

EXERCISE AND CYSTIC FIBROSIS

# MY EXERCISE DIARY



## About this guide

This booklet is full of exercises beneficial to people with CF, including upper and lower body strengthening, upper and lower body flexibility and core strength exercises. Exercises are designed to be pelvic floor safe and you can vary the intensity of each exercise using the modified options.

Work through this booklet with your hospital physiotherapist, starting with your exercise guidelines on page 1. You can then work through each chapter with them and have them recommend the exercises and weights that are most appropriate for you.

**You can track your exercise progress in the exercise log at the back of the book, and report back to your physio 3 monthly.**



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Authors from Cystic Fibrosis Western Australia.

Special thanks to:

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Paul O'Neill, Dietitian

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# Contents

1.	My Exercise Guidelines	1
2.	Upper Body Exercises	3
3.	Lower Body Exercises	5
4.	Flexibility Exercises (upper body)	7
5.	Flexibility Exercises (lower body)	9
6.	Core Strength Exercises	11
7.	Exercise Prescription	13
8.	Exercise Log	17
9.	Useful Resources	23
10.	Useful Contact Details	24

# 1. My Exercise Guidelines

Name: \_\_\_\_\_

What is my target heart rate? \_\_\_\_\_

What is the maximum heart rate I should not exceed? \_\_\_\_\_

What is my target rating of perceived exertion? \_\_\_\_\_

What is the maximum rating of perceived exertion I should not exceed? \_\_\_\_\_

## MY OTHER EXERCISE PRECAUTIONS

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## MY EXERCISE GOAL

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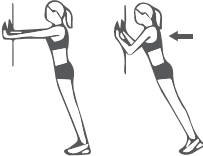
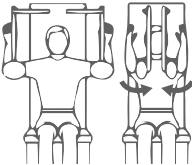
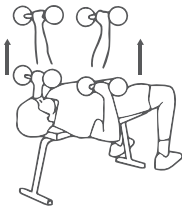

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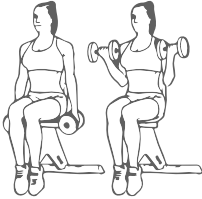

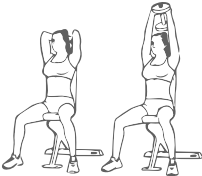



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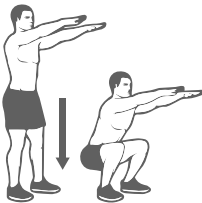

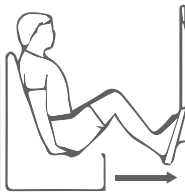





Rating of Perceived Exertion (RPE)	
0	Nothing at all
0.5	Very, very light
1	Very light
2	Fairly light
3	Moderate
4	Somewhat hard
5	Hard
6	
7	Very hard
8	
9	
10	Very, very hard (maximal)

# 2. Upper Body Exercises


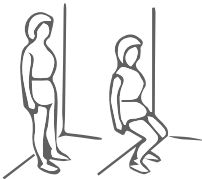
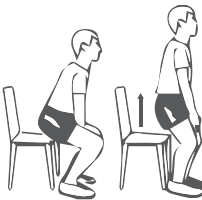
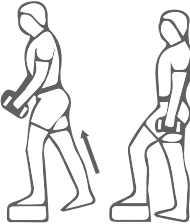
EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>WALL PUSH UP</b> 	<ul style="list-style-type: none"> <li>• Standing a couple of feet away from a wall, place hands against the wall at shoulder height.</li> <li>• Bend your elbows to bring your body towards the wall, keeping back flat.</li> <li>• Inhale before beginning the movement and exhale as you push off the wall.</li> </ul>	<ul style="list-style-type: none"> <li>• Bring your feet closer to the wall to make this exercise easier.</li> </ul>	<div></div>
<b>PEC DECK</b> 	<ul style="list-style-type: none"> <li>• Place inside of arms against pads, elbows bent to 90 degrees.</li> <li>• Pull arms inward and together.</li> <li>• Return to start position and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>• This can be done at home with free weights.</li> <li>• Use lighter weights to protect your pelvic floor</li> </ul>	<div></div> <div>Recommended Weight</div>
<b>CHEST PRESS</b> 	<ul style="list-style-type: none"> <li>• Grasp weights and push upwards.</li> <li>• Slowly bend the elbows to return to the start position, with hands near the chest.</li> </ul>	<ul style="list-style-type: none"> <li>• This exercise can be done lying down with dumbbells or sitting up using a chest press machine at a gym.</li> <li>• Use lighter weights to protect your pelvic floor</li> </ul>	<div></div> <div>Recommended weight</div>
<b>SEATED ROW</b> 	<ul style="list-style-type: none"> <li>• Grasp row handle with both hands.</li> <li>• Pull handles to mid chest keeping elbows close to body.</li> <li>• Squeeze shoulder blades together as you pull.</li> <li>• Return to start position and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>• Use lighter weights to protect your pelvic floor</li> </ul>	<div></div> <div>Recommended weight</div>

EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>SEATED BICEP CURL</b> 	<ul style="list-style-type: none"> <li>While sitting, hold weights in hands, palms up.</li> <li>You can lift both arms together or alternate reps from right to left.</li> <li>Repeat.</li> </ul>	<ul style="list-style-type: none"> <li>Sitting on a fit ball is a great option to further protect the pelvic floor.</li> </ul>	  Recommended weight
<b>SEATED TRICEP EXTENSIONS</b> 	<ul style="list-style-type: none"> <li>Sit on a bench or fit ball, and using both hands, hold the dumbbell above your head.</li> <li>Lower the dumbbell down to behind your head.</li> <li>Drive the dumbbell back to the starting position and repeat.</li> </ul>		  Recommended weight
<b>SHOULDER ROTATIONS</b> 	<ul style="list-style-type: none"> <li>Hold both arms straight out to your sides.</li> <li>Starting with small arm circles, gradually increase the size and speed of the circles for about 30 revolutions.</li> <li>Make sure you remain in control of your arms and are not just using momentum.</li> <li>Reverse your direction and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>This exercise can be done with or without dumbbells to make it easier or harder as required.</li> <li>Use lighter weights to protect your pelvic floor.</li> </ul>	  Recommended weight


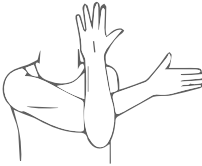



# 3. Lower Body Exercises



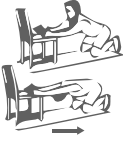







EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>SQUAT (SHALLOW AND NARROW)</b> 	<ul style="list-style-type: none"> <li>Stand with feet closer than shoulder width apart. A narrow stance helps protect pelvic floor.</li> <li>Toes slightly pointed out and aligned with knees.</li> <li>Squat down as though you are preparing to sit in a chair. Ensure hips remain at a higher level than your knees.</li> <li>Return to start and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>You could do wall squats with a fit ball behind your back.</li> </ul>	
<b>LEG PRESS</b> 	<ul style="list-style-type: none"> <li>Place both feet on foot plates, knees bent.</li> <li>Make sure back is supported by backrest.</li> <li>Push down on foot plate, straightening knees.</li> <li>Return to start position and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>To protect your pelvic floor, keep weight lower and repeat more reps.</li> </ul>	 Recommended Weight
<b>LEG CURL</b> 	<ul style="list-style-type: none"> <li>Place pads behind ankles.</li> <li>Begin with knees straight.</li> <li>Bend knees until 90 degrees.</li> <li>Return to the start and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>To protect your pelvic floor, keep weight lower and repeat more reps.</li> </ul>	 Recommended weight
<b>SHALLOW LUNGES</b> 	<ul style="list-style-type: none"> <li>Step forward, bending knees to less than 90 degrees.</li> <li>Push back up to standing.</li> <li>Repeat.</li> </ul>	<ul style="list-style-type: none"> <li>Keeping lunges shallow helps to protect the pelvic floor.</li> </ul>	





