La promozione del Movimento nei percorsi di cura e guarigione

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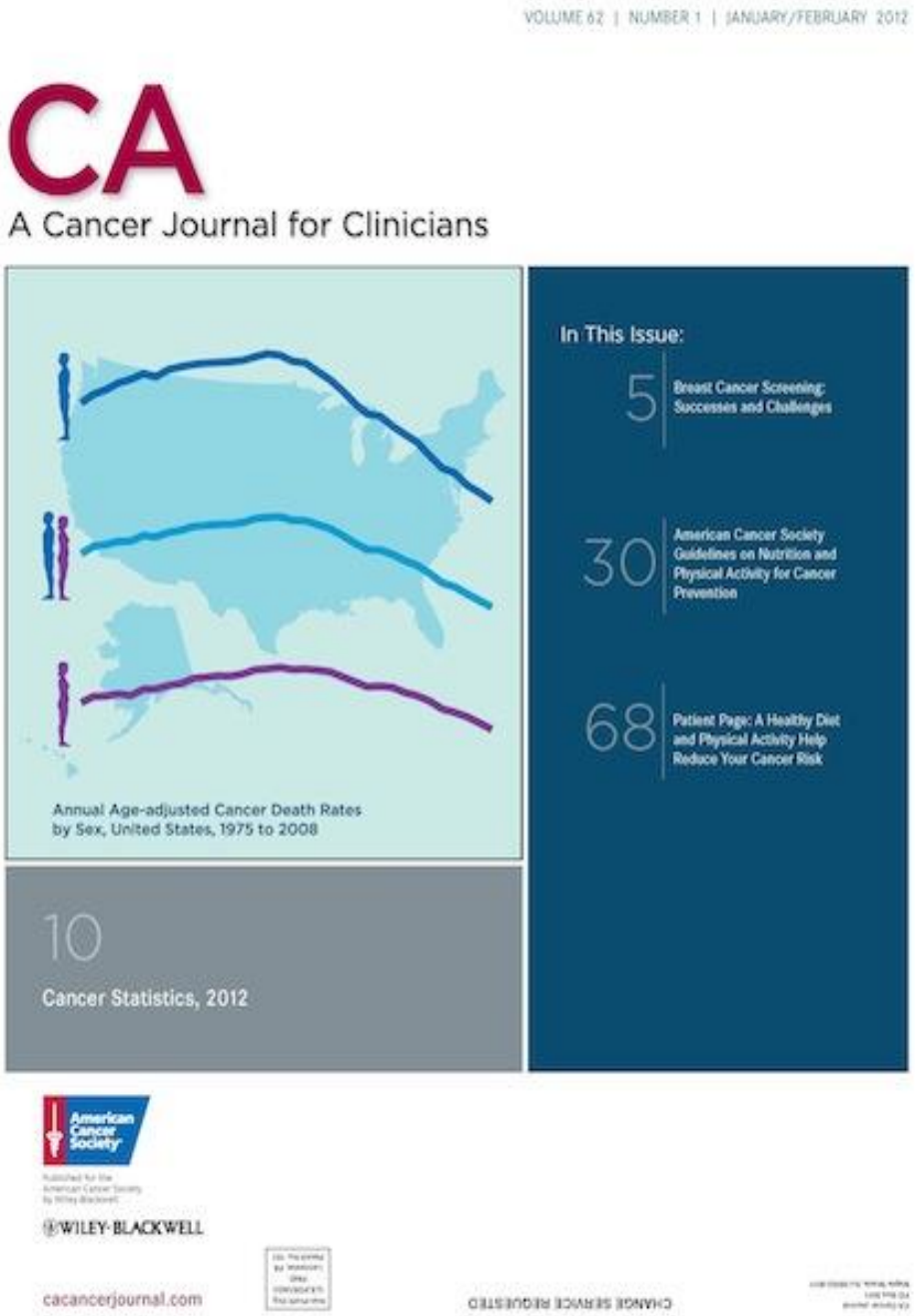


American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention

Esercizio fisico nella prevenzione primaria del cancro

Adottare uno stile di vita fisicamente attivo:

