

# OTAGO

# STRENGTH & BALANCE

Home Exercise Programme



Intermediate



laterLife  
training.

Otago  
Exercise  
Programme  
Leader

<http://www.laterlifetraining.co.uk/>

Do you want to live life to the full? Doing the exercises in this booklet at least twice a week. in addition to taking a daily walk can help keep you strong and walk steadily, reducing the risk of falls.

These exercises have been used in strength and balance programmes across the world and are based on the Otago Exercise Programme (OEP) which has been shown to reduce falls and injuries due to falls

Ideally, set aside a time to do all (or some) of the exercises at once. Alternatively you can do these exercises as part of your everyday routine - for example try a one leg stand while waiting for the kettle to boil, or do the sit to stand exercise during the advertisements on television.

# Safety

Ensure that the chair you use is sturdy and stable. Wear comfortable clothes and supportive footwear.

Prepare a space and have a glass of water (for afterwards) ready before you start.

If you experience pain in your joints or muscles, stop, **check your position** and try again. If the pain persists, seek advice from your GP or Otago Exercise Programme Leader.

While exercising, if you experience chest pain, dizziness or severe shortness of breath, **stop immediately** and contact your GP (or call an ambulance if you feel very unwell and your symptoms do not go away when you stop exercising).

However, feeling your muscles working or slight **muscle soreness** the next day after exercise is **normal** and shows that the exercises are working.

Breathe normally throughout and try not to hold your breath.

Aim to do these exercises **three times** per week -or twice a week in addition to a strength and balance group or class.

**If you are using this booklet without attending a supervised exercise session, consult your GP to check it is suitable for you.**

**Please read disclaimer at the back of this booklet.**

# Warm Up Exercises

Always begin with a warm up to prepare your body for the main exercises.

There are 4 **warm up** exercises.

Try to complete them all.

**TIP:**

While waiting for the kettle to boil.

Alongside the exercises are tips or suggestions of when you could do these exercises in your own daily routine, to help make them more of a habit.

# Marching

- Stand tall (holding your support if needed).
- March slowly, lifting the knees.
- Build to a rhythm that is comfortable for you.
- If you feel steady, add an arm swing with one or both arms.
- Continue marching for 1 to 2 minutes.

**TIP:**

At the breakfast table.

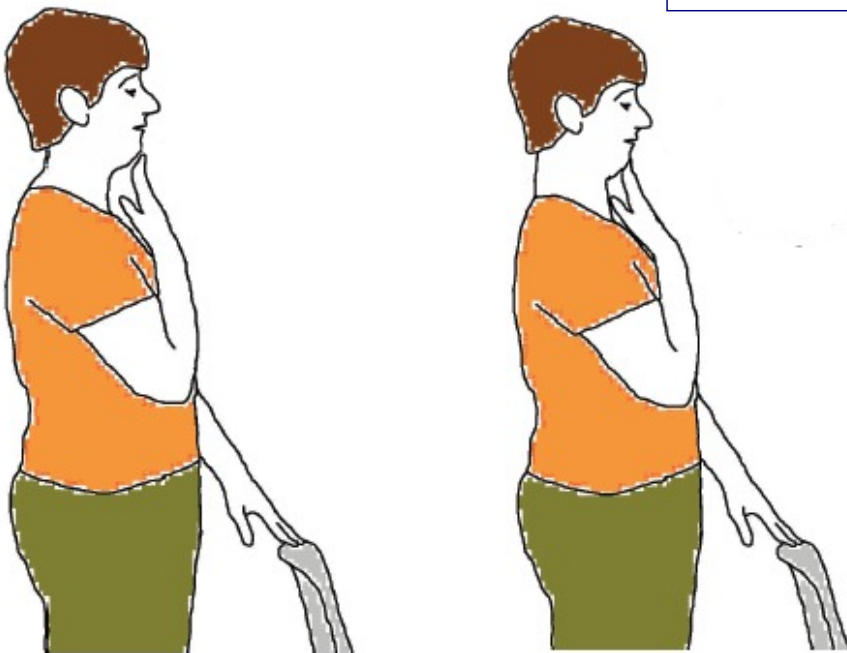


# Neck movements

- Stand tall with your feet hip width apart and arms resting loosely by your sides or hold the chair.
- Place 2 fingers onto your chin then gently guide the chin back until you feel a stretch in the back of the neck.
- Repeat 5 times.

