

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. It is a well known fact that people who do no fitness exercising are generally more tired in the evening 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.

Unfortunately, it seems that people who would benefit greatly from endurance and strength to cope with the daily stress and challenges of chronic pain are more often than not extremely unfit. 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:

- Choose a safe activity like walking, swimming, cycling, or stairs
- Set yourself a target for endurance; set a time frame Set yourself a target for exertion; until your heart rate is raised
- Do it regularly!

Movement patterns and memory of movements

Every time a movement or results in an increase in pain, we lay down memories or 'neuro tags' and it does not take very many repetitions for the neurotags trigger a chain of reactions even at the thought of doing movements that have caused pain in the past. The challenge in patients with chronic pain is to create different and better neuro tags around movement, especially the ones that often or always cause an increase in pain.

To develop new memories around movements is a critical component of pain management and we will have several sessions during the programme where we will raise and discuss different ways this can be tackled.

We will use the exercise sessions to explore and apply some of these strategies.