



## **Cardiac Rehabilitation Service**

# **Seated Home Exercise Booklet**



This booklet is designed to be used by people who are attending, or who have attended, Cardiac Rehabilitation.

Only use the booklet if you have been instructed to do so by a health professional.

HEART RATE TARGET RANGE: \_\_\_\_\_

### **The Key Physical Activity Points for a Healthier Heart**

- Aim to build up to 150 minutes of cardiovascular exercise per week
- Aim to do 2-3 sessions of resistance exercise per week
- Be less sedentary. Sit less, move more!

### **Why Do Cardiovascular Exercise?**

Cardiovascular exercise is a very important part of looking after your heart health, and helps prevent further problems with your heart.

It improves overall health including strengthening the heart muscle, reducing high blood pressure, helping to control cholesterol levels.....and much more!

It helps to improve muscle strength, flexibility, balance and bone health.

Also, exercise helps to reduce stress and anxiety, improves sleep patterns and general mental wellbeing.

*There are some exercises that are not recommended, such as heavy weight lifting, squash and sprinting.*

*Please talk to one of the Cardiac Rehabilitation Team if you are unsure.*

### **When Not To Exercise**

- Immediately after a meal (allow 1 hour)
- If you have CHEST PAIN or SEVERE SHORTNESS OF BREATH
- If you are dizzy or unwell

*If you are worried, consult your GP or phone 111 (NHS Helpline) for advice. In an emergency call 999*

## How Often Should I Exercise?

- Aim to do some activity every day e.g. walking, gardening, housework, etc.
- Aim to build up to at least 150 minutes of moderate intensity exercise each week, this could be 20 minutes every day or 30 minutes 5 times a week or lots of 10 minute slots.

In addition, do some resistance based exercise 2-3 days a week to improve muscle strength (see resistance exercises later).

## How Hard Should I Exercise?

You should aim to exercise at a moderate intensity for you. This should raise your heart rate, make you feel warmer and breathe a little harder but so that you can still talk. (See the modified Borg Scale at the end).

Start slowly and build up your activity levels.

Set yourself an achievable goal (this can be revised from time to time).

MY GOAL IS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Before participating in exercise at home it is important to ensure your safety is a priority, below are some key safety points.

- Ensure you have enough room to perform the activity safely, with good lighting. The space around you needs to be clutter free and well ventilated.
- Wear clothing that is free moving, non-restricting and appropriate for exercise. Footwear should ideally be flat shoes or trainers with support and comfort.
- Have a phone nearby (wear your pendant alarm if you have one), and where possible exercise when someone else is at home in case you need assistance.

- Have your GTN Spray/Inhalers/Diabetic Snack Kit (if applicable) nearby.
- Have a bottle/glass of water nearby to have regular sips from during your exercise session.
- Make sure you rest. Listen to your body and rest when you need to.
- Make sure any equipment you are using is safe.

## **Warming Up and Cooling Down**

Each time you do any moderate exercise it is important to warm up first and cool down afterwards.

Warming up means beginning your exercise slowly and building up gradually. This is important because the heart is a muscle and the warm up helps the heart rate to rise slowly and stretches the other muscles, so they are ready for exercise.

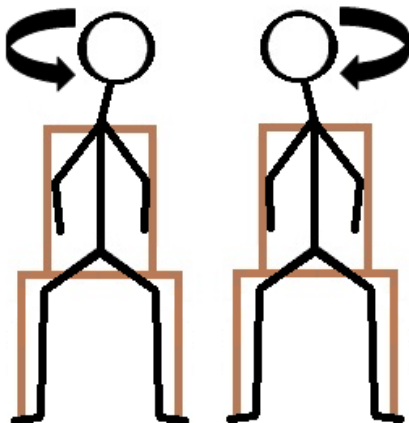
When you come to the end of your exercises or activity take some time to also slow down, don't stop suddenly. Cooling down is important for ending activity safely and allowing your heart, circulation and muscles to recover from the effect of exercise.

This booklet contains a 5+ minute warm up, 16 main exercises, and a 5 minute cool down for you to follow.