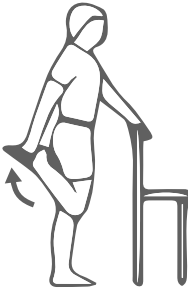



EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>LEG EXTENSION</b> 	<ul style="list-style-type: none"> <li>• Place front of ankles under pads.</li> <li>• Slowly straighten knees.</li> <li>• Return to start position and repeat.</li> </ul>		<div>○</div> <div>Recommended weight</div>
<b>SHALLOW WALL SQUATS</b> 	<ul style="list-style-type: none"> <li>• Stand with feet about hip distance apart.</li> <li>• Keep toes slightly pointed out and aligned with knees.</li> <li>• Squat down by bending knees forward while allowing hips to bend back behind, similar to beginning to sit in a chair.</li> <li>• Lower your body as far as comfortable.</li> <li>• Return to standing position and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>• This exercise can be done with or without dumbbells to make it easier or harder as required.</li> </ul>	<div>○</div>
<b>SIT-TO-STAND</b> 	<ul style="list-style-type: none"> <li>• Start by sitting upright in a chair.</li> <li>• Slide forward as far as possible.</li> <li>• Use your bottom and legs to stand up. Lightly use your hands on the chair if necessary.</li> <li>• Sit down again and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>• This exercise can be done with or without dumbbells to make it easier or harder as required.</li> </ul>	<div>○</div>
<b>LOW STEP UPS</b> 	<ul style="list-style-type: none"> <li>• Step up onto a raised platform such as an exercise step or even a stair in your home.</li> <li>• Step up one leg at a time and then lower yourself back down one step at a time.</li> <li>• Repeat on the other leg.</li> </ul>	<ul style="list-style-type: none"> <li>• This exercise can be done with or without dumbbells to make it easier or harder as required.</li> <li>• The step should not be too high, in order to protect your pelvic floor.</li> </ul>	<div>○</div>

## 4. Flexibility Exercises (upper body)

EXERCISE	INSTRUCTIONS	BENEFITS	REC. BY PHYSIO?
<b>UPPER BACK STRETCH</b> 	<ul style="list-style-type: none"> <li>Interlace fingers and turn palms out.</li> <li>Extend arms in front at shoulder height.</li> <li>Hold for at least 30 seconds, relax and repeat.</li> </ul>	<ul style="list-style-type: none"> <li>Stretches shoulders and middle back.</li> </ul>	<input type="radio"/>
<b>SHOULDER STRETCH</b> 	<ul style="list-style-type: none"> <li>With your shoulders down and relaxed, reach one arm across your chest, parallel to the floor.</li> <li>With the other arm, place your hand on the elbow.</li> <li>Gently pull your elbow in toward your chest. Hold the stretch</li> <li>Relax and repeat on opposite side.</li> </ul>	<ul style="list-style-type: none"> <li>Stretches shoulders and triceps.</li> </ul>	<input type="radio"/>
<b>FIT BALL BACK STRETCH</b> 	<ul style="list-style-type: none"> <li>Lie on your back on the exercise ball.</li> <li>Stretch by extending your arms and legs fully.</li> </ul>	<ul style="list-style-type: none"> <li>Stretches your abdominal muscles as well as your chest and back muscles.</li> </ul>	<input type="radio"/>
<b>UPPER SIDE STRETCH</b> 	<ul style="list-style-type: none"> <li>Raise your right arm straight up.</li> <li>Tilt your upper body at the hips to your left to stretch the entire right side of your body.</li> <li>Repeat on other side.</li> </ul>	<ul style="list-style-type: none"> <li>Stretches muscles on your side and back as well as your abdominal muscles.</li> </ul>	<input type="radio"/>
<b>FULL BODY STRETCH</b> 	<ul style="list-style-type: none"> <li>Lie on your back and stretch your arms up above your head until they are flat on the floor.</li> <li>Stretch out to elongate your body.</li> </ul>	<ul style="list-style-type: none"> <li>Lengthens and elongates your body</li> </ul>	<input type="radio"/>

