

Survivorship: What happens when treatment ends

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BREAST CANCER
RESOURCE CENTER

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The start of the breast cancer journey



Congratulations! You are a survivor!



So....
Now what?

NBC News

TEXAS  ONCOLOGY
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Survivorship Defined: Who is a Cancer Survivor?



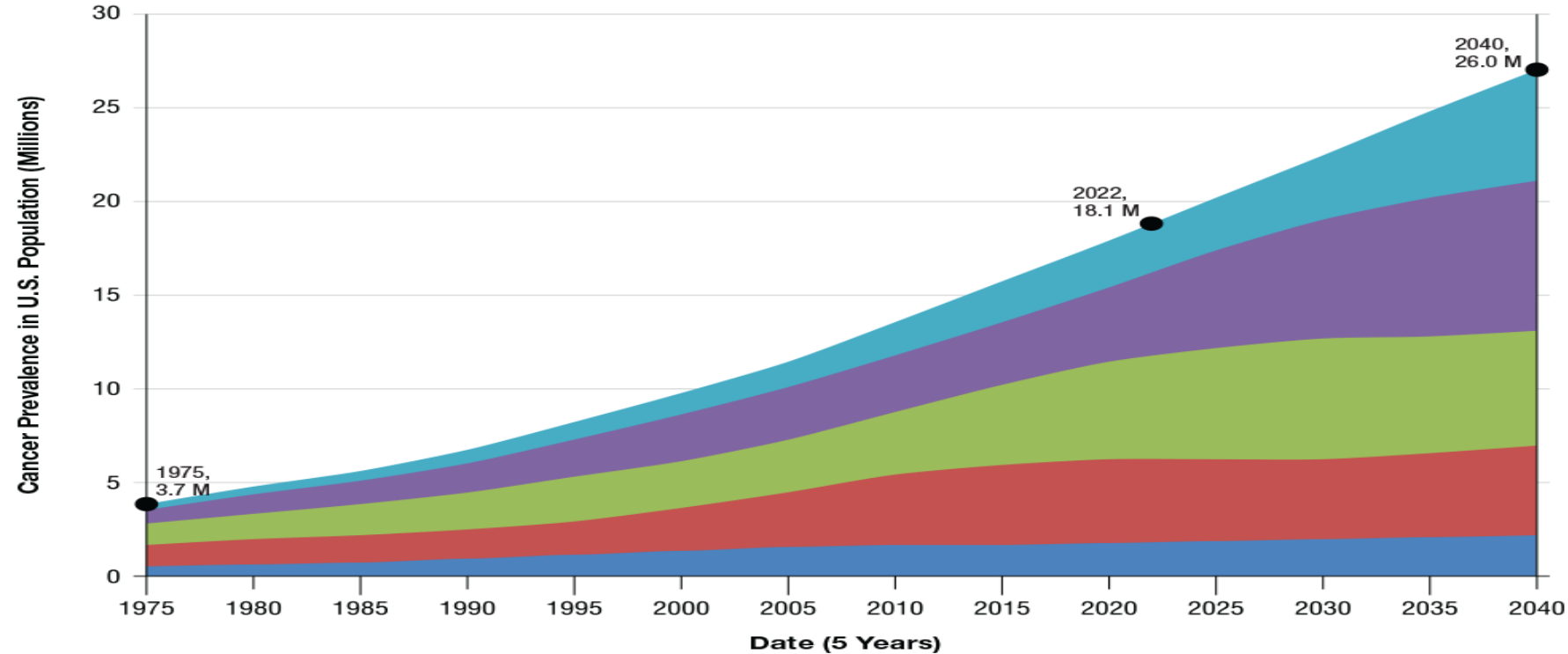
- NCCN's definition of a survivor, from the time of diagnosis and for the balance of life is now the norm for the cancer community and beyond. NCCS has expanded its definition of survivor to include family, friends, and caregivers.
 - *National Coalition for Cancer Survivorship*
- Survivorship care is a specific program taken to address the long term needs of cancer survivors and includes monitoring for and managing long term and late effects, as well as health promotion.
 - *American Society of Clinical Oncology*
- In cancer, survivorship focuses on the health and well-being of a person with cancer from the time of diagnosis until the end of life. This includes the physical, mental, emotional, social, and financial effects of cancer that begin at diagnosis and continue through treatment and beyond. The survivorship experience also includes issues related to follow-up care (including regular health and wellness check-ups), late effects of treatment, cancer recurrence, second cancers, and quality of life. Family members, friends, and caregivers are also considered part of the survivorship experience.
 - *National Cancer Institute*

