# Living Well After Cancer: Recognizing and Managing Lymphedema

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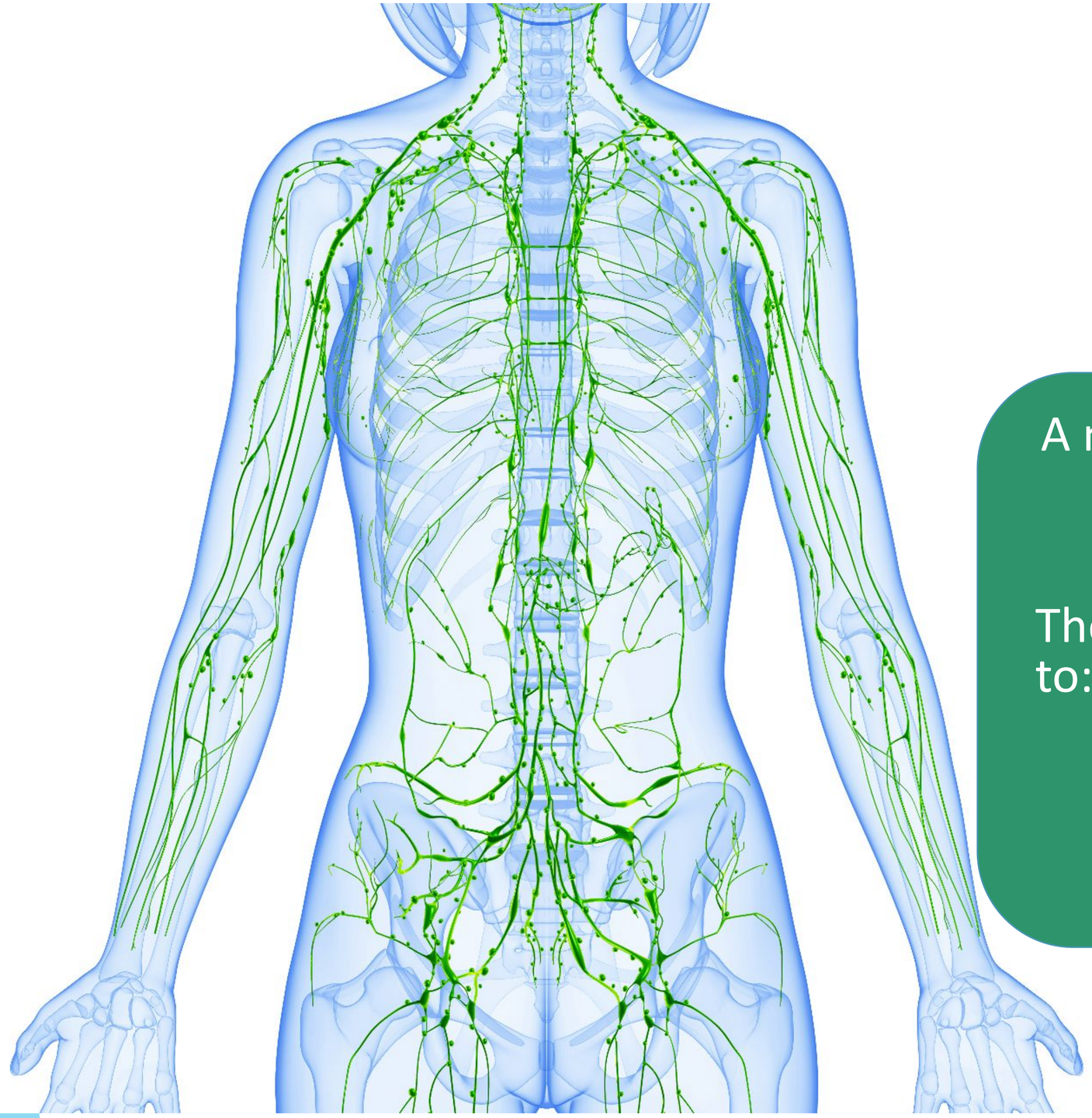
# CANCER IS A JOURNEY AND NO PATH IS THE SAME



