

# patient education program

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## Diabetes & Activity: Coaches' Perspective

As a coach, your role is to have a basic understanding of diabetes and to work with parents/guardians to make sure their child has a safe, fun and rewarding sports' event. Below you will find answers to common questions about diabetes and its treatment to help you feel comfortable in this role.

### What is diabetes and how is it treated?

Diabetes is a chronic disease that happens when the pancreas is no longer able to make insulin (type 1), or when the body cannot totally use the insulin it makes (type 2). Not being able to make insulin or use it well causes the amount of sugar in the blood to become high.

You may see some of the following signs in someone whose blood sugar is **too high**:

- Tiredness
- Frequent need to use the bathroom
- Increased thirst
- Trouble thinking or focusing

Those with type 1 diabetes must take insulin shots every day. Those with type 2 diabetes might take insulin shots but might also take other medications that help insulin work better. The reason for insulin and other medication taken for diabetes is to lower the blood sugar. Sometimes the blood sugar gets too low.

You may notice some of the following signs in someone whose blood sugar is **too low**:

- Shaking or wobbly
- Sweating
- Dizziness
- Weakness/tiredness/confusion

Many things, including activity level, stress of competition and food/drink intake can cause unexpected high or low blood sugars. Those with diabetes need information on what their blood sugar is so they know what action to take. Some use a blood glucose meter needing them to poke their finger, put blood on a strip wait 5 seconds for the result. Others use nonstop glucose monitors which sense the amount of sugar in the body and send that information to an app on their cell phone. This information can then be shared with other individuals in real time-like the people watching the event, which is helpful for you.

### What does blood sugar have to do with it?

To safely take part in an activity, someone with diabetes needs to know what their blood sugar is before they start and take the correct action. This guide, given to parents, helps explain the action to take:

Blood Sugar Before Activity	Action
Below 70	Treat with 15 grams of fast-acting carbohydrate and retest in 15 minutes- <b>NO ACTIVITY UNTIL BLOOD SUGAR IS ABOVE 70</b>
70-120	Take 15 grams of carbohydrate before beginning the activity-do not take insulin for these carbohydrates May need 15-30 grams of carbohydrate every 30 minutes during activity
121-239	No action-ok to exercise
240 or Above	Check for ketones - <b>DO NOT EXERCISE IF POSITIVE</b>
Over 400	<b>DO NOT EXERCISE</b>

## How do I treat a low blood sugar?

Any time a person with diabetes has signs of low blood sugar, treatment needs done right away. Follow these steps:

1. Check a blood sugar **IMMEDIATELY!** If no meter is available it is safest to treat right away.
2. Give a **fast-acting** carbohydrate (1 choice below) to treat the low blood sugar-**less than 70** (if blood sugar is less than 50, double the treatment).
4. Retest blood sugar in 15 minutes.
5. Keep treating every 15 minutes (1 **fast-acting** choice at a time) until blood sugar reaches desired limit.
6. Once blood sugar reaches desired range, give a **long-acting** carbohydrate (1 choice below) if the next meal or snack is more than an hour away.

### Food used to treat a low blood sugar (fast-acting)

7.5 grams of carbohydrate (under 5 years)	15 grams of carbohydrate (over 5 years)
¼ cup (2 ounces) juice	½ cup (4 ounces) juice
¼ cup regular soda	½ cup regular soda
½ Tablespoon sugar	1 Tablespoon sugar
½ Tablespoon syrup	1 Tablespoon syrup
½ Tube glucose gel	3-4 glucose tabs
½ Tablespoon jelly	1 Tablespoon honey

### Foods used after the blood sugar is at desired range (long-acting)

7.5 grams of carbohydrate (under 5 years)	15 grams of carbohydrate (over 5 years)
½ slice bread	1 slice bread
2 graham cracker squares	3 graham cracker squares
3 saltine crackers	6 saltine crackers
¼ cup chocolate milk	½ cup chocolate milk
½ cup white milk	1 cup white milk

If seizures or blackouts occur, or the child cannot safely swallow, **DO NOT GIVE ANYTHING BY MOUTH.** GLUCAGON needs to be given right away. Make sure you have a plan ahead of time for this!!

## What about fluid intake?

Drinking enough before and during activity is important for everyone, especially in high humidity and high temperatures. Those with diabetes may need more fluid and also need to think about what kind of fluids they choose.

Here are general suggestions on what to drink:

Blood sugar above 200 + lower power activities + shorter time = **sugar-free** liquids

Blood sugar below 200 + higher power activities + longer time = **high-sugar** liquids

## What do I need to know before the season starts?

You need to have a talk with the child and parents/guardians before activity begin. There has to be agreement on what the child will bring with them (snacks, liquids, low blood sugar treatment) and how the blood sugar will be checked. You should know where the child keeps glucagon and how to use the exact kind they have. Other people who may be helping with the activity should also be given basic information about the child's diabetes, especially the signs/treatment of low blood sugars. Being well informed will give a safe, enjoyable and rewarding sports experience that you are trying to give to all members!