

Exercise

There are a huge number of sports on offer at university. You may already understand how exercise affects your blood glucose levels and have your own plan in place for making adjustments to your insulin and carbohydrate intake before, during and after exercise. However, taking a fresh look at things can be helpful, especially if you are starting a new sport.

Different types of exercise have different effects on blood glucose levels

- Moderately intense aerobic exercise (like hiking) will initially use up energy from your muscle glycogen. Then your body has to rely on glucose produced from your liver. Insulin will prevent liver generating glucose into your body. Therefore you are at risk of having hypos from 20 - 60 minutes after starting the activity and sometimes up to several hours
- High intensity or anaerobic activity (like sprinting or competitive sport) may result in your levels rising initially. This is because your body releases adrenaline, triggering your liver to produce glucose. Once you stop exercising, and your adrenalin returns to normal, your levels may go back down

Get your glucose level right before exercise

1. Check your blood glucose twice in the hour before exercise. Aim for your blood glucose to be between 5.5 and 10mmol/L before you start
2. Consider having extra carbohydrate if the glucose is below 7mmol/L
3. If you are exercising within 1 - 3 hours of taking insulin, think about reducing your insulin dose to prevent hypos. Start a trial with a 20% reduction
4. Delay exercise if your levels are more than 14mmol/L because exercise with too little insulin can cause a hyper.
5. Take extra care if you have hypos within a few hour before exercise as it may increase the risk of hypos

During Exercise

- Check your levels every 20 - 30 minutes during, and then every few hours after
- Keep some quick acting carb handy with you. You may need to eat/drink with some carb up to every 20 minutes during intensive exercise
- Tell people that you have type 1 and hypo features



New sports will be on offer at university. There are restrictions on SCUBA diving for people with diabetes. Ask your diabetes team or the sports captain if you are unsure.

Tell those around you that you have type 1 and carry a medical ID. Always ensure that you have hypo treatment with you.

For more information on exercise, plus a blog article kindly provided by Francesca Annan (Paediatric Diabetes Dietitian Alder Hey Children's NHS Foundation Trust), [visit our website](#).

Before making any changes to your insulin regime please consult with your diabetes healthcare team.

You can also get exercise tips at www.runsweet.com.