

Transforming Cancer Care with Integrative Oncology

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No disclosures



Osher Mini Med School for the Public
Wednesday evenings, May 4 – June 8, 7-8:30 PT

Transforming Cancer Care with Integrative Oncology



- **Integrative Oncology 101: Empowering Us to Reduce Risk, Support Treatment, and Promote Health**
Kathleen Cavanaugh, NP
Kavita K. Mishra, MD, MPH (Course Chair)
- **Exercise and Cancer: Impact of Physical Activity**
Natalie Marshall, MD
- **Nutrition and Cancer: Do's and Don'ts**
Donald Abrams, MD
- **Introduction to Integrative Palliative Care & Symptom Management**
Brieze Bell, MD
- **Caring for Mind, Body, and Spirit: Approaches to Coping with Cancer Care**
Jamie Cohen, PsyD
Christina Weyer Jamora, RN, PhD, CBIST
- **Integrative Cancer Care: Bringing Innovative Approaches into the Clinic**
Moderators: Anand Dhruva, MD/Kavita K. Mishra, MD, MPH
Panelists: Jennifer Ashby, DAOM, LAc, Chloe Atreya, MD, PhD, Shannon Fogh, MD

Course Speakers



Natalie Marshall, MD



Kathleen Cavanaugh,
RN, MS, ANP



Kavita K. Mishra,
MD, MPH



Donald
Abrams, MD



Brieze Bell, MD



Jamie Cohen, PsyD



Christina Weyer Jamora,
RN, PhD, CBIST



Jennifer Ashby,
DAOM, LAc



Chloe E. Atreya,
MD, PhD



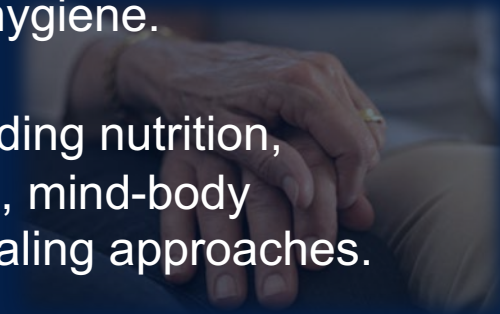
Anand Dhruva, MD



Shannon Fogh, MD

Learning Objectives

- Understand paradigm shift to integrative oncology and learn strategies to reduce cancer risk and support cancer treatment.
- Describe how physical activity and nutrition have potential benefit for symptoms, side effects, cancer risk and survival.
- Learn specific mind-body skills including symptom/pain/stress management, mindfulness practices, cognitive strategies, and sleep hygiene.
- Gather resources to help care for your whole self, including nutrition, exercise, symptom/pain management, natural products, mind-body medicine, acupuncture, psycho-oncology, and other healing approaches.



Format

- Six sessions on Wednesdays, May 4 – June 8, 2022 at 7-8:30 PT.
- Each 90-minute sessions with lecture and live Q&A.
- No personal medical advice is given.
- Opinions are based on our own practice and literature review. These may vary amongst practitioners.
- Audience is varied, may include general public, patients/caregivers, oncology community members, students, educators, health care professionals, and others.
- Please submit questions at any time into the Q&A function at the bottom of your zoom screen.





Integrative Oncology 101: Empowering Us to Reduce Risk, Support Treatment, and Promote Health

Kavita K. Mishra, MD MPH

Kathleen Cavanaugh, RN, MS, ANP

Osher Center for Integrative Health
University of California San Francisco

Cancer Trends

2022 and Beyond

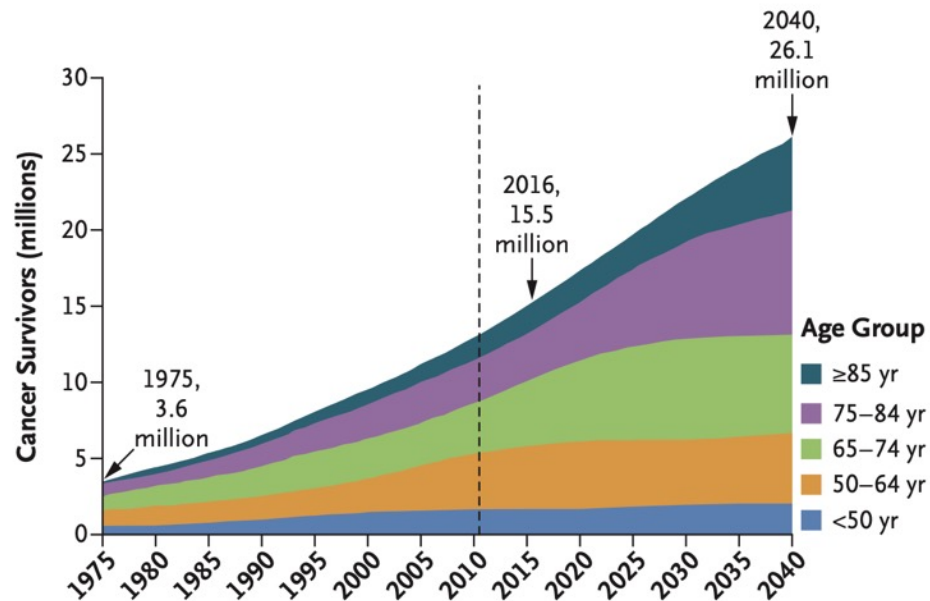
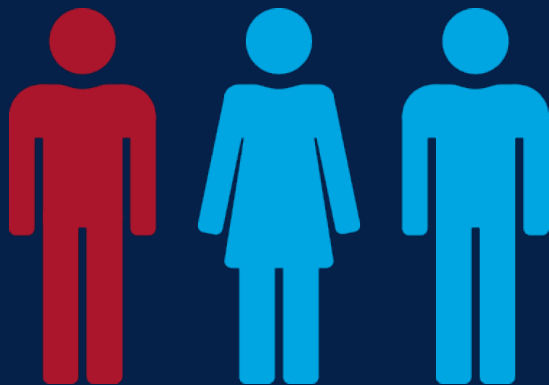


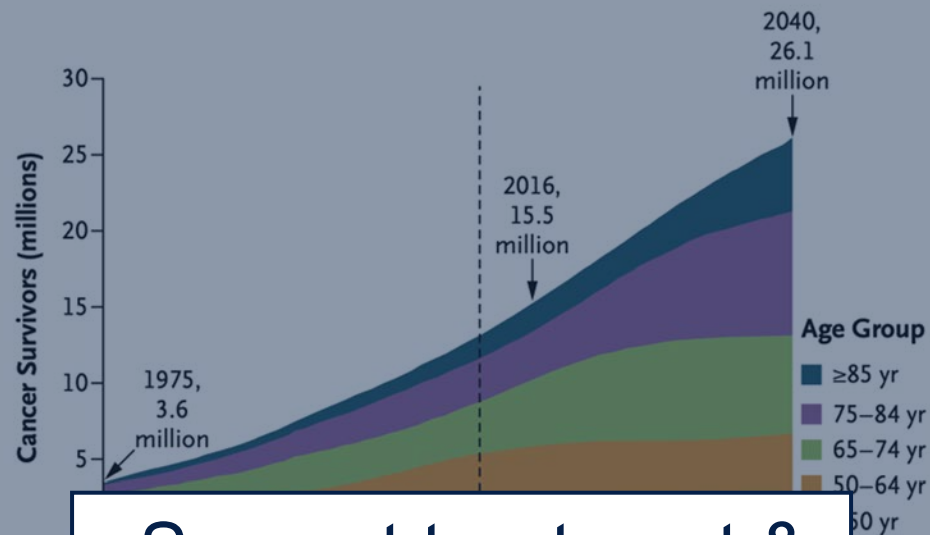
Figure 1. Changing Demographic Characteristics of Cancer Survivors in the United States.

Shown is the number of cancer survivors according to age group, starting in 1975, when there were 3.6 million cancer survivors, and projected to 2040, with an estimated 26.1 million survivors. The vertical broken line at 2011 indicates the year when the first baby boomers (a population born between 1946 and 1964) turned 65 years old. Data are from Bluethmann et al.¹

N Engl J Med 2018;379:2438-50

Cancer Trends

2022 and Beyond



Support treatment & Promote health

Figure in the United States.