# WHAT IS THE LYMPHATIC SYSTEM?

A network of vessels, lymph nodes and organs

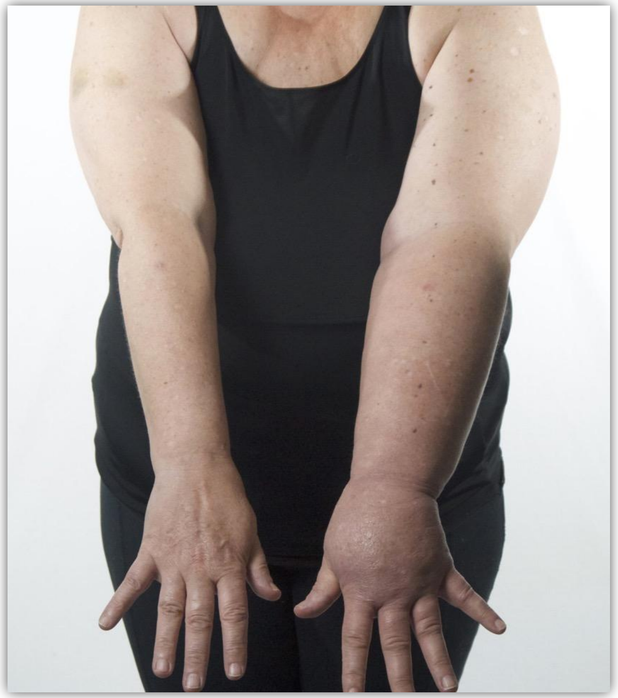
The purpose is to move fluid (lymph) to:

- Help the body remove toxins, waste, unneeded material
- Fight infections

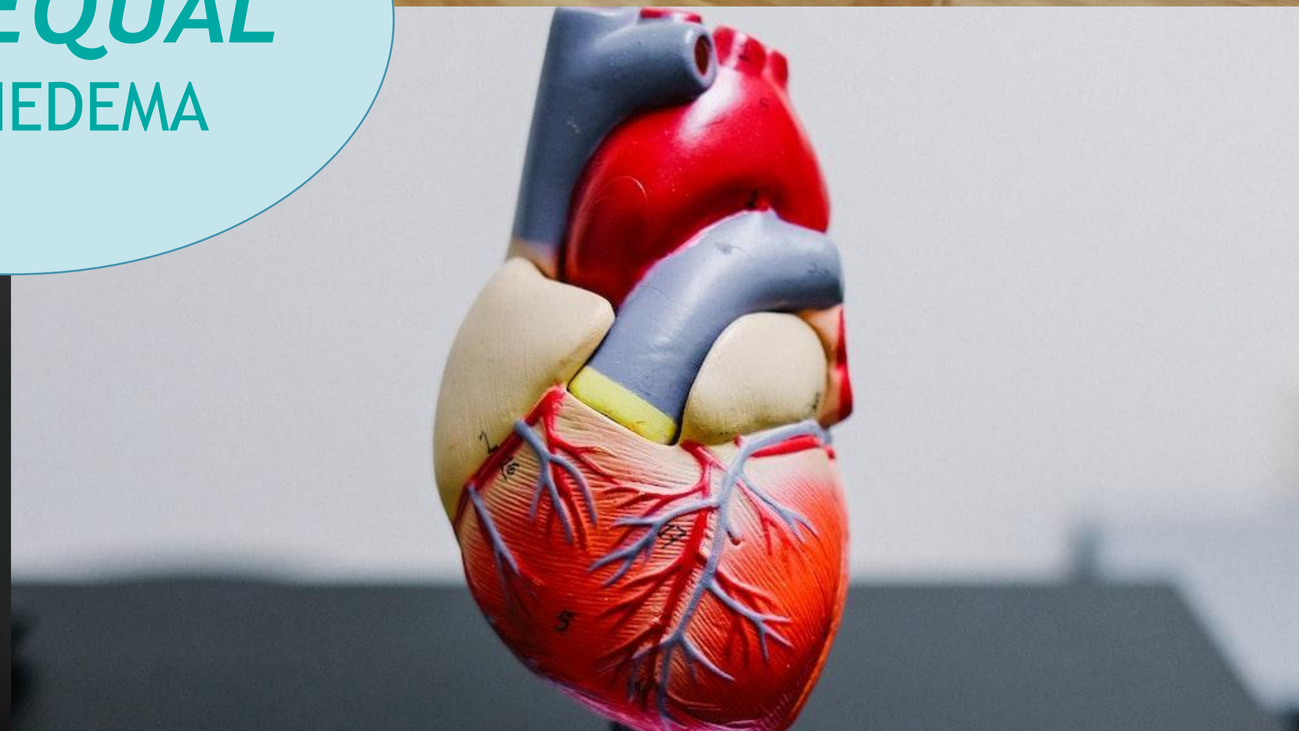
Zuther, Joachim E.: 2009, *Lymphedema Management*

# WHAT IS CANCER-RELATED LYMPHEDEMA?

An **accumulation** of fluid and fibroadipose tissue due to destruction of lymphatic flow from cancer and its treatment.



