Slam the Scan Day



YouTube video about protecting yourself from scammers, <u>https://youtu.be/c6svESSADHM</u>.

Cancer & Exercise

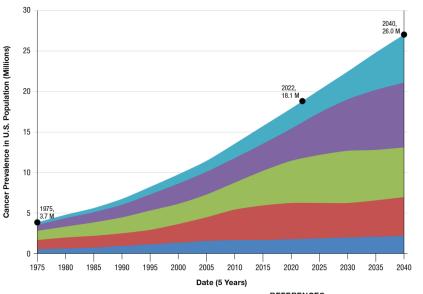


Linda Paumer March 2024

Cardiovascular Wellness Program

Cancer Survivor Stats

- As of January 2022, it is estimated that there are 18.1 million cancer survivors in the United States. This represents approximately 5.4% of the population.
- In 2022, 69% of survivors have lived 5+ years since their diagnosis; 47% of survivors have lived 10+ years since their diagnosis; and 18% of survivors have lived 20+ years since their diagnosis.



Cancer Prevalence and Projections in U.S. Population from 1975–2040

KEY Age 50 50-64 65-74 75-84 85+ REFERENCES

Bluethmann SM, Mariotto AB, Rowland JH. Anticipating the "Silver Tsunami": Prevalence Trajectories and Comorbidity Burden among Older Cancer Survivors in the United States. Cancer Epidemiol Blomarkers Prev. 2016 Jul;25(7):1029-36.

Miller KD, Nogueira L, Devasia T, Mariotto AB, Yabroff KR, Jemal A, Kramer J and Siegel RL. Cancer Treatment and Survivorship Statistics. CA A Cancer J Clin. 2022.

Relative Survival

Relative survival is an estimate of the percentage of patients who would be expected to survive the effects of their cancer. It excludes the risk of dying from other causes. Because survival statistics are based on large groups of people, they cannot be used to predict exactly what will happen to an individual patient. No two patients are entirely alike, and treatment and responses to treatment can vary greatly.

5-Year

Relative Survival

68.7%



There is strong evidence that higher levels of physical activity are linked to lower risk of several types of cancer (2-4).



- **Bladder cancer:** In a 2014 <u>meta-analysis</u> of 11 <u>cohort studies</u> and 4 <u>case-control studies</u>, the risk of bladder cancer was 15% lower for individuals with the highest level of recreational or occupational physical activity than in those with the lowest level (5). A pooled analysis of over 1 million individuals found that leisure-time physical activity was linked to a 13% reduced risk of bladder cancer (6).
- Breast cancer: Many studies have shown that physically active women have a lower risk of breast cancer than inactive women. In a 2016 meta-analysis that included 38 cohort studies, the most physically active women had a 12–21% lower risk of breast cancer than those who were least physically active (7). Women who increase their physical activity after menopause may also have a lower risk of breast cancer than women who do not (9, 10).
- Colon cancer: In a 2016 meta-analysis of 126 studies, individuals who engaged in the highest level of physical activity had a 19% lower risk of colon cancer than those who were the least physically active (<u>11</u>).

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- **Endometrial cancer:** Several meta-analyses and cohort studies have examined the relationship between physical activity and the risk of endometrial cancer (cancer of the lining of the <u>uterus</u>) (12-15). In a meta-analysis of 33 studies, highly physically active women had a 20% lower risk of endometrial cancer than women with low levels of physical activity (12). There is some evidence that the association is indirect, in that physical activity would have to reduce obesity for the benefits to be observed. Obesity is a strong risk factor for endometrial cancer (12-14).
- **Esophageal cancer:** A 2014 meta-analysis of nine cohort and 15 case–control studies found that the individuals who were most physically active had a 21% lower risk of esophageal adenocarcinoma than those who were least physically active (16).



- **Kidney (renal cell) cancer:** In a 2013 meta-analysis of 11 cohort studies and 8 case—control studies, individuals who were the most physically active had a 12% lower risk of renal cancer than those who were the least active (<u>17</u>). A pooled analysis of over 1 million individuals found that leisure-time physical activity was linked to a 23% reduced risk of kidney cancer (<u>6</u>).
- Stomach (gastric) cancer: A 2016 meta-analysis of 10 cohort studies and 12 case–control studies reported that individuals who were the most physically active had a 19% lower risk of stomach cancer than those wh least active (<u>18</u>).

