct'. Perhaps the penalties of ignoring this and the evidence from patients, are now coming home to roost.

# **Actions Taken By IDDT**

IDDT wrote to the following people on May 5th 2000:

Mr Alan Milburn, Secretary of State for Health,

Lord Hunt, Parliamentary Under Secretary Of State for Health,

Dr Keith Jones, Chief Executive of the Medicines Control Agency

[MCA],

Dr Peter Arlett, Post licensing Division of the MCA

Professor Breckenridge, Chairman of the Committee on Safety of Medicines [CSM].

IDDT requested that the present position on 'human' insulin is investigated and guidelines issued as a matter of urgency by the Department of Health to enable people with diabetes and doctors, to be given the full facts and evidence on which to base the choice of insulin species.

We made the following points:

- With the reservation that the decisions to prescribe 'human' insulin
  and to change people from the animal insulin that suited them,
  were not, and still are not evidence based, we have previously fully
  acknowledged that the majority of people with diabetes appear to
  be satisfactorily treated with 'human' insulin.
- This public statement made by the manufacturers of 'human' insulin themselves, about these serious adverse reactions that may occur with 'human' insulin therapy, has very serious implications for everyone treated with it and for prescribing doctors.
- The 'worsening of retinopathy' demonstrates how serious these problems are. The wording implies that for patients who already have retinopathy, 'human' insulin therapy could make it worse so leading to earlier visual impairment or blindness. As there is no way of knowing which people have retinopathy, if 'human' insulin is prescribed many people may be at risk of worsening of retinopathy. However small this increased risk is, any risk of visual impairment and blindness is one that most people would consider unacceptable especially when there are alternative insulins that have never been said to carry such risks.

- Oedema is an equally serious adverse reaction and we now have an explanation for the large weight increase that happens to some people when they use 'human' insulin with subsequent weight loss on changing to animal insulin.
- Hypoglycaemia and loss of warning symptoms are acute daily problems for those living with diabetes and any increased risks of this not only make 'human' insulin therapy less safe but reduce the quality of life of those with diabetes and that of their families. Recent statistics show that between 4 and 13% of deaths in people with diabetes are now caused by hypoglycaemia.
- Despite being used for nearly 80 years, no such statements have had to be issued about either bovine or porcine insulins. It now appears that the risk/benefit ratio for first line treatment has shifted from 'human' insulin in favour of animal insulin and that the present prescribing habits may be putting some people with diabetes at risk of unnecessary and avoidable complications to which they are already susceptible.

#### We also informed them that:

- We would have to make this information available to people with diabetes on July 1st, the date of our next Newsletter, otherwise we would be guilty of withholding information that could affect the health and welfare of our client group.
- If the DoH still felt unable to take any action then IDDT would attempt to inform health professionals before July 1st, so that they could be prepared for a possible influx of people exercising their rights to more information and a possible revision of their choice of insulin treatment.

## What Response Did We Receive?

Lord Hunt's correspondence unit wrote to say that the letter was being referred to the 'appropriate Minister' and the Chairman of the CSM said we would be receiving a response from the MCA. Five weeks later no response nor even an acknowledgement had been received from any of the other recipients of the letter and so by the time you receive this Newsletter, IDDT will have sent information to consultant diabetologists, diabetes specialist nurses, GPs with an interest in diabetes and pharmacists. IDDT has done this for three reasons:

- To inform health professionals of the Aventis statement so that they have an informed prescribing choice.
- To prepare them for any reactions or alarm that people with diabetes and their families may express and to give them time to reconsider the risks and benefits of prescribing 'human' insulin for their patients.
- From past experience, we know that it is not easy for patients to change their treatment from 'human' to animal insulin and in some areas people are still being denied that choice or being given inaccurate, even incorrect information. We hope that by informing health professionals of the present situation, we help people to have the confidence to approach this matter again with their clinic or GP.

# What Action Should People With Diabetes Take?

It has never been IDDT's policy to advise people what treatment to have but simply to provide information about alternative treatments, risks and benefits in order that they can make an informed decision. This principle is entirely in line with the Patients' Charter, Right 5 and should be given to you by your doctor otherwise he/she is in breach

of his/her NHS contractual agreement [confirmed some time ago in a letter from the BMA.]

IDDT's advice now is that people requiring insulin treatment should themselves reassess the risks and benefits of 'human' insulin treatment compared to those of animal insulin treatment. It is your health, your choice and your decision. Assessing risks and benefits sounds scientific but isn't – you do it with many everyday decisions such as changing your job. So simply list the risks [disadvantages] and list the benefits [advantages] of both types of insulin for you, bearing in mind that risks can be unknown - absence of evidence is not the same as evidence of absence. Any decision to change treatment can then be made on the basis of evidence of benefit, advantages of one particular type of insulin over any risks or disadvantages.

If one of the disadvantages of changing treatment is that you do not have the courage to ask your doctor, you now have some evidence to support your wishes and remember again – it is your health, your life and ultimately your choice.

# **Retinopathy Facts**

A review of retinopathy by the University of York NHS Centre for Reviews and Dissemination published in Effective Health Care, August 1999, provides the following information:

- Diabetic retinopathy is the leading cause of blindness in people of working age in industrialised countries.
- Twenty years after diagnosis almost all those with Type 1 diabetes and 60% of those with Type 2 diabetes will have some degree of retinopathy.
- British screening studies suggest that around 5-10% have sight threatening retinopathy and up to 40% of people with newly diagnosed Type 2 diabetes have some retinopathy.

 Small blood vessels in the retina become blocked, swollen or leaky causing oedema and new, fragile vessels grow haphazardly in the retina. This process can continue for years without causing visual symptoms or visual impairment: during this period, retinopathy can only be detected by eye examination.

In addition, it is important to note that there are particularly vulnerable groups of people susceptible to retinopathy:

- Pregnant women.
- Children and adolescents in the long term are at greater risk of microvascular and macrovascular complications of diabetes. This paper recommends that surveillance for the earliest evidence of microvascular disease [this includes retinopathy] should begin at puberty and after 3 and 5 years of diabetes.

Ref Endocrin Metab Clin North Am 1999 Dec;28[4]: 865-82

### Withdrawal Of Animal Insulin In The US

#### LITIGATION - but a class action with a difference

One could say that if it was going to happen anywhere, it would be the United States but it is also a country where litigation could succeed. This is a class action with a difference. It is not simply about compensation or an out of court settlement for damages that 'human' insulin may have caused, as with other drugs such as Opren and Prozac. This is a tactic often used by drug companies to stop the litigation going all the way and legally proving that their drug has caused damage or even death. But in this case settlement will not be that easy for them because compensation money is not what it is all about. Suzan Kawulok, from New Mexico, has only taken the legal action now because she cannot obtain the animal insulin she needs to remain well. No amount of money in a damages settlement will provide this for her, no amount of money will make up for the life that

she knows she will have if she has to go back to using animal insulin.

Suzan took Lilly biosynthetic insulin, Humulin, in 1987 and it caused 'unbearable pain and loss of most (of) my arms'. She went back to animal insulin but in 1998 tried the biosynthetic version again and experienced the same problems. She now takes pork insulin. The class action lawsuit alleges that the biosynthetic insulins from Novo Nordisk and Lilly can hurt people with diabetes and also contends that the two companies have recklessly reduced the production of these alternative medications.

