

#### ProFouND: Prevention of Falls Network for Dissemination

#### **DELIVERABLE D 5.1**

#### HOME EXERCISE LEAFLETS DISTRIBUTED FOR TRANSLATION

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Three leaflets have been distributed amongst the ProFouND partner membership for translation.

1) Otago Strength and Balance Home Exercise Programme (46 pages, p3-48)

2) Postural Stability Strength & Balance Home Exercise Programme (28 pages, p49-77)

3) Chair Chair-based Home Exercise Programme (25 pages, p78-102)

# Otago Strength & Balance Home Exercise Programme



## Safety

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

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

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).

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

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 enjoy yourself.

Aim to do these exercises **three times** per week.

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

#### Warm up exercises

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

There are 6 warm up exercises.

Complete them **all**:

#### March

- Stand tall (holding your support if needed)
- Begin marching your legs
- If you feel steady, add an arm swing with one or both arms
- Continue marching for 1 to 2 minutes



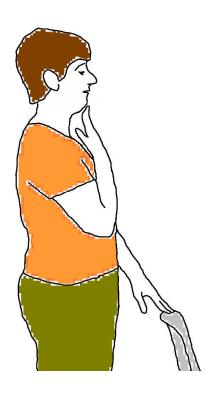
#### Head movements

- Stand tall with your feet hip width apart and arms resting loosely by your sides or hold the chair
- Turn the head slowly to the left then slowly to the right
- Ensure that the shoulders stay still so only the head is moving
- Repeat 5 times



#### **Neck movements**

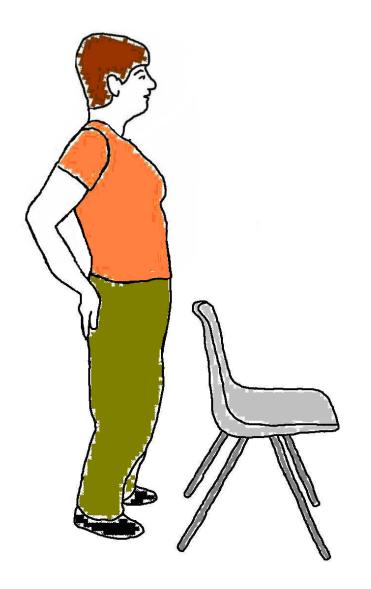
- Stand tall with your feet hip width apart and arms resting loosely by your sides or hold the chair
- Place 2 fingers onto your chin then gently guide the chin back until you feel a stretch in the back of the neck
- Repeat 5 times





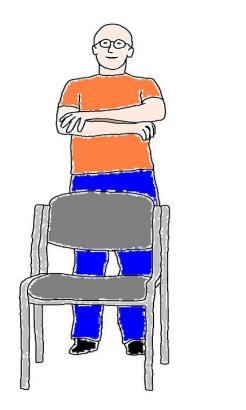
#### **Back extension**

- Stand tall with your feet hip width apart
- Place your hands onto your bottom
- Gently arch your back
- Avoid looking at the ceiling or locking out your knees
- Repeat 5 times



#### **Trunk movements**

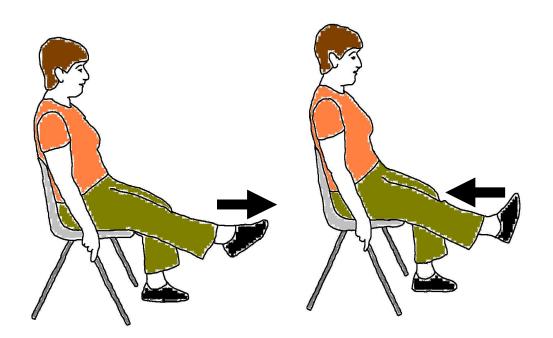
- Stand tall with your feet hip width apart
- Fold the arms in front of the chest or place one hand on the chair
- Lengthen and lift the trunk upwards then slowly turn the head and shoulders to the right
- Ensure you are only turning the upper body (not the hips)
- Return to the start position and repeat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





#### 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
- Do this 5 times then repeat on the other leg
- If the pull behind the knee is too intense, perform this exercise with the foot closer to the floor



#### **Strength exercises**

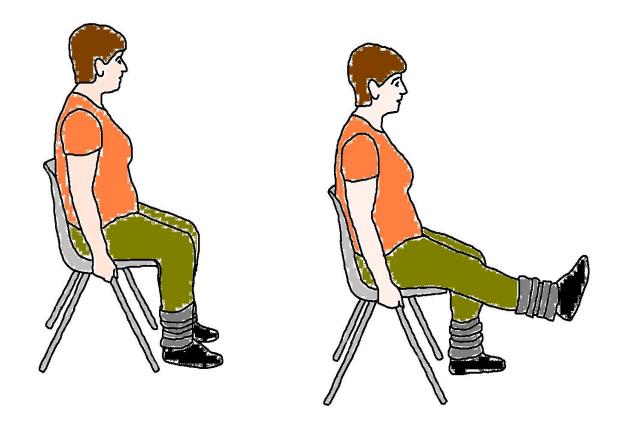
These are to help improve your bone and muscle strength.

Complete them all.

Put your ankle cuff weights on now.

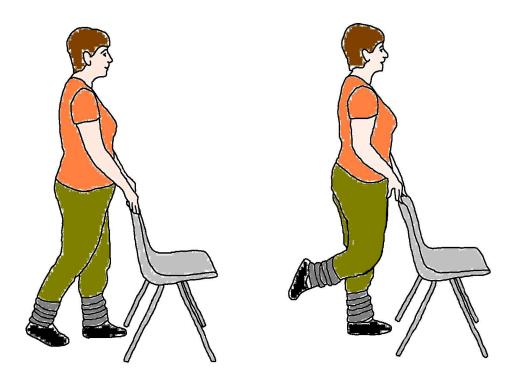
#### Front knee strengthening

- Sit back in the chair with your back supported and your feet under your knees
- Brush one foot along the floor then lift the weight slowly and straighten (but do not lock out) your knee
- Lower the foot with control
- Repeat \_\_\_\_\_ times on one leg then change legs
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time



