

PATIENT EMPOWERMENT:

Fighting Fatigue, Exercise
Prescription, Sexual Health &
Integrative Therapies

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**Focus on pelvic
health, lymphedema,
and oncology
rehabilitation**



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Who am I?

Fighting Fatigue!

- Cancer Related Fatigue (CRF) - primary complaint
 - Why? Because it affects **FUNCTION!**

Cancer Related Fatigue

- The oncologist patches the hole in the tire
But now we must put the air back in it so you can roll down the road!

FLAT TIRE



CRF & Exercise Prescription

- Physical activity can benefit patients at all stages of the cancer care pathway. Keeping active can **improve survival rates**¹⁻⁴, help maintain **quality of life**⁵, **improve sleep**⁵, have **mental health benefits**^{6,7}, **reduce fatigue**⁸, and **reduce risk of falls**⁹.

- 1. Lemanne D, Cassileth B, Gubili J. The role of physical activity in cancer prevention, treatment, recovery, and survivorship. *Oncology* 2013;27:580–5.
- 2. Meyerhardt JA, et al. Physical activity and survival after colorectal cancer diagnosis. *J. Clin. Oncol.*2006;24:3527–34.
- 3. Ibrahim EM, Al-Homaidh A. Physical activity and survival after breast cancer diagnosis: meta-analysis of published studies. *Med. Oncol.* 2011;28:753–65.
- 4. Barbaric M, Brooks E, Moore L, Cheifetz O. Effects of physical activity on cancer survival: a systematic review. *Physiother. Can.* 2010;62:25–34.
- 5. Buffart LM, et al. Effects and moderators of exercise on quality of life and physical function in patients with cancer: An individual patient data meta-analysis of 34 RCTs. *Cancer Treat. Rev.* 2017;52:91–104.
- 6. Stonerock GL, Hoffman BM, Smith PJ, Blumenthal JA. Exercise as treatment for anxiety: systematic review and analysis. *Ann. Behav. Med.* 2015;49:542–56.
- 7. Mammen G, Faulkner G. Physical activity and the prevention of depression. *Am. J. Prevent. Med.* 2013;45:649–57.
- 8. Mustian KM, et al. Comparison of pharmaceutical, psychological, and exercise treatments for cancer-related fatigue: a meta-analysis *JAMA Oncol.* 2017; doi: 10.1001/jamaoncol.2016.6914.

Stressing the importance of staying active:

- A randomized, controlled trial examining the effects of seated exercise in women with advanced stage breast cancer found that those randomized to the seated exercise intervention group showed statistically **lower fatigue scores** compared with the usual care group.

- Headley JA, Ownby KK, John LD. The effect of seated exercise on fatigue and quality of life in women with advanced breast cancer. *Oncol. Nurs. Forum* 2004;31:977–83.

- Similarly, a pilot study examining the effects of yoga in women with metastatic breast cancer found that, on the day after the women practiced yoga, they were significantly more likely to report **lower levels of pain and fatigue**.

- Carson JW, Carson KM, Porter LS, Keefe FJ, Shaw H, Miller JM. Yoga for women with metastatic breast cancer: results from a pilot study. *J. Pain Symptom Manage.* 2007;33:331–41.

Stressing the importance of staying active:

- Even in a palliative care setting, studies show that physical activity can have significant benefits. For example, one group of patients in palliative care were asked to participate in 50 minutes of group exercise twice a week for six weeks, which resulted in an **improvement in physical fatigue.**

- Oldervoll LM, et al. The effect of a physical exercise program in palliative care: a phase II study. *J. Pain Symptom Manage.* 2006;31:421–30.

- Another study found that palliative care participants in a group exercise program reported **relief of mental stress and anxiety.** And patients with advanced-stage cancer receiving palliative care who walked at least 30 minutes per day were found to have **improved quality of life** compared to those who exercised less.

- Lowe SS, Watanabe SM, Courneya KS. Physical activity as a supportive care intervention in palliative cancer patients: a systematic review. *J. Support. Oncol.* 2009;7:27–34.

Exercise: How Much?

- Where appropriate, people with cancer should aim to reach levels of physical activity consistent with public health guidelines, that is:
 - at least 150 minutes of *moderate* aerobic activity such as cycling or fast walking every week OR
 - 75 minutes of *vigorous* aerobic activity such as running or tennis (?)
 - strength exercises on two or more days a week that work all the major muscles (legs, hips, back, abdomen, chest, shoulders and arms).
- **150 minutes = 21 minutes/day**

For consideration...