The 18-page lawsuit alleges that "Lilly and Novo Nordisk recklessly and maliciously discontinued or significantly reduced the manufacture of animal-based insulins knowing that diabetics had serious adverse symptoms from the biosynthetic products; that the two companies failed to warn patients that 'human' insulin can cause injurious, life threatening symptoms, including arthritic syndromes and a lack of awareness of low blood sugars."

The action also accuses them of trying to prevent other companies from making animal insulins and asks that the firms be ordered to release their formulas for animal insulins to another manufacturer.

The sums of money involved are ones that are beyond our imagination. The claim is for \$1,333,000,000 with \$333,000,000 to be set aside for the purpose of developing a US source of animal insulins, \$20,000,000 to allow the plaintiffs to obtain animal insulins from CP Pharmaceuticals so that animal insulins are available immediately.

#### IDDT's position on the litigation

Obviously as a registered charity IDDT cannot be involved in legal action either here in the UK or in the US but we will be watching with interest!

So it appears are others:

Anthony Barnett of The Observer took up the issue in May 7th's edition and he points out that this action could send shock waves through the pharmaceutical industry. He pointed out the dangers of hypos without warning and cited the case of a man who crashed his car in Wolverhampton and killed his mother-in-law who was a passenger. He blacked out and swerved, ploughed across a roundabout and shunted another car 20yards across a grass verge. The man who has had diabetes for 15 years did not realise what had happened until he took glucose tablets later. Two years earlier his doctor had switched him from animal to genetically engineered insulin. The article also guotes a spokesman for the BDA and their statement now implies that they see the issue as bigger and much more serious than previously. They state "We will be watching this case with great interest. It highlights the need for manufacturers to supply animal insulin for the many who need it to survive". There are two acknowledgements here that they have not really been made before – the use of the words "many" and "survive". "Survive" means that people need animal insulin to live.

**Pulse**, the weekly magazine for GPs, we have already quoted. But their assessment of the allegations is that the manufacturers "failed to notify doctors and patients of the full spectrum of potential side effects, suppression of information and inadequate trial data." The lawyer for the firm taking the action told Pulse "Ten major problems have been identified". Pulse again points out that while the case in the UK in the early 1990s petered out for lack of medical evidence, this new legal action could spark renewed interest. They quote Liz Thomas from the charity Action for Victims of Medical Accidents: "It may be that any UK action would be brought on the back of the US proceedings, rather like the silicone implant case."

I make no apology for repeating this - the consequences of loss of hypo warnings are serious and can have a dramatic effect on quality of life, a simple example is that it means the driving licence is removed.

'Human' insulins have no known advantages and the question

really is - are the risks worth taking? This question now applies to doctors as well as people with diabetes. If the Observer article is correct and the legal case in the US does send shock waves through the pharmaceutical industry, then it will also send shock waves throughout the medical profession. They are not only going to have to warn their patients about loss of hypo warnings but they are going to have to justify prescribing 'human' insulin and considering the now acknowledged problems, these justifications will have to be based on evidence of superiority and there isn't any! No longer will it be safe or acceptable for them to provide patients with anything less.

#### **Seizures - What To Do**

We know tight control that people are encouraged to aim for [blood glucose levels near normal between 4 and 7] leads to a threefold increase in the risks of severe hypoglycaemia. We also know that severe hypoglycaemia is usually defined as being unconsciousness in a coma and perhaps with an accompanying seizure or fit. Certainly at IDDT we hear people complaining of having seizures, or to be more correct, carers complaining of their partners having seizures and this appears to be on the increase. The fact that we are talking about them is good because I am sure that at one time many of us kept quiet because of a feeling of embarrassment. The fact that they are happening and apparently more frequently, is not so good. It sometimes gets forgotten that frequent hypos, especially moderate or severe ones, are a sign of control not being 'good' in exactly the same way as hyperglycaemia.

IDDT is more likely to hear about seizures because the people who are in contact with us are often having problems with loss of warnings while using 'human' insulin and therefore suffer more hypos. On a personal note my daughter has not had a hypo with a seizure since she changed from 'human' insulin to animal insulin.

#### Frightening!

Seizures are frightening for the carers, especially when they happen at night. They would be frightening for the person with diabetes but they actually don't know or remember anything about them. They may well feel awful the next day, may have bruises from thrashing around and may suffer the after effects of whatever treatment has been used to bring them round from the hypo. But they don't remember the seizure and it is sometimes reassuring for carers to know this, especially parents.

#### Here are some standard guidelines about seizures:

What to do and not to do:

#### DO...

- Protect them from injury by moving any sharp or hard objects.
   If they are having a partial seizure then guide them away from danger.
- Cushion the person's head if they fall down.
- When the convulsive part of the seizure is over place the person in the recovery position ie lying down on their side. This will help their breathing.
- · Be quietly reassuring.
- · Stay with them until they are fully conscious again.

#### DO NOT...

- Try to restrain the person having the seizure.
- · Put anything in their mouth or force anything between their teeth.
- Try to move them unless they are in danger.
- Give the person anything to eat or drink until they have fully regained consciousness.

**Remember** – in adults and children with diabetes, the seizure is most likely caused by hypoglycaemia and it is very important to follow the rules for treatment of hypos:

**DO NOT** administer anything by mouth or use Hypostop because the person is unconscious and it could cause them to choke.

If you have Glucogen or Glucagon in the house then try to inject this.

When should you call the ambulance?

- If it is the first time that a seizure has occurred, then there needs to be investigation into the cause as well as treatment of the hypo.
- If the convulsive part of the seizure shows no signs of stopping or a second seizure occurs without the person r egaining consciousness.
- If there are any injuries sustained during the seizure eg cuts.
- If you do not have Glucagen or Glucagon available or are unable to inject it.
- If you cannot deal with the seizure and are worried or frightened.

**Note from Jenny**: from personal experience I admit that seizures always frightened and upset me. I never had any qualms about calling 999 in these circumstances if only for the reassurance and security of knowing that someone else was taking the responsibility and not me! I always had difficulty sleeping afterwards and not just that night, but for a few weeks afterwards, for fear there was going to be another one. The other thing I was guilty of was running my daughter's blood sugars higher until I got my confidence back!

### **Unconsciousness - Misunderstood!**

700 people attending a hospital emergency department were asked 7 questions, one about the term "unconscious". 53.5% thought that an unconscious person could still hear and 41% thought that unconscious people always had their eyes shut. [J Accid Emerg Med 2000;17:]

Simple misunderstandings like this can result in emergency situations

being wrongly handled by the public or phone call reports being wrongly described to the emergency services. For example if a person is found unconscious but their eyes are open, a 999 caller may not tell the emergency services that the person is unconscious.

#### A Total Re-Think?

How often do we go back to basics and re-think accepted practices – whether some people would be better to try a completely different approach to their diabetes regime? The same regimes have been followed for years, even the introduction of multi-dose regimes was not truly a re-think but an addition to existing treatment regimes. Regimes have been tinkered with, often as a result of so-called 'innovative' insulins produced by the manufacturers, rather than by innovative thinking. The following article is a demonstration of a total re-think and I am grateful to Ron Raab, the author, for allowing IDDT to publish it. In his earlier letter to me, Ron said that it took him 2 years to change his own 'mind-set' and think again about the accepted regimes that have been used for years. It is also notable that Dr Bernstein, who specialises in this new approach, has had diabetes for 50 years. Maybe it is not a regime that would suit everyone but...

What works? Forty-three years living with type 1 diabetes and living with my positive experience with the low carbohydrate regime.