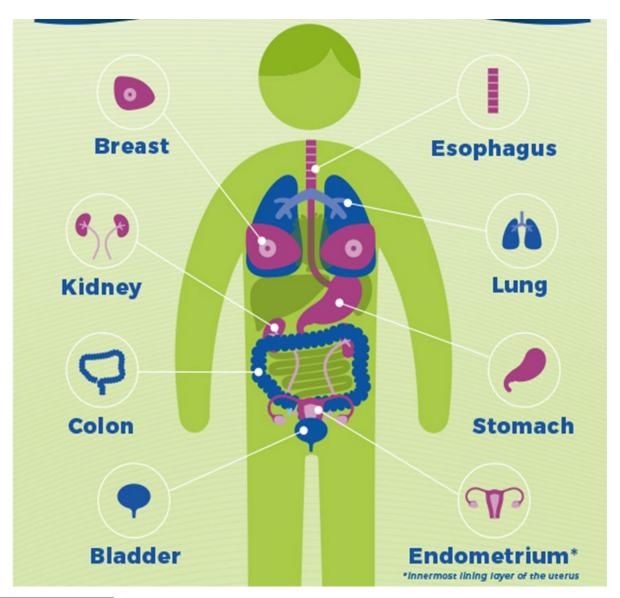


• There is some evidence that physical activity is associated with a reduced risk of lung cancer (2, 4). Likely the differences in smoking, rather than in physical activity, are what explain the association of physical activity with reduced risk of lung cancer though. In a 2016 meta-analysis of 25 observational studies, physical activity was associated with reduced risk of lung cancer among former and current smokers but was not associated with risk of lung cancer among never smokers (19).

• For several other cancers, there is more limited evidence of an association. These include certain cancers of the blood, as well as cancers of the pancreas, prostate, ovaries, thyroid, liver, and rectum (2, 6).

https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/physicalactivity-fact-sheet

Regular Physical Activity Reduces Cancer Risk



LEARN MORE AT www.cdc.gov/physicalactivity/basics

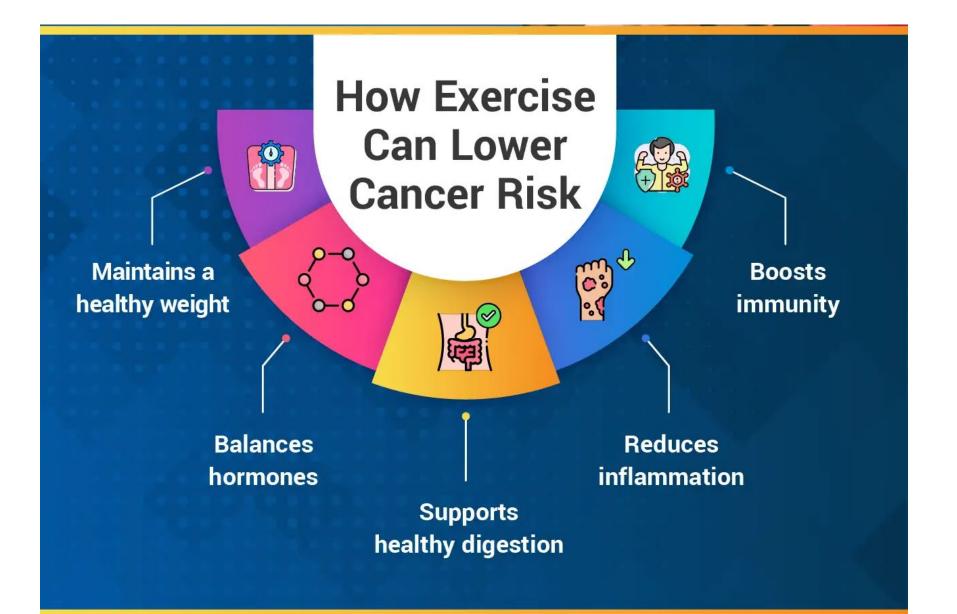
How physical activity reduces cancer risk

- . Lowers the levels of estrogen and growth factors that have been associated with cancer development and progression [breast, colon]
- Insulin control, which has been linked to cancer development and progression [breast, colon]
- . Reducing inflammation/ Improving immune system function
- Altering the metabolism of bile acids, decreasing exposure of the GI tract to these suspected carcinogens [colon]
- . Reducing the time it takes for food to travel through the digestive system, which decreases GI tract exposure to possible carcinogens *[colon]*
- Helping to prevent obesity, which is a risk for for many cancers

Being sedentary & cancer risk

Although there are fewer studies of sedentary behavior and cancer risk than of physical activity and cancer risk, sedentary behavior — sitting, reclining, or lying down for extended periods of time (other than sleeping)— is a risk factor for developing many chronic conditions and premature death, and includes increased risk for certain cancers.



