



Endocrinology & Diabetes Unit

4480 Oak Street, Room K4-213, Vancouver, BC V6H 3V4

Phone: (604) 875-2117 FAX: (604) 875-3231

endodiab.bcchildrens.ca

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To Whom It May Concern:
c/o Sandy Struss, Founder & President
PeopleWithDiabetes.ca

I am a Pediatric Endocrinologist working in the Pediatric Diabetes Clinic at British Columbia's Children's Hospital, where we follow about 950 of the estimated 1600 children in BC with type 1 (insulin-dependent) diabetes.

Type 1 diabetes is a very difficult disease to manage for children and families. It requires the administration of insulin by 3 to 5 injections of insulin daily, or the use of an insulin pump; the self-monitoring of blood glucose by fingerpoke 4 to 6 times a day; following a meal plan, or the careful counting of carbohydrate intake; alterations in insulin and/or food intake during times of exercise, illness or stress; and constant treatment of minor or major deviations in blood sugar.

These chores are difficult enough in an adult, and they are even more taxing when dealing with an infant, toddler, child or teen. The lifestyle of a person (or parent of a child) with type 1 diabetes can hardly be called normal. Disruption in sleep, work, schooling, and family life are frequent and emotionally draining. Parents struggle constantly with the anxieties of the long-term effects of hyperglycemia, and the short-term worries of whether their child will have to deal with the possible devastating consequences of a hypoglycemic reaction at school, at a soccer game, or in their sleep.

Fortunately, there are a number of new insulins, insulin delivery systems, and glucose monitoring systems that are available and approved by Health Canada. These can allow for a more physiological replacement of insulin, and for closer, continuous monitoring of blood sugar, to anticipate and ameliorate major deviations in blood sugar levels. The new basal insulins Lantus® and Levemir® have been shown in numerous published studies to reduce overnight hypoglycemic reactions in children and adults. The rapid-acting insulin analogs Humalog® and NovoRapid® allow for closer matching of insulin levels with the rise and fall in blood sugar that occurs after food consumption. Again, studies have demonstrated a normalizing of the post-meal blood sugar level and a reduction in hypoglycemic reactions with the use of these insulins. Insulin pump therapy with rapid-acting insulin analogs can allow for near-physiologic insulin delivery, particularly when combined with real-time continuous blood-glucose monitoring.

Of course, these innovations in diabetes care are more expensive in the short term than traditional diabetes treatment regimens. But it is my conviction that the up-front costs of improved diabetes control will be more than offset by the reduction in the financial and social burden of kidney dialysis, blindness rates, coronary bypass and limb amputation surgeries, and mental health interventions down the road. The resulting improvement in lifestyle will allow adults and parents of children with type 1 diabetes to spend more productive time at school and in the workforce, and fewer days on disability or in hospital.

I would therefore ask that health-care decisions around diabetes in our province take into

account this more global, long-term view of diabetes management, and not simply to continue to focus on short-term costs.

I thank you very much for your attention. Please do not hesitate to contact me if I can provide you with any further information.

Sincerely,

Daniel L. Metzger, MD, FAAP, FRCPC
Pediatric Endocrinologist, British Columbia's Children's Hospital
Clinical Associate Professor, University of British Columbia
dmetzger@cw.bc.ca