Ron Raab B.EC. President, Insulin For Life Inc Member, International Diabetes Federation Insulin Task Force

I was diagnosed with Type 1 diabetes in 1957 at the age of 6, and started on

one insulin injection daily, which was the usual method, because

doctors tried to minimise the number of injections per day for children. However, because my doctor had Type 1 diabetes and felt that good blood glucose control should be the major aim, the number of injections was increased to two each day until 1984. I increased it to 3 each day until 1994 and since then have been taking 4 each day.

I started self-blood glucose testing in 1980, and of course before that I was testing urine. I now test 4 times each day (using a plasma calibrated meter) and I also regularly moderately exercise 2-3 times per week. Apart from mild background retinopathy, I do not have other major diabetes complications that interfere with my life.

In 1998, I became aware of a new approach - the low carbohydrate, low glycaemic index food plan. I also visited a diabetes centre in New York that specialises in this. Its Director (Dr. Richard Bernstein ) has had Type 1 diabetes for over 50 years. He adopted this food plan many years ago after a lot of experimentation and he reported that his diabetes control very significantly improved. I was also interested in this approach as I had observed over many years that when my carbohydrate intake was less, my blood sugars were improved. This further encouraged me to try this very different food plan. I was intrigued by reports of normal HbA1c's in Dr. Bernstein's book, news reports and internet site and the many other similar reports.

Prior to this I did not adopt this approach because the generally accepted and recommended regime was a high carbohydrate food plan and there was not support or encouragement to adopt this major change. By 1998, the low carbohydrate diet was being discussed a lot in the USA and there was increasing discussion in the diabetes journals and at conferences.

I experimented a lot and have reduced since July 1998 the total amount of daily carbohydrate from about 200 gms to recently 30 grams, which is all of a slowly absorbed type.

#### Here are some of the results:

My insulin dose has fallen by over 45%. My HbA1c has improved by

20% to 6.6% (range 6.3-7.4%) and continues to decline and I expect this to be even more so with my further recent reduction to 30 grams daily carbohydrate. There is much less variation in daily blood glucose. Hypoglycaemia is much less severe. Weight has dropped from 84 kg to 74 kg; retinopathy has stabilised (my ophthalmologist made particular note of this new trend in its progression); blood pressure and lipids remain normal.

Very importantly, hunger has decreased (insulin is an appetite stimulant and this regime has resulted in much less insulin). There is much more motivation, less frustration and my subjective quality of life has improved significantly.

I do not regard this food plan as "radical" or a "fad". It should not be confused with the extreme food plans, which are periodically publicised, especially in America! It does not need to be a particularly "high protein diet " – rather the level is chosen in part based on what gives a feeling of satiety.

The significantly reduced insulin dose has been a major contributor to the reduction in hunger, and I do not feel hungry during the day; however there is some hunger in the evening. However, as I continue to experiment with the food plan and the type and range of meals, particularly in the evening, I am confident that this problem will also be significantly reduced and am very excited about continuing to be able to lower my HbA1c further.

Lowering daily carbohydrate intake makes sense on many levels. Why eat so much of a food type that is at the root of blood glucose instability and which needs (much) more insulin to (try to) take care of, which in turn creates further problems. There doesn't appear to be any evidence supporting high carbohydrate intake over lower intake in terms of blood glucose control, yet this is what is being generally advocated and promoted!! Also kidney disease seems to be subsequent to high blood glucose rather than higher protein intake, according to professionals such as Dr Bernstein and his expert colleagues.

The major pharmaceutical manufacturer, Bayer, now endorses this approach and includes information about it with meters it sells in America and cites persons with diabetes who use this approach as "living proof of the success of this method".

**In summary**, smaller amounts of carbohydrate require smaller amounts of insulin and this results in more predictability and less variation in blood glucose levels.

I was invited to give a talk and slide presentation to a Japanese Diabetes Education Center organised symposium for physicians and educators in April 2000, under the title "The Experience of the Person with Diabetes", on my experiences with this system of blood glucose management. I will also be making a similar presentation at the Australian Diabetes Society/ Australian Diabetes Educators Association Annual Meeting in August and have recently also published information about this approach and my experiences.

Ron Raab B.Ec.

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Australia

www.idi.org.au/insulin.htm

Improving Access to Insulin and Diabetes Supplies in Countries in Need.

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Please let me know your reactions by writing to Jenny Hirst, PO Box 294, Northampton NNI 4XS or e-mail to jenny@iddtinternational.org

# **AShortHistoryLessonMayBeEnlightening!**

- 1982 very quietly, the first genetically produce drug came on the market produced from bacteria – not an association that would appeal to insulin users so it was called 'human' insulin. Not of course that it was human insulin, but the name was attractive and far better to market than anything resembling a more accurate description such as bacteriological insulin!
- By 1985/6 the sales were not doing that well, largely because people who were well controlled on their beef or pork insulins had no reason to change. Why should they? A rumour then went around the medical world that animal insulins were about to be removed from the market. Bound to have been rumour rather than truth because they didn't disappear!
- UI00 around the same time doctors in the UK decided that everyone should be changed to U100 strength insulin – we were told that it would make travelling easier because all the other countries were going this way! Did they? No!
- Net result of these two factors while doctors were changing all the people with diabetes to U100 in a planned 2 year programme led by Professor Harry Keen, they also changed many of them to 'human' insulin at the same time. Seemed the right thing to do considering that animal insulins were going to be withdrawn according to rumour!
- Late 1980s the changeover had taken place and miraculously over 80% of people had been changed to genetically produced 'human' insulin with many not even realising that their insulin species had been changed as well as the strength.
- The pen and multi-dose regimes appeared was this because it was beneficial treatment or essential to achieve control because of the shorter duration and more aggressive actions of 'human' insulins?

Consent? Choice? Patient involvement in decision making? Warnings that maybe the insulin would be different? Wash my mouth out with salt and water! Who had ever heard of these words?

So was this all coincidence or really clever stuff? I know my answer and coincidence is not something that is in my vocabulary these days!

However, the value of history is in learning from the past to help with the future, so have we, the patients, learnt from this? I think so but it is a sad lesson and one that in many ways we wish we had not had to learn. It used to be good to have faith and trust in health systems, services and the people involved.

# So we look at the situation today now that we are wiser and we know that:

After nearly 20 years there is no evidence that 'human' insulin has any clinical advantages for patients and there is certainly no evidence of its superiority. 'Human' insulins are more aggressive and shorter acting than animal insulins and therefore mean that more daily injections are necessary to achieve control. It is no longer a question of patients trying to prove that 'human' insulin can cause adverse reactions in some people – the manufacturers agree. So doctors and nurses should no longer ignore their patients' reports of problems with 'human' insulin.

**Given the choice** who would want to use an insulin with the potential for loss of hypo warnings and all that implies, that may cause worsening of retinopathy, that may cause lipodystrophy or oedema, when there are alternative insulins that do not have these statements attached to them?

**Given the choice** who would want to prescribe it? Patients may have learnt from history but it remains to be seen who else has?

# Global Withdrawal Of Animal Insulins By Novo Nordisk - as reported in the last issue

IDDT has taken the following actions in relation this specific issue

because such action by them and Lilly means the virtual removal of animal insulins throughout the world:

We wrote to Novo Nordisk UK and they told us that:

- "Novo Nordisk will supply porcine insulins as long as there is a demand in the UK."
- "When the decision is made to withdraw porcine insulin we will work closely with the BDA and health professionals to ensure a smooth transition." [Balance, the BDA magazine reported this as 'if' and not 'when'.]
- "When the decision is made we will provide all necessary information on alternative insulins including alternative animal insulins available."

