



# Type 1 Diabetes and Pregnancy Sick Day Rules What to do if you are unwell

Patient information Leaflet

July 2020

## **Importance of ketones and avoiding Diabetic Ketoacidosis in Type 1 Diabetes**

If you have forgotten to take your insulin, either background or meal time, or not had enough insulin, this will result in your blood glucose levels rising. Without enough insulin in the blood stream your body is unable to get the energy it needs and starts to breakdown your body fat to use as fuel. Using fat stores produces breakdown products known as **KETONES** which are acid and toxic. If this process continues then it can lead to a serious condition known as **Diabetic Ketoacidosis (DKA)**.

Ketones are measured on a finger stick blood test and this is the preference with Type 1 Diabetes, however they can be detected in urine.

In pregnancy, ketones can develop very quickly even if your blood glucose levels are only slightly above your targets. Acting quickly when you are unwell, staying hydrated and taking your insulin can help prevent DKA from developing.

### **Be mindful do you have ?**

- A cold/flu, urine infection, toothache, under stress emotionally or physically or any other illness or just feel unwell
- **Are your blood glucose levels in pregnancy above target**  
Target levels: Fasting less than 5.3 mmol/l , 1 hour after meals less than 7.8mmol/l, negative ketones
- You need to be mindful if you are unwell and your blood glucose levels are rising, you may be at risk of developing ketones.

### **Symptoms of DKA :-**

- Abdominal pain
- Passing urine more often
- Feeling of nausea or vomiting
- Increased thirst
- Breathlessness
- Smell of ketones in the breath
- Feeling tired

### **Urgent go to hospital if :-**

- You feel you have any of the above symptoms
- Your baby stops moving or the movements have changed/reduced
- You have persistent vomiting
- You are unable to eat/keep fluids down
- You have moderate to large ketones in your blood/urine

## Making sense of Ketone Testing and how to adjust your insulin

Blood Glucose BG	Blood Ketones	Insulin Changes / BG frequency
BG 8 mmol/l or less	Less than 0.6 mmol/l	Continue with same doses of your long acting/basal insulin (BI) Use the same meal time ratio/doses of meal time insulin – Quick Acting Insulin (QA) <b>Test your BG and ketones every 4 hours</b>
BG 8-10 mmol/l	0.6-1.5 mmol/l	Give 10 % of your Total Daily Dose (TDD) of your Quick acting insulin every 2 hours <b>Test your BG and ketones every 2 hours</b> <b>If no improvement in 4-6 hours – seek assistance</b>
BG 10-13 mmol/mol Or BG > 13 mmol/mol	Above 1.5 mmol/l	Give 20 % of your Total Daily (TDD) of your quick acting insulin every 2 hours <b>Test your BG and ketones every 2 hours</b> <b>If no improvement in 4-6 hours seek assistance</b>

**Working out your Total Daily Dose – please use a normal day for this calculation**

**Total amount of Meal Time insulin (QA) .....**

**Total amount of Background Insulin (BI) .....**

**Total Daily dose (TDD) .....**

**10 % TDD .....**

**20% TDD .....**

TDD	20 units	25 units	30 units	35 units	40 units
10%	2 units	2.5-3 units	3 units	3.5-4 units	4 units
20%	4 units	5 units	6 units	7 units	8 units

## Action Plan

- **Never** stop taking your long acting insulin (BI) – ie Lantus,levemir, Toujeo, Tresiba, Humulin I **My dose of BI is** .....
- If you are not eating, you still need to monitor your BG levels and correct with your Quick acting insulin to correct high readings
- If unable to eat solid food , consider replacing with liquid foods i.e. soup, milk, yoghurts, ice cream
- Ensure you stay well hydrated – drink 100 mls of sugar free fluids hourly
- Know your insulin sensitivity i.e. 1 unit of insulin usually drops BG levels by 2-3 mmol/l. **My correction factor is 1 unit of insulin reduces my BG by** .....
- Know your insulin :carbohydrate ratio ie 1 units of insulin for .... g carbohydrate or dose of meal time insulin. **My meal time ratio is 1 units of QA insuiln for .....g carbohydrate**
- Know your contact details for help

## Contact us:

Diabetes Specialist Midwife – 0161 922 4891

Diabetes Specialist Nurse – 0161 366 2354

Maternity Triage – 0161 922 6175

Diabetes Email – [tga-tr.anc@nhs.net](mailto:tga-tr.anc@nhs.net)

The detection of ketones in pregnancy is recommended by [www.nice.org.uk/guidance](http://www.nice.org.uk/guidance) - Clinical Guideline NG3 Diabetes in Pregnancy  
For further information visit [www.diabetes.org.uk](http://www.diabetes.org.uk)

If you have a visual impairment this leaflet can be made available in bigger print or on audiotape. If you require either of these options please contact the Patient Information Centre on 0161 922 5332

If you require an interpreter, please ask an appropriate person to contact our central booking office between Monday to Friday 8am to 5pm on 0161 922 6991 to arrange this for you.

**語言翻譯及病者支持服務 (LIPS):**

如果閣下需要翻譯員在您的預約當日幫助您的話 請找一名合適的家庭成員 0161 922 6991 聯絡本中央預約辦事處來您您安排 我們的辦公時間是星期一至星期五 上午 8 時至下午 5 時

**Językowo Tłumaczeniowa Usługa Pomocy dla Pacjenta (Language, Interpretation and Patient Support Service LIPS):**

Jeśli potrzebujesz pomocy tłumacza w trakcie swojej wizyty, proszę poprosić odpowiedniego członka rodziny o skontaktowanie się z Centralnym Biurem Zamówień (Central Booking Office), w celu zorganizowania tłumacza pomiędzy poniedziałkiem a piątkiem w godzinach od 08:00 - 17:00 pod numerem 0161 922 6991.

لینگوئج، انٹرپریٹیشن اینڈ پیٹینٹ سپورٹ سروس (Lips)

اگر آپ کو اپنی اپائنٹمنٹ کے لئے مترجم کی مدد کی ضرورت ہو تو براہ مہربانی اپنے خاندان کے کسی موزوں فرد سے کہیں کہ وہ ہمارے سنٹرل بکنگ آفس سے پیر سے جمعہ 8.00 بجے صبح سے 5.00 بجے شام کے دوران 0161 922 6991 پر فون کر کے اس کا بندوبست کریں۔

**Document control information**

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