



# L'ABRUZZO TERAPEUTICO «INTO THE WILD»

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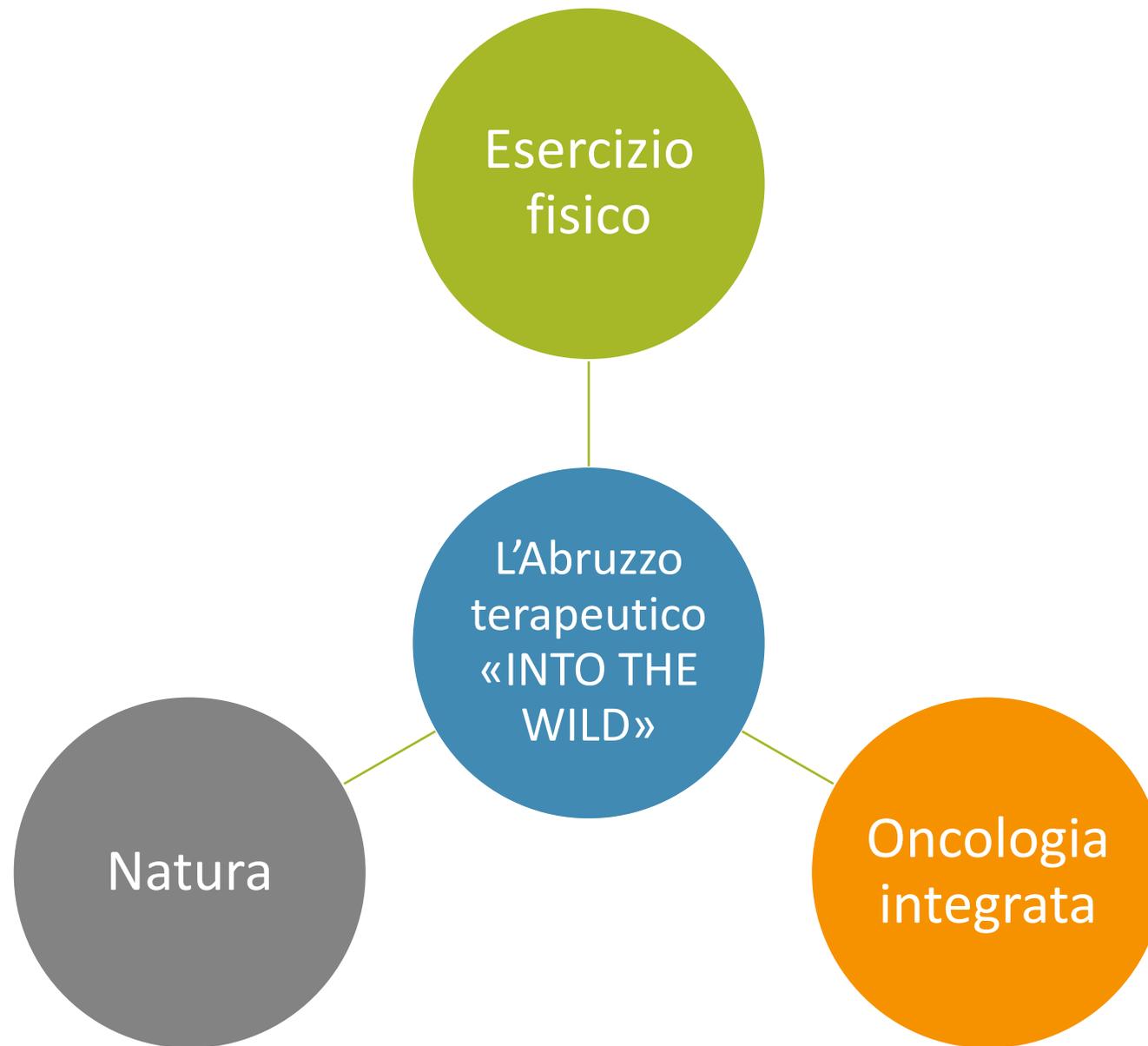
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**crea**  
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e l'analisi dell'economia agraria



# Green spaces, blue spaces and human health: an updated umbrella review of epidemiological meta-analyses

XiaoWen Wang<sup>1†</sup>, Bowen Feng<sup>2†</sup> and Juan Wang<sup>1\*</sup>



## OPEN ACCESS

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PIANO STRATEGICO  
DELLA PAC  
IL FUTURO DELL'AGRICOLTURA SOSTENIBILE