It is clear from these statements that their pork insulin will be discontinued in the UK, the question is when they decide that the demand is not there!

Important for Lentard users - Novo Nordisk have decided to stop supply of beef insulins during 2000. In the UK this will mean that they will stop supplies of Lentard, a beef/pork mix, by mid-2001, not the 18 months notice as promised! They say "we will develop guidelines together with health professionals for the transfer to alternative insulins but that there is no equivalent beef insulin available from other suppliers." Lentard is described in Mims as a highly purified beef with pork zinc suspension lente insulin. CP Pharmaceuticals supply a beef lente insulin so this is an option for Lentard users who do not want to use 'human' insulin. If you are taking Lentard then discuss all the options with your doctor.

We wrote to the International Diabetes Federation [IDF] and received this response from Maria L. de Alva, the president, "I, and many others, feel that it is correct to keep animal insulin on the market for different reasons. This concern is part of the agenda of the next meeting of the Insulin Task Force that will be held in June. IDF officers, the insulin manufacturers and other interested individuals are part of

this Task Force."

I replied that I hoped IDDT would be informed of the outcome of this meeting.

We wrote to the World Health Organisation [WHO] they've not replied.

## If Banting And Best Could See Us Now!

The discovery of insulin was arguably one of the biggest break throughs in medicine. It was discovered at a time when we weren't trying to clone sheep or cattle that cause the papers to write horrific articles about enabling us to live till we are 200 and women to have babies when they are 70! No, insulin was discovered at a time when scientists and doctors were simply trying to find methods of eradicating disease or, as in the case of diabetes, prevent people from dying for lack of a treatment. In 1922 Banting and Best, the discoverers of insulin, relinquished their patent for the production of insulin and handed it over to the University of Toronto so that "everyone in the world needing insulin should survive".

Just imagine having discovered something as powerful and effective as insulin and bequeathing it to the world! It is not hard to understand that in 1922 this seemed a realistic possibility, the pharmaceutical industry was a different animal in those days. The discoverers could never have dreamt that insulin would be a treated as a commodity, to be bought and sold at as high a price as possible. They could not have dreamed that the insulin they discovered, would be controlled by huge corporations that could, and would be, bought and sold at the drop of a commercial hat! They could not have dreamed that the world's insulin supply would end up being controlled by three major manufacturers or that this control would be exercised in the interests of the balance sheet rather than the interests of people with diabetes. Nor could they have imagined that the treatment of diabetes would

become such a profitable business.

# Banting and Best's dream that everyone in the world needing insulin should survive? Did it come true?

No, of course not! Let us take off any rose coloured glasses that some of us might still have! There have been four major events that truly benefited people who need insulin:

- 1. The discovery of insulin.
- 2. The development of short and long acting insulins for 24 hour blood glucose control.
- 3. The development in the 1970s of highly purified insulins to reduce skin reactions and 'lumps and bumps' at injection sites.
- 4. The development of home blood glucose monitoring in the late 70s or early 80s.

# What has happened to insulin development since the 1970s to benefit people with diabetes?

The answer to this question will be 'huge strides ahead' or 'absolutely nothing'! The 'huge strides ahead' perspective can only mean the development of synthetics, biosynthetics, analogues etc etc etc. The 'absolutely nothing' perspective means that all these new insulins have produced no actual proven clinical benefit for patients. The development of the genetically engineered insulins just may have been an attempt to discover insulins that would better control diabetes more cheaply. But in reality, there is no evidence of benefit and they are certainly not cheaper to make them affordable for people in the world's poorest countries. The cynic would say that insulins are now being developed to try to counteract the adverse effects of the original 'human' insulins, eg the analogues, such as Humalog and NovoRapid, to reduce the hypos produced by 'human' insulin. The reality may be somewhere in the middle with intensive therapy playing a part.

Remember the quote from Novo Nordisk when advertising their new analogue: "Historically human insulin is associated with an increased risk of hypoglycaemia". Wonderful thinking! Produce a 'new improved version' to solve the problems of the last new improved version, naturally there will be a price increase and greater profits. We are used to this with washing powder ads! The fact that the old, less expensive animal insulins do the job just as well, and for some people better, is conveniently forgotten. Even industry could hardly have justified increasing the costs of the same animal insulins produced in 1970, to today's prices for the synthetic insulins. The net result is overall hiking of insulin prices, which means for us in the UK greater cost to the NHS but for many people means that insulin is either unaffordable or affordable only at the expense of other needs.

#### **Today's realities**

#### The UK

We are lucky in the UK because insulin is free and so much of the time, we are guilty of completely ignoring the price with drug pricing only surfacing to the public consciousness when a new and expensive drug is denied to someone who needs it. Nevertheless, the NHS is funded by us and we need to know that there is not unnecessary expenditure in one part of the NHS that could save someone's life in another. Remember a few years ago when IDDT showed that supplying 'human' insulin with its lack of proven benefits for patients, resulted in an unnecessary NHS overspend of nearly £20 million per year? It might not sound very much but over the last 15 years it amounts to £300 million. In the UK we are not immune from the effects of insulin prices and insulin manufacturers' pricing philosophies but we are luckier than most.

#### **The United States**

Since IDDT became an international organisation, we have come to realise the true effects of insulin pricing and how it affects people with diabetes, even in countries as wealthy as the US. I receive e-mails from people in the US who are desperate because they cannot afford the insulin they need or if they can afford insulin, then they cannot afford their blood testing strips. An estimated 40 million American citizens are either underinsured or not insured. Even for

those that are insured, the Medicare programme does not cover the costs of prescriptions. But what of those who can't afford their insulin treatment?

There have been repeated attempts to change this to a system whereby the Federal government enters into some sort of drug price-setting arrangements so that medicines are affordable to the elderly and those with chronic conditions such as diabetes. But we read reports that huge amounts of money have been spent by the pharmaceutical industry to scupper plans to provide prescription benefits that would curtail their freedom to make apparently unlimited profits from drugs - insulin being no exception. The connection between politics and the pharmaceutical industry is widely known in the US and peoples' health suffers as a result, simply because they cannot afford the price of their medication. For people with diabetes, this is bound to reflect in their future health, the complications they suffer and their reduced life span. It seems unimaginable in a country leading the field in many areas of medicine that US citizens are suffering from lack of affordable insulin. Ironically, it was the US based pharmaceutical company Eli Lilly, that teamed up with Banting and Best's University of Toronto in 1922 to start to produce insulin on a large scale so that it was freely available to all people with diabetes!

#### The world's poorest countries

An article in The Lancet, [Vol 355, March 11,2000] points out three quarters of a century after Banting and Best discovered it, insulin is still not routinely available to people and may not be included on the national formularies of essential drugs in many countries. The statistics are appalling:

- The life expectancy of someone newly diagnosed with Type1 diabetes in some parts of Africa may be only one year but their life expectancy might be increased five-fold with an uninterrupted insulin supply.
- The amount spent on healthcare, in particular pharmaceutical products, may be as little as US\$2-3 per person per year.
- The costs of outpatient care for Type 1 diabetes has been

- calculated for one African country as around US\$229 per person per year but 156 dollars of that is for insulin alone.
- In a state funded health system the cost of treating one person with diabetes might be depriving 75 others of life saving antibiotics but the alternative, of people buying their own insulin, may cost the equivalent of half their year's salary.

