

EXERCISE AND DIABETES 101 AT HOME

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TOPICS COVERED

- Benefits, barriers and types of exercise.
- Recommendations and diabetes strategies for exercise.
- Managing lows and highs during and after exercise.
- Analyzing activities with CareLink™ Software.



BENEFITS



- Feeling of well-being
- Energy level
- Self-esteem
- Mental and physical capacity
- Insulin sensitivity



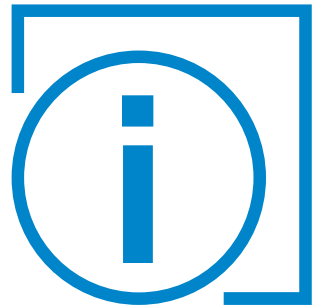
- Stress
- Blood pressure
- Insulin resistance



BARRIERS

- Motivation.
- Outside temperature.
- Risk/fear of lows during or after.
- Risk of highs before, during or after.
- Difficulty managing variations in blood glucose and insulin/food balance.
- More frequent blood glucose tests.

We have to find our individual balance between the pros and cons... 😊



TYPES

Aerobic: cardiovascular exercise works large groups of muscles with repetitive movements over long periods (e.g. cycling, jogging, walking, swimming).

- Blood glucose gradually drops during or after exercise depending on the intensity and duration.

Anaerobic: high-intensity exercise, quick exercise, short duration (e.g. sprinting, weight training, resistance bands).

- Blood glucose rises during exercise.

Recommendations

Aerobic:

- At least 150 minutes of moderate to vigorous-intensity exercise each week.

Anaerobic:

- At least two sessions/week (preferably three).

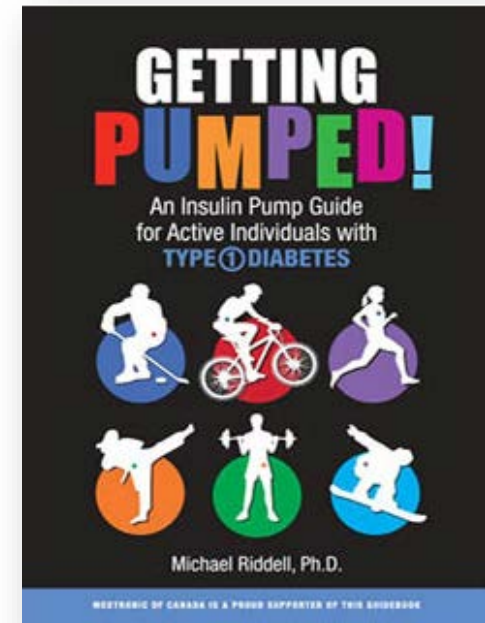
STRATEGIES*

- If you're using an insulin **pump without CGM**:
 - Temp basal rate 60–90 min before exercising and during exercise.
 - Can start with a temp basal rate of 50%.
- If you're using an insulin **pump with CGM**:
 - Less blood glucose needed and easier to analyze. Consider that there may be a physiological delay of up to 15 minutes between your BG meter reading and your sensor glucose reading.
 - Same strategy at the temp basal level.
- If you're using the **MiniMed™ 670G in Auto Mode**:
 - Setting the Temp Target 60–90 min before exercise and during exercise may be helpful.
 - Note that carbs may be necessary before, during or after exercise depending on the activity's duration and intensity.

Questions before starting exercise:

What is my blood glucose?

What is my active insulin?



* <https://shop.medtronicdiabetes.ca/en/accessories/Books/GettingPumped/xyz>

LOWS AND HIGHS RELATED TO PHYSICAL ACTIVITY

Lows¹

- 15-15 rule.
- Use fast-acting carbs.
- If using MiniMed™ 670G and CGM: Suspend before low or Auto Mode – a slightly lower carb intake may be sufficient to manage a low.

Post-exercise highs²

- Stay hydrated.
- Wait before making a correction.
 - Less of a correction may be needed to avoid a low.

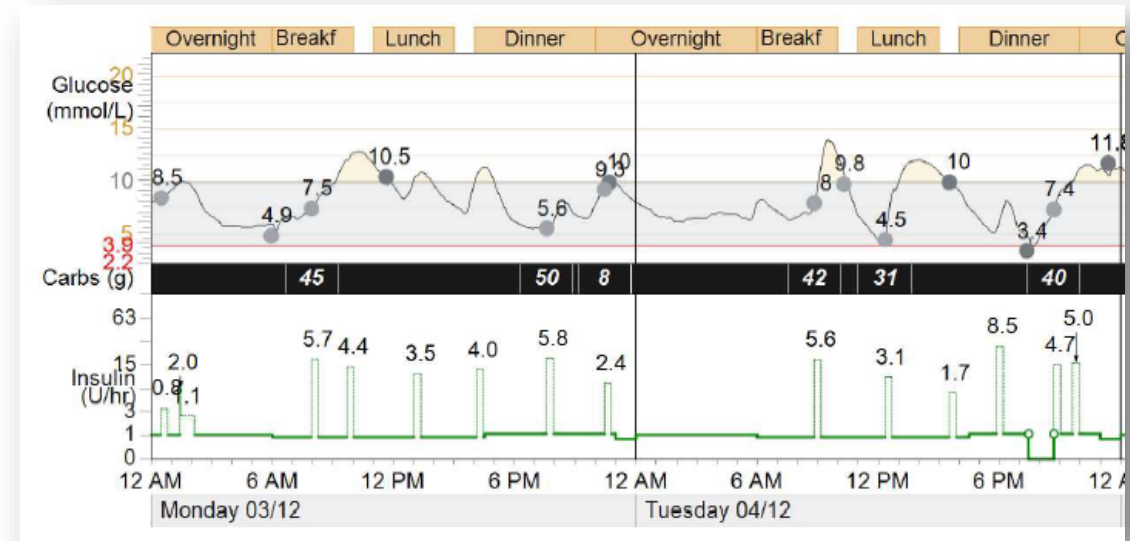


1. 2018 Clinical Practice Guidelines. "Hypoglycemia." Diabetes Canada Clinical Practice Guidelines Expert Committee. Jean-François Yale, MD, CSPQ, FRCPC, Breay Paty, MD, FRCPC, Peter A. Senior, MBBS, Ph.D.

2. Exercise management in type 1 diabetes: a consensus statement. Michael C. Riddell, Ian W. Gallen, Carmel E. Smart, Craig E. Taplin, Peter Adolfsson, Alistair N Lumb, Aaron Kowalski, Remi Rabasa-Lhoret, Rory J. McCrimmon, Carin Hume, Francesca Annan, Paul A. Fournier, Claudia Graham, Bruce Bode, Pietro Galassetti, Timothy W. Jones, Iñigo San Millán, Tim Heise, Anne L. Peters, Andreas Petz, Lori M. Laffel

ANALYSIS

- Upload your pump to CareLink™ Software* and familiarize yourself with your reports to find out which strategies were suitable and which ones could be improved.
- Keep a log book and/or journal.
- Try a variety of exercises and don't give up.
- **Most importantly, keep moving!**



THANK YOU!