Shown is the number of cancer survivors according to age group, starting in 1975, when there were 3.6 million cancer survivors, and projected to 2040, with an estimated 26.1 million survivors. The vertical broken line at 2011 indicates the year when the first baby boomers (a population born between 1946 and 1964) turned 65 years old. Data are from Bluethmann et al.¹

What is Integrative Oncology?





“a patient-centered, evidence-informed field of cancer care that utilizes mind and body practices, natural products, and/or lifestyle modifications from different traditions alongside conventional cancer treatments...

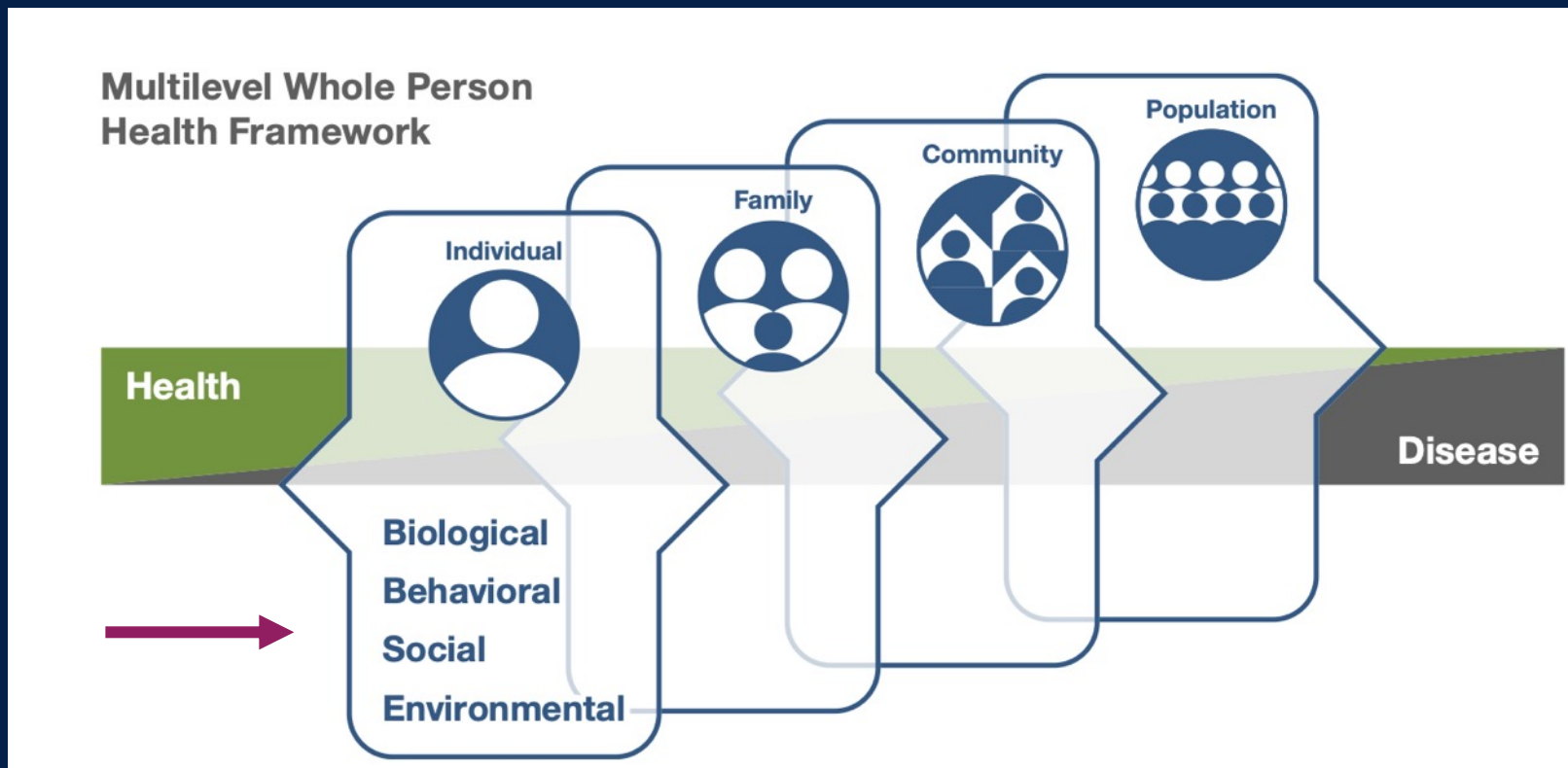
Integrative Oncology (IO) aims to optimize health, quality of life, and clinical outcomes across the cancer care continuum and to empower people to ~~prevent~~ cancer and become active participants before, during, and beyond cancer treatment.”



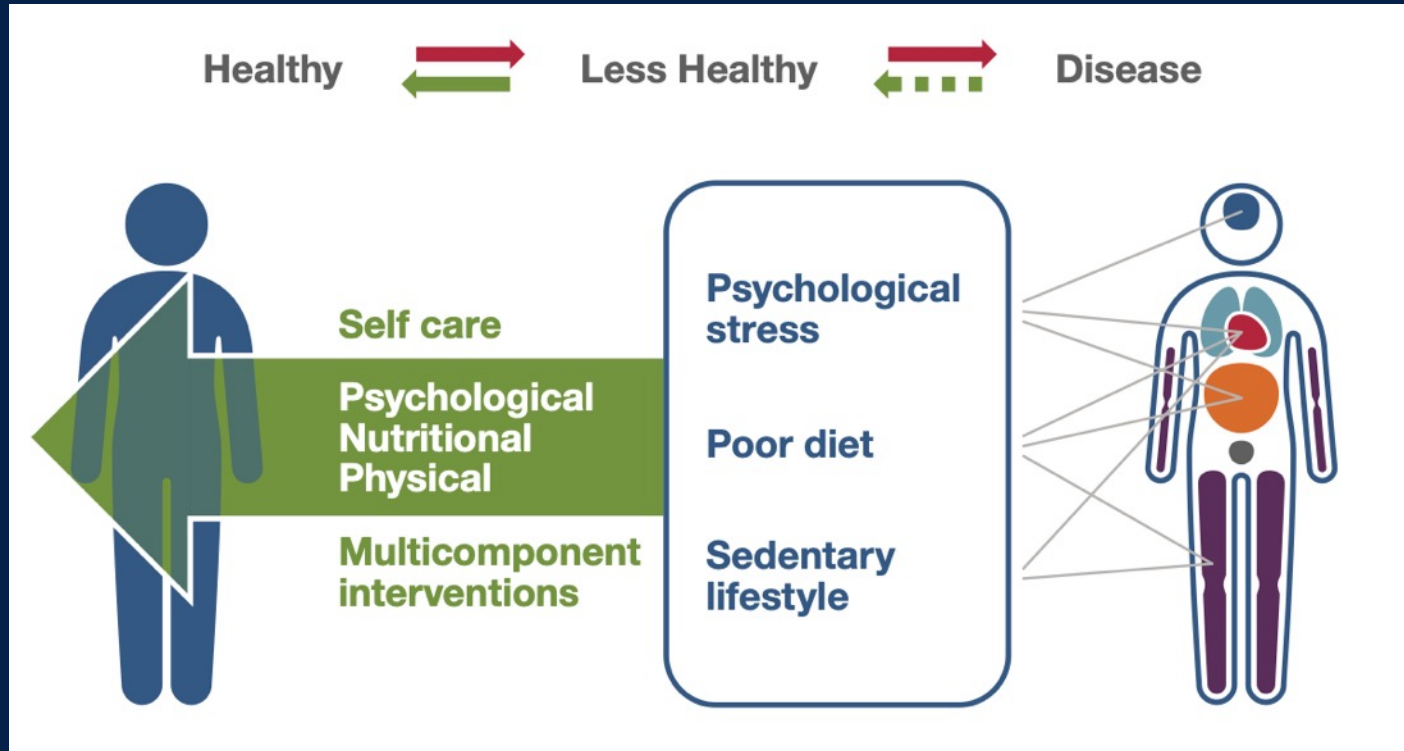
“a patient-centered, evidence-informed field of cancer care that utilizes mind and body practices, natural products, and/or lifestyle modifications from different traditions alongside conventional cancer treatments...