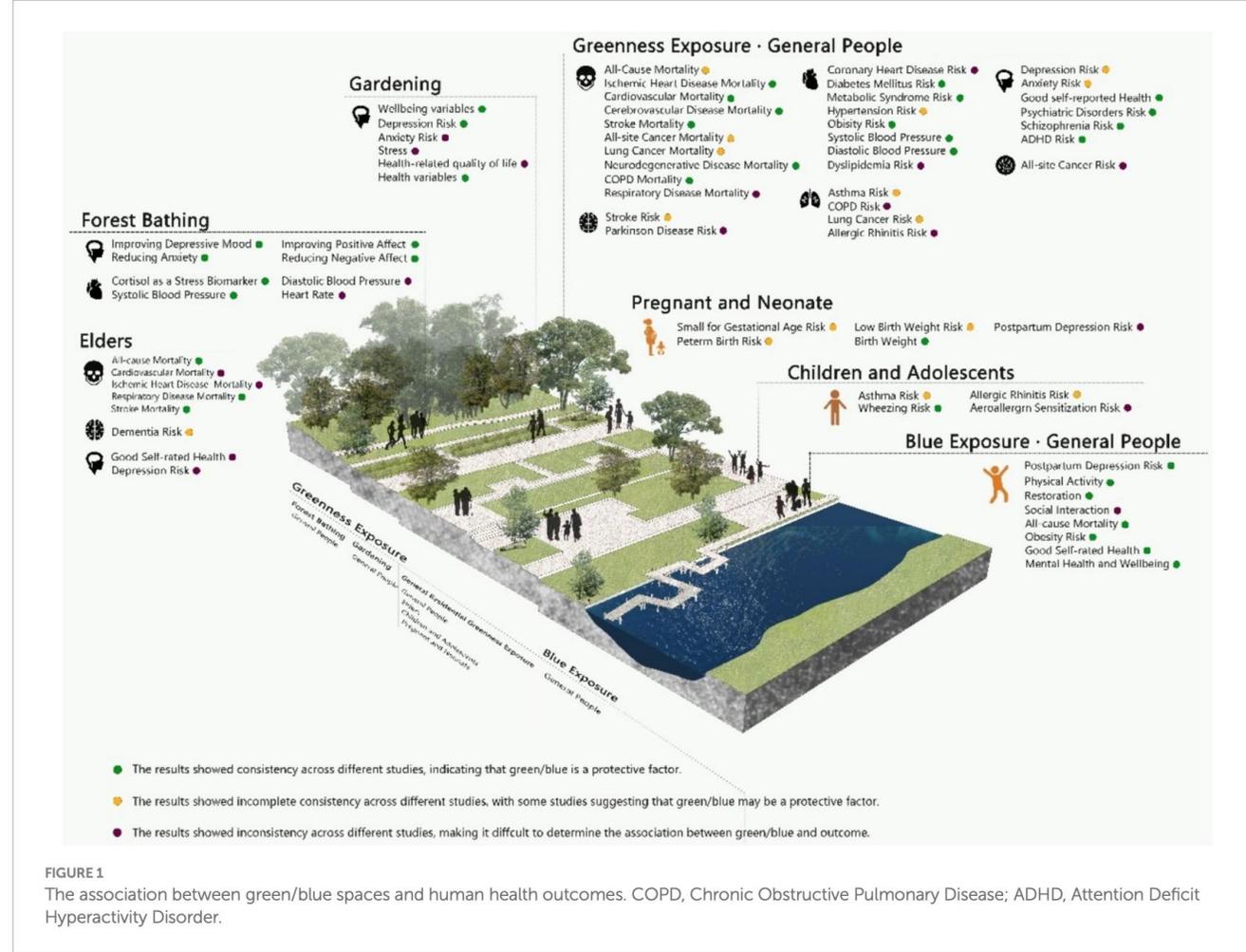


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Connessioni che seminano opportunità

# 1 NATURA





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# Science of the Total Environment

journal homepage: [www.elsevier.com/locate/scitotenv](http://www.elsevier.com/locate/scitotenv)



Review

## Beyond “bluespace” and “greenspace”: A narrative review of possible health benefits from exposure to other natural landscapes

Hansen Li <sup>a</sup>, Matthew H.E.M. Browning <sup>b,\*</sup>, Alessandro Rigolon <sup>c</sup>, Lincoln R. Larson <sup>d</sup>, Derrick Taff <sup>e</sup>, S.M. Labib <sup>f</sup>, Jacob Benfield <sup>g</sup>, Shuai Yuan <sup>b</sup>, Olivia McAnirlin <sup>b</sup>, Nazanin Hatami <sup>b</sup>, Peter H. Kahn Jr. <sup>h,j</sup>



Fig. 3. Examples of landscapes dominated by rocks and/or minerals.

Fig. 2. Examples of landscapes dominated by water in a liquid (1–3) or solid-state (3–9).



# 1 NATURA

Tipo di ambiente naturale	Outcome di salute	Evidenza principale
 <b>Verde residenziale (greenspace)</b>	Mortalità totale	↓ 4–7% per +0.1 NDVI
	Mortalità per ictus (anziani)	↓ 23–33%
	Diabete tipo 2	OR 0.72–0.91
	Obesità	RR 0.88
	Ipertensione	OR 0.95
	Depressione	OR 0.89–0.93
	Ansia	OR 0.94
	Demenza	OR 0.95–0.97
	ADHD	OR 0.89
	Schizofrenia	OR 0.74
	Peso alla nascita	+8–20 g
	Parto pretermine	OR 0.98
 <b>Attività in natura (parchi, foreste)</b>	Depressione	SMD fino a –0.67
	Ansia	SMD fino a –0.84
	Benessere emotivo	SMD fino a +0.95
 <b>Blue spaces (mare, laghi, fiumi)</b>	Salute mentale, obesità, attività fisica	Cohen's d 0.12–3.44
 <b>Paesaggi con neve/ghiaccio (white space: ambienti alpini/polari)</b>	Umore e benessere psicologico	Miglioramento dell'umore e riduzione distress in spedizioni polari
	Crescita personale	Incremento di forza personale e wellbeing durante permanenze prolungate
	Fitness ed emozioni	Attività su neve/ghiaccio (sci, mountaineering) associate a benefici fisici, emotivi e sociali
 <b>Deserti (brown space)</b>	Stress e attenzione (Re. stutta)	Recupero dallo stress simile ai parchi verdi (VR studies)
	Memoria	Miglior performance cognitiva dopo esposizione a video desertici
	Benessere mentale	Sensazioni di calma, pace e rilassamento in programmi di camminata nel deserto
 <b>Grotte (brown space)</b>	Asma, rinite allergica, BPCO- (Mesimi, carvinsian)	Speleoterapia associata a miglioramento <b>respiratorio</b>
	Ansia e capacità motoria (ne. stutta)	Riduzione ansia e aumento capacità di cammino dopo <b>10 giorni</b>
	Performance fisica (ne. ssuferia)	Miglioramento VO <sub>2</sub> max, equilibrio; reattività in atleti dopo 12 settimane

Nota: Review epidemiologica (umbrella review) e narrativa su ambienti naturali non tradizionali



ELSEVIER

Review

## Beyond “bluespace” and “greenspace”: A narrative review of possible health benefits from exposure to other natural landscapes

Hansen Li<sup>a</sup>, Matthew H.E.M. Browning<sup>b,\*</sup>, Alessandro Rigolon<sup>c</sup>, Lincoln R. Larson<sup>d</sup>, Derrick Taff<sup>e</sup>, S.M. Labib<sup>f</sup>, Jacob Benfield<sup>g</sup>, Shuai Yuan<sup>b</sup>, Olivia McAnirlin<sup>b</sup>, Nazanin Hatami<sup>b</sup>, Peter H. Kahn Jr.<sup>h,i</sup>

