

Life after treatment for Ovarian Cancer: Cancer Survivorship

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Goals

- 1. To gain an understanding of potential late effects of cancer therapy
- 2. To gain an understanding of a cancer survivorship plan
- 3. To develop an awareness or strategy of remaining healthy after cancer treatment.

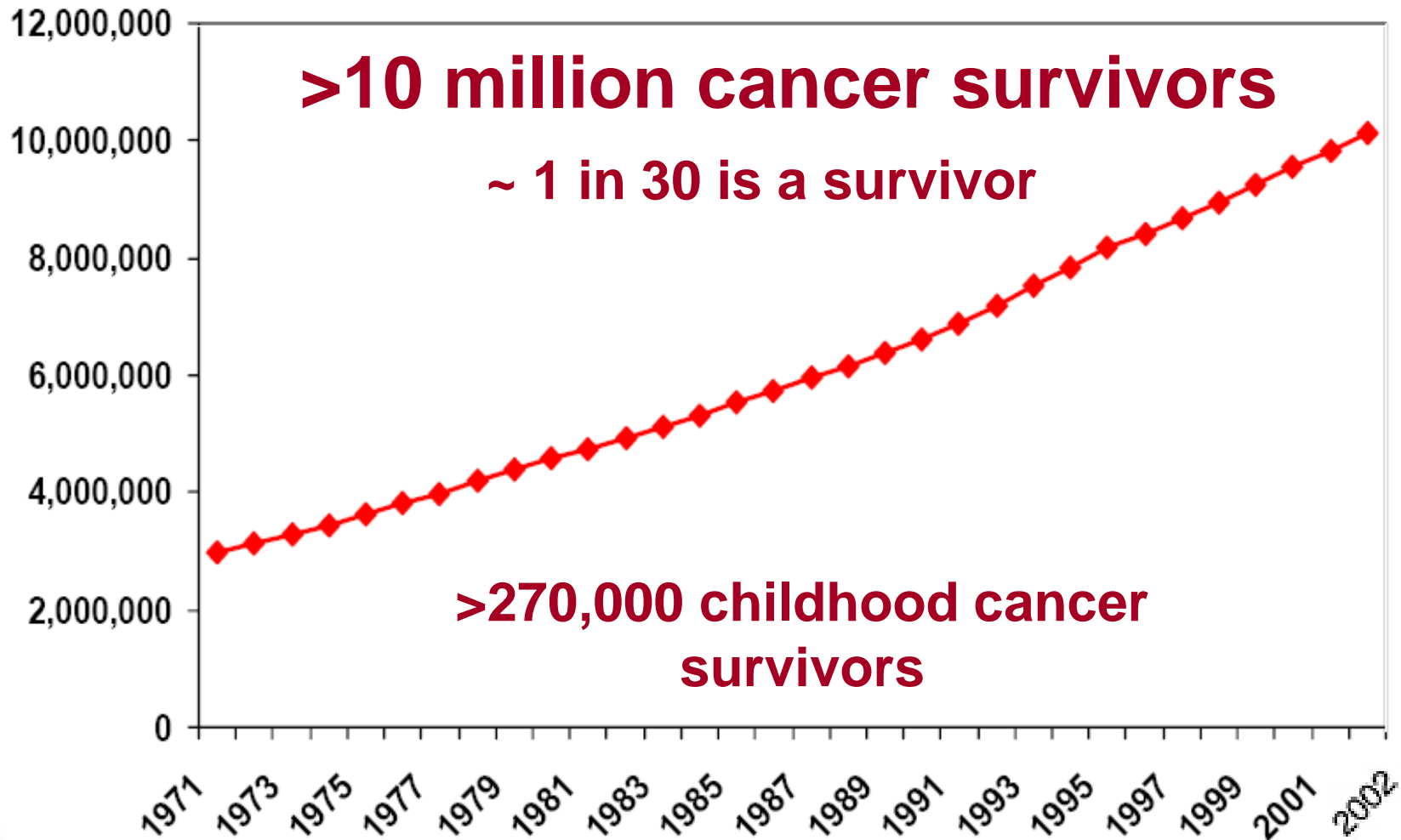
- No disclosures

Congratulations For Being A Cancer
Survivor!