In the article, Professor Yudkin proposes that insulin manufacturers should guarantee a regular uninterrupted supply of insulin to the 40 poorest indebted countries sufficient to treat everyone with Type 1 diabetes, as they have a long history of philanthropy.

Yes, it sounds like Banting and Best's ideal: "Everyone in the world needing insulin should survive" and it is achievable when he quotes the actual costs:

- The insulin requirement for this is estimated to be less than 0.5% of the world's current insulin usage.
- It would cost US\$3-5 million per year.
- This figure is only 0.2% of the value of total insulin sales by the three major producers.

These figures are worked out on the basis of the real costs of insulin – without the costs of promotion, advertising and return on investments. Interestingly, Professor Yudkin proposes the use of animal insulins "because they are sold at substantially lower prices than human insulin." I fear that this proposal may be fall on stony ground as at least two of the three companies, Novo Nordisk and Lilly, progress more rapidly to total discontinuation of animal insulins.

#### The poor but not quite so poor countries.

The situation varies from country to country but people are dying for the lack of affordable insulin. One thing is clear, where the insulin available is 'human' insulin then the cost is much higher than where there are supplies of animal insulin. For example, there is no animal insulin in the Philippines and 'human' insulin costs the enormous sum of \$US30 per vial, while around the corner in India you can obtain

reasonable quality animal insulin for around \$US5. A quote from a letter I received about a 16 year old girl in the Philippines says, "just recently she stopped taking insulin because she could no longer afford it, went into a coma and died 3 days later."

# Let us once more remember the wishes of Banting and Best - "Everyone in the world needing insulin should survive".

We not only have the outrageous situation where 'human' insulin can be supplied to the Philippines, for example, but for reasons that defy decency, the cheaper more affordable animal insulin cannot, so people die. We have people in the poorest countries dying for lack of insulin that would cost industry a minute fraction of their insulin sold and marketed to the industrialised world. While in the industrial world we have health systems that allow insulin to be priced beyond the reach of many, so that their lives are not only shortened but may be ruined by the complications of diabetes.

While all this exposes yet another reason why animal insulins must not be allowed to disappear, it exposes a deeper and more outrageous situation – the occurrence of unnecessary and avoidable deaths. We can understand industry wishes to ignore those of us that complain about adverse effects of 'human' insulin - we are a thorn in their flesh and a threat because one day we might just be proved right. But we cannot understand or accept industry's manipulation of insulin markets, and governments, to simply increase their already huge profits at the expense of life itself for so many people. The insulin manufacturers appear to demonstrate a disregard for the lives of people with diabetes - it is not good enough to simply care about those that can afford their products! The world needs more insulin manufacturers to come into the market place to remove the global monopoly - only this way will people be able to have affordable insulin. If natural animal insulin is the affordable insulin because it is cheaper then so be it – it is probably safer for people where support services and blood testing are not so available. At the same time, many of us would be delighted that the animal insulin we need would have a secure future.

# NHS Failing Diabetics - Audit Commission Report

According to an Audit Commission Report issued on April 12th 2000 people with diabetes are at risk because of sub-standard care from the NHS. Patients face long waits for treatment, are not given vital information about their condition and face wide variations in the quality of care across the country, according to the Report. Services are under pressure and in some areas patients are not getting access to the high quality care they deserve.

It acknowledged that there are 1.4m people diagnosed with diabetes in the UK and NHS spending on the condition is estimated at almost 5 billion pounds a year.

#### The Findings of the Report:

- Only half of hospitals visited had structured education programmes for patients and two out of every three patients in a large survey said they had received no education in the past year.
- Only two out of the nine hospitals visited had formal arrangements for out of hours advice. More than one in five patients knew nothing or very little about the effect of illness, such as flu', on their diabetes or what to do if their blood glucose levels drop too low.
- People had to wait up to 14 weeks for the first appointments at the hospital and over a third of people said that waiting times at hospitals was the top area for improvement.
- Almost one in ten people said that privacy in waiting areas was a top concern.
- One in five people identified lack of the opportunity to meet other people with diabetes as a top concern.
- At one hospital half of all the people attending the foot clinic with serious foot ulcers had been referred late for specialist treatment.
- Six out of nine hospitals could not say how many patients had received full health checks and only one in six health authorities had a register of everyone with diabetes in their area.

Three out of nine hospitals did not have a specialist childrens' diabetes nurse and six out of nine had no psychological support.

As we know the majority of people with diabetes have Type 2 diabetes and around three-quarters of people with diabetes have their condition managed by a GP, but the report recommends that family doctors take more responsibility from hospitals.

#### Some other rather staggering facts from the Report are that:

- Only half of health authorities had a district-wide screening service to prevent blindness and less than a third of GPs had regular access to a chiropodist to prevent problems which could in extreme cases lead to amputation.
- The Report also recognised that without the proper care, people with diabetes are at risk of long term complications such as blindness, heart disease and kidney disease.
- Some hospitals have ten times as many consultants to deal with the condition as others.

#### Conclusions?

The report calls for better training for staff and improved education for patients and improved links between different services such as chiropodists and dieticians.

Andrew Foster, controller of the Audit Commission is quoted as saying, "Our study shows that services are under pressure and in some areas patients are not getting access to the high quality care they deserve. We believe that more routine care could be provided by staff outside hospital to a high standard, given proper support by specialist teams."

The government is set to produce guidelines on treating diabetes in 2001 but meanwhile a spokeswoman for the Department of Health said: "The report highlights unacceptable variations in the quality of diabetes services. If some local health authorities can provide first class care then so can others".

#### Is there a message in all this?

Clearly there is one simple one – the services generally for people with diabetes vary and are not good enough. It is really very worrying that we still have a situation like this and if one looks at the research funded by the BDA that shows that death rates from diabetes have not reduced, then we do have to wonder what has been going on. We have had innovations - diabetes specialist nurses didn't exist 15 years ago, consultants specialising in diabetes were few and far between, and we have all the modern technology of home blood testing, HbA1cs etc, but exactly where has it got us?

There does need to be more help in the community and we have raised this on numerous occasions. I have enough history to remember that the first Diabetes Specialist Nurses were actually Health Visitor trained and the idea was that they would work in the community and not be hospital based as they so often are now. In fact, it was because there was seen to be such a lack of assistance and support in actually living with diabetes at home that the battle to have these community-based diabetes nurses was won. Somewhere along the line Specialist Nurses underwent a metamorphosis and became largely hospital-based, technicians of blood glucose results and doing much of the work that doctors used to do. Not only does this leave the many people who never visit a hospital out in the cold but it also leaves the help, support and education needed on a day to day basis unanswered.

I might add that other advantages of home visits are that in the home environment, the patient is more likely to feel able to discuss their real difficulties and worries. The Nurse will undoubtedly learn more about their patients real concerns and priorities which will result in a better understanding by healthcare professionals of living with diabetes. Perhaps we should revisit the old days a bit more!

#### No Excuse

Equally we cannot excuse ourselves from some responsibility in all this – we are the consumers of these services and we should act with a sense of ownership and awareness of our rights in the matter.

But do we? I fear not, but some of this is understandable. We do not complain but grumble quietly amongst ourselves! Most of us are guilty of this, usually for the same reason — diabetes is a chronic condition and we have to go on being treated by the same team of people. Complaining about them or the services they offer is difficult when we have to face them at the next visit. But if the poor services are not raised with the people who can bring about change then improvements will not happen.

