

Encouraging Physical Activity for Older Adult Cancer Survivors: Following Treatment

Older Adult Cancer Survivors — What You Need to Know as a Fitness Professional



Surviving cancer treatments such as surgery, radiation treatment and chemotherapy can leave an older adult (50+ years) feeling exhausted both physically and emotionally. Although these interventions can improve survival, they also cause side effects, decrements in physical functioning and quality of life (QoL), and an increased risk for second cancers and co-morbid conditions such as cardiovascular disease, diabetes, osteoporosis, hypertension, overweight, and obesity, which may be directly attributed to cancer treatment, their personal genetic disposition, and lifestyle practices. Exercise interventions have proven benefits in reducing the functional ability declines associated with cancer and its treatment, and also play an important role in preventing co-morbidities and in reducing risk of death from causes other than cancer.

A cancer diagnosis is often made in the context of other medical conditions. Older adult cancer survivors are often faced with coping with cancer while dealing with age-related disabilities, such as deterioration in mobility, vision, and strength. In addition, an inability to cope may lead to deterioration in aspects of psychological QoL, such as symptoms of depression, anxiety, and delirium; social and emotional issues such as widowhood, retirement, and declining social support; and age related changes in cardiac, renal, pulmonary, and gastrointestinal systems.

Preliminary research suggests that physical activity may be important for reducing the risk of recurrence and extending survival for some cancer survivors. Research continues to suggest that physical activity during or after completion of treatment is safe and results in:

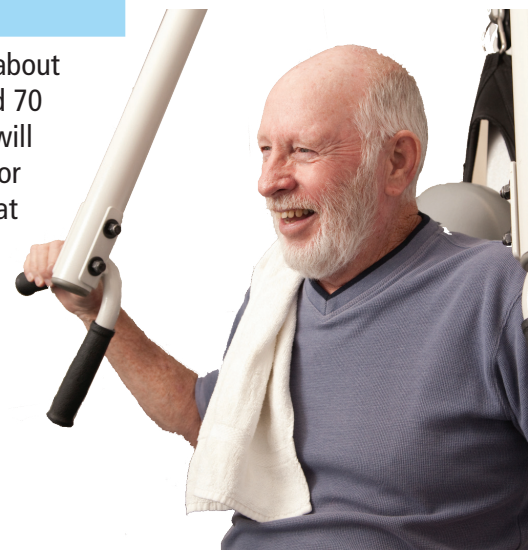
- Improved quality of life
- Reduction in fatigue
- Quicker recovery
- More energy
- Better posture and balance
- Weight management
- Stronger muscles and bones
- Relaxation and reduced stress
- Improvements in cardio-respiratory fitness

Canadian Cancer Statistics - A Reality

Cancer is primarily a disease of older Canadians. The estimates for 2008 indicate that about 71,000 new cases (42%) and 45,000 cancer deaths (60%) will occur in Canadians aged 70 years or more, while an additional 44,100 new cases (27%) and 16,200 deaths (22%) will occur in those aged 60-69. In contrast, less than 1% of new cases and deaths occur prior to age 20. The median age at cancer diagnosis is between 65 and 69 years of age and at death between 70 and 74 for both sexes.

Men outnumber women for both new cases and deaths. Not counting non-melanoma skin cancers, three types of cancer account for at least 55% of new cases in each sex: prostate, lung and colorectal in males and breast, lung and colorectal in females. Lung cancer remains the leading cause of cancer death for both men and women. Overall, colorectal cancer is the second leading cause of death from cancer.

Exercise interventions have proven benefits in reducing the functional ability declines associated with cancer and its treatment....



On the basis of current incidence rates, almost 40% of Canadian women and almost 45% of men will develop cancer during their lifetime. On the basis of current mortality rates, 24% of women and almost 29% of men, or approximately 1 out of every 4 Canadians, will die from cancer.

General Guidelines for Increasing Physical Activity

Although there currently are no 'evidence-based' cancer-specific guidelines for exercise for cancer survivors or for cancer patients in general, or a position statement by any group, research has shown that many of the benefits achieved through a more active lifestyle by the 'apparently healthy' older adult are the same for older adult cancer survivors. As such, *Canada's Physical Activity Guide to Healthy Active Living for Older Adults* is a relevant document to use. The guide states that individuals should:

- start slowly and gradually increase time and intensity as they are able, and to listen to their body
- accumulate 30 to 60 minutes of moderate physical activity most days of the week. Minutes count – add it up 10 minutes at a time.

