

# physical activity & type 2 diabetes

**Regular physical activity is important for maintaining good health and ensuring good diabetes management. While you may be thinking ‘that’s easier said than done’, you may be surprised to learn that exercising isn’t about ‘no pain-no gain’. Regular physical activity can become an enjoyable part of your day with long-term benefits to your diabetes and your overall health.**

## Why do it?

Physical activity is essential to everyone to stay healthy. For people with diabetes, being regularly physically active has even greater benefits.

### **For the person with diabetes, physical activity helps to:**

- Improve the body’s response to insulin which can lower blood glucose levels
- Lower blood pressure and cholesterol levels, reducing the risk of cardiovascular disease such as heart attack and stroke
- Control weight
- Reduce the risk of developing diabetes complications.

### **Other positives include:**

- Stronger bones
- Improved mood
- Increased energy levels
- Reduced stress and tension
- Improved sleep.

## What activities are recommended?

Aerobic activities that get your large muscles moving such as walking, swimming or cycling are all recommended. Not everyone finds activity enjoyable, so try to choose activities you enjoy doing.

Strength training activities that make you use your muscles against a resistance, such as squats, theraband exercises or lifting weights, are also recommended.

### **Ideas to help you to ‘get moving’:**

- Walking is easy, cheap and doesn’t take any special skill – just a comfortable pair of walking shoes. Up the pace and distance covered as you become fitter.
- Be creative and try something different – perhaps ballroom dancing, water aerobics, water walking or Tai Chi. Check with your local council or community centre about free programs.

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**Physical activity benefits everyone in many ways but for people with diabetes, being regularly physically active, eating well and not smoking are very important to their future health.**



- Stand and move about while on the phone rather than sitting.
- Consider buying a pedometer (step counter) and count your daily steps, aiming to increase to a level decided by you and your doctor.
- Think about things you do using a machine. Could you do them in a more active way?

## How much is enough?

The length of time you spend will depend on the type of activity you choose and whether you need to lose weight.

### Moderate intensity exercise

Aim to do at least 30 minutes of moderate intensity physical activity such as brisk walking or swimming every day. This can be two 15-minute sessions or even three 10-minute sessions. To achieve a level of moderate intensity physical activity, you need to notice your breathing and heart rate speeding up and perhaps a light sweat. If you are gasping and unable to talk, you are probably working too hard.

If you are trying to lose weight, you may need to aim for 60 to 90 minutes every day. This will depend on how active you are already and other things such as the food you eat. Discuss this with your doctor, accredited practising dietitian and accredited exercise physiologist.

### Vigorous intensity exercise

When you are ready for more of a challenge, you may choose to try some more vigorous intensity physical activity such as jogging, running, aerobics classes or strenuous gardening. Three 20-minute sessions of vigorous physical activity equates to five 30-minute sessions of moderate intensity physical activity.

### Strength training

Aim to include strength training twice a week in addition to your moderate intensity or vigorous intensity exercise. General recommendations include performing 8–10 different exercises using all the major muscle groups, repeating each exercise 8–12 times and completing two sets for each exercise. Lift a weight that you can lift 8–12 times but find difficult to lift on the last few repetitions.

Strength training activities include body weight exercises such as wall pushups or sitting and standing from a chair, machine based exercises or free weight exercises such as lifting dumb bells. If you are unsure how to do strength training exercises safely, consult an accredited exercise physiologist, registered physiotherapist or other appropriate health professional.

## What should I do before starting an activity program?

Diabetes can put you at risk of certain conditions that could be affected by physical activity. This check list will help you to 'get moving' with safety.

- Before starting any new activity program, check with your doctor who will consider your blood glucose levels, any diabetes related complications and the condition of your heart and blood vessels.

“ aim for at least 30 minutes each day o

- Your doctor may advise you to have a stress test as a precaution if you:
  - > are over 35
  - > have had type 2 diabetes for more than 10 years
  - > have high blood pressure
  - > have or have had heart problems.
- As most physical activity involves using your feet, consider seeing a registered podiatrist before you start your program for advice on suitable footwear and other helpful information.