TIP:

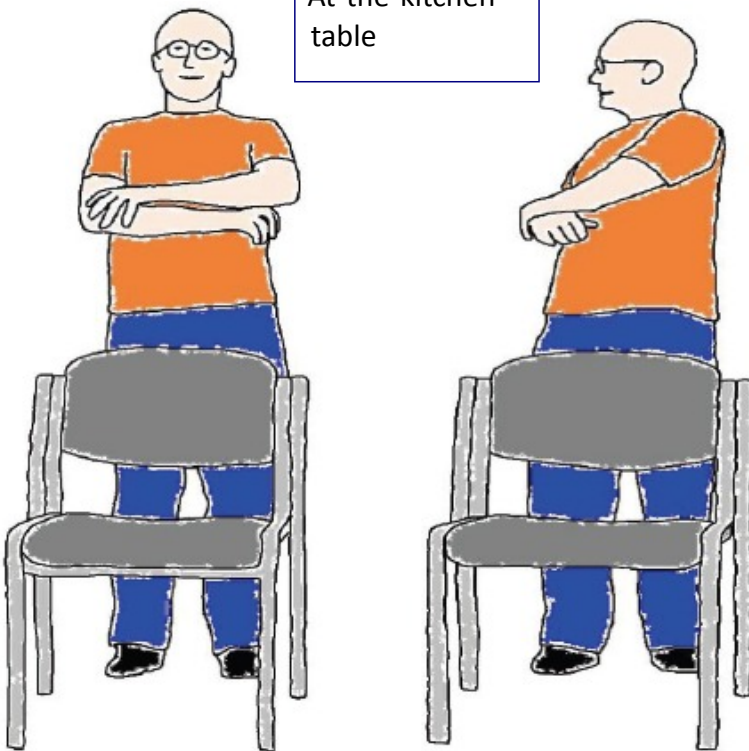
While you are watching TV.



# Trunk movements

- Stand tall with your feet hip width apart.
- Fold the arms in front of the chest or place one hand on the chair.
- Lengthen and lift the trunk upwards then slowly turn the head and shoulders to the right.
- Ensure you are only turning the upper body (not the hips).
- Return to the start position and repeat to the other side.
- Repeat 5 times.

