# How to Prevent Ketoacidosis While on a Pump

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| Causes of unexplained high blood sugars when on an insulin pump | Your insulin pump uses rapid-acting insulin only. If insulin delivery is interrupted, ketosis can develop very quickly. Possible causes of unexplained high blood sugars (over 300) could be:<br>• Empty cartridge<br>• Kink in cannula or tubing<br>• Insulin that has lost its potency or is expired<br>• Infusion set was inserted into scar tissue – that means insulin can't be absorbed<br>• Infusion set got disconnected from pump<br>• Insulin is not absorbing for unknown reason |
| Treatment for unexplained blood sugar over 300 | • Check tubing for leaks, air bubbles and kinks, and see if the set is inserted properly.<br>• Test for ketones immediately.<br>• If negative or trace ketones: Give correction bolus on pump and retest in 1 hour.<br>• If blood sugar is not lower in 1 hour, give another correction by injections with a syringe or insulin pen and change the infusion set.<br>• If ketones are moderate, give 1.5 times correction bolus by injection and change infusion set.<br>• If ketones are large, give 2 times correction bolus by injection and change infusion set.<br>• Continue to check for ketones every 2 hours until negative.<br>• Use the same guidelines for extra correction insulin if you have ketones due to illness.<br>Corrections may be given every 2 hours on an insulin pump. |
| If you need to go off your pump and start injections | Basal insulin dose (Lantus, Tresiba, Detemir): this is the amount of basal insulin that you receive on the pump in a 24-hour period. You can find this on your pump settings report or on the pump itself under the basal menu- basal review.<br><br>Carb and correction ratios: These can be found on the software pump report or on the pump under bolus menu - bolus setup - review settings. |