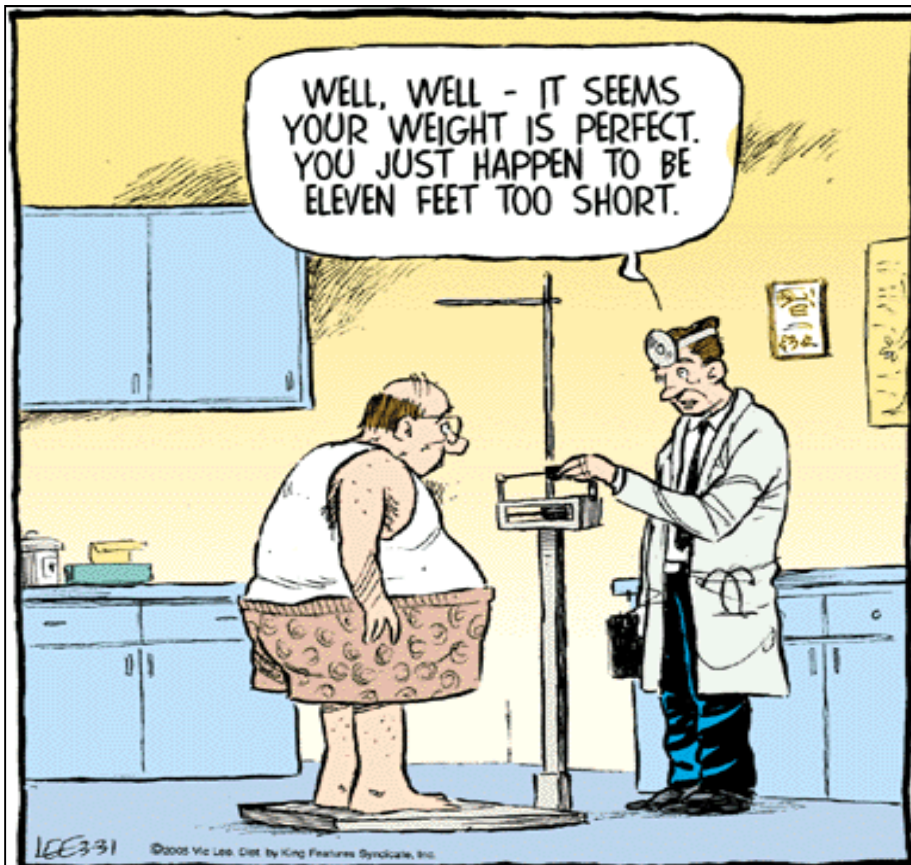




## Editorial

Even Northland is cold at this time of year. Despite the icy conditions in Otago, the NZSSD Executive is burning with ideas and enthusiasm. Much of the information in this edition can also be found on the NZSSD website. Patrick and his team are making a sterling effort to ensure NZSSD is a worthwhile, productive organisation as evidenced by his President's report on the back page. This edition we also have a summary of the diabetes associated items discussed at the advisory committee to PHARMAC (kindly supplied by Peter Moore). Details on outcome cannot be provided but at least we can discover what is on the agenda. Robyn Toomath continues her fight for decent health policy around the Food Industry and Tim Cundy's expert reports on two papers relevant to diabetes in pregnancy are covered in this edition (the MiG report in summary only). Thanks to Stephanie Farrand for the cartoon.