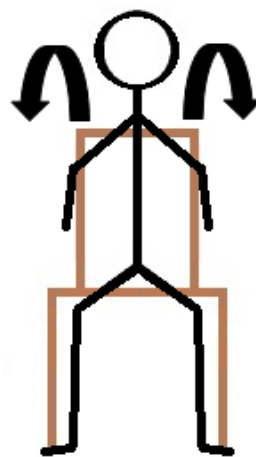
To warm up, follow the below seated warm up exercises, these should take 5+ minutes to do, and should be done at a light level of effort for you, and performed to a comfortable range of movement. (See the Borg rating of perceived exertion scale toward the back of this booklet for "Light level"),

## Warm up exercises

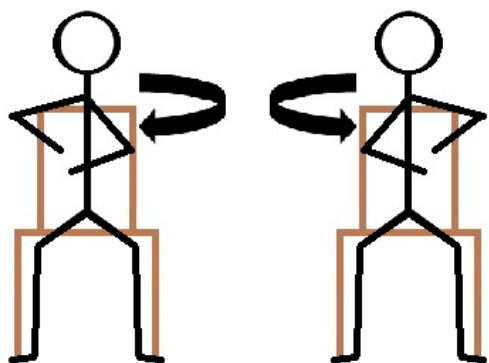
1. Turn and look (x 5 times slowly each way)



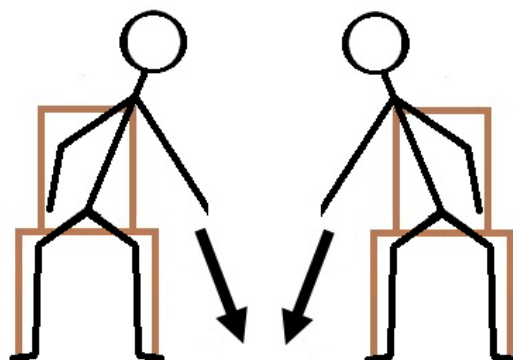
2. Shoulder rolls (x 5 rolls forward, x 5 rolls back)



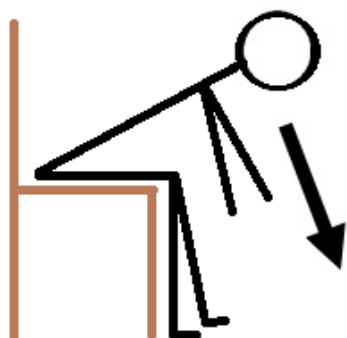
3. Thoracic rotations x 5 each side



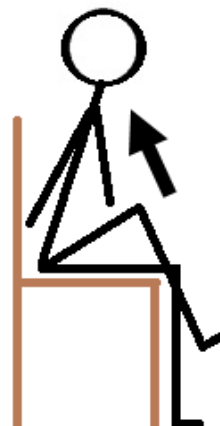
4. Side reach toward floor x 5 each side



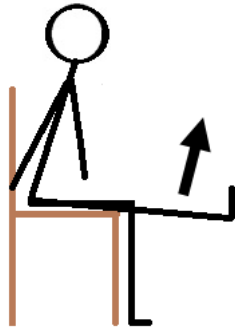
5. Forward bend toward floor x 5



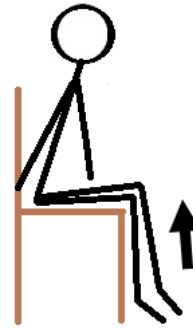
6. Knee lifts - alternating legs x 10



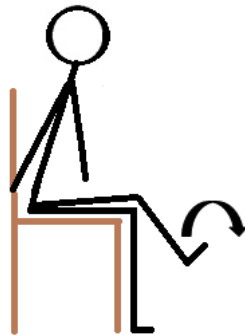
7. Single knee extensions - alternating legs x 10 (Brief hold at top)



8. Rocking from heels to toes to warm up calf muscles x 10



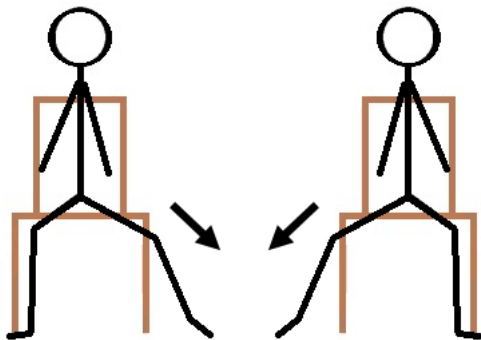
9. Ankle circles x 5 circles each direction, per leg



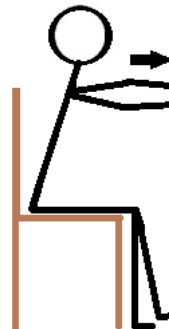
10. Heel digs forward, toe taps back x 10 each side



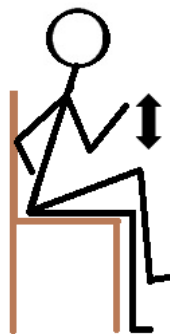
11. Side toe taps x 10 per side



12. Punches forward (Both arms together) x 10 punches



13. Seated march x 1 minute



You have now completed your 5+ minute warm up and have prepared your body for your main exercises over the next few pages.

