

Mobility and Flexibility Exercise Hand-booklet

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CANCER SUPPORT



CancerAndRehabilitationExercise

Description

The CARE programme is designed to improve physical performance during or post cancer treatment. However, the programme also provides to patients to join a community and a variety of participants to meet, greet, and to increase socializing involvement. Although, maintaining a minimum amount of muscular strength is essential for performing a wide range of everyday activities as you get older, especially after a variety of cancer treatments. This guide is designed for participants who may struggle with fatigueless, strength, and sudden reduced muscle mass to rebuild their physical performance to complete daily lifestyle activities by completing a range of chair-based Thera-band exercises.

It is known that taking part in physical activity does boost ones' physiological and psychological by participating in the gym, weights, resistant machines, fitness classes, Pilates, yoga, and sporting activities. However, this booklet is designed by the CARE (Cancer and Rehabilitation Exercise) department for participants who want to take part in low intensity exercise which revolve around Thera-band exercises.

The information sheet that has been presented by the CARE department contains general knowledge only. With, this handbook should not rely on instead of the opinion and advice of a medical professional. Furthermore, it is the readers responsibility to follow the correct procedure when completing the aligned exercises and the CARE department nor does Notts County FITC (Football in The Community Trust) accept any liability.

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Information

Frequency	We recommend participants should complete this hand booklet 2/3 times per week.
Intensity	All exercises which have been highlighted and detailed should be completed at a low/medium intensity. These exercises are to strengthen isolated muscle components thus, this programme is not designed for high intensity. Furthermore, with regards to repetition it is advised that each exercise should be in the range of the participants requirement of mobility. We recommend that each exercise should be based on minutes rather than repetition.
Time	It should be highlighted that this programme is not for the duration of a lengthy period. Although, we advise that the programme should be no longer than 30 minutes.
Type	With regards to exercises, there is no set limit or minimum amount of exercises that should be completed per session. This is based on the mobility, status, and physical ability of the participant. However, there is no set programme, but rather more of an indication of exercise to improve and increase muscle strength and mobility from completing certain exercises which may improve weaknesses of the participant.

1. Wrist Flexion

Purpose

The purpose of this movement is to improve flexion/tension with gripping, squeezing, and carrying certain objects which may be used within everyday lifestyle activities.

Movement

The wrist is a joint that acts as a bridge between the hand and the forearm. This important joint is formed by the ends of eight carpal bones, the end of the radius (the large forearm bone), and the articular disk. There are also several tendons – which connect muscle to bone – that begin in the forearm, cross the wrist to enter the hand.

Exercise

The exercise focuses on improving the range of motion of the wrists and flexion/tension of the forearms. To complete this exercise, you can either use the floor or the wall. However, this movement should be focused on seconds rather than repetition due to the status of the movement being a fixed position. It is recommended to start this movement with small progression stages by limiting timing and range of mobility.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets



2. Hips

Purpose

The purpose for this movement is to improve the surrounding areas located around your hip. Your hip is known as a ball and socket joint for your femur (leg) which gives you the mobility to lift, stretch, sit, and any other activities which may involve the activity of the movement for your legs.

Movement

Your hip joint is a ball and socket that moves in all directions. It's important to warm up the hip and surrounding muscles before any workout, since they're key contributors to balance and stability. The femur is one of the most important parts of your skeletal system due to its variety of tasks it withstands daily. Furthermore, the femur connects all the lower tendons and ligaments to the pelvis (hip) which supports daily activity lifestyle choices such as walking, running, squatting, kicking, or lunging.

Exercise

To participate in this exercise you can either standing, hold onto an object to improve balance or use a chair. As the diagram demonstrates, the objective of this movement is to lift your knee/leg as high as possible, rotate your leg over so now your leg is parallel with your hip, and then lower your foot onto the floor.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets



3. Hamstrings

Purpose

The purpose of this exercise is to reduce tension and mobility and flexibility within the hamstrings (behind the leg). This movement is highly recommended to improve due to its daily function of walking, squatting, lifting, moving, and the function of mobility within the hinge joints of the patella.

Movement

The hamstring gives function to the movement and any activity which involves the movement of the leg. With the hamstring being located on the opposite side of the quadricep (anterior of the leg) it is just as important for the contraction of muscles when producing force, power, strength, and movement. If one bends their knee, then on the action phase the quadricep is contracting and the hamstring is relaxing. However, on the end phase of bending the knee, the hamstring engages, and the quadriceps relax. Therefore, it is vitally important for the opposite located muscles, ligaments, and tendons to be just as strong or functional as the anterior muscles, ligaments, and tendons.

