

Cardiac prevention and rehabilitation programme booklet

This leaflet explains more about the cardiac prevention and rehabilitation programme at St George's. If you have any further questions, please speak to a physiotherapist caring for you.

What is cardiac rehabilitation?

Cardiac rehabilitation can help improve the health of your heart. It is designed to help you get back to as full a life as possible after a cardiac event such as a heart attack, angioplasty, heart surgery or other heart condition.

Regular exercise is an important part of keeping your heart healthy and reducing the risk of further heart problems in the future.

Please read the following information carefully and, for further information and advice, please attend the exercise health education session. Ask at your venue for dates.

What is the cardiac rehabilitation programme?

The cardiac prevention and rehabilitation programme is made up of exercise sessions lasting for up to 60 minutes, followed by a relaxation session lasting 15-20 minutes and an educational talk lasting for about 45 minutes. You will also have a pre-exercise assessment and a review with your cardiac rehabilitation team before your session. **Please arrive for your class on time.**

It is important that you stay for the relaxation session as well as for the exercises as this allows us to make sure you are safe and well after your exercises.

Education session topics include:

- how the heart works
- risk factors for the heart
- medicines for the heart
- stress and the heart
- exercise and the heart
- healthy eating for the heart
- heart failure.

Your cardiac rehabilitation sessions will be once a week, for up to **eight** weeks from your start date. The actual number of weeks will depend on your progress.

Your cardiac rehabilitation programme timetable:

Venue.....

Day.....**Time**.....

Start date.....

What should I wear and bring to the session?

You should wear loose comfortable clothes such as jogging bottoms, a T-shirt and well-fitting, flat, rubber soled shoes such as trainers. Jeans should not be worn.

Changing and showering facilities are available. Please bring your own toiletries and towel.

You may also wish to bring a small towel and bottle of water to each exercise session. Cold water is available at most venues.

How can I exercise safely?

Don't attend your exercise sessions if you are ill or have been ill 48 hours before your session with any infection such as a cough, heavy cold, flu, a high temperature or stomach problems.

If you have a known medical problem such as arthritis, asthma or bronchitis which gets worse, or a recent physical injury or if you are unsure whether you should attend for any other reason, please call the rehabilitation team on 020 8725 1396 or 020 8725 4403.

Follow these additional tips for your safety during exercise:

- don't carry items in your pockets
- don't chew gum
- switch off your mobile phone
- tell the rehabilitation staff of any changes to your medication or dosages.

You should also eat a light meal before exercising. Think about having a late breakfast or early lunch, depending on when your exercise session starts.

If you have diabetes:

- and you are taking diabetes medication such as tablets or insulin, make sure you have eaten before exercising. You are at more risk of having low blood sugar levels during or after exercise.
- Check your blood sugar at home before starting to exercise.
- Bring a snack or sugary drink with you in case your blood sugar level is low during the session.
- Tell the staff if you have had any recent hypoglycaemic (low blood sugar) episodes.
- If you are attending classes at Queen Mary's Hospital or Wandle leisure centre please bring your glucometer with you.

If you have any questions or concerns about exercising please discuss these with the rehabilitation staff.

How do I get the most out of the programme?

Please arrive for your sessions on time as, if you arrive late, you may not be able to join the session.

To get the greatest health benefits from exercising you **should be physically active every day** of the week including doing some exercises at a similar level to your class exercises.

Try following the **FITT** principle – **FITT** stands for:

| | |
|------------------|---|
| Frequency | aim to build up to three sessions of aerobic exercise a week |
| Intensity | aim for an effort level of somewhat hard , or 11-14 on the Borg scale (see below) |
| Time | aim for 20 to 30 minutes of continuous aerobic exercise at the somewhat hard level, after a 15 minute gradual warm up, followed by a 10 minute cool down |

Type do types of activities such as brisk walking, cycling, dancing and circuit training, that use the large muscle groups especially the leg muscles in rhythmical, continuous movements.

Your target is to do 30 minutes moderate to vigorous intensity aerobic exercise at least three times a week and be physically active every day of the week – aiming for a total of 150 minutes exercise or physical activity per week.

Remember any exercise is better than none, but using the **FITT** principle to guide you will give you the most benefit for your heart.

Tips for exercising:

1. Choose an activity that is fun and not exhausting
2. Try and add variety to your exercise regime
3. Wear comfortable, properly fitted footwear and loose clothing
4. Use music to keep you motivated and entertained
5. Join in with others
6. Don't overdo it - start at a low level and build up your level of activity gradually.
7. Keep a record of your activity and reward yourself at special milestones.

