

Components of Exercise



When we exercise, we aim to improve:

1. Strength
2. Stamina and fitness
3. Movement patterns and memory of movements

Strength

Muscles vary greatly in terms of their capabilities and strength. They need plenty of oxygen to work. With an exercise programme you will aim not only to strengthen your muscles, but also to improve their blood supply. Prolonged holding activities are particularly difficult for muscles (especially weaker ones) because the blood supply is restricted while the muscle is contracted.

When you do strengthening exercises it is important to:

- Know which specific muscle you are exercising
- Gain a realistic impression of how "able" your different muscles are
- Exercise them well within their capacity
- Make sure they relax between repetitions, but especially at the end of each exercise (they need to take a deep breath too)
- Do them frequently, once or twice daily is ideal
- To experience some muscle aching following these exercises is quite normal (however it shouldn't really exacerbate your pain for any length of time)

Stamina and Fitness

During exercise the muscles use up the oxygen they had "in store". In order to refuel with oxygen, the heart pumps a little bit faster to quickly transport oxygen from the lungs to the needy muscles.

So, when we try to increase our fitness levels we're really exercising one of our bigger muscles - our heart - the heart is similar to other muscles in the body, in that it can have a more or less powerful pumping capability and can get more or less tired with its task. Generally, people who do **no** fitness exercising are generally **more** tired than people who do. Simply getting us through the day is a challenge for our hearts. Since one of the physical signs of stress is an increase in heart rate, it is most useful to be physically well- equipped to cope with that.

To reverse the impact of pain on your physical de-conditioning, improving your cardiovascular fitness (the ability of your heart and artery muscles to pump blood to different parts of the body and the brain) is one of the major keys to helping you cope with your situation better in the long run.

If you want to increase your cardiovascular fitness, you need to:

- Add a physical activity like walking, swimming, cycling, or stairs or any of the exercises suggested in the video resources to your normal routine
- Aim for 12 minutes daily - get your heart rate is raised
- Do it regularly – daily is best!
- To embed the new activity in your day, you may find it helpful to:
 - set yourself a target for endurance;
 - set a time frame
 - set yourself a target for exertion;
 - have a reward for sticking to it
 - make a note of what you are doing and/ or tell a friend
 - exercise in a group / with a friend

Movement patterns and memory of movements

Every time a movement or results in an increase in pain, we lay down memories that connect the exercise with the pain fare. This can easily lead to a chain reactions and pain is triggered due to these previous experiences. Even the thought of doing movements that have caused pain in the past can trigger pain at times.

We are keen for you to develop new memories where exercise does not change your pain. We suggest you add slow, and low level exercise to your repertoire and that you regularly include breathing and calming strategies. Any exercise that doesn't make your pain worse today, is a step towards increasing your tolerance to exercise in the future.