When you get into a tight place and everything goes against you, till it seems as though you could not hang on a minute longer, never give up then, for that is just the place and time that the tide will turn.

-Harriet Beecher Stowe

You Are Not Alone!



Who Is A Survivor?

- Anyone with cancer
 - From the time of cancer diagnosis
 - 5 years out from therapy
 - At the time of completing treatment
- Family members, friends and caregivers impacted by the survivorship experience are also survivors

Ovarian Cancer

- Ovarian Cancer: 21,990 new cases annually
- With improvements in therapies, even those with advanced disease will live for many years

What are the challenges for
cancer survivors?

Issues in Cancer Survivorship

- -Progressive or recurrent disease
- -Second cancers
- -Cardiovascular Disease
- -Diabetes
- -Obesity
- -Osteoporosis
- -Sarcopenia
- -Functional decline
- -Depression & fatigue in subsets
- -\$219 Billion annually on cancer: 2/3's of costs due to downstream effects

Fatigue

- 30% note fatigue 5+ yrs post treatment
- May be related to:
 - anemia
 - inflammation after radiation/chemotherapy
 - loss of muscle mass
 - hypothyroidism associated with radiation
- Many of these symptoms are underrecognized by physicians
 - Stavrika C. Gynec Oncol 2012

Nerve Damage

- Peripheral neuropathy typically occurs in 10% to 20% of cancer patients (can be as high as 60% in some reports of ovarian cancer survivors)
- Post operative numbness/pain
- Post chemotherapy neuropathy (taxanes)
- Health Care Costs with chemo-associated neuropathy: >\$17,300 with > 12 visits and more hospitalizations over a 9 month period

Wong et al, 2006

Kaplan et al, 1998

Pike CT. Chemother Res Treat 2012

Grover S, Gyn Onc 2012

Cardiotoxicity

- Doxorubicin/Epirubicin
- Dose dependent, cumulative
- Incidence: Dose dependent, 1.6% for symptomatic disease in those who received AC chemotherapy
- Asymptomatic decrease in heart function in 10-50%
- Greater risk if +65 yo, history of high blood pressure, heart disease or right sided radiation for breast cancer

While cardiac problems such as heart failure are less common in ovarian cancer survivors than other cancer survivors, with new biologic agents, cardiovascular problems such as hyperlipidemia and hypertension need to be monitored closely

Premature Menopause

- Cause: chemotherapy, surgery, hormonal blockade therapy: tamoxifen/SERM
- Consequences
 - Loss of fertility
 - Bone health
 - Lipids

Menopause/Sexual Symptoms

- Two-thirds of all breast cancer survivors report hot flashes and of them 60% describe symptoms as moderate or extremely severe
 - 50% ovarian cancer survivors report sexual changes and dysfunction
-
- Vaginal dryness
 - Weight gain
 - Hot flashes
-
- These are often underrecognized by physicians

Grover S, et al Gyn Onc 2012
Stavraka C. Gyn Oncol 2012
Carpenter JS, Cancer 1998

Bone health

- 18% ovarian cancer survivors report osteoporosis
- Chemotherapy induced menopause
 - Triggers bone loss
- Tamoxifen
 - Prevent osteoporosis
- Aromatase inhibitors
 - Associated with a higher degree of fractures

Secondary cancers

- 2nd primary breast cancer
- Tamoxifen: endometrial cancer
- Cytosan: bladder malignancies
- Secondary leukemia:
 - Rare, but the risk is increased
 - Associated with alkylating agents (cytosan) and topo II inhibitors (doxorubicin)
 - Typically occurs within the first 5 yrs after treatment
- Skin cancers in the field of radiation (6% of ovarian cancer survivors treated with radiation reported skin cancers)
- Genetics and hereditary cancer risk?