**Anyone who
has ever been
diagnosed with
cancer**

Survivorship Impact



Cancer Prevalence and Projections in U.S. Population from 1975–2040



KEY

Age



REFERENCES

Bluethmann SM, Mariotto AB, Rowland JH. Anticipating the “Silver Tsunami”: Prevalence Trajectories and Comorbidity Burden among Older Cancer Survivors in the United States. *Cancer Epidemiol Biomarkers Prev.* 2016 Jul;25(7):1029–36.

Miller KD, Nogueira L, Devasia T, Mariotto AB, Yabroff KR, Jemal A, Kramer J and Siegel RL. Cancer Treatment and Survivorship Statistics. *CA A Cancer J Clin.* 2022.

4 Key Areas of Survivorship Care



As outlined in Institute of Medicine (IOM) 2005 report:

Prevention of recurrent and new cancers and of other late effects

Surveillance for cancer spread, recurrence, or second cancers, and assessment of medical and psychological late effects

Intervention for consequences of cancer and its treatment

Coordination of care between specialists and primary care providers to ensure health needs are met



What happens at the survivorship visit



Surveillance for recurrence

Monitoring for and managing psychosocial and medical late effects

Providing screening recommendations for second cancers

Providing health education: diagnoses, treatment exposures, and potential late- and long-term effects

Familial genetic risk assessment (as appropriate)

Coordination of care with PCP, specialists and referral to necessary resources

Empowering survivors to advocate for their own healthcare needs

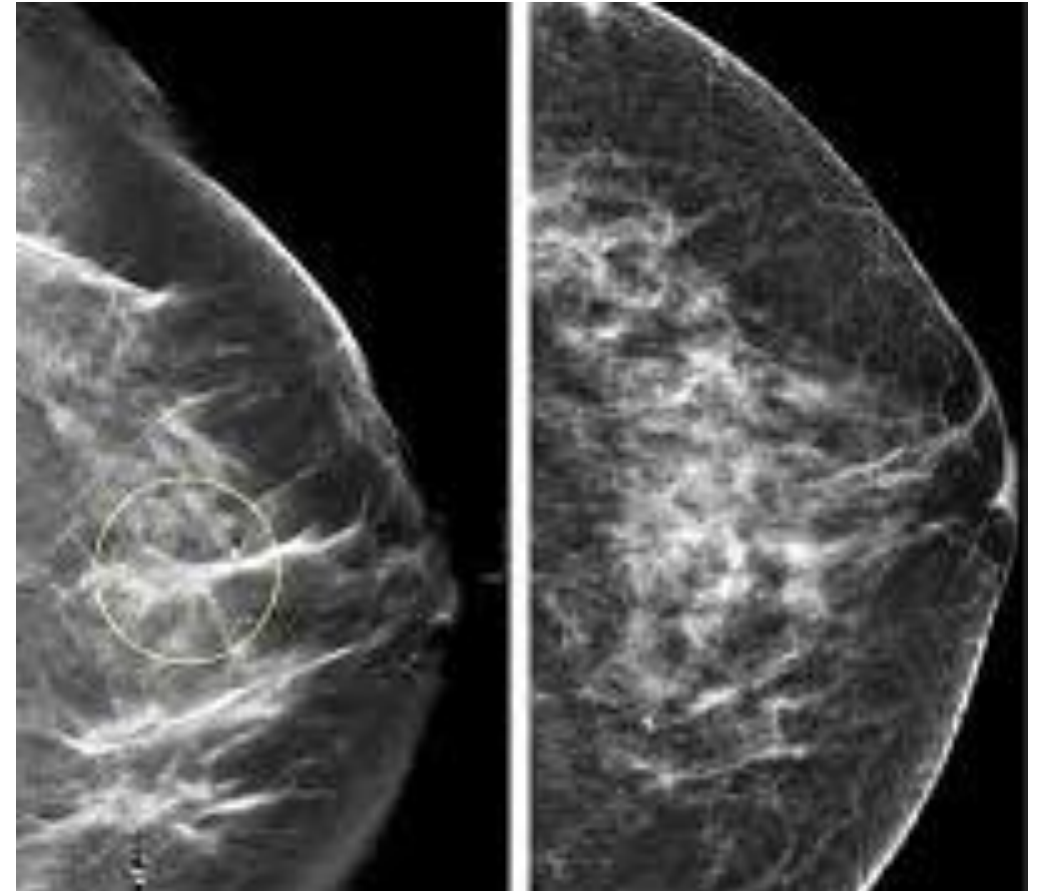
Providing resources to assist with financial and insurance issues

