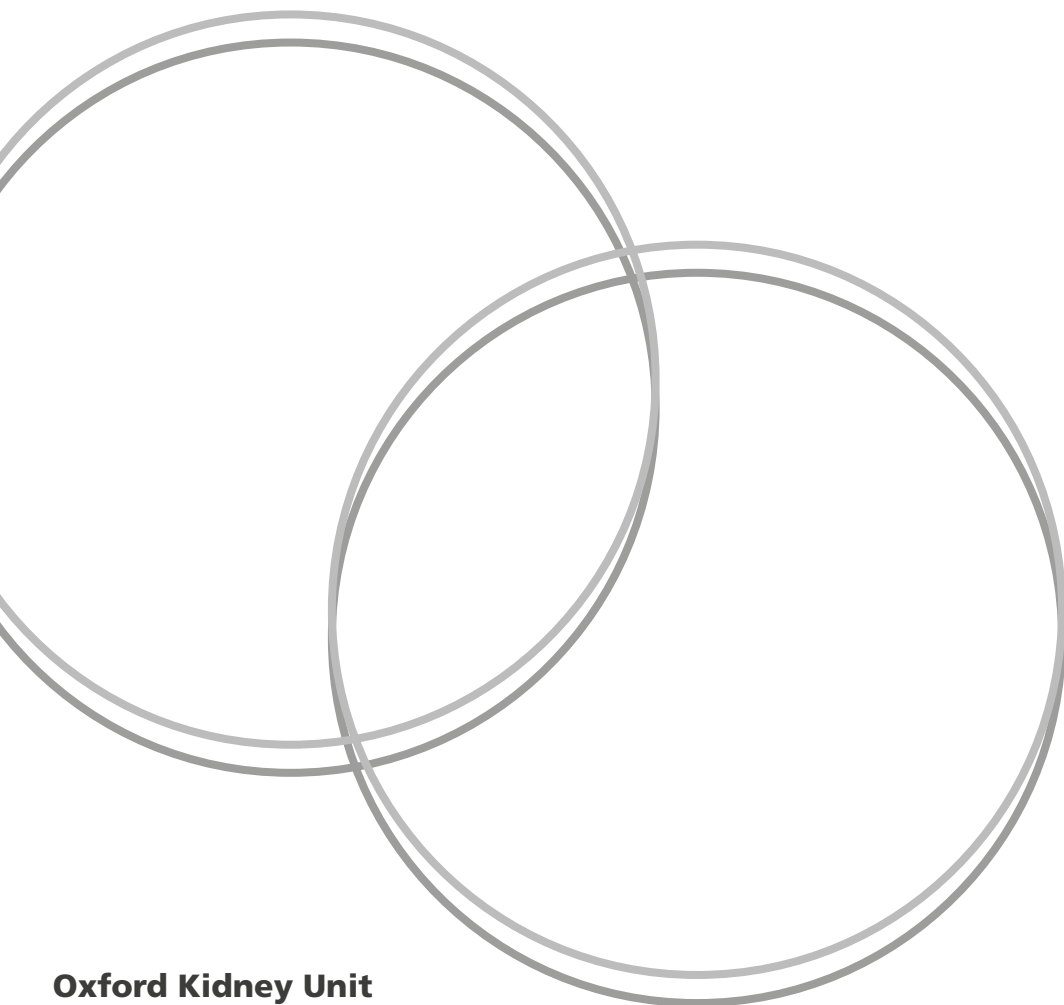


# Chair Based Exercises for Strength and Balance

Information for patients



When you first start haemodialysis or peritoneal dialysis you may feel tired and lack energy. You may also have a change in your appetite and find it difficult to enjoy the things you once did. However, haemodialysis treatment should not stop you from being physically active.

## **How will exercise help me?**

Being active is good for your health, mobility, mental health and wellbeing.

## **What is the chair based exercise programme?**

Designed by experts, the Chair Based Exercise Programme (CBE Programme) is a set of exercises that can help develop your fitness, strength, mobility and balance.

The CBE Programme is safe, easy to follow and can be carried out in the comfort of your own home. The instructions in the booklet give step-by step instruction allowing you to complete these exercises anytime and anywhere.