## Main Exercises

If you are going to do the main exercises in this booklet follow the order shown, and aim to spend 1-2 minutes on each exercise. If this is one of your first few sessions, start at 1 minute per exercise and gradually increase the time over several weeks, as and when the exercises are feeling a little easier, to steadily increase your fitness.

These main exercises should be done at a “moderate level” of effort for you (See the Borg rating of perceived exertion scale toward the back of this booklet for “Moderate level”).

### Main seated exercises 1 – 2 minutes per exercise

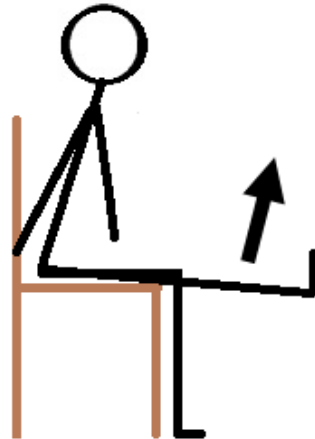
1. **Heel digs forward, toe taps back:** Dig your heels forward into the floor, one leg at a time, then tap your toes back one leg at a time- Keep repeating for time set.



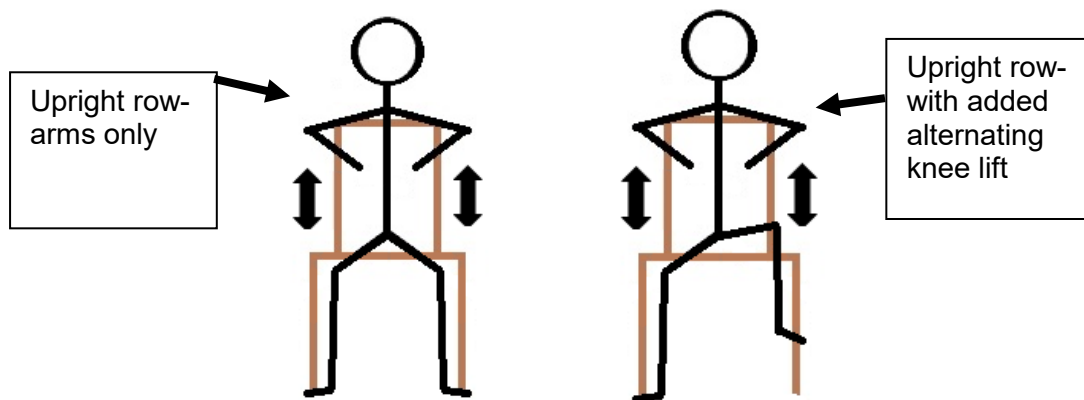
2. **Punches with both arms:** Punch forward with both arms x5, Punch down with both arms x5. Keep repeating for time set, alternating between forward and downward punches.



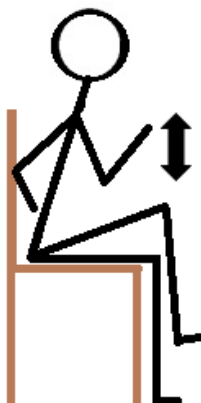
3. **Alternating knee extension:** Slowly straighten one leg at the knee, have a short pause when the leg is straight and contract your thigh muscles for 3-5 seconds, before slowly lowering, repeat on other leg. Keep repeating process for time set, alternating legs.



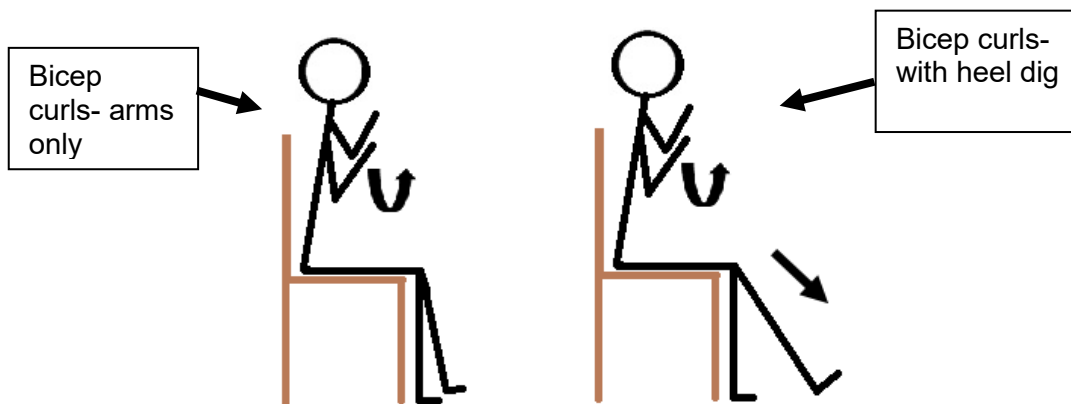
4. **Upright row:** Lift your elbows upward, just below shoulder height, gently squeeze your shoulder blades toward each other, then slowly lower your arms back down by your side. Add an alternating knee lift, as you perform upright row if able. Keep repeating process for time set.