Guidance about diet, exercise and health promotion activities

Monitoring for second breast cancer



- Mammograms if residual breast tissue
 - Diagnostic mammogram
 - Screening mammogram
- MRI breasts for those with certain gene mutations, familial high risk, or very dense breasts
- Physical exam every 6 -12 months by a physician



What about imaging after mastectomies?



- In a meta-analysis of 16 studies in patients with prior breast cancer who underwent mastectomies (with or without reconstruction):
 - *Cancer detection rates with mammogram, ultrasounds, and MRI was each <1%*
 - *The majority of cancers detected on imaging were also detected on physical exam*
 - *Therefore, imaging after mastectomy is not recommended*

Smith et al. JAMA Netw Open. 2022;5

Monitoring for *distant* recurrence



- Routine scans (CT, bone scans) are NOT recommended for screening for metastatic disease
 - A 2005 meta-analysis compared regular follow up (physical exam and mammograms) with intensive surveillance (CT scans and labs) and there was no difference in overall survival or disease-free survival
 - Can lead to false positives.
- Similarly, tumor markers are NOT recommended (Ca 15-3, Ca 27-29)
- ctDNA (Signatera) is not yet recommended due to lack of data

Symptoms to look out for



Make sure to follow up with your oncologist and call if:

- New shortness of breath
- Persistent cough
- Unexplained weight loss or loss of appetite
- Bone pain
- Persistent abdominal pain
- Persistent and/or severe headaches or vision changes