It is recommended that you do the exercises up to 3 times a week.

## **How do I keep safe when exercising?**

Your safety while exercising is important. You should exercise according to your capabilities.

- Don't overdo it.
- Start slowly and build up slowly.
- Use a stable chair for support.
- Keep your back straight.

Before you start the programme, you will be seen by someone in the renal team who will assess your suitability to exercise. If you have any questions about starting the exercises, please contact your nurse, consultant or rehabilitation therapist.

### **Exercising with a Tesio**

If you have a Tesio line in your chest for dialysis you will have been advised whether or not it is safe to continue with normal day to day physical activities. If you have any discomfort in the area around your Tesio, please contact the vascular access nurses, let your dialysis nurse know when you come to dialysis or phone the renal unit.

### **Exercising with an arterio-venous fistula (AVF)**

If you have an AVF, you can still exercise. Exercising is good for your circulation, blood flow and keeping you healthy.

## **Where can I do the exercises?**

Anywhere. These exercises were developed to be carried out in the comfort of your own home, either before or after dialysis.

The exercises in this booklet start off easy and become progressively more challenging, but they will become easier over time.

Please discuss any issues or concerns you have with your nurse, consultant or rehabilitation therapist.

You may wish to ask a family member or friend to join you when you exercise. This can make it more fun, as having someone with you is a great way to exercise. You can also complete these exercises online please visit this website:

[www.youtube.com/watch?v=EJgZygWBKaE](http://www.youtube.com/watch?v=EJgZygWBKaE)

## **Can I set goals?**

Setting yourself small goals or target to achieve will often help you to exercise. Like anyone going to the gym for the first time, the rehabilitation therapists will look at what is realistic and set small goals for you to achieve this. It really can be anything that you want. It is up to you! It may simply be that you want to strengthen your legs so you can stand for longer; that you enjoy the social side of exercise; or that you wish to be healthier and lose weight.

## **Can I do too much?**

Yes, if you are not used to exercising it is best to begin gently and build up gradually. Your muscles or joints may feel a bit achy and stiff a few hours after the first exercise session, but this should get better in a few days. Please talk about this with your nurse or rehabilitation therapist.

## **Will I feel tired?**

Exercise very often helps to reduce fatigue. However, to begin with you may feel more tired as a result of the exercise you have done. This is quite normal, and the tiredness usually improves as you get used to your new level of activity. This tiredness may not be the same as the fatigue you experience with your condition.

## **What if I feel unwell?**

You should not exercise if you feel unwell.

**Stop exercising** if you experience any of the following:

- Chest pain.
- Shortness of breath that stops you from talking.
- Dizziness.

Dizziness and shortness of breath are symptoms you may experience during and after haemodialysis. It is good to know which symptoms are associated with haemodialysis and which are associated with exercise.

## **Please contact your GP if these symptoms continue.**

You should wait until you feel better before re-starting the exercises. Speak to your nurse or rehabilitation therapist. They will let you know when you should start the programme again.

# Walking

Walking to the shops or even to the end of the street is a good way of increasing your activity levels. Going for a walk for 5 to 10 minutes each day will give you lots of health benefits.

If you use a walking aid, such as a walking stick, continue using this as normal. You can increase the amount of time walking as you get more confident.

## Tips for walking

- Always wear comfortable shoes.

## When you walk make sure that:

- Your shoulders are relaxed.
- You look ahead and not at the ground.
- Your heel lands on the ground first and you push off with your toes.
- You walk at a comfortable pace.

## Remember these top tips:

**Endurance:** When you exercise your breathing may become faster. This is normal, but you should still be able to talk.

**Strength and balance:** When you do the chair-based exercises always use a steady chair to hold on to.

**Warm up and flexibility:** Before you exercise always warm up and cool down afterwards. A few minutes of walking is an ideal way of doing this. Stretching is also good.

## **How to use this booklet**

All the exercises in this booklet will help improve your strength, mobility and fitness levels.

Look at the photographs and read the instructions. You will be taught how to do the exercises by the rehabilitation therapists. If you are unsure what to do, just speak to them.