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# 1 NATURA



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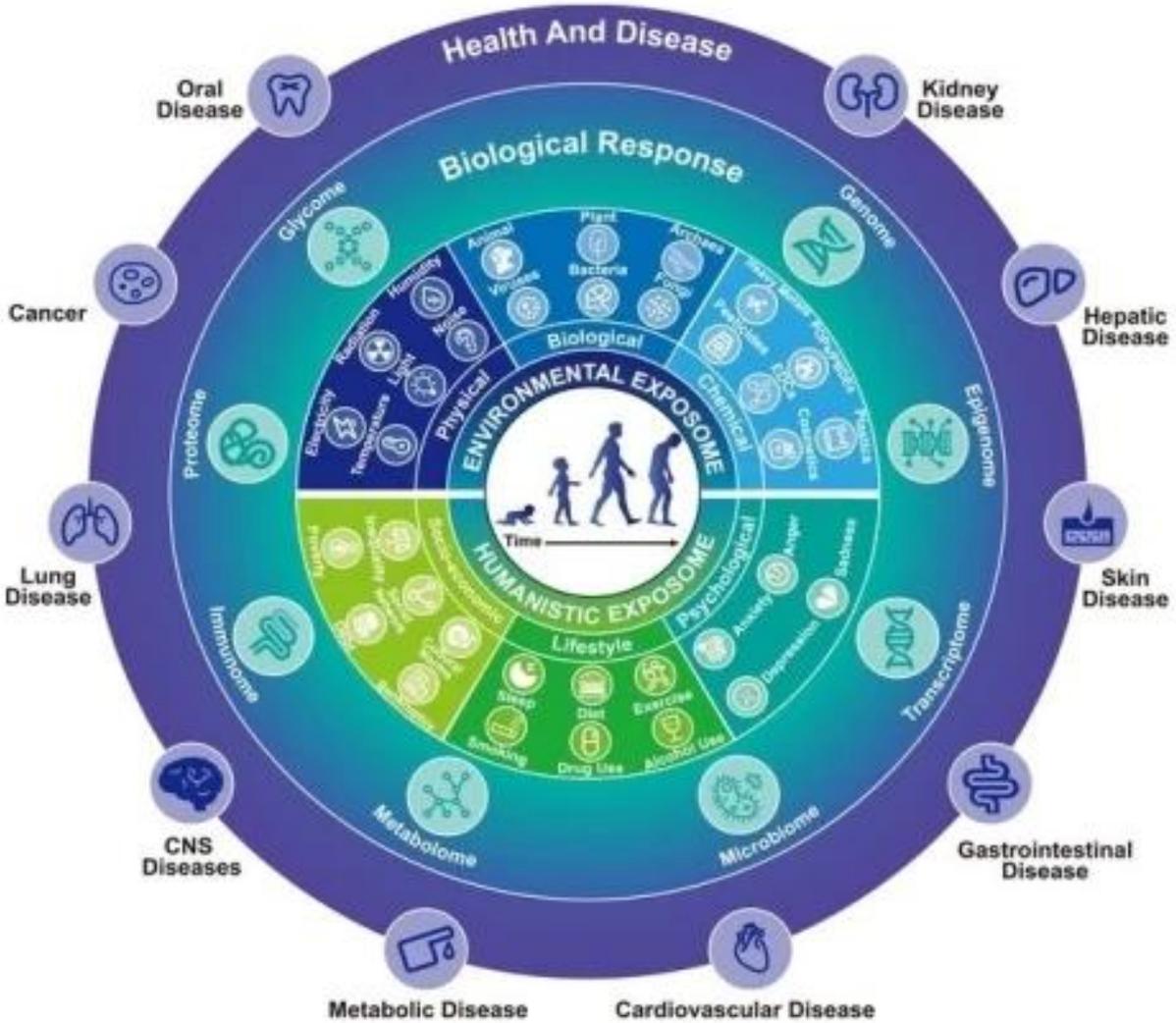
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# Green spaces, blue spaces and human health: an updated umbrella review of epidemiological meta-analyses