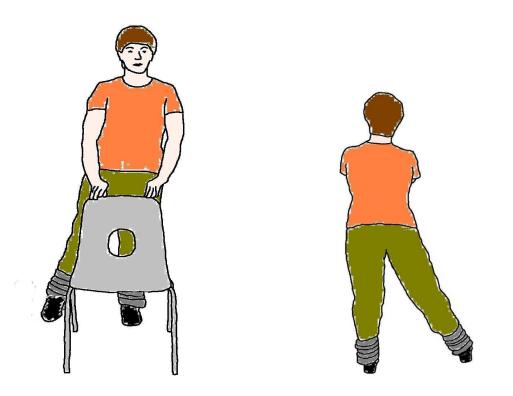
## **Back knee strengthening**

- Stand tall close to and holding your support
- Feet hip width apart and knees soft
- Brush the foot backwards along the floor (picture 1) then lift the heel slowly towards the bottom (picture 2)
- Keep the knees close together
- Lower the foot slowly
- Place the weight back over both feet to rest briefly
- Repeat \_\_\_\_\_ times on one leg then change legs
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time



## Side hip strengthening

- Stand tall with your feet hip width apart holding your support
- Lift the leg slowly out to the side keeping the toes pointing forwards
- Avoid leaning the body to the side
- Lower the leg slowly
- Place the weight back over both feet to rest briefly
- Repeat \_\_\_\_\_ times on one leg then change legs
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time



Take your ankle cuff weights off now.

#### Calf raises

- Stand tall with your feet hip width apart holding your support
- Slowly lift the heels keeping the weight over the big toes
- Avoid locking the knees
- Lower the heels slowly
- Repeat 10 to 20 times
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time



#### Toe raises

- Stand tall with the feet hip width apart, holding your support
- Slowly lift the toes keeping your knees soft
- Avoid sticking your bottom out
- Lower the toes slowly
- Repeat 10 to 20 times
- Aim to lift for a slow count of 3 and lower for a slow count of 5 each time



## **BALANCE EXERCISES**

These are to help improve your balance and stability and prevent falls.

Complete them all.

#### Knee bends supported

- Feet should be hip width apart, toes facing forwards
- Hold your support
- Bend the knees and push your bottom backwards as though you were going to sit down
- Ensure the heels do not lift
- Ensure the knees do not roll inwards
- Come back up to the start position
- Repeat \_\_\_\_\_ times



#### Knee bends no support

- 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
- Ensure the knees do not roll inwards
- Come back up to the start position
- Repeat \_\_\_\_\_ times



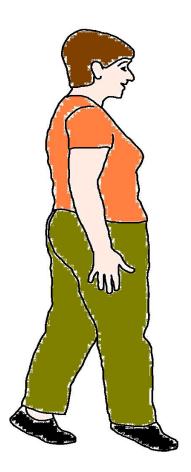
## Toe walking supported

- Stand side on to a support with feet hip width apart
- Lift the heels keeping the weight over the big toes
- Walk 10 steps forwards on your toes.
- Bring the feet level before lowering the heels to the floor
- Turn around towards the support then repeat the toe walking in the other direction
- Move steadily and with control



#### Toe walking no support

- Stand with feet hip width apart
- Lift the heels keeping the weight over the big toes
- Walk 10 steps forwards on your toes
- Bring the feet level before lowering the heels to the floor
- Turn around then repeat the toe walking in the other direction
- Move steadily and with control



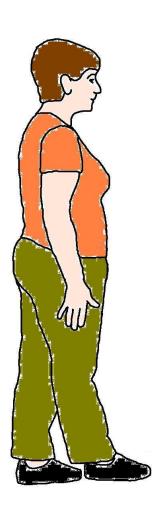
#### Heel toe stand supported

- Stand tall, side on to the support
- Place one foot directly in front of the other so that the feet form a straight line
- Look ahead and balance for 10 seconds
- Take the feet back to hip width apart before placing the other foot in front and balancing for another 10 seconds



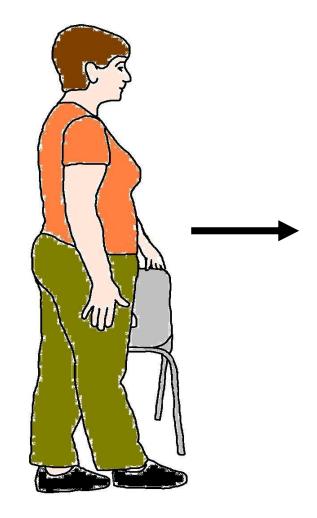
#### Heel toe stand no support

- Stand tall
- Place one foot directly in front of the other so that the feet form a straight line
- Look ahead and balance for 10 seconds
- Take the feet back to hip width apart before placing the other foot in front and balancing for another 10 seconds



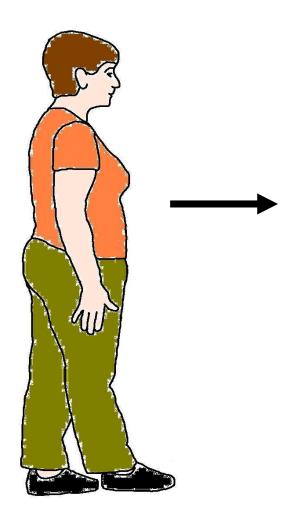
#### Heel toe walking supported

- Stand tall, side on to the support
- Walk 10 steps forwards placing one foot directly in front of the other so that the feet form a straight line
- Look ahead and aim for a steady walking action
- Take the feet back to hip width apart before turning towards your support then repeat the steps in the other direction



#### Heel toe walking no support

- Stand tall
- Walk 10 steps forwards placing one foot directly in front of the other so that the feet form a straight line
- Look ahead and aim for a steady walking action
- Take the feet back to hip width apart before turning around then repeat the steps in the other direction



#### One leg stand supported

- Stand close to and holding on to your support
- Balance on one leg keeping the support knee soft and upright posture
- Hold the position for 10 seconds
- Repeat on the other leg



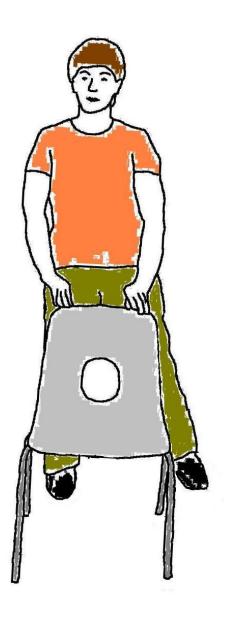
#### One leg stand no support

- Stand tall
- Balance on one leg keeping the support knee soft and upright posture
- Hold the position for 10 seconds
- Repeat on the other leg



#### Sideways walking supported

- Stand tall facing a support
- Take 10 sideways steps keeping the hips forward and the knees soft
- Repeat the other way



