



Moving Beyond Cancer: Tips for Getting and Staying Physically Active

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Cancer Connections
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Benefits of Physical Activity (PA) for Cancer Patients and Survivors

- During Treatment

- ↑ fitness, physical functioning, self-esteem
- ↓ nausea and vomiting, pain, fatigue, % body fat
- May: Result in fewer chemotherapy dose adjustments and improve disease free survival

- Post-Treatment:

- Improved:
 - Psychological well-being and quality of life
 - Muscle mass and bone density
 - Physical and cognitive functioning
- Decreased:
 - Chronic disease risk
 - Negative treatment-related side effects
- For breast, colorectal, prostate and ovarian cancers, individuals who are more active live longer and have lower chance of cancer recurrence and progression and increased survival



PA Recommendations for Cancer Survivors

ACS (2012)

ACSM (2019)



≥150 mins/week of moderate intensity PA or 75 mins/week vigorous PA

≥3x/week of moderate intensity PA for 30 mins



≥2x/week, full body

≥2x/week, 2-3 sets for large muscle groups for 30 mins

- Move more and sit less throughout the day. Some physical activity is better than none!
- Avoid inactivity and return to normal daily activities as soon as possible following diagnosis

What is Aerobic Moderate and Vigorous PA?

- PA that causes the heart to pump freshly oxygenated blood to the muscles.
- Any PA or exercise that can be sustained for more than a couple of minutes and increases the body's breathing and heart rate.



Example Moderate Activities:

- Brisk walking (3 mph or faster)
- Water aerobics
- Bicycling slower than 10 mph
- Tennis (doubles)
- Ballroom dancing

Example Vigorous Activities:

- Race walking, jogging, or running
- Swimming laps
- Tennis (singles)
- Aerobic dancing
- Bicycling (10 mph or faster)
- Jumping rope
- Hiking uphill with a heavy backpack

Aerobic PA

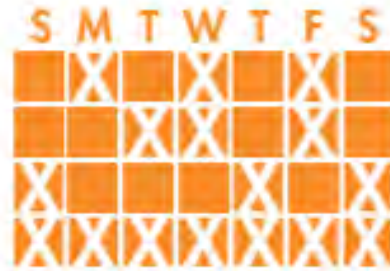
What?

Any rhythmic, continuous activity!



How often?

3-5 days/week



How hard?

Fairly light to somewhat hard



How much?

Start w/ a few minutes. Gradually build up to 30-60 total minutes over the day.



Remember: Fit in 5 or 10 minutes here and there. Or go for 20-30 minutes. During treatment, several short sessions may work better than one long one. Be active however you can.

Strength Training

What?

Hand weights, resistance bands, weight machines or your own body (for example, kitchen counter push-ups chair squats).



How often?

2-3 days/week
*Rest day in between!



How hard?

Start with light effort.
Build up to medium or hard effort.



How much?

10-15 repetitions to start (for each major muscle group). Build up to 8-12 reps of challenging effort.



Remember: If you need it, get help from a certified exercise professional. They can teach you the right way to do exercises and how to breathe properly. If you have lymphedema, you may benefit from wearing a compression sleeve during strength training.

Example Exercise Session

5-10 mins

Warm-up

- Increases blood flow, breathing and hear rate
- Low intensity, low-impact aerobic exercise + stretching

10+ mins

Exercise Session

- Improves health, fitness, and well-being
- Start off slow
- Start with low impact activities
- Time varies based on intensity

5-10 mins

Cool-Down

- Decreases breathing and heart rate to resting
- Prevents injury
- Low impact, low-impact aerobic exercise + stretches

Safety Precautions

- Check with your doctor to ensure PA is safe for you
- Start slowly
- Choose exercise level that is right for you
- Monitor your intensity throughout your exercise session.
- Take breaks as needed
- Do short bouts of PA
- Vary your routine to avoid injury
- Stay hydrated!
- Wear proper attire
- Keep a phone nearby in case of emergency



Special Safety Considerations

- Anemia: delay activity until anemia is better
- Weakened immune system: avoid public gyms and other public places until white blood cell counts return to safe levels
- Radiation: avoid swimming pools because chlorine may irritate the skin
- Joint pain: engage in low impact activities
- Peripheral Neuropathy/Balance/Falls Concerns
 - Hold onto handrails on the treadmill or other exercise equipment
 - Exercise on smooth surfaces
 - Wear good athletic shoes
 - Don't wear clothes that bunch up or drag on the ground
 - Double knot your shoes



