

## Cardiac rehabilitation

Your exercise handbook

Name

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If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

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Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie, proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil, vă rog să discutați cu un membru al personalului să se ocupe de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式,请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أُخرى، أو بتنسيق يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

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# **Contents**

Page 2	Introduction
Page 3	Activity advice
Page 4	Benefits of exercise
Page 5	Monitoring exercise levels
Page 7	Borg scale
Page 8	Warm up
Page 11	Aerobic exercises
Page 14	Cool down
Page 16	Strengthening
Page 25	Cardiac rehabilitation education talks

## Contact information if you are worried about your condition

Your own GP 999

## Other useful telephone numbers/contacts:

NHS 111

Stop Smoking Helpline (Sefton) 0300 100 1000

Stop Smoking Helpline (West Lancashire) 0808 196 2638

# **Cardiac rehabilitation education talks**

Talk	Attended (please tick)	Date attended
Exercise and physical activity		
Cardiac conditions and treatment part 1		
Cardiac conditions and treatment part 2		
Healthy eating		
Occupational therapy (stress/pacing)		
Cardiovascular disease risk factors		
Pharmacy		
Resuscitation		

## Introduction

This cardiac rehabilitation handbook is designed to help you in becoming more active. It will give you helpful tips on exercising with your cardiac condition. It is not intended to replace individual advice from your healthcare professional.

We look to provide useful information and a wide range of homebased exercises, that you can start using on your own to help your recovery.

Set yourself goals and measure your achievements using this guide.

Please note that we expect you to find what exercise best works for you and you enjoy.

Ask a member of staff for more information if you need it.

Page 25————Page 2

# **Activity advice**

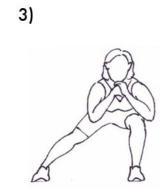
- Wear comfortable clothing and footwear
- Always warm up and cool down (refer to pages 8 and 14)
- Progress at your own pace
- Do not exercise within 2 hours of eating a large meal
- Do not drink alcohol immediately before or after exercising
- Do not exercise if you have a cold, illness or flu
- Do not have a very hot or cold shower immediately after exercising
- Stop exercising if you suffer with dizziness, nausea, extreme breathlessness, muscle cramp or sore joints
- Chest pains stop exercise follow your plan of Glyceryl trinitrate (GTN) spray or get emergency help

## 5. Side lunges

Stand up tall with your feet slightly apart (use stable surface to hold onto if needed). Take one leg out to the side and place it on the floor. Transfer your weight to your other leg and bend your knee slightly. Ensure you keep your chest upright. Do not fully bend your knees if you have problems or experience pain with knees, hips or back. You can use an ankle weight to add resistance. Repeat on the same side 12-15 times. Then repeat on opposite side.







Page 3 Page 24

### 4. Heel raises

Stand with feet slightly apart (use stable surface to hold onto if needed). Push up onto the balls of your feet, lifting your heels off the floor. You can hold a weight to add resistance. Lower back to starting position. Repeat 12-15 times.



Page 23————Page 4

# **Benefits of exercise**

There are lots of health benefits that come with being active, which can reduce the stress put on the heart.

When performed safely this can:

- Slow the progression of coronary heart disease
- Reduce and regulate blood pressure levels and cholesterol
- Reduce angina and breathlessness
- Help with weight control
- Reduce the risk of diabetes
- Reduce stress, anxiety and depression levels and improve confidence
- Improve muscle tone, strength, stamina and flexibility

## **Monitoring exercise levels**

## Where to begin?

To start, exercise should not be too difficult. As a minimum we should aim to complete 150 minutes per week of moderate intensity aerobic exercise, this can be broken down into 30 minutes, 5 times a week.

You also may need to do strengthening 2 times a week. You can also try not to spend long periods of time sitting, get up and have a walk around every 30 minutes/hour if possible.

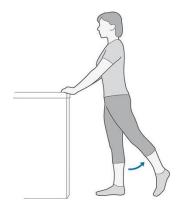
# How do I know if I am doing too much, or am I doing enough?

Monitoring your exercise levels is very important, to ensure you are not pushing your body too hard. However, you do want to make sure your work rate is enough, in order to achieve the benefits that have been included in this booklet so far.

In the sessions we use a combination of heart rate and how you feel, to guide your level of exercise. When you exercise it is normal for your heart to beat faster and stronger, for you to breathe faster and deeper, start to feel warm, flushed and maybe even start to sweat.