TIP:  
At the kitchen  
table

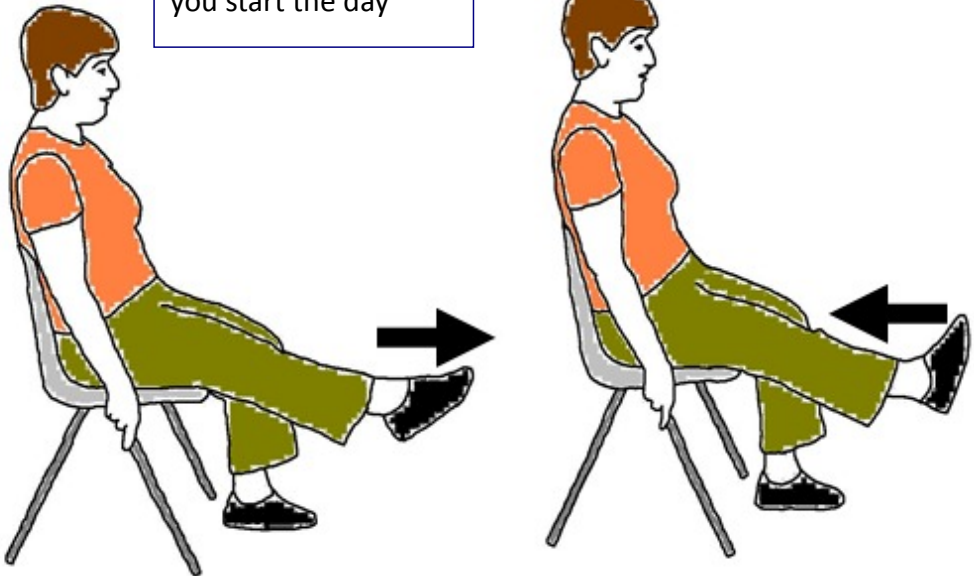


# Ankle movements

- Sit with your back supported by the chair back.
- Straighten one leg so the foot is held off the floor.
- Keep the leg in this position whilst pointing the toes forwards then pulling them back slowly.
- Do this 2 times and eventually build up to 10.
- Repeat on the other leg.
- If the pull behind the knee is too intense, perform this exercise with the foot closer to the floor.

**TIP:**

After breakfast before  
you start the day





# Strength and Balance Exercises

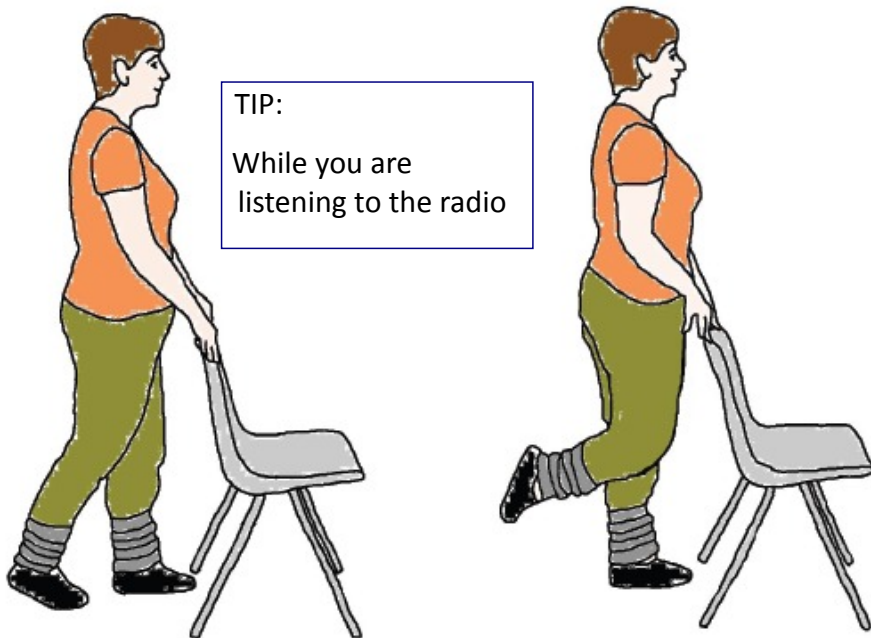
These are 6 exercises to help to improve your balance and your muscle strength.

Try to complete them **all**, unless instructed otherwise by your Orago Exercise Programme Leader.

**If you have ankle weights put them on now.**

# Back knee strengthener

- Stand tall close to and holding your support.
- Feet hip width apart and knees soft.
- Brush the foot backwards along the floor then lift the heel slowly towards the bottom.
- Keep the knees close together.
- Lower the foot slowly.
- Place the weight back over both feet to rest briefly.
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time.
- Repeat 2 times, eventually build up to 10 on one leg, then change legs.



