

patient education program

8200 Dodge Street Omaha, NE 68114-4113 402-955-5400 ChildrensOmaha.org

Diabetes & Physical Activity/Exercise

Physical activity is movement that causes you to burn sugar and is an important part of managing diabetes and keeping you healthy. Exercise is a more structured form of physical activity. Both of these are important because they:

- Improve blood sugar control
- Lower risk for heart disease by reducing heart rate, blood pressure and blood fats (cholesterol and triglycerides)
- Help keep body weight in a healthy range
- Improve overall well-being

Exercise recommendations

60 minutes or more of medium or high intensity aerobic activity every day

Activities to increase strength at least 3 days/week

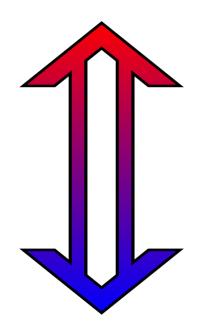
Spend less time sitting by briefly standing, walking or doing other light activities after 30 minutes

High/low blood sugars may be an issue depending on type, intensity and amount of time

Weight lifting, tag, gymnastics, wresting, volleyball, ice hockey, dodge ball, sprinting

Skiing, running (middle distance), soccer, basketball, football, tennis, lacrosse, golf, ice skating, softball/baseball

In-line skating, jogging, swimming, cycling, brisk walking, jumping on trampoline



COULD CAUSE HIGH BLOOD SUGARS

COULD CAUSE HIGH OR LOW BLOOD SUGARS

COULD CAUSE LOW BLOOD SUGARS

Use this RPE chart to judge the intensity of your activity

More intense activity = more sugar burned

1-2 "I just got off the couch"	Can talk/breath normally
3-4	Can carry on a conversation, light increased breathing
5-6	Can carry on a conversation, heavy breathing
7-8	Broken sentences, very heavy breathing
9-10	Can't talk, very heavy breathing

Decide how long you will be active Longer time being active = more sugar burned

For people with type 1 diabetes, care needs to be taken when being active. Each person will have different changes in blood sugar. It will be important to:

- Do activities for short amounts of time a first
- Check blood sugar before, during and after activity, or follow glucose levels on a sensor, to find out how your blood sugars change
- Check blood sugar at 12 AM and 3 AM on days you are more active to see if exercise lowers your blood sugar for a longer time If using a sensor, make sure glucose alerts are set

Blood Sugar Guidelines for Activity

Blood Sugar Before Activity	Action
Below 70	Treat with 15 grams of fast-acting carbohydrate and retest in 15 minutes-
	NO ACTIVITY UNTIL BLOOD SUGAR IS ABOVE 70
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 - DO NOT EXERCISE IF POSITIVE
Over 400	DO NOT EXERCISE

At bedtime, the goal is to keep your blood sugar above 130 if activity was done later in the day

A word about fluid intake: Drinking enough before and during activity is important for everyone – recommendations on what to drink:

Blood sugar above 200 + lower intensity activities + shorter time = **sugar-free** liquids Blood sugar below 200 + higher intensity activities + longer time = **sugar-containing** liquids