Exercise & Medication

Your blood sugar level may just go up after a meal if you are a type 2 diabetes patient. Bring it down with exercise, says Cindy Ng, Senior Physiotherapist, Singapore General Hospital.

It is common to observe high blood sugar after a meal in those with type 2 diabetes. Exercising one to three hours after eating may reduce post meal sugar level. Hence, exercise is very important in the management of diabetes.

However, exercise works differently from one individual to another. So it is advisable to monitor the effect of a certain physical activity on your blood sugar level.

Test your blood sugar level before and after exercise. Check two to three hours later as high intensity and long duration exercise (such as running for an hour at 8km/h or more) can lower one's blood sugar for up to 24 hours.

Check your blood sugar level before you start to exercise

5.5 – 13.5 mmol/L or 100 – 240 mg/dl	Safe to start exercising
Less than 5.5 mmol/L or 100 mg/dl	Take 15g of carbohydrates as snack before exercising
More than 13.5 mmol/L or 240 mg/dl	Delay exercise, rest and retake sugar level 15 to 30 minutes later

Fast Facts >>>>>>>>>>>>>>>>

About 25 per cent of people with type 2 diabetes eventually need treatment with insulin.

If you are on insulin, you have to avoid exercising during the peak insulin action. If this is unavoidable, consider reducing insulin dose by two to four units. Always have a snack on hand in case of hypoglycaemia or low blood sugar. A good snack includes glucose tablets, one slice of bread or a small cup of beverage such as plain Milo.

Always have sufficient fluids before, after and during exercise to prevent dehydration. For exercise in the mid-morning, for example, when short-acting insulin is expected to peak, reduce the dose of insulin or take extra carbohydrates for breakfast.

Another precaution is to choose injection sites that are less likely to be affected by the working muscles during exercise. For example, if running is your form of exercise, do not inject into the legs as that will result in greater absorption of the insulin and increase the risk of hypoglycaemia during the run.

Stop exercising if you experience the following symptoms and check your blood sugar level, heart rate and blood pressure:

- light headedness or dizziness
- tightness in chest, discomfort or pain (seek medical attention immediately).
- severe shortness of breath
- nausea

With appropriate monitoring and taking the necessary precautions, one can exercise safely and have fun at the same time.

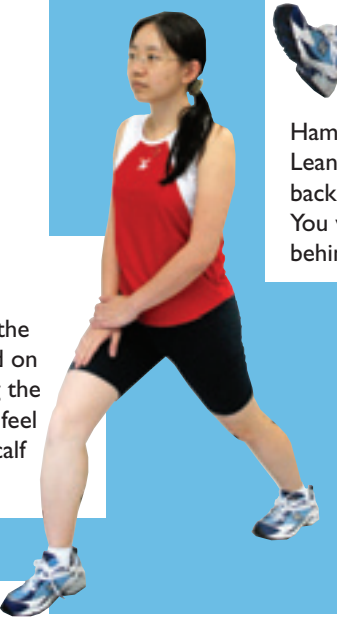
It is important to carry out stretches before and after the exercise regime.

Here are some stretches you can do:

Hamstring stretch: Reach as far forward as possible keeping the back straight. You will feel the stretch behind the knee

Quadriceps stretch: bring the leg as far back as possible keeping the body upright. You will feel the stretch on the front thigh

Hamstring stretch : Lean forward , sitting back on one's buttocks. You will feel the stretch behind the knee



Calf stretch: align the feet in one direction keeping both flat on the ground. Lean forward on the front leg, bending the knee slightly. You will feel the stretch on your calf

The longer a person has type 2 diabetes, the more likely they will have to start insulin treatment at some point.