

Starting the conversation:

# Physical Activity & Type 1 Diabetes

## Healthcare providers can transform relationships with movement

As a healthcare provider, understanding the barriers that people with type 1 diabetes (T1D) face when engaging with physical activity (PA) can fuel better conversations that transform people's relationship with movement.<sup>1,2</sup>

Whether it's daily forms of movement like getting steps in while cleaning, or structured activities like a cycling class, PA is important for supporting diabetes management. Getting regular PA can help reduce risk factors for diabetes-related complications and improve insulin sensitivity, glucose management, and overall well-being.<sup>3</sup>

Though the benefits are well known, getting started with movement can feel intimidating and isolating. Often, the mere mention of exercise raises thoughts of high-intensity, organized sports, which may feel unapproachable. It may also raise concerns about how to safely manage glucose levels during activity.

## Barriers to engaging with activity

**It's complicated!** Changing factors such as insulin dosing, meals, or stress can cause different responses to glucose levels during activity.<sup>1,2</sup> Some people may not have access to tools that simplify management, like insulin pumps or continuous glucose monitoring (CGM) systems, or know how to optimize management for different activities that pose additional challenges like swimming or contact sports.<sup>3</sup>

**Fear of hypoglycemia:** Individuals on insulin therapy are at higher risk for hypoglycemia. Some activities can cause glucose levels to drop quickly, while others may cause high glucose levels now and lows later in the day. Fear of hypo events is a leading barrier for children and adults with T1D.<sup>1-3</sup> Providing information about safe blood glucose management during a person's [preferred activities](#), developing a treatment plan together for emergency lows, and providing a glucagon prescription can help equip people with additional security and confidence.

**Diabetes stigma and stereotypes:** People are often judged, blamed, or shamed for having diabetes. This is diabetes stigma,<sup>4</sup> which often manifests as unwanted looks, comments, or people being viewed as "lazy," "fragile," or "uninterested in their health." These misconceptions can lead to discrimination and exclusion from sports. People experiencing diabetes stigma, or stigma about their weight or other conditions, are also more likely to self-exclude from physical activities or avoid the topic.<sup>5</sup>

## Know how different activities may impact glucose levels<sup>1-3</sup>



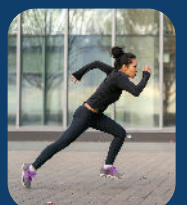
### Aerobic activities: ↓

Glucose levels may decrease during, immediately after, and later in the day.



### Interval & mixed activities: ↑ ↓

Glucose levels may drop less or rise during or after mixed activities compared to aerobic activities.



### Anaerobic activities: ↑ ↗

Glucose levels may increase during activity due to a rise in stress hormones, especially when fasted.



## 4 ways to open the dialogue about movement

### Ask permission to discuss movement, physical activity, and exercise:

Physical activity can be a challenging subject for many people to discuss, especially if someone has had past stigmatizing experiences. Ask people for their preferences on when and how to discuss the topic, and tailor the kinds of activities included in the conversation to each individual.

**Try this:** “Would you be open to discussing physical activity today?” or “It’s important we find some time to discuss movement today. When in the visit would you like to make time for that?”

### Explore potential barriers:

The barriers highlighted above are just a few of the many that people with diabetes may experience. If someone is feeling reluctant to discuss PA or having difficulty engaging with exercise regularly, explore potential barriers like stigma, scheduling challenges, access to recreational spaces, or affordability, to name a few.<sup>1-5</sup>

**Try this:** “Is there anything else I can help with that has been getting in the way, such as making time or affording a gym membership?”

### Offer additional tools and support:

For many people, their healthcare providers are the only reliable source of information they have to learn about exercise. When possible, help people feel confident in their management skills by equipping them with tools like CGMs for easier glucose monitoring or educational resources about how different activities impact blood glucose levels. [DiabetesWise](#) has great resources that can help with exploring a variety of activities.

**Try this:** “Would you like to hear about some more resources that could help make [activity] easier?”

### Set goals that build upon what’s working well:

Getting started with PA can be challenging, especially if someone has experienced stigma, exclusion, or other barriers. Identify strong sources of motivation and forms of movement that have been working well, even if it’s something as simple as a short walk with the dog each morning, and build from those successes.

**Try this:** “I see you working really hard on getting more steps in during the work day, how can we make that easier or add more steps at home, too?”

### Citations:

1. Adolfsson et al. ISPAD Clinical Practice Consensus Guidelines 2022: Exercise in children and adolescents with diabetes. *Pediatr Diabetes*. 2022;23(8):1341-1372.
2. Riddell et al. Exercise management in type 1 diabetes: a consensus statement. *Lancet Diabetes Endocrinol*. 2017;5(5):377-390.
3. Riddell, Peters. Exercise in adults with type 1 diabetes mellitus. *Nat Rev Endocrinol*. 2023;19(2):98-111.
4. Speight et al. Bringing an end to diabetes stigma and discrimination: an international consensus statement on evidence and recommendations. *Lancet Diabetes Endocrinol*. 2024;12(1):61-82.
5. Fried et al. The Challenges of Being Physically Active: A Qualitative Study of Young People With Type 1 Diabetes and Their Parents. *Can J Diabetes*. 2021;45(5):421-427.

This resource was created for dStigmatize, a diaTribe Foundation program, with support from Novo Nordisk. In collaboration with Dessi Zaharieva PhD, CEP, CDCES (Stanford University) and Chris Bright BSc (Hons), MRes, Honorary Fellow at the University of Worcester (UK) (Breakthrough T1D), together with [INSPIRE T1D](#).

