

Booklet 4

Rehabilitation after critical illness

Physical factors - exercises

Information for patients



Acknowledgements

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Introduction

The information in this booklet is aimed at helping you regain some of the strength and mobility you will have lost during your time spent in intensive care. You may have some physical side effects from the stay on intensive care including stiff joints, tiredness and weakness.

When a joint has not been used for a while it stiffens up, even in young people. The stiffness will go as the joint is used more.

You may feel easily tired at first which is normal, as your muscles have become weak whilst you have been ill and they need time to build their strength again. It may take some months until you feel that you are fully back to normal. Everyone is different so it is impossible to give an exact timetable for how much exercise you should take and when.

This booklet aims to give you general advice about exercise and how regular exercise should form part of your recovery.

It may be quite a shock when you realise how weak you have become whilst in hospital, especially if you cannot remember a lot of your time in the intensive care unit. It can be very distressing to suddenly wake up and find it very hard to move, especially if you were very active before you became ill.

Please make sure you read through the whole of this booklet before you begin any exercise.

Why exercise?

Exercise is important after being ill and will:

- Strengthen your heart
- Help to rebuild lost muscle
- Help to reduce stress
- Improve your confidence
- Improve movement in your joints
- Help you to get good refreshing sleep.

While you were ill your body took what it needed to survive using extra calories and nutrients stored in your muscles. This means that all your muscles will have become smaller and weaker. You may find:

- You feel tired very quickly even when you are pottering about the house.
- Your balance is not as good as it used to be.
- You have difficulty climbing stairs or walking longer distances and may have to take a break part way.

The good news is that you can rebuild your muscles back to what they were before, but you will need to do some exercises as it will not happen by itself. It may take between six months and a year until you feel that you are fully back to normal. Everyone is different and so it's impossible to give an exact timetable for how much exercise you should take and when.

Here are some types of exercise that people who have been on intensive care have taken up. You may feel at the moment that you will never be able to get fit enough to try any of these.

Additional exercise could include:

- Walking (indoors and outdoors)
- Bowls
- Dancing
- Swimming or aqua aerobics
- Golf
- Yoga or Pilates
- Tai Chi
- Gardening
- Cycling
- Walking up and down stairs.

Important points about exercise:

- Follow the instructions given in this booklet.
- Do not try to do too much too soon, because this will just make you feel overtired and disheartened.
- If you have had a bad day, don't get upset about it. Everyone feels like that at some time. Ask yourself if you've been doing more than normal over the past few days. This may explain why you feel a bit tired.
- Always warm up and cool down before and after your exercise.
- Allow two hours after eating before you exercise to allow food to be fully digested.
- If you feel unwell reduce your normal level of exercise until you feel well again.

When to stop exercising

You should stop exercising and rest if you experience any of the following:

- Severe chest pain.
- Increase in chest tightness.
- Dizziness or feeling faint.
- Joint or muscle pain.
- Much more breathlessness than you experienced the last time you did this exercise.

If you feel your symptoms are getting worse, dial 999. If the symptoms settle in two to three minutes, do not continue with the exercise until you have contacted your GP or physiotherapist (if you are still seeing one) for advice.

How hard should I be working?

Every patient is different, so to begin with in hospital, you should be guided by your physiotherapist as to how hard you should work.

It is very important that you do not suddenly start or stop your exercise, so always warm up before starting your exercises and cool down afterwards. Your physiotherapist will give you advice on a suitable warm up and cool down. During your warm up and cool down, you should be working at a fairly light intensity.

Whilst you are in hospital your ward physiotherapist will inform you how many repetitions to be doing and advise you how to progress your exercises as you get stronger.

During your main exercises you should be working at a level where you find the exercises somewhat hard. Think about how hard you are finding the exercises so you are working at the right level. If you find the exercises very hard, you will risk injuring yourself or causing excessive tiredness. But if you find your exercises too easy, they will not help you recover properly.

If you are finding an exercise very hard, then this exercise is too difficult for you and you should either:

- Do fewer repetitions.
- Do it for a shorter time.
- Choose an easier exercise to replace it.