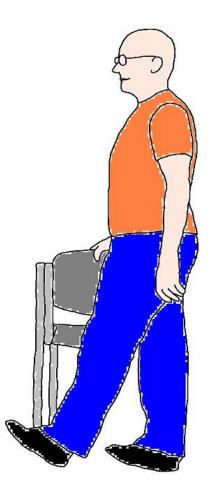
#### Sideways walking no support

- Stand tall
- Take 10 sideways steps keeping the hips forward and the knees soft
- Repeat the other way



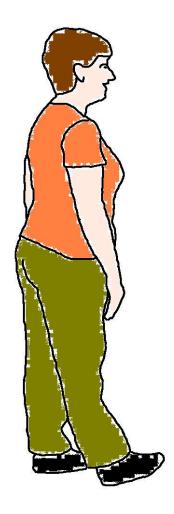
### Heel walking supported

- Stand side on to the support
- Lift the toes keeping the knees soft and the bottom tucked in
- Walk 10 steps on your heels
- Move steadily and with control
- Keep looking ahead
- Bring the feet together before lowering the toes to the floor
- Repeat the other way



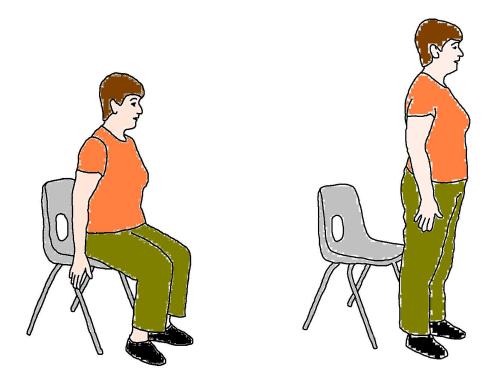
#### Heel walking no support

- Stand tall
- Lift the toes keeping the knees soft and the bottom tucked in
- Walk 10 steps on your heels
- Move steadily and with control
- Keep looking ahead
- Bring the feet together before lowering the toes to the floor
- Repeat the other way



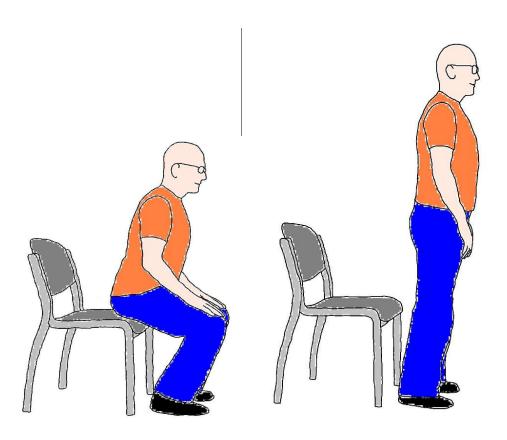
#### Sit to stand using hands

- Sit tall near the front of the chair
- Place your feet slightly back
- Lean forwards slightly
- Stand up (using your hands on the chair if needed)
- 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 times



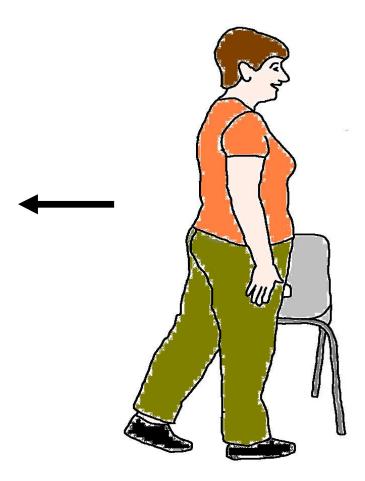
#### Sit to stand no hands

- Sit tall near the front of the chair with your hands on your thighs or folded across your chest
- Place your feet slightly back
- Lean forwards slightly
- Stand up
- Step back until your legs touch the chair then slowly lower your bottom back into the chair
- Repeat times



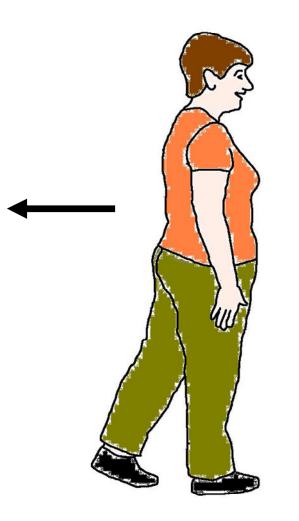
#### **Backwards walking supported**

- Stand side on to the support
- Walk backwards 10 steps
- Keep the back tall and look straight ahead throughout the exercise
- Use a toe through to heel action
- Keep the pace steady and controlled
- Repeat the other way



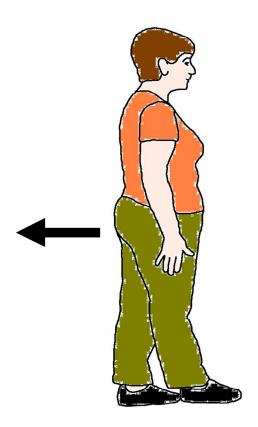
#### **Backwards walking no support**

- Stand tall
- Walk backwards 10 steps
- Keep the back tall and look straight ahead throughout the exercise
- Use a toe through to heel action
- Keep the pace steady and controlled
- Repeat the other way



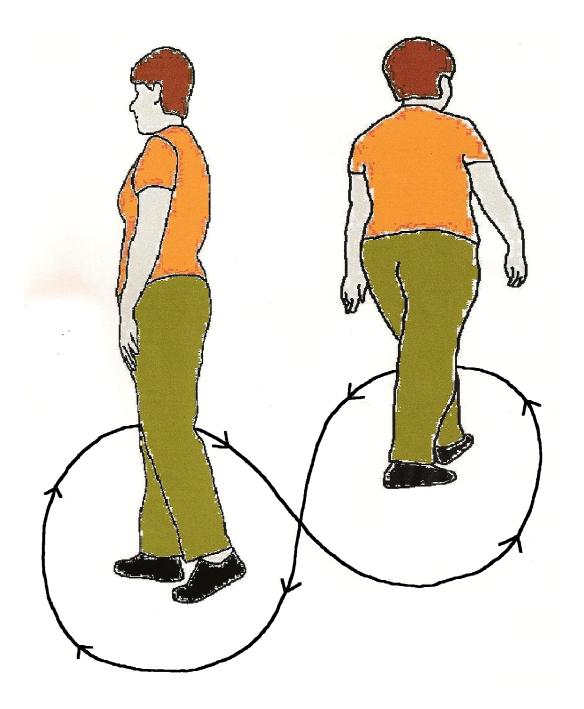
#### Heel toe walking backwards

- Stand tall
- Look straight ahead
- Place one foot directly behind the other touching the toe against the heel so the feet are in a straight line
- Continue walking backwards in this way for 10 steps
- Aim for a smooth walking action, rolling through the foot from toe to heel
- Place your feet hip width apart before turning then repeat in the other direction