*Nicole McGrath*



## FOE: Fight Obesity Epidemic

*Robyn Toomath*

As I write this we are on tenterhooks to see whether the revised Public Health Act will be passed by Parliament before the next election. Rather incredibly the process that started years and years ago has ground on and produced legislation which if passed would allow the Director General of Health to impose codes, which if not adhered to voluntarily after a period of two years, could become regulations. Under sub-clause 374(x) these would be for the purpose of "reducing, or assisting in reducing, risk factors.....associated with, or related to, non-communicable diseases" This is so desperately what the country needs; and what we have been working towards; that if this is not passed, I think I will abandon the cause in a fit of despair. Fortunately the government seems determined to vote on this before the election and of course The Greens will be pushing for this too but National have stated they will vote against the Bill so the outcome is far from certain. Unfortunately as we move into electioneering mode the lobbying has become frenzied and agencies with big money to spend are working hard to ensure that their (self) interests are protected. Yesterday in Parliament Tony Ryall asked the Minister whether FOE, and OAC, the PHA and ANA received funding from the Ministry of Health and if so how much and what for. The paltry sum we receive to pay our executive to maintain the web-site and send out obesity news is a pittance compared to the sums being spent by the advertising and media industries. But I am not going to let my anxiety about the passage (or not) of this Bill cloud my thinking completely. There have been successes. This week the Advertising Standards Authority (self-regulating body for the advertising industry) decided to uphold the complaint against Bluebird Potato Chips for their luring of kids by inserting rugby players collectable cards in with the chips. Previously their interpretation of their own codes had them allowing ads which induced kids to nag their parents to allow them to eat chicken nuggets six days a week....And last month the National Nutrition Survey showed that the rate of increase in obesity appeared to be slowing. Specifically, the average BMI for children hasn't changed since 2002. While this is still too high, a plateau at this point is cause for optimism. Obesity figures have also stabilised for American children (and Australian) ...but at a much higher rate than here. Adults continue to get fatter (one in four now obese!!) but at a slower rate. Unfortunately what we are seeing though is increased polarisation with Pacific children 2.5 times more likely to become obese than European children. Maori are in between at 1.5 times the prevalence but the average BMI for this group has actually fallen slightly. This increase in disparity is a cause for concern in itself as it clearly demonstrates that the current emphasis on education and personal responsibility is not successful; but in addition; opponents of regulation are likely to say that it is a problem of just one sector and not the responsibility of the community as a whole. So, we battle on. Thank you for your support.

### Summary of NZSSD Position Statement on Insulin Pump Therapy

The NZSSD Executive believes that Insulin Pump Therapy should be available:

- To people with Type 1 diabetes who, despite optimal high level care and MDI using a long acting analogue, meet the following criteria:
  - \* Recurrent severe<sup>1</sup> unexplained hypoglycaemic episodes (2 or more in a 12 month period).
  - \* Women who have suboptimal glycaemic control and wanting to conceive.
  - \* Children (<12 years) in whom MDI is judged to be impractical.
  - \* Poor glycaemic control (HbA1c >8.5%) demonstrated by CGM to be due to a prominent dawn phenomenon.
  - \* Other selected situations: gastroparesis, eating disorders.
- The person should be assessed by a physician experienced in insulin pump therapy, and would include evidence of adherence to appropriate nutritional and self-monitoring practices.
- Pump therapy should be administered through the special authority mechanism or equivalent criteria-based methodology. A national panel should be developed to assess applications.
- Pump therapy should only be commenced and supervised by a diabetes service that has the appropriate experience and resources to manage insulin pump therapy.
- Access to treatment should be consistent throughout New Zealand.
- Funding should apply to the pump and consumables.
- Response to treatment (according to pre-defined outcomes) should be demonstrated annually to be eligible for on-going funding.

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1. Severe defined as disabling hypoglycaemia requiring administration of glucagon or intervention by medical personnel.



In the 2008-09 Budget, the Australian government announced that it would subsidise the cost of insulin pumps for young people with type 1 diabetes from 1 November 2008. A means-tested subsidy of between \$500 and \$2,500, based on gross family income for people with type 1 diabetes under the age of 18 will be provided.

The media release states that the subsidy will make insulin pumps more affordable for working families and help parents care for children with diabetes.

It goes on to say pumps reduce the need for parental supervision in looking after a child with Type 1 diabetes. They allow the child to participate in normal activities like school, sport and social functions with less constant monitoring. Pump therapy reduces severe hypoglycaemic episodes and provides major improvements in the control of blood glucose. Insulin pump therapy also has the potential to reduce the long term risk of retinal eye disease.

### **Summary of NZSSD EXPERT OPINION: Comment on the MiG Trial**

*Professor Tim Cundy*

Until recently, oral hypoglycaemic agents were not used in pregnancy for the management of gestational diabetes (GDM) because of concerns about their safety and efficacy. A randomised controlled trial published in 2000 demonstrated that glibenclamide could be safely used in pregnancy<sup>1</sup>. Although it possesses some theoretical advantages over glibenclamide, there was no similar trial evidence for metformin. The MiG Trial (Metformin in Gestational Diabetes)<sup>2</sup> examined whether metformin treatment for GDM could provide equivalent outcomes to insulin treatment.

The results of the MiG study indicate that metformin can be safely used in the management of GDM, but that it is less likely to be successful as monotherapy in women with higher blood glucose levels. It would be useful to see additional data on the probability of needing supplementary insulin in relation to particular levels of glycaemia at presentation. This would enable clinicians and patients to assess soon after diagnosis the likelihood of any individual women needing insulin. Although the proportion of women allocated to oral hypoglycaemic agents that needed supplementary insulin was significantly greater in the MiG trial than in the glibenclamide trial<sup>1</sup> (46% vs 4%), the women in the MiG study had higher average fasting blood glucose levels and were recruited later in pregnancy than in the latter study.