ALL SWELLING DOES
***NOT EQUAL***
LYMPHEDEMA



# LYMPHEDEMA – NOT JUST BREAST CANCER

Breast Melanoma Bladder Sarcoma

Uterine Head & Neck Cervical Vulvar Prostate

https://www.cancer.gov/about-cancer/treatment/side-effects/lymphedema/lymphedema-hp-pdq

# LYMPEDEMA RISK FACTORS

- Lymph nodes removed or damaged
  - *More = Higher Risk*
- Radiation
- High weight or sedentary lifestyle
- Infection / injury

Ferguson CM, Swaroop MN, Horick N, et al. Impact of ipsilateral blood draws, injections, blood pressure measurements, and air travel on the risk of lymphedema for patients treated for breast cancer. J Clin Oncol 2016; 34: 691–98.; McLaughlin, S. A., Brunelle, C. L., & Taghian, A. (2020). Breast Cancer-Related Lymphedema: Risk Factors, Screening, Management, and the Impact of Locoregional Treatment. Journal of Clinical Oncology, 38(20), 2341–2350. https://doi.org/10.1200/jco.19.02896

# 4 STAGES OF LYMPHEDEMA

**Stage 0**

- Lymphatic system is impaired, swelling is present, but not to the naked eye
- Most report no symptoms, some may feel subtle changes
- **Symptoms Reversible**

**Stage 1**

- Early onset of swelling that is visible and decreases with elevation
- **Symptoms Reversible**

