#### What is cancer-related fatigue?

Cancer-related fatigue (CRF) is defined by the National Comprehensive Cancer Network (NCCN) as a "distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning. Compared with the fatigue experienced by healthy individuals, CRF is more severe, more distressing, and less likely to be relieved by rest." CRF is reported more frequently than any other symptom of cancer and cancer treatment and affects 70-80% of cancer survivors at all stages of disease and recovery – during treatment, in advanced disease, and in remission. <sup>2</sup>

# What causes cancer-related fatigue?

CRF can be a side effect of many common cancer treatments such as chemotherapy, radiation, surgery, and stem cell transplant. In some cases, it may also be due to the cancer process itself. Other preexisting health conditions may also increase fatigue symptoms related to cancer or cancer treatment.

# How do I know if I have cancer-related fatigue?

There is no single way to diagnose CRF as it is experienced differently by different people. Signs and symptoms of CRF can include but are not limited to:

- Feeling tired, weary, exhausted even after a good night's sleep
- Lack of energy/prolonged tiredness after activity
- Weakness, heaviness in arms/legs
- Listlessness or irritability
- Trouble starting or finishing tasks due to tiredness
- Needing to sleep during the day
- Unable or needing help to do usual or desired activities
- Being too tired to eat
- Difficulty with concentration and memory
- Limiting social activities due to tiredness

#### What is physical therapy?

Physical therapists are experts in movement and function, especially when movement involves changes in "normal" movement patterns. Physical therapists are dedicated to promoting health and wellness of all Americans through preventing functional decline and the development of certain conditions. To learn more about physical therapy and physical therapists, please visit the American Physical Therapy Association's (APTA's) Consumer Website at <a href="https://www.choosept.com">www.choosept.com</a>.



### How can physical therapy help me?

If CRF is affecting you, a physical therapist can perform an evaluation either in the hospital if you are admitted for treatment, or in an outpatient physical therapy clinic. There are often multiple components to your fatigue that can be addressed through a personally designed treatment program by your physical therapist.

### **Physical Therapy Evaluation**

A physical therapy evaluation may include:

- Questions to get to know you i.e. What was your prior level of activity/daily, how do you get around in and out of the house, what are your goals/what do you want to be able to do?
- Fatigue and/or Quality of Life questionnaire(s) helps determine how you experience fatigue and how it impacts your daily activities
- Systems review and health history helps determine other potential contributing factors to fatigue such as anemia or depression
- Posture, walking, and/or body mechanics assessment (standing from chair, lifting, bending, etc.)
- Strength tests
- Cardiovascular endurance tests
- Flexibility or range of motion assessments
- Sensation testing
- Balance assessments

# **Physical Therapy Treatment for Cancer-Related Fatigue**

To date, the only intervention for CRF supported by research evidence is exercise. In particular, aerobic endurance training in combination with moderate resistance strength training have been shown to improve physical performance and reduce fatigue and are recommended as essential components of treatment by the NCCN. <sup>3</sup>

Depending on the findings from your evaluation, your physical therapist will design a plan of care to target your individual needs.



Treatment interventions could include but are not limited to:

- Postural education (awareness and endurance training)
- Body mechanics education and training
- Strengthening exercises (resistance training body weight, elastic bands, or free weights)
- Aerobic exercise (i.e. walking, biking, swimming)
- Stretching program
- Deep breathing and relaxation techniques/mindfulness training
- Sleep hygiene
- Energy conservation education

## **Questions to Ask Your Physical Therapist**

- 1) Before Cancer Treatment "Prehabilitation"
  - a. What should I expect with the type of treatment I'll be receiving (process, side effects, etc.)?
  - b. How can I best prepare myself physically and mentally for this type of treatment(s)?
  - c. How can I prepare my family and friends to help me through my treatment(s)?
- 2) During Cancer Treatment
  - a. What types and levels of activity are safe for me to do during treatment?
  - b. How do I practice energy conservation to be able to do the things I need to/want to do?
  - c. How do I monitor my fatigue?
  - d. What type of resistance and aerobic training program can I include in my daily routine to help manage my fatigue?
  - e. When can I start exercising?
  - f. What other services would I benefit from?

Your physical therapist may refer you to other healthcare professionals or services such as:

- Occupational Therapy
- Speech Therapy
- Registered Dietician for Nutrition and Weight Management
- Professional Psychological Support
- Palliative Care for Pain Management
- Support Groups
- Community Exercise Programs

Tell your physical therapist about your goals and activities that are meaningful to you! This will allow them to better help you return to those activities.



- 3) After Cancer Treatment / Long-term Management
  - a. What types of regular exercise should I do?
  - b. Are there any community exercise programs available in this area?
  - c. How can I modify my exercise routine to be safe/prevent injury?
  - d. How can I progress my exercise program if it becomes too easy?
  - e. How do I know if I am doing too much or too little exercise?
  - f. How do I know if I should return to physical therapy?

# How do I find a physical therapist?

If you think you may benefit from physical therapy, the American Physical Therapy Association (APTA) offers a "Find A PT" database at <a href="https://www.choosept.com">www.choosept.com</a> that can help you find a physical therapist who specializes in oncology rehabilitation. Insert "cancer" in the Practice Focus area.

You can also visit APTA Oncology's consumer resources page at www.oncologypt.org.

#### **Additional Resources**

Learn more about Cancer-Related Fatigue at:

- American Cancer Society <u>http://www.cancer.org/treatment/treatmentsandsideeffects/physicalsideeffects/fatigue/</u>
- Institute of Cancer http://www.cancer.gov/about-cancer/treatment/side-effects/fatigue/fatigue-pdq

#### <u>References</u>

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- 3. Kummer F, Catuogno S, Perseus JM, Bloch W, Baumann FT. Relationship between cancer-related fatigue and physical activity in inpatient cancer rehabilitation. Anticancer Research. 2013; 33: 3415-3422.

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