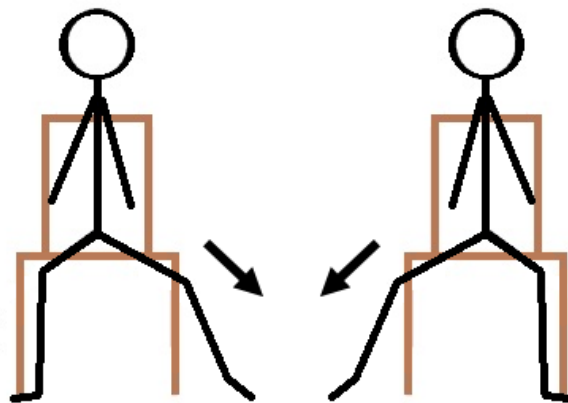
5. **Seated march:** alternating opposite arm and knee lifts- work to a moderate pace for you. Keep repeating process for time set.



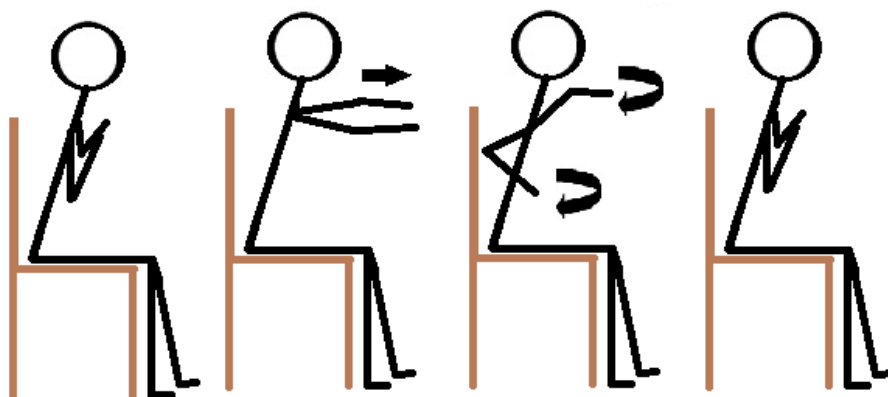
6. **Bicep curls:** Bend your elbows and lift your hands up toward your shoulders, slowly lower your arms back down. Repeat process for time set. Add alternating heel digs forward, as you perform the bicep curl if able.



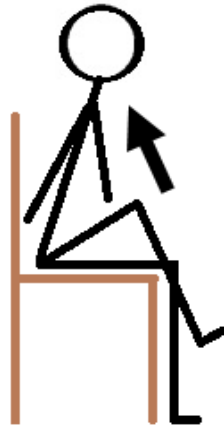
7. **Side toe taps:** Lift one leg and tap your toes on the floor out to the side. Bring that leg back to start position, and repeat on the other leg. Keep repeating process for time set.



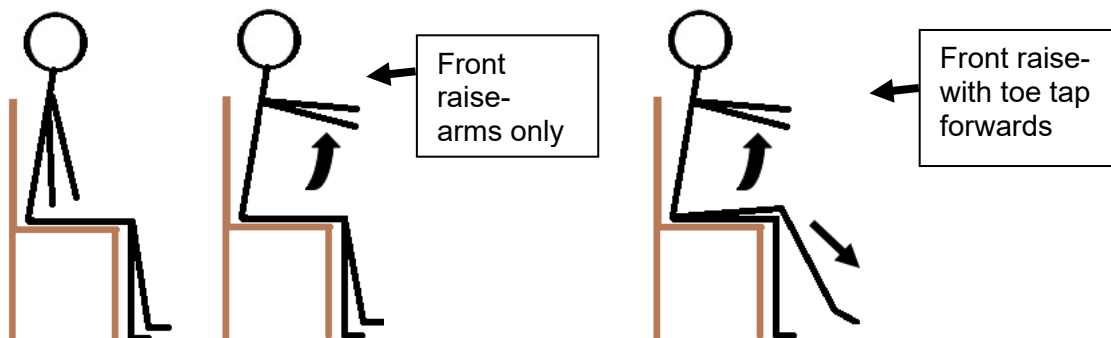
8. **Swim:** reach forward with both arms, keeping hands below shoulder height, circle your arms out to the side and slowly bring your hands back to the middle of your body and repeat- *like breaststroke*. Keep repeating process for time set.