## 3. Hip extensions

To begin, stand up tall with your feet together (use a stable surface to hold onto if needed). Slowly and controlled lift one leg off the floor and take it behind you to a level that is comfortable and **do not** lean forwards. You can use an ankle weight to add resistance, lower your leg back to the starting position. Repeat on the same side 12-15 times then repeat with the opposite leg.



Page 5 Page 22

## 2. Hip abductions

To begin, stand up tall with your feet together (use a stable surface to hold onto if needed). Slowly and controlled lift one leg off the floor out to the side to a level that is comfortable and **do not** lean to the side.

You can use an ankle weight to add resistance. Lower your leg back to the starting position. Repeat on the same side 12-15 times, then repeat with the opposite leg.



### **Heart rate**

You may be given a heart rate range as a guide. Please note, it is a personalised calculation. Not all people are given one for different reasons. Much more importantly, go on how you feel, not what your heart rate monitor says.

### Talk test

Simple and effective. If you are able to hold a conversation but possibly slightly out of breath, you are working effectively. If you are unable to hold a conversation and very short of breath, regress by taking the pace down. If you can sing and whistle, progress and include a little more effort.



NB: If you have a chronic lung condition, this may not apply because you may be short of breath at rest or at an earlier stage.

Page 21 Page 6

# **Borg scale**

Also known as the effort scale. During the warm up and cool down, you should feel the level of activity is easy/no problem. In the main component, this should increase to moderately hard. This means feeling comfortable to continue but not easy.

Number	Effort experienced	Verbal expression
6	Nothing at all	
7	Extremely light	Just noticeable
8		
9	Very light	No problem
10		
11	Light	Very easy to continue
12		
13	Somewhat hard	Comfortable to continue
14		Beginning to feel puffed
15	Hard	Heavy, feeling a bit puffed
16		Tiring, you have to push yourself to continue
17	Very hard	
18		
19	Extremely hard	Out of breath/shattered
20	Maximal exertion	As hard as most people have experienced

## Lower limb strength

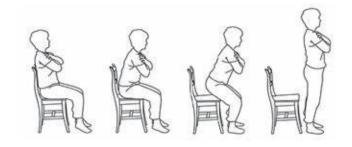
## 1. Sit to stand

To start, stand with your feet hip width apart then bring your weight forward and push your bottom out ensuring your knees do not go over your toes.

Lower yourself to the chair then return to the starting position. Repeat this motion.

You can hold a weight to add resistance.

If you usually use the arms of the chair to lower and stand you can do this initially until you get stronger.



Page 7 Page 20

## 5. Triceps extensions

### Do

Start as shown in the diagram, place one foot in front of the other. Use opposite arm to which leg is in front. Straighten your elbow, bend elbow. Repeat.



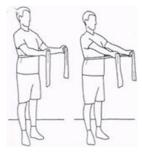
#### Do not

Move your shoulder or lean too far forward.

### 6. Punches

### Do

Start with arms in front of body (around shoulder height).
Punch arms forward (alternatively or both together).
Keep a slight bend in your arms at all times.
Bring back to start position.
Repeat.



### Do not

Lift arms above shoulder height.

# Warm up

It is essential that you warm up before any exercise session. An inadequate warm up can lead to chest pains and irregular heart rhythms.

- Gradually increases heart rate in preparation for exercise and provides the heart with plenty of oxygen
- Reduces risk of injury
- Always keep your feet moving when standing or keep toes moving when stretching
- Warm up adequately for your exercise session. This would be normally for 15 minutes.

## Examples of a warm up

The warm up will be relevant to the exercise you are going to do e.g. walking, swimming or cycling at a slow pace.

Provided on the next few pages are visual examples of exercises, that you may try and work through. Please look out for the 'Dos' and 'Do nots' for each exercise, in order to get the most out of the exercises and stretches.

Page 19————Page 8

## 1. Walking

Start by slowly walking and gradually increase speed. If you do not have enough space, walk on the spot.



### 2. Shoulder rolls

Roll shoulders forwards and then backwards. Keep feet moving.



## 3. Arm lifts/punches

Alternate reaching arms above your head/in front of you. Keep feet moving.



## 3. Shoulder press

### Do

Start with the hands at shoulder height. Lift arms above head alternatively or both together.

Keep a slight bend in the arms at all times.

Bring back down to shoulder height. Repeat.

### Do not

Lower past shoulder height.

### 4. Front arm raises

## Do

Start with weights in front of thighs. Lift arms straight out in front (one at a time/both together) to roughly shoulder height. Lower back to start position. Repeat.

