

# Exercise and Lymphoedema

Everyone should attempt to maintain a healthy weight and be physically fit within the limitations of their age and any physical or medical conditions. To become physically fit one needs to undertake a range of exercise.

It is now clear from a range of studies that exercise is generally safe and beneficial. Exercise includes many different types of physical movement. The three main groups of exercise are: aerobic, strength, and flexibility.

There are many other types of exercise that have health benefits such as Pilates, yoga, Tai Chi, Qigong, aquatic exercise, trampoline rebounding, breathing and relaxation that have not yet been adequately studied in people with lymphoedema.

The National Lymphoedema Network of the USA (NLN) indicates a person at risk of lymphoedema or with lymphoedema can use the benefits of any system of exercise if he/she follows the general safety principles of exercise with lymphoedema, seeks medical guidance, and uses caution in starting any new exercise program.

## What happens when you exercise?

When you undertake an exercise program your heart rate (and often blood pressure) rise. This helps supply your muscles with oxygen and nutrients and helps your body remove waste products. During this process the load on your lymphatic system (which can be likened to a sewerage system) increases, and its flow increases. This is generally okay for a normal lymphatic system, but when a lymphatic system has been disrupted by surgery or radiotherapy the load it can take without showing signs of overload can be less, often leading to fluid accumulation in the tissues (called oedema). Even after you have finished your exercise your heart rate and blood flow and pressure might be higher than at rest. It is important to remember this as it can mean higher loads on your lymphatic system.

Even when your lymphatic system is normal, you can expect to get some short term fluid accumulation in the tissues. In people without lymphoedema, this fluid is soon removed. When the lymphatic system is not working well that fluid (and its contents – which includes waste products

from the cells and tissues) may stay in the tissues. If it stays for a long time (weeks and months) it's best referred to as lymphoedema.

We and the NLN (via their position statement) would like you to know that you can use the benefits of any system of exercise as long as you follow the general safety principles (undertake within your limits, warm up and warm down) of exercise with lymphoedema, seek medical or qualified health professional guidance (e.g., Medical Oncologist, Lymphoedema Specialist), and use caution in starting any new exercise program.

## One of the most important principles to is warm up and warm down.

These actions can vary widely between individuals, but might involve gentle bending and straightening at a constant speed or keeping the limb still while increasing the tension (e.g., stretching). This movement of the muscle groups and or the limb or area of the body is important. Remember to take some deeper breaths during warm up and warm down if you are able to do so.

## Compression or no compression during and after exercise?

This is a difficult question to answer. It's really up to you the individual. We suggest that if you have a bandage on and normally wear a garment during the day that you leave it on for your exercise/ activity. If you do not have a garment then we suggest you pay particular attention to how your arm feels in the hour or two after the initial bouts of exercise. If it feels 'full' or tighter or your fingers seem a little swollen then it may be worth considering purchasing (ideally with the help of a health professional familiar with your condition) a compression garment and utilising one or more of the following suggestions below to help relieve/ remove lymphoedema symptoms.

## Key points

- 1) Warm up and warm down! If you are at risk of lymphoedema or already have it the warm down period is crucial. After exercise, the load on the lymphatic system is generally higher, so you need to keep the lymph in it flowing by slow decreasing levels of activity.
- 2) Keep your garment or bandage on during exercise. If you have been undertaking your exercise with a bandage on or garment on then you would have noticed that your arm will feel warmer than the other one. That's OK but it does mean this arm will take longer to cool. You might think it's a good idea to remove your garment or bandage at this time for a while. While the information available is not strong it does seem that it is better to leave it on! This means the compression helps vary the pressures in the tissues and helps pump the lymph along.
- 3) To wear or not to wear? Another general point about garments and bandages. If you don't wear them 24 hours a day (which is totally OK), and you wear them only during waking hours, it's best to put them on as early as possible after you get out of bed. It's also VERY important not to take them off until you are in bed. If you take them off earlier the fluids they were holding out of the tissues may accumulate.
- 4) Undertake a gentle arm exercise and breathing program after any exercise program and before you go to bed. This has been clinically trialled at Flinders Medical Centre and while not a large trial, it suggested that undertaking this program helps clear the lymphatics of the chest of fluids - and thus creates space for the fluids to enter when they leave the arms (see attached program). You will see that we recommend this program be undertaken 5 times a day to attain maximum benefit.
- 5) Take some deep breaths during the day. At other times of the day taking a good deep breath in and breathing out slowly is good for helping clear the lymph vessels in the upper parts of the arm and chest of lymph. This in turn helps keep the fluid levels under control.
- 6) Whenever your arm or hand starts to feel a little heavy and or has a 'full' feeling we suggest you undertake the gentle breathing and arm exercise program.
- 7) Contact your health professional of GP if you are in any doubt. If the fullness persists then we suggest you contact a qualified lymph therapist, your specialist or GP.

Therapist listings are available at <http://nlpr.asn.au/> or call the Lymphoedema Research Unit at Flinders Medical Centre on 82044903 for further advice. Therapists listed on this website are private practitioners so you will need to enquire about costs involved with treatment. Flinders Medical Centre does not currently have a publicly funded service.

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## For more information

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If you require this information in an alternative language or format please contact SA Health on the details provided above and they will make every effort to assist you.

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