- Adulti: **150 minuti** di esercizio di intensità moderata o **75 minuti** di intensità vigorosa distribuiti nella settimana, tutte le settimane.
- Bambini e adolescenti: **1 ora** di moderata o vigorosa attività ogni giorno da aggiungere a un'attività vigorosa **3 volte alla settimana**
- Limitare i comportamenti sedentari
- Eseguire attività fisica durante le normali attività indipendentemente dal livello di attività

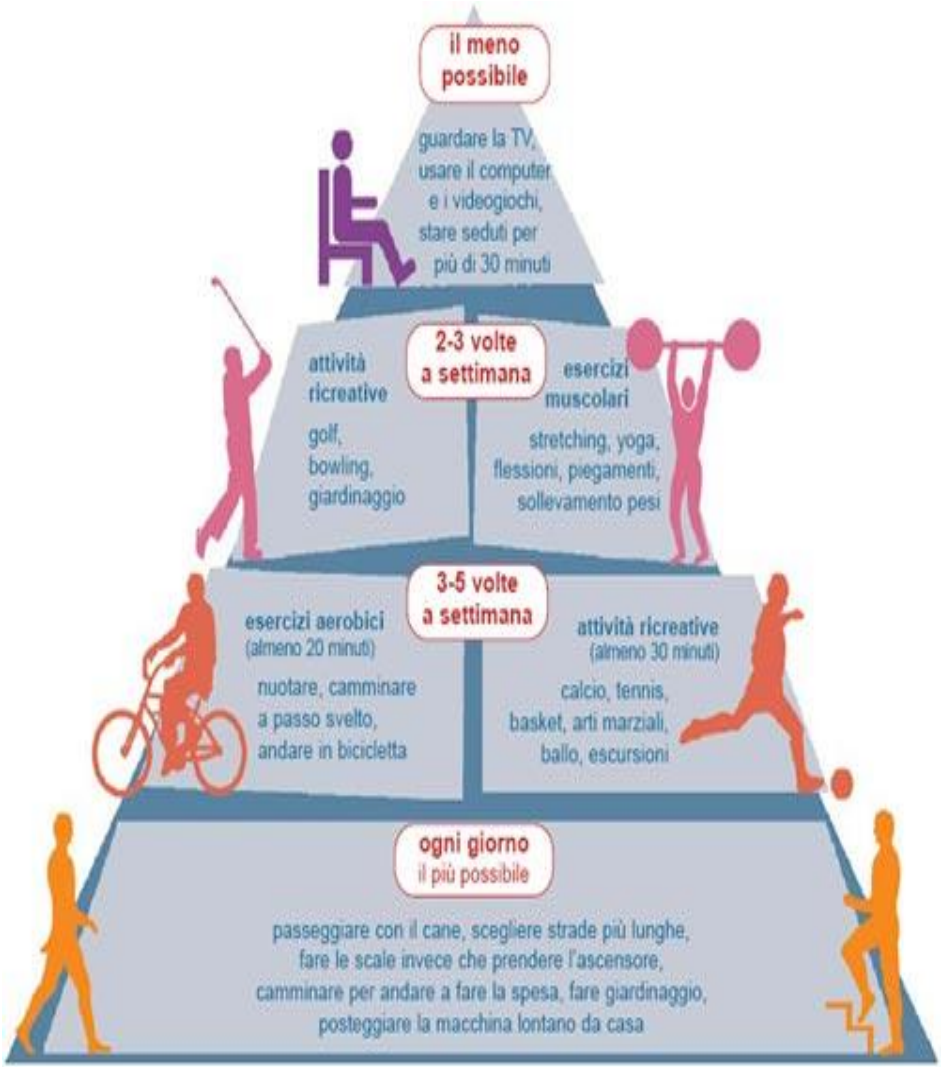
American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention

Esempi di attività fisica :