Psychological stressors

- When therapy ends
 - Family ready to move on
 - Patient just beginning to feel the change
- Sense of uncertainty
- Betrayal of the body: how to trust again
- Body irrevocably changed, visible scars, reconstruction process
- Emotional stressors

Fear, anxiety, depression

- What now?
- What happens when not being seen weekly by health care team?
- What do I do if there's a problem?
- What do I do if this comes back?

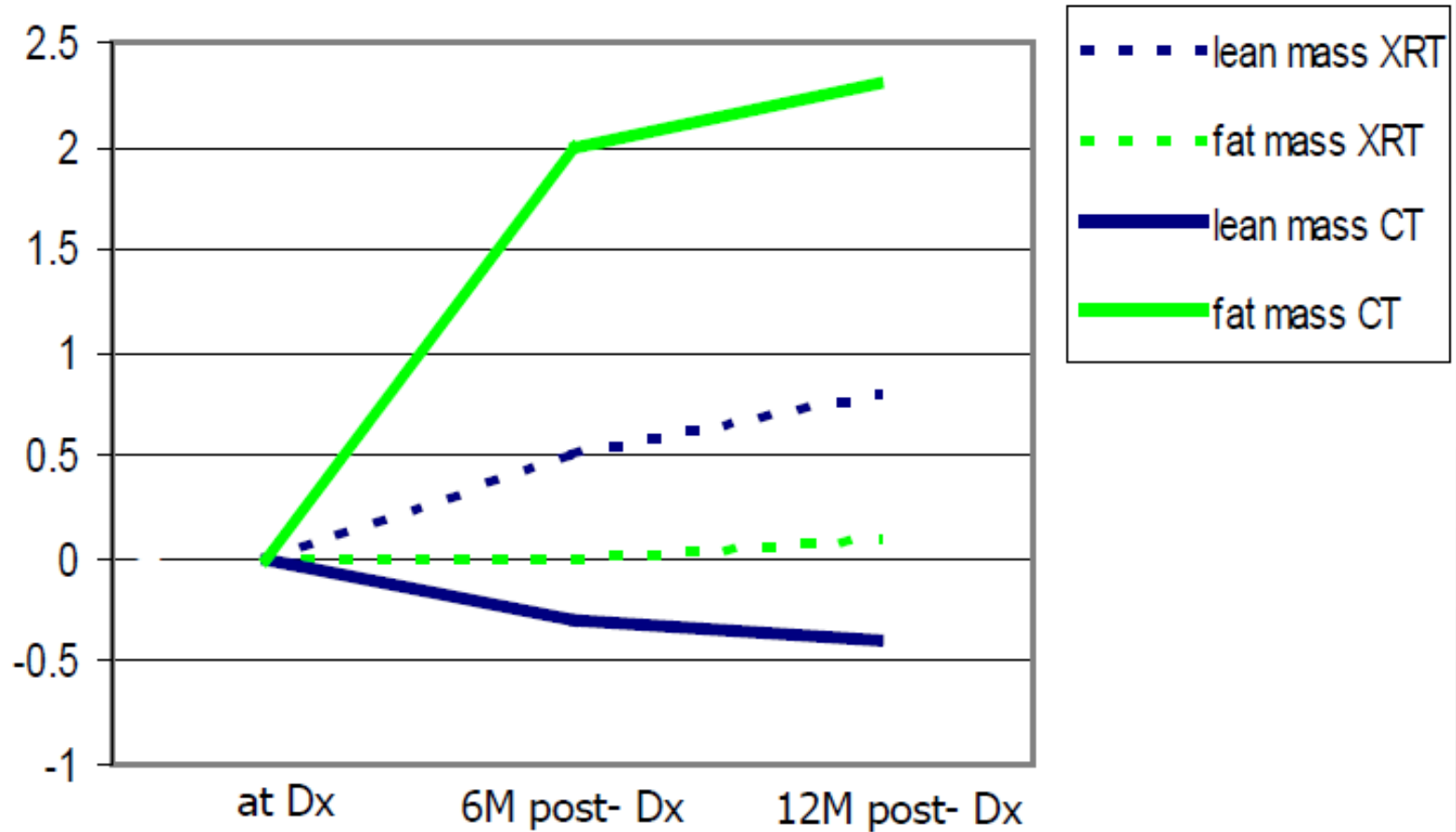
Cognitive Dysfunction

- “I cannot concentrate like I used to.”
- 66% of ovarian cancer survivors report cognitive changes