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# 1 NATURA



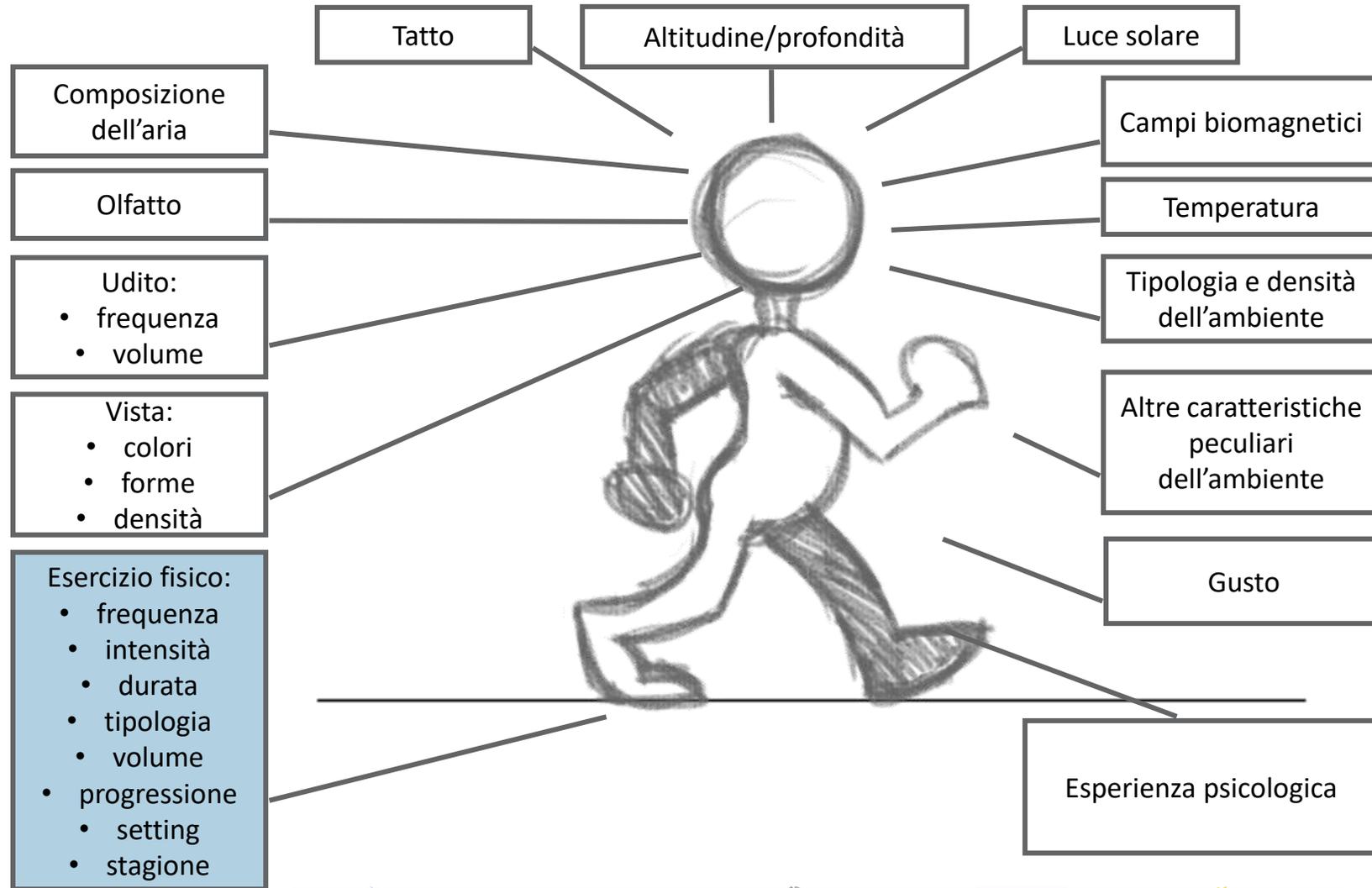
*iMeta* 2022; 1:e50. <https://doi.org/10.1002/imt2.50>

**LA STORIA DELL'UMANITÀ**  
 TEMPO TRASCORSO A CONTATTO CON LA NATURA  
 CONTRO TEMPO TRASCORSO A CONTATTO CON LE CITTÀ

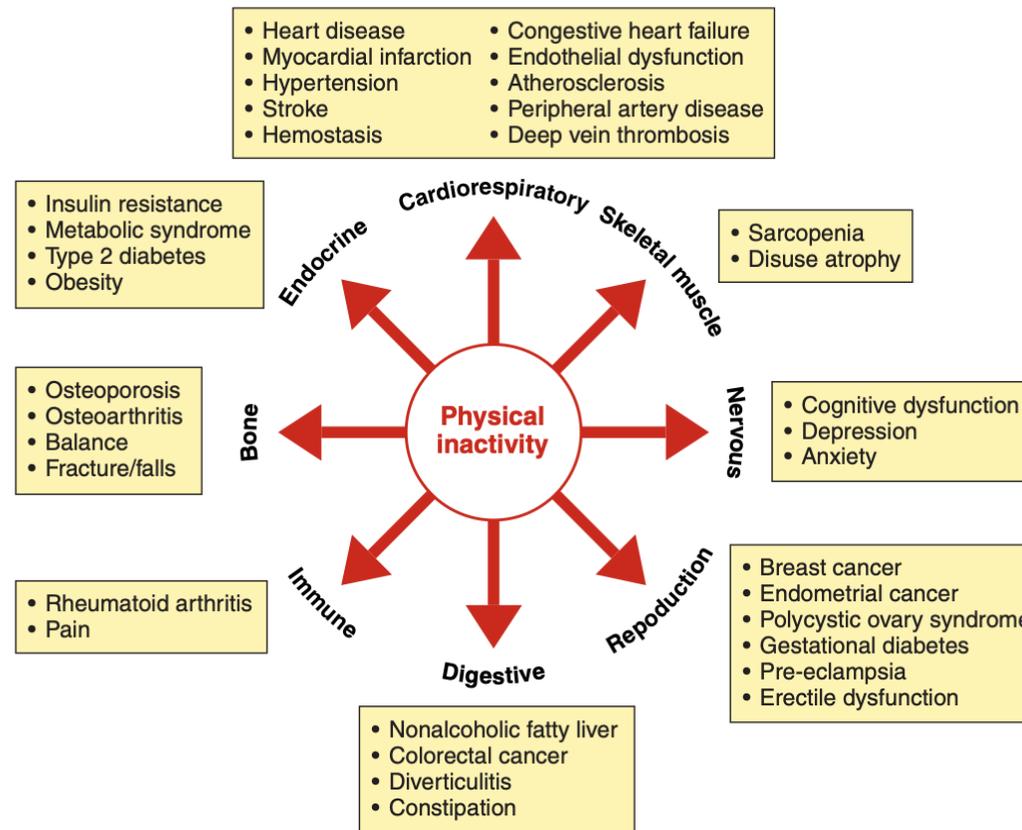




# 2 NATURA, ESERCIZIO FISICO



# 2 NATURA ED ESERCIZIO FISICO



**FIGURE 3.** Physical inactivity increases 35 chronic diseases. See Booth et al. [55] for more details on how physical inactivity is a major cause of chronic diseases.