### **How much should I do?**

Ideally you should try to practice these exercises every other day. Do as much as you feel you can.

You may prefer to practice in smaller activity chunks, for example, arm exercises in one session and leg exercises in the next and so on.

### **The most important thing is to start small and build up gradually.**

If one of the exercises cause a sharp pain or discomfort, then stop that exercise, but carry on with the others. Tell your rehabilitation therapist when you come in for the next session.

# Chair Based Exercises

## 1. Toe and heel raises

Place both feet flat on the floor.

- Keeping your heels on the floor, lift your toes as high as you can. Hold for 1 second and then lower them back down. Repeat 10 times.
- Then raise your heels so your toes are on the floor. Hold for 1 second and then return to normal position. Repeat 10 times.
- Then alternate between toes and heels. Repeat 10 times at a steady and even pace.
- Increase the repetition when you feel more confident.



**(Toe raises)**



**(Heel raises)**



## 2. Heel taps

- Move your foot forwards to tap your heel on the floor. Return to the start position. Repeat with the same leg 10 times.
- Then do the same with the other foot.
- Once you have done 10 for each foot, do another 10 but alternate your feet at an even pace.
- Increase the number of repetitions when you feel comfortable to do so.



### Too much?

- ✓ Reduce the number of repetitions and build up gradually.

### Need more?

- ✓ Increase the number of repetitions.

### 3. Leg ups

- Holding onto the side of the chair, raise one leg and hold for 1 second. Then lower your leg to the ground. Repeat 10 times with the same leg.
- Do the same with the other leg; raise the leg, hold for 1 second and lower. Repeat 10 times.
- When you have done both legs, alternate between the left and the right leg. Repeat 5 times for each leg.

You might find this exercise starts to make you feel a bit warmer and breathe a little heavier. You should still be able to hold a conversation.

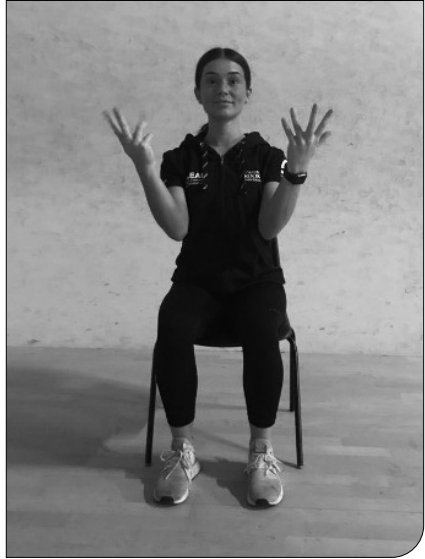


#### **4. Thumb exercises - Ducks**

Hold your arms to the side of your body palms facing forward. Rotate your thumbs in a circle in one direction 10 times. Change the direction and repeat 10 times.



## 5. Hand exercises - Playing piano



- Hold your arms in front of you so that they bend at the elbow.
- Move your fingers one by one like a 'finger wave', or like you are playing the piano. Move your arms in and out.
- When you have done 10 repetitions, rotate your hands so your palms are facing upwards and repeat the same as you did before.

## 6. Wrist rotations

Sit comfortably in your chair and bring your hands up to shoulder height. Rotate your wrists in one direction 10 times and then in the other direction another 10 times.



If you feel you need more, increase the number of repetitions up to a maximum of 20.

## 7. Steeple

- Put your palms together in front of you. Then move your arms to your sides, lifting your elbows upwards. Then bring your palms together again.
- Each time you bring your palms together is 1 repetition. Do 10 repetitions to start with and remember to pace yourself.



### Too hard?

- ✓ Reduce the number of repetitions then build up gradually.

### Need more?

- ✓ Increase the number of repetitions up to 20.

## 8. Pointing forward

- Point one arm forward and then rest on your lap.
- Repeat with the other arm.

Do 10 repetitions for each arm.



## 9. Raised arm extensions

- Sit with your hands in your lap.
- Raise one arm and point your finger to the ceiling. Then stretch over your head a few inches further. Hold this position for 1 second.
- Relax and drop your arm to the start position and repeat with the other arm.

