



How to Use the Sample Ketone Management Plan

Information for Healthcare Professionals

Intended Audience

For use by healthcare professionals caring for individuals who take insulin.

Purpose

The Sample Ketone Management Plan supports clinician-led education and shared decision-making by translating clinical guidance into clear, individualized instructions for use. When appropriate, the Sample Ketone Management Plan can be shared with individuals living with diabetes.

How this resource is meant to be used:

- Review and personalize the plan with the individual during a clinical encounter.
- Individualize monitoring thresholds, insulin guidance, and instructions for seeking additional care.
- Reinforce sick day education and ketone response strategies.
- Provide the completed plan as a take-home reference to support self-management when clinically appropriate.
- Not intended as a standalone self-management protocol.

Related ADA Resources

This sample plan is part of a broader set of American Diabetes Association® (ADA) ketone education resources, including a **Clinical Ketone Conversation Guide for Healthcare Professionals**.

Additional resources are available in the [ADA's Healthcare Professional Resource Library](https://diabetes.org/HealthcareProfessionalResourceLibrary) and at diabetes.org/Ketones.

Disclaimer

For educational purposes only; not a substitute for individualized medical advice or clinical judgment.

Sample Ketone Management Plan for Individuals Taking Insulin

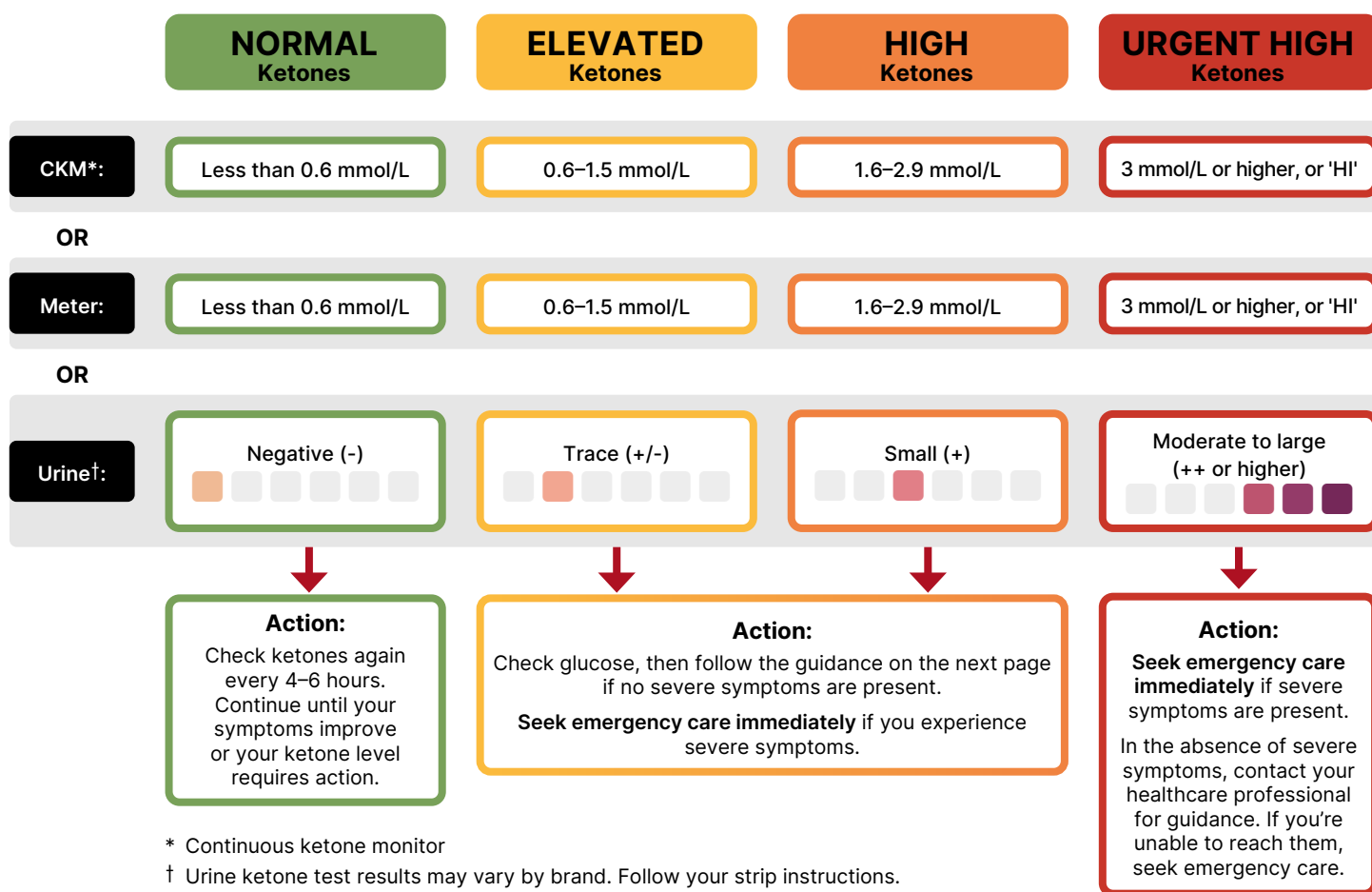
This plan is designed to be personalized by a healthcare professional to support education and self-management.