# 3 NATURA ED ESERCIZIO FISICO IN ONCOLOGIA

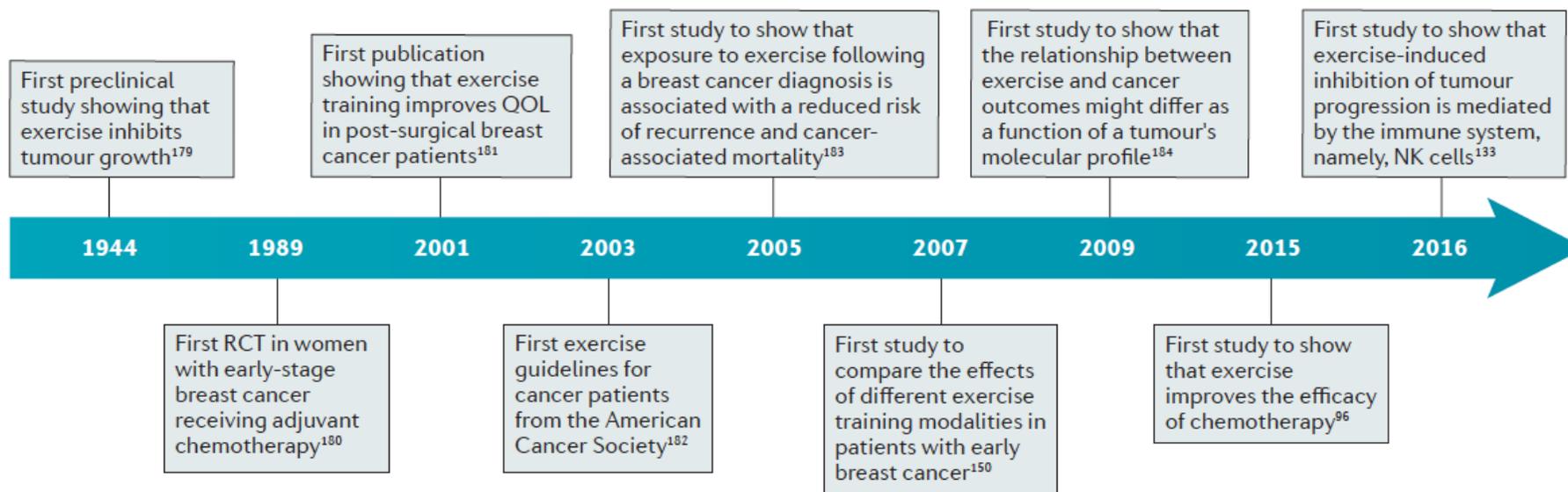


Figure 4 | **Timeline of exercise in cancer research.** NK cells, natural killer cells; QOL, quality of life; RCT, randomized controlled trial.

## Exercise-dependent regulation of the tumour microenvironment

Graeme J. Koelwyn, Daniela F. Ouail, Xiang Zhang, Richard M. White and Lee W. Jones

# 3 NATURA ED ESERCIZIO FISICO IN ONCOLOGIA



## HHS Public Access

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## Exercise Guidelines for Cancer Survivors: Consensus statement from International Multidisciplinary Roundtable

Kristin L. Campbell<sup>1</sup>, Kerri Winters-Stone<sup>2</sup>, Joachim Wiskemann<sup>3</sup>, Anne M. May<sup>4</sup>, Anna L. Schwartz<sup>5</sup>, Kerry S. Courneya<sup>6</sup>, David Zucker<sup>7</sup>, Charles Matthews<sup>8</sup>, Jennifer Ligibel<sup>9</sup>, Lynn Gerber<sup>10,11</sup>, Stephen Morris<sup>12</sup>, Alpa Patel<sup>13</sup>, Trisha Hue<sup>14</sup>, Frank Perna<sup>15</sup>, Kathryn H. Schmitz<sup>16</sup>

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JSAMS  
Journal of Science and Medicine in Sport

Review

The Exercise and Sports Science Australia position statement: Exercise medicine in cancer management

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PIANO STRATEGICO  
DELLA PAC  
IL FUTURO DELL'AGRICOLTURA SOSTENIBILE



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DELLA SOVRANITÀ ALIMENTARE  
E DELLE FORESTE



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dall'Unione europea



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original contributions  
**Exercise Recommendation for People With Bone Metastases: Expert Consensus for Health Care Providers and Exercise Professionals**  
CARE DELIVERY RecAP Full-length article is available online at [ascopus.org](http://ascopus.org)  
Kristin L. Campbell, PT, PhD<sup>1</sup>; Prue Cormie, PhD, AEP<sup>2,3</sup>; Sarah Weller, MSc, CSEP-CEP<sup>1,4</sup>; Shabbir M. H. Alibhai, MD, MSc<sup>5</sup>; Kate A. Bolam, PhD<sup>6</sup>; Anna Campbell, PhD, MBE<sup>7</sup>; Andrea L. Cheville, MD, MSCE<sup>8</sup>; MaryAnn Dalzell, PT, MSc<sup>9</sup>; Nicolas H. Hart, PhD, AEP<sup>10,11</sup>; Celesta S. Higano, MD<sup>12</sup>; Kristin Lane, PhD, CSEP-CEP<sup>13</sup>; Sami Mansfield, BA<sup>14</sup>; Margaret L. McNeely, PT, PhD<sup>15</sup>; Robert U. Newton, PhD, DSc, AEP<sup>16</sup>; Morten Quist, PT, PhD<sup>15</sup>; Jennifer Rauw, MD<sup>1</sup>; Friederike Rosenberger, PhD<sup>17</sup>; Daniel Santa Mina, PhD, CSEP-CEP<sup>18</sup>; Kathryn H. Schmitz, PhD<sup>19</sup>; Kerri M. Winters-Stone, PhD<sup>20</sup>; Joachim Wiskemann, PhD<sup>21</sup>; and Jennifer Goulet, MD<sup>21</sup>



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# 3 NATURA ED ESERCIZIO FISICO IN ONCOLOGIA

## Effects of Exercise on Health-Related Outcomes in Those with Cancer

### What can exercise do?

- **Prevention of 7 common cancers\***  
Dose: 2018 Physical Activity Guidelines for Americans: 150-300 min/week moderate or 75-150 min/week vigorous aerobic exercise
  - **Survival of 3 common cancers\*\***  
Dose: Exact dose of physical activity needed to reduce cancer-specific or all-cause mortality is not yet known; Overall more activity appears to lead to better risk reduction
- \*bladder, breast, colon, endometrial, esophageal, kidney and stomach cancers  
\*\*breast, colon and prostate cancers

Overall, avoid inactivity, and to improve general health, aim to achieve the current physical activity guidelines for health (150 min/week aerobic exercise and 2x/week strength training).