The Borg scale

It's important to rate how much effort or exertion you feel you are making when you exercise - how hard the exercise feels to you. This will depend mainly on the strain and fatigue (tiredness) in your muscles and on your feelings of breathlessness.

The Borg scale is a way of measuring this, from 6 to 20, where 6 means no exertion at all and 20 means maximum exertion.

Some examples to help you measure where you are on the scale:

- 9 is **very light** exercise, such as walking slowly for some minutes.
- 13 is **somewhat hard** exercise, where your breathing rate will be faster and deeper, but you should still be able to talk quite easily, you may feel warmer or even sweat slightly.
- 17 is **very hard**, strenuous exercise, where you really have to push yourself to go on, your muscles feel heavy and you feel tired.

The aim of the exercise session is for you to exercise at a level that feels **somewhat hard** – between 12 and 14 on the Borg scale.

We will ask you during, and at the end of the exercise session where you felt you were on the Borg scale **during** the exercise session.

The Borg scale

| | |
|----------------|---------------------------|
| 6 | No exertion at all |
| 7 – 8 | Extremely light |
| 9 – 10 | Very light |
| 11 – 12 | Light |
| 13 – 14 | Somewhat hard |
| 15 – 16 | Hard (heavy) |
| 17 – 18 | Very hard |

- 19 **Extremely hard**
20 **Maximal exertion**

How will exercise make me feel?

It is normal to feel:

- slightly sweaty
- warm and/or a bit flushed
- your breathing to be faster and deeper (you should still be able to talk)
- your heart to be beating faster.

However you should slow down and make the movements smaller if:

- your breathing is uncomfortable
- you feel excessively tired
- you are sweating a great deal
- your heart rate is going above your target heart rate
- your Borg scale score is higher than that recommended by your cardiac rehabilitation team.

If slowing the exercises down does not help then stop the exercises and just march gently on the spot until you feel better.

If you are still having problems after a couple of minutes of marching on the spot then stop and sit down in a supportive chair.

When and why should I stop exercising?

You should stop exercising and sit down, if:

- you feel dizzy
- you feel chest pain (if you have had heart surgery think about whether any chest pain you feel is wound pain)
- your heartbeat becomes irregular.

If you have GTN spray or tablets, use it as your doctor has told you. If the pain, discomfort or tightness continues and has not improved after 10-15 minutes, dial 999 straight away and call your doctor.

What exercises should I do at home?

Example home exercise programme

Step 1: Warm up

You should always warm up before exercise so your body adapts to the increased demand.

Time: 15 minutes

Intensity: 9 – 11 on the Borg scale: very light or light

If you need some guidance on how to perform the warm up exercises please see the pictures below.

1. Walk on the spot for 2 minutes and gently circle shoulders
2. Heel digs in front with alternate legs x 8 each leg
3. March for count of 20
4. Knee bends x 8
5. March for count of 20
6. Knee raises x 8 each leg
7. March for count of 20
8. Toe taps to side x 8 each leg
9. March for count of 20
10. Toe taps behind x 8 each leg
11. March for count of 20
12. Kick heel toward bottom x 8 each leg
13. March for count of 20
14. Take two steps to right and two to left x 4
15. March for count of 20

Repeat the above twice more adding some gentle arm movements and making the moves a little bigger with each set of exercises.

Step 2: Conditioning (exercise circuit)

Time: 20-30 minutes

Intensity: 11 – 14 on the Borg scale: somewhat hard. Work to target heart rate.

Level 1: Do 1 minute of each exercise repeat x 2 (total circuit time of 20 minutes)

Level 2: Do 2 minutes of odd numbered stations and 1 minute of even numbered stations and repeat for a total time of 20-25 minutes

Level 3: Do 2 minutes of each odd numbered station only, repeat for a total time of 25-30 minutes.

Exercise 1 – Stepping back

Stand up straight. Start with both feet together and your arms at your side. Step back with one leg and then bring your feet back together. Step back with your other leg then bring your feet back together. Continue stepping back with alternate legs.

Increase your effort level by:

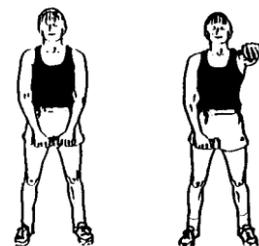
- taking bigger steps and moving faster
- lifting your arms out in front to waist height and then back down again each time you step, or



- lifting your arms out in front to shoulder height and then back down again each time you step.

