

EXERCISE AND BLADDER, THYROID AND PROSTATE CANCERS: THE IMPACT OF STAYING ACTIVE

Part I: Bladder Cancer

There are many reasons why a cancer patient should stay as active as possible through cancer treatment and recovery. I will begin by pointing out a few studies that show how exercise can benefit cancer patients. These studies demonstrate how exercise can reduce certain side effects from treatment, increase energy, decrease stress, and improve quality of life. In the last article of this series, I will suggest ways to develop an exercise program that based on the individual's needs and is safe and effective.



Introduction

Research has shown that exercise can reduce the risk of getting some types of cancers. There are numerous published studies on the benefits of exercise for those with colon cancer, [breast cancer](#), and endometrial cancer. An American Cancer Society's newsletter stated: "Among breast cancer survivors, a recent analysis shows that getting exercise after diagnosis was associated with a 34% lowered risk of breast cancer death, a 41% lower risk of dying from all causes, and a 24% lowered risk of breast cancer recurrence. Among colon cancer, studies suggest exercise cuts death from colon cancer and all causes, and cuts the risk of the cancer coming back by up to 50%."

The Journal of the American Medical Association reported that exercise lowers the risk of 13 types of cancers. Since there is limited research on exercise and bladder cancer, it is important to note that the results of the study showed that those who exercised the most had a 13 percent lower risk of bladder cancer. The JAMA study is empowering because it provides further ammunition as to the importance of [exercise](#) for additional types of cancers.

Studies suggest that exercise is safe and helpful for many people who are suffering from cancer and may lower the risk of some cancers. Other health benefits of exercise are weight control, cardiovascular health, increased bone density, and decreased fatigue, stress, anxiety and depression. Exercise can improve range of motion, improve endurance, and decrease the risk of lymphedema.

Exercise helps to control obesity, which is positively correlated with several cancers. Studies have shown that weight gain increases the risk of cancer and the risk of recurrence during and after treatment. Since exercise is a crucial component of weight control which effects cancer risk, exercise needs to be considered as part of the treatment plan.

How does exercise play a role in cancer prevention, control, and cancer outcomes?

- During exercise, epinephrine is released which helps natural killer cell infiltration.
- Exercise may restore normal gene function and may influence tumor-suppressing genes. There is a relationship between hypomethylation and hypermethylation and cancer cells.
- Exercise can affect hormone levels
- Exercise reduces insulin, increases IGF-1, and decreases leptin and may have an anti-inflammatory effect.

What does the research show for bladder cancer?

It has been observed that exercise can improve outcomes for those with bladder cancer. Research conducted by J. Vallance suggests that strength training and aerobic exercise can improve psychological and physical issues for those with bladder cancer and increases the chance of survival.

In May of 2007, “*Associations between Exercise and Quality of Life in Bladder Cancer Survivors: A Population-Based Study*” by Kristina H. Karvinen et al was published in *Cancer Epidemiology and Biomarkers*. The authors examined the association between exercise and quality of life in a sample of 525 bladder cancer survivors. They found exercise to be negatively associated with several aspects of fatigue. The study also suggested that active bladder cancer survivors have improved mood and energy and quality of life.

In 2016, “*Lifestyle factors and health-related quality of life in bladder cancer survivors: a systematic review*” by Gopalakrishna, reviewed the literature on the associations between lifestyle factors and quality of life in bladder [cancer survivors](#). Their conclusion was that there is some evidence for a positive association between quality of life and physical activity.

Kellogg Parsons, MD, an associate professor of Surgery at the University of California, San Diego, discusses modifiable lifestyle factors associated with bladder cancer on [onclive.com](#). Parsons and his team found that participants who had any amount of physical activity had improved survivorship compared to those with no physical activity.

A recent study in by Cannioto et al in *Cancer Epidemiology* reports an association between living a life with little to no recreational physical activity and an increased risk for bladder cancer. The study suggests a connection between being inactive and increased risk of cancer.

In summary, we know that physical activity reduces the risk of numerous diseases. Now we have additional evidence, that it may also reduce the risk of bladder cancer.

Physical Activity in Bladder Cancer Patients

The sooner the patient starts to exercise the better. Starting before surgery and treatments and continuing during treatment can lead to a better recovery with less complications and medications.

Survivorship can serve as a strong motivator to make positive lifestyle changes. Everyone’s situation is unique. Accordingly, exercise needs to be tailored to individual people, taking into account their overall fitness, diagnosis, and other factors that could affect safety.

Regular physical activity can help rebuild a patient’s strength and energy level and help manage other health related issues. Health issues like diabetes, and cardiovascular diseases are a leading cause of death in cancer survivors and those without cancer. Managing health related issues through exercise could increase survival.



Some cancers and cancer treatments may result in incontinence. A side effect of biologic treatment may include irritation of the bladder, an urgent need to urinate, frequent urination, or incontinence.

Incontinence can occur in men or women with bladder cancer and last for a short time or longer. There are different types of incontinence, ranging from mild to severe. Some examples are: stress incontinence can cause a person to leak urine during activities such as coughing, laughing, sneezing, or exercising, urge incontinence is a sudden, urgent need to urinate and continuous incontinence is not being able to control the bladder at all.

Kegel exercises strengthen your pelvic floor muscles to control urine flow. The pelvic floor muscles are comprised of the bladder, sphincter and the pubococcyges muscle. These muscles are used to stop the flow of urine. You can find your pelvic floor muscles by squeezing your sphincter and contracting the urethra to stop the flow of urine when using the bathroom.

Exercise can help control incontinence without medication or surgery. It is wise to start Kegel exercises before surgery and treatments and to work with a pelvic floor specialist.

Kegel Exercise

Perform the Kegel 10 times holding for 5 seconds each. Try to do this four times per day. Take a 5-second break between each repetition. It may take several weeks or months to be able to contract your muscles for 5 seconds at a time, or to repeat it 10 times. If you perform the Kegel several times per day, your pelvic floor strength should improve.

Tips

- Try not to use the surrounding muscle groups in the buttocks, legs and abdomen.
- Try to lift the pelvic floor upward.
- You can perform this exercise in any position: standing, sitting, or lying in bed.
- Kegels can be done at any time, such as while watching TV, waiting in line or driving.

Part 2 will focus on thyroid cancer. Contact me at caroljmichaels@gmail.com or go to www.CarolMichaelsFitness.com or <https://www.nfpt.com/product/cancer-recovery-specialist> to find out about cancer exercise programs in New Jersey and cancer continuing education courses.

Carol J. Michaels is the founder and creator of Recovery Fitness® LLC, located in Short Hills, New Jersey. Her programs are designed to help cancer survivors in recovery through exercise programs. Carol, an award winning fitness and exercise specialist, has over 17 years of experience as a fitness professional and as a cancer exercise specialist.

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Carol Michaels

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