1. Langer O, Conway DL, Berkus MD, Xenakis EM, Gonzales O. A comparison of glyburide and insulin in women with gestational diabetes. *N Engl J Med* 2000; 343: 1134-1138.
2. Rowan JA, Hague WM, Gao W, Battin MR, Moore MP; MiG Trial Investigators. Metformin versus insulin for the treatment of gestational diabetes. *N Engl J Med* 2008; 358: 2003-2015.

.....The full report can be found on the NZSSD website

**NZSSD EXPERT OPINION: Comment on the HAPO Study****Prof Tim Cundy**

The diagnostic criteria for gestational diabetes (GDM) were originally formulated for their ability to predict the later development of type 2 diabetes in the mothers, rather than adverse pregnancy outcomes. The Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study<sup>1</sup> was designed to determine the impact on a number of pregnancy outcomes of varying degrees of glycaemia, up to a fasting blood glucose <5.8 and 2 hr values <11.1 mmol/l on a 75g GTT performed at 24-32 weeks' gestation. The strengths of the study include its very large size (24,505 pregnant women took part) and that it involved individual centres from four continents. Clinicians were blinded as to the result of the GTT.

The most important finding was that there was no association between perinatal mortality and higher blood glucose levels. A number of neonatal morbidities (such as shoulder dystocia and premature delivery) were associated with higher blood glucose, but the rate of such complications was generally low. Admissions to neonatal special care facilities were also related to blood glucose levels, but there was striking between-centre variation (the rates of admission varied from 3 to 29%), suggesting that local practice, rather than blood glucose is the main determinant of this particular outcome. The study did find a continuous relationship between birth weight and maternal blood glucose (both fasting and post glucose load). There was also some association between higher maternal blood glucose and the occurrence of neonatal hypoglycaemia, but this relationship disappeared when a variety of other maternal characteristics, including body mass index, were taken into account; as did the relationship between higher blood sugar and the need for primary caesarean section. A surrogate measure of uncertain significance, the cord blood C-peptide level, was strongly associated with maternal blood glucose measures.

Overall, the results confirm earlier findings that birth weight is related in a continuous fashion to maternal blood glucose<sup>2</sup>. The relationships between maternal glycaemia and primary caesarean section are confounded by maternal body mass. Perinatal mortality and morbidity were low. Whilst some of the morbidities were associated with maternal glucose, it is impossible to assess from the paper the 'number-needed-to-treat' to avoid such outcomes (even assuming that treatment is effective). The HAPO data do not provide compelling reasons for reducing the diagnostic thresholds for GDM. Indeed, the continuous nature of all the relationships argues indicates that there is no particular blood glucose threshold for the development of perinatal morbidity.

1. HAPO Study Cooperative Research Group, Metzger BE, Lowe LP, Dyer AR, Trimble ER, Chaovarindr U, Coustan DR, Hadden DR, et al. Hyperglycemia and adverse pregnancy outcomes. *N Engl J Med* 2008; 358:1991-2002.
2. Naylor CD, Sermer M, Chen E, Sykora K. Cesarean delivery in relation to birthweight and gestational glucose tolerance: pathophysiology or practice style? *JAMA* 1996; 275: 1165-1170.

**Summary of Pharmac Meeting - 18<sup>th</sup> June**

The NZSSD nominated members present were: Peter Moore, Nick Crook and Pat Carlton. The meeting was chaired by Tom Thompson. The other health professional attending was Dr Bruce Small representing the General Practice point of view.

The committee discussed a wide range of issues including but not confined to the following:

1. There was discussion about the limited availability of insulin pump treatment for patients with Type 1 diabetes in New Zealand with comment on the regional differences in access to funding for pumps and particularly consumables. The possibility of listing insulin pump consumables on the pharmaceutical schedule was discussed.
2. There was discussion about the availability of only one long-acting insulin (glargine) on the pharmaceutical schedule and the desirability of having the other long-acting insulin (detemir) available where required. There was also discussion over the prescribing restrictions for glargine particularly in relation to severely insulin-deficient Type 2 diabetes patients on intensive treatment and in relation to patients with Type 2 diabetes requiring District Nurse injections of insulin to maintain them in their own home.
3. There was discussion about the lack of availability of a suitable meter and strips for use by patients with blindness and one "talking meter" was reviewed as a possible solution for this group of patients.
4. There was discussion about the possibility of widening the access to pioglitazone to allow triple therapy with metformin and a sulphonylurea and amending the HbA1c level at which Special Authority applications could be made.
5. The evidence regarding the use of analogue premixes was reviewed in relation to an application from one company to have its analogue mixture listed.
6. There was discussion around a number of proposals for supply of diabetes consumables and the possibility of having lancets available via wholesale supply orders was discussed. Also considered were the options for ketone testing for Type 1 patients and whether there should be other funded options.
7. There was discussion around where some of the newer pharmaceutical agents coming on stream fitted in the therapy for patients with Type 2 diabetes

Also discussed was the need for funding meters for women with GDM

The results of all these deliberations will be considered by the Pharmacology and Therapeutics Advisory Committee (PTAC) which then advises Pharmac regarding which products should be subsidised from public funds. The minutes of PTAC meetings are a matter of public record and can be accessed via the Pharmac website. It is at that stage the outcome in terms of any changes in policy can be assessed.