EXERCISE	INSTRUCTIONS	BENEFITS	REC. BY PHYSIO?
<b>ABDOMINAL TWIST</b> 	<ul style="list-style-type: none"> <li>● Sit down on the floor, legs straight, away from each other.</li> <li>● Stretch by rotating your upper body to one side then to the other.</li> </ul>	<ul style="list-style-type: none"> <li>● Stretches your abdominal and back muscles.</li> </ul>	
<b>CHAIR BOW</b> 	<ul style="list-style-type: none"> <li>● Kneel on a soft mat with a chair in front of your body.</li> <li>● Place your hand on the chair and lean forward until your back is flat.</li> </ul>	<ul style="list-style-type: none"> <li>● Stretches shoulders and chest</li> </ul>	
<b>THORACIC NOODLE STRETCH</b> 	<ul style="list-style-type: none"> <li>● Lying on your back, place a pool noodle horizontally along your upper back (across your shoulder blades).</li> <li>● Legs bent at 90 degrees.</li> <li>● Place arms on sides of your head.</li> </ul>	<ul style="list-style-type: none"> <li>● Stretches upper back.</li> </ul>	
<b>SPINAL EXTENSION</b> 	<ul style="list-style-type: none"> <li>● Lie on your front and rest your forehead on the floor with legs straight and slightly wider apart than hips.</li> <li>● With bent elbows, position your hands palms down, slightly wider and above your shoulders.</li> <li>● Gradually lift your head and chest off the floor but keep your lower ribs in contact with the floor.</li> </ul>	<ul style="list-style-type: none"> <li>● Stretches lower back muscles.</li> </ul>	
<b>DOORWAY STRETCH</b> 	<ul style="list-style-type: none"> <li>● Stand in a door frame.</li> <li>● Bend your elbow and support the forearm against the door frame above shoulder height.</li> <li>● Exhale and lean your body forward, rotating your upper body away from the arm until you feel stretching in your chest muscles.</li> </ul>	<ul style="list-style-type: none"> <li>● This can be done with either one arm or both arms at the same time. To stretch both sides together, do this exercise in a corner.</li> </ul>	





# 5. Flexibility Exercises (lower body)


EXERCISE	INSTRUCTIONS	BENEFITS	REC. BY PHYSIO?
<b>SIDE-LYING HIP FLEXOR STRETCH</b>  	<ul style="list-style-type: none"><li>● Lie on your left side with both legs straight, and left arm resting on the floor underneath your head.</li><li>● Bring right heel into the buttocks while holding on to your foot.</li><li>● Pull your heel toward your buttocks to feel a stretch through your upper front thigh muscles.</li><li>● Repeat on other side.</li></ul>	<ul style="list-style-type: none"><li>● Stretches hip muscles.</li></ul>	
<b>QUADRICEPS</b>  	<ul style="list-style-type: none"><li>● Stand and touch wall or stationary object for balance.</li><li>● Grasp top ankle or forefoot behind.</li><li>● Pull ankle or forefoot to your bottom.</li><li>● You should feel the stretch along the front of your thigh.</li><li>● Repeat on other side.</li></ul>	<ul style="list-style-type: none"><li>● Stretches front of thigh.</li></ul>	
<b>SEATED HAMSTRING</b>  	<ul style="list-style-type: none"><li>● Sit on a mat with your right leg extended in front of you and your left leg bent with your foot against your right inner thigh.</li><li>● Lean forward from your hips and reach for your ankle until you feel a stretch in your hamstring.</li><li>● Repeat on other side.</li></ul>	<ul style="list-style-type: none"><li>● Stretches back of leg, behind the knee.</li></ul>	

EXERCISE	INSTRUCTIONS	BENEFITS	REC. BY PHYSIO?
<b>STANDING CALF STRETCH</b> 	<ul style="list-style-type: none"> <li>• Stand a few feet from a wall with arms on the wall and step the leg to be stretched behind you.</li> <li>• Lunge forward onto your front leg until you feel a stretch in your calf on the back leg.</li> <li>• Keep back knee straight and heel on the floor.</li> <li>• Hold and repeat on other side.</li> </ul>	<ul style="list-style-type: none"> <li>• Stretches calf.</li> </ul>	



## 6. Core Strength Exercises

EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>BALANCING ON BOSU BALL BALANCE DISC</b> 	<ul style="list-style-type: none"> <li>Stand on one leg on bosu ball or balance disc.</li> <li>Engage core to help stabilise.</li> <li>Hold for 30 to 60 seconds.</li> <li>Switch legs.</li> </ul>	<ul style="list-style-type: none"> <li>Lean on a wall or hold on to someone if needed.</li> </ul>	○
<b>KNEELING PLANK</b> 	<ul style="list-style-type: none"> <li>Place forearms on mat, elbows under shoulders.</li> <li>Keep legs together with knees on the floor and a slight bend at the hips.</li> </ul>		○
<b>SUPERMAN</b> 	<ul style="list-style-type: none"> <li>Slowly slide leg backwards extending the knee.</li> <li>At the same time slide your opposite arm forward.</li> <li>Engage your core muscles and hold the pose for up to 30 seconds.</li> <li>Return and do with opposite arm and leg.</li> </ul>	<ul style="list-style-type: none"> <li>To make this easier, do legs and arms separately rather than at the same time.</li> </ul>	○
<b>BRIDGE</b> 	<ul style="list-style-type: none"> <li>Lie on your back with your knees bent and your heels as close to your buttocks as possible.</li> <li>Gently lift your hips until your thighs are nearly parallel with the floor.</li> <li>Hold for 30-60 seconds and then slowly roll your spine back down into a lying down position.</li> </ul>		○

