This document has been produced by Angie Jewell (parent of a type 1 diabetic child on an insulin pump funded through WSH). The opinions expressed within this document are my own, and may not necessarily represent the views of West Suffolk Hospital

What is a pump?

The insulin pump is not an artificial pancreas. Rather, it is computer-driven device that delivers fast-acting insulin in precise amounts at pre-programmed times. Wearing an insulin pump might require more work on your part than traditional injection therapy, especially if you are not used to checking your blood sugar several times a day. You must also learn to use the pump to deliver the extra insulin you require when you eat.

An insulin pump is small about the size of a mobile phone, worn outside the body, often on a belt or in a pocket. It delivers fast-acting insulin into the body via an infusion set -- a thin plastic tube ending in a small, flexible plastic cannula or a very thin needle. You insert the cannula beneath the skin at the infusion site, usually in your abdomen or upper buttocks. You keep the infusion set in place for two to three days (sometimes more), and then move it to a new location. All insulin is delivered through the infusion set.

Why might you want a pump for your child?

- Better control
- Ability to correct out of range blood sugar levels more often
- Pumps can deliver tiny amounts of insulin accurately – as small as 0.025U
- Pumps do all the maths for you.
- Pumps calculate doses and already active insulin. Reduces ‘insulin stacking’.
- Flexibility in meal timing and size, eating what you want, when you want. You do not have to eat at a certain time.
- Easy to cover snacks whenever wanted
- A freer lifestyle
- Ability to exercise without losing control
- Control while traveling (time zones etc)
- Erratic / spontaneous schedules
- Peace of mind
- To reduce wide blood sugar fluctuations
- Worrying less about hypos
- No problem with sleeping in late / staying up late
- Getting on with life – not an endless round of snacks and shots
- Fewer missed / skipped doses
- To improve control during growth spurts of adolescence
- To improve control during puberty

As an adult what will you have to do if you decide on pump therapy for your child?

- Check blood sugars at **least** 4 times a day, every day (often 6-12 times daily)
- Learn how to adjust insulin doses based on such things as activity and meal size
- Count carbohydrates
- Take (more) responsibility – the early days involve a huge learning curve
- Make accurate records

Adjusting to pump therapy is a lot like adjusting to diabetes. You need to relearn a lot of things. But the benefits of pump therapy make it worth the effort.

There are many scientific studies that demonstrate that insulin pump therapy results in better outcomes for teens and adults with type 1 diabetes. There are also studies that show that insulin pump therapy works well in toddlers and pre-school children

Little ones are ideal pump candidates if parents are willing to learn and commit
Delay or split boluses for fussy eaters
Faster insulin adjustment for erratic activity
Precise dosing – ideal if little/no hypo awareness
Indispensable in time of illness
Use lock out to avoid self dosing

What have we learnt?

It took 3 months for us (as parents) to start to get used to pump therapy, our daughter got used to it within a few days.

Our daughter has never felt better.

Our daughter has significantly better blood glucose control.

Given the choice, our daughter has said she ‘will never go back to injections’.

Kids and young adults who have grown up with computers and video games will feel comfortable using the pump. Older adults might be a little apprehensive, but will quickly learn how to manage their pump.

Unrealistic	**Realistic**
The pump will cure my diabetes	I will feel better
I can eat anything I want	I will have more freedom with my food choices
My blood sugar will be perfect	I will have better control with fewer lows
It will be as easy to learn as a meter	It will take time to learn and adjust to the pump
I won’t have to test as much	I must monitor very frequently

UK Children With Diabetes Advocacy Group

UK Children with Diabetes on-line community and email support list.

Join our UK email support and discussion group, which will put you in touch with other families who are raising children with diabetes.

The forum is open to anybody who wants to discuss all of the personal and scientific aspects of this condition and how it affects their family's lives. We aim to support families with newly diagnosed children or any families who wish to discuss raising a child with diabetes. A large number of the members of the group have children using insulin pump and parents are always willing to share information and experience of pump therapy or any aspects of living with the condition.

To find out more about the on- line support mailing list go to this page on the CWD international site. Where you will find instructions about how to subscribe.

http://www.childrenwithdiabetes.com/uk/

The on line support list is free to join and links, which will take you to the subscription link, can also be found on The US CWD site and also on the Diabetes UK and JDRF websites.

If you have any problems subscribing to the list, or want more information please email jackie.jacombs@childrenwithdiabetes.com

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