## Is there anything I need to do before and during my physical activity session?

- Set yourself goals to stay motivated – and when you achieve your goals, reward yourself!
- For your first few sessions, it is a good idea to test your blood glucose level before, during and after exercise, especially if you are on insulin or certain diabetes tablets that can lower blood glucose levels. Always carry quickly absorbed glucose such as jellybeans or glucose tablets in case your blood glucose level drops too low. For more information refer to the *Hypoglycaemia and Diabetes* information sheet.
- Wear good quality, well fitting, closed-in footwear as recommended by your podiatrist.
- Start slowly, gradually increasing the pace and length of each session.
- Aim to do your activity sessions at regular times and on set days.
- Do not be physically active if you are unwell.
- Stay well hydrated. Drink enough water to avoid thirst and remember you will need a bit more than usual while being active.
- Take short breaks along the way if being active for long periods.
- Wear diabetes identification (eg: Medic Alert® bracelet).
- Remember to make achievable changes to your exercise routines so that you can keep up your schedule. Each time you set out on your activity session, make a mental commitment: “This is forever”.
- Doing your activity sessions with a friend or family member or as part of a regular group can help you to stay motivated and make it more fun.
- Wear sunscreen, protect your head and layer your clothing so you can add or remove clothes as needed.

## Are there times when I should stop my activity session?

- Stop and rest if you experience chest, abdominal, neck or arm pain or tightness, or even vague discomfort. Stop and rest if you feel breathless, faint or lightheaded or have any other unusual symptoms while exercising. These symptoms could mean heart trouble that requires urgent treatment.

If you are experiencing symptoms that do not settle within 10 minutes, you or someone with you MUST call an ambulance to take you to the nearest hospital emergency department immediately. If the symptoms settle in less than 10 minutes, you should go to your doctor urgently for a checkup and this must be done before you do more exercise.

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- If you experience leg pain, stop until the pain goes away then resume your activity. Make sure your doctor knows about the leg pain. Gradually you should be able to exercise longer without pain but treatment may be required.
- If you are experiencing symptoms of a 'hypo' (low blood glucose), stop, check blood glucose levels and treat your 'hypo'. Wait 10 to 15 minutes, test again and follow up with longer acting carbohydrate such as a sandwich, glass of milk or two biscuits. Do not continue to exercise until your symptoms have disappeared and test your blood glucose regularly to watch out for further 'hypos'. For more information refer to the *Hypoglycaemia and Diabetes* information sheet.

## Is there anything I need to do after my activity session?

- Check your feet after exercise or at least once a day looking for signs of redness, blisters, cracks and calluses. If your feet perspire, change your socks after activity.
- Physical activity can lower your blood glucose level for up to 48 hours afterwards, so check your blood glucose levels often after exercise. You might notice a temporary rise after activity. This rise varies between individuals and is due to the release of hormones during periods of intense muscle activity.
- Each time you reach your goal, reward yourself with a movie, a new shirt or a low fat latte, then set new goals to stay motivated.

## Know how your body responds

As everybody reacts differently, it is important to know your own blood glucose response to activity. Many of the early signs of a 'hypo' such as sweating, feeling faint or weakness are also feelings you may have during physical activity and can therefore go unnoticed. Your doctor will advise if your medication, insulin or eating plan needs adjusting.

If you have concerns about any activity program, talk to your doctor or diabetes educator or contact your state or territory diabetes organisation on 1300 136 588.

### Would you like to join Australia's leading diabetes organisation?

- > Dietary services
- > Free magazines
- > Children's services
- > Educational literature
- > Product discounts
- > Support groups

For more information phone **1300 136 588** or visit your State/Territory Organisation's website:

<b>ACT</b>	<a href="http://www.diabetes-act.com.au">www.diabetes-act.com.au</a>	<b>NSW</b>	<a href="http://www.australiandiabetescouncil.com">www.australiandiabetescouncil.com</a>
<b>NT</b>	<a href="http://www.healthylivingnt.org.au">www.healthylivingnt.org.au</a>	<b>QLD</b>	<a href="http://www.diabetesqueensland.org.au">www.diabetesqueensland.org.au</a>
<b>SA</b>	<a href="http://www.diabetessa.com.au">www.diabetessa.com.au</a>	<b>TAS</b>	<a href="http://www.diabetestas.com.au">www.diabetestas.com.au</a>
<b>VIC</b>	<a href="http://www.diabetesvic.org.au">www.diabetesvic.org.au</a>	<b>WA</b>	<a href="http://www.diabeteswa.com.au">www.diabeteswa.com.au</a>

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