Any of the above would lead to more testing to evaluate for metastatic disease

The Good News

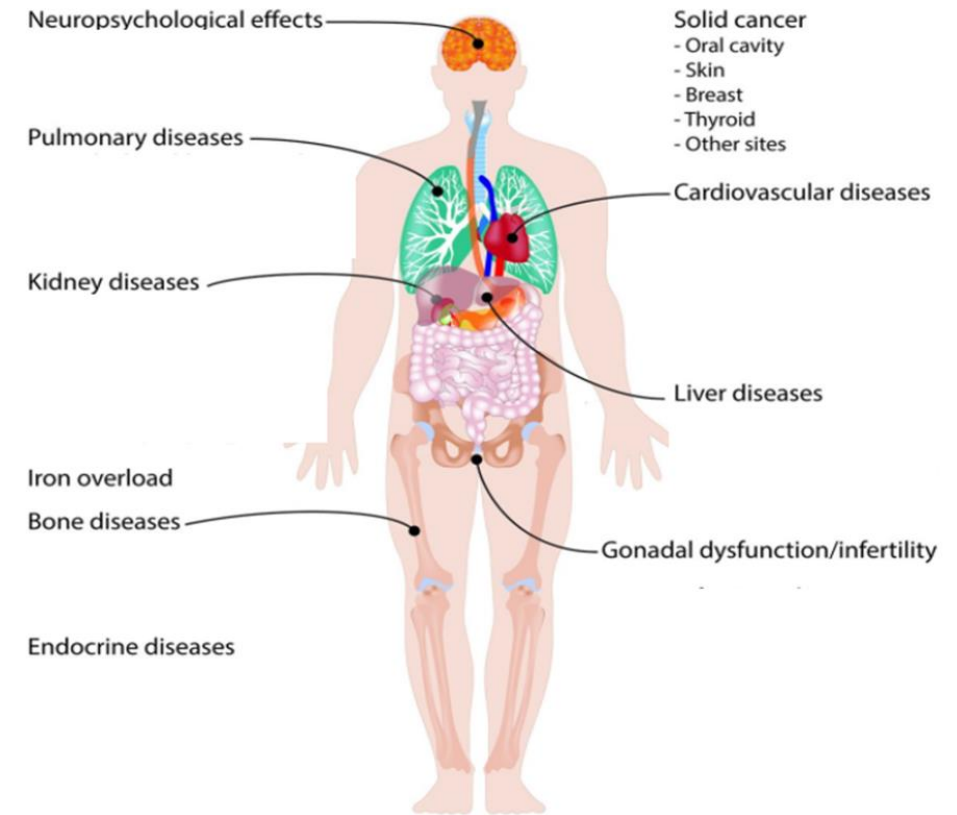


**90-97% of women
with early stage breast
cancer are cured**

The bad news... side effects & late effects



- Late effect → Side effect that occurs/lasts months to years **after** cancer treatment
 - Chemotherapy
 - Immunotherapy
 - Radiation
 - Surgery



Longterm symptoms and therapies



Neuropathy

- PT
- Medications such as gabapentin

Lymphedema

- PT, compression

Fatigue

- Exercise, sleep hygiene

Joint/muscle aches from endocrine therapy

- acupuncture, exercise

Hot flashes

- Chili pillow and fans
- Medications such as gabapentin, Effexor, ditropan

Sexual Health



Vaginal dryness and painful sex

- Try lubricants first such as coconut oil and Hyalogyn gel
- OK to use topical estrogen if necessary (prefer inserts over cream)

UTIs- usually due to thinning of vaginal tissue

- May need to see urologist

Body image

Don't be afraid to talk to your doctor about this!

Pregnancy and fertility



- **POSITIVE** trial results San Antonio Breast Cancer Conference December 2022
 - Women age 42 or younger with stage I-III hormone positive breast cancer
 - Received endocrine therapy for 18-30 months and then stopped for 2 years to conceive and carry pregnancy -> resume endocrine therapy
 - No difference in recurrence rate
 - 74% achieved at least one pregnancy, and 64% at least one live birth, similar to rates of general public
 - 76% of patients resumed endocrine therapy



Partridge at al. SABCS 2022

Contraception/ Hormone usage



Any hormones (including testosterone!) are CONTRAINDICATED in women who have had hormone positive breast cancer

Therefore contraception must not include any hormones

- Condoms
- Tubal ligation
- Copper IUD
- Vasectomy

Important to not get pregnant on tamoxifen as it is teratogenic

Bone health



Endocrine therapy (aromatase inhibitors) and chemotherapy can increase risk of osteoporosis; tamoxifen can increase bone density