If on the other hand, when you do an exercise, you find it light or easy, then this exercise is too easy for you and you need to progress it by either:

- Increasing the number of repetitions or sets of repetitions.
- Increasing the time you do it for.
- Choosing a harder exercise.
- Adding some weight or resistance, for example holding a small bottle of water or using a Theraband.

When you have completed your exercises don't forget to record them in your exercise diary (pages 10-11). Look back over your diary regularly so you can see your progress. Sometimes people don't think they are improving, especially if they aren't back to doing everything they could do before they were ill. If you look back at what exercises you could do a few weeks ago, you may surprise yourself about how much you have progressed. Bring your exercise diary with you, if you have any follow up appointments with the physiotherapist, so they can check your progress. Additional blank exercise sheets can be obtained from your physiotherapist.

Common questions about exercise:

1. "Am I too old to take up swimming or jogging?"

Whatever age you are it is possible to take exercise. Even if all you can manage is a few minutes of home exercise each day you will start to feel the benefits.

2. "I get breathless very quickly when I exercise - should I continue?"

It is OK and usual to feel a bit out of breath when exercising. This is perfectly normal; it is just your body's way of getting more oxygen to the muscles.

As you build up your exercise you will find you will gradually be able to do more before you get breathless. Making sure you warm up gradually before exercising will make you less out of breath. As with all your other muscles, the muscles involved in breathing have got weaker and smaller whilst you have been ill, meaning you will get breathless more easily. They will gradually get stronger as you exercise. This is also true for patients with chronic chest problems. To become fitter you need to be active enough to make you feel slightly breathless for at least 10 to 20 minutes. If your breathlessness does not settle within five minutes of stopping exercise, this suggests you are exercising too hard. Make the exercise easier by following the guidance on page 8.

3. “I have a chronic chest problem, is it safe for me to exercise?”

Yes, research has shown that chronic chest sufferers benefit from graded exercise because it makes their muscles able to use oxygen more efficiently. Take advice from your physiotherapist or GP about using any reliever inhalers you have before or during exercise.

Nutrition

It is important that you are having enough nutrition to help support you to regain your muscle strength. It is common for people to have a poor appetite following critical illness and it can take a number of weeks for this to return to normal.

You are advised to eat three regular meals a day that include:

- Starchy carbohydrates (e.g. bread, pasta, rice, potatoes).
- Protein (e.g. meat, fish, eggs, beans, pulses, dairy).
- Fruit and/or vegetables.

This will help to maintain your energy levels and ensure you are getting the nutrition you need to support your recovery. If your appetite is poor or you have lost weight, try having small meals then adding two or three snacks a day.

Suitable snacks include:

- Full fat yoghurt.
- Cheese and biscuits.
- Chocolate/cakes/biscuits.
- Mild drinks, e.g. milky coffee, milkshake, hot chocolate.
- Handful of nuts.
- Slice of toast with peanut butter/ chocolate spread.
- Sausage roll/savoury eggs/ miniature pork pie.
- Milk pudding, e.g. custard, mousse, rice pudding, ice cream.

Equipment and additional support

If you need any equipment or help from social services this should be discussed and arranged with the physiotherapist or occupational therapist whilst you are still in hospital.

Sometimes it is not until you actually get home and do things for yourself, that you realise you need equipment or support. 'The Golden Number' is a social services hotline that you or your family can ring. This will help you get additional support or equipment once you are home. The number you need is based on where your GP surgery is:

- If your GP has a Nottinghamshire postcode, contact 0300 5008080.
- If your GP has a Derbyshire postcode, contact 0845 6058058.

Wheelchairs

Many people struggle walking longer distances outside when they first get home, but want to get out and about to help their recovery. Unfortunately the hospital is unable to provide wheelchairs, but you can hire them locally per week or per day. Different companies charge different prices, so check which suits your needs most:

- British Red Cross – 0115 8528029. Weekly donation required.
- Kirkby Volunteer Centre – 01623 753192. £15 per week and a refundable deposit.
- Care Matters, Mansfield Woodhouse – 01623 659660. £20 per week and a refundable deposit.

A full list of local companies can be obtained from your occupational therapist on the ward.

Managing your energy levels

When you are recovering from a critical illness, you are likely to feel very tired and weak at first so don't be surprised if you have less energy. A simple task, such as putting on your shoes, can feel like hard work. Fatigue (extreme tiredness) is very common.