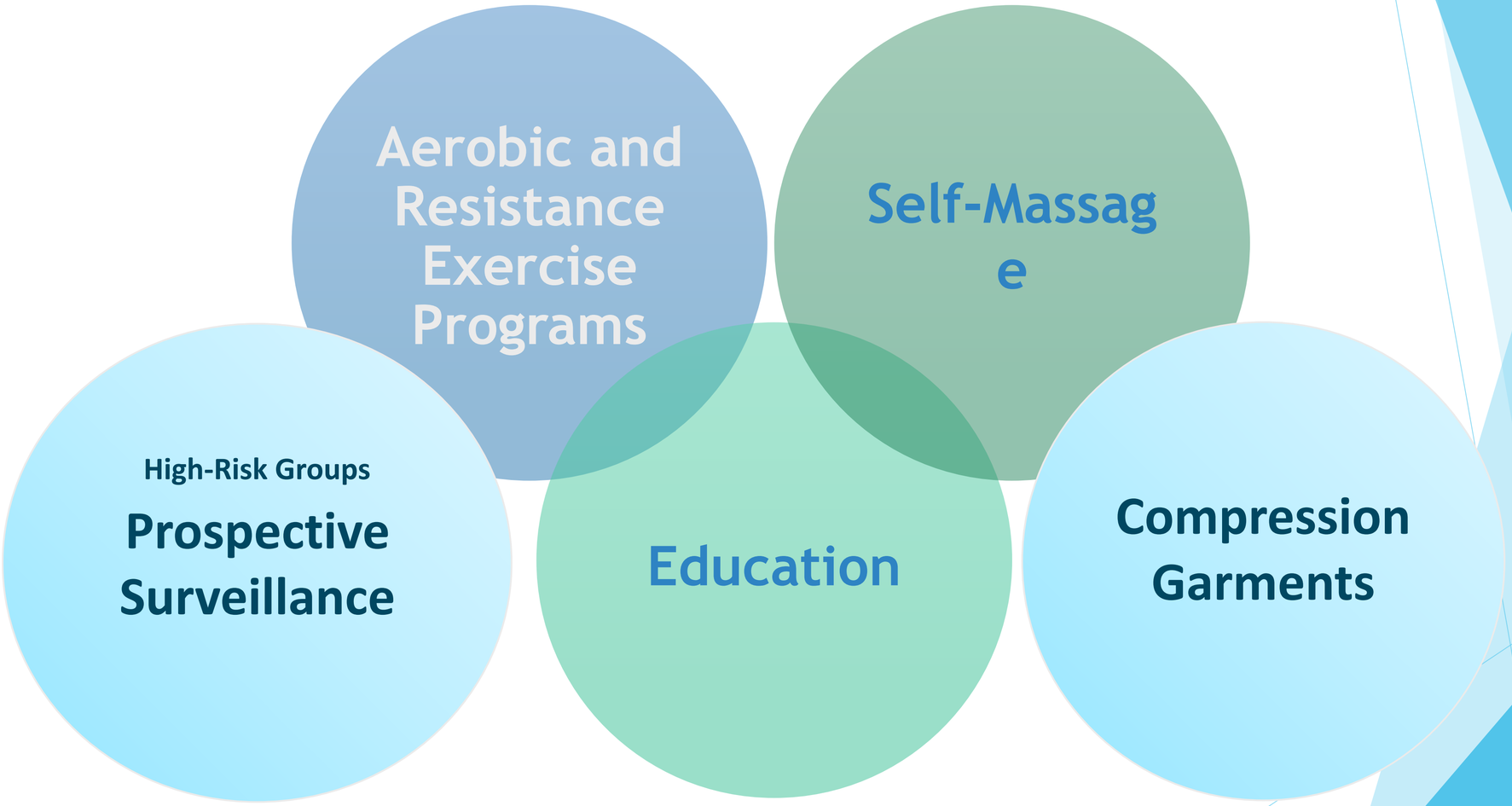
**Stage 2**

**Stage 3**

*The Diagnosis and Treatment of Peripheral Lymphedema: 2016 Consensus Document of the International Society of Lymphology. (2016). Lymphology, 49(4). https://pubmed.ncbi.nlm.nih.gov/*