Exercise

To complete this exercise, you can either use a resistant/thera-band or a strong piece of cloth, such as a towel. Place the band on the middle of your foot and then raise your leg in the air, trying to keep your leg as straight as possible. This will then start to strengthen, stretch, and pull your hamstring, allowing for the hamstring to increase in depth and mobility.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets



4. Spine

Purpose

Your thoracic spine is in the middle of your back, from the base of the neck to the area between your shoulder blades. Good mobility in the thoracic spine allows you to move your arms freely over your head and turn side to side. Poor mobility can lead to shoulder pain and problems, poor posture, and upper back pain.

Movement

It is vitally important to keep the spine as active as possible. For example, most of the movement within the anatomy and skeletal system are built up from hinge, ball and socket, and fixed joints which allow our limbs to move and our body to function. However, the spine is known to be in a fixed position which requires extra attention to keep mobile.

Exercise

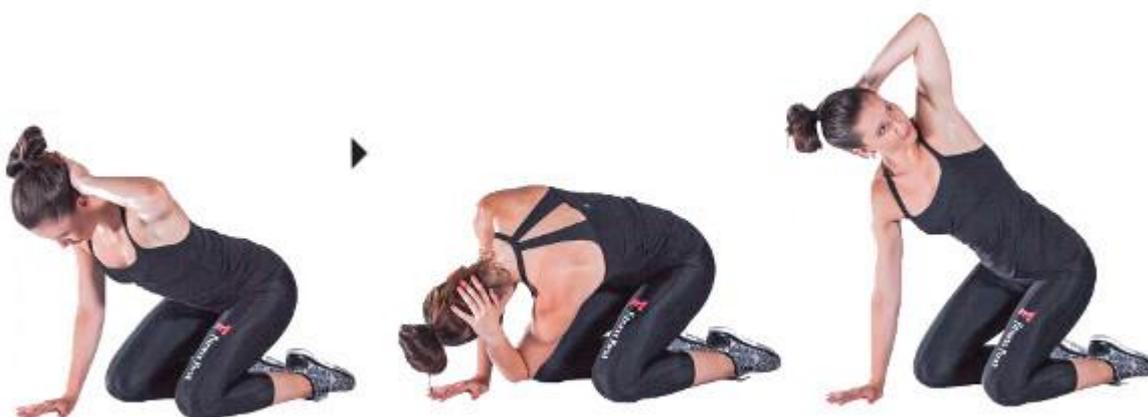
As the diagram shows, the exercise is meant to achieve as much rotation as possible from the leading elbow into the middle of the stomach, positioning into a crunch motion. The key elements of this exercise is to keep one hand behind your head. This allows a fixed position on where you should be rotating to and to keep good technique.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets



5. Shoulders/Upper Back

Purpose

The purpose for this movement is to improve shoulder mobility as well as improving the upper posture. Even though this movement requires a full circulation of rotation from the shoulders and upper cervical (upper spine) to improve the mobility and posture.

Movement

The movement itself is known to be a challenging spinal movement. It requires all functional movement from the spine, shoulders, and an overall good physical posture stance. However, this movement is designed to improve all aspects of a participant's incorrect posture with tackling all elements of upper/lower back posture positioning.

Exercise

The purpose for the movement is not to perform with a full rotation to begin with. Instead, the participant must build to this range of motion in time. To be able to complete this movement, you must be able to complete these three stages of the exercise. The first stage is for yourself to be able to stand straight, shoulders back and engaged, with hands wide on the pole (the equipment for this movement can be a pole, resistance band, or a towel). The next stage is to have a full lock out position at the top of your head, straight arms, shoulders engaged with good posture. The last stage is to slowly bring the object to the bottom of lower spine with still maintaining good/correct posture.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets



6. Chest

Purpose

The purpose of this movement is to improve your pectoral major and minor muscles if one is suffering from roundness of the upper spine. This movement will help to improve upper position of the posture.

Movement

The movement itself is attainable to be completed within your surroundings. All you need is a curved wall or somewhere to lean our hand/arm and for your body to pass by this object (door frame).

Exercise

The exercise itself can be completed by standing up right and with a sturdy stance to improve stability and to attain the position for your chest. Rest your arm flat on the wall in a 90-degree angle and lean forward. This will now start to apply pressure onto the pectoral muscles. The more upright your chest you will achieve a better range of motion and performance throughout this exercise.

Workout

Beginner – 30 seconds/ 4 sets

Intermediate – 1 minute/4 sets

Advanced – 2 minutes/4 sets

