



[engelsk]

Type 2 diabetes and physical activity (Diabetes type 2 og fysisk aktivitet)

Regular physical activity is a key part of controlling your blood sugar.

It also protects against cardiovascular disease (disease of the heart or blood vessels), hypertension (abnormally high blood pressure) and obesity – as well as being vital for muscle, bone and joint health.

For people who start out physically inactive, the recommendation is 30 minutes of moderate-intensity activity daily. If you double that, you benefit even more. This is because physical activity increases the body's glucose uptake independently of both insulin and weight loss.

Muscle contractions in themselves increase glucose uptake in the muscles and also improve insulin sensitivity. This is one of the most beneficial effects of physical activity. The effect is achieved from all types of activity, and benefits the young and old, women and men, and both type 1 and type 2 diabetes.

The more physical work you do, the bigger the benefit, and the most benefit is achieved in people who start out physically inactive. This has some practical implications for both the treatment of diabetes generally and for prevention of type 2 diabetes specifically.

Preventive and blood-sugar lowering

Regular physical activity helps to prevent type 2 diabetes – and is a source of increased well-being. Endurance exercise and weight training have the same effect, and the more you do, the bigger the protective effect - it's as simple as that. Increased physical activity also benefits HbA1c, your "long-term blood sugar".

Is it safe for me to exercise

If you have type 2 diabetes, all types of physical activity are generally safe.

When to take extra care:

- If you have suspected angina, or are thinking of starting high-intensity exercise, you should consider a heart check, including an exercise ECG. If you have diabetes, you are also at higher risk of autonomous

neuropathy (nerve damage) or poor blood circulation. Before starting high intensity exercise, you should also be checked for these medical conditions.

- Physical activity improves insulin sensitivity, which may last for many hours. If you are being treated with medication to reduce your blood sugar, you may need to take dextrose or some other rapid-uptake carbohydrate before, during and/or after physical activity – to avoid low blood sugar.

Weight training is often an ideal form of physical activity for people with diabetes. The exercises should be dynamic and controlled. If you suspect or know that you have cardiovascular disease, you should avoid exercise that causes a big rise in blood pressure. See your doctor for advice.

When not to exercise hard:

Physical activity of moderate intensity is healthy, but if you do high-intensity exercise, you should be aware of the following limitations:

- High blood sugar if you take insulin (higher than 15 mmol/l). Intensive exercise will typically cause your blood sugar level to go even higher.
- Unstable angina
- Autonomous neuropathy because this puts you at higher risk of low blood pressure. You may also lack early symptoms of coronary ischaemia – reduced blood flow in the heart.
- Retinopathy (damage to the eye's retina) with bleeding.
- Kidney disease, because high systolic blood pressure during exercise may worsen the kidney damage.
- Peripheral neuropathy, because reduced sensation in your feet and joints puts you at greater risk of injury.
- Uncontrolled arrhythmia – disturbance of the heart rhythm.

This factsheet from the Norwegian Diabetes Association (Diabetesforbundet) was last updated in 2013.