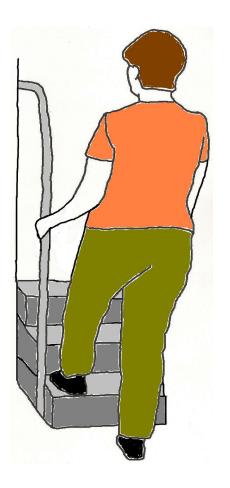
#### Walk and turn

- Walk at your usual pace in a figure of 8 shape (around 2 chairs if this is easier for you)
- Try to maintain upright posture as you walk
- Repeat this exercise twice only



#### Stair walking

- Hold the rail if you usually do, but try not to pull too much with your arms
- Use the strongest leg to lead on each step
- Place the foot fully on the stair
- Look down with the eyes (rather than bending forwards from the waist) to check your foot position
- At the top, take a rest then come back down leading with your weaker leg on each step
- Repeat \_\_\_\_\_ times

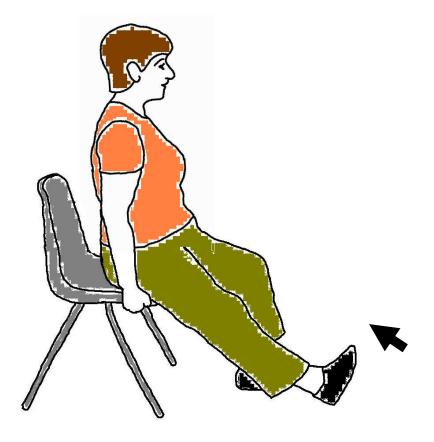


#### **Ending the session**

Perform the following stretches:

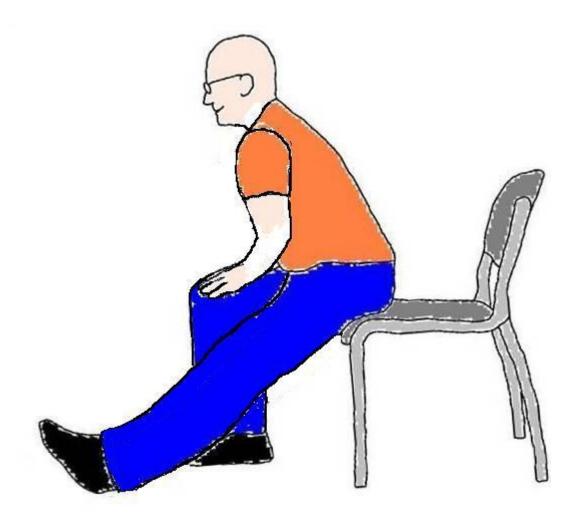
#### Calf stretch

- 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
- Release and repeat on the other side



#### 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
- Repeat on the other leg



## Walking

Aim for two 30 minute walks per week.

5 or 10 minute walks are an ideal way to get started. Progress the time until 30 minutes of continuous walking is achieved.

If possible, try to walk at a pace that makes you feel warmer and increases your breathing. You should still be able to talk as you walk. If you feel too puffed to talk, you are going too fast and need to slow down a little.

Wear loose, comfortable clothing and flat, supportive shoes.



# Well done! You have finished your exercises for today.

Try to do these home exercises **two more times** this week.

Set a day and a time aside for these sessions now.

#### **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.

It helps to keep an **exercise diary**. This will remind you when you last did your

exercises and is a place to note anything you want to ask or tell your exercise instructor. There is a diary on the next page you can use.

#### **EXERCISE DIARY**

Date	Comments
(eg. 2 June	(eg. Completed all exercises; Did not do a
2013)	specific exercise; feel you have improved
	doing a particular exercise; did some
	<u> </u>
	walking today)

#### Acknowledgments:

Text by Sheena Gawler, Research Associate, Research Department of Primary Care and Population Health, University College London Medical School; Co - Development Lead & Senior Tutor, Later Life Training.

Illustrations by Simon Hanna, Falls & Exercise Clinical Practitioner, Cambridgeshire Falls Service. Senior Tutor, Later Life Training. These illustrations are adapted from the original Otago Exercise Programme illustrations.

#### 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, Later Life Training, 2008, 2010, 2012.

#### With additional thanks to:

Steve Richardson, Crashed Inventors, for the "design" of the leaflet.

Professor John Campbell and Dr Clare Robertson for their permission to use the OTAGO Exercise Programme and for their continued collaboration with LLT.

Dr Susie Dinan-Young and Prof Dawn Skelton for their ongoing technical support.

This booklet has been translated from English by <mark>(insert your name and</mark> organization) on behalf of the ProFouND (Prevention of Falls Network for Dissemination) Thematic Network

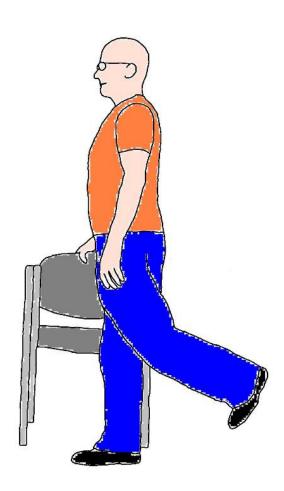


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## Postural Stability Strength & Balance Home Exercise Programme



## Safety

Ensure that the chair you use is sturdy and stable. Wear comfortable clothes and supportive footwear. Prepare a space and have your exercise band and a glass of water (for afterwards) ready before you start. 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).

If you experience pain in your joints or muscles, stop, **check your position** and try again. If the pain persists, seek advice from your Postural Stability Instructor.

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 enjoy yourself.

Aim to do these exercises twice per week **in addition** to your exercise class.

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

#### Warm up exercises

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

There are 4 warm up exercises.