If you feel unable to raise these matters yourself then this is where IDDT may be able to help. We have taken up issues before for people who have faced some of these difficulties. One example was an area where one of our members was told that his district was going to start charging all patients for chiropody services. We quickly wrote to the decision makers in that area and pointed out that this would ultimately result in a greater cost to the Health Authority because people with diabetes who could not afford their treatment would end up with much more serious problems. The charges were not introduced.

If the services you receive are less then adequate and you feel that IDDT can help, then write to me – Jenny Hirst, PO Box 294, Northampton NN1 4XS, e-mail address

jenny@iddtinternational.org or fax 01604 622838

#### **Feedback**

ADA and CDA respond – I am pleased to say that both these diabetes associations in Canada and the US have responded to IDDT's request and issued statements that have included information about personal importation of animal insulins from the UK and directed people to IDDT for more information. This information is now provided by the diabetes associations in Australia, the US and Canada and we are grateful to them for helping people with diabetes to know that there are

alternatives for them, albeit that these alternatives are cumbersome and expensive!

TONY BLAIR - In the April 2000 Newsletter we reported that Tony Blair wrote in the Independent on Sunday: "There is no doubt that there is the potential [from GM technology] both for harm and good.... GM technology has, for instance, helped diabetics by the production of insulin." After some angry calls from members that Mr Blair had cited 'human' insulin as the good example of GM technology on behalf of IDDT, I wrote to the Independent on Sunday and my letter was published the following week. I also wrote to Tony Blair, Mo Mowlam and other political parties and involved organisations. They all responded but neither Tony Blair and nor Mo Mowlam even bothered to acknowledge my letter. I wrote a second time, just in case they had not received my first letter, but I did not get a response to this either! And I was polite!

## **Novo Nordisk Pork Insulin Expiry Dates**

#### you have told us...

- Pork Insulatard November 2001. Everyone had the same expiry date - no one had any earlier or later than this. The last time we checked 6 months ago the dates were March and November 2001.
- Pork Actrapid March and October in 2001. 6 months ago the expiry dates were March and July 2000.
- Pork Mixtard the majority were September and November 2001.
   6 months ago the dates were all May 2001.

Insulin has a life of 2 years once released from the manufacturers, you can read into these results what you want. I would like to thank everyone that responded to our request for information. We will follow this up again in the next Newsletter.

## **Ghost Writing**

In IDDT Newsletter January 2000, we discussed the issue of ghost writers, where pharmaceutical companies employ people to write up the study to paint the results in a good light, instead of the actual researchers themselves, despite their often very respected names being published as the authors. Marketing the product starts from this point onwards!

Interestingly there have been new developments on this front resulting in a four page document called "Good publication practice: guidelines for pharmaceutical companies" drawn up by industry. According to the Lancet, March 25, 2000 the guidelines arose from the need to offer assistance with writing up research data — especially universities in non-English speaking countries and drug companies.

Fine, but why do drug companies need help? The researchers they fund are surely capable of writing up the research they carry out, if they are not or they are too busy, then they should perhaps not carry out the research in the first place. The document does, however, make some of the points that have concerned IDDT for some time:

- Companies should endeavour to publish the results from all their clinical trials – this is essential if treatment is to be evidence based.
- Assistance of ghost writers should be acknowledged but the main authors must retain responsibility for the paper and should be given adequate time to comment on an early draft.
- Help with opinion pieces is acceptable but " it is not usually appropriate for the professional ghost writer to prepare the first draft."

So far eight companies have signed up to the new guidelines to be published later this year. Liz Wager of Glaxo Welcome says that the group wants companies to "think about their responsibilities in publishing clinical trials and increase dialogue with editors and investigators about the way they can do this." She hopes that critics "will appreciate this public commitment to ethical publication practices".

Forgive me! I'm not a critic just a cynic, but public commitment is easy – such openness and responsibility may be more difficult if it encroaches on future sales of a product.

# What The Papers Say

Diabetes breakthrough may end insulin injections – this was the headline in many of the papers in May. Exciting news but I suspect that many of you got tired of your helpful friends telling you the answer to your problems was around the corner!

The surgeon, John Shapiro, announced at a conference that he had successfully transplanted pancreatic islet cells into 8 people who had once had severe diabetes. He describes them as "people aged between 29 and 53 with very severe diabetes since their youth, needed up to 15 injections a day, often suffered blackouts without warning and were crashing their cars, falling off horses or burning themselves while cooking." After undergoing the transplants 11 months ago, Mr Shapiro said there had been a dramatic improvement in their quality of life and no evidence of rejection. Forgive my scepticism, but sounds as if they didn't have a lot to lose!

#### How did this transplant work?

- The pancreatic cells were extracted from dead donors and kept alive and purified.
- They were injected into the portal vein and carried to the liver in the blood stream.
- The cells nested in the liver and produced insulin even though they were in the liver and not the pancreas.

I suspect this is another case of don't hold your breath and remember that this may well not be suitable for everyone with diabetes and has only been carried out in eight people with diabetes that could not be controlled by insulin injections. Remember it means a lifetime on an anti-rejection drug, in this case a new drug, not yet licensed in the UK called Rapamune, already estimated to cost at least £5000 per year per patient. It means swapping the insulin regime for a lifetime on a drug that dumbs down the immune system!

As ever the newspapers see this as the answer to our prayers but we are a little bit more realistic!

# **IDDT Annual Meeting**

#### A date for your diary

IDDT's Annual General Meeting will take place on Saturday October 7th at the Birmingham and Midland Institute. It is within easy access of the railway station, car parking is good and orange badge holders can park at the back of the Institute. There is disabled access and a lift. We hope to have an interesting programme for you and will be sending details to you shortly. In the meantime, please put the date in your diary and we look forward to seeing you there!

**Insulin Shortages** 

Some people in the UK have experienced difficulties in obtaining supplies of some of CP Pharmaceuticals range of Hypurin animal insulins. IDDT has been in touch with CP and there have been problems with stocks of some insulins but I am assured by their managing director, Charles Savage, that this has been a temporary problem which has now hopefully been rectified. We have also pointed out to CP that this shortage has led people to fear that CP is stopping production, this fear being made worse by some pharmacists and health professionals assuming that this is the case. However,

Mr Savage assures IDDT that CP is fully committed to continuing production of both beef and pork insulins in vials and cartridges. This commitment is vital to the future of people who need beef or pork insulins as the large multi-nationals systematically withdraw supplies throughout the world.

What Irritates Me...

In response to the suggestion of one of our members, we asked you to let us know what are the things that irritate you about having diabetes – a good opportunity for a whinge! And why not? This is what we received:

- People who insist that they, or someone they know, takes insulin
  in tablets!!!!
- People who tell you 'They do wonderful things these days, I'm sure they will find a cure one day'.
- People who insist on telling me that my child will grow out of diabetes.
- When friends and family exclude me when offering round cakes and biscuits.
- When junior doctors patronise me by saying things like 'the aim is to keep your blood sugar between 4 and 8' – no, I never knew!!!!
- When my walking group insist on walking to the next scenic spot for lunch when I need to stop now.
- The uninitiated asking "Did you take your insulin?" when I am in the throws of a hypo. It is not very comforting to be asked this question by a paramedic! It was especially a problem when I constantly went hypo on 'human'.
- I recently purchased a Glucotrend glucose monitoring machine from Roche and subsequently purchased the Camit software to connect to my personal computer. The connection cable to the computer is fine but the connection is useless as my computer can only accept 'male' adapters whereas the connection cable is

'female'. 'Female' to 'female' just doesn't work! What irritates me is that Roche told me they did not supply any other kind and to keep trying Computer World. What a waste of money that was!