Outcome	Aerobic Only	Resistance Only	Combination (Aerobic + Resistance)
<b>Strong Evidence</b>	Dose	Dose	Dose
<b>Cancer-related fatigue</b>	3x/week for 30 min per session of moderate intensity	2x/week of 2 sets of 12-15 reps for major muscle groups at moderate intensity	3x/week for 30 min per session of moderate aerobic exercise, plus 2x/week of resistance training 2 sets of 12-15 reps for major muscle groups at moderate intensity
<b>Health-related quality of life</b>	2-3x/week for 30-60 min per session of moderate to vigorous	2x/week of 2 sets of 8-15 reps for major muscle groups at a moderate to vigorous intensity	2-3x/week for 20-30 min per session of moderate aerobic exercise plus 2x/week of resistance training 2 sets of 8-15 reps for major muscle groups at moderate to vigorous intensity
<b>Physical Function</b>	3x/week for 30-60 min per session of moderate to vigorous	2-3x/week of 2 sets of 8-12 reps for major muscle groups at moderate to vigorous intensity	3x/week for 20-40 min per session of moderate to vigorous aerobic exercise, plus 2-3x/week of resistance training 2 sets of 8-12 reps for major muscle group at moderate to vigorous intensity
<b>Anxiety</b>	3x/week for 30-60 min per session of moderate to vigorous	Insufficient evidence	2-3x/week for 20-40 min of moderate to vigorous aerobic exercise plus 2x/week of resistance training of 2 sets, 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Depression</b>	3x/week for 30-60 min per session of moderate to vigorous	Insufficient evidence	2-3x/week for 20-40 min of moderate to vigorous aerobic exercise plus 2x/week of resistance training of 2 sets, 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Lymphedema</b>	Insufficient evidence	2-3x/week of progressive, supervised, program for major muscle groups does not exacerbate lymphedema	Insufficient evidence
<b>Moderate Evidence</b>			
<b>Bone health</b>	Insufficient evidence	2-3x/week of moderate to vigorous resistance training plus high impact training (sufficient to generate ground reaction force of 3-4 time body weight) for at least 12 months	Insufficient evidence
<b>Sleep</b>	3-4x/week for 30-40 min per session of moderate intensity	Insufficient evidence	Insufficient evidence

Citation: [bit.ly/cancer\\_exercise\\_guidelines](http://bit.ly/cancer_exercise_guidelines)

Moderate intensity (40%-59% heart rate reserve or VO<sub>2</sub>R) to vigorous intensity (60%-89% heart rate reserve or VO<sub>2</sub>R) is recommended.

Exercise is Medicine | AMERICAN COLLEGE OF SPORTS MEDICINE

## MOVING THROUGH CANCER: Exercise for people living with and beyond cancer

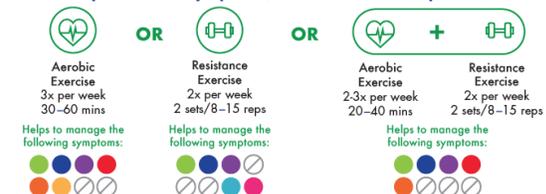
**TO GET STARTED**  
Avoid inactivity; moving more and sitting less benefits nearly everyone



**FOR PEOPLE DURING & FOLLOWING CANCER TREATMENT**  
Research shows lower amounts of exercise can still help with the following cancer treatment-related symptoms:



To improve these symptoms, choose an exercise plan below:



<sup>1</sup> Physical Activity Guidelines for Americans, 2018

<sup>2</sup> Progressive supervised resistance training does not exacerbate lymphedema

<sup>3</sup> At least 12-months of resistance training plus high impact training needed

# 3 NATURA ED ESERCIZIO FISICO IN ONCOLOGIA

Table 3 (Continued)