Weight Gain

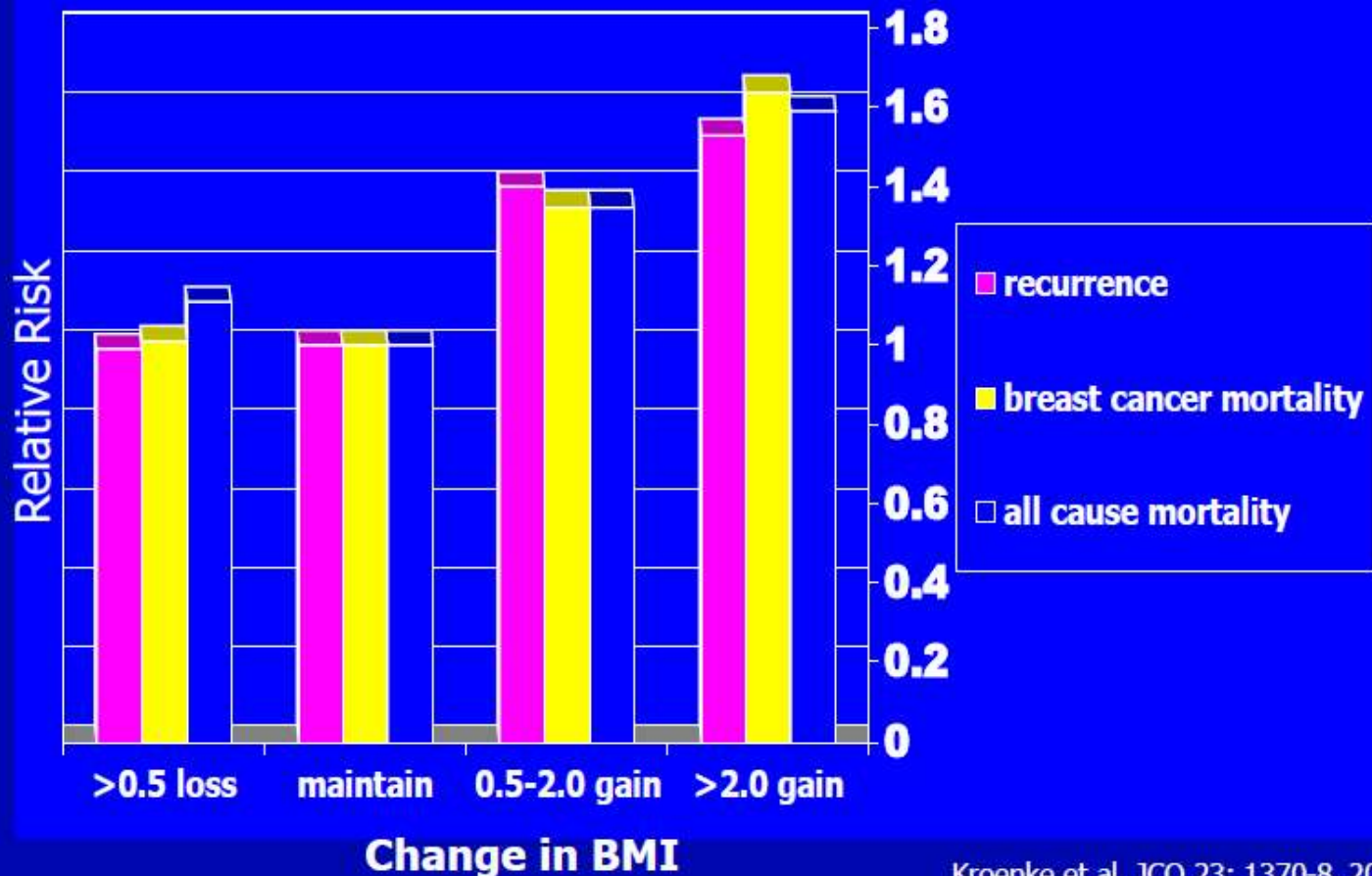
- 1st observed in 1978: surprising with incidence of nausea and mucositis
- Avg gain: 10 lbs; more in premenopausal women
- Mechanism:
 - Not related to increased eating
 - Associated with lean tissue loss/absence of lean tissue gain: increase in fat
- Decrease quality of life: increase in DM, HTN, CVD