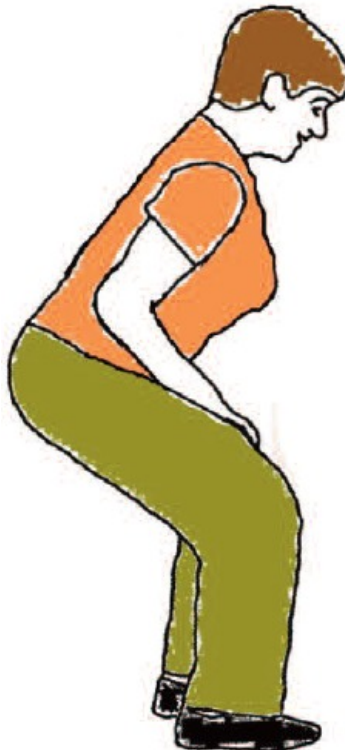
**Now take off your weights if you are wearing them.**

# Knee bends

- Feet should be hip width apart, toes facing forwards.
- Bend the knees and push your bottom backwards as though you were going to sit down.
- Ensure the heels do not lift and the knees do not roll inwards.
- Come back up to the start position slowly.
- Use a support if you need to but try first with hands near support but not holding on.
- Repeat up 2 times, eventually build to up 10 times.

TIP:

At the Kitchen  
sink.

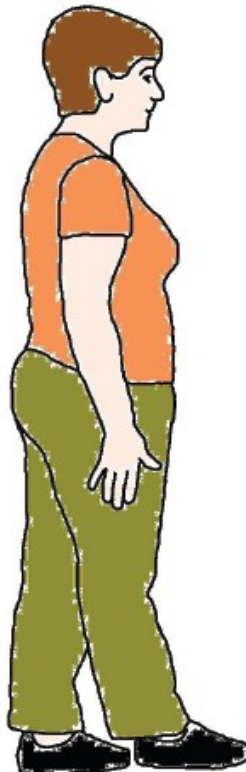


# Heel toe standing

- Stand tall.
- Place one foot directly in front of the other so that the feet form a straight line.
- Use your hands to hold on to something if you need to but try first with hands near but not holding on.
- Look ahead and balance for 2 seconds, eventually build up to 10 seconds.
- Take the feet back to hip width apart before placing the other foot in front and balancing again.

TIP:

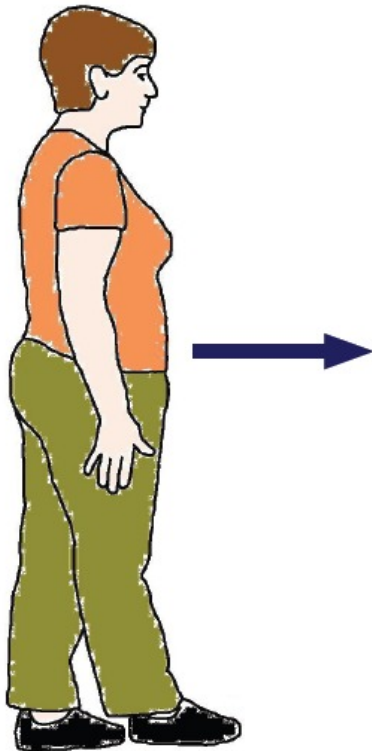
In your hallway.



# Heel toe walking

- Stand tall.
- Walk 2 steps forwards placing one foot directly in front of the other so that the feet form a straight line, eventually build up to 10 steps.
- Look ahead and aim for a steady slow walking action.
- Take the feet back to hip width apart before turning around slowly then repeat the steps in the other direction.
- Have hands near the wall or a support in case you need to hold on.

TIP:  
Along your hallway.

