

## Lymphedema and Exercise



By Carol Michaels

Exercise and fitness training provide valuable benefits for patients during and after cancer treatment. Many survivors can experience persistent fatigue, deficits in strength and range of motion, decreased ability to manage work and home tasks, and lymphedema. Studies are increasingly indicating that exercise can help combat many of these side effects of treatment.

During chemotherapy, exercise may increase fitness and energy levels, improve mood, and help patients better tolerate cancer treatments. After treatment is concluded, exercise can increase strength and aerobic capacity, improve joint flexibility, elevate mood, and help patients resume regular activities and work demands. In addition,

exercise has been shown to decrease the risk of onset or recurrence of many types of cancer.

It is essential that cancer survivors communicate with their healthcare team and engage in exercise that is appropriate for their unique needs and stage of treatment or recovery. In *Exercises for Cancer Survivors* (FriesenPress, 2014), coauthor Maria Drozda and I provide valuable information about the role of exercise during and after cancer treatment to help patients and caregivers understand how to exercise safely and effectively.

One of the goals of *Exercises for Cancer Survivors* is to encourage fitness without incurring pain or injury that could trigger or exacerbate lymphedema, a possible side effect of cancer treatment. Recent studies have demonstrated that regular exercise, including strength training, may decrease the risk of lymphedema or diminish symptoms of the condition if it is already present.

We hope that by providing information about how to perform exercises safely and use good technique to improve flexibility, strength, and function, we can help survivors who are experiencing lymphedema enjoy the many physical and psychological benefits of exercise. The following excerpt offers valuable insight into safe and effective strategies for managing lymphedema and exercise.

---

### Lymphedema

[excerpt from *Exercises for Cancer Survivors*]

Lymphedema is a swelling produced by an accumulation of lymph fluid in tissue. Too much lymph fluid can accumulate in an area of the body that has been damaged because of the removal of lymph nodes or radiation to the area. Fibrosis of the axilla due to surgery or radiation can also cause lymphatic obstruction. Symptoms include a feeling of tightness, leathery skin texture, and heaviness. Lymphedema can be debilitating and painful and can affect emotional health.

The circulatory system is made up of arteries, veins, and the lymphatic system. The lymphatic system relies on the movement of muscles to circulate the lymph fluid throughout the body. You can think of the lymphatic system as a road system. When one or more roads are blocked due to lymph node removal, the system does not flow smoothly. The "traffic congestion" can cause swelling known as lymphedema.

Even if you have only had a few lymph nodes removed, you should still understand the lymphedema precautions. Lymphedema can occur right after surgery or years later.

## Decreasing the Risk of Lymphedema

One of the most important things you can do to decrease your risk of lymphedema is to maintain a healthy weight. It is also important to learn proper nutrition and the appropriate exercise routines for your specific needs.

The following are additional steps one should take to decrease the chance of developing lymphedema:

- Try to avoid extreme temperatures, and avoid sunburns.
- Avoid restricting your lymph circulation. Examples of this would be taking blood samples from or blood pressure on the affected arm, carrying a heavy bag on your arm, or wearing tight clothing and jewelry.
- Check regularly for infection, and call your doctor immediately if an infection occurs. Insect bites, scratches, skin punctures, and bites can cause infections.
- Wash the affected area frequently and apply moisturizer to avoid cracks in the skin.

The National Lymphedema Network's website ([lymphnet.org](http://lymphnet.org)) is a terrific resource. You should also speak with your therapist for a complete list of lymphedema precautions.

## Lymphedema Therapist

Learn the first signs of lymphedema; it is easier to manage if treated early. Your lymphedema specialist will teach you complex decongestive therapy, consisting of skin care, manual lymph drainage, and exercise. If you meet with your lymphedema specialist at the first signs of swelling, pitting, redness, or heaviness, lymphedema can be kept under control. The specialist will also make sure that your exercise plan is compatible with the treatment and will clear you to exercise if your lymphedema is under control.

Additionally, if baseline measurements have not already been taken at the hospital, it is recommended that you obtain a baseline girth measurement by a lymphedema specialist. The limbs that are at risk for lymphedema should be periodically measured to make sure they have not changed in size. Symptoms can be managed more easily if dealt with as soon as they appear.

A compression garment or sleeve, which supports the muscles and helps bring the lymphatic fluid to the heart, can be worn while exercising and at other times. These garments need to be professionally fitted and monitored by a lymphedema specialist.

## Exercise and Lymphedema

Your body will work better if you are engaged in regular physical activity. Moreover, exercise is very helpful for lymphedema control, but it must be done in a safe manner if lymph nodes have been removed or radiated. If you have lymphedema, you should begin to exercise under professional guidance after receiving medical clearance. It is important to learn the right exercises for your particular situation and how to perform them properly and with good form. Exercise needs to progress slowly, using a properly fitted garment. Our goal is to promote physical activity without incurring pain or injury, which can make lymphedema worse.

All the exercises should incorporate abdominal breathing and relaxation breathing. These breathing techniques are beneficial because they do the following:

- Stimulate lymph flow and lymphatic drainage
- Act as a lymphatic system pump, moving the sluggish lymph fluid
- Enable oxygen to get to the tissues
- Reduce stress, a common cancer side effect

It is also helpful to incorporate Pilates into your exercise routine because of the deep breathing used with each movement. When you begin Pilates exercises, perform just a few repetitions and use no weights or use the lightest machine tension. After you are able to exercise for several sessions without flare-ups, you can use resistance bands, light weights, and modified body-weight exercises.

You can develop a good fitness level without triggering lymphedema. Swimming is a very good exercise for those with lymphedema. The water creates compression. Because repetitive motions are risky, try to vary your swimming strokes. The water should not be hot, and the pool area should be clean to help you to avoid infection. When you leave the water, follow proper skin care precautions. Moisturize to prevent dry skin, which can lead to cracks in the skin and infection.

Yoga poses can cause flare-ups. Do not perform the following poses: downward-facing dog, upward-facing dog, plank, and side plank. Avoid hot yoga.

Exercise helps the lymphatic fluid move throughout the body. Muscles pump and push the lymph fluid and can help move the lymph away from the affected area. Strength training may help pump the lymph fluid away from the affected limb, but it does not necessarily prevent lymphedema. Slow progression of exercise will allow you to monitor fullness or aching, which can indicate stress to the lymphatic system. You should stop if you feel tired or if your limb aches or feels heavy.

**Carol Michaels** is the founder and creator of *Recovery Fitness*®, an exercise program designed to help cancer patients recover from surgery and treatments. Carol received her degree from the Wharton School of the University of Pennsylvania. She is certified by the American Council on Exercise and the American College of Sports Medicine (ACSM), is Pilates certified, and is a member of ACSM and IDEA Health & Fitness Association. Carol is a coauthor of *Exercises for Cancer Survivors*; for more information please go to [CarolMichaelsFitness.com](http://CarolMichaelsFitness.com).