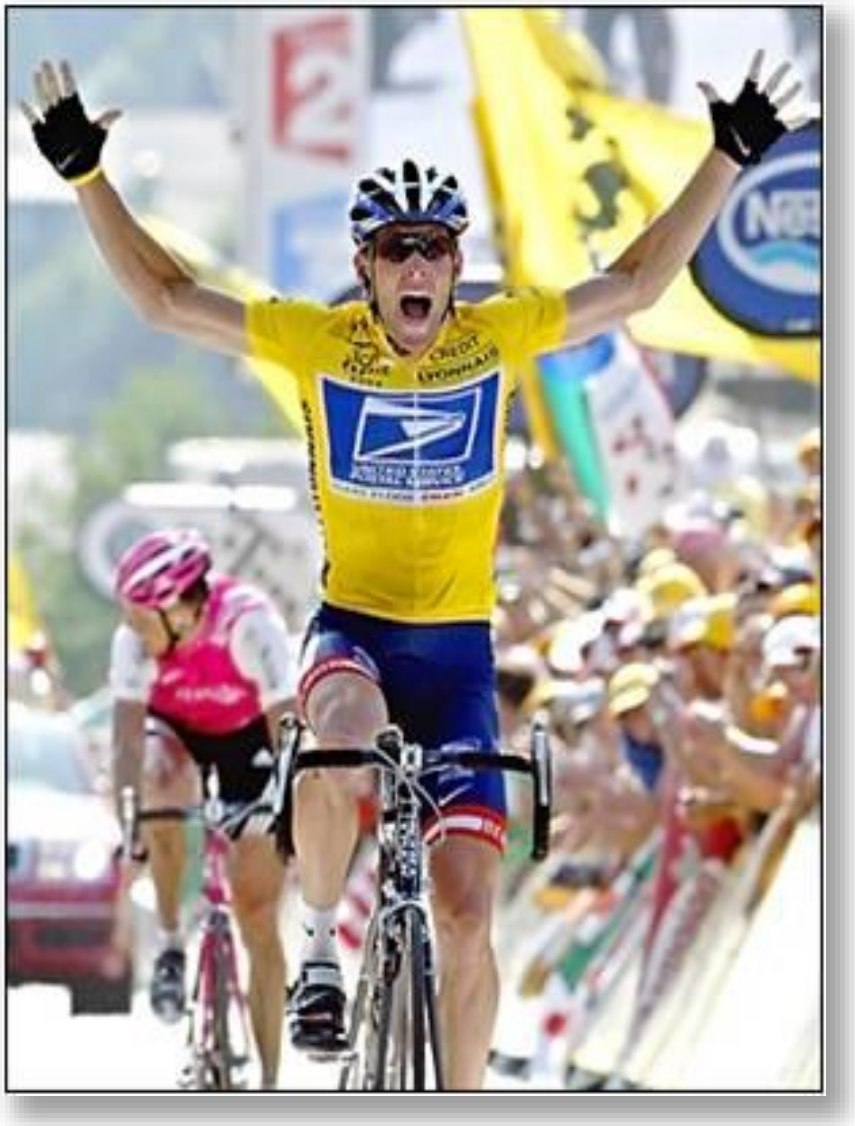
	Attività Moderata (posso parlare ma non cantare)	**Attività Vigorosa** (posso dire poche cose senza fermarmi per prendere fiato)
Esercizio e tempo libero	Camminare, ballare,ciclismo amatoriale,pattinare, canoa, yoga	Jogging, ciclismo veloce, nuoto, pesistica, aerobica, arti marziali
Sport	golf, pallavolo, baseball, doppio di tennis	Basket,calcio,ciclismo,tennis, sci
Attività domestiche	Giardinaggio	Vangare
Attività professionale	Camminare, alzarsi durante il lavoro	Lavori manuali pesanti

Suggerimenti per limitare la sedentarietà :