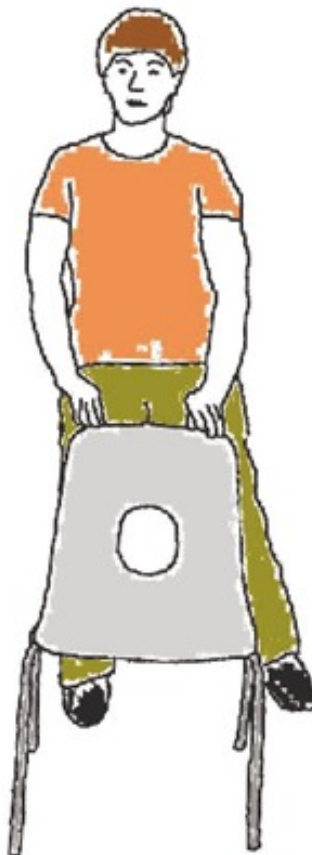


# Sideways walking

- Stand tall facing a support (chair, table or wall) and look ahead.
- Take 2 sideways steps, keeping the hips forward and the knees soft.
- Build up to 10 steps.
- Repeat the other way - slowly.

TIP:

Along your kitchen worktop.

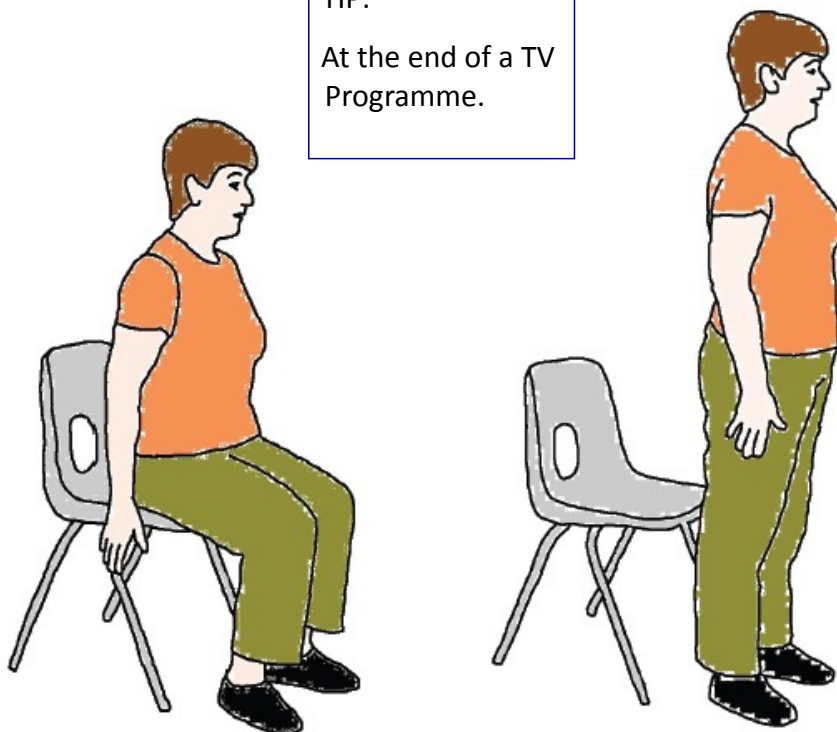


# Sit to stand

- Sit tall near the front of the chair.
- Place your feet slightly back.
- Lean forwards slightly.
- Stand up slowly (using your hands on the chair if needed but try without).
- Step back until your legs touch the chair.
- Slowly lower your bottom back into the chair, reaching for the chair as you lower if needed.
- Repeat 5 times, eventually build up to 10 times.

TIP:

At the end of a TV Programme.