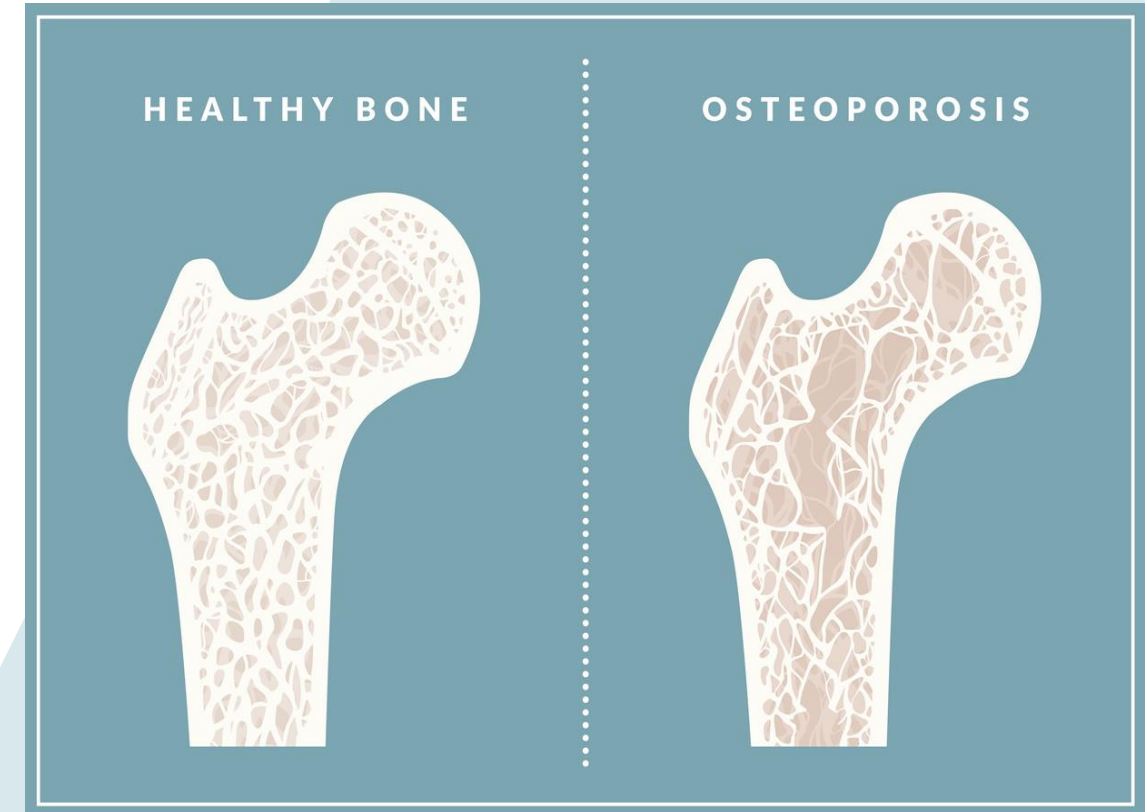
DEXA scans every 2 years

Calcium carbonate – about 1000 mg daily

Vitamin D3- about 1000 IU daily

Weight bearing exercise

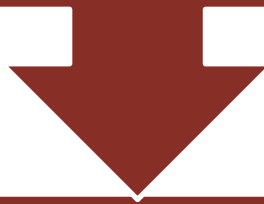
Your doctor may suggest a medicine called a bisphosphonate to strengthen your bones