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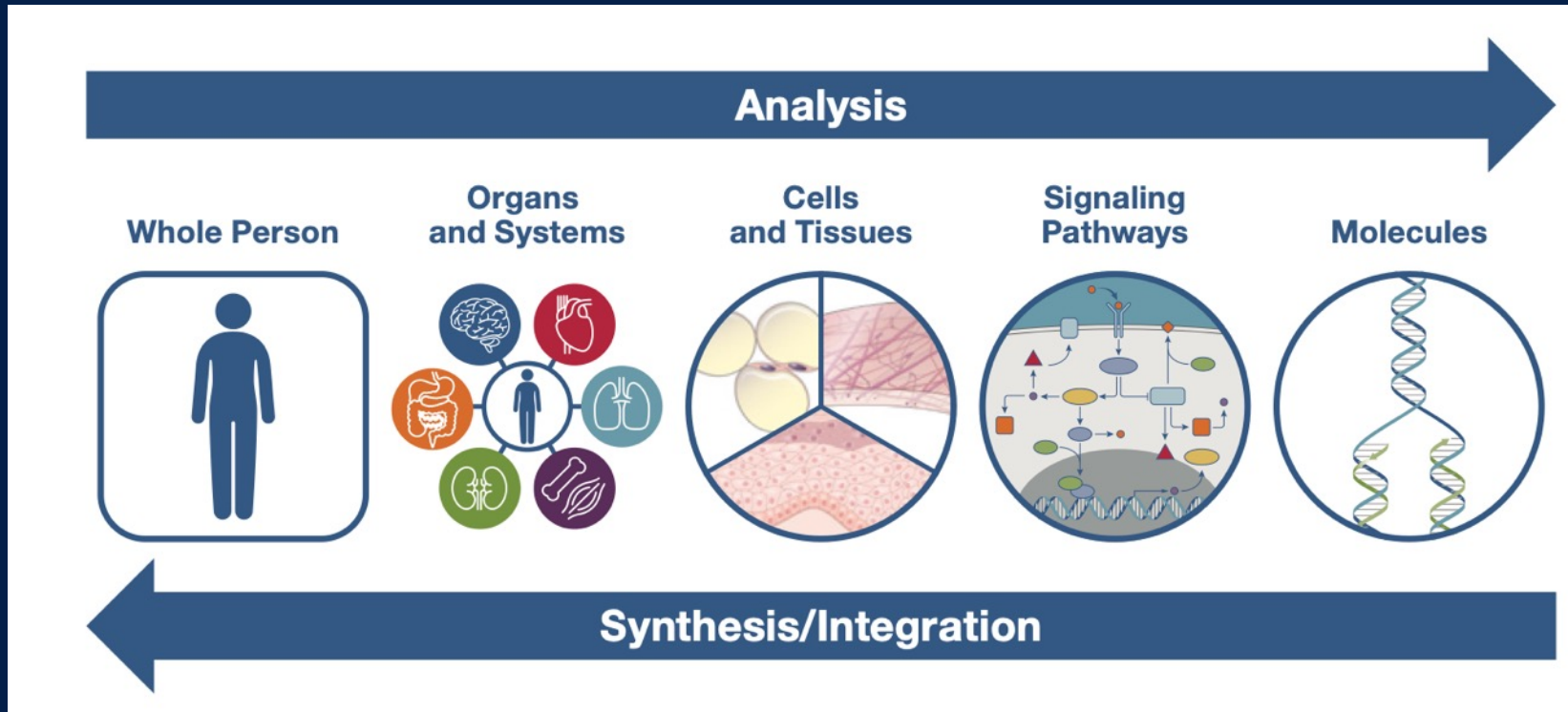
Key #1: Whole Person Framework



Key #2: Integrated Healthcare Team Approach



Key #3: Evidence-informed, Safe & Rational



Integrative vs ‘Alternative or Complementary’

- Integrative ~ collaborative work w/ oncology healthcare team
- Alternative ~ “instead of”
- Complementary ~ “outside of”

- Up to 80% utilize an IO modality based on surveys of patients with cancer (i.e., acupuncture, mind-body medicine, massage, yoga, herbs, nutritional supplements, etc.).

- Much fewer (~15-50%) discuss use with their oncology team.
- But if asked during history-taking, disclosure increases significantly.
- So communicate!

Growth of IO at Cancer Centers

ARTICLE

Growth of Integrative Medicine at Leading Cancer Centers Between 2009 and 2016: A Systematic Analysis of NCI-Designated Comprehensive Cancer Center Websites

Hyeongjun Yun, Lingyun Sun, Jun J. Mao

Affiliations of authors: Memorial Sloan Kettering Cancer Center, New York, NY (HY, LS, JJM); Harvard T. H. Chan School of Public Health, Boston, MA (HY); Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing, China (LS).

Whole systems
Acupuncture
Ayurveda
Consultations
Dietary supplements
Herbs
Nutrition
Physician IM
Spiritual counseling
Mind-body therapy
Biofeedback
Guided imagery
Hypnosis
Meditation
Qigong
Tai chi
Yoga
Touch therapy
Healing touch
Massage
Reiki
Movement/creative
Art
Dance
Exercise
Music

Goals of IO?

- Integrate care for whole person
- Engage mind, body, spirit and community
- Activate the body's innate healing
- Consider natural, less invasive, non-pharma interventions when appropriate
- Focus on health promotion
- Increase empowerment



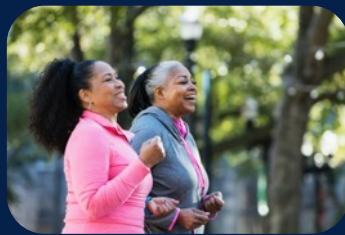
How does IO help?

- Reduce cancer (recurrence) risk
- Help reduce cancer symptoms
- Support treatment and lessen side effects
- Optimize health in survivorship
- Strengthen end-of-life care





Nutrition



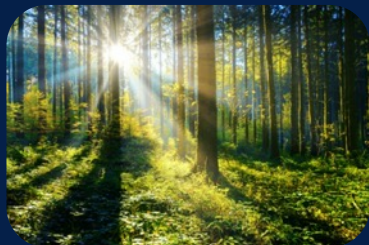
Physical Activity



Mind-Body Medicine



Whole Systems, TCM,
Ayurveda, Energy &
Manual Therapy



Nature, Connection



Screening
Smoking Cessation



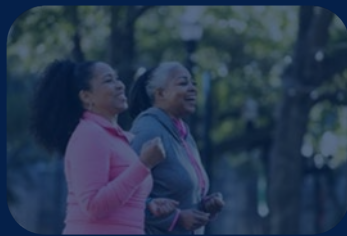
Herbs & Supplements



Psycho-Oncology,
Symptom/Pain Mgmt,
Sleep Clinic



Nutrition



Physical Activity



Mind-Body Medicine



Whole Systems, TCM, Ayurveda, Energy & Manual Therapy



Nature, Connection



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Smoking Cessation



Herbs & Supplements



Psycho-Oncology,
Symptom/Pain Mgmt,
Sleep Clinic

AICR RECOMMENDATIONS FOR CANCER PREVENTION

A Blueprint to Beat Cancer

To prevent cancer, people should aim to follow as many of the 10 Cancer Prevention Recommendations as possible. However, any change you make that works toward meeting the goals set out in the Recommendations will go some way to reducing your cancer risk.

EAT A DIET RICH IN WHOLE GRAINS, VEGETABLES, FRUITS AND BEANS

Make whole grains, vegetables, fruits and pulses (legumes) such as beans and lentils a major part of your usual daily diet



LIMIT CONSUMPTION OF RED AND PROCESSED MEAT

Eat no more than moderate amounts of red meat, such as beef, pork and lamb. Eat little, if any, processed meat



LIMIT CONSUMPTION OF SUGAR-SWEETENED DRINKS

Drink mostly water and unsweetened drinks



LIMIT CONSUMPTION OF "FAST FOODS" AND OTHER PROCESSED FOODS HIGH IN FAT, STARCHES OR SUGARS

Limiting these foods helps control calorie intake and maintain a healthy weight



LIMIT ALCOHOL CONSUMPTION

For cancer prevention, it's best not to drink alcohol



FOR MOTHERS: BREASTFEED YOUR BABY, IF YOU CAN

Breastfeeding is good for both mother and baby



AFTER A CANCER DIAGNOSIS: FOLLOW OUR RECOMMENDATIONS, IF YOU CAN

Check with your health professional about what is right for you



DO NOT USE SUPPLEMENTS FOR CANCER PREVENTION

Aim to meet nutritional needs through diet alone



Not smoking and avoiding other exposure to tobacco and excess sun are also important in reducing cancer risk.