**News From The Pharmaceutical Industry** 

UK - Pharma industry task force sets sail

The UK government is setting up a joint task force with industry to look at ways of strengthening the competitiveness of the UK-based pharmaceutical industry. It will be chaired by AstraZeneca's Chief Executive, Tom McKillop and Health Minister, Lord Hunt.

**New Human Insulin Products Available In The UK** 

Aventis, formally Hoechst, have introduced a range of 'human' insulins into the UK and they are available on the NHS. They are as follows:

- Insuman Comb premix of neutral and isophane.
- Insuman Basal intermediate acting isophane.
- Insuman Rapid short acting neutral insulin.

Each product is presented as 3ml cartridges for use with the OptiPen Pro 1 injection pen that is supplied free of charge from Aventis. The products are also supplied as a 5ml vial.

**IDDT Warning** – if you are advised to "try this new insulin", remember all these products are synthetic, genetically produced, so-called 'human' insulin.

# First Long-Acting 'Human' Insulin Analogue Approved

Aventis has received FDA approval in the US for LANTUS, insulin glargine, for the treatment of Type 1 and Type 2 diabetes and the product should be available in the US later this year. It has a duration of 24 hours to be injected at bedtime for people with Type 2 who need a long acting basal insulin and also for adults and children with Type 1 diabetes. Having looked at the 14 page document including the results of trials, it appears to offer no benefits over the 'human' insulin to which it was compared despite the activity peak being much flatter and more like long acting beef insulin. More in the next Newsletter.

# Novo Nordisk To Help Develop Long-Acting Basal Insulin

Flamel Technologies and Novo Nordisk have announced that they are to collaborate on developing Basulin, a long-acting once a day insulin for Type 2 and Type 1 diabetes. The agreement announced by Flamel gives Novo exclusive world wide development and marketing rights to Basulin, while Flamel receives up-front licensing fees of 5 million US dollars as well as 37 million dollars in future payments and royalties. A phase 1 clinical trial is already underway in the UK.

# Novo Nordisk And Eli Lilly Settle Long Term Patent Dispute

After 4 years of legal battles Novo Nordisk have accepted an out of court settlement from Lilly that will end all litigations world wide, including

the UK, relating to insulin analogues, insulin delivery systems and human growth hormone. Novo Nordisk will receive a one off payment and will have global freedom of operation for its products involved in the legal action including its new analogue, NovoRapid.

## **Not Always What They Seem - A Little Smile**

A letter in The Lancet [April 29 2000] brought a smile to my face but there is a message worth remembering. A 43 year old man was diagnosed with diabetes, stabilised on insulin and was doing fine a month later. He returned to the clinic with his wife for a routine check after 3 months. He was doing well and his only complaint was of a tingling sensation in his hands - he feared the start of neuropathy [nerve damage]. His doctor seized the opportunity for some 'patient education' and proceeded to tell him about the benefits of good control in preventing complications.

After listening the man said, "I didn't know whether or not I should be worried because after all it only happens when I have a shower. When I reach up and adjust the shower head, I feel it in my hand and it feels like it is going down to my feet."

His non-diabetic wife then volunteered "You know, I have felt the same thing." The man and his wife were referred to a specialist – an electrician, who promptly repaired an electrical fault in the shower!

The writer of the letter says "As physicians we are constantly reminded that things are not always what they seem to be. Taking a careful history can often sort it out."

#### Is This A Record?

I have been contacted by a lady who is 99 years old and has insulin dependent diabetes for 41 years. She wants to try to find out if this is a record. I can't believe that there are many people who can claim this achievement! We know that medals are given for people that have had diabetes for 50 years but we would like to help this lady by trying to find out if she has set a record.

Do you know of anyone that is 99 years old and has had insulin dependent diabetes for 41 years?

If so, please contact Jenny at IDDT, PO Box 294, Northampton NN1 4XS or

e-mail enquiries@iddtinternational.org

# **A Sensitive Time For Litigation!**

TROGLITAZONE in the UK, REZULIN, in the US - perhaps the class-action against 'human' insulin comes at a particularly sensitive time for both industry and the FDA, the US drug regulatory authority. Readers may remember the withdrawal of troglitazone after only 6 weeks on the market in the UK, making one wonder on what basis it ever achieved marketing approval in the first place. It had already caused liver damage and even deaths in the US. However, it was not withdrawn from the US market despite concerns expressed by one FDA adviser as early as 1996 but he was removed from his position by the FDA following complaints from Warner Lambert, the manufacturer of Rezulin [troglitazone] .

The drug has now been withdrawn from the US market, 29 months after the first death was attributed to Rezulin. The FDA revised the safety warnings for Rezulin four times and on one occasion even approved its wider use in combination with other treatments for diabetes. As recently as February this year, they issued a statement supporting its use! It is also worth noting that one of the top FDA advisers involved was a paid consultant for Warner Lambert – something of a conflict of interest!

#### So what brought about the sudden change in the FDA's position?

Could it be that there are now at least 90 liver failures including at least 63 deaths and 7 nonfatal liver transplants which the FDA now acknowledge are 'possibly or probably' associated with Rezulin? Or could it be that a group of FDA medical advisers who could no longer do nothing and blew the whistle, forced the sudden turnaround? Could it be that over the last year product liability cases have been filed in state and federal courts on behalf of patients or their survivors? Could it be that there are also three federal investigations relating to Rezulin? One into the physician's acceptance of consulting fees from Rezulin manufacturers, Warner Lambert while working as an adviser to the FDA and an FDA inquiry into allegations that the company omitted findings of liver toxicity from a 1994 clinical trial. This long catalogue of events should never have been allowed to happen. But it makes compulsive reading and does nothing to alley our concerns about the power that the pharmaceutical industry has and its use of paid medical advisers.

While the class action for 'human' insulin does not seek its removal from the market, in the wake of the Rezulin case, it is a sensitive time for the FDA and regulatory authorities as there are similarities, not least of which is the continual denials of the reported problems.

# Finding Information About Prescription Drugs

Associated Press, Washington, May 16th 2000 points out that one of

the most difficult issues of today's medicine is how to teach doctors the pros and cons of the dozens of new drugs that come out each year. The FDA [the US drugs licensing authority] are considering overhauling drug labelling in the hope that this makes it easier for doctors to spot the biggest risks. Janet Woodcock of the FDA is quoted "Our interest is in the physician who has 30 seconds to make a prescribing decision, they need something right in front of them." [30 seconds - a frightening thought!]

She points out that simplifying the labels might make doctors actually read them, so they propose that drug labels become more like food labels with special at-a-glance sections that highlight the biggest risks. According to Robert Califf, an FDA adviser, less than 1% of physicians have seen a label in the last year and he thinks it highly unlikely that putting anything on the label is going to make any difference. Many doctors say they are too busy to read the complex labels and instead learn about new drugs from the pharmaceutical salesmen. [Salesmen are salesman and will always paint their products in the best possible light – whatever that product is!]

#### Why the changes now?

In the last 21/2 years the FDA has banned four drugs that have seriously damaged people or have caused deaths and a fifth is due to come off the market this year. One of these drugs was Rezulin, called trogliterzone in the UK, for Type 2 diabetes. Also likely to affect people with diabetes in the US is the likely approval of the new impotence drug, Uprima where FDA advisers have warned that it has side effects that will certainly kill some people. But their logic for its approval is that new impotence treatments are necessary so they are advising strong warning labels to deter prescriptions for men most at risk. [What strange logic, I am not an impotent man, so should not judge but I think I would rather be impotent than dead!]

