



# Exercising with chronic kidney disease

## Every move counts

Move more and reduce your sedentary time each day by incorporating different types of movement. It is never too late to start, some is always better than none!

## How to get started

Regular exercise will help to improve your overall health and ability to enjoy everyday activities. It significantly improves physical fitness, physical functioning (e.g. walking capacity) and the health-related quality of life in adults with chronic kidney disease (CKD). Exercise improves cardiovascular function, enhances aerobic capacity (so you are able to be active for longer), lowers blood pressure and cholesterol, and reduces the risk of developing obesity, type 2 diabetes, some cancers, heart disease, and other long-term health problems. It also reduces muscle strength loss associated with CKD.

Ask your doctor or healthcare provider for advice on suitable exercises and work together to create an exercise plan. You may need to modify it according to your energy levels, dialysis schedule and health condition.

Exercising during dialysis is advised and is highly effective to improving your overall health. If you have hemodialysis, avoid lifting weights above your head and neck movements that may affect your catheter. If have peritoneal dialysis, ensure you drain the dialysis fluid before moderate - vigorous exercise for safety and comfort. Avoid high impact exercises and contact sports if you have polycystic kidney disease.

**Take all medicines as recommended by your doctor or pharmacist.**

## Warm up and cool down

**Always start your exercise session with a 10–15-minute warm up to loosen up the muscles and raise the heart rate safely.** Warm-up exercises include dynamic stretches, range-of-motion activities and low intensity movements. This can be done standing up, walking around, marching on the spot or seated.

**Always end your exercise session with a 10–15-minute cool-down to ensure your heart rate and breathing rate return to normal safely.** Cool down exercises include slowly decreasing the intensity of your activity and simple stretches.

## Be active

### Some is good, more is better

<b>How much:</b>	Aim for at least <b>150 – 300</b> minutes a week of moderate intensity or at least <b>75–150</b> minutes a week of vigorous intensity physical activity. Start moving more each day increasing to regular movement every day and add sessions as your strength and stamina improve.
<b>How hard:</b>	Any movement helps. Aim for moderate to vigorous intensity—aim to get slightly breathless. Take frequent breaks, if necessary.
<b>How long:</b>	Aim to spread out your session throughout the week. If your fitness level is low, start with 5–10-minute sessions and add 10-minute intervals until you can comfortably exercise for longer.

<b>What type:</b>	All physical activity counts. Try activities within your abilities: walking, cycling, jogging, dancing, swimming, water aerobics, hiking—choose something you enjoy! Recreational team sports such as basketball, golf, soccer and volleyball are great social activities too! Household activities such as cleaning, gardening, vacuuming or walking your dog are great activities for your health.
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### What will it do for me?

*Exercise has been shown to significantly improve your overall health and your ability to do the activities of daily living. It improves sleep quality, improves blood sugar control and helps you lose or maintain your weight, in turn reducing risk factors such as obesity, type 2 diabetes and joint problems.*

## Build strength

<b>How much:</b>	At least twice a week.
<b>How hard:</b>	Start with light muscle strengthening exercises and progress to moderate or greater intensities over time. Avoid holding your breath and over-gripping or lifting weights overhead as this can increase blood pressure.
<b>How long:</b>	Choose a variety of 8–10 exercises targeting the upper and lower body and repeat each exercise 10–15 times. Try 1–2 sets.
<b>What type:</b>	A variety of strength exercises using free weights, resistance machines or household items such as a can of beans or a weighted water bottle as a weight. Strength exercises you can do at home include sit-to-stands, seated row, seated leg curls, push-ups and squats.

### What will it do for me?

*Strengthening weak muscles helps to maintain bone, muscle and joint health. Strength exercises specifically help prevent falls.*

## Improve balance

<b>How much:</b>	At least three days a week.. Start with one session per week, if necessary, and gradually work towards two.
<b>How hard:</b>	Choose 2–3 balance exercises and repeat each exercise 10–15 times.
<b>How long:</b>	Hold each balance for 10-30 seconds.
<b>What type:</b>	Try yoga, Tai Chi or home balance exercises such as standing on one foot, a heel-to-toe walk or a balance walk lifting one leg at a time. Ensure the area you are exercising in and the type of balance exercise is safe.. If you are at high risk of falling, do seated balance exercises or use a sturdy chair or wall for support.

### What will it do for me?

CKD increases your risk of osteoporosis, falls and fractures which can result in pain and injury. Practicing balance exercises helps to train your body to react more quickly to impending loss of balance and can help reduce the risk of falls, fractures and injuries.



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## Sedentary living

**Reduce the amount of time being sedentary.** Move more and break up sedentary time. Sedentary behavior is defined as time spent sitting or lying with low energy expenditure, while awake in the context of occupational, educational, home and community settings, and travel. Higher amounts of sedentary behavior can increase the risk of heart disease, type 2 diabetes and some cancers.

**Replace sedentary behavior with more physical activity of any intensity (including light intensity).** It is possible to avoid sedentary behaviour and be physically active while sitting or lying, through, for example, upper body led activities, inclusive and/or wheelchair-specific sport and activities. Try seated stretches for those with limited mobility; using active forms of transport; standing while working (within your abilities and environment), and other accessible active options to replace sedentary time.

## Your exercise, your way!

Choose activities that are easy to start with, and that you enjoy. Always exercise within your abilities. If mobility is difficult, adapted cycling, swimming and chair-based exercises may be better alternatives. Exercise with friends and family or join a group class. Try exercising both indoors and outdoors and see which you prefer. Most importantly: **some physical activity is better than none!**

## Exercise safety

Ask your doctor for more information about how to exercise safely and effectively and how to maintain an exercise plan. Start with shorter sessions (e.g. 10–15 minutes) and slowly build up to the recommended level. Always exercise within your abilities.

If you are undergoing dialysis or have had a kidney transplant, join a supervised program for physical activity and exercise.

Contact sports where there is risk of physical trauma or repetitive rubbing occurring to your catheter site are not recommended.

If you have had a kidney transplant, avoid participation in contact sports (e.g. rugby, football, martial arts, ice hockey, boxing) and/or prolonged extreme exercise (e.g. marathons, triathlons).

Aim to get slightly out of breath, but exercise sensibly and stop the activity if you feel unwell, become out of breath, dizzy or experience chest pain or discomfort and follow your treatment and medication plan agreed with your doctor or healthcare provider.

Always wear comfortable clothing and shoes that give good support. Take frequent breaks if necessary, and drink water before, during and after exercise.

Choose environments that you can access freely and safely. Please ask your healthcare provider or local leisure organizations for advice on the best option for you.

## Resources

The Kidney Foundation of Canada provides tips on maintain a good quality of life while living with kidney Disease <https://kidney.ca/Kidney-Health/Living-With-Kidney-Disease>

The Kidney Foundation of Canada's Active Living For Life Program is a free virtual exercise and educational program that encourages CKD patients to increase their rates of physical activity, physical literacy and capacity. <https://kidney.ca/Support/Programs-Services/ON/Programs/Active-Living-for-Life>



Scan for more physical activity resources!