It is important for you to find ways to conserve your energy as you go about your daily tasks. By making small changes you'll have more energy throughout the day.

Think about 'The 3 Ps principle' (Pace, Plan and Prioritise)

Learning to pace, plan and prioritise your daily activities will help you to save energy.

Pace

Pacing yourself will help you have enough energy to complete an activity. You'll recover faster if you work on a task until you are tired rather than exhausted.

Top tips:

- Break activities up into smaller tasks and spread them throughout the day.
- Try adjusting different parts of an activity to reduce the energy demands.
- Build rests into your activities; they're key to recharging your energy.
- Stop, pause and rest between activities where possible.
- Sit and rest wherever possible.

Plan

Look at the activities you normally do on a daily and weekly basis, and develop a plan for how you can spread these activities out. If certain activities make you breathless or fatigued, rather than do them in one go, plan ahead to do them throughout the day. Change the time of an activity; instead of having a bath or shower in the morning when you are busy, have one in the evening. Do weekly activities such as gardening, laundry and food shopping on different days, with rest days in between.

Top tips:

- Plan ahead as much as possible.
- Create routines.
- Spread activities out.
- Keep items you need together and in easy reach.
- Look for equipment to reduce effort.
- Measure and track your energy use.

Prioritise

Some daily activities are necessary, but others aren't. Ask yourself the following questions to find out which of yours are necessary:

- What do I need to do today?
- What do I want to do today?
- What can be put off until another day?
- What can I ask someone else to do for me?
- What activities help me feel energised?

Top tips:

- Be kind to yourself and don't try to do everything.
- Create a balance of activities you need and want to do.
- Delegate or drop tasks if you can.
- Look for activities that make you feel energised.
- Measure and track your energy use.

Bathing / showering as an example using the '3 Ps'

Pace:

- Allow plenty of time and take regular rests throughout. Think about the time of day (do you have the most energy in the morning or are you more tired in a morning? Maybe consider bathing / showering later in the day).
- Sit in the shower if possible (consider a referral to an occupational therapist for equipment that might help you, for example a shower chair, bath lift).
- Rest in a towel style dressing gown or large size towel rather than drying.

Plan:

- Keep all the things you need for this activity in one place.
- Open an inside door or window to allow good ventilation.
- Use long-handled equipment to avoid excessive bending or over-reaching (for example a long handled sponge).
- Consider grab rails to aid you getting in/out of the bath and shower safely.

Prioritise:

- Is bathing/showering an activity that is important to you and are you willing to use a lot of your energy for the day on this?
- Is a daily bath/shower essential?
- Could you consider an alternative such as strip washing at the sink some days instead? Could you consider the use of dry shampoo to avoid washing and drying hair as regularly?

Keeping an activity diary

A good way of monitoring energy levels is by using a diary; this will also help you to identify any fatiguing activities. In the diary you can document what the activity is (for example bathing/showering) and how you feel after you have performed the activity. This can help you identify where changes need to be made or activities adapted to help you conserve energy and avoid fatigue. You can also use this to monitor your own progress.

My daily plan

Time	Activity	Fatigue score (and additional comments)
6am		
7am		
8am		
9am		
10am		
11am		
Noon		
1pm		
2pm		
3pm		
4pm		
5pm		
6pm		
7pm		
8pm		
9pm		
10pm		
11pm		
12-6am		

- Fatigue score - once the activity is completed on a scale of 1-10 (1 = no fatigue and 10 = worst level of fatigue), self-rate your fatigue levels afterwards.
- Remember to allow for rest periods.

My weekly plan

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6am							
7am							
8am							
9am							
10am							
11am							
Noon							
1pm							
2pm							
3pm							
4pm							
5pm							
6pm							
7pm							
8pm							
9pm							
10pm							
11pm							
12-6am							

Recommendations:

- Allow time for rest periods.
- Fatigue score - once the activity is completed on a scale of 1-10 (1 = no fatigue and 10 = worst level of fatigue), self-rate your fatigue levels afterwards.

When completing these exercises follow the guidance from this booklet and from your physiotherapist. Remember to complete the exercise diary (from page 12) to monitor your progress.

