



**ST. JAMES'S  
HOSPITAL**



# **Exercise and Physiotherapy Advice Before and after Surgery**



# Introduction

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- Increased fitness is proven to benefit people undergoing surgery. Those who increase their level of physical activity before surgery are less likely to suffer complications during and after surgery and will likely recover quicker
- You should be active at a moderate level for at least **30 minutes a day on at least 5 days a week**
- You should exercise to a level where you work up a sweat and you are slightly breathless but still able to speak. Aim for 11-13 on the breathing scale on the next page
- This can include walking, cycling, running, swimming etc.
- Physical activity should be performed in bouts of at least 10 minutes duration



## RATE OF PERCEIVED EXERTION (RPE SCALE)

Point	Effort	Description	% of Max HR
6	No Exertion	Little to no movement, very relaxed	20%
7	Extremely Light	Able to maintain pace	30%
8			40%
9	Very Light	Comfortable and breathing harder	50%
10			55%
11	Light	Minimal sweating, can talk easily	60%
12			65%
13	Somewhat Hard	Slight breathlessness, can talk	70%
14		Increased sweating, still able to hold conversation but with difficulty	75%
15	Hard	Sweating, able to push and still maintain proper form	80%
16			85%
17	Very Hard	Can keep a fast pace for a short period	90%
18			95%
19	Extremely Hard	Difficulty Breathing, near muscle exhaustion	100%
20	Maximally Hard	STOP EXERCISING! Total Exhaustion	

# Benefits of Exercise Before Surgery

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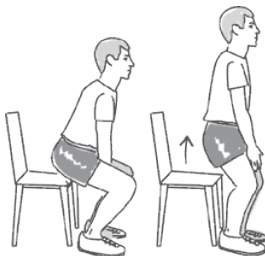
It is important to exercise and keep active. Some of the benefits include:

- Strengthening your muscles, joints and bones
  - Reducing tiredness and increasing energy levels, improving sleep quality
  - Reducing anxiety and depression
  - Improving mood and quality of life
  - Reducing the risk of other health problems
  - Increasing your confidence
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- Research tells us that exercising during treatment and before surgery is safe and can have many benefits. Regular contact with your physiotherapist during your treatment will help support your progress.
  
  - There may be days when you feel too tired to achieve the recommended amount of exercise. It is important to listen to your body and to rest on the days you don't feel able to exercise

# Strengthening Exercises

(do these exercises 2-3 per week)

## Sit to Stand



- Stand up and sit down from a chair without using your hands as support if possible
- Try to do this exercise 30 times
- You can do this exercise at any time of the day, whenever you think of it.

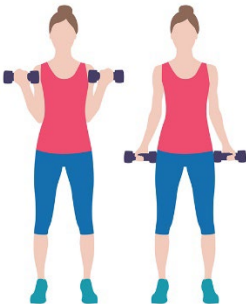
## Heel Raise



- Stand with your feet apart, with your hands lightly resting on a counter or chair in front of you.
- Slowly raise your heels off the floor and hold for 5 seconds, then slowly lower your heels to the floor.
- Repeat 30 times

(Do the following exercise with a set of weights. If you do not have weights, you can use a 2 bottles of water/cartons of milk)

## Bicep Curl



- With your arm at your side, draw up your hand by bending at the elbow. Keep your palm face up the entire time
- Repeat 10 times, 3 sets

## Overhead Press



- Raise your elbows to shoulder height out to your side
- Raise your arms over your head
- Hold and then gently lower your arms to shoulder height
- Repeat 10 times, 3 sets

# Role of the Physiotherapist after Surgery

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- Prevent post-operative lung complications such as lung collapse and infection
- Maximise your lung function as soon as possible after your surgery
- Give advice regarding exercise to help you return to pre-surgery functional levels