# STAGE 0 LYMPHEDEMA

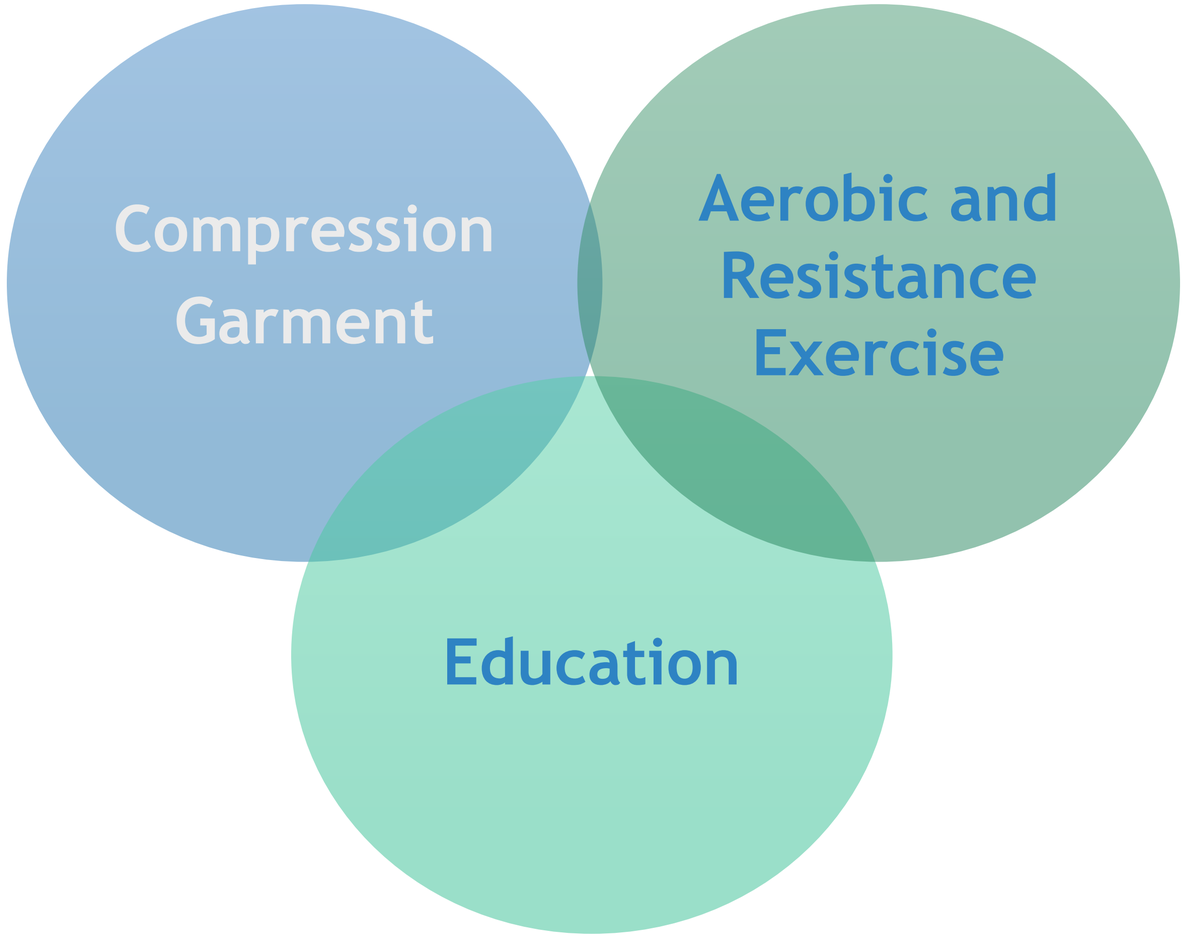
## Treatment

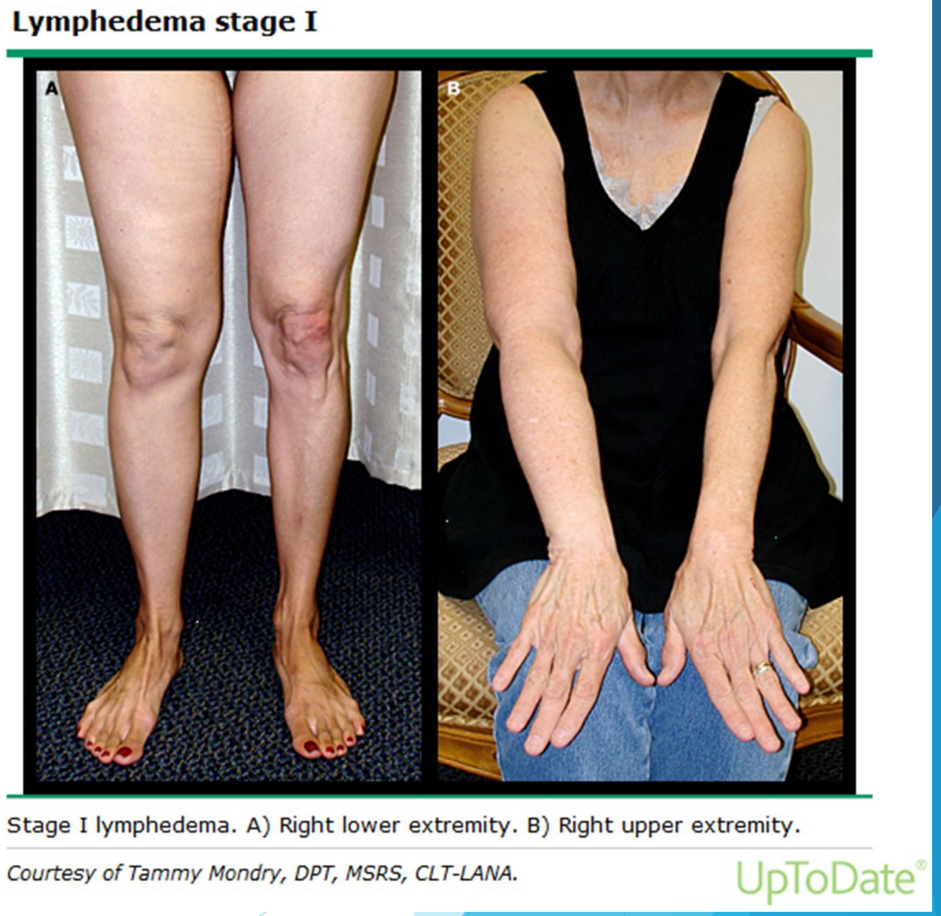



*Davies C. Levenhagen K, Ryans K, Perdomo M, Gilchrist L. Interventions for Breast Cancer-Related Lymphedema: Clinical Practice Guideline From the Academy of Oncologic Physical Therapy of APTA. Physical Therapy. 2020;100(7):1163-1179. DOI: 10.1097/01.REO.0000000000000223.*