Complete them **all**:

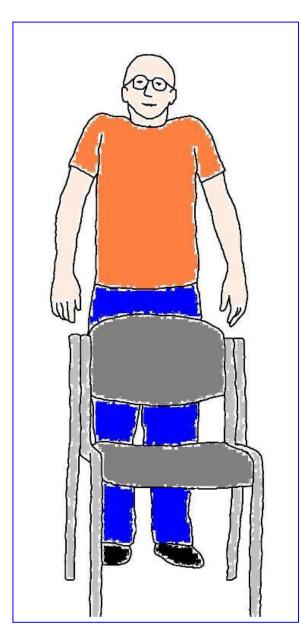
#### March

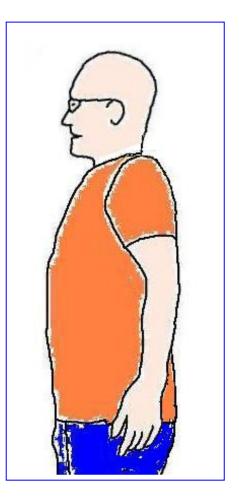
- Stand (or sit) tall
- Hold the back (or sides) of the chair
- March with control
- Build to a rhythm that is comfortable for you
- Continue for 1-2 minutes



#### **Shoulder circles**

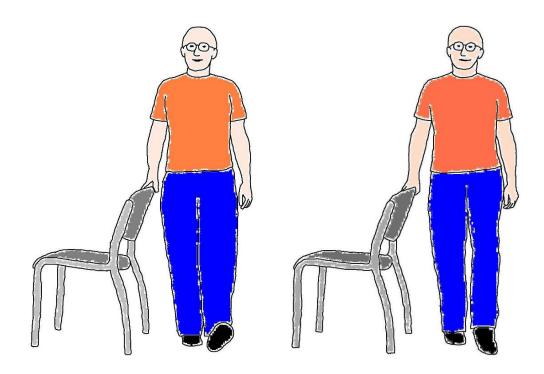
- Stand (or sit) tall with your arms at your sides
- Lift both shoulders up to your ears, draw them back then press them down
- Repeat slowly 5 times





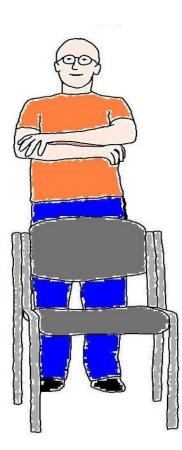
#### Ankle loosener

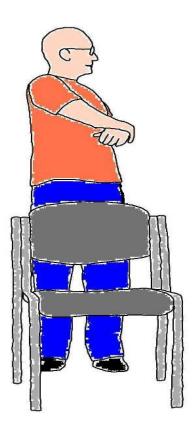
- Stand side on to (or sit tall at the front of) the chair
- Pull up tall
- Hold the back (or sides) of the chair
- Place the heel of one foot on the floor then lift it and put the toes down on the same spot
- Repeat 5 times on each leg



#### Spine twists

- Stand (or sit) very tall with your feet hip width apart
- Fold your arms across your chest
- Twist your upper body and head to the right keeping your hips forwards
- Repeat on the opposite side
- Repeat 5 times





#### Main exercises

There are 8 exercises in this section.

Complete them **all**.

Aim to do them twice per week on top of your exercise class and walks.

# The first 5 exercises are to help improve your balance.

#### Heel raises

- Stand tall holding a sturdy chair, table or the sink
- Raise your heels taking your weight over your big toe
- Hold for a second
- Lower your heels with control
- Repeat 10 times



#### Toe walk

- Stand tall and side on to your support
- Raise your heels (weight over big toe as before) then take 10 small steps forwards
- Bring your feet together then lower your heels with control
- Repeat in the other direction



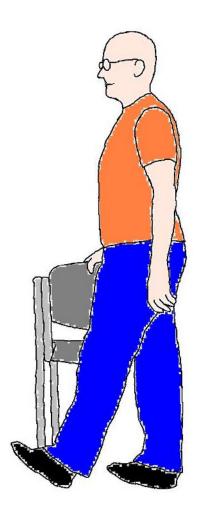
#### Toe raises

- Stand tall holding your support
- Raise your toes taking your weight back into your heels without sticking your bottom out
- Hold for a second
- Lower your toes with control
- Repeat 10 times



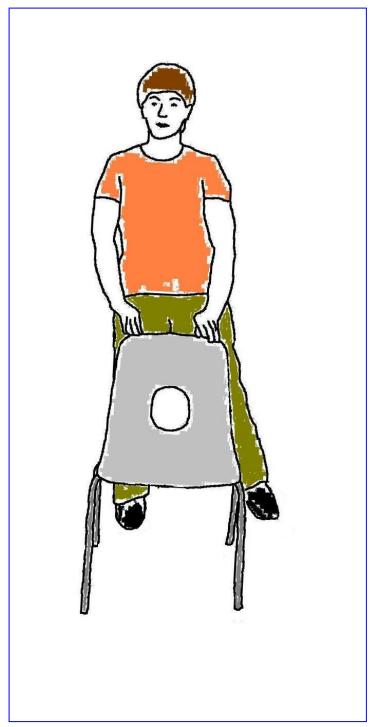
#### Heel walk

- Stand tall and side on to your support
- Raise your toes without sticking your bottom out then take 10 small steps forwards
- Lower your toes with control
- Repeat in the other direction



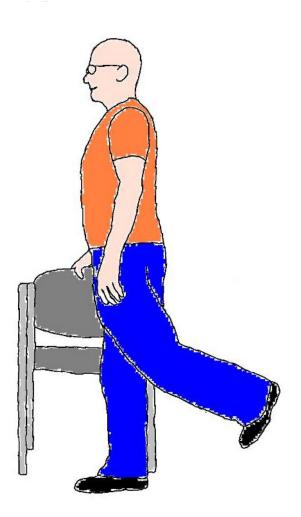
#### Side steps

- Stand tall facing your support
- Take a sideways step keeping the hips forward and the knees soft
- Repeat side to side 10 times, building to a comfortable rhythm



## Flamingo swings

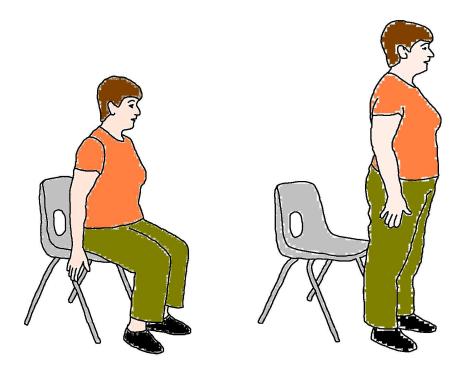
- Stand tall and side on to your support
- Swing the leg furthest from the chair forwards and back with control
- Perform 10 swings
- Repeat on the other leg