Following these Recommendations is likely to reduce intakes of salt, saturated and trans fats, which together will help prevent other non-communicable diseases.

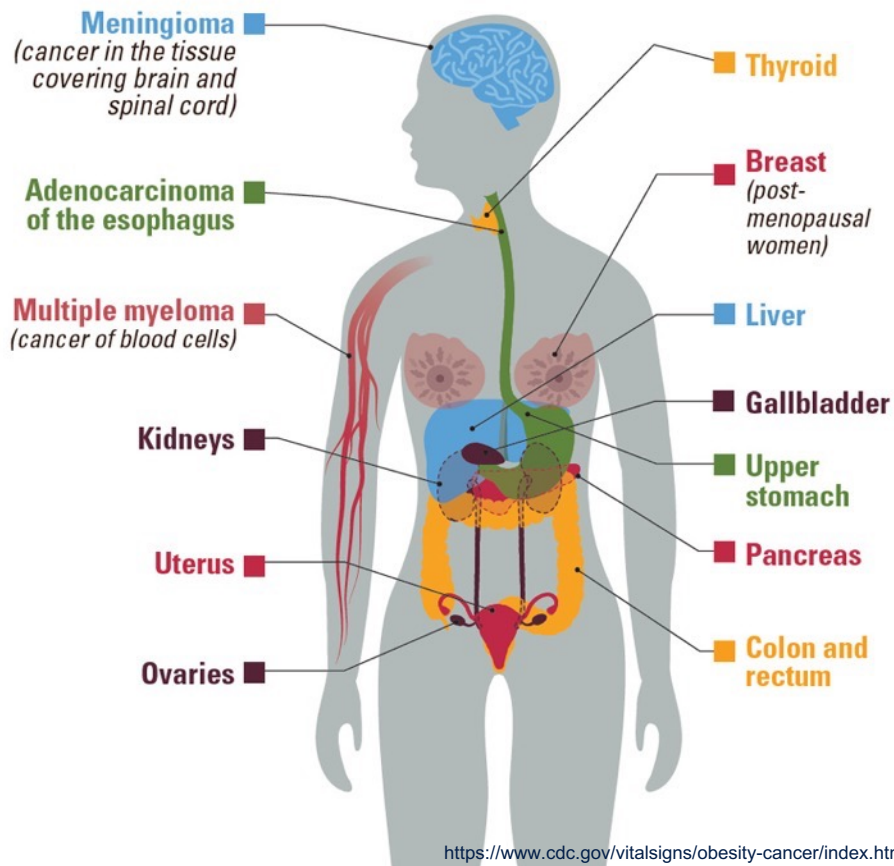
<https://www.aicr.org/resources/media-library/10-cancer-prevention-recommendations/>

Nutrition Matters

Obesity-associated cancers

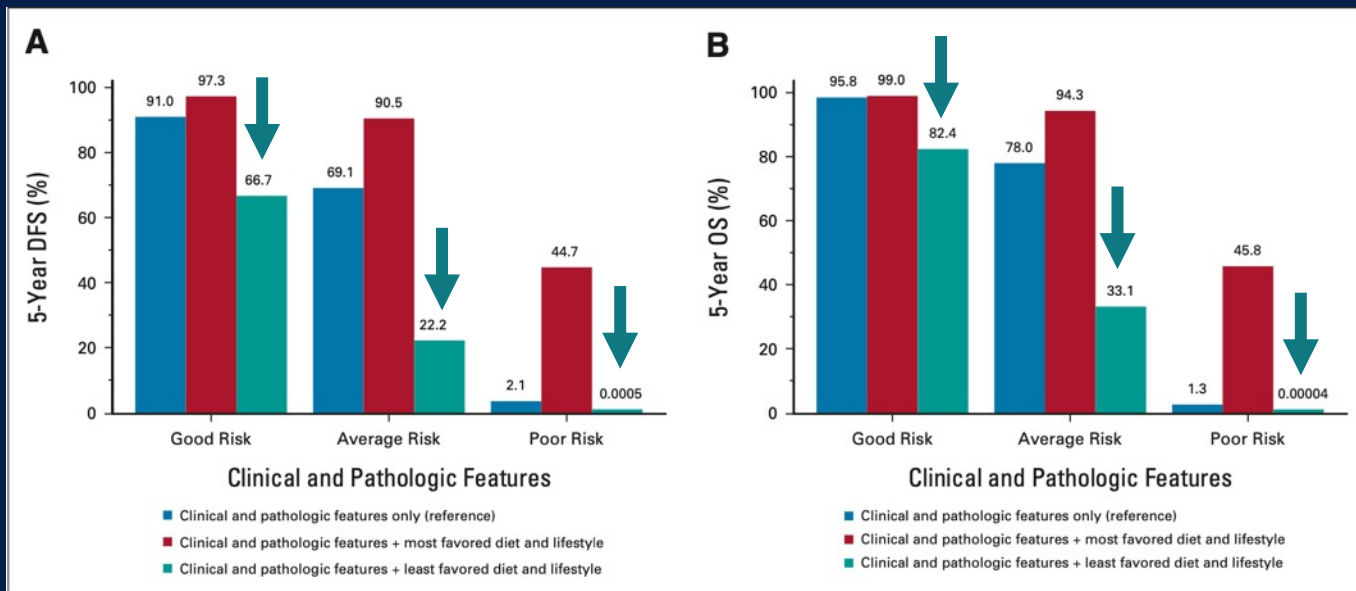
- Obesity is a leading risk factor for cancer.
- Overweight and obesity is associated with 13 different types of cancer.
- 40% of all cancers diagnosed
- Obesity is recognized as a chronic inflammatory state that predisposes to cancer.

13 cancers are associated with overweight and obesity



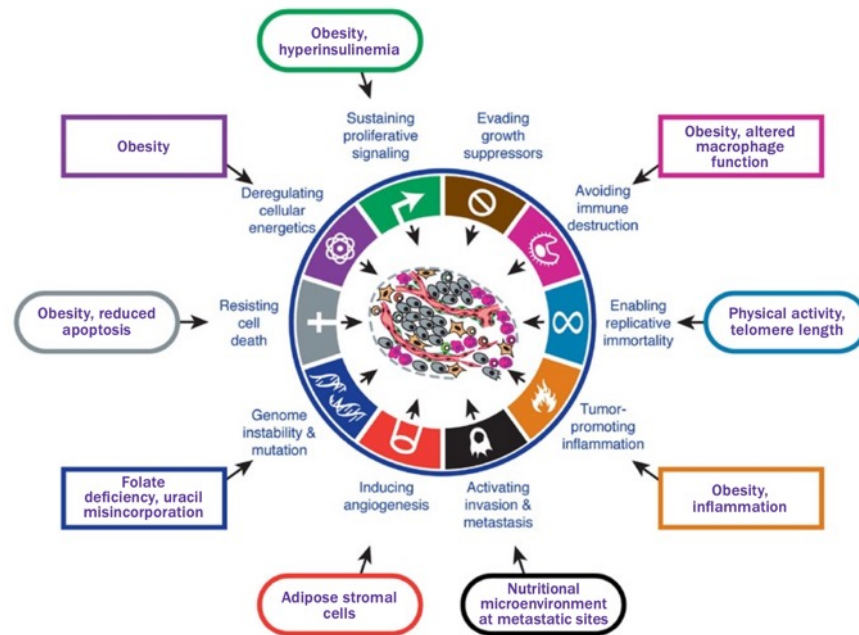
Nutrition Matters

A healthy diet and lifestyle are associated with a significantly lower risk of cancer recurrence and death.