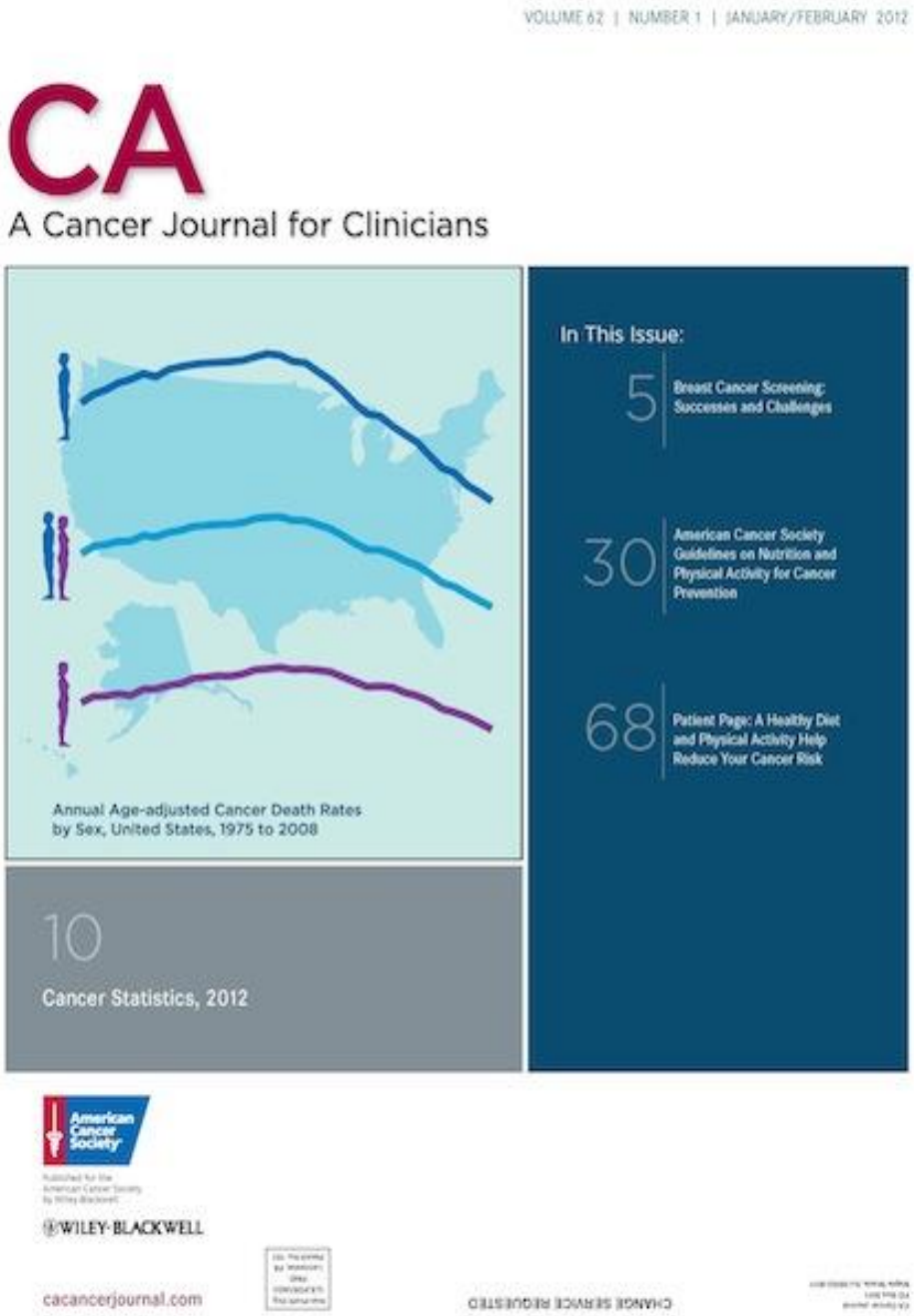
- Limitare il tempo per guardare la tv
- Usare il treadmill o la bici quando si guarda la tv
- Cammina o vai in bici, se puoi, al lavoro
- Esercizio fisico nella pausa pranzo con familiari, colleghi, amici
- Prenditi una pausa dal lavoro per camminare o stretcharti
- Cerca di persona i tuoi colleghi invece di mandare mail
- Programma vacanze attive
- Utilizza un contapassi ogni giorno e incrementa il numero degli steps
- Fai sport



Esercizio fisico nel paziente oncologico



Nutrition and Physical Activity Guidelines for Cancer Survivors



Nutrition and Physical Activity Guidelines for Cancer Survivors

Esercizio fisico durante il trattamento oncologico

Dal 2006 ad oggi un crescente numero di studi hanno dimostrato:

- L'esercizio fisico è sicuro e fattibile durante il trattamento oncologico
- Migliora le funzioni fisiche, la fatica, depressione, la composizione corporea, molti aspetti della qualità di vita con possibilità di completare percorsi chemioterapici
- Non interferisce con l'efficacia delle terapie

Deve essere però personalizzato: decidendo quando cominciare, a che intensità, per quanto tempo andare avanti. Ma il goal principale deve essere mantenere l'attività fisica più che si può.

