

Physical Activity and Diabetes



Physical Activity and Blood Sugar

The effect of physical activity on your blood sugar depends on many factors such as how long you exercise, the type of exercise, amount and type of food eaten before and after a workout, and more. Understanding exactly how physical activity impacts your blood sugars is super important as it can help you prevent high and low blood sugars.

It is recommended to check your blood sugars frequently as you build movement into your daily routine. Check your blood sugar both before and after you move your body. In fact, physical activity can impact your blood sugars for up to 24 hours post-movement so the more you check the more insight you will have into how physical activity impacts you.

How does movement impact blood sugars?

Physical activity impacts your blood sugars by:

- **Increasing insulin sensitivity**
 - Your muscle cells are better able to use available insulin to take up the sugar in your blood to burn as energy both during and after activity.
- **Increases glucose energy usage**
 - When you are active, your muscles contract and use up the glucose for energy whether insulin is available or not resulting in better usage of glucose for energy (and less sitting in your blood stream!)

As you can see, physical activity not only impacts blood sugar levels on the short-term but if you build movement into your daily routine you may also see a change in your A1C.

Physical Activity and Hypoglycemia

Monitor your Blood Sugar

Individuals who take insulin or oral diabetes medications are at risk for hypoglycemia if insulin dose or carbohydrate intake is not adjusted for physical activity. It is crucial that you check your blood sugar prior to beginning exercise.



Discuss with your doctor first, prior to adding exercise into your routine, on exactly how to adjust your current medications. As mentioned above, in order to help prevent hypoglycemia you may need to adjust your insulin dosage before exercise.

Apply the 15-15 Rule:

If before, during, or after exercise you experience low blood sugar (less than 70mg/dL), apply the 15-15 rule.

1. Eat or drink 15 grams of carbs to increase your blood sugar.
2. After 15 min, recheck your blood sugar.
3. If your blood sugar remains below 70 mg/dL, repeat these steps until blood sugar rises above 70 mg/dL.



Carbohydrate Intake and Physical Activity

Carbohydrates are the body's preferred source of energy during exercise. Carbohydrates are broken down into glucose and readily available to your cells to be used as energy to fuel your work out.



Three important things to consider when it comes to managing your diabetes, physical activity, and carbohydrate intake:

1. Amount of carbohydrates eaten
2. The timing of intake (before, during, and/or after exercise)
3. Quality of the carbohydrates eaten

In terms of the amount of carbohydrates eaten, it is important to consider first the type and length of physical activity you are about to do. A longer, more intense type of exercise requires more carbohydrates whereas a shorter, less intense activity may require fewer. Discuss with both your doctor and your NourishedRx nutrition coach about the type and length of physical activity you are doing and work together to build an individualized plan.

As for the timing of the carbohydrates, consider fueling for your workout but also replenishing post-workout. Remember not all carbohydrates are created equally. Choose whole grains and starchy veggies instead of cookies and candy to get you through your next round of physical activity.