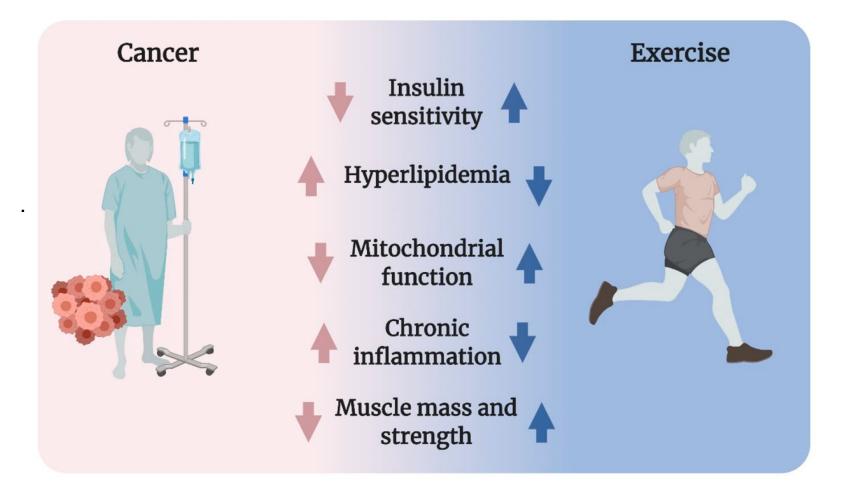






Exercising with Cancer

Regular physical activity is linked to increased life expectancy after a diagnosis of cancer — in many cases by decreasing the risk of cancer recurrence.



Exercising with Cancer

• A report of the 2018 American College of Sports Medicine International Multidisciplinary Roundtable on Physical Activity and Cancer Prevention and Control concluded that exercise training is generally safe for cancer survivors and that every survivor should maintain some level of physical activity.



Specific Study/Exercise Benefit

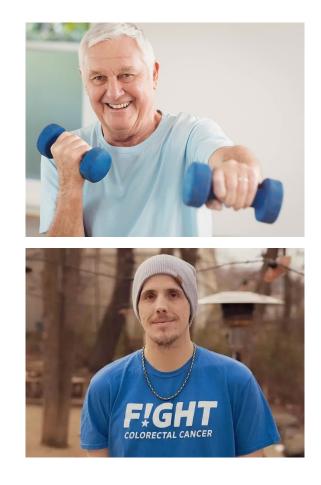
• **Breast cancer:** In a 2019 systematic review and meta-analysis of observational studies, breast cancer survivors who were the most physically active had a

42% lower risk of death from any cause and a 40% lower risk of death from breast cancer than those who were the least physically active.



Specific Study/Exercise Benefit

- Colorectal cancer: Evidence from multiple epidemiologic studies suggests that physical activity after a colorectal cancer diagnosis is associated with a 30% lower risk of death from colorectal cancer and a 38% lower risk of death from any cause.
- **Prostate cancer:** Limited evidence from a few epidemiologic studies suggests that physical activity after a prostate cancer diagnosis is associated with a 33% lower risk of death from prostate cancer and a 45% lower risk of death from any cause.



Exercising with Cancer

- Research shows that for most people exercise is safe and helpful before, during, and after cancer treatment. It can help improve your quality of life as well as the energy you have to do the things you like. Physical activity may also help you cope with side effects of treatment and possibly decrease your risk of new cancers in the future.
- Too much time spent resting or sitting can cause loss of body function, muscle weakness, and reduced range of motion. Many cancer care teams are urging their patients to be as physically active as possible before, during and after cancer treatment.

How Exercise Helps

- . Reduce feeling tired (fatigue)
- . Help lessen depression and anxiety
- . Might help you sleep better
- . Improve your physical ability to get things done
- . Improve muscle strength, bone health and range of motion
- . Strengthen the immune system
- . Increase appetite
- . Help maintain a healthy weight
- . May help with breast cancer-related lymphedema
- . Decrease the chance that of cancer will come back
- . Improve your quality of life
- . Reduce treatment side effects

Guidelines

• These are general guidelines. You can find more information, including how much to exercise for specific cancer-related side effects, on the American College of Sports Medicine Moving through Cancer website.



Before treatment

• Becoming more active before treatment may help one handle and recover from treatment more easily. Research shows that being as active as possible may reduce complications from surgery and helps tolerance for treatment. Also, physical activity may help with distress and anxiety, increase energy, and improve sleep better as one begins treatment.

• Many people find that as they start treatment, the ability to be active is harder. So, starting out in better physical shape means you can tolerate more activity during and after treatment.