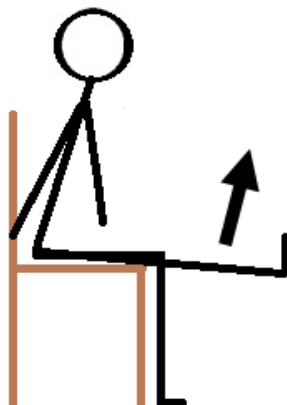
9. **Knee lifts (hip flexion):** Slowly lift one knee up to a comfortable height. Briefly hold at the top, then slowly lower back down. Repeat on other leg. Keep repeating process, alternating legs for time set.



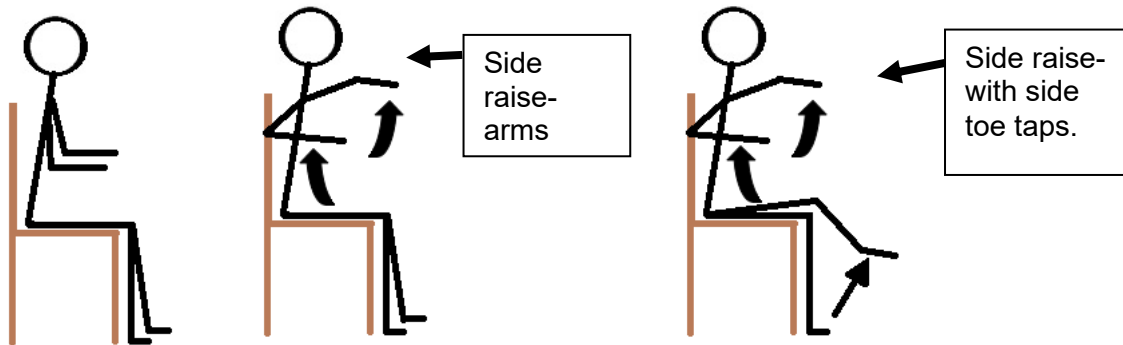
10. **Straight arm front raise:** Start with your arms straight down by your side. Slowly raise your arms up toward shoulder height, brief pause at the top, then slowly lower back to start position. Repeat process for time set. Add alternating toe taps forward, as you perform the front raise if able.



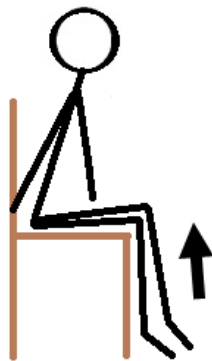
11. **Alternating knee extension:** Slowly straighten one leg at the knee, have a short pause when the leg is straight and contract your thigh muscles for 3-5 seconds, before slowly lowering, repeat on other leg. Keep repeating process for time set, alternating legs.



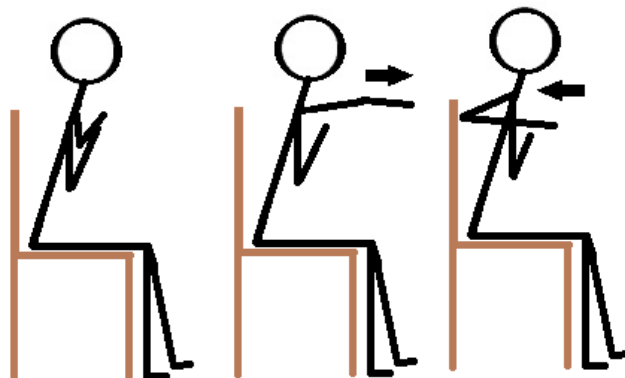
12. **Side arm raises- elbows bent:** Start with your arms down beside you, and your elbows bent to 90°. Slowly lift your elbows out to the side, just below shoulder height, briefly pause at the top, then slowly bring your arms back down to start position. Keep repeating process for time set. Add alternating side toe taps, as you perform the side raise if able.



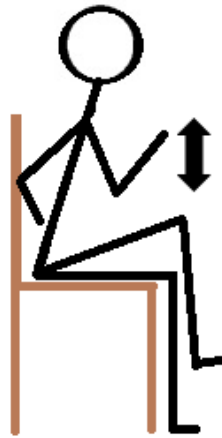
13. **Heel lifts:** Slowly lift your heels up off the floor, hold at the top for a count of 2-3 to contract your calf muscles, slowly lower your heels back down. Keep repeating process for time set.



14. **Rope pull:** reach forward with one arm, pull back, repeat with your other arm. Keep repeating process for time set. If this is uncomfortable take both arms forward and back together.



15. **Seated march:** alternating opposite arm and knee lifts- work to a moderate pace for you. Keep repeating process for time set.



