KEEP SAFE STAY WELL SERVICE

A HOME EXERCISE PROGRAMME

Keeping Fit, Preventing Falls

Abu Ambia, Physiotherapist
Welcome to your home exercise programme!

The exercise programme is designed to keep you fit, preventing falls. Exercises in this booklet will help improve your bone, muscle strength and balance.

The benefits of exercise are plentiful. By continuing regular physical exercise, you can improve:

- General cardiovascular (heart and blood vessels) health
- Physical function - joint flexibility and muscle strength
- Balance, and reduce the risk of falls
- Life satisfaction, by reducing anxiety, stress and depression
- A good nights sleep, and also you can develop a healthy appetite
- Bowel function and help tackling constipation
- Cognition, improve memory and slow down mental decline
- General wellbeing

Exercise also reduces the risk of some types of cancer (in particular breast and colon cancer), stroke and type-2 diabetes.
The programme is divided into three sections:

**Section 1: Warm up Exercises**

**Section 2: Exercises to help improve bone and muscle strength**

**Section 3: Exercises to help improve your balance**

You need to do the prescribed exercises at least three times per week. You can divide the exercises up, they do not all have to be done at the same time. If you are able, try to do the exercise standing up. If not, then try it sitting down.

You may feel a little stiff after you first start to exercise. This is quite normal. It is because you are using muscles that may not be used to exercising. It is important that you keep on exercising. The stiffness will leave as your body becomes more familiar with exercise.

**Safety**

For seated exercises ensure that the chair you use is sturdy and stable. For standing exercises always use something secure like a work top or heavy table. Never use something that might move.
Wear comfortable clothes and supportive footwear. While exercising, if you experience:-

- Dizziness
- Chest pain
- Severe breathlessness (you are unable to speak because you are short of breath)

You should seek medical advice from your GP or other relevant health professionals.

If you experience pain in your joints or muscles, stop, check your position and try again. If the pain persists, seek medical advice. Remember some aching after exercise is normal but you should not experience pain.

**Family members and carers**

Your support and supervision is vital to keep an older person with mental health needs active and stimulated.
Exercise is beneficial for physical and mental health and can improve the quality of life for people in all stages of dementia. It can provide a welcome distraction from stresses of the illness and can help the person focus on the positive and fun aspects of life.

*Remember* exercising together is beneficial to the person with dementia and anyone accompanying them.

Exercise burns up the adrenaline produced by stress and frustration, and releases endorphins (feel good hormones), which can promote feelings of happiness. This will help both parties relax and increase their sense of well being.

**Walking**

Walking is an excellent way to enhance your general fitness. Try going for a walk on the days between your exercises.

Try to increase the distance you walk and the time you spend walking.

Always make sure you wearing comfortable and supportive shoes and comfortable clothing.

Make sure you start with a warm up - marching on the spot for two minutes.

If you’d rather not go walking alone, why not ask visitors to go for a short stroll with you before you settle down to tea and biscuits!
When you walk make sure

- The shoulders are relaxed and the arms gently swing.
- Look ahead, not down.
- With each step the heel lands first, then you push off on the toes.
- Finish with a warm down - marching on the spot for two minutes.
- Enjoy yourself!
Getting up after a long sit down

As we get older, messages take longer to get from our brain to our muscles; also our joints tend to stiffen. So if you have been sat down for a while, it is good idea to do a few seated exercises before getting up. This will help get your circulation going, loosen your joints and prepare your body to get up and get moving and so reduce the risk of falls.

Try:-

- Marching on the spot for half a minute
- Flexing your ankles up and down
- Stretching your knees out in front of you - one at a time
- Opening and closing your hands a few times

Remember, as you go to stand up

- Move your bottom forward to the front of the chair
- Tuck your feet under you, one slightly in front of the other
- Lean forward, “nose over toes” and head up
- Push up to stand
Section 1: Warm-up exercises

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

There are eight warm-up exercises in this section.

Please complete them all.
### Chair march
- Sit tall, away from the back of chair.
- Hold the sides of the chair.
- March on the spot, alternately lifting your feet and placing them down with control.
- Build up to a comfortable rhythm.
- Continue for 30 seconds.

### Arm swings
- Sit tall, away from the back of chair.
- Place your feet flat on the floor.
- Bend your elbows and swing your arms from the shoulder.
- Build up to a comfortable rhythm.
- Continue for 30 seconds.
Shoulder circles

- Sit tall, arms relaxed at your sides.
- Lift both shoulders up to your ears, draw them back, then press them down. Repeat slowly 5 times.

Ankle loosener

- Sit tall, away from the chair back.
- 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 5 times on each leg.
**Spine twists**

- Sit tall with your feet flat on the floor.
- Place your right hand on your left knee and left hand behind you on the chair back or side of the chair.
- Turn your upper body and head towards your left as far as you can, comfortably.
- Repeat on the opposite side. Repeat 5 times

**Chest stretch**

- Sit tall away from the chair back.
- Reach behind with both arms and hold the chair back.
- Gently press your chest forwards and upwards until you feel a stretch across your chest.
- Hold for count of 20 - 30 seconds.
Calf stretch
- Sit at the front of the chair.
- Straighten one leg out in front, keeping the heel on the floor.
- Pull your toes up towards you.
- Hold this position for a count of 20 - 30 seconds.
- Repeat on the other leg.
- Ensure you feel the stretch in the calf muscle.