EXERCISE	INSTRUCTIONS	MODIFIED OPTIONS	REC. BY PHYSIO?
<b>MODIFIED SIDE PLANK</b> 	<ul style="list-style-type: none"> <li>• Position your elbow on the floor under your shoulder.</li> <li>• Keeping legs together, bend your bottom leg and allow your knee to touch the floor and take some of your weight.</li> <li>• Hold this position for a count of 10.</li> <li>• Rest and repeat the exercise on the other hip.</li> </ul>		○



## 7. Exercise Prescription

[illegible]



[illegible]



[illegible]

# 8. Exercise Log

Notes	Monday	Tuesday	Wednesday
Notes  Week: __/__/__	Workout as prescribed by physio. Completed full workout. Felt good today!	Rest Day	Walk around neighborhood. Gentle walk, still recovering from Monday's session
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			

Thursday	Friday	Saturday	Sunday
Rest Day	Workout as prescribed by physio	Swim at local pool. Completed 1km swim in 1 hour.	Rest Day

Notes	Monday	Tuesday	Wednesday
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			
Notes			
Week: __/__/__			

[illegible]

Notes	Monday	Tuesday	Wednesday
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			
Notes  Week: __/__/__			



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## 9. Useful Resources

### **CFFIT**

Exercise and Cystic Fibrosis: A Guide for Personal Trainers

Exercise and Cystic Fibrosis: A Guide for People Living with CF

### **CFFACT**

A range of quick, easy to read fact sheets on various CF-related topics, including

- Airway clearance techniques
- Bone health
- Continence
- Cystic Fibrosis Related Diabetes
- Dehydration
- Germs and cross-infection
- Lung transplants
- Medications
- PEGs
- PICCs
- Ports

### **CFFOOD**

Cystic Fibrosis Nutrition Program: A Guide for Adults

CFBites: Snacks and Meals for those with Cystic Fibrosis

### **CFCOOKING**

A series of cooking demonstration videos for people with CF

**All our resources available from our website [www.cfwa.org.au](http://www.cfwa.org.au)**

### **OTHER WEBSITES**

Cystic Fibrosis Australia [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

Pelvic Floor First [www.pelvicfloorfirst.org.au](http://www.pelvicfloorfirst.org.au)

Continence Foundation of Australia [www.continence.org.au](http://www.continence.org.au)

PACTSTER- Online exercise for cystic fibrosis

[www.pactster.com/cystic-fibrosis](http://www.pactster.com/cystic-fibrosis)

## 10. Useful Contact Details

### ACT

#### **Cystic Fibrosis Association ACT Inc**

☎ (02) 6292 9866  
✉ [info@cfact.org.au](mailto:info@cfact.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### NSW

#### **Cystic Fibrosis Community Care (NSW)**

☎ (02) 8732 5700  
✉ [admin@cfnsw.org.au](mailto:admin@cfnsw.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### QUEENSLAND

#### **Cystic Fibrosis Queensland**

☎ (07) 3359 8000  
✉ [admin@cfqld.org.au](mailto:admin@cfqld.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### SOUTH AUSTRALIA

#### **Cystic Fibrosis SA**

☎ (08) 8221 5595  
✉ [cfsa@cfsa.org.au](mailto:cfsa@cfsa.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### TASMANIA

#### **Cystic Fibrosis Tasmania**

☎ (03) 6234 6085  
✉ [general@cftas.org.au](mailto:general@cftas.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### VICTORIA

#### **Cystic Fibrosis Community Care (CFV)**

☎ (03) 9686 1811  
✉ [admin@cfv.org.au](mailto:admin@cfv.org.au)  
🌐 [www.cysticfibrosis.org.au](http://www.cysticfibrosis.org.au)

### WESTERN AUSTRALIA

#### **Cystic Fibrosis Western Australia**

☎ (08) 6457 7333  
✉ [admin@cfwa.org.au](mailto:admin@cfwa.org.au)  
🌐 [www.cfw.org.au](http://www.cfw.org.au)



[www.cfwa.org.au](http://www.cfwa.org.au)