When to check ketones:

Check your ketone levels using a continuous ketone monitor (CKM), blood ketone meter, or urine ketone strip when you:

 Don't feel well	 Are fasting for religious or medical reasons
 Glucose (blood sugar) is above 250 mg/dL (13.9 mmol/L) or for 2 hours or more	 Eat a low-carbohydrate or ketogenic diet
 Notice signs of elevated ketones such as nausea, vomiting, stomach pain, trouble thinking clearly, exhaustion, or heavy breathing	

Check your ketone level, then find which category it falls within to determine what to do next.



Seek emergency care immediately if you have any of the following severe symptoms:

- ⚠ Unable to drink fluids or keep fluids down
- ⚠ Signs of dehydration
- ⚠ Confusion or difficulty thinking clearly
- ⚠ Rapid or heavy breathing

Check your glucose and take action.

If your ketone level is elevated, check your glucose and follow the guidance below. *Work together with your healthcare team to complete this plan before use.*



Take these actions if your glucose is less than 250 mg/dL (13.9 mmol/L)



If you use an insulin pump, consider changing your infusion site or giving insulin with a syringe or insulin pen.



Increase fluid intake. Drink ~16 ounces of fluids every hour until ketones resolve.



Take anti-nausea medication as prescribed if you have nausea or vomiting.



Take insulin and consume carbohydrates:

For individuals weighing more than 50 kg (110 pounds), take _____ units of short-/rapid-acting insulin with 15-30 grams of fast-acting carbohydrate.

Clinical guidance note: Approximately 0.3 g carbohydrate per kg body weight.

For individuals weighing 50 kg (110 lb) or less, take _____

units of short-/rapid-acting insulin with _____ grams of fast-acting carbohydrate.



Examples of fast-acting carbohydrates: Juice, regular soda, or glucose tabs.



Pause the following medication(s) (e.g., SGLT inhibitors)

when ketones exceed _____ and/or symptoms develop.



Seek emergency care if you have severe symptoms, are unable to follow these steps, cannot keep fluids down, or do not have support.



Take these actions if your glucose is more than 250 mg/dL (13.9 mmol/L)



If you use an insulin pump, consider changing your infusion site or giving insulin with a syringe or insulin pen.



Take insulin (ketone correction dose):

Take _____ units of short-/rapid-acting insulin
no more than every _____ hours.

Clinical guidance note: This dose is an increased correction, typically 10-20% higher than the usual calculated correction dose.

Recheck glucose and ketones every 1-4 hours. If glucose remains above 250 mg/dL (13.9 mmol/L), repeat the ketone correction dose as directed above. If ketones remain elevated after glucose decreases below this level, follow the plan for glucose below 250 mg/dL (13.9 mmol/L).



Increase fluid intake. Drink ~16 ounces of water or other carbohydrate-free fluids every hour until ketones resolve.



Pause the following medication(s) (e.g., SGLT inhibitors)

when ketones exceed _____ and/or symptoms develop.



Seek emergency care if you have severe symptoms, are unable to follow these steps, cannot keep fluids down, or do not have support.

Recheck ketones with one of the following:

- **Continuous ketone monitor:** Every 1-2 hours with attention to ketone trend arrows
- **Blood ketone meter:** Every 2 hours
- **Urine ketone strip:** Every 4 hours



If ketones remain elevated upon recheck, follow the actions based on your current glucose level. Continue monitoring and following this plan until ketones resolve or emergency care is needed.

Important information for ketone monitoring and care.

Seek emergency care if, despite following your ketone management plan:

- ⚠ Ketones remain at urgent high level (3 mmol/L or higher)
- ⚠ Your continuous ketone monitor shows ketones are increasing after 4-6 hours of self-care
- ⚠ Symptoms get worse (such as vomiting, inability to drink fluids, signs of dehydration, or confusion)
- ⚠ You do not feel comfortable or are unable to manage ketones on your own

Clinic phone number:

Emergency phone number:

Important reminders:

- ⚠ Insulin should not be stopped unless directed by your healthcare team or listed in your personalized ketone management plan, as stopping insulin can cause ketone levels to increase and raise the risk of diabetic ketoacidosis (DKA).
- ⚠ Make sure you have short-acting insulin and the supplies needed to give it (syringes or pen needles).
- ⚠ Insulin pump users: Keep unexpired long-acting (basal) insulin and the supplies needed to give it (syringes or pen needles) available in case of pump or infusion site failure.
- ⚠ Caregivers and family members should be familiar with your ketone management plan in case you need help.

Disclaimer: This ketone management plan is for educational purposes and does not replace advice from your diabetes care team. Always contact your healthcare professional with questions about your specific situation.



Learn more at
diabetes.org/Ketones