# The following 4 exercises are to help improve your bone and muscle strength.

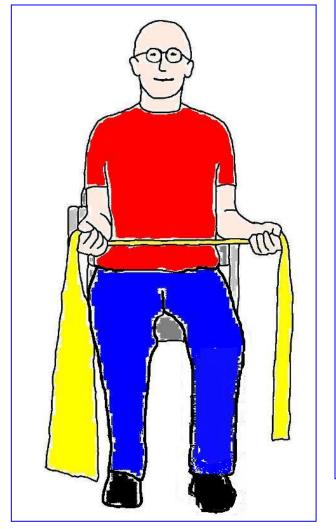
#### Sit to stand

- Sit tall near the front of the chair
- Place your feet slightly back
- Lean forwards slightly
- Stand up (using your hands on the chair if needed)
- Step back until your legs touch the chair then slowly lower your bottom back into the chair
- Repeat 10 times



## **Upper back strengthener**

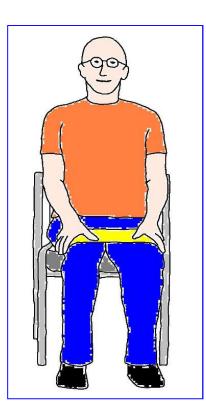
- Hold the band with your palms facing upwards and your wrists straight
- Pull your hands apart then draw the band towards your hips and squeeze your shoulder blades together
- Hold for a slow count of 5 whilst breathing normally
- Release, then repeat 7 more times

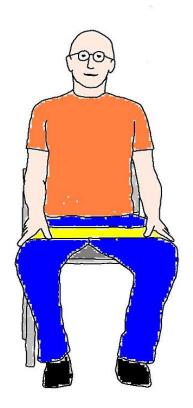




## **Outer thigh strengthener**

- Sit tall near the front of the chair with your feet and knees touching then wrap the band around your legs (keeping the band as flat as possible)
- Take your feet and knees back to hip width apart
- Push your knees outwards, keeping your feet flat on the floor and hold for a slow count of 5
- Release slowly, then repeat 7 more times

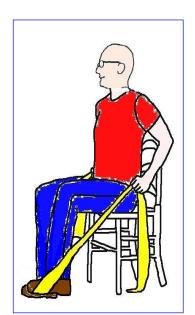




#### Thigh Strengthener

- Sit tall at the front of your chair
- Place the band under the ball of one foot and grasp it with both hands at knee level (picture 1)
- Lift your foot just off the floor then pull your hands to your hips (picture 2)
- Now press your heel away from you until your leg is straight and your heel is just off the floor (picture 3)
- Hold for a slow count of 5 then return to the starting position (picture 1)
- Repeat 6-8 times on each leg



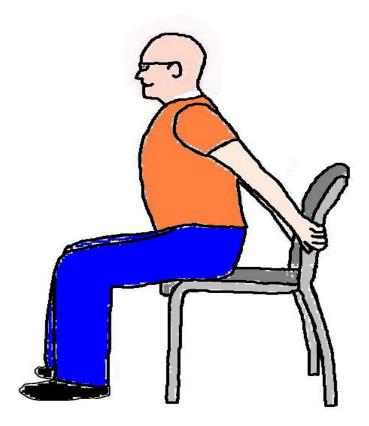


#### **Ending the session**

Finish by **marching** at a relaxed pace for 1-2 minutes then perform all of the following stretches:

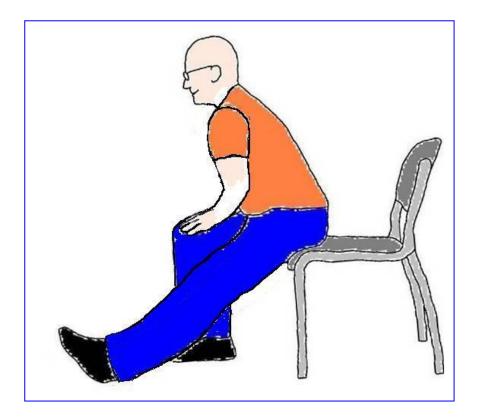
#### **Chest stretch**

- Sit tall away from the back of the chair
- Reach behind with both arms and grasp the chair back
- Press your chest upwards and forwards until you feel the stretch across your chest
- Hold for 10-20 seconds



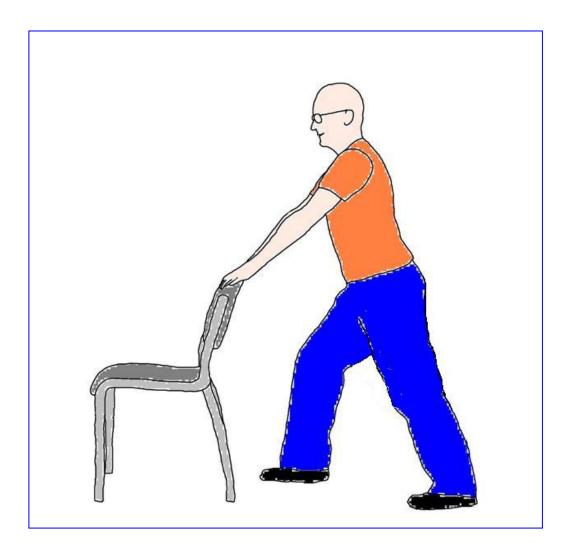
## **Back of thigh stretch**

- 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 10-20 seconds
- Repeat on the other leg



# Calf stretch

- Stand behind the chair holding on with both hands
- Step back with one leg and press the heel down
- Check that both feet face directly forwards
- Feel the stretch in your calf
- Hold for 10-20 seconds
- Repeat on the other leg



# Well done! You have finished your exercises for today.

Try to do these home exercises **two more times** this week. Set a day and a time aside for these sessions now.

#### **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. It helps to keep an **exercise diary**. This will remind you when you last did your exercises and is a place to note anything you want to ask or tell your exercise instructor. There is a diary on the next page you can use.

#### **EXERCISE DIARY**

Date	Comments
(eg. 2 June	(eg. Completed all exercises; Did not do a
2013)	specific exercise; feel you have improved
<i>"</i>	doing a particular exercise; did some
	walking today)

#### Acknowledgments:

Text by Sheena Gawler, Research Associate, Research Department of Primary Care and Population Health, University College London Medical School; Co - Development Lead & Senior Tutor, Later Life Training.

Illustrations by Simon Hanna, Falls & Exercise Clinical Practitioner, Cambridgeshire Falls Service. Senior Tutor, Later Life Training. These illustrations are adapted from the original Otago Exercise Programme illustrations.

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

The Postural Stability Instructor Manual, Later Life Training, 2008, 2010, 2012.

Skelton DA, Dinan S et al. Tailored group exercise reduces falls in community dwelling older frequent fallers; an RCT, Age and Ageing. 2005, Vol 34, p636-639.