Genetic testing

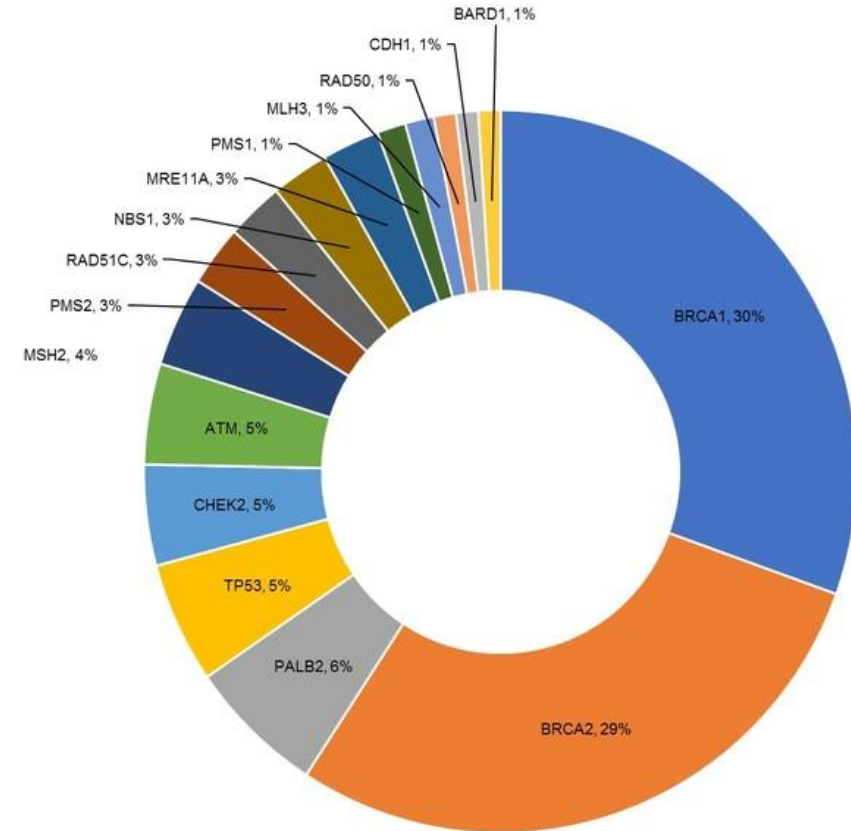


Most women with breast cancer now qualify for genetic testing



If gene mutation is found, may impact cancer screening and risk of cancer in family members

RELATIVE DISTRIBUTION OF MUTATIONS DETECTED BY NGS
IN YOUNG WOMEN WITH BREAST CANCER



Risk of heart disease- #1 killer of women with breast cancer



Risk of diabetes and hypertension are increased in women with breast cancer

Aromatase inhibitors can increase cholesterol-
important to have this checked by PCP

Important to exercise and maintain healthy weight

Medical Follow Up Plan, example



- History and physical with Medical Oncology every 3 months for 2 years, then every 6 months for 3 years.
- Imaging with mammogram annually
- Routine physical exam with Primary Care Provider at least annually with necessary lab including but not limited to cholesterol, thyroid and diabetes screening and monitoring.
- Immunizations may include:
 - *annual flu vaccine*
 - *Pneumococcal vaccine*
 - *Tdap once then boost with Td every 10 years*
 - *other vaccines as recommended – covid-19*



Screening Recommendations, Female (example)



Mammogram every 12 months

Monthly self breast/chest wall exam

Clinical breast exam every 6 months

**Colonoscopy every 10 years beginning at age 45.
Repeat every 10 years. Frequency may change based on
personal or family history as well as previous
colonoscopy findings**

Bone density (DEXA) scan every 2 years

Skin exam annually

**Pelvic exam and pap smear every 3 years. Frequency
may change based on personal history and prior exam
findings**

Dental exam and cleaning every 6 months

Ophthalmology exam every 12 months

**Annual low dose CT for lung cancer screening - if
personal history of smoking and meets criteria**

Additional screening recommendations as needed

Ways to Promote Healthy Living



- Avoid smoking, tobacco, second-hand smoke exposure
- Exercise regularly
- Protect skin from sun exposure
- Limit alcohol consumption
- Do not use illegal drugs
- Eat a healthy diet high in fiber and plants
- Get recommended vaccinations
- Maintain BMI (body mass index) that is "normal for you"
- Get regular cancer screening

Healthy Living: Limit alcohol



CDC recommends:



