



**UNC REX  
HEALTHCARE**

## **Exercising with Diabetes**

UNC Rex Cardiac Rehabilitation

# Exercise and Blood Sugar (Glucose)

Exercise can:

- Increase your insulin sensitivity
  - Insulin helps your body turn blood sugar (glucose) into energy.
  - Muscle cells are better able to use insulin during and after activity.
- Lower your A1C
  - A1C is your average blood glucose level over the past 3 months
  - Regular exercise can lower this number



# Checking Your Blood Sugar

- Check your blood sugar level before and after exercise.
- Become familiar with how your blood sugar responds to different activities.
- Understanding patterns can help you prevent your blood sugar from going too high or too low.
- Talk to your diabetes care team to find out if you are at risk for hypoglycemia.



# Low Blood Sugar (Hypoglycemia)

Low blood sugar is more likely to occur if you:

- Take insulin or an insulin secretagogue
  - Oral diabetes pills that cause your pancreas to make more insulin
- Fail to adjust your insulin dose or carbohydrate intake with exercise
- Skip meals
- Exercise for a long time
- Exercise strenuously



# Follow the 15-15 rule

- If you experience hypoglycemia (low blood sugar) during or after exercise, treat it immediately.
- If your reading is 100 mg/dL or lower:
  - Consume 15-20 grams of carbohydrate to raise your blood sugar.
  - This may be:
    - 4 glucose tablets (4 grams per tablet), or
    - 1 glucose gel tube (15 grams per gel tube), or
    - 4 ounces (1/2 cup) of juice or regular soda (not diet), or
    - 1 tablespoon of sugar or honey
- Check your blood sugar again after 15 minutes.
  - If it is still below 100 mg/dL, have another serving of 15 grams of carbohydrate.
- Repeat these steps every 15 minutes until your blood sugar is at least 100 mg/dL before beginning or resuming exercise.

# Understanding Your Blood Sugar and Exercise

- Physical activity makes your body more sensitive to insulin.
- Your blood sugar may be lower up to 24 hours or more after your workout.
- If hypoglycemia interferes with your exercise routine, talk to your healthcare provider about the best treatment plan for you.