Beginners exercise programme:

1. Seated marching on the spot

- Sitting on a chair, lift your leg a few inches off the seat keeping your knee bent. Return to the starting position. Repeat _____ times on alternate legs.



2. Glute squeezes

- Sitting upright in a chair, squeeze your bottom cheeks together firmly. Hold this squeeze for 5-10 seconds. Repeat _____ times.



3. Hand dexterity

- Practice picking up and using small objects, for example picking up a beaker of water and drinking from it. Using a comb, hair brush or spoon.

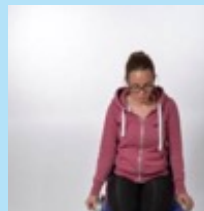
4. Upright sitting

- Place your feet on the floor, hip width apart in front of you. Sit up straight and pull your shoulder blades together. Pretend there is a band that stretches from the bottom of your spine to the top of your head, pulling you straight. Sit for 1-5 minutes, rest and repeat _____ times.



5. Shoulder raises

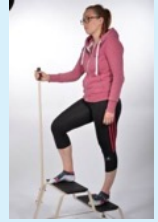
- Sit with your arm resting by your side. Slowly raise it up in front of you until it is level with your shoulder. Hold for 5 seconds; relax it back by your side. Repeat _____ times on alternate arms. This exercise can also be done raising your arm out to the side.



Intermediate exercise programme:

1. Step-ups

- At the bottom of your stairs/step, step up with one foot onto the next step holding your hand rail. Then bring your other foot up onto the same step. Then step back down again. Repeat _____ times with alternate legs. If this is a little difficult, start by marching on the spot until you feel confident to do step ups.



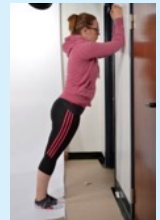
2. Hip rotation

- Lie on your side with your hips and knees bent, so that your heels are in line with your head, body and hips. Open your hips by rotating your top knee up toward the sky while maintaining contact between your heels. Lower your knee back to the starting position. Repeat _____ times.



3. Wall plank

- Stand with your body angled towards a wall and your feet behind your hips. Lean forward and place your forearms on the wall about shoulder width apart. Walk your feet back as far as you can without lifting your heels. Press the forearms into the wall for 30 to 60 seconds. Repeat _____ times.



4. Shoulder raises

- As with the beginners shoulder raises but add a small weight, such a tin of beans or small water bottle. Repeat _____ times on alternate arms.



5. Hand dexterity

- Practice writing the alphabet, doing crosswords or using a knife and fork.

Advanced exercise programme:

1. Wall squats

- Stand with your head and back against a wall, with your feet shoulder width apart. Lower your body into a squat position until your thighs are parallel to the floor. Hold for 5-10 seconds, repeat _____ times.



2. Bridging

- Lie on your back with your hands by your sides, your knees bent and feet flat on the floor. Tighten your abdominal and buttock muscles. Raise your hips up to create a straight line from your knees to shoulders.



3. Crunches / sit-ups

- Lie on your back with your knees bent and your feet flat on the floor, with your hands resting on your thighs. Tighten your abdominal muscles and slowly lift your shoulders off the floor, sliding your hands up to your knees. Lower your shoulders back down to the floor. Repeat _____ times.

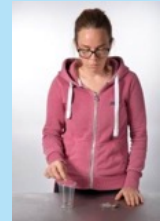
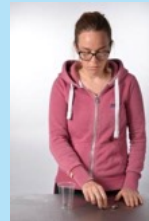


4. Shoulder raises

- As for intermediate exercises, but increase the amount of weight used.

5. Hand dexterity

- Practice picking up small objects e.g. batteries or paper clips and putting them in a beaker.



Contacts:

- GP telephone number: _____
- Physiotherapy telephone number: 01623 622515, extension 6688 (Monday – Friday, 8am - 4pm).



Further sources of information

Diabetes UK: www.diabetes.org.uk
NHS Choices: www.nhs.uk/conditions
Our website: www.sfh-tr.nhs.uk

King's Mill Hospital:

01623 672222

Newark Hospital:

01636 685692

Email: sfh-tr.PET@nhs.net

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

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