- Bone is a common site for metastasis
- Those with bone metastases are at risk of skeletal-related events (SREs) such as fracture or spinal cord compression
- Up to 70 percent of women with bone metastases will have a SRE within 2 years of diagnosis without a bone-strengthening treatment.
- What can we do to reduce that?
 - Bone-targeting agents are recommended for patients with metastatic breast cancer in the bone to prevent SREs and bone pain.
 - and EXERCISE!

Effect of exercise on bone

- Physical activity, particularly weight-bearing exercise, is thought to provide the mechanical stimuli or "loading" important for the maintenance and improvement of bone health.
- Physical inactivity has been implicated in bone loss
- Both aerobic and resistance training exercise can provide weight-bearing stimulus to bone, yet research indicates that resistance training may have a more profound site specific effect than aerobic exercise.

• Layne JE, Nelson ME. The effects of progressive resistance training on bone density: a review. *Medicine and Science in Sports and Exercise*. 1999, 31(1): 25-30.

Exercise with bone metastasis:

- For example, one study of a 3-month supervised resistance exercise program in 20 men and women with metastatic disease secondary to prostate or breast cancer showed that improvements in **functional ability, physical activity level, lean mass and quality of life** remained 6 months after completion of the program.

- Cormie P, Galvão DA, Spry N, Joseph D, Taaffe DR, Newton RU. Functional benefits are sustained after a program of supervised resistance exercise in cancer patients with bone metastases: longitudinal results of a pilot study. Support. Care Cancer 2014;22:1537–48.

- Another trial, which compared a resistance training program to passive physical therapy in 60 patients with spinal bone metastases, showed that resistance training was able to improve **functional capacity, reduce fatigue and thereby enhance quality of life** over a 6-month period.

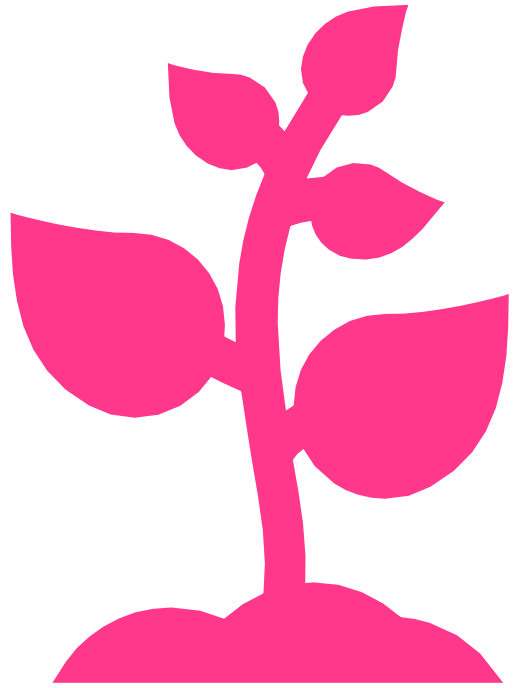
- Rief H, et al. Quality of life and fatigue of patients with spinal bone metastases under combined treatment with resistance training and radiation therapy- a randomized pilot trial. Radiat. Oncol. 2014;9:151.

Exercise: How much with bone metastasis?

- There is no reason why people at risk of MBD or with MBD cannot engage in physical activity and, indeed, they are likely to benefit from being as active as possible.
- Be aware of red flags:
 - Bone pain in the vertebral column that is worse at night
 - Bone pain on weight bearing, especially in the proximal femur
- Stop if you have:
 - Back or neck pain
 - Numbness or pins and needles in toes, fingers or buttocks
 - Progressive weakness in legs
 - Bladder or bowel problems

Talk with your doctor

- Talk with your doctor before starting a new exercise program.
- Mirels' Classification can determine fracture risk
- Find healthcare providers who are familiar with your condition.



Energy Conservation

Energy Conservation

- ENERGY CONSERVATION STRATEGIES:
- “Energy Coins”
 - Spend them wisely
 - Identify value
 - Use help from others
- Grade B evidence
- Can reduce physical and cognitive fatigue

- Greater than 40% of survivors expressed interest in receiving sexual healthcare, but few had ever sought such care.
- Hill, et al. Assessing gynecologic and breast cancer survivors' sexual health care needs. 2011. Cancer. 117(12): 2643-2651