If the situation in the US only vaguely represents that in the UK, you can understand why IDDT continually advises you to read the Patient Information Leaflet that accompanies your medications — including in the insulin you receive regularly. If the manufacturers change their

advice or have new warnings, this is where the information will be.

The 'human' insulin saga fits this bill! Clearly labelling has been pretty ineffectual in informing doctors about the possibility of loss of warnings. Improving the design of the labels would help so that the adverse effects and the contraindications for use are highlighted in bold print at the beginning - both doctors and patients would then not have to search through lots of tiny print. But this still assumes that the labels are read at all.

If doctors receive most of their information from salesmen, then perhaps these people could be regulated rather than just having 'guidelines of good practice!' Training doctors to ask the 'right' questions of the salesman might help but perhaps it is a cultural change within the medical and nursing professions that has to come about so that they recognise sales patter for what it is. Undoubtedly they dismiss the advertising bumf that comes through the door and recognise TV adverts for what they are – glossy adverts that only paint the product in a good light. They should equally recognise that pharmaceutical selling is no different.

The present system of waiting until significant numbers of people die or have been maimed by a drug before regulatory authorities act, is obviously not good enough. The FDA recognise this and may be right, better labelling may help but is it enough to ensure that a greater importance is attached to adverse effects? Listening to patients would probably be far better advice and far more effective.

#### **Parents Part**

#### New web site - teenage diabetes

If you are "connected" take a look at this new web site www. teenagediabetes.co.uk

Diabetes in teenagers is difficult for both the teenagers and their parents and this web site offers help, support and advice. It has been prepared by Philip Johnson – a parent himself, who produced the very excellent videos about diabetes in younger children.

"Insulin in cartridges is stable for up to 4 weeks once opened if stored at 25 degrees C." The original had "in a refrigerator" on the end of this statement. Once opened cartridges should not be stored in the refrigerator as the next point said.

# Results From The Yorkshire Childhood Diabetes Register

In June 1999 Diabetes Care published the results of a study that examined the hospital obstetric and neonatal records of 196 children with diabetes who were listed on the Yorkshire Childhood Diabetes Register. Each child with diabetes was matched with two control subjects of the same age and gender. After comparing the 325 control subjects' hospital records with those of the diabetic children they found that the risk of diabetes is increased in

- births to older mothers.
- mothers with Type 1 diabetes,
- high blood pressure during pregnancy
- neonatal illnesses.

As in previous studies, they also found that children who are breast fed immediately after birth may develop better defences against Type 1 diabetes.

#### **An Error**

#### But I apologise!

In the Spring 2000 edition of the Newsletter on page 6 in the "Remember the following about pens" article the first point is written incorrectly – it should read as follows:

#### Late News - Welcome To Finland

We have just received a request from a patient/carer group in Finland to join IDDT-International. The registered association is called 'Conservative Diabetics' and their main concern is the availability of animal insulin for all those who need or want to use it rather than 'human' insulin.

There are more than 1000 people who need animal insulin. The group is aiming to convince the authorities of these needs and also to reach those people with diabetes who don't even know that there is such a thing as animal insulin but who may be having difficulties without realising the cause.

This all sounds very familiar and we welcome the Conservative Diabetics from Finland under the umbrella of IDDT-International.

"Launch of Insulin email discussion group"

A new email discussion group has been created for people who use insulin - in particular, for those who are not happy using "human" insulins. This forum allows members to discuss and share their problems and successes. In order to foster a friendly supportive environment, it is a "closed group". This means that members must apply to join. Their emails can only be read by other members of the group. A list of all other group members can be obtained at any time.

To read more about the Insulin discussion group, visit www.egroups.com/group/insulin

#### To join the group, send an email to:

insulin-subscribe@egroups.com

The administrator of the Insulin discussion group is John Neale jneale@webshowcase.net

The Insulin discussion group is not connected with IDDT, but IDDT fully supports this discussion forum.

### **Taking Blood Meters**

#### Hope on the horizon!

Regular readers will know that we have been trying to solve the problem of assisting people who are visually impaired or blind to have talking blood glucose meters. These have been discontinued in the UK because they are not commercially viable! Again! The situation is now worse because for people who already had a working meter, the strips suitable for it have now been discontinued too.

Having written numerous letters, IDDT was eventually put in touch with NICE, the National Institute for Clinical Excellence and we have submitted an application that they look into this situation. We await the results.

Help from the US – this arrived in the shape of an e-mail from 'Bob' at Lifescan in the US. He has been very helpful and the net result of our conversations was that he sent me two blood glucose meters with voice synthesisers. [They arrived from the States in about 5 days!] One of the meters is being used by a lady who is blind under the supervision of the diabetic clinic in the Isle of Wight. Although the meter is American the calibration can be changed from mg/dls, the units used in the US to mmols/l used in the UK.

#### Costs excluding postage:

One-Touch-Basic and VS2 voice synthesiser which we have received, is 155US dollars, around £100. One-Touch-Profile and synthesiser is 219US dollars. These costs seem to be very reasonable but I appreciate that very often the people that are visually impaired do not have this sort of money! It seems to me that there is no good reason why local health authorities should not be asked to pay for these devices. They are bound to save money in terms of saving on regular nursing support to do blood tests, better diabetic control as a result of the patient being able to test as and when necessary - to say nothing of them being able to maintain their own independence with a better quality of life!

Some people are now able to have insulin pumps funded by their health authority and these cost around £2000. It would therefore seem quite reasonable that health authorities should fund visually impaired and blind people to whom these talking meters mean so much. However, by the very nature of their impairment, this group of people is less able to do battle with the authorities. This surely has got to be worth a try!

#### A Call to Diabetes Specialist Nurses!

- We now know that the meters are available and can be imported.
- The cost is reasonable and by no means excessive.
- There are blind and visually impaired people who would benefit from a talking meter but need help with funding or acquiring funding.

Specialist nurses can identify these people and help with this. If you are a specialist nurse and have patients that would benefit, please contact me:

Jenny Hirst, PO Box 294, Northampton NN1 4XS

Tel 01604 622837 Fax 01604 622838 e-mail jenny@iddtinternational.org

## Warning

Medication error: potential for confusing Humalog and Humalog Mix 25

The Medicines Control Agency has issued a warning to doctors and pharmacists to be vigilant to the possibility of mis-prescribing or incorrect dispensing of products marketed under the Humalog name. Currently 6 such products are marketed in the UK.

Since April 1999, 7 patients have been prescribed or have received either Humalog or Humalog Mix 25 in error. In the majority of instances the mistake resulted in hospital admission. In July 1999, pharmacists in the UK were alerted to the problem in a letter sent by the manufacturer, Eli Lilly.

Lilly is currently modifying the packaging of these products throughout their world markets, labelling being differentiated by the redesign of the carton layout and additional use of symbols. Although it is anticipated that the new packaging should prevent further errors from occurring, awareness of this issue is important.

MEDICINES CONTROL AGENCY, Committee on Safety of Medicines

Current Problems in Pharmacovigilance, Volume 26, May 2000 page 4

Note –This warning was only issued to pharmacists and doctors, not to patients, but remember that you should always check that you have been given the correct insulin preferably before leaving the pharmacy.

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

PO Box 294 Northampton NN1 4XS

Name: Addres																	_
Postco Tel No																	

# From Your Editor – Jenny Hirst

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**Insulin Dependent Diabetes Trust** 

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