Persistent changes resulting from the most commonly used curative therapies

	Surgery	Chemotherapy	Radiation	Hormonal Therapy, Oophorectomy or Orchiectomy	Targeted Therapies
Second cancers		✓	✓		
Fatigue	✓	✓	✓	✓	✓
Pain	✓	✓	✓	✓	✓
Cardiovascular changes: damage or increased CVD risk		✓	✓	✓	✓
Pulmonary changes	✓	✓	✓		
Neurological changes:					
Peripheral neuropathy		✓			
Cognitive changes	✓	✓	✓	✓	✓
Endocrine changes					
Reproductive changes (e.g., infertility, early menopause, impaired sexual function)	✓	✓	✓	✓	✓
Body weight changes (increases or decreases)	✓	✓		✓	
Fat mass increases	✓	✓		✓	
Lean mass losses	✓	✓		✓	
Worsened bone health		✓	✓	✓	
Musculoskeletal soft tissues: changes or damage	✓		✓	✓	
Immune system					
Impaired immune function and/or anemia		✓	✓	✓	✓
Lymphedema	✓		✓		
Gastrointestinal system: changes or impaired function	✓	✓	✓	✓	✓
Organ function changes	✓				
Skin changes			✓	✓	✓

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American college of Sports Medicine Roundtable on Exercise Guidelines for Cancer Survivors

TABLE 2. Preexercise medical assessments and exercise testing.

Cancer Site	Breast	Prostate	Colon	Adult Hematologic (No HSCT)	Adult HSCT	Gynecologic
General medical assessments recommended before exercise	Recommend evaluation for peripheral neuropathies and musculoskeletal morbidities secondary to treatment regardless of time since treatment. If there has been hormonal therapy, recommend evaluation of fracture risk. Individuals with known metastatic disease to the bone will require evaluation to discern what is safe before starting exercise. Individuals with known cardiac conditions (secondary to cancer or not) require medical assessment of the safety of exercise before starting. There is always a risk that metastasis to the bone or cardiac toxicity secondary to cancer treatments will be undetected. This risk will vary widely across the population of survivors. Fitness professionals may want to consult with the patient's medical team to discern this likelihood. However, requiring medical assessment for metastatic disease and cardiotoxicity for all survivors before exercise is not recommended because this would create an unnecessary barrier to obtaining the well-established health benefits of exercise for the majority of survivors, for whom metastasis and cardiotoxicity are unlikely to occur.					
Cancer site–specific medical assessments recommended before starting an exercise program	Recommend evaluation for arm/shoulder morbidity before upper body exercise.	Evaluation of muscle strength and wasting.	Patient should be evaluated as having established consistent and proactive infection prevention behaviors for an existing ostomy before engaging in exercise training more vigorous than a walking program.	None	None	Morbidly obese patients may require additional medical assessment for the safety of activity beyond cancer-specific risk. Recommend evaluation for lower extremity lymphedema before vigorous aerobic exercise or resistance training.
Exercise testing recommended	No exercise testing required before walking, flexibility, or resistance training. Follow ACSM guidelines for exercise testing before moderate to vigorous aerobic exercise training. One-repetition maximum testing has been demonstrated to be safe in breast cancer survivors with and at risk for					

Prima di intraprendere l'attività fisica:

•Una valutazione medica generale in cui si deve prendere in considerazione il percorso terapeutico iniziato o già in essere, la presenza di metastasi (fratture), morbidità (diabete, ipertensione,) cardiotossicità (chemioterapici, ormonoterapia)

•Una valutazione medica pre-esercizio cancro-specifica: es. nel tumore al seno importante una valutazione dell'arto superiore; nel tumore del colon se esita una stomia considerare il rischio di infezioni e il lavoro che porta a un aumento della pressione addominale

•Non vengono richieste valutazioni specifiche se l'attività fisica è il cammino o esercizi di mantenimento dell'articolarità e flessibilità.

•Devono essere eseguite valutazioni più specifiche se la tipologia di allenamento che si intraprende è moderato oppure è un esercizio aerobico vigoroso

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TABLE 3. Exercise prescription for cancer survivors.

