

This leaflet explains about how to improve your fitness through exercise, building up gradually and avoiding overdoing it.

If you have any questions, please call us.

Our telephone number is 020 7813 8541.



Chronic fatigue syndrome and strengthening, stretching and fitness

Information for young people

Great Ormond Street Hospital for Children NHS Trust

Strengthening

- Always do a movement slowly. This makes sure you are strengthening the right muscle throughout the movement and not causing any damage by making jerky movements.
- Always keep your back straight and your eyes looking forward. If you look up or down, you may hurt your neck.
- At the start, it might be enough to just go through the movements without weights.
- When using free weight (weights that you hold in your hand), the best way to use them is to:
 - ◆ Start with 10 repetitions and gradually increase the weights until you can do no more than 10 in a row.
 - ◆ Remember that it can take several days to work this out and the correct weights will vary from muscle group to muscle group
 - ◆ Split the days you use the weights, doing leg movements on one day and then arm movements the next. This gives your muscle groups a rest day.
 - ◆ To increase your weights, you can either increase the weights you are using or increase the number of repetitions that you do each time.
- Balance is very important when strengthening muscles as they work in pairs. Make sure you do both your quadriceps muscles and your hamstrings or your triceps and biceps.

Stretching

- Don't bounce
- Make sure your back is always straight, especially when doing a hamstring stretch (see overleaf). This exercise is not to prove how far down your leg you can reach.
- It is better to hold a stretch for a long time than do a large number. The minimum amount of time you should hold a stretch is 30 seconds.



Getting fit for sport

- You need to be exercising comfortably for 20 to 30 minutes continuously at least three times a week before taking on a fitness programme.
- Estimate the heart rate you should start exercising at as follows:
 - $220 - \text{your age} = \text{maximum heart rate possible}$
 - 40 per cent of this is the ideal heart rate that will affect your fitness when you start.
 - For example, if you are 16 years old:
 - $220 - 16 = 204$ beats per minute
 - 40 per cent of 204 = 81 beats per minute
- Once you are exercising regularly and this heart rate is easy to achieve, increase it by 10 per cent over a number of weeks and months until you reach 60 per cent.
- Choose a sport that you like and enjoy.
- Advice about how often to exercise and for how long varies. We suggest 20 minutes, three times a week.
- For sports such as tennis or football, you could start by doing a walk/run programme, with some skills practice. This is the best way to increase your fitness and your ability in the sport. Other sports such as cycling or swimming can help to build up your fitness on their own.



Delayed onset muscle soreness

Feeling strange or having different symptoms is normal when you start a new activity or exercise. Your skin may go red, you might feel tired, like jelly or stiff when you finish. This is quite normal. Delayed Onset Muscle Soreness (DOMS) is a common effect for all people when they increase their exercise or activity level.

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Stretch programme

Look at the diagrams showing the muscles in the body (overleaf) so you know which muscle group you are stretching for each exercise. Hold each stretch for a slow count of 30 and repeat at least twice on each side. Do not bounce!

Legs and back

☀ Hamstrings

- Sit on a bed or the floor with your legs out in front of you
- Sitting up with your back straight, tilt forwards from your hips
- Feel the stretch at the back of your legs
- Pull your toes back towards your shins to increase the stretch



☀ Quadriceps

- Stand up with your back straight and balance on one leg
- Pull your other foot up behind you towards your bottom
- Keep your knees together
- Feel the stretch at the front of your thigh
- You might need to hold onto a chair to help you balance



☀ Calf – gastrocnemius

- Stand with your legs apart, with one foot in front of the other
- Lean forward on your front leg, keeping your back leg straight and your foot flat on the ground
- Feel the stretch at the top of your calf muscle
- Repeat with your other leg



☀ Calf – soleus

- Stand with your legs apart, with one foot in front of the other but closer together than for the previous stretch
- Bend your back leg so that your knee moves downwards
- Feel the stretch lower down your calf muscle
- Repeat with your other leg



☀ Gluteals

- Sit on the floor with your legs out in front of you
- Keeping your right leg straight, cross your left leg over the top of your right leg
- Place your right elbow on your left knee
- Repeat with your other leg



☀ Upper back

- Sit on a chair with your feet flat on the ground
- Turn head and both shoulders to the right
- Repeat on the other side



☀ Lower back

- Lay on your back with your knees bent and your feet flat on the floor
- Make sure your back is flat
- Keep your knees together and gently rock your knees from side to side



☀ Groin

- Sit on the floor with your legs out in front of you
- Bend your legs so that you can bring the soles of your feet together in front of you
- Gently push your knees towards the floor



Arms and neck

☀ Biceps

- Stand in a doorway and place one palm flat on the wall
- Take a step forward
- Feel a stretch along the front of your arm
- Repeat with the other arm