Obesity and Cancer Hallmarks

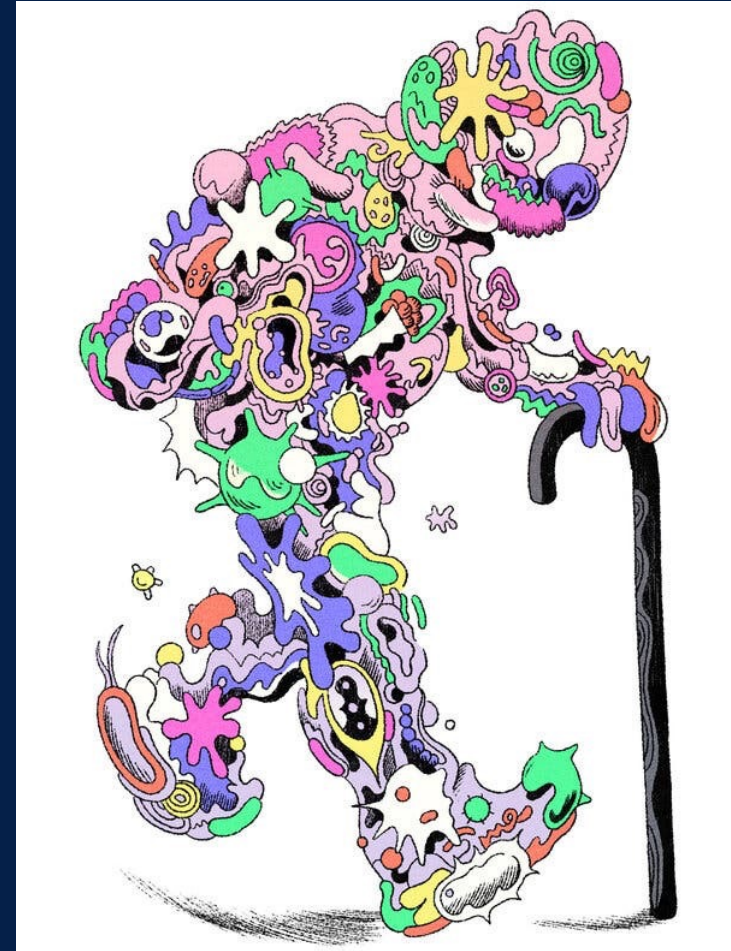
Figure 5: Nutrition, physical activity and the hallmarks of cancer



Adapted from: Cell 144, Hanahan D and Weinberg RA, Hallmarks of cancer: the next generation, 646–74, Copyright (2011), with permission from Elsevier.

Nutrition and Microbiome

- Trillions of microorganisms of thousands of different species, bacteria, fungi, parasites, and viruses.
- In a healthy person, these “bugs” coexist peacefully.
- DNA, environmental exposures, and diet can affect microbiome.
- Imbalances in microbial ecology are implicated in certain cancers.



What should I eat?

- Plant-based, Anti-Inflammatory
- Whole Foods, Unprocessed
- Vegetables, fruits, whole grains, beans
- Favor brightly colored or strongly flavored vegetables and fruits (sources of phytochemicals)
- Phytochemicals in supplement form may not be as easily absorbed as those from food
- 80/20



“The New American Plate”



Dirty Dozen™

EWG's 2021 Shopper's Guide to Pesticides in Produce™



1. Strawberries



2. Spinach



3. Kale, collard and
mustard greens



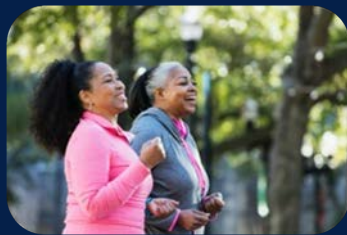
4. Nectarines

Select Resources - Nutrition

- Nutritionist and Oncology consults; Online resources
- American Institute for Cancer Research
 - <https://www.aicr.org/cancer-prevention/healthy-eating/>
- World Cancer Research Fund International
 - <https://www.wcrf.org/diet-activity-and-cancer/>
- American Cancer Society
 - <https://www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/guidelines.html>
- UCSF Osher Center for Integrative Health
 - <https://osher.ucsf.edu/patient-care/integrative-medicine-resources/cancer-and-nutrition>
- UCSF Patient & Family Cancer Support Center
 - <https://www.ucsfhealth.org/services/patient-and-family-cancer-support-center>



Nutrition



Physical Activity



Mind-Body Medicine



Whole Systems, TCM,
Ayurveda, Energy &
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Screening
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Herbs & Supplements



Psycho-Oncology
Sleep Clinic

Exercise Matters



- Lower risk of developing cancers (i.e., bladder, breast, colon, endometrial, esophageal, kidney and stomach)
- Reducing cancer-related symptoms and treatment side effects (i.e., fatigue, QOL, physical function, anxiety, depression, lymphedema, bone health, sleep)
- Lower recurrence risk (i.e., breast, prostate, colon)
- Longer survival
- Other: falls, cardiovascular fitness, self-esteem, strength/balance, body composition

Exercise Matters... before, during and after

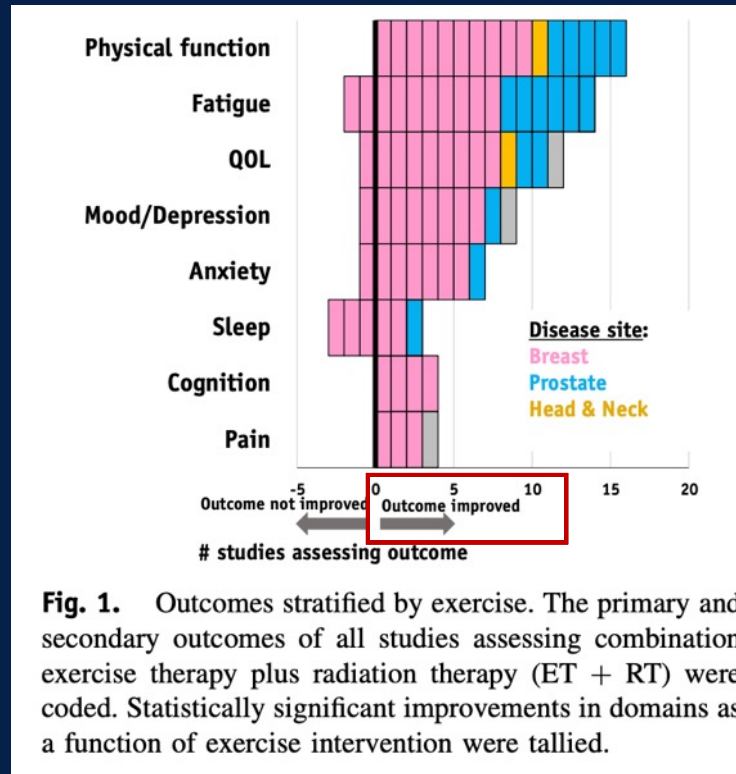


Fig. 1. Outcomes stratified by exercise. The primary and secondary outcomes of all studies assessing combination exercise therapy plus radiation therapy (ET + RT) were coded. Statistically significant improvements in domains as a function of exercise intervention were tallied.

Exercise Matters

- Increase in physical activity after diagnosis (compared with before dx) is associated with longer survival.

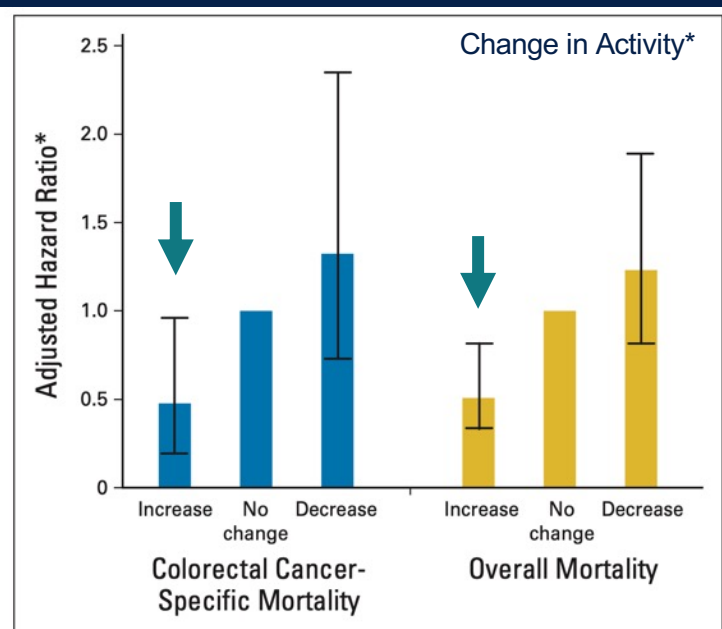


Fig 1. Change in physical activity reported before and after diagnosis of stage I to III colorectal cancer in relation to risk of colorectal cancer-specific and all-cause mortality among 523 women in Nurses' Health Study. Compared with women who reported same level of physical activity pre- and postdiagnosis ($n = 203$), those who reported more physical activity after diagnosis ($n = 144$) had approximately 50% lower risk of colorectal cancer-specific (hazard ratio [HR], 0.48; 95% CI, 0.24 to 0.97) and all-cause mortality (HR, 0.51; 95% CI, 0.30 to 0.85). (*) Compared with no change. Adjusted for body mass index, stage of disease (I, II, or III), grade of tumor differentiation, colon or rectal primary, age at diagnosis, year of diagnosis, receipt of chemotherapy (yes, no, or unknown), time from diagnosis to physical activity measurement, change in body mass index, and smoking status (current, past, or never). Data adapted.¹⁵