### **NZSSD Professional Development Awards**

No awards were given in this round. The NZSSD Executive strongly urge members to please come forward with their applications for the next round and comment that it is disappointing to not have received any applications that they were able to fund.

### **NZSSD Secretariat**

The NZSSD Executive welcome your feedback on this concept. There has been a paucity of responses from the members and before the position can be developed and funded the Executive would like to know that this position will be supported.

### **NZSSD Membership Subscriptions are due!**

If you have not paid your yearly membership fee (\$50), could you please contact the Membership Secretary (Victoria Farmer) by email: [nzssdmembership@gmail.com](mailto:nzssdmembership@gmail.com) or by phone (03) 470 3805. Thank you!

### **Recent Publications by NZSSD Members:**

- ⇒ Rinki Murphy and colleagues from Exeter, UK have produced an excellent review of maternally inherited diabetes and deafness (MIDD): *Diabetic Medicine* 2008; 25(4):383-399
- ⇒ Check out Jeremy Krebs' regular Diabetes and Obesity Research Review which is a review of interesting papers (not necessarily by NZ authors). You can subscribe at: [www.researchreview.co.nz](http://www.researchreview.co.nz)
- ⇒ The NZSSD website also provides a review of recent publications.

### **Meetings 2008:**

- ADS/ADEA Annual Scientific Meeting: 28-30 August, Melbourne.
- 44th EASD Meeting: 7-11 September, Rome.
- Diabetes Physicians' Meeting: 17-19 October, Hanmer Springs.
- ADIPS Meeting: 30th Oct - 2 Nov, Adelaide.
- Therapeutic Patient Education (TPE) conference. Including the 4th International DAWN summit: 5-8 November, Budapest, Hungary.
- NZSSD Annual Scientific Meeting 30 Jun - 3 July 2009, Dunedin.

*Letter to the Editor: none received*

**NEWSWEET** is the newsletter of the New Zealand Society for the Study of Diabetes (NZSSD).

Contributions are welcome and should be sent to the Editor: Nicole McGrath

[Nicole.McGrath@northlanddhd.org.nz](mailto:Nicole.McGrath@northlanddhd.org.nz)

### **NZSSD President's Report**

It is hard to believe that the year is already half over. As you will now have realised the next Annual Scientific Meeting for NZSSD will be in Dunedin from 30 June to 3 July 2009. This should be a great conference with several new initiatives planned by the organising committee. Please diary this date now so that you can come down South for some excellent education and socialising.

The Dunedin Executive will hand over to the new Executive at the 2009 meeting. We are in the process of sorting out where the next Executive will reside and ensuring a smooth transition. We are hopeful that a permanent Secretariat will have been established by the time the Executive changes hands. This will make the job of the next Executive much easier as it will maintain institutional knowledge of projects underway and ensure that momentum continues.

The Executive has taken the step of requesting "Expert Opinions" from individuals within the Society. These are featured on our website and we are grateful to the members who have agreed to participate in this new initiative. It allows for some degree of cross-pollination of opinions and clinical practice viewpoints throughout New Zealand. The NZSSD website is undergoing a redesign phase and we hope to have our re-vamped website up and running soon. You will have also noticed that latest research findings that we believe are of interest to members are placed on the homepage. In addition, the "Health Professionals" page has a number of useful tools for clinical practice. If you have further ideas that could improve the website please let us know. We hope you find these additions useful.

The NZSSD Executive has given an oral submission to the National Health Committee on xenotransplantation in Type 1 diabetes. Our submission was essentially explaining to the Committee the NZSSD Position Statement on this subject.

Several members of NZSSD have spoken to parliamentarians on issues related to diabetes. This is a useful forum for NZSSD to be able to get important messages across. We are grateful to DNZ for arranging these forums.

Please feel free to contact the Executive at [info@nzssd.org.nz](mailto:info@nzssd.org.nz) if there are any issues that you feel need to be brought to our attention.



Patrick Manning,  
NZSSD President