Monitoring Intensity: Rating of Perceived Exertion (RPE)

- **How hard do you feel like you are working?**
 - Scale ranges from 6 to 20
 - Reflect total amount of physical stress, effort and fatigue
 - Check in with yourself frequently throughout your session to determine whether you need to increase or decrease your intensity
 - **Increase intensity** by speeding up or adding resistance
 - **Decrease intensity** by slowing down or decreasing or removing any resistance.
 - Gradually progress from 11-13 to 15-17 if able
 - Some days you may feel better than others so your RPE may vary

Rating of Perceived Exertion (RPE) "How hard does it feel like you are working?"	
6	
7	Very, very light
8	
9	Very light
10	
11	Fairly light
12	
13	Somewhat hard
14	
15	Hard
16	
17	Very hard
18	
19	
20	Very, very hard

Monitoring Intensity: Heart Rate (% Max Heart Rate)

- More exact, measurable option to ensure you are working at the proper intensity

Target Heart Rate Calculation

Target HR = maximum HR x Target %
Where your maximum HR = 220 - age

- Ways to determine heart rate:
 - Heart rate monitors
 - Taking your pulse in the middle of your exercise session



Monitoring Intensity: Talk Test

- Ask yourself if you could hold a conversation
 - **Light Exercise**= able to sing
 - **Moderate exercise**= able to comfortably carry a conversation
 - **Vigorous exercise**= too out of breath to talk to another person



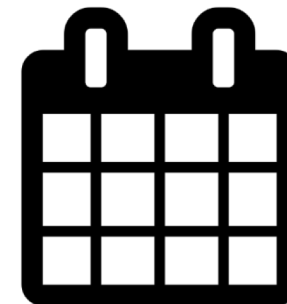
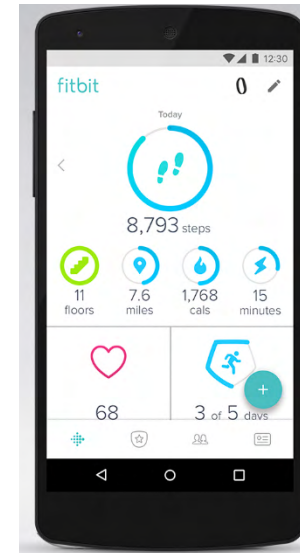
Why is it so hard to become and stay active?

- Not a single act but several:
 - Planning for participation
 - Initial adoption
 - Continued participation/maintenance
 - Periodicity (stops & starts; seasonal variation)
- Motivation and attitude not reasons people are inactive
- Often have good *intentions* but lack *self-regulation*
 - **Intentions:** readiness to perform a given behavior
 - **Self-regulation:** ability to regulate behaviors



Self-Monitoring

- Monitoring exercise behavior to raise awareness of its occurrences and accomplishment of goals
- Ideas for self-regulation of exercise behavior:
 - Cues to action
 - Environmental changes
 - Laying out workout clothes the night before
 - Activity logs
 - Scheduling in calendar/planner/on-line
 - Smartphone Apps
 - Activity trackers



Set SMART Goals For Yourself

- Directs activity and emphasize the link between behavior and outcome
 - Long vs. short-term
 - Process vs. outcome goals
- When you meet a goal, celebrate with a (healthy) reward!



Example: I will start to work out vs. I will walk outside or around the mall at a moderate intensity for 20-30 minutes 3-5 times per week for the next 4 weeks.

Find a Friend or Family Member or Co-worker

- Support from others can make it easier to stay regularly active
- Let the people in your life know your goals are so they can cheer you on and hold you accountable
- Strategies:
 - Ask someone to go to an exercise class with you
 - Find a coworker to take a walk with you at lunch.
 - Have active get-togethers
 - Find more active activities to do with children/grandchildren (e.g. golfing, bike riding, swimming, roller skating)
 - Find someone to check-in with
 - Social PA apps



Be Realistic About Expectations for PA Outcomes

- Short v. long-term
- Pay attention to little benefits and celebrate them; don't give up if some major changes take longer

1 Month

- Find enjoyment in your workouts! Notice that workouts and daily activities are getting easier

6 Weeks

- Feel noticeably stronger. Ready to increase the intensity of your workouts. Exercise for a longer period of time or move more quickly during your aerobic activity. Improvements in your overall mood.

2-3
Months

- See and feel changes in your muscles. Be able to regularly increase the intensity and resistance of your workouts. If weight loss is a goal, you may start to see some.

