

2017

# Pumps, MDI and Eating Disorders



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# Possible Advantages and Disadvantages of Pump and CGM use for someone with Diabetes and an Eating Disorder

## Introduction

Currently there have not been sufficient studies into the use of insulin pumps and continuous glucose monitors for someone suffering from ED-DMT1 or Diabulimia. However, DWED have been given insight from our members regarding their own experiences and overall thoughts on the subject. Henceforth we have come to learn what possible positives and negatives may be relevant in making the decision to switch to a pump or CGM and would recommend consideration of the following points:

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## Advantages

- In the beginning stages of using a pump a patient will have to be in close contact with their diabetic nurse or clinic. It is imperative that the patient has the support to cope with adjusting to use of such technology and regular appointments should be provided. A representative from the pump manufacturing company may also be provided as a point of contact. This hands-on approach promotes openness and makes it difficult for a patient to disengage or hide any struggles they may be having from their healthcare providers.
- Self denial and rejection of personal medical needs can often be tied in to ED-DMT1 and especially if involving insulin omission. By not accepting sufficient insulin the sufferer denies the body of an essential life-source. A pump can be of use in challenging this as it is a constant physical reminder that needs the user's direct attention, requiring them to take control of their own insulin administration. Additionally, alarms can be set under the pump utilities to prompt the need to undertake blood testing and meal times.
- Using a pump involves the patient being attached to a constantly running basal rate of insulin. This is crucial in order to keep a type one diabetic out of immediate danger and so

can provide an added level of safety regardless of what eating patterns and subsequent basal administration may consist of.

- Both a pump and CGM provide extensive functions in order to link the patients real time blood glucose results and insulin control to their health care providers. Updates can be uploaded at the press of a button and pooled into various charts and graphs. This also makes it easy for clinicians to spot the signs of a patient running into difficulty if they fail to provide sufficient data.
  - A continuous glucose monitor is particularly useful for individuals that experience hypo unawareness. Episodes whereby an individuals blood glucose levels drop to a precariously low level without indication are a great concern and a CGM can enable them to foresee such occurrences without trying to rely on physical symptoms. This should prevent the need for hypoglycaemia related hospitalisations.
  - CGM can also help to regulate sharp swings of high to low sugar levels, or vice versa. Seeing advancing blood glucose crashes or surges can then provide the opportunity to act and try to stabilise before they occur.
  - Pumps can make management of secondary issues such as gastroparesis easier.
  - Often the regime of MDI in type 1 can become ritualistic in Eating Disorders. Some of our members have stated that by being on a pump this has significantly reduced and they feel different about having Diabetes. Some with diabetes may feel completely unable to cope with 4 -8 injections a day as it represents 'injecting weight gain'. An insulin pump may help in these situations
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## Disadvantages

- Omitting insulin while using a pump is extremely dangerous. This is due to the fact that if the basal source is removed there will be no long acting insulin on board whatsoever. In

comparison to someone on multiple daily injections that can fall back on their Levemir or Lantus dose, the constant trickle of Novorapid provided via the pump does not remain in the system for long. Therefore, if a diabulimic patient suspends their pump or removes it they are at risk of falling into diabetic ketoacidosis far quicker than they would if injecting.

- The addition of an insulin pump may act as a possible trigger of further body image issues, especially if the pump is worn visibly.
- Having a piece of equipment attached 24/7 may also serve as a constant reminder of ones illness.
- The process of learning to use pump can be difficult and this may cause rejection of all diabetic control, particularly in those who are already perfectionistic
- The need to engage with diabetic HCP's may be overwhelming, especially if they do not understand eating disorders
- The necessity of techniques such as carb counting may lead or add to obsessional thoughts.
- CGMs can be difficult to manage especially for those who do not want attention drawn to the fact that they have diabetes, those who struggle to maintain control may feel harassed by the constant alarms

**For further information on Access to Pump and CGM technology please see**

**<http://www.inputdiabetes.org.uk/>**