16. **Punches with both arms:** Punch forward with both arms x5, punch down with both arms x5. Keep repeating for time set, alternating between forward and downward punches.

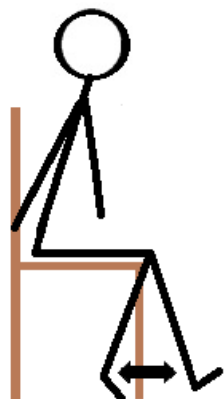


You have now completed your main exercises. To help aid your body's recovery after exercise, you should now do a 5+ minute cool down.

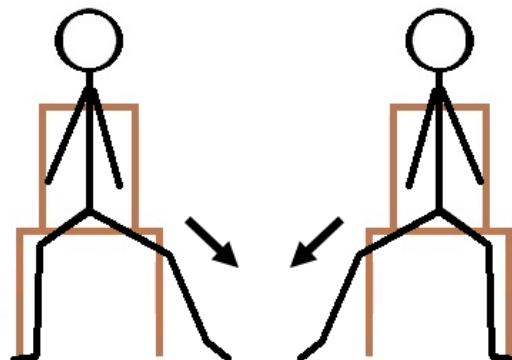
To cool down, follow the seated cool down exercises on the next page, these should take 5+ minutes to do, and should be done at a light level of effort for you, and performed to a comfortable range of movement. (See the Borg rating of perceived exertion scale toward the back of this booklet for "Light level").

## Cool down exercises

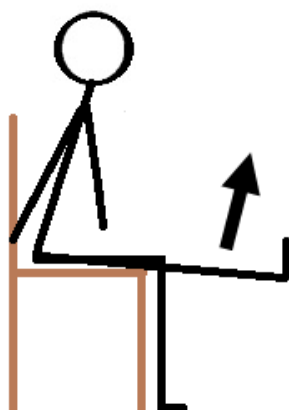
1. Heel digs forward, toe taps back x 10 per side- slow



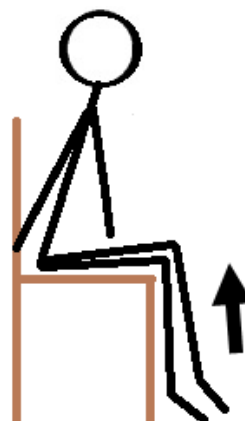
2. Side toe taps x 10 per side - slow



3. Single knee extensions - alternating (Brief hold at top) x 10 each leg -slow



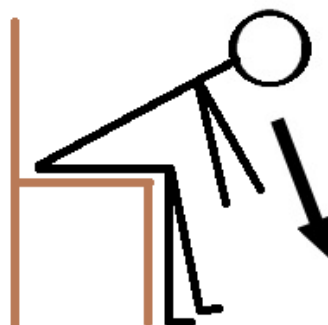
4. Rocking from heels to toes to loosen calf muscles x 10 -slow



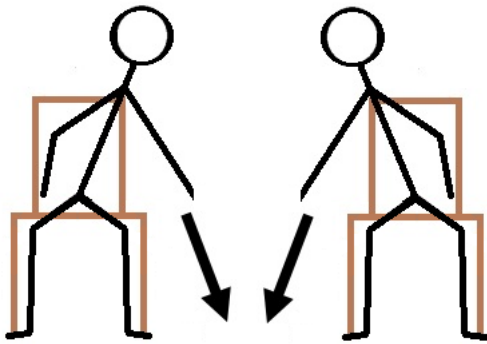
5. Ankle circles x 5 circles each direction, per leg



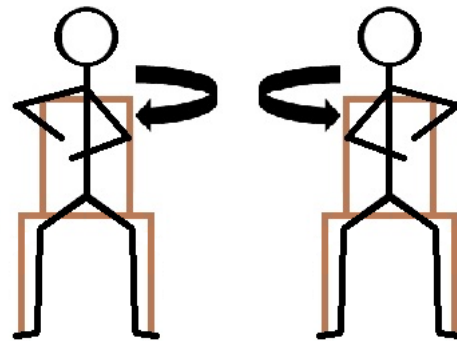
6. Forward bend toward floor x 5



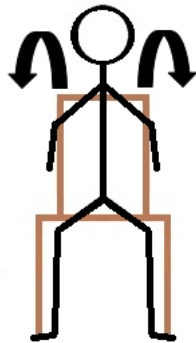
7. Side reach toward floor x 5 each side



