The Emily Center at Phoenix Children's Hospital

Phoenix Children's Hospital

Si usted desea esta información en español, por favor pídasela a su enfermero o doctor.

I can tell you how my child can safely be active

How does activity affect blood sugar levels?

Activity is very good for your child's blood sugar control and general health.

— Activity usually makes people more sensitive to insulin. In other words, 1 unit of insulin will lower your child's blood sugar more. This may cause your child to have lows.

— Activity may cause lows for up to 24 hours after activity, even if your child's blood sugars went up during the exercise.

— The excitement that comes with activity may cause the body to release more sugar into the blood, which can make blood sugar levels go up.

— If your child already has ketones, activity will make the cells burn fat for energy and release even more ketones.

— Activity may cause dehydration, which can raise blood sugar levels.

Every child is different. Learn how your child's blood sugars change with activity by checking the blood sugar before, during, and after he or she is active.

How do I manage blood sugar levels before, during, and after activity?

This is general information about how children can be safely active. Your diabetes team will tell you what works best for your child.

Before activity:

Check blood sugar before activity.

— If blood sugar is less than 100, have a 15 to 30 gram carbohydrate snack without insulin.

— If blood sugar is less than 150, have a 15 gram carbohydrate snack without insulin.

— **If blood sugar is between 150 and 300, it is OK to exercise.**

— If blood sugar is greater than 300, check for ketones.
- If ketones are positive (moderate to large), do not exercise. Treat the ketones instead.
- If ketones are negative (trace or small), it is OK to exercise.
- Consider giving an insulin correction using 200 as the target.

During activity:

— Check blood sugar every hour. If blood sugar goes below 150, give 15 grams of carbohydrate without insulin.
— Drink plenty of water to stay hydrated.

After activity:

— Check blood sugar soon after activity to learn how it responds to activity.
— Drink plenty of water to stay hydrated.
— Do not correct for high blood sugar until 2 hours after activity, but you can cover for carbs as usual.

At bedtime:

— If your child had a lot of exercise that day, adjust bedtime and nighttime target blood sugar range to 130-180 mg/dl.
— If blood sugar is less than 130, give a 15 gram carbohydrate snack with protein, without insulin.
— If blood sugar is more than 180, correct with insulin using a target of 180.
— Consider a blood sugar check at 2 a.m.
— Consider decreasing long-acting insulin (Lantus or Levemir) if using vials or pens. Consider a temporary basal decrease for an insulin pump.

Now that you've read this:

❒ Tell your nurse or doctor what exercise does to blood sugar. (Check when done.)
❒ Tell your nurse or doctor when to check your child's blood sugar when active. (Check when done.)
❒ Tell your nurse or doctor what to do before your child exercises. (Check when done.)
❒ Tell your nurse or doctor what to do while your child is exercising. (Check when done.)
❒ Tell your nurse or doctor what to do after exercise. (Check when done.)
❒ Tell your nurse or doctor what to do at bedtime, if your child has had a lot of exercise that day. (Check when done.)