# 5

## Do not

Lift arms higher than shoulder height.

Page 9 Page 18

## **Upper limb strength**

## 1. Bicep curls

### Do

Elbows locked to the side of your body at all times. Bend elbow lifting weight to chest (one at a time/both together). Lower to start position Repeat.



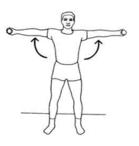
### Do not

Move your elbows away from the side of your body.

### 2. Side arm raises

### Do

Start with weights either side of thighs. Lift the weights out to the side (one arm at a time/both together) to roughly shoulder height. Lower back to start position.



### Do not

Lift your arms higher than shoulder height.

## 4. Heel taps

Tap one heel on the floor in front of you, then bring both feet back together. Repeat on other leg and continue to alternate.



### 5. Half star

Alternate tapping toes out to the side, lift the same arm at the same time.



## 6. Knee lifts

Lift one knee up to roughly hip height or to where is comfortable, then lower back down. Repeat by alternating legs.



Page 17 Page 10

## **Aerobic exercises**

Following the warm up, you would then increase the intensity slightly and gradually increase the length of time you can do.

This is exercise that uses oxygen to power the muscles. This can be walking, swimming, cycling, circuits etc. that use the large muscle groups.

Below are examples of exercises you could use in a circuit.

### 1. Sit to stands





### Do

Start seated, close to edge of a chair. Bring your weight forwards, your nose over your toes. Then push up using your legs to stand up. Repeat.

## Do not

Use your hands (if you can help it) and do not let your knees fall together.

# Strengthening

Strength training can be done after your aerobic session, after a 5 minute cool down when your muscles are already warm, or on a different day to your aerobic session. In this case make sure you warm up your muscles before doing the exercises. You can do this by doing 5 repetitions of each exercise without weights.

Keeping your muscles strong is important to maintain independence, reduce the risk of falls and take added pressure off your heart.

You can use weights/resistance bands/tins of beans/water bottles/milk cartons. You should try to complete at least one set of 12-15 repetitions of each exercise.

If you are unable to do 12-15 repetitions it might mean that weight is too heavy or if you can do more than 15 repetitions it might mean that weight is too light. You need to pick the weights/resistance bands accordingly to one that suits you.

Allow 48 hours between training sessions for strengthening.

Page 11 Page 16

## **Hamstring stretch**

Stand feet shoulder width apart. Step one leg in front keeping heels down, toes off the floor. Ensure your back leg is bent and front leg is straight. Bend forward over hips until you feel a stretch. Hold stretch for 30 seconds. Alternate legs and repeat.



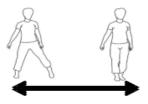


### Shoulder stretch

Bring your arm across the front of your chest.
Place your other hand above the elbow and apply a gentle pressure, pulling your arm towards your chest.
Hold this position whilst you feel the stretch across the top and back of the shoulder.



## 2. Side stepping



### Do

Step right leg out and then bring left foot to it. Step left foot out and then bring right foot to it. Repeat.

## Do not

Fully bend your knees if you have problems or experience pain with knees, hips or back.

## 3. Lunges



### Do

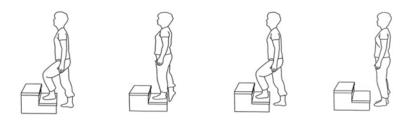
Step back with your right leg, keep your back straight and chest forward, then bend your right knee and go back to the start. Repeat on opposite leg.

### Do not

Fully bend your knees if you have problems or experience pain with knees, hips or back.

Page 15 Page 12

## 4. Step ups



### Do

Use the bottom step. Step up with your right leg. Bring your left leg up. Then reverse the motion, right leg down then left leg down. Repeat this with equal amounts for each leg.

### Do not

Step up more than one step.

## Alternatives to aerobic exercises

Walking, swimming, gym classes, dancing, active hobbies, exercise DVDs.

## **Cool down**

It is essential that you cool down after every exercise session. An inadequate cool down can lead to dizziness, irregular heart rhythms and muscle soreness.

It gradually reduces heart rate and blood pressure to normal. Stretching can prevent any aches and pains after exercise. It should last at least 10 minutes.

Carry out warm up exercises at a slower pace and include stretches that are below.

### Calf stretch

To begin stand with your feet hip width apart. Step one foot back then bend your front knee in line with your toes. Keep your back straight and hold the stretch for 30 seconds. Alternate foot and repeat.





Page 13 Page 14