Skelton DA, et al. Bone Mineral Density Improvements Following FaME in Frequently Falling Women Age 65 and Over: An RCT. Journal Aging and Physical Activity 2008; Vol 16: pS89-90.

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# Chair-based Home Exercise Programme



#### Safety

Ensure that the chair you use is sturdy and stable. Wear comfortable clothes and supportive footwear. Prepare a space and have your exercise band and a glass of water (for afterwards) ready before you start.

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).

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

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 enjoy yourself.

Aim to do these exercises twice per week **in addition** to your exercise class.

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

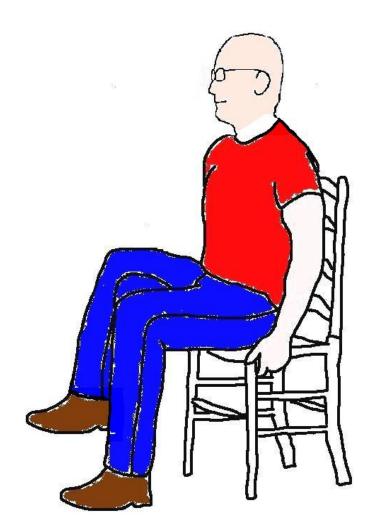
#### Warm up exercises

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

Complete **all** the warm up exercises:

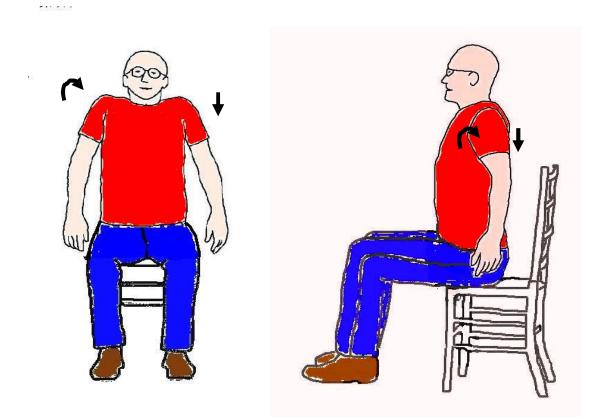
### March

- Sit tall at the front of the chair
- Hold the sides of the chair
- March with control
- Build to a rhythm that is comfortable for you
- Continue for 1-2 minutes



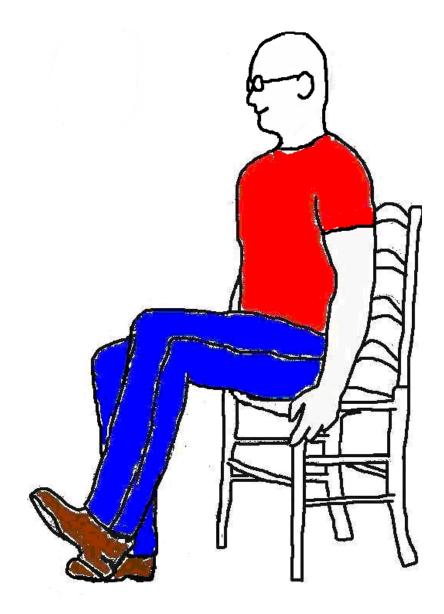
#### **Shoulder circles**

- Sit tall with your arms at your sides
- Lift both shoulders up to your ears, draw them back then press them down
- Repeat slowly 4 times



#### Ankle loosener

- Sit tall at the front of the chair
- Hold the sides of the chair
- Place the heel of one foot on the floor then lift it and put the toes down on the same spot
- Repeat 4 times on each leg



## Spine twists

- Sit very tall with your feet hip width apart
- Place your right hand on your left knee and hold the chair back with your left hand
- Twist your upper body and head to the left
- Repeat on the opposite side
- Repeat 3 more times each way



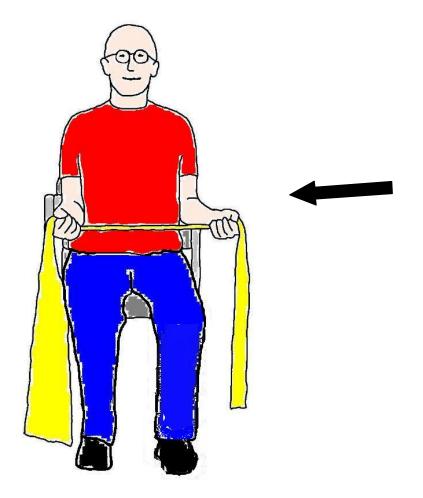
#### Main exercises

There are **8 exercises** in this section. They are to help improve your bone and muscle strength.

Complete them **all**.

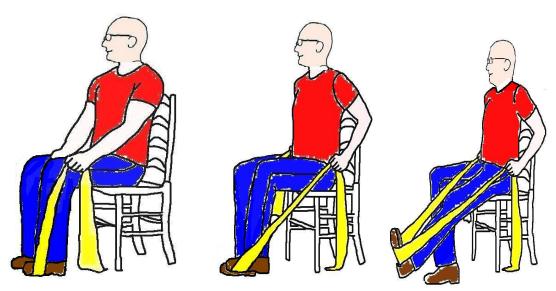
# **Upper back strengthener**

- Hold the band with your palms facing upwards and your wrists straight
- Pull your hands apart then draw the band towards your hips and squeeze your shoulder blades together
- Hold for a slow count of 5 whilst breathing normally
- Release, then repeat 7 more times



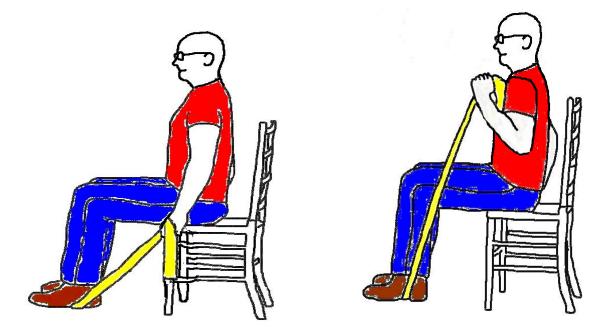
# **Thigh Strengthener**

- . Sit tall at the front of your chair
- Place the band under the ball of one foot and grasp it with both hands at knee level (picture 1)
- Lift your foot just off the floor then pull your hands to your hips (picture 2)
- Now press your heel away from you until your leg is straight and your heel is just off the floor (picture 3)
- Hold for a slow count of 5 then return to the starting position (picture 1)
- Repeat 6-8 times on each leg



