



Exercise And Diabetes



If this is not possible, this time can be divided into 3 to 10 minutes. You can split the exercise during the day.

► Foot care ◀

Wounds or other lesions on the feet are a serious risk for people with diabetes.

Preventing foot injuries is especially important for middle-aged and older people. Always inspect your feet before and after exercise.

► Exercise tips ◀

To prevent dehydration, drink extra fluids before, during (only prolonged exercise), and after exercise. If you need extra carbs, fluids may be water or a sugary drink. 250 ml every 15 minutes or one liter of fluid per hour is recommended.

To prevent low blood sugar, eat extra carbs before and during exercise. Extra carbs are often needed after exercise. Talk to your doctor or dietitian about adjusting your carbohydrate intake.

Monitor your blood glucose levels before, if possible during (at least initially) and after exercise, to assess your need for extra food.

► Benefits of exercise and physical activity ◀

► **Benefits of aerobic exercise:** Aerobic exercise increases mitochondrial density, insulin sensitivity, oxidative enzymes, adaptation and response of blood vessels, lung function, immune function, and cardiac output.



Moderate to high levels of aerobic activity is associated with cardiovascular and overall mortality risks in both type 1 and type 2 diabetes. In type 1 diabetes, aerobic exercise increases cardiorespiratory fitness, reduces insulin resistance, and improves fat levels and endothelial function. In people with type 2 diabetes, regular exercise lowers A1C, triglycerides, blood pressure, and insulin resistance.

► **Benefits of resistance training:** The effect of resistance exercise on blood sugar control in type 1 diabetes is unknown. However, resistance exercise can help minimize the risk of exercise-induced hypoglycemia in type 1 diabetes. The benefits of resistance exercise for people with type 2 diabetes include improvements in blood sugar control, insulin resistance, fat mass, blood pressure, strength, and lean body mass.



▶ Exercise and diabetes ◀

Physical activity includes all movements that increase energy expenditure, while planned exercise is structural physical activity. Exercise improves blood glucose control in type 2 diabetes, reduces cardiovascular risk factors, helps with weight loss. Regular exercise may prevent or delay the progression of type 2 diabetes. Regular exercise also has significant health benefits for people with type 1 diabetes (for example, improving cardiovascular fitness, muscle strength, insulin sensitivity, etc.). Challenges related to blood sugar management vary with the type of diabetes, the type of activity, and the presence of complications associated with diabetes. Therefore, physical activity and sports advice should be tailored to the specific needs of each individual.

For a person with diabetes, exercise helps:

- ▶ Have a healthy weight
- ▶ Lower your blood pressure
- ▶ Reduce the risk of heart disease
- ▶ Reduce stress
- ▶ Insulin works better, which improves your diabetes management



- ▶ Swimming
- ▶ Cycling / Sports
- ▶ Dancing
- ▶ Gardening
- ▶ Golf

Increasing a person's general physical activity is also beneficial, for example. Use the stairs instead of the elevator, get up instead of using the remote control. Avoid watching too much TV or sitting at the computer for long periods.

▶ The amount of exercise ◀

For good health, you should exercise for about 30 minutes every day.

▶ Recommended exercises for people with diabetes ◀

- ▶ walking