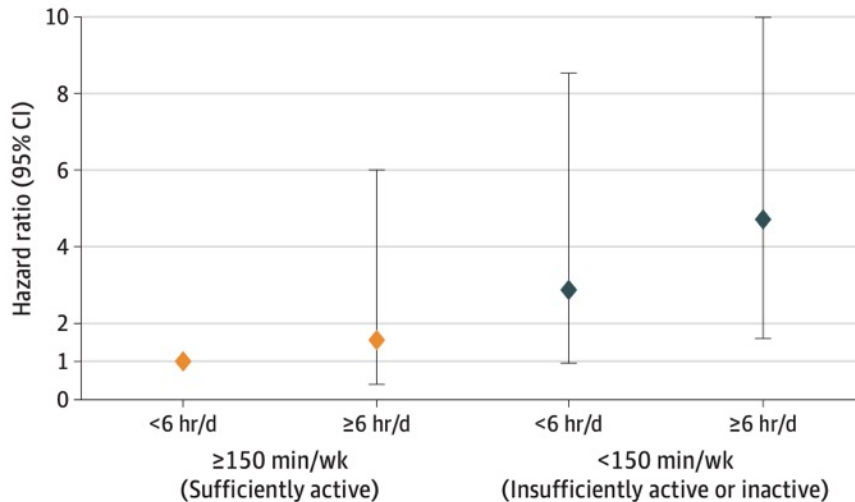
Exercise Matters in Survivorship

JAMA Oncology | Original Investigation

Association of Daily Sitting Time and Leisure-Time Physical Activity With Survival Among US Cancer Survivors

Chao Cao, MPH; Christine M. Friedenreich, PhD; Lin Yang, PhD

B Cancer mortality



- Combination of prolonged sitting (>6-8 hrs/day) with lack of physical activity (<150 min/wk) was associated with the highest risks of death from all causes and cancer.


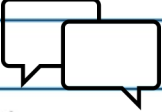

How much should I move?



- Safe, sustainable, personalized plan with trained professional
- Exercise Counselors/Trainers, PT/OT/Rehab; Yoga, Tai chi, Qi gong, Dance
- Aerobic: Build up to 150 min/week moderate or 75 min/week vigorous activity
- Strength training and flexibility/balance exercise (~2x/week)

Guide 5

Examples of physical activity by intensity

Light intensity 	Moderate intensity 	Vigorous intensity 
Slow walking	Brisk walking	Race walking
Slow biking	Biking on flat ground	Biking fast
Gentle yoga	Vinyasa yoga	High-intensity yoga
Tai chi	Pilates	Martial arts
Light housework	Light gardening	Heavy gardening
Bowling	Volleyball	Jogging, running, jumping rope
Playing catch	Baseball, softball	Running sports
Child care	Ballroom or line dancing	Fast dancing
Active gaming	Doubles tennis	Singles tennis
	Water aerobics	Fast swimming
	Using a manual wheelchair	Hiking uphill, stair climbing

Name: _____ Date: _____



Aerobic Activity 3 or more days/week

Intensity: Light (casual walk) Moderate (brisk walk) Vigorous (like jogging)

Time (minutes/day): Build up to 30 minutes/day

Type: Walk Run Bike Swim/Water Exercise Other _____

Steps/day: 2,500 5,000 7,000 9,000 or more Other _____

What about aerobic activity?

- Moderate activity is at a pace where you can talk but cannot “sing.” Examples: *brisk walking, light biking, water exercise and dancing.*
- Vigorous activity is at a pace where you have trouble talking and may be out of breath. Examples: *jogging, tennis and fast bicycling.*
- While the recommendation is to build up to 30 min/day, at least 3 days/week, you can exercise for any length of time. For example, you might walk:
 - 5 minutes here, 10 minutes there
 - 15 minutes daily
 - Just work your way up to 30 minutes 3 days/week
- Gradually build up to a daily step count of 7,000-9,000 steps/day.

Exercise as Medicine

Tips to Help Build Healthy Habits



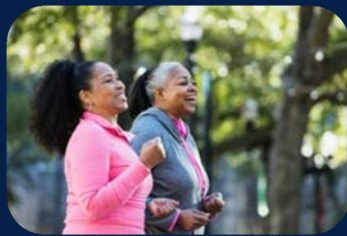
- This is a life-long pursuit, seek help to develop strategies
- Set short-term goals to achieve long-term goals
- Tailor your plan: barriers, needs, support (friend/class), online/apps
- Several short sessions may work better
- Give yourself credit for small and large steps toward goals
- Follow up with your provider to assess progress

Select Resources - Exercise

- Exercise Counselor/PT/OT/Rehab consults
- Group classes – cardio/resistance/other, yoga, tai chi, qi gong; online resources/apps
- Moving Thru Cancer – Exercise is Medicine
 - <https://www.exerciseismedicine.org/eim-in-action/moving-through-cancer/>
- The American College of Sports Medicine (ACSM) and American Physical Therapy Association (APTA) offer specialty training. Can search for an ACSM- or APTA-certified provider near you.
 - <https://www.acsm.org/get-stay-certified/find-a-pro>
 - <https://aptaapps.apta.org/APTAPTDirectory/FindAPTDDirectory.aspx>
- American Cancer Society
 - <https://www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/physical-activity-and-the-cancer-patient.html>
- UCSF Exercise Counseling
 - <https://www.ucsfhealth.org/services/cancer-exercise-counseling>



Nutrition



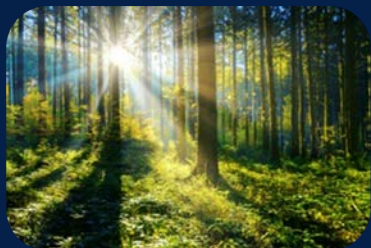
Physical Activity



Mind-Body Medicine



Whole Systems, TCM,
Ayurveda, Energy &
Manual Therapy



Nature, Connection



Screening
Smoking Cessation



Herbs & Supplements



Psycho-Oncology,
Symptom/Pain Mgmt,
Sleep Clinic

What is Mind-Body Medicine?

- Diverse group of practices
- Mind, body and behavior → promote health and well-being
- Meditations (breath/body awareness, mindfulness, kindness/compassion, mindfulness-based courses - MBSR, MBCR)
- Movement or energy-based therapies (qi gong, tai chi, yoga)
- Relaxation techniques (PMR, guided imagery)
- Expressive (nature, dance, art, writing, music)
- Biofeedback, Hypnosis, Support Groups