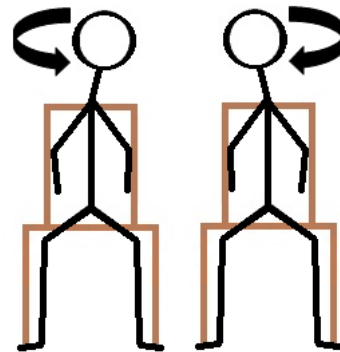
8. Thoracic rotations x 5 each side



9. Shoulder rolls (x 5 rolls forward, x 5 rolls back)



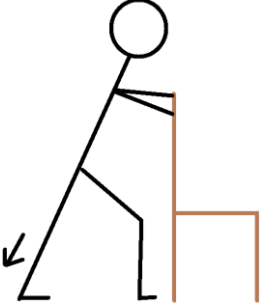
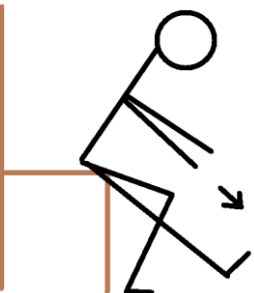
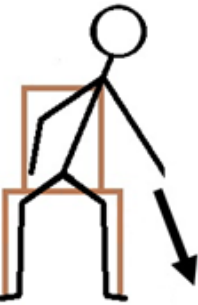
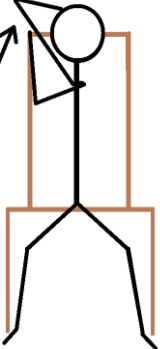
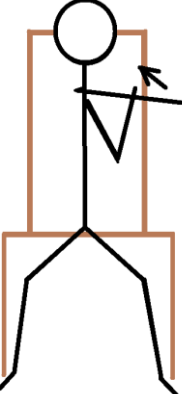
10. Turn and look (x 5 times slowly each way)



## Stretches

Stretching is very good for increasing your joint suppleness / flexibility and reducing joint stiffness if done regularly over a long period of time. It is also beneficial after exercise, to aid recovery.

Below are some recommended stretches we do in cardiac rehab. For stretches to be effective hold them for 15-30 seconds. You can repeat stretches for more effect- eg 2-3 sets of one stretch held for 15-30 seconds at a time.

<p><b>Calf muscle stretch</b></p> 	<p>Hold on to a stable surface. Take one leg a good stride back, make sure your feet are hip width apart facing forward. Gently bend your front knee whilst keeping your back heel on the floor. Bend your front knee until you feel a stretch in your calf muscle on your rear leg. Hold this stretch for 15-30 seconds. Repeat on other leg.</p>
<p><b>Hamstring Stretch</b></p> 	<p>Sit a little further forward in your chair. Make sure you feel steady and stable. Put one leg forward- keep it straight. Gently lean forward until you feel a light stretch in the back of your thigh. Hold this stretch for 15-30 seconds. Repeat on other leg.</p>
<p><b>Side lean stretch</b></p> 	<p>Sitting comfortably with your arms down by your side, gently lean to one side until you feel a light stretch going down the opposite side of your body. Hold this stretch for 15-30 seconds. Repeat on other side.</p>
<p><b>Upper arm stretch</b></p> 	<p>Lift one arm up and bend your elbow- aiming that hand toward your back. With your other hand gently push your upper arm back until you feel a stretch in your raised arm. Hold this stretch for 15-30 seconds. Repeat on other arm.</p>
<p><b>Shoulder stretch</b></p> 	<p>Bring one arm straight across your chest. With your other hand pull the arm across your chest closer toward you, until you feel a stretch in your upper arm / shoulder. Hold this stretch for 15-30 seconds. Repeat on other arm.</p>

## -----Resistance exercise is also recommended-----

Surgical (e.g. bypass, valve replacement) patients not to complete resisted exercises until 12 weeks post operation.

Resistance exercises strengthen your muscles which keeps you active and mobile for longer and also allows the heart to work more efficiently.

You should aim to do a session of resistance exercises 2 or 3 times per week with a 48-hour gap between sessions.

Each time you exercise aim to do 2 sets of 10-15 repetitions of 4-5 of the exercises below with a one-minute rest in between. This should take 10-15 minutes. By your last repetition of each exercise the muscle group should feel like you could not do much more.

Remember to keep breathing. Do not hold your breath!

Resistance exercises can be done using body weight, weights, or a resistance band.

Over the next few pages are some recommended resistance exercises.