	Breast	Prostate	Colon	Adult Hematologic (No HSCT)	Adult HSCT	Gynecologic
Objectives/goals of exercise prescription	1. To regain and improve physical function, aerobic capacity, strength and flexibility. 2. To improve body image and QOL. 3. To improve body composition. 4. To improve cardiorespiratory, endocrine, neurological, muscular, cognitive, and psychosocial outcomes. 5. Potentially, to reduce or delay recurrence or a second primary cancer. 6. To improve the ability to physically and psychologically withstand the ongoing anxiety regarding recurrence or a second primary cancer. 7. To reduce, attenuate, and prevent long-term and late effects of cancer treatment. 8. To improve the physiologic and psychological ability to withstand any current or future cancer treatments. These goals will vary according to where the survivor is in the continuum of cancer experience, as depicted in Figure 1.					
General contraindications for starting an exercise program common across all cancer sites	Allow adequate time to heal after surgery. The number of weeks required for surgical recovery may be as high as 8. Do not exercise individuals who are experiencing extreme fatigue, anemia, or ataxia. Follow ACSM guidelines for exercise prescription concerning cardiovascular and pulmonary contraindications for starting an exercise program. However, the potential for an adverse cardiopulmonary event might be higher among cancer survivors than age-matched comparisons given the toxicity of radiotherapy and chemotherapy and long-term/late effects of cancer surgery.					
Cancer-specific contraindications for starting an exercise program	Women with immediate arm or shoulder problems secondary to breast cancer treatment should seek medical care to resolve those issues before exercise training with the upper body.	None	Physician permission recommended for patients with an ostomy before participation in contact sports (risk of blow) and weight	None	None	Women with swelling or inflammation in the abdomen, groin, or lower extremity should seek medical care to resolve these issues before exercise training with the lower body.

Quindi si comincia ?:

•Effetti benefici dell'attività fisica sempre.

•Controindicazioni generali: aspettare almeno 8 settimane dopo una ferita chirurgica, non iniziare se c'è estrema fatica, anemia

•Controindicazioni cancro-specifiche: donne con problemi immediati all'arto superiore legati all'intervento chirurgico aspettano la risoluzione del problema; pazienti con stomia non eseguono sport di contatto o pesistica.

•Motivi per interrompere gli esercizi: cambiamenti nella sintomatologia dell'arto superiore nelle pz. operate al seno; la cmparsa di infezioni o ernia in pz. operati al colon

•Personalizzare il più possibile gli esercizi

•Utilizzare presidi per ridurre i rischi es: bendaggi compressivi in pz. con linfedema

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TABLE 4. Review of US DHHS Physical Activity Guidelines (PAG) for Americans and alterations needed for cancer survivors.