**Let's talk
about sex,
baby.**

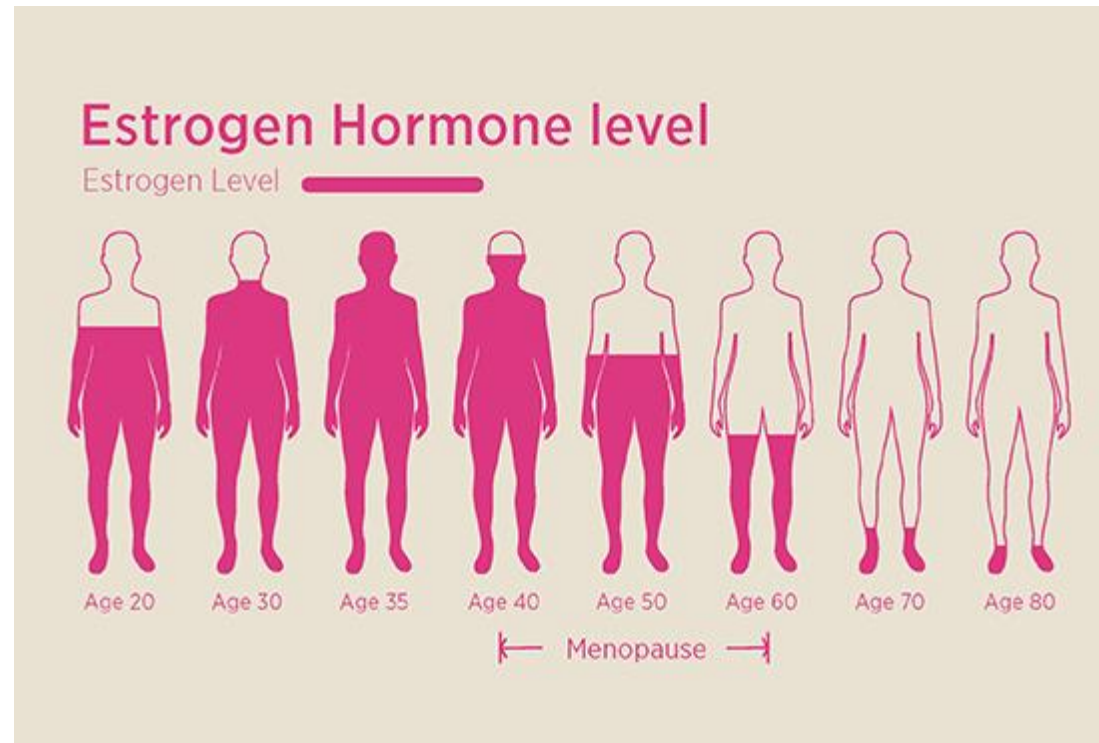
Why?

- Research has documented a range of physical changes to a woman's sexuality following breast cancer, including:
 - disturbances to sexual functioning
 - breast cancer surgery
 - disruptions to sexual arousal
 - sexual pleasure
 - lubrication
 - chemically induced menopause
 - orgasm
 - tamoxifen
 - sexual desire
 - negative body image
 - loss of fertility
 - loss of femininity
 - depression
 - anxiety

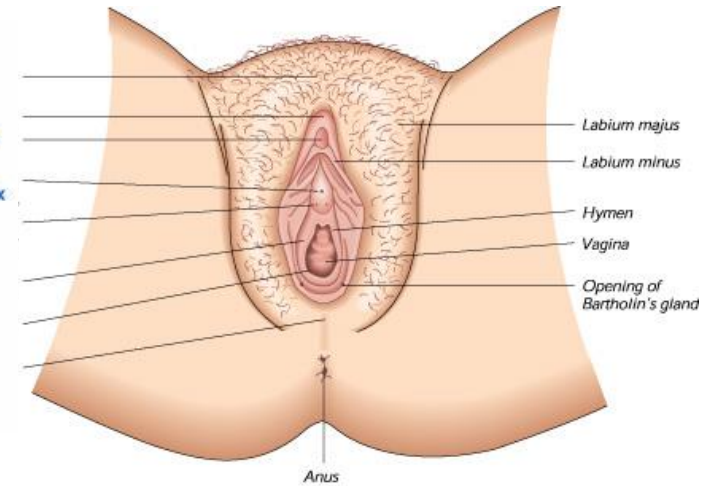
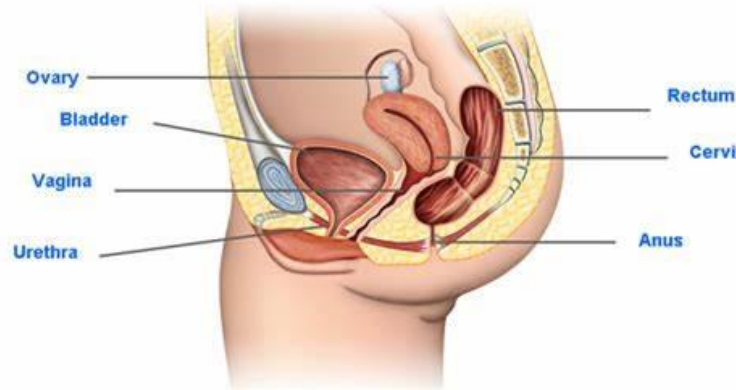
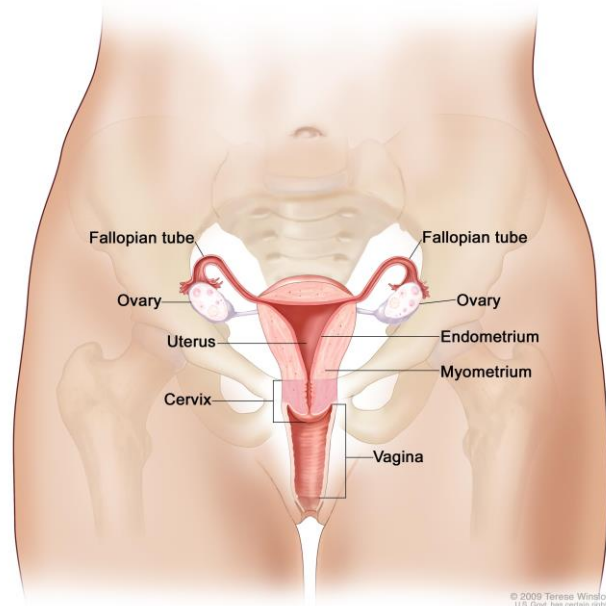
Also, BECAUSE WE ALL HAVE AGING VAGINAS AND DESERVE TO KNOW!