## Use of Elastic Resistance Bands

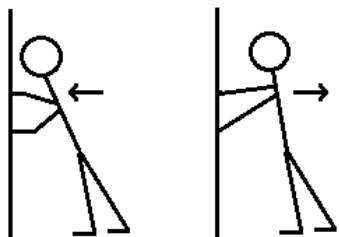
### Warnings:

- Do not use standard elastic resistance bands if you or anyone in your household have a **latex allergy** (latex free bands are available)
- Use the elastic resistance band only as directed by your healthcare professional.
- Inspect the band before **each use**, check for small nicks or tears in the resistance band that may cause it to break.
- Do not overstretch the resistance band – please follow your exercise instructions carefully.
- Do not use the resistance band while wearing rings or other jewellery that might create a nick or cut in the material.
- If the exercise involves wrapping the resistance band around your foot make sure your footwear is appropriate. Check for small stones on the bottom of the shoe that might create a cut or nick in the band.
- If the exercise requires wrapping the resistance band around a piece of furniture, make sure there are no rough areas or splinters that could cause the band to break.
- Do not use the resistance band in any way that might cause it to snap towards the face or cause injury to the eyes.
- Perform all the exercise in a slow controlled manner.
- Do not allow other adults or children to use the resistance band.

### General Information

- Do not store in direct sunlight as this can degrade the band.
- Do not store near heaters, radiators or other sources of heat.
- Clean the band with cold, clear water only; do not use hot water or detergents. If your band becomes tacky, apply a dusting of talcum powder.

## Resistance Exercises Using Body Weight



### Wall Press

If too difficult move your feet closer to the wall.  
If too easy try this exercise on a kitchen work surface.

Repeat slowly 10-15 times.



### Sit to Stand

Stand up slowly from a seated position  
– no jerking.

Use your arms if you need to.

Repeat slowly 10-15 times.

## Resistance Exercises Using Weights



**Bicep Curls, Punching Forwards or Sideways, Raising Arms Sideways, etc**

## Resistance Exercises Using Resistance Bands



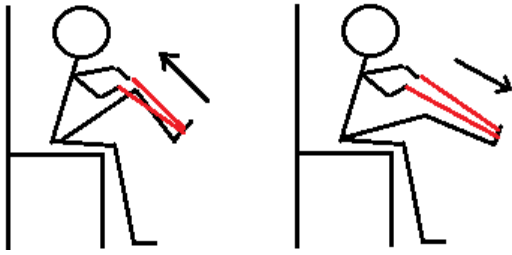
### Bicep Curl

Sit or stand, place both your feet on the middle of the resistance band and hold each end of it with your hands. Bend your elbows, lifting your hands towards your shoulders, then slowly return to your starting position. Repeat ten to fifteen times.



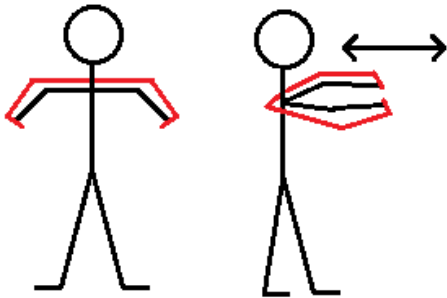
### Squats

Place both feet on the middle of the resistance band and hold each end of it with your hands. Slowly bend your knees into a squatting position, then return to your starting position and repeat ten to fifteen times.



### **Leg Press**

Sit on a chair with your back straight. Place one foot in the middle of the resistance band and hold both ends of it with your hands. Bend your knee towards you, then straighten it back out in front of you before returning to your starting position and repeating with each leg ten to fifteen times.



### **Chest Press**

Sit or stand and put the resistance band behind your back and hold each end of it. Slowly press both arms out in front of your chest, then slowly return to your starting position and repeat ten to fifteen times.

Aim to do these resistance exercises 2-3 times a week, as well as your usual activities and the cardiovascular exercise.

Use the Borg Scale (on the next page) to assess how hard you are working.

You can use the Diary page to monitor how often you are achieving your aims.

## Borg Scale

<b>Rating of Perceived Exertion</b>	
	6 No exertion at all
	7 Extremely light
	8
Warm Up & Cool Down	9 Very light
RPE 10-11 {	10
	11 Light
Moderate {	12
Effort 12-13	13 Somewhat hard
	14
	15 Hard (heavy)
	16
	17 Very hard
	18
	19 Extremely hard
	20 Maximal exertion

Copyright Gunnar Borg 1970, 1984, 1985, 1998

The Borg Rating of Perceived Exertion (RPE) is a way of measuring physical activity intensity level. Perceived exertion is how hard you feel your body is working. It is based on the physical sensations a person experiences during physical activity, including increased heart rate, increased respiration or breathing rate, increased sweating, and muscle fatigue.

Look at the rating scale above while you are engaging in an activity: it ranges from 6 to 20, where 6 means "no exertion at all" and 20 means "maximal exertion." Choose the number from above that best describes your level of exertion. This will give you a good idea of the intensity level of your activity, and you can use this information to speed up or slow down your movements to reach your desired range ie 12-13.



## Contact Information

The Team can be contacted on:

**01493 809977**

Please leave a message and we will get back to you, however it is not an emergency line.