# Ending the session

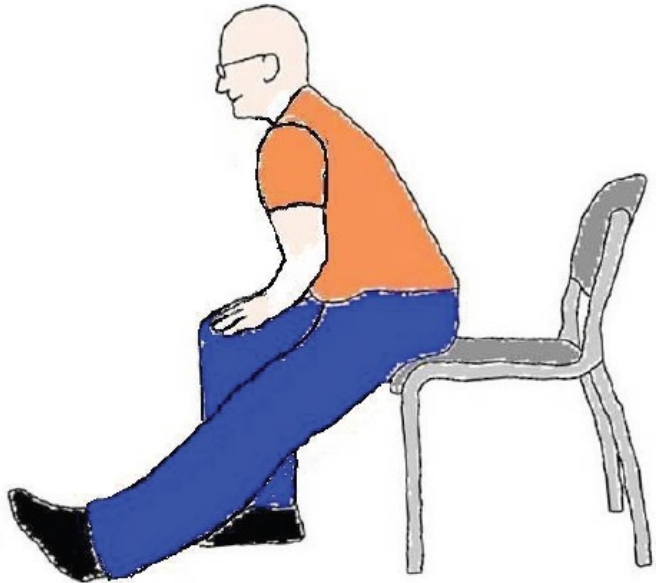
Try to perform the following stretches at the end of your session or daily. They will help with walking and stability.

## Back of thigh stretch

- Make sure you are right at the front of the chair.
- Straighten one leg placing the heel on the floor.
- Place both hands on the other leg then sit really tall.
- Lean forwards with a straight back until you feel the stretch in the back of your thigh.
- Hold for 10-15 seconds.
- Relax and repeat on the other leg.

**TIP:**

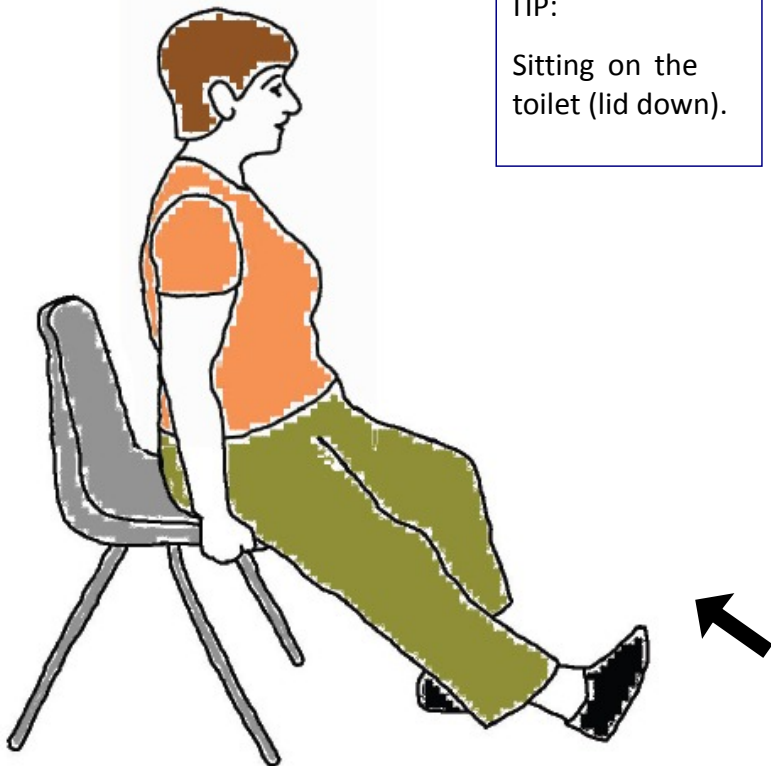
Do these when you first get up in the morning.





# Calf stretch

- Sit forwards in the chair and hold on.
- Keep one knee bent and directly above the ankle.
- Straighten the other leg with the heel resting on the floor.
- Pull the toes back towards the shin until you feel a stretch in the calf.
- Hold for 10 to 15 seconds, making sure the knee is not locked out.
- Relax and repeat on the other side.



**TIP:**

Sitting on the toilet (lid down).

# Finished!

Well done! You have finished your exercises.

Try to do these exercises **three times** per week. Set a day and a time aside for a second session now, or try to do the exercises as part of your daily routine. Our tips may give you some ideas. It would be best if these exercises become a habit!

Regular performance of these exercises will, over time, make you feel stronger and steadier. They have also been shown to help your brain, reduce injuries and improve quality of life. Why not get exercising with your family or a friend.