	Reference ranges for blood values	Consideration
<b>Blood work*</b>		
Platelets	150-400 × 10 <sup>9</sup> /L	Concentrations <20 × 10 <sup>9</sup> /L: higher bleeding risk, functional mobility exercises only, minimise fall or impact risk†, emphasise normal breathing (avoid Valsalva manoeuvre), monitor bruising and bleeding, doctor's clearance; concentrations 20-150 × 10 <sup>9</sup> /L: exercise as tolerated, monitor bruising and bleeding
Haemoglobin	Men 140-180 g/L; women 120-160 g/L	Concentrations <80 g/L: relative contraindication to exercise, low to moderate intensity only (doctor's clearance); concentrations 80-100 g/L: monitor signs and symptoms of fatigue and exertion, adjust exercise intensity or duration to accommodate fatigue or weakness; concentrations >100 g/L: aerobic and resistance exercise as tolerated
White blood cell	4.0-11.0 × 10 <sup>9</sup> /L	Concentrations <2.0 × 10 <sup>9</sup> /L: relative contraindication to exercise, avoid group and public exercise, light to moderate intensity exercise only, reinforce importance of sanitisation and hand-washing (doctor's clearance); concentrations 2.0-4.0 × 10 <sup>9</sup> /L: minimise risk of infections, clean all equipment before use, vigilance with hand-washing and use of hand sanitiser, light to moderate intensity exercise only to reduce infection risk
Neutrophils	2.0-7.5 × 10 <sup>9</sup> /L	Concentrations <1.5 × 10 <sup>9</sup> /L (neutropenia) or fever (oral temperature >38°C/100.4°F): relative contraindication to exercise, avoid group and public exercise, light to moderate intensity exercise only, reinforce importance of sanitisation and hand-washing (doctor's clearance); concentrations 1.5-1.9 × 10 <sup>9</sup> /L: minimise risk of infections, clean all equipment before use, vigilance with hand-washing, light to moderate intensity exercise only
Blood glucose	3.8-7.0 mmol/L	Concentrations <5.5 mmol/L: recommend 5-30 g carbohydrate consumption before exercise (doctor's clearance); concentrations >16.7 mmol/L and type 1 diabetes: light to moderate intensity exercise only; concentrations >16.7 mmol/L and type 2 diabetes: exercise as tolerated, encourage hydration and monitor signs and symptoms of dehydration
<b>Cardiorespiratory signs and symptoms (at rest and related adverse responses during exercise)</b>		
Resting blood pressure	NA	Systolic blood pressure >200 mmHg or diastolic blood pressure >110 mmHg after two measurements, 5 min apart: relative contraindication (doctor's clearance); systolic blood pressure 160-200 mmHg or diastolic blood pressure 90-110 mmHg after two measurements, 5 min apart: monitor for signs and symptoms, repeat blood pressure measurements frequently during session; systolic blood pressure <90 mmHg or diastolic blood pressure <60 mmHg: routinely monitor blood pressure and signs and symptoms (presyncope or pallor)
Resting heart rate	NA	<60 bpm after two measurements, 5 min apart: monitor for signs and symptoms (doctor's clearance needed if patient is without suspected athletic bradycardia or taking β-blockers with heart rate less than <55-60 bpm; 100-124 bpm after two measurements, 5 min apart: monitor for signs and symptoms; >120 bpm after two measurements, 5 min apart: relative contraindication (doctor's clearance)
Resting oxygen saturation (on room air)	NA	<88%: absolute contraindication to exercise, discontinue exercise if desaturation to this level occurs during a session (doctor's clearance); 89-94%: aerobic and resistance exercise as tolerated, monitor signs and symptoms of fatigue and exertion, repeat SpO <sub>2</sub> routinely; >95%: exercise as tolerated
Adverse cardiorespiratory signs or symptoms	NA	Cardiac arrest or unresponsive: call code medical emergency; absolute contraindications (moderately severe angina, dizziness or pre-syncope, cyanosis or pallor): discontinue exercise, monitor heart rate, blood pressure, and SpO <sub>2</sub> , facilitate recovery (sit or lie down, water, active recovery), notify doctor, patient transportation to pick-up area or to the emergency department; relative contraindications (increasing chest pain, fatigue, shortness of breath, wheezing, claudication): reduce exercise intensity or facilitate active recovery, monitor heart rate, blood pressure, and SpO <sub>2</sub>
<b>Bone metastases (including lytic myelomatous lesions)</b>		
Pelvis and proximal femur	NA	Caution regarding hip hyperflexion and hyperextension and high torque or rotational movements; exercise as tolerated
Spine	NA	Cautions regarding axial loading; avoid lumbar hyperflexion and hyperextension and high torque or rotational movements; exercise as tolerated
Ribs	NA	Caution regarding high torque or rotational movements through torso; exercise as tolerated
Shoulder	NA	Caution regarding extreme shoulder flexion, extension, abduction, and adduction; exercise as tolerated
Appendicular skeleton	NA	Modify or avoid for localised signs and symptoms; exercise as tolerated
<b>Variations in physical or cognitive function</b>		
Sudden or severe pain, swelling, or dysfunction	NA	Avoid exercise of the affected region; doctor's clearance required to resume exercise of the affected region or if general exercise exacerbates symptoms
Cognitive	NA	If brain fog, cognitive impairment, or developmental delay is reported or suspected: simplify exercise routine and provide additional support (including logbook, written materials with illustrations, memory cues, weekly or biweekly check-ins)
<p>Doctor's clearance refers to the suspension of exercise programming (or a portion of programming as indicated) until a licensed doctor provides medical clearance to proceed. NCCN—National Comprehensive Cancer Network. SpO<sub>2</sub>—oxygen saturation. *Reference ranges for blood concentrations pertain to institutional laboratory standards. †Fall risk is assessed via 30 s single-leg stance (pass or fail) and response to the following questions: have you fallen in the last year? do you ever use a cane, walker or wheelchair? and do you need help to get on or off hospital equipment or furniture?; patients at an increased risk of falls receive adaptations to exercise prescriptions as per peripheral neuropathy and poor bone health guidance from the NCCN survivorship guidelines. ‡Recent onset without medical assessment before next exercise testing or training session; considerations for lymphoedema, stem-cell transplant, ostomy, peripheral neuropathy, and poor bone health are as per guidance provided by the NCCN survivorship guidelines (version 2.2017).</p>		
<p><b>Table: Safety Reference Guide to support exercise services in people with cancer</b></p>		

For more on NCCN guidelines see <http://www.nccn.org>

higher than 95%, but warrants close monitoring between 89% and 94%.<sup>11</sup> Patients who present with resting

hypoxia or desaturate to 88% or less during exercise require medical clearance for ongoing exercise.

Physician and QEP responses to the presence of adverse cardiorespiratory clinical markers (eg, baseline or

may need to increase fluid intake when effort and hydration (asking for advice from the

before, for patients with low exercise self-efficacy while

ases in pain

## comfort:

it may make skin irritations worse (e.g., types of fabric, tightness of clothing around a particular area, temperature, smoothness of problem solve accordingly (e.g. suggest trying a singlet top with a shelf bra to women who find wearing a bra to be uncomfortable radiation treatment to the chest wall).

## hygiene and care.

**long death:** The duration of this period is usually only days to weeks. Anticipated length of survival, if known or given, likely and a patient may or may not understand (or want to know) their estimated survival time.

period of treatment with curative intent to palliative treatment or cessation of all treatment can represent a time of significant change surrounding the patient. Maintaining continuous contact with an AEP during this period could have important and positive physical ramifications.

one of the palliative care period will influence exercise-related goals which may be to gain, maintain or prevent declines in fitness high to maintaining dignity (e.g., ability to self-care for as long as possible). Whether you understand approximate duration of ensure the patient guides the goals.

EP must be highly cognisant of balancing any burden associated with exercise prescription and its perceived benefit – ensure the physical or psychosocial) outweighs the burden (e.g., patient would prefer spending time doing something else).

ry catheter above).

support the weakened abdominal wall. These can also help to products such as belts or guards (recommended if the bag may

er ensuring attachment with additional support or waterproof fabric/disguise) the pouch.

not visible to the individual then recommend that someone exercise or movements.

al examination.