Mind-Body Medicine & the Cancer Journey



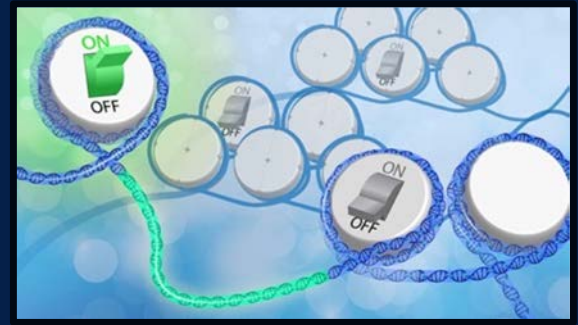
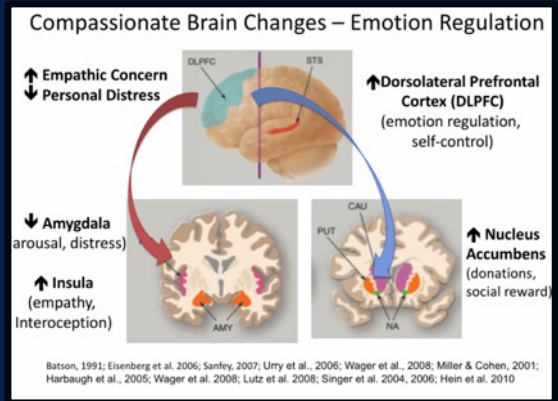
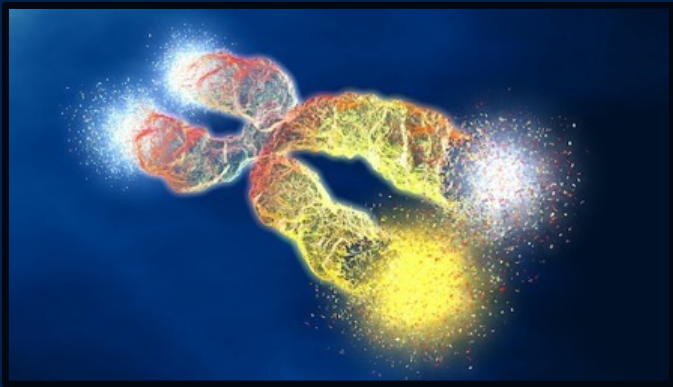
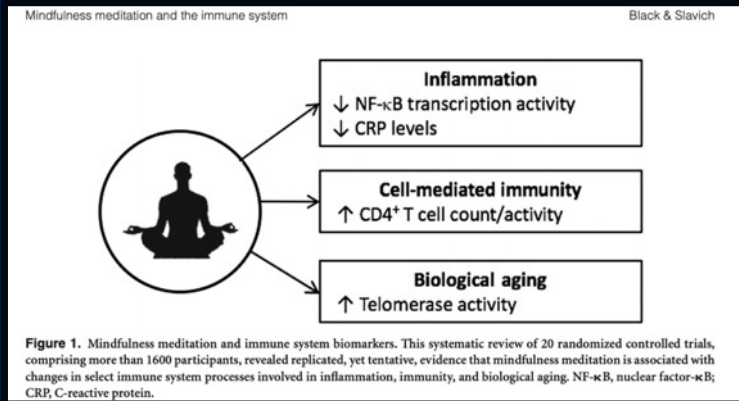
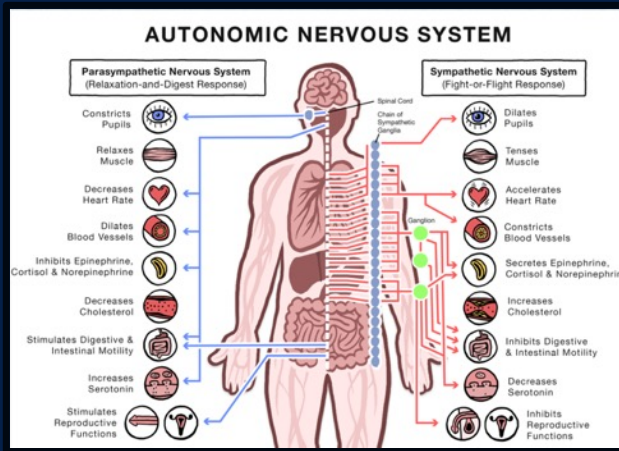
- Physical symptoms: Cancer-related and treatment side effects (i.e., sleep, fatigue, pain, nausea)
- Psychosocial: Stress, depression, anxiety, fear of cancer recurrence
- Cognitive/Existential: awareness, self-compassion, gratitude, reflection, insight
- Survivorship & End of life care

TABLE 1. National Comprehensive Cancer Network Clinical Practice Guidelines for the Use of Integrative Medicine for Supportive Cancer Care^a

SYMPTOMS	ACUPUNCTURE	MASSAGE	MEDITATION/MBSR	YOGA	MUSIC THERAPY	EXERCISE	NUTRITION
Adult cancer pain	X	X	X	X		X	
Cancer-related fatigue	X	X	X	X		X	X
Sleep disorders			X	X			
Distress (anxiety/depression)			X	X	X	X	X
Cancer-associated cognitive dysfunction			X	X			
Hot flashes/night sweats	X			X		X	
Sexual dysfunction			X	X			
Nausea/vomiting	X			X	X		
Anorexia						X	X

Abbreviation: MBSR, mindfulness-based stress reduction.

^aDerived from the National Comprehensive Cancer Network (NCCN) clinical practice guidelines for supportive cancer care (NCCN 2021,¹³⁰ Denlinger 2021,¹³¹ Swarm 2021,¹³² Berger 2021,¹³³ Ettinger 2021,¹³⁴ Riba 2021,¹³⁵ Dans 2021¹³⁶).



IO: ASCO/SIO guidelines

Clinical practice guidelines on the evidence-based use of integrative therapies during and following breast cancer treatment

Heather Greenlee, ND, PhD, MPH, Melissa J. DuPont-Reyes, MPH, MPhil, Lynda G. Balneaves, RN, PhD, Linda E. Carlson, PhD, Misha R. Cohen, OMD, LAc, Gary Deng, MD, PhD, Jillian A. Johnson, MSc, Matthew Mumber, MD, Dugald Seely, ND, MSc, Suzanna Zick, ND, MPH, Lindsay Boyce, MLIS, and Debu Tripathy, MD

Integrative Therapies During and After Breast Cancer Treatment: ASCO Endorsement of the SIO Clinical Practice Guideline

Gary H. Lyman, Heather Greenlee, Kari Bohlke, Ting Bao, Angela M. DeMichele, Gary E. Deng, Judith M. Fouladbakhsh, Brigitte Gil, Dawn L. Hershman, Sami Mansfield, Dawn M. Mussallem, Karen M. Mustian, Erin Price, Susan Rafta, and Lorenzo Cohen

- Music therapy, meditation, stress management, and yoga are recommended for anxiety/stress reduction; ~depression/mood disorders; quality of life
- Acupressure and acupuncture are recommended for reducing chemotherapy-induced nausea and vomiting.

Greenlee et al, CA Cancer J Clin. 2017; 67(3): 194–232. Lyman et al, JCO 2018; 36 (25):2647-2655

Select Resources - MBM

- Individual consults and Group classes – MBSR, MBCR, yoga, tai chi, qi gong; retreats; online resources/mobile apps
- Walking meditation Greater Good in Action: https://ggia.berkeley.edu/practice/walking_meditation
- Self-Compassion Meditations: <https://self-compassion.org/category/exercises/>
- Anticancer Lifestyle Program: <https://anticancerlifestyle.org/resources-topic/mindset/>
- UCSF: <https://www.ucsfhealth.org/services/meditation-and-guided-imagery-for-cancer-patients>
- UCSF MBSR course: <https://osher.ucsf.edu/public-classes/mindfulness-based-stress-reduction-mbsr>
- UCSD: <https://cih.ucsd.edu/mindfulness/guided-audio-video;>
<https://medschool.ucsd.edu/som/fmph/research/mindfulness/programs/mindfulness-programs/MBSR-programs/Pages/audio.aspx>
- UCLA: <https://www.uclahealth.org/marc/mindful-meditations> (multiple languages);
- Body scan – sleep: <https://www.uclahealth.org/marc/mpeg/Body-Scan-for-Sleep.mp3>
- MSKCC: <https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/multimedia/meditations>
- MBCR: <https://www.mindfulcancerrecovery.com>



Acupuncture/TCM

Benefit for Pain, Less analgesics, Fatigue, Nausea, Hot flashes, Dry mouth



Critical Review

Use of acupuncture to alleviate side effects in radiation oncology: Current evidence and future directions