# STAGE 1 LYMPHEDEMA

## Treatment

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# EXERCISE TO MANAGE LYMPHEDEMA

- Your muscles work like a **pump to drain** the lymph fluid
- Exercise and strength training **DOES NOT** increase the risk of developing lymphedema
- **Exercise reduces risk** of lymphedema via:
  - Range of motion exercise after surgery
  - Upper body strength/resistance training
  - Weight management
- **Reduces** severity & flare-ups for those with lymphedema

*Baumann FT, Reike A, Reimer V, et al. Effects of physical exercise on breast cancer-related secondary lymphedema: a systematic review. Breast Cancer Res Treat. Jul 2018;170(1):1-13. doi:10.1007/s10549-018-4725-y; Schmitz KH, Ahmed RL, Troxel A, et al. Weight lifting in women with breast-cancer-related lymphedema. N Engl J Med. Aug 2009;361(7):664-73. doi:361/7/664 [pii] 10.1056/NEJMoa0810118; Wanchai A, Armer JM. Effects of weight-lifting or resistance exercise on breast cancer-related lymphedema: A systematic review. Int J Nurs Sci. Jan 10 2019;6(1):92-98. doi:10.1016/j.ijnss.2018.12.006; Omar MTA, Gwada RFM, Omar GSM, El-Sabagh RM, Mersal AAE. Low-Intensity Resistance Training and Compression Garment in the Management of Breast Cancer-Related Lymphedema: Single-Blinded Randomized Controlled Trial. J Cancer Educ. Dec 2020;35(6):1101-1110. doi:10.1007/s13187-019-01564-9*

# 4 STAGES OF LYMPHEDEMA

**Stage 0**

**Stage 1**

**Stage 2**

- Swelling doesn't go away and your fingerprint stays. Elevation rarely reduces the swelling
- Symptoms are progressive and irreversible but manageable

**Stage 3**

- Consistent PROGRESSIVE swelling with skin changes
- Symptoms are irreversible and cause other skin conditions

*The Diagnosis and Treatment of Peripheral Lymphedema: 2016 Consensus Document of the International Society of Lymphology. (2016). Lymphology, 49(4). https://pubmed.ncbi.nlm.nih.gov/[illegible]*

# STAGES 2 & 3 LYMPHEDEMA

**Lymphedema stage II**

Stage II lymphedema. A) Left upper extremity. B) Right lower extremity.

*Courtesy of Tammy Mondry, DPT, MSRS, CLT-LANA.*

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**Lymphedema stage III**

Stage III lymphedema. A) Left lower extremity. B) Right upper extremity. C) Right upper extremity.

