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## Testing for Ketones

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### What are ketones?

Ketones are chemicals that appear in your child's pee and blood when body fat is used for energy. Ketones can appear when your child is sick, skips or misses taking insulin, or does not eat enough.

### When should I test for ketones?

Test for ketones whenever your child is sick or blood glucose goes above 300 mg/dl. Ketones can be present during an illness, even when blood glucose is within normal range. It is important to test for ketones with any vomiting—ketones can cause vomiting.

### How do I check for ketones?

1. Keep these supplies on hand: plastic cup, Ketostix and a clock with a second hand.
2. Have your child pee into the cup.
3. Dip the entire color pad of Ketostix into the pee. (Draw the edge against the cup's rim to remove extra pee.)
4. Use the second hand on the watch to time 15 seconds.
5. Promptly compare the color of the Ketostix with the color on the bottle.
6. Note: Date the bottle of Ketostix when first opened. Throw the bottle away after 6 months.

### How do I treat for ketones?

- Negative ketones: Use insulin sliding scale for blood glucose levels.
- Trace ketones: Use insulin sliding scale for blood glucose. Have your child drink extra water.
- Small ketones: Use insulin sliding scale for blood glucose. Have your child drink extra water. Retest pee in 2 hours.
- Moderate or large ketones: Use insulin sliding scale and multiply recommended dose by 1 ½ (see sick day sheet). Have your child drink extra water. Retest pee in 2 hours. This supplemental insulin is the rapid-acting insulin (brand names Humalog, NovoLog or Apidra) that may be repeated every 2-4 hours, if needed, until blood glucose drops below 200 mg/dl and ketones are negative.
- Be aware that it may take up to 8 hours for ketones to go away.

### When should I call the Pediatric Endocrinology office or take my child to the Emergency Room?

- Moderate or large ketones stay in the pee for over 8 hours.
- No improvement occurs after 2 supplemental insulin doses.
- Your child is sleepy, dizzy, breathes heavily, vomits often or has stomach pain.

If you have questions about this information, please call our office at **(864) 454-5100**.