Exercise 2 – Front arm raise

March slowly and gently on the spot.
 Hold the weights in both of your hands resting on your thighs.
 Slowly raise one arm in front of you to shoulder height.
 Repeat with your other alternate arm (or raise both arms together) and continue for one minute.



Exercise 3 – Knee lifts

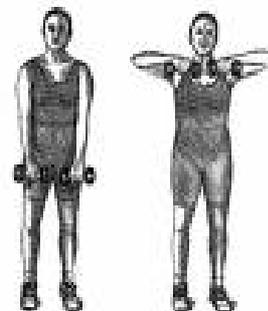
Lift alternate legs with your hands on your waist as shown.
 Lift your thighs so they are parallel with the floor.
 Increase your effort level by:

- moving your legs faster
- holding your hands at waist height and lifting your knees to your hands, or
- lifting your knees and combining this with a pull-down action of both your arms from shoulder height.



Exercise 4 – Upright row

March slowly and gently on the spot.
 Hold the weights in both of your hands at the top and centre of the chest with your elbows up and pointing out as show in the picture.
 Move your hands slowly down to your waist then bring them back up to your upper chest.

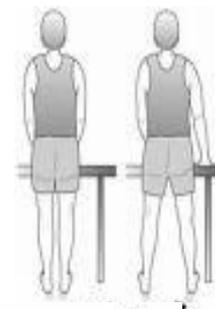


Exercise 5 – Side Stepping

Stand up straight. Start with both your feet together and your arms at your side. Step one leg out to the side and then bring your feet back together. Repeat with the opposite leg. Continue stepping to the side with alternate legs.

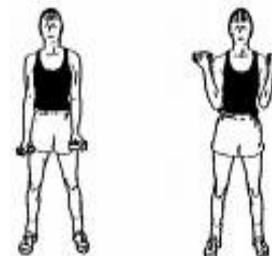
You can increase your effort level by:

- taking wider steps and moving faster
- lifting your arms out to the side to waist height and then back down again each time you step, or by
- lifting your arms out to the side to shoulder height and then back down again each time you step.



Exercise 6 – Bicep (arm) curls

March slowly and gently on the spot.
 Hold the weights in both of your hands and stand with your arms at your side and your palms upwards.
 Keep your arms tucked into the side and slowly bend both elbows up to your chest and then lower back to the starting position.
 Repeat for one minute.



Exercise 7 – Step ups

Start with both of your feet on the floor. Put one foot onto the step followed by the other foot (so both feet are on the step) with both arms by the side, then step back down off the stepper one foot at a time.

Increase your effort level by:

- stepping up and down more quickly
- lifting your arms to waist height each time you step, or by
- lifting your arms to shoulder height each time you step.



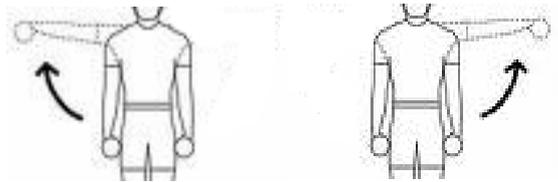
Exercise 7 alternative – Sit to stand

Sit to stand from a stable chair, such as a dining room or kitchen chair. In a controlled way move from sitting to standing and return to sitting.



Exercise 8 – Lateral (side) arm raise

March slowly and gently on the spot. Hold the weights in both of your hands and stand with your arms at your side. Keeping your arm straight slowly raise one arm out to the side, to shoulder height then return to your side. Repeat with alternate arm and continue for one minute.



Exercise 9 – Hamstring curls

Start with your feet shoulder width apart and arms at your side. Bend your knee to 90 degrees then bring your foot back to starting position.

Repeat with alternate leg.

Increase your effort level by:

- stepping faster and with wider steps
- moving both arms into bicep curls to waist height as you step, or
- moving both arms into bicep curls to shoulder height as you step.



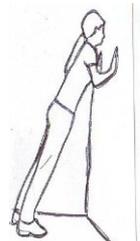
Exercise 10 – Push-ups against wall

Place your hands on the wall at chest height.

Keeping your back straight and tummy tight, bend your elbows and lean gently and with control towards the wall and push back.

Or

Push your arms forward and back at shoulder height - light weights can be added.