*Courtesy of Tammy Mondry, DPT, MSRS, CLT-LANA.*

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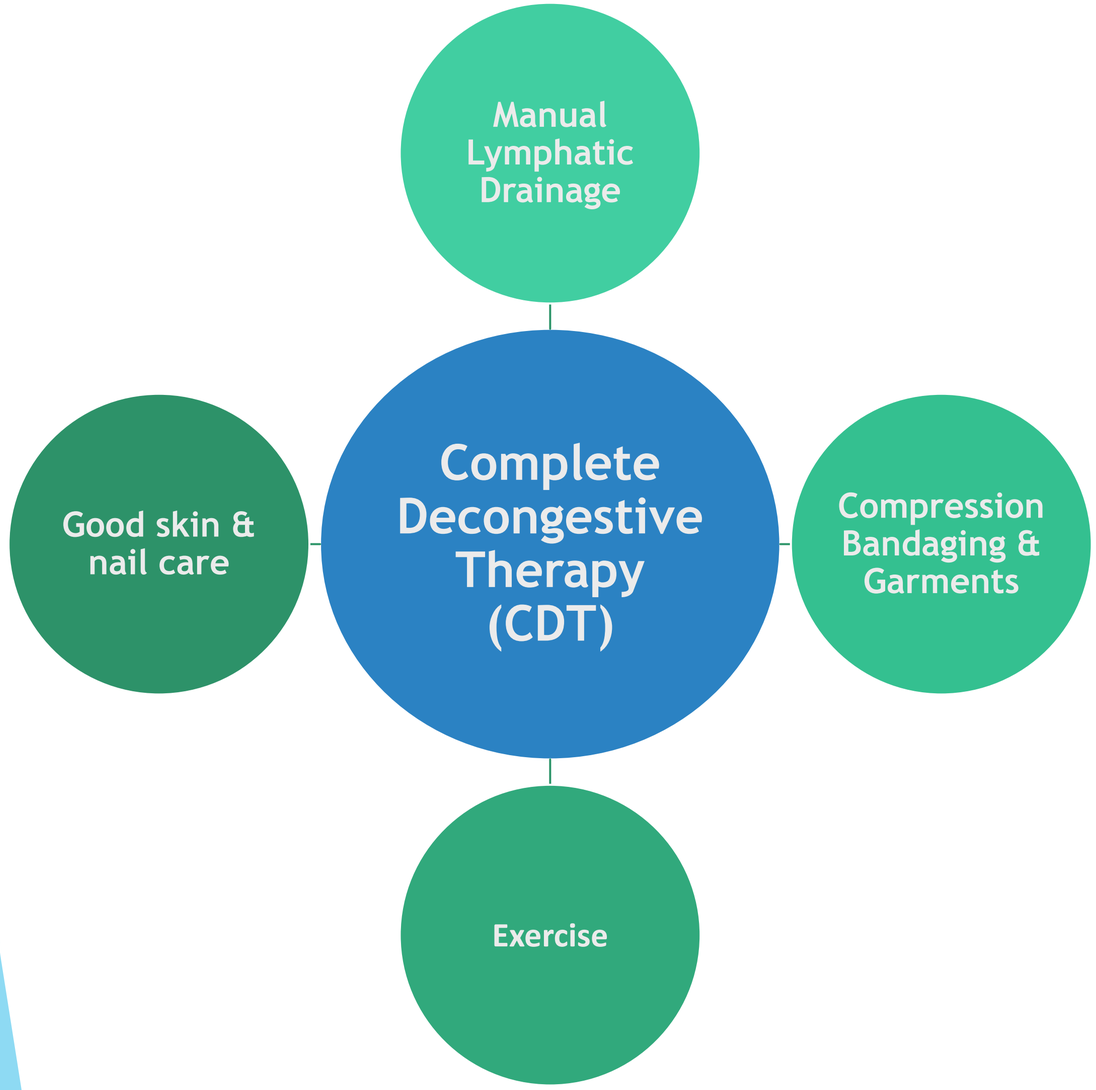
# STAGE 2 & 3 LYMPHEDEMA

## Treatment




**See a Certified Lymphedema Therapist (CLT)**

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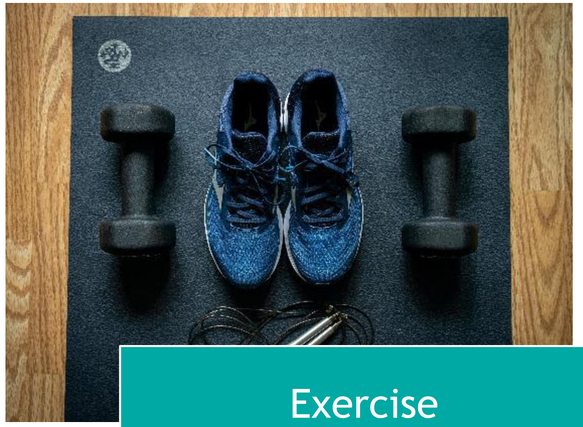
# LYMPHEDEMA RISK REDUCTION PRACTICES

Early Detection

Good Skin Care

Maintain Healthy Weight



Exercise

Wear Compression Garments *(if appropriate)*

Regular Check Ups

NLN Advisory Committee. “Lymphedema risk reduction practices: Position statement of the national lymphedema network.” National Lymphedema Network. May 2012. Web. 1 Oct. 2021. http://www.lymphnet.org/.; Schmitz K. “Strength After Breast Cancer.” Online course. Klose Training Online. 2015. April 2017.

# SEE A CANCER REHAB THERAPIST FOR:

- Evaluation of **YOUR** risk
- Exercise Plans
- Strategies to build healthy habits

**And / Or**

- Feelings of heaviness, achiness, fullness in affected area
- Stiffness & decreased flexibility of joints
- Clothing & jewelry fitting tighter
- Persistent swelling after surgery **(>6-8 weeks)**

***We are here to help you do what matters most!***

# THANK YOU!

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