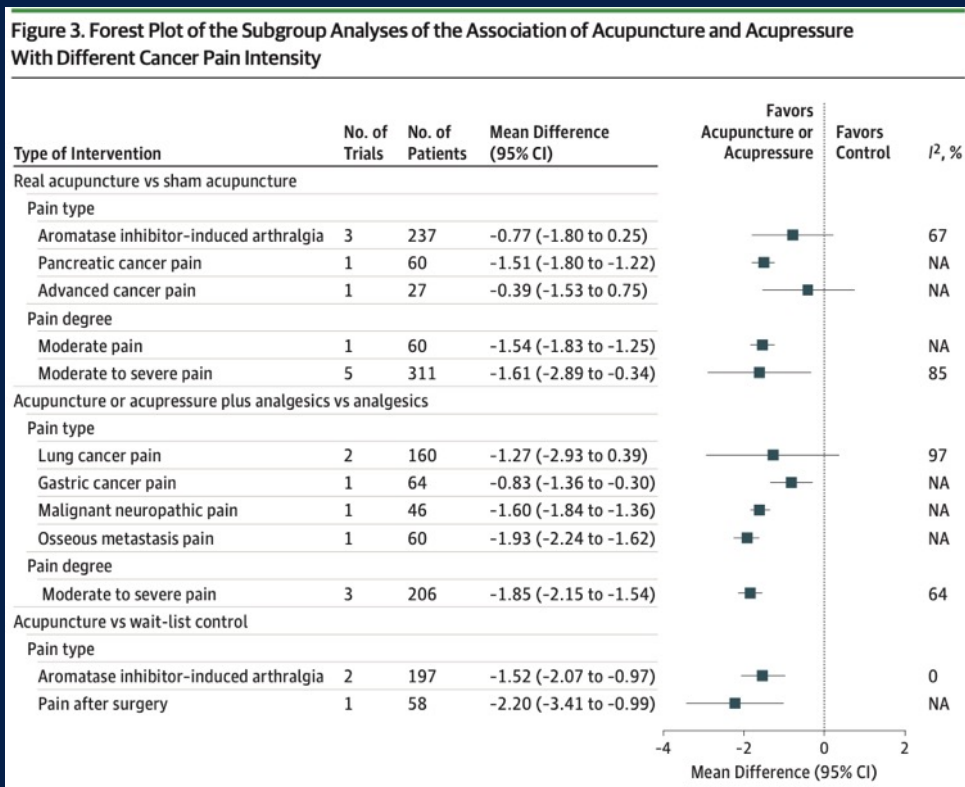
Rebecca Asadpour ^{a,c}, Zhiqiang Meng MD PhD ^d,
Kerstin A. Kessel PhD ^{a,b}, Stephanie E. Combs MD ^{a,b,c,*}

JAMA Oncology | Original Investigation

Clinical Evidence for Association of Acupuncture and Acupressure With Improved Cancer Pain A Systematic Review and Meta-Analysis

Yihan He, PhD; Xinfeng Guo, PhD; Brian H. May, PhD; Anthony Lin Zhang, PhD; Yihong Liu, MM; Chuanjian Lu, MD; Jun J. Mao, MD; Charlie Changli Xue, PhD; Haibo Zhang, MD

Acupuncture & Cancer/Surgical/Joint Pain



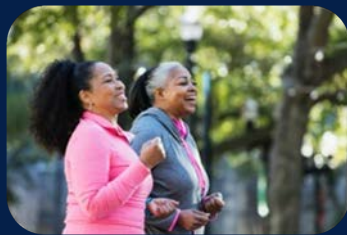
- **Ayurveda** = *ayur* (life) and *veda* (science or knowledge). Traditional medicine practice from India using lifestyle interventions and natural therapies to regain balance between the body, mind, being, environment. May utilize diet, herbal remedies, massage therapy, yoga, and meditation.



- **Manual therapy** can reduce cancer-related fatigue, pain, mood disturbance, and lymphedema. Adaptations in oncology massage may include changes to applied pressure, site avoidance or restrictions, and precautions related to other relevant history (surgery, tx or metastasis).



Nutrition



Physical Activity



Mind-Body Medicine



Whole Systems, TCM,
Ayurveda, Energy &
Manual Therapy



Nature, Connection



Screening
Smoking Cessation



Herbs &
Supplements



Psycho-Oncology,
Symptom/Pain Mgmt,
Sleep Clinic

Screening General Guidelines

*Check with your provider as these may be adjusted due to individual factors

Cervical CA

Age 25-65 HPV/PAP every ~5 years
Age 65+ if needed based on prior tests

Breast CA

Age 40-44 discuss with provider
Age 45-54 annual mammogram
Age 55+ mammo every 1-2 years

Lung CA

Age 50-80 if good health AND current smoker/quit in past 15 years AND 20+ pack-year smoking history, recommend annual low dose CT scan.

Colorectal CA

Age 45-75 visual exam every 5-10 years, or stool-based test every 1-3 years
Age 76-85 discuss with provider
Age 85 no screening recommended

Prostate CA

Age 50 discuss with provider
Age 45 if African American OR have a father or brother who had prostate cancer before age 65, discuss with provider

Ocular Disease

Age 40 Baseline screening
Age 41-60 every 1-2 years exam
Age 61+ annual exam

Other...

American Cancer Society, US Preventive Services Task Force, American Academy of Family Physicians, American Academy of Ophthalmology

Herbs & Supplements

- Providers and patients should communicate to assess needs and impacts.
- Potential interactions: antioxidants, anticoagulants, phytoestrogens, immune-stimulating, renal/hepatic toxicity
- NCCN/AICR - Not recommended for cancer prevention.
- Aim to obtain nutrients from dietary intake. If deficiency, replete as needed.
- Quality control, Cost, Limited studies
- Commonly seen supplements in oncology: vitamin D3 (depending on 25OHD level), calcium/magnesium, omega-3, medicinal mushrooms, turmeric/curcumin, probiotics

Select Resources – Herbs & Supplements

- National Center for Complementary and Integrative Health: <https://www.nccih.nih.gov/health/herbsataglance>
- NCI Office of Cancer Complementary and Alternative Medicine: https://cam.cancer.gov/health_information/for_patients.htm; https://cam.cancer.gov/health_information/cam_therapies_a-z.htm
- NIH, Office of Dietary Supplements: <https://ods.od.nih.gov>; <https://ods.od.nih.gov/factsheets/list-all/>
- About Herbs (MSKCC): <https://www.mskcc.org/aboutherbs>
- Natural Medicines Comprehensive Database (subscription): <http://naturaldatabase.com>; <https://naturalmedicines.therapeuticresearch.com>
- ConsumerLab (subscription): <https://www.consumerlab.com>
- Guidelines ACS: <https://www.cancer.org/healthy/find-cancer-early/american-cancer-society-guidelines-for-the-early-detection-of-cancer.html>
- Guidelines/ Supportive Care NCCN: <https://www.nccn.org/patients>; <https://www.nccn.org/patients/guidelines/content/PDF/survivorship-hl-patient.pdf>; <https://www.nccn.org/patients/guidelines/content/PDF/survivorship-crl-patient.pdf>

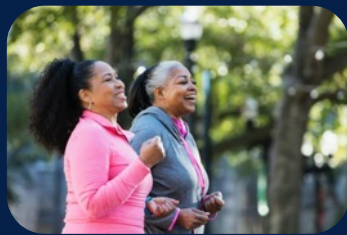
Psycho-Oncology, Pain Mgmt, Sleep Clinic

- Depression, Anxiety, Fear of recurrence, Isolation, Stress, Pain, Fatigue, Sleep disturbance, Insomnia, are common in the cancer population.
- IO may access Psycho-Oncology, Symptom Management, Sleep Clinic.
- Cognitive behavioral therapy for insomnia (CBTI) is a first-line, highly effective nonpharmacological treatment for sleep disturbance.
- In addition, acupuncture, tai chi, yoga, mind-body therapies can help.





Nutrition



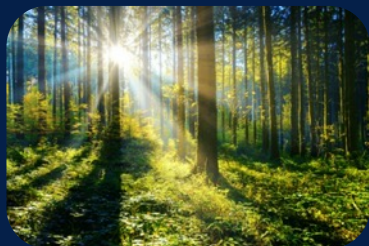
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What you practice
grows stronger





Osher Mini Med School for the Public
Wednesday evenings, May 4 – June 8, 7-8:30 PT

Transforming Cancer Care with Integrative Oncology



- **Integrative Oncology 101: Empowering Us to Reduce Risk, Support Treatment, and Promote Health**
Kathleen Cavanaugh, NP
Kavita K. Mishra, MD, MPH (Course Chair)
- **Exercise and Cancer: Impact of Physical Activity**
Natalie Marshall, MD
- **Nutrition and Cancer: Do's and Don'ts**
Donald Abrams, MD
- **Introduction to Integrative Palliative Care & Symptom Management**
Brieze Bell, MD
- **Caring for Mind, Body, and Spirit: Approaches to Coping with Cancer Care**
Jamie Cohen, PsyD
Christina Weyer Jamora, RN, PhD, CBIST
- **Integrative Cancer Care: Bringing Innovative Approaches into the Clinic**
Moderators: Anand Dhruva, MD/Kavita K. Mishra, MD, MPH
Panelists: Jennifer Ashby, DAOM, LAc, Chloe Atreya, MD, PhD, Shannon Fogh, MD

Thank you