## **Balance Progression**

Once you are performing the balance exercises with confidence on a regular basis, you should aim to GRADUALLY reduce the amount of hand support you use. This can be done by releasing your little fingers to see if you can still maintain your balance. The next step is to release your ring fingers and when you have mastered this, your middle fingers so that you are now balancing by supporting only with your index fingers. Make sure you master balancing at each stage before progressing to the next.

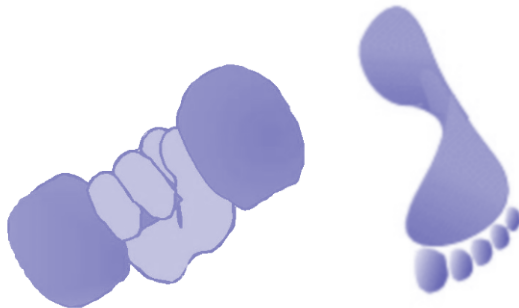




# Why Strength and Balance?

Strong muscles help maintain bone health as well as protecting your joints. Regular strength exercises can reduce pain from arthritic joints as well as boosting your body's natural immunity to infection.

Balance is the ability to stay upright when you are knocked, or to stay steady if you have to walk along a narrow foot path. When we walk, we spend a lot of time with only one foot on the ground, this makes the brain work hard to keep us upright and this requires a lot of practice to get right. Just as a young child has to practice to walk, as we get older we have to practice balance challenging activities to maintain good balance.



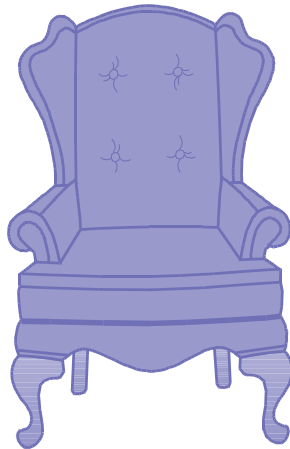
# Sit Less

We now know that long periods of sitting, like watching the television all evening, are not good for our health. The more we sit, the more likely we are to get thicker around the waist, develop diabetes, become less mobile and have a low mood.

People who get up more regularly and break up long periods of sitting (every 1 - 2 hours at least) are more mobile and healthy.

Tips to break up long periods of sitting

- Stand up after a few chapters of your book
- Remain standing while the kettle boils
- Do one of the standing exercises in this booklet



# Acknowledgements

## **We would like to acknowledge the following content resources:**

The Otago Exercise Programme, Professor John Campbell & Dr Clare Robertson. ACC New Zealand, 1997.

Robertson MC, et al. Effectiveness and economic evaluation of a nurse delivered home exercise program to prevent falls 1: A randomized controlled trial. British Medical Journal 2001, Vol 322, p697-700.

Robertson MC, et al. Effectiveness and economic evaluation of a nurse delivered home exercise program to prevent falls 2: Controlled trial in multiple centers. British Medical Journal, 2001, Vol 322, p701-704.

The Postural Stability Instructor Manual 7<sup>th</sup> Edition, Later Life Training, 2015.

The “How to Lead the Otago Exercise Programme Handbook” 4<sup>th</sup> Edition, Later Life Training, 2015.

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# Disclaimer

You take responsibility for your own exercise programme. The authors and advisers of the exercises in this programme accept no liability. All content is provided for general information only, and should not be treated as a substitute for the medical advice of your own GP or any other health care professional. Health care professionals using these exercises do so at their own risk.

Whilst these exercises have been used in research trials and many thousands of older people do similar exercises from other home exercise booklets, the authors do not know you, your medical conditions or physical fitness and cannot give advice tailored to you, your medical condition or physical function. The authors cannot guarantee the safety or effectiveness of this program of exercises for you. Any noticeable changes in health, pain, mobility or falls should prompt a visit to your GP.

This booklet should not be treated as a substitute for medical advice of your doctor.

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