Do 10 in each direction.





## 10. Reaching across

- Start with both hands resting on your lap. Raise one arm and stretch across your chest and point. Then relax your arm back to your lap. Repeat with the other arm.

Alternate your arms and do 10 repetitions for each arm.



## 11. Swimming

- Alternately rotate your arms forward, as if you were doing front crawl, but in small circles. Repeat the movements 10 times (5 each arm).
- When you have completed the forward movements, repeat the arm movements backwards (like back crawl).

If you feel you can do more, then increase the repetitions. Remember to keep a steady pace and look forward when completing this exercise. This will help you keep your balance and focus.



## 12. Standing exercises – tip toes

- Hold on to the back of the chair. Raise yourself up on the balls of your feet (so your heels are off the ground). Hold for 1 second and then return to starting position.

Repeat 10 times. If you feel you can do more later on then increase the repetitions up to 20.



### 13. Standing exercises – side marches

- Stand facing to the left, but hold on the back the chair for balance. Raise and lower your legs alternately, as if marching on the spot. Repeat 10 times in one direction.
- When you have completed your first 10, turn to the other side and repeat another 10.

If you feel you can increase repetitions, do so at a steady pace.



## 14. Squats

- Hold the back of the chair for support. With your legs shoulder width apart, bend your knees so you squat down, as far as you can go. Hold for 1 second and then rise to standing position.

Repeat 10 times. When you feel more comfortable, increase the number of repetitions or how low you can squat.



## 15. Standing exercises - reverse lunges

- Hold the back of the chair for support. With your legs apart, bring one leg back as far as you can.
- As you bring your leg back, bend your front leg. Make sure you keep your knee in line with your toes.
- Do small lunges to start with.
- Hold for 1 second, then bring your leg back to its start position.
- Repeat with the other side and continue to alternate the lunges.

Do 10 for each leg.



## 16. Stand to sit

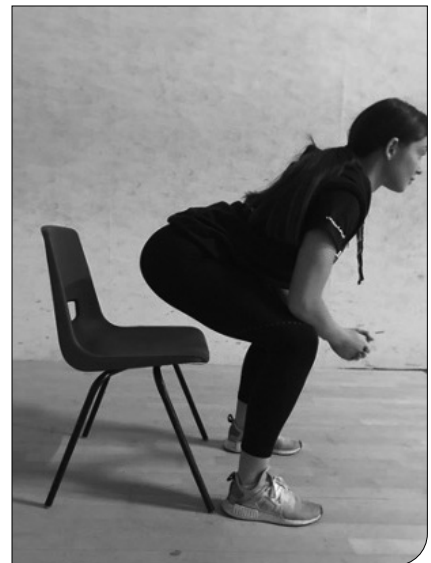
This exercise may be difficult at first but will become easier with practice.

Stand in front of the chair.

Slowly bend down and place your elbows on your knees.



Hover in this position for 1 second. Count down from 5 and slowly lower yourself to a sitting position on the chair.



Once seated and when you are ready, slowly bend forward. Push up on your legs and return to a standing position.



Once in the stand position, repeat the sequence again. Repeat 5 times.



### **Not quite there yet?**

- ✓ Make it easier by starting with a higher chair.

### **Need more?**

- ✓ Do more repetitions, up to 10.



## 17. Walking to running whilst sitting

- Alternate the raising and lowering of your legs in co-ordination with your arms, just like you are walking but in a sitting position.
- Start off slowly, as if you are walking, and do 10 repetitions.
- When you feel ready, increase the speed to a gentle 'trot'. When you feel more confident increase the speed to 'running'. Slow down if you feel you need to, or if you get out of breath.













This programme was designed and developed for Renal Dialysis patients by Dr Sheera Sutherland and Dr Andy Meaney with patients and staff at the Oxford Kidney Unit and in the Clinical Exercise and Rehabilitation unit, (CLEAR) Oxford Brookes University.

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All photos taken with consent: Many thanks to Katie Winter, Bruna Oliveira and Fran Ronan for their assistance.

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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