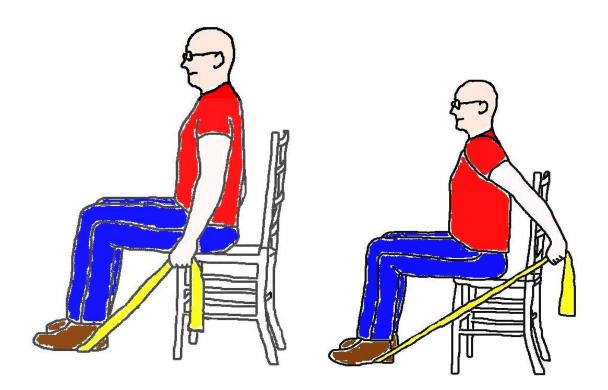
# Arm curl

- . Sit tall at the front of your chair
- Place one end of the band securely under both feet and grasp it with one hand at about knee level (picture 1)
- Now curl your fist slowly towards your shoulder keeping your wrist straight and your elbow close to your side (picture 2)
- Slowly lower
- Repeat 6-8 times on each arm



#### **Backward press**

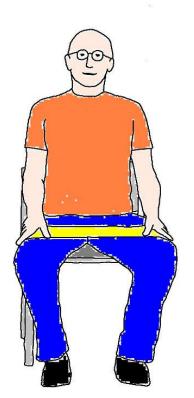
- Sit tall at the front of your chair
- With the band securely under both feet, grasp it with one hand with the arm down by your hip (picture 1)
- Now pull your arm backwards keeping your chest facing forwards (picture 2)
- Hold for a slow count of 5 then relax
- Repeat 6-8 times on each arm



# **Outer thigh strengthener**

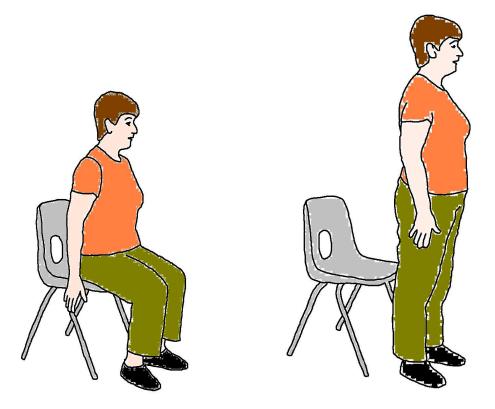
- Sit tall near the front of the chair with your feet and knees touching then wrap the band around your legs (keeping the band as flat as possible)
- Take your feet and knees back to hip width apart
- Push your knees outwards and hold for a slow count of 5
- Release, then repeat 7 more times





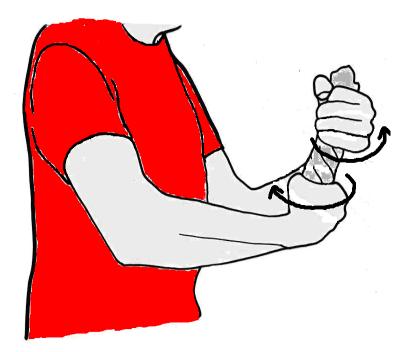
#### Sit to stand

- Sit tall near the front of the chair
- Place your feet slightly back
- Lean forwards with a straight back
- Stand up (using your hands on the chair if needed)
- Step back until your legs touch the chair then slowly lower your bottom back into the chair
- Repeat 4 to 8 times



#### Wrist strengthener

- Fold or roll your band into a tube shape
- Sit tall then squeeze the band tightly with both hands, hold for a slow count of 5 then release
- Make this exercise more challenging by squeezing then twisting your band before holding for 5 seconds
- Repeat this exercise 6-8 times



## **Pelvic floor strengtheners**

#### Exercise 1

Tighten the muscles around your back and front passages and lift up inside as if trying to stop passing wind and urine at the same time.

Avoid

- squeezing your legs together
- tightening your buttocks
- holding your breath

Try to hold the contraction for **10 seconds**. Rest for 4 seconds, then repeat. Perform this **10 times**.

#### **Exercise 2**

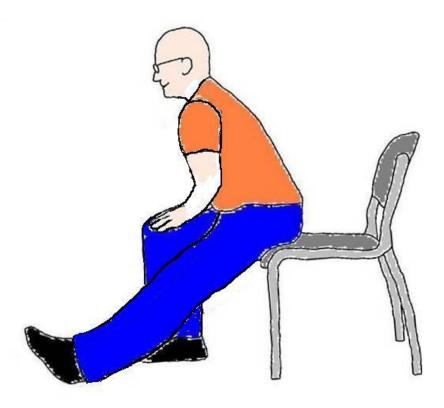
Perform **10 quick contractions** by drawing up the pelvic floor as fast as possible, holding for just one second then releasing.

## **Ending the session**

Finish by **marching** at a relaxed pace for 1-2 minutes then perform all of the following stretches:

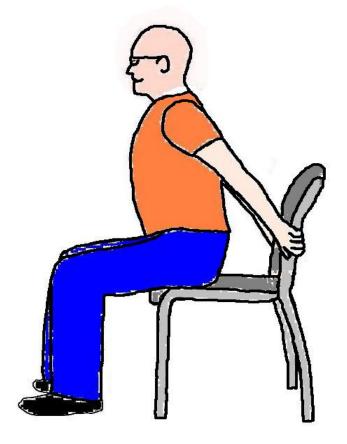
# **Back of thigh stretch**

- 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 10-20 seconds
- Repeat on the other leg



#### **Chest stretch**

- Sit tall away from the back of the chair
- Reach behind with both arms and grasp the chair back
- Press your chest upwards and forwards until you feel the stretch across your chest
- Hold for 10-20 seconds



# Calf stretch

- Sit forwards in your chair and hold the sides
- Straighten one leg placing the heel on the floor
- Pull your toes up towards the ceiling
- Feel the stretch in your calf
- Hold for 10-20 seconds
- Repeat on the other leg



# Well done! You have finished your exercises for today.

Try to do these home exercises at least **one more time** this week. Set a day and a time aside for a second session now.

It helps to keep an **exercise diary**. This will remind you when you last did your exercises and is a place to note anything you want to ask or tell your exercise instructor. There is a diary on the next page you can use.

# **EXERCISE DIARY**

Date	Comments
(eg. 2 June 2011)	(eg. Did not do a specific exercise, feel y have improved doing a particular exercise

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Skelton DA, McLaughlin A. Training functional ability in old age. Physiotherapy, 1996, Vol 82, p159-167.

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