Body composition changes post-diagnosis in premenopausal breast cancer patients



Change in Weight Status Post-Diagnosis & Association with Recurrence & Mortality

– Data from Cohort of 5204 Breast Cancer Survivors in Nurse's Health Study



Staying Healthy After Cancer Therapy

Make A 'Survivorship Plan'

- Establish a regular medical care provider
- Know details of your cancer and its treatments
- Consider evaluation in a Long Term Follow Up Clinic for Cancer Survivors or use your own records to create your own plan (oncolink.net)
- Follow guidelines for followup tests and exams
- Maintain a healthy lifestyle
 - Avoid smoking or chewing tobacco
 - Eat a healthy diet and be physically active
 - Wear a sunscreen

Get Information



American Institute of Cancer Research www.aicr.org

Clinical Trials

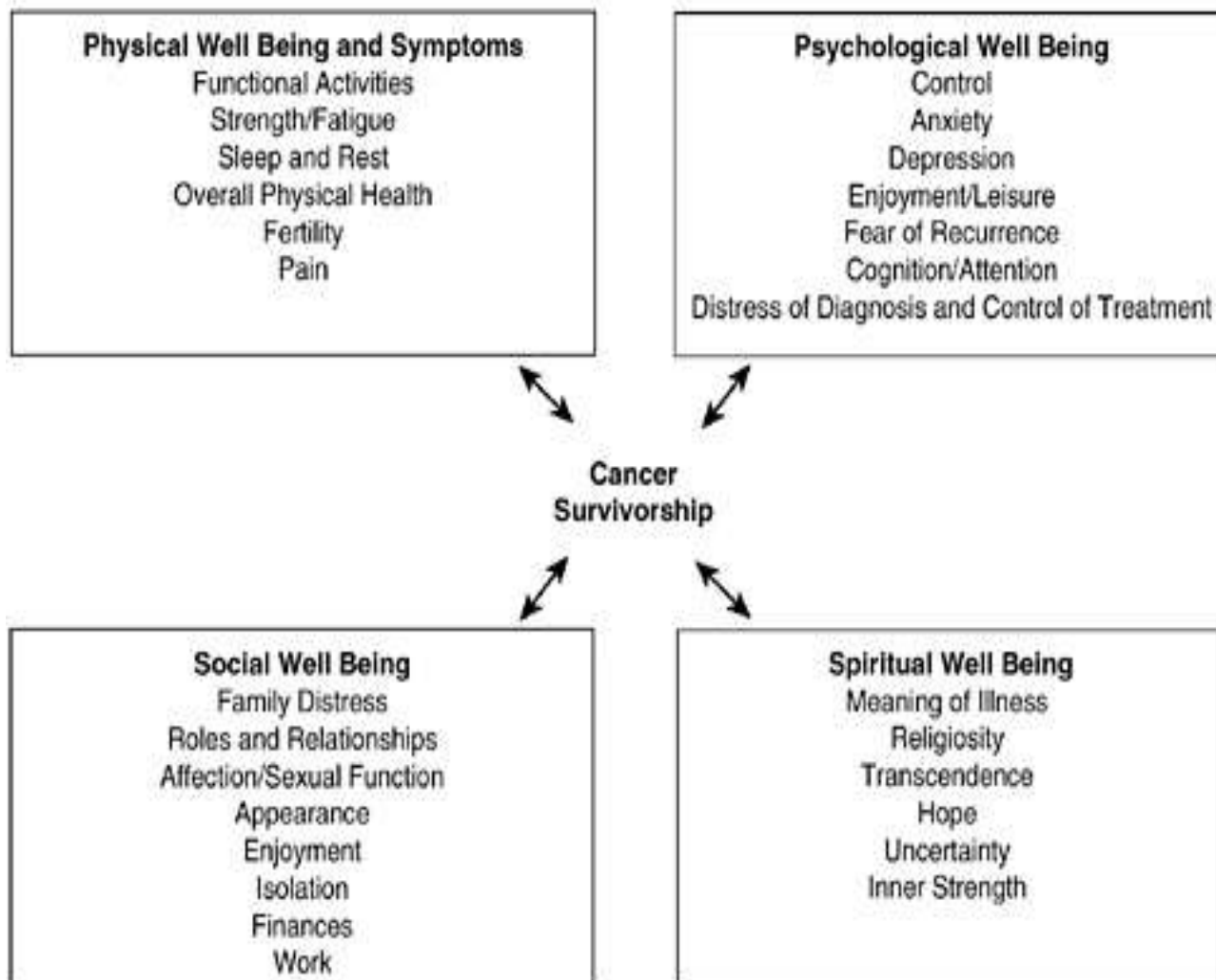
- Survivorship as a research field is growing. Know what clinical trials are available for symptom management in addition to treatment
 - Mindfulness based cancer recovery after chemotherapy and radiation
 - Eligibility: have completed chemo or or radiation within the last 6 months
 - Cognitive dysfunction and ovarian cancer
 - New agents for painful chemotherapy associated neuropathy – KRN 5500
 - Eligibility: painful chemotherapy associated neuropathy, not on active treatment
 - Sexual health questionnaires and interventions
 - Bone health in gyn-oncology survivors