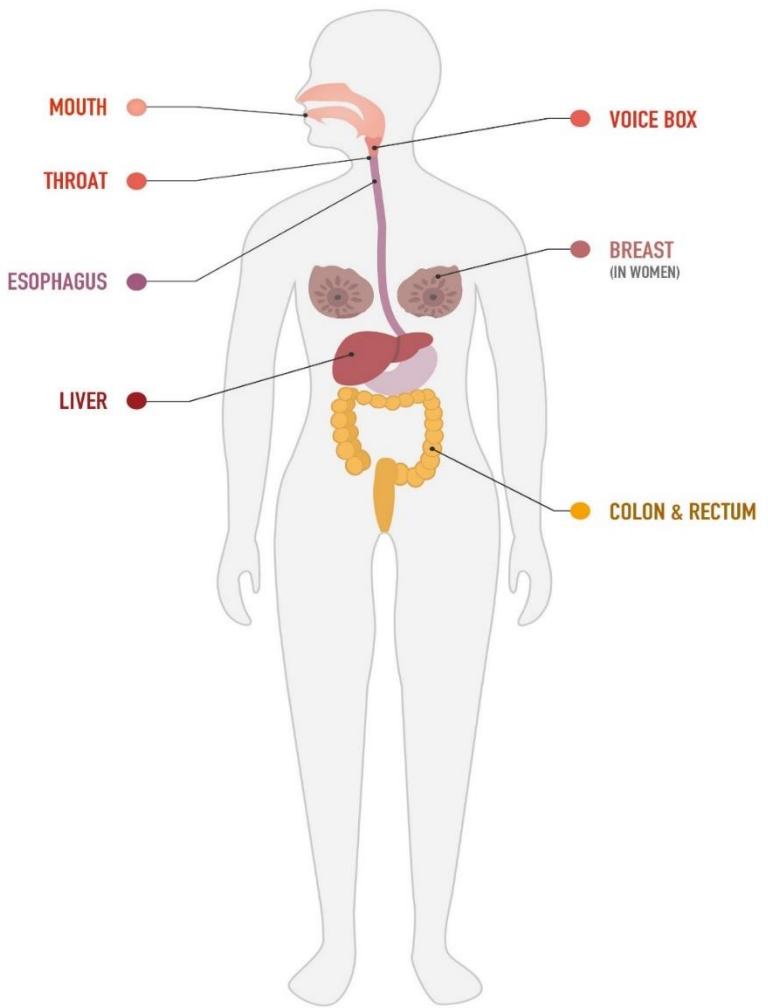
- Excessive alcohol consumption can increase risk for:
 - Cancer/Cancer Recurrence
 - Depression
 - Epilepsy
 - Stroke
 - Osteoporosis
 - Cirrhosis, *Fatty liver or liver dysfunction, especially after total-body/cranial radiation*
 - *Chemotherapy-related heart dysfunction*

Healthy Living: Limit alcohol



NATIONAL CANCER INSTITUTE

Cancers Associated with Drinking Alcohol



cancer.gov/alcohol-fact-sheet

Cancer Type	Moderate drinker	Heavy drinker
Oral Cavity	1.8-fold risk	5-fold risk
Larynx	1.4-fold risk	2.6-fold risk
esophageal	1.3-fold risk	5-fold risk
liver	--	2-fold risk
Breast	1.23-fold risk	1.6-fold risk
Colorectal	1.2-fold risk	1.5-fold risk

Sex	Moderate drinking	Heaving drinking
Female	1 drink or less/day	4+ /day or 8+ /week
Male	2 drinks or less/day	5+ /day or 15+ /week

Healthy Living: Exercise



Healthy Living: Exercise



Regular, moderate intensity exercise has proven to protect against:

- Osteoporosis
- High blood pressure
- Diabetes
- Cardiovascular disease

CDC recommends: 150 total minutes per week

- 30 min+ moderate-intensity exercise 5+days/week
- 20 min+ vigorous exercise 3+ days/week



Exercise can change outcomes



- *Exercise decreases risk of recurrence and improves cancer-related survival in breast cancer survivors*
- *Vigorous is not better but*
- *More is (probably) better*
- *Independent of BMI!*



Healthy Living: Avoid Tobacco



- Smoking harms nearly every organ in the body.
- Among cancer survivors, smoking ↑ organ damage associated with treatment exposures (radiation, pulmonary-toxic chemo)
- Tobacco use is crucial to avoid in the cancer survivor
- Survivors who smoke are less likely to participate in moderate-intensity exercise



Healthy Living: Eating Well



The [American Cancer Society Guideline for Diet and Physical Activity for Cancer Prevention](#) defines a healthy, cancer-preventive diet as one that is:

- Rich in vegetables, fruits, legumes, and whole grains
- Limits or does not include red and processed meats
- Limits sugar-sweetened beverages
- Limits highly processed foods and refined grain products.