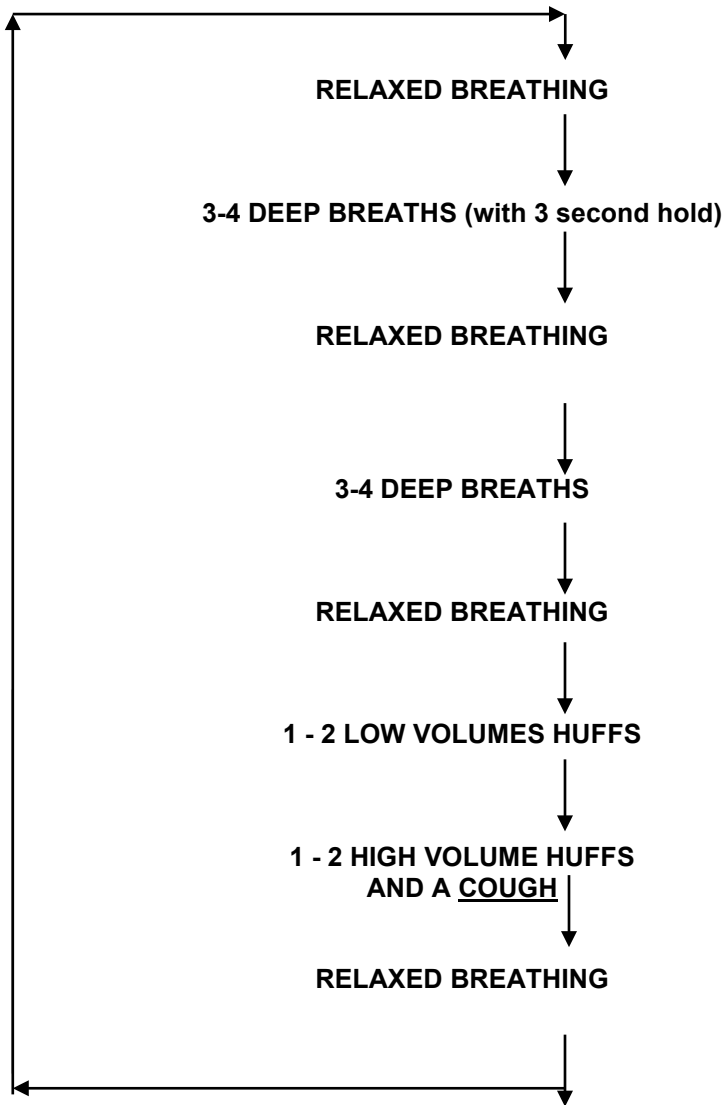
# Breathing Exercises

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- On the first day after your surgery your physiotherapist will instruct you in breathing exercises and supported coughing techniques
- The Active Cycle of Breathing Technique (ACBT) is a technique which uses breathing exercises to remove phlegm from the lungs
- It should be performed in sitting or standing, in a comfortable position
- Try to breathe in through your nose and out through your mouth. Breathing out should be slow, like “sighing out”.
- A “huff” is a sharp breath out like fogging up a mirror but much stronger with your mouth in an O shape.
- Support the area where you had your surgery with your hands or a small pillow when you cough
- It is important to remember that your incision area cannot be damaged by any post-operative exertions such as coughing.



**A typical cycle of the Active Cycle of Breathing Technique (ACBT) consists of:**



# Moving after surgery

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- On the morning after your surgery, your physiotherapist and the nursing staff will help you to sit out of bed. You will begin to walk short distances as soon as possible
- The distance you walk will then be increased every day by your physiotherapist at a pace appropriate to your recovery
- If you use any walking aid such as a stick prior to surgery you should bring this with you into hospital as you will require it to assist your walking after surgery

# Pain Control

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- After your surgery, pain relieving medications will be given to you regularly. It is important that after your surgery your pain is well controlled in order for you to carry out your breathing exercises and be able to walk
- If you are in pain after your surgery please let the staff know and they will address this problem.

# Clothing

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- Please bring comfortable everyday clothing (e.g. loose fitting t-shirt, button up shirt or blouse), and a pair of runners or shoes into hospital
- We will be encouraging you to get out of bed, get dressed in your own clothes and get active. This is because being active will help you recover quicker and you will feel better dressed in your day clothes



***“Pyjamas say you’re unwell...  
Clothes say you’re getting better”***

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# **hello** my name is...

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