Cancer Rehabilitation

Formal vs Virtual

- Advance survivorship care to educate physicians/oncologist and rehabilitation professionals to improve physical and psychological recovery
- “New Normal” after cancer
 - physically and psychological Rehab:
 - Chronic pain/neuropathy
 - Fatigue
 - Nausea
 - Lymphedema
 - Cardiopulmonary symptoms
 - Sleep disturbances
 - Memory changes
 - Fears/anxiety
- Critical part of the healing experience for survivors

Quality of Life Model Applied to Cancer Survivors



Process of Renewal

Plan of Care:

- Screening/monitoring/follow-up
- Create your own Integrated Team of providers
- Access information on conventional and alternative options
- Engage in lifestyle Modifications
 - The adoption of healthy lifestyle behaviors provides an opportunity for cancer survivors to assume control over aspects of their health and improve outcomes from cancer and other chronic illnesses.

Food As Medicine

A limited but growing body of evidence shows that nutritional interventions for cancer survivors reduce the risk of recurrence (Chlebowski et al., 2005).

Reasonable to recommend that cancer survivors follow dietary guidelines established for primary prevention of cancer: AICR

- **Nutritional Guidelines for Cancer Survivors from the American Institute for Cancer Research**

- Choose predominantly plant-based diets rich in a variety of vegetables and fruits.
- If eaten at all, limit intake of red meat to less than 3 ounces daily.
- Limit consumption of fatty foods, particularly those of animal origin. Choose modest amounts of appropriate vegetable oils.
- Limit consumption of salted foods and use of cooking and table salt. Use herbs and spices to season foods.
- Limit alcoholic drinks to less than two drinks a day for men and one for women.
- Do not eat charred food. Consume the following only occasionally: meat and fish grilled in direct flame, and cured and smoked meats.
- Avoid being overweight and limit weight gain during adulthood. Take an hour's brisk walk or similar exercise daily.