3-6
Months

- Notice decreases in cholesterol, blood pressure, and blood glucose levels. Find that daily activities are much easier. Feel mentally and physically better about yourself.

Increase Your PA Confidence

- Believe in your ability to successfully stick with a PA routine, even when encounter obstacles
- One of the most important factors in increasing likelihood someone will stay active
- Tips to increase your confidence:
 - Gradually progress to increases changes of success
 - Pay attention to and celebrate small successes
 - Find a good example
 - Think about all you have been through and how strong you are
 - Pay attention to how your body is responding to exercise



Common Barriers and Solutions

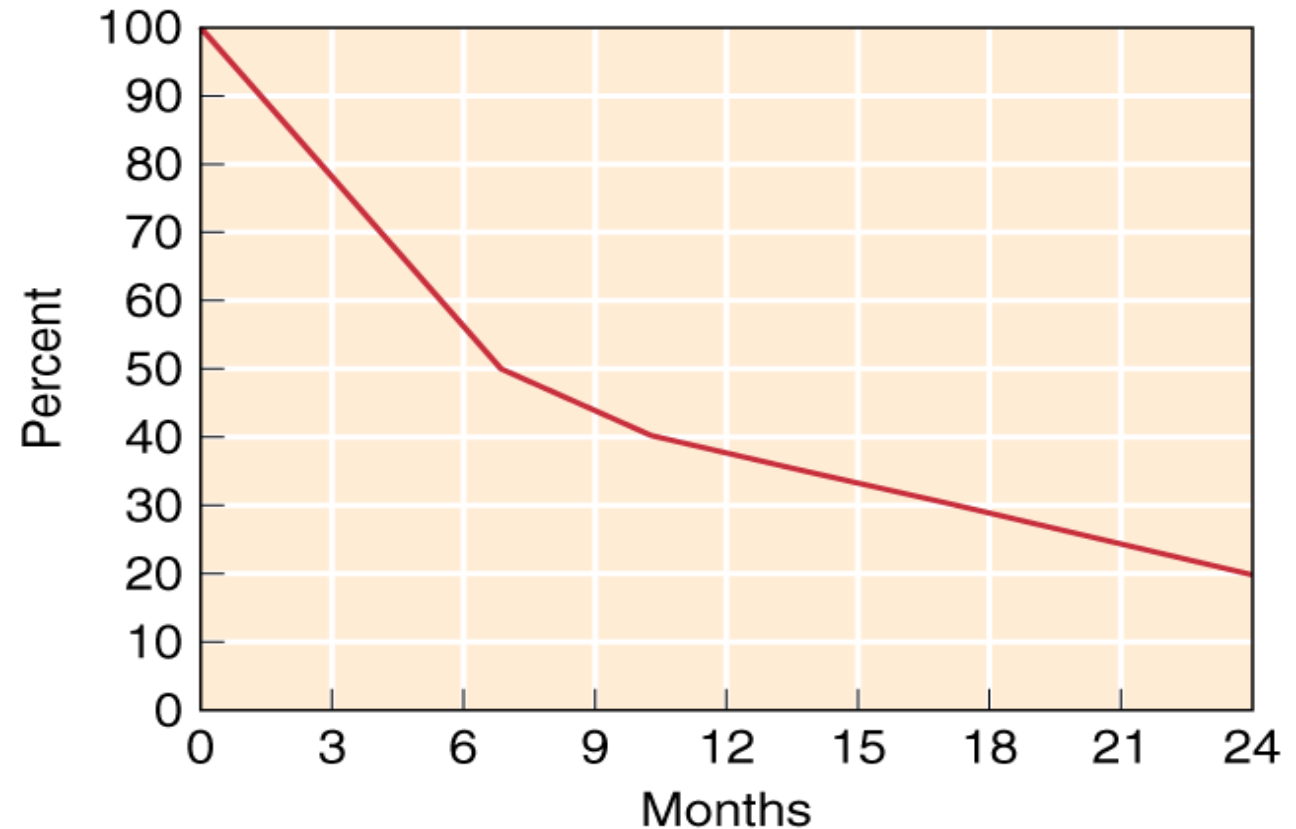
The Challenge	Possible Solutions
Time	<ul style="list-style-type: none">• Schedule your exercise sessions like other appointments• Exercise first thing in the morning• Break up activity into short 10 minute sessions
Lack of enjoyment	<ul style="list-style-type: none">• Exercise with someone• Take a class at a local gym or cancer wellness center• Try variety of activities and stick with the ones you enjoy• Set goals to work towards
Fatigue	<ul style="list-style-type: none">• Exercise can actually increase your energy levels• Exercise first thing in the morning• Eat an energizing snack before you exercise.