☀ Pectorals

- Stand in a doorway and place one palm flat on the wall
- Keep your shoulder and arm at right angles to your body
- Turn your body away from your arm
- Feel the stretch on the front of your chest
- Repeat with your other arm



☀ Triceps

- Bend your right arm and reach down your back
- Place your left hand on your right elbow to stretch
- Feel the stretch in the back of your arm
- Repeat with your other arm



☀ Wrist

- Reach your arm straight in front of you
- Pull your fingers back with your other hand
- Feel the stretch on the underside of your forearm
- Repeat with your other arm



☀ Upper cervical

- Look straight ahead and pull your chin down to make a double chin
- Feel the stretch at the very top of your neck



☀ Upper trapezius

- Sit on a chair and hold onto the seat with your right hand
- Tilt your left ear towards your left shoulder
- Feel the stretch along the right side of your neck
- Repeat on the opposite side

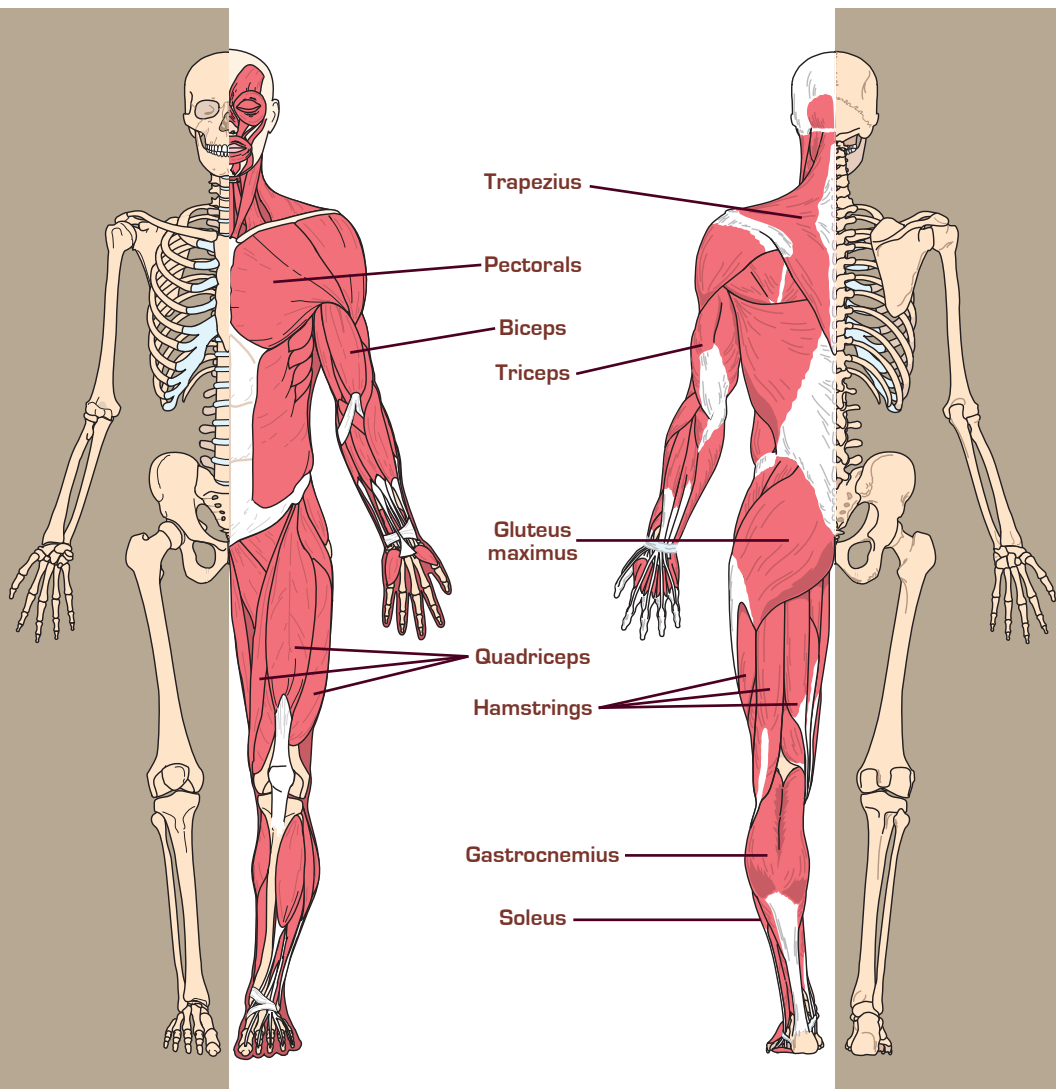


☀ Lower trapezius

- Sit on a chair and hold onto the seat with your right hand
- Turn your head to look at your left hip and thigh
- Feel the stretch in your upper back
- Repeat on the opposite side



If you have any questions,
please ring the CFS/ME team on 020 7813 8541.



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