Several eating patterns can meet this definition, including the Mediterranean diet, the DASH diet, and vegetarian diets.

No particular diet has been shown to decrease risk of recurrence- but survivors with healthy weight have decreased risk of recurrence (hormone positive BC)



Resources:

American Dietetic Association: eatright.org

American Institute for Cancer Research (AICR): www.aicr.org

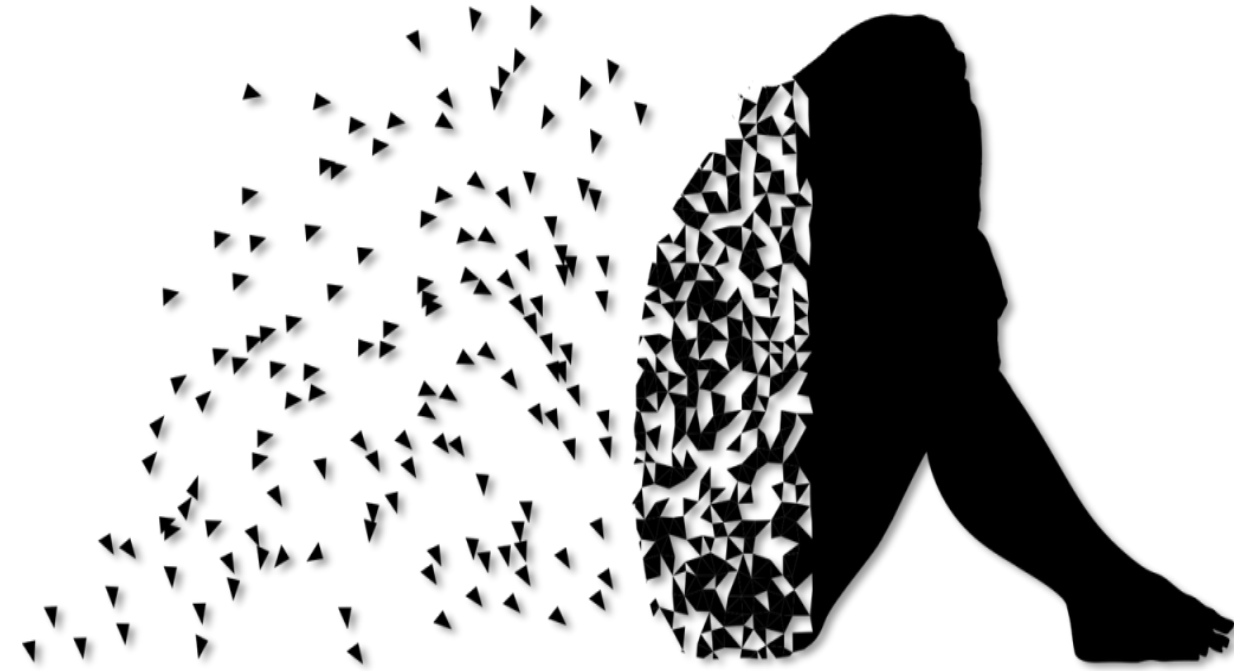
Healthy Living: Emotional/ Mental Wellbeing



- Lean into your social support systems
- Establish a “Self Care Plan” that is fluid and easily modified
- Establish a coping skills “toolbox”
- Practice mindfulness and meditation
- Engage and talk to someone who is not family about your feelings and experience
- Balance in person and online supports
- Create space for all your feelings
- Know the signs and symptoms of emotional distress
- Be open to and seek out professional support



Emotional Distress



- Distress, anxiety and depression are common among long term cancer survivors
- Grief
- “new normal” with new priorities
- Chronic Pain
- Fear of recurrence/death
 - “Scanxiety”
- Isolation/Resocialization
- Body Changes
- Sexuality & Intimacy
- Relationship challenges

- [illegible]



[SUR • VI • VOR]

To beat the odds, one with great courage and strength, a true inspiration