Common Barriers and Solutions

The Challenge	Possible Solutions
Joint Pain	<ul style="list-style-type: none">• Stretch and do exercises that move your joints through their full range of motion.• Try low-impact aerobic exercises (walking, biking, swimming, elliptical)
Balance Issues	<ul style="list-style-type: none">• Choose footwear and an exercise space that will reduce tripping risk.• Focus on gaining the confidence you need to overcome fear of falling• Work with a physical therapist to address any specific muscle weaknesses, restore flexibility, and do balancing exercises.
Other Health Issues	<ul style="list-style-type: none">• Try exercising in small bouts and see how your body responds.• If you aren't feeling your best, reduce the intensity of your workout.• Talk to your doctor or physical therapist if you are concerned.

Relapse Prevention

- **Relapse:** return to patterns of inactivity
- Main components:
 - Identify situations that put you at risk (i.e. vacations, busy time at work)
 - Plan to avoid or cope with these situations (i.e. bring gym shoes on vacation)
 - Put consequences of not exercising in perspective
 - Expect and plan for relapses
 - Don't have an "all or nothing" attitude
 - Enjoy exercise
 - Reward yourself
 - Remember *a little bit* is better than *none*!



Strategies to Fit More PA Into Daily Life

- Take the stairs instead of the elevator
- Park farther away from the front door
- Stand instead of sitting
- Take a walk on your lunch break
- Walk or bike to your destination instead of driving
- Do stretches, walk in place or use exercise equipment while watching TV
- Take a 10 min walk in the morning and/or evening
- Play outside with your kids
- Take your dog for a walk
- Do a little exercises while getting ready
- Take a walk when you are frustrated or bored
- Plant/maintain a garden
- Go for a walk with a friend instead of meeting for a meal or coffee
- Have “walking meetings” at work



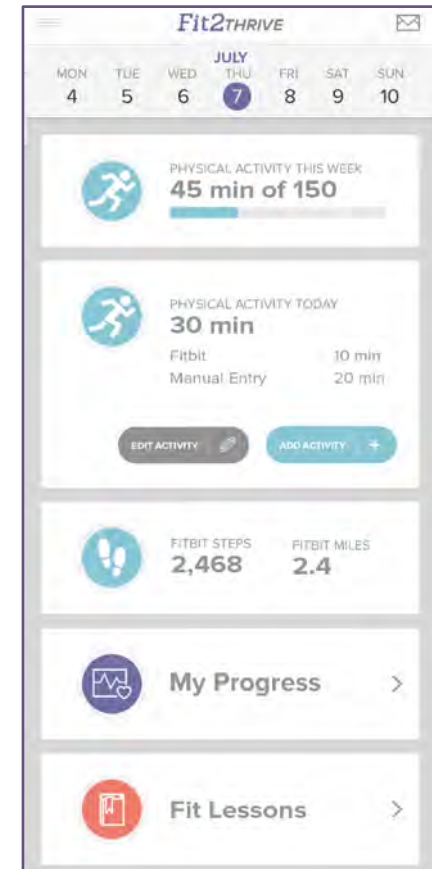
Useful Resources

- American College of Sports Medicine- Moving Through Cancer:
https://www.exerciseismedicine.org/support_page.php/moving-through-cancer/
- Area Cancer Wellness Centers
 - Gilda’s Club (Chicago)
 - Cancer Wellness Center (Northbrook)
 - Wellness House (Hinsdale)
 - LivingWell Cancer Resource Center (Geneva)
- Many local malls have walking hours
- Many park districts offer free access to indoor tracks

The Exercise and Health Lab

- Join One of Our Studies!
 - MyActivity
 - Recruiting Breast and Endometrial Cancer Survivors in Jan 2020
 - Fit2ThriveMB
 - Recruiting Metastatic Breast Cancer Patients in Nov 2019

Email: exerciseandhealthlab@northwestern.edu
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Facebook: @ExerciseandHealthLab



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“Integrate more exercise into your daily routine. Instead of taking the elevator, climb up the side of the building. When you pass a coworker in the hall, insist on a game of leap-frog. Use kick boxing to post messages on your bulletin board. Stir your coffee with your toes. Arm wrestle your clients...”

Questions?

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