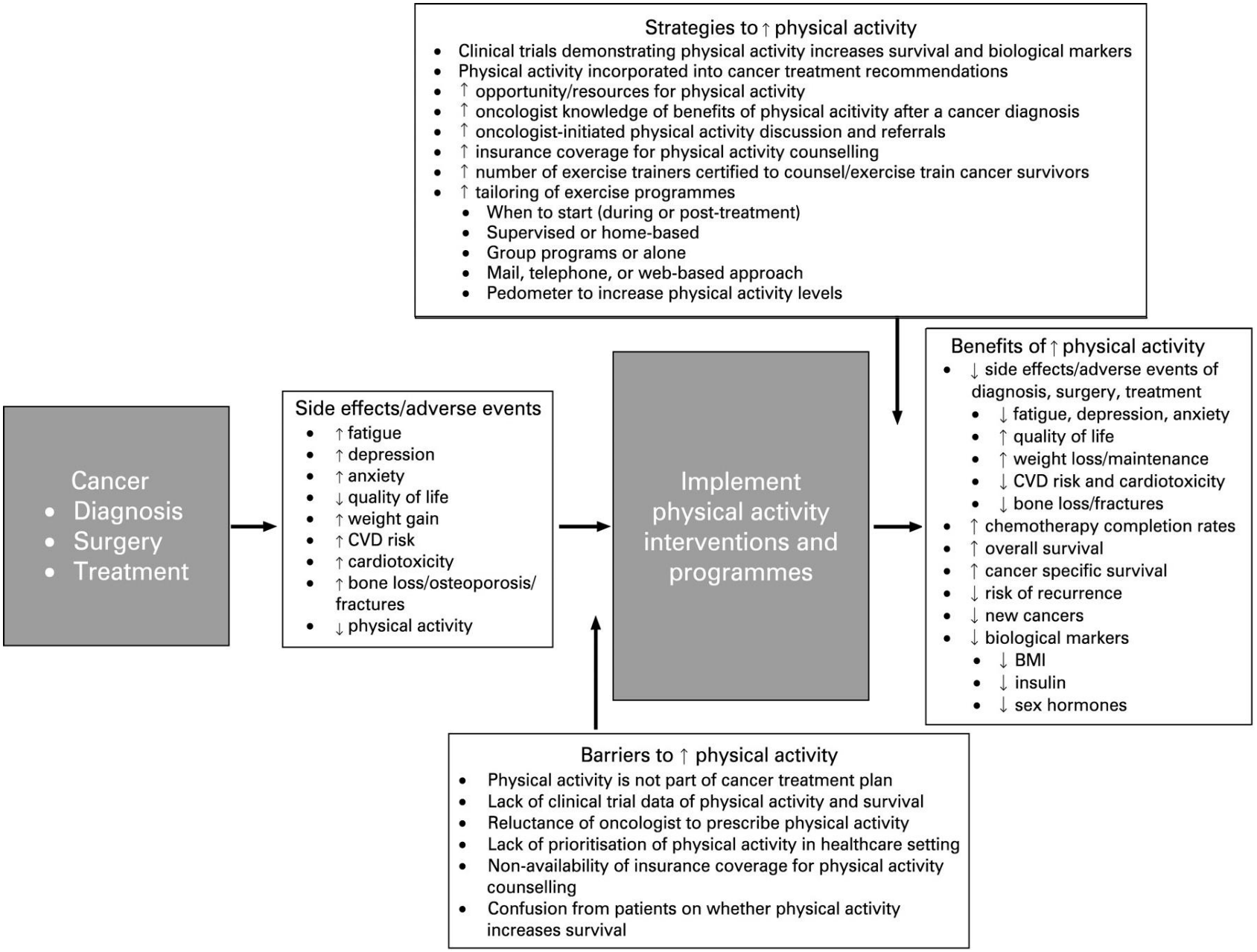
	Breast	Prostate	Colon	Adult Hematologic (No HSCT)	Adult HSCT	Gynecologic
General statement	Avoid inactivity; return to normal daily activities as quickly as possible after surgery. Continue normal daily activities and exercise as much as possible during and after nonsurgical treatments. Individuals with known metastatic bone disease will require modifications to avoid fractures. Individuals with cardiac conditions (secondary to cancer or not) may require modifications and may require greater supervision for safety.					
Aerobic exercise training (volume, intensity, and progression)	Recommendations are the same as age-appropriate guidelines from the PAG for Americans.				Ok to exercise everyday: lighter intensity and lower progression of intensity recommended.	Recommendations are the same as age-appropriate guidelines from the PAG for Americans. Morbidly obese women may require additional supervision and altered programming.
Cancer site–specific comments on aerobic exercise training prescriptions	Be aware of fracture risk.	Be aware of increased potential for fracture.	Physician permission recommended for patients with an ostomy before participation in contact sports (risk of blow).	None	Care should be taken to avoiding overtraining given immune effects of vigorous exercise.	If peripheral neuropathy is present, a stationary bike might be preferable over weight bearing exercise.
Resistance training (volume, intensity, and progression)	Altered recommendations. See below.	Recommendations are the same as age-appropriate PAG.	Altered recommendations. See below.	Recommendations are the same as age-appropriate PAG.		Altered recommendations. See below.
Cancer site–specific comments on resistance training prescription	Start with a supervised program of at least 16 sessions and very low resistance; progress resistance at small increments. No upper limit on the amount of weight to which	Add pelvic floor exercises for those who undergo radical prostatectomy. Be aware of risk for fracture.	Recommendations are the same as age-appropriate PAG. For patients with a stoma, start with low resistance and progress resistance slowly to avoid	None	Resistance training might be more important than aerobic exercise in bone marrow transplant patients. See text for	There are no data on the safety of resistance training in women with lower limb lymphedema secondary to gynecologic cancer. This condition is very

Indicazioni Generali: ritornare alla normale attività giornaliera il prima possibile dopo l'intervento chirurgico e dopo i trattamenti oncologici.

Allenamenti di tipo aerobico da raccomandare con attenzione al tipo di esercizio, al volume di carico, all'intensità, alla progressione: es. in pz che hanno subito radioterapia il cloro della piscina potrebbe essere irritante.

Allenamento per la flessibilità da raccomandare con le stesse indicazioni: es. in pz con stomia non eseguire esercizi che aumentano la pressione addominale.

Some activity is better than none.



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