During Treatment

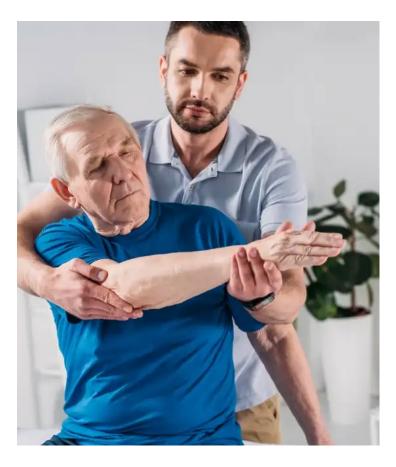
- Affecting one's ability to exercise during treatment are:
 - [°] The type and stage of cancer
 - Cancer treatment
 - Stamina, strength, and fitness level before and during treatment
- People who exercised before treatment, might need to exercise less or at a lower intensity during treatment.
- People who were very sedentary (inactive) before cancer treatment may need to start with short, lowintensity activity, such as short slow walks.

Recovering from treatment

- Most people are able to slowly increase exercise time and intensity as their side effects lessen. What may be a low- or moderate-intensity activity for a healthy person may seem like a high-intensity activity for some cancer survivors. The most important thing is to move as much as one can.
- A healthy lifestyle might also decrease the risk of some cancers coming back. A growing number of studies have looked at the impact of physical activity on cancer recurrence and long-term survival. Studies of people with breast, colorectal, and prostate cancers suggest that physically active cancer survivors have a lower risk of cancer recurrence and improved survival compared with those who are inactive.

Living with Advanced Cancer

Physical activity may also help people whose cancer has spread or has become advanced and cannot be cured. Exercise may improve physical function, decrease fatigue, and improve quality of life. Whether you can tolerate more physical activity will depend on your type and stage of cancer, side effects you might have, your current physical ability, and any other health problems.



Exercise Encouragements

- . Avoid inactivity and return to normal daily activities as soon as possible after diagnosis and treatment.
- . Take part in regular physical activity.
- . Start slowly and build up the amount of physical activity over time, striving for 150-300 minutes of moderate (or 75-150 minutes of vigorous intensity) activity each week (same goals for everyone!).
- . Exercise several times a week for at least 10 minutes at a time.
- . Try to include resistance training exercise 2 days/week.
- . Do stretching exercises at least 2 days/week.

Special Encouragements

- People with cancer trying to exercise should talk with their health care team and be aware of any special limitations they might have.
- Starting an exercise program can be a big task, even for a healthy person. It is even harder for those with a chronic illness, especially if they weren't used to exercising. The encouragement is to start slowly.



• Cancer survivors may need to exercise less intensely and increase their workout at a slower rate than people who haven't had cancer. Remember, the goal is to be as active as possible. Keep it safe, keep it fun.

Tips for Exercising with Cancer

- If you don't have the energy to exercise a full half-hour, break it up; try three 10-minute walks during the day.
- Make exercise enjoyable; recruit a walking partner or listen to music with headphones while on a recumbent bike or treadmill.
- Dress comfortably and drink plenty of water.
- Warm up by swinging your arms or marching in place and cool down with gentle stretches.
- Do some gardening or house cleaning both provide physical workouts.

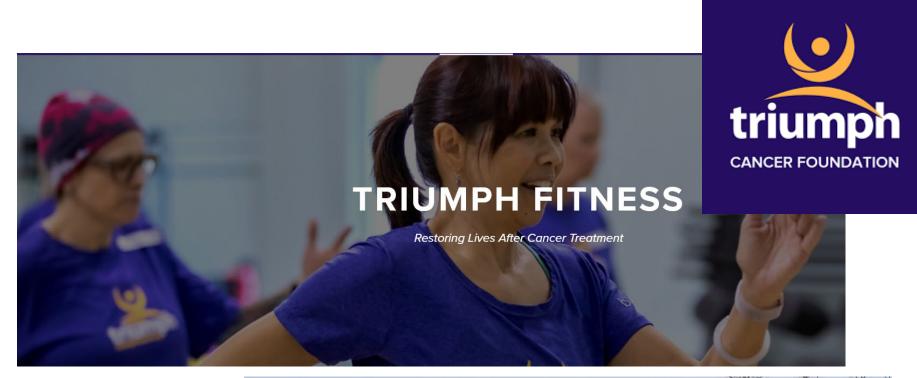




Tips for Exercising with Cancer

- Consider yoga and tai chi; though not aerobic, they integrate movement and meditation and enhance wellness.
- Look for programs designed for people who have cancer. Some health clubs and hospitals offer exercise classes that address the challenges and needs of people with cancer.
- If on radiation therapy, avoid swimming pools; they can expose you to bacteria that may cause infections and the chlorine may irritate radiated skin.









Exercising With Cancer



Sources

American Cancer Society, American College of Sports Medicine. Cancer survivorship research: recovery and beyond. Biennial Conference; ACS; ACSM., 2010. https://www.exerciseismedicine.org/