# 3 NATURA ED ESERCIZIO FISICO IN ONCOLOGIA

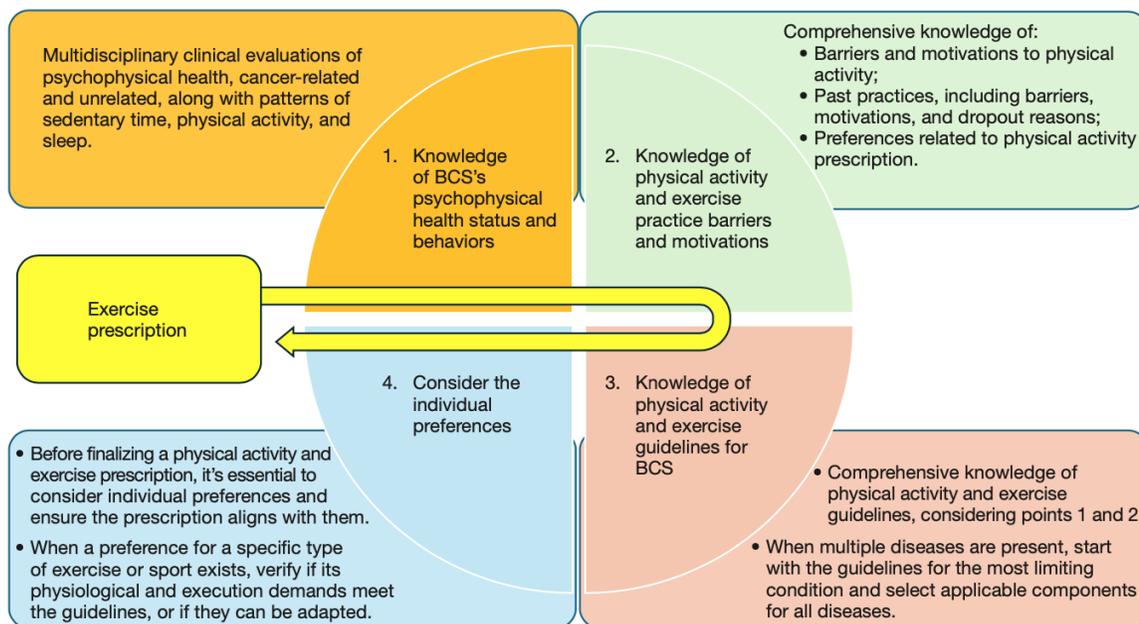


Figure 2 Exercise prescription algorithm. BCS, breast cancer survivor.

Table 1 Summary of barriers to exercise and facilitators of exercise

Barriers to exercise	Facilitators of exercise
Treatment related side effects	Improved physical health
Time poor	Improved mental wellbeing
Fatigue	Gaining control over health
No facilities	Social benefits
Don't know what to do/no info	Cancer as a motivation for change
Don't enjoy it	Influence from physician/ other survivor
No motivation	Moving forward
No-one to exercise with	Cancer related benefits
Bad weather	Supervision
Health problems	Improved quality of life
Fear of injury	Self-efficacy as a facilitator
Cost	Fear of not exercising on health
Injuries	Affirming healthy status
Lack of self-efficacy	Exercise variety
Responsibilities (work/home)	Support
Low self-confidence (body image)	Home visits
Low physical fitness	Improved sleep quality
Environment as a barrier	Chance to be alone
Ageing	Reduced fatigue

The lists move from the most to the lowest frequent item according to the study of Clifford *et al.* (25).

## Non-commonly prescribed physical exercises, disciplines and sports in breast cancer survivors: a narrative review

Andrea Di Blasio<sup>1,2</sup>, Teresa Morano<sup>1,2</sup>, Alessandra Di Marco<sup>1,2</sup>, Federica Lancia<sup>1,2</sup>, Leandro Ditali<sup>1,2</sup>, Giacomo Sirtori<sup>1</sup>, Mirko Pesce<sup>1</sup>, Lucia Cugusi<sup>3</sup>, Valentina Bullo<sup>4</sup>, Sofia Marini<sup>1,2</sup>, Simona Grossi<sup>2</sup>, Giorgio Napolitano<sup>1,2</sup>

# LA MISSION ATTUALE

## Integrative oncology: Addressing the global challenges of cancer prevention and treatment

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**Abstract:** The increase in cancer incidence and mortality is challenging current cancer care delivery globally, disproportionately affecting low- and middle-income countries (LMICs) when it comes to receiving evidence-based cancer prevention, treatment, and palliative and survivorship care. Patients in LMICs often rely on *traditional, complementary, and integrative medicine* (TCIM) that is more familiar, less costly, and widely available. However, spheres of influence and tensions between conventional medicine and TCIM can further disrupt efforts in evidence-based cancer care. Integrative oncology provides a framework to research and integrate safe, effective TCIM alongside conventional cancer treatment and can help bridge health care gaps in delivering evidence-informed, patient-centered care. This growing field uses lifestyle modifications, mind and body therapies (eg, acupuncture, massage, meditation, and yoga), and natural products to improve symptom management and quality of life among patients with cancer. On the basis of this review of the global challenges of cancer control and the current status of integrative oncology, the authors recommend: 1) educating and integrating TCIM providers into the cancer control workforce to promote risk reduction and culturally salient healthy life styles; 2) developing and testing TCIM interventions to address cancer symptoms or treatment-related adverse effects (eg, pain, insomnia, fatigue); and 3) disseminating and implementing evidence-based TCIM interventions as part of comprehensive palliative and survivorship care so patients from all cultures can live with or beyond cancer with respect, dignity, and vitality. With conventional medicine and TCIM united under a cohesive framework, integrative oncology may provide citizens of the world with access to safe, effective, evidence-informed, and culturally sensitive cancer care.

**Keywords:** cancer prevention, complementary, alternative, and integrative medicine, global health, health policy, survivorship



# L'AMBULATORIO DI MEDICINA INTEGRATA della ASL02 di Lanciano- Vasto-Chieti e del DMSI





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**AMBULATORIO  
MEDICINA INTEGRATA**  
Ospedale di Ortona







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**GRAZIE PER  
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