Hamstring stretch
- Sit at the front of the chair.
- Straighten one leg out in front, keeping your heel on the floor.
- Place both hands on your other leg (the bent knee) and sit tall.
- Lean forwards keeping your head and chest up until you feel the stretch in the back of your thigh.
- Hold the position for 20 - 30 seconds.
- Repeat on the other leg.
Section 2

Exercises to help improve bone and muscle strength

Use the resistance band or ankle weight, if you were issued one
**Wrist**

- Roll up a towel and hold with both hands.
- Squeeze hard and twist towel by bringing your elbows close to your body.
- Hold for a count of 5, *don’t* hold breath. Relax and repeat 10 times.

**Upper back**

- Hold the resistance band with your palms facing upwards and your wrist straight.
- Keep your elbows close to your body.
- Pull your hands apart then draw the bands towards your hips and squeeze your shoulder blades together.
- Hold for slow count of 5 whilst breathing normally.
- Release. Repeat 10 times
Arms curls
- Sit tall at the front of the chair.
- Place the end of the resistance band securely under both feet and grasp it in one hand at knee level.
- Bend your elbow slowly towards your shoulder keeping elbow close to your side.
- Lower the hand slowly.
- Repeat 10 times on each arm.

Outer thigh
- Sit tall at the front of the chair with your feet hip width apart and knees touching.
- Wrap the band around your thighs keeping the band as flat as possible.
- Now take your knees outwards for a slow count of 3. Repeat 10 times.
Thigh strengthener
- Sit tall at the front of the chair.
- Place the band under the ball of one foot and grasp it with both hands at the knee level.
- Lift your foot just off the floor and pull your hands to hips.
- Now straighten your knee by pushing your foot firmly downwards against the band.
- Hold for slow count of 5 then return to the start position. Repeat 10 times on each leg.

Sit to stand
- Move your bottom forward to the front of the chair.
- Tuck your feet under you, one slightly in front of the other.
- Lean forward, “nose over toes” and head up.
- Stand up without using hands (use your hands on the chair if needed).
- Step back until your legs touch the chair then SLOWLY lower to sit. Repeat 5 to 10 times.
**Front knee strengthening**

- Sit back in chair, back straight.
- Strap the weight around your ankle, if you were issued with one.
- Slowly straighten one leg.
- Hold for a count of 2-5.
- Repeat 10 times. Repeat on the other leg.

**Back of knee strengthening**

- Strap the ankle weight round your ankle.
- Stand tall with both hands on a stable table or kitchen worktop.
- Bend your knee, slowly bringing the foot towards your bottom, keeping your knee beside your other knee.
- Lower the leg with control.
- Place your weight evenly over both feet to rest. Repeat 10 times on each leg.
Side hip strengthening

- Strap the ankle weight round your ankle.
- Stand tall beside the table or kitchen worktop, keeping one or two hands for support.
- Lift the leg slowly out to the side keeping the leg straight.
- Lower the leg with control.
- Place your weight evenly over both feet to rest. Repeat 10 times on each leg.

Important:
Take your ankle cuff weight off now
Calf raises
- Stand tall holding a sturdy table, chair or kitchen worktop.
- The feet are shoulder width apart.
- Slowly go up onto 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 holding a sturdy table, chair or kitchen worktop.
- Feet hip width apart.
- 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.
Section 3
Exercises to help improve your balance
Knee bends
- Stand facing a kitchen sink or a sturdy table.
- Feet hip width apart.
- Hover hands over sink ready to hold on if you lose your balance.
- Bend the knees and push your bottom backwards as though you are going to sit down.
- Ensure the heels do not lift.
- Slowly push through both feet and stand up again. Repeat 3 x 10 times.

Toe walking
- Stand up tall beside a kitchen worktop.
- Hold on and look ahead.
- Come up on your toes.
- Walk 10 steps on your toes.
- Lower your heels to the ground and turn around.
- Walk 10 steps on your toes. Repeat 5 times.
**Tandem (heel toe) standing**

- Stand up tall facing kitchen sink.
- Hover hands over sink ready to hold on if you lose your balance.
- Place one foot directly in front of other so that the feet form a straight line.
- Look ahead and balance for 10 seconds.
- Swap other foot in front and repeat.

**Heel toe walking**

- Stand up tall beside kitchen worktop.
- Hold and look ahead.
- Place one foot directly in front of other so that the feet form a straight line.
- Place the other foot directly in front. Repeat 10 more steps.
- Turn around. Repeat exercise 5 times.
### One leg stand
- Stand up tall beside the table or worktop.
- Look straight ahead.
- Balance on one leg keeping your knees close together.
- Hold this position for 10 seconds.
- Place your foot down and repeat on the other leg.

### Sideways walking
- Stand tall facing kitchen worktop.
- Hover hands over worktop ready to hold on if you lose your balance.
- Take 10 steps to the right keeping the hips forward and knees soft. Repeat the other way.
Heel walking

- Stand tall beside a table or kitchen worktop.
- Hold on and look ahead.
- Walk 10 steps on your heels.
- Lower your toes to the ground and turn around.
- Walk 10 steps on your heels. Repeat 5 times.

Backwards walking

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

- Your physiotherapist will advise you on stair practice.
Ending the programme

Finish by chair marching at relaxed pace for 1-2 minutes (Page 8), and then repeat the last three stretches from the warm up - Chest stretch (Pg 10) - Hamstring (Pg 11) - Calf stretch (Pg 11)

Well done! You have completed your exercises for today.

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

Exercise 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 your index fingers. Make sure you master balancing each stage before progressing to the next.

Acknowledgements

I would like to acknowledge the following content resources:
The Otago Exercise Programme, Professor John Campbell & Dr Clare Robertson. ACC New Zealand, 1997.
Otago exercises leaflet, physiotherapy department, Ashford & St. Peter’s Hospital NHS Trust
A guide to dementia science, Alzheimer’s Society publication,
Preventing falls, strength and balance exercises for healthy ageing, Age UK.