Estrogen

- Estrogen maintains genitourinary health including tissue pliability and lubrication.
- Report of vaginal dryness:
 - 48% on women on tamoxifen
 - 58 % on aromatase inhibitors



Female Reproductive System



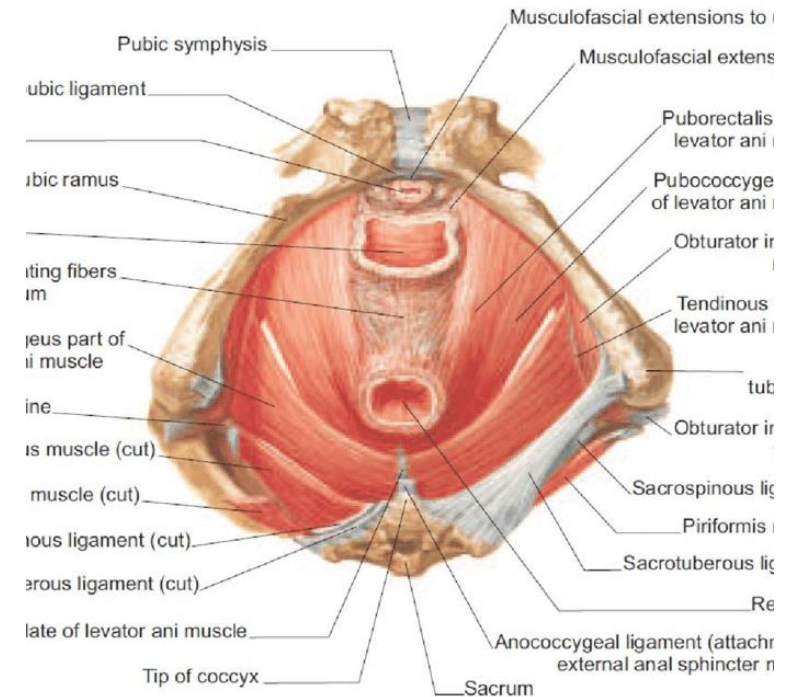
Anatomy & Changes

- Vulvovaginal atrophy
- Tissues more pale
- Labia less distinct
- Vaginal opening can shrink
- Length of vaginal canal can shrink

- Vaginal walls thinner
- Loss of elasticity
- Loss of moisture
- Itching
- Change in FUNCTION!

What can we do?

- Vaginal moisturizers
 - Example: Replens
- Lubrication
- Estrogen (talk to provider)
- Dilators to increase vaginal opening size to accommodate speculum or penis
- Maintenance can be key!



Integrative Therapies

Evidence

- The search (January 1, 1990–December 31, 2013) identified 4900 articles, of which 203 were eligible for analysis.
- Grade A: Good evidence based research to support the recommendation
 - Meditation, yoga, and relaxation with imagery
 - recommended for routine use for common conditions, including anxiety and mood disorders
- Grade B: Fair evidence based research to support the recommendation
 - Stress management, yoga, massage, music therapy, energy conservation, and meditation
 - recommended for stress reduction, anxiety, depression, fatigue, and quality of life

Greenlee, et al. Clinical Practice Guidelines on the Use of Integrative Therapies as Supportive Care in Patients Treated for Breast Cancer. JNCI Monographs. 2014. 2014 (50). 346–358.