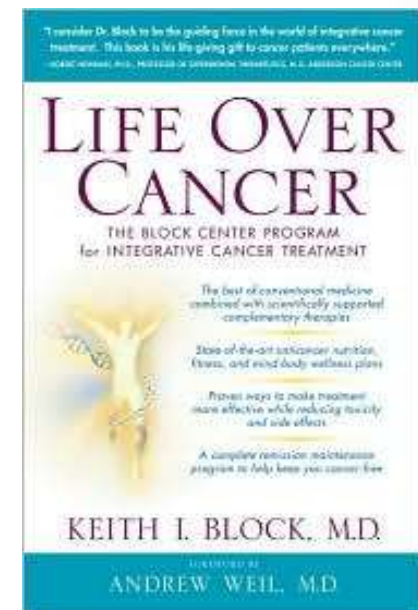
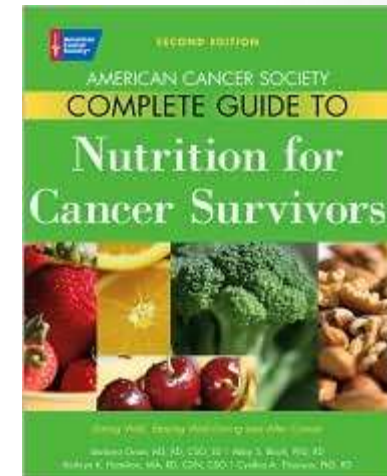
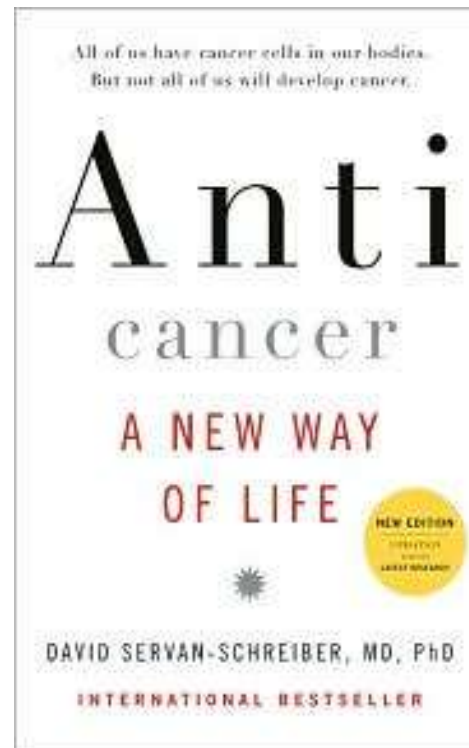


aicr.org

Food As Medicine

Anticancer diet:

- Antioxidants
- Anti-inflammatory
- Fruits and vegetables
 - 9/day
- Omega three fatty acids
 - Fish and Flax
- Organic vs commercial foods



Supplements:

Vitamin D

- Evidence for breast cancer reduction:
 - Three observational cohort studies had inconsistent results:
- Levels:
 - Draw 25(OH)D.
 - Optimal level (30-80 ng/ml). 1000 – 5 000 IU daily
 - Benefits: Support bones, immune function, calcium absorption, etc.
 - Recent studies on Bone loss on AI was significantly slowed when levels are >40 ng/ml.

EXERCISE AS MEDICINE

- Physical activity among cancer survivors show positive and consistent effects of physical activity on the following outcomes:
 - Vigor and vitality
 - Cardio respiratory fitness
 - Quality of life
 - Depression
 - Anxiety
 - Fatigue/tiredness

(Knols et al., 2005; Pinto et al., 2005).
- The exercise prescription is: moderate- to vigorous-intensity aerobic activity on 3 or more days per week, for 10 to 60 minutes/session.
- Resistance training has beneficial effects on muscle and bone and may counteract some of the side effects of cancer treatment (e.g., bone and muscle loss) and help improve survivors' physical function and quality of life

(Galvao and Newton, 2005).
- Lymphedema: Gradual, progressive weight lifting did not increase limb swelling and decreased exacerbations.

(Ahmed et al)



There came a time when the risk to remain tight in the bud was more painful than the risk it took to blossom.

- Anais Nin

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Thank YOU