Step 3: Cool down and stretches

Time: 10 minutes including stretches

Start by repeating the activities from the warm up on page five, at a more gentle pace, by making the movements slower and smaller.

Stretching after exercise helps to reduce any soreness and stiffness in the muscles.

Hold stretches for 10-15 seconds and keep the stretch constant - try not to “bounce” the stretches or over-stretch.

Stretches should not be painful.

Shoulder

Reach your right arm across your body at shoulder height, hold it at the elbow with your other hand and pull towards your chest.

Hold for 10-15 seconds and repeat with your left arm.

Feel the stretch at the back of the shoulder.



Tricep

Reach your right arm behind your right shoulder giving a gentle push to your elbow with your other hand.
Hold for 10-15 seconds and repeat with left arm.
Feel the stretch at the back of the upper arm.



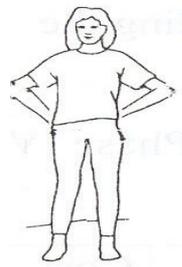
Upper back

Reach your arms forward as if holding round a large ball and feel the stretch between your shoulder blades.
Gently drop your chin to your chest and feel the stretch across your upper back and neck.



Chest

Place both hands to the small of your back and brace your shoulder blades back together to feel a stretch across the front of your chest.



Quads

Using a chair for support, stand tall and lift your right foot behind.
Reach and hold your right foot with your right hand, and pull your knees in line and together and keep your back straight.
Feel the stretch down the front of your thigh.
Hold for 10-15 seconds and repeat with your left leg.



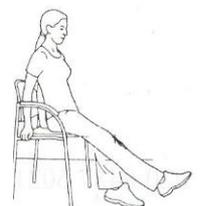
Hamstrings

Place your right leg forward out straight in front of you with your heel on the floor and sit back onto your left leg.
Push your bottom away and pull your toes up towards you.
Feel the stretch behind your right knee.
Hold for 10-15 seconds and repeat with your left leg.



Alternative hamstring stretch while sitting

Sit towards the edge of a chair so that your right leg is straight out in front of you with your heel on the floor.
Pull your toes up towards you and sit up straight in the chair to feel the stretch behind the knee.
Hold for 10-15 seconds and repeat with your left leg.



Calf

Take a small step forwards with your right foot and bend your right knee gently forwards keeping your left heel pushed down into the floor and feel the stretch in your left calf muscle.
Hold for 10-15 seconds and repeat with your other leg.



What happens after the cardiac rehabilitation programme ends?

When you finish your rehabilitation programme it is important for you to continue exercising regularly. There are lots of ways to do this. Think about whether you wish to continue with group sessions at a leisure or community centre, join a gym or continue with your own exercise plan.

The cardiac rehabilitation staff will discuss this with you towards the end of your programme.

Phase 4 classes in Wandsworth:

| Day and time | Location | Instructor | Cost |
|------------------------------|--|-------------|-------|
| Mon 1.30-2.30pm Wed 2-3pm | Tooting Leisure Centre Greaves Place, Tooting | Sue Gyngell | £2.10 |
| Wed 9.30-10.30am | Wandle Recreation Centre Mapleton Road | Dani | £2.10 |
| Wed 12-1pm | Latchmere Leisure Centre Burns Road, Battersea | Sue Gyngell | £2.10 |
| Thurs 9-11am | Roehampton Sports Centre | Dani | £2.10 |
| Friday 1-2pm | Balham Leisure centre | Norbert | £2.10 |
| Friday 12-1pm | Putney Leisure Centre Dryburgh Road, Putney | Sue Gyngell | £2.10 |
| Mon and Thurs 1-2pm | Douglas Bader Gym Queen Mary's Hospital Roehampton | Paul Smith | £3 |

Please see notice boards in gym or ask staff for details of Phase 4 classes outside Wandsworth.

Contact us

If you are unable to attend a session you should call us on 020 8725 1396 to let us know.

Leave a message if no one is there to take your call. If you don't attend your appointments for the exercise and relaxation sessions on two occasions and do not tell us the reason, you will be discharged to your GP's care.

If you have any questions or concerns about cardiac prevention and rehabilitation, please contact the team on 020 8725 1396 or 020 8725 4403 (Monday to Friday, 9am to 5pm). Out of hours, please leave a message and we will get back to you as soon as possible.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111



Reference: CAR_CPRP_01 **Published:** December 2017 **Review date:** December 2019