Fitness professionals should assist older adults with choosing a variety of activities for endurance, flexibility, strength and balance. When they seem unsure, suggest they consult with you and/or their health care team.

What we do know is supported by preliminary research indicating that cancer survivors who remain active and participate in regular exercise and support programs during and after cancer treatments may exhibit fewer signs of fatigue, improved immune function, less depression and a greater quality of life, even with small amounts of regular physical activity.

There is a high probability that, as a fitness professional, you will work with older adult cancer survivors (if you haven't already). They represent the collective wisdom of our society and deserve to be treated with the utmost respect and handling. You have an important role to play to influence them with healthy choices and ensure a safe, fun, and enjoyable experience.

Prudent First Steps

There are few contraindications for older adult cancer survivors for engaging in physical activity. Following their treatment, their oncologist will indicate whether they can exercise moderately or not, so this initial step is important in determining their 'individual' readiness. Depending upon their current physical activity level and readiness, older adult cancer survivors should be encouraged to talk with other members of their healthcare team e.g., primary physician, physiotherapist, occupational therapist, registered dietician, and/or certified fitness professional about the role that physical activity can play in enhancing their life. Some cancer survivors can adopt an exercise program independently although some will benefit from referral to an exercise specialist, exercise physiologist, personal trainer or physical therapist. In Canada, fitness professionals routinely use the screening tools called the Physical Activity Readiness Questionnaire (PAR-Q for 15 to 69 years of age) and the Physical Activity Readiness Medical Examination (PARmed-X) to prescreen individuals for involvement in activity. As a fitness professional, you need to get involved with the decisions that affect the older adult cancer survivors. Talk with them about their worries or concerns. Reinforce with them that the effort that they take regarding the inclusion of physical activity into their lives is relative and extremely worthwhile.

Precautions to Consider When Choosing a Physical Activity Program

Safety is the primary issue – some types of exercise are inappropriate for some types of cancer. 'Individual issues' for cancer survivors may affect their ability to exercise e.g., effects of prior treatment may promote the risk for exercise-related injuries and adverse effects. Specific precautions to be aware of include:

... cancer survivors who remain active in regular exercise and support programs may exhibit a greater quality of life, even with small amounts of regular physical activity.



- Survivors with neurological complications affecting coordination or balance will require stable exercises (e.g., stationary reclining bicycle rather than walking on a treadmill).
- Survivors who have limited arm mobility following surgery or radiation treatment will be unlikely to fully exercise their upper body.
- Survivors with compromised immune function should avoid public gyms and other public places until their white blood cell counts return to safe levels.
- Survivors suffering from severe fatigue as a result of their therapy may not feel up to an exercise program – to start, encourage alternate programs such as short bouts of stretching or suggest taking up a program such as Tai Chi Chuan, or yoga, or going for short walking bouts.
- Survivors should not exercise when they are at risk of infection, are in pain, or experiencing other side effects that are not well-controlled (e.g., on-going or recurrent lymphedema, muscle weakness, or possible cognitive challenges).
- Survivors who have any concerns should ask their doctor before starting a ‘high-intensity’ exercise program e.g., dragon boat racing.
- Survivors with physical challenges (e.g. arthritis, obesity) should be referred to physical therapy or exercise professionals if necessary to learn to exercise within their ability. If there are medical concerns, survivors need to be in a program that can meet their needs (e.g. cardiac or cancer rehabilitation programs).

... ensure that the older adult cancer survivors are involved in the process of selecting correct choices for them.

Once they have selected and involved themselves in some form of physical activity, be cognizant of and monitor any excessive fatigue, chest pain, shortness of breath, dizziness, swelling (lymphedema), or pain experienced by the older adult cancer survivors during their exercise sessions. In these cases, survivors may want their blood and other vital signs to be monitored a bit more frequently. Communicating with an older adult cancer survivor and other members of their healthcare team makes a lot of sense.

Individual Choices – Making It Work for Older Adult Cancer Survivors

Getting started is easier than most older adult cancer survivors think. Once they have clearance for safe involvement in physical activity, keep in mind the following – there are many different and varied ways to be physically active that impact their endurance (continuous activities that make them feel warm and breathe deeply such as walking), flexibility (gentle reaching, bending, and stretching), strength (lifting weights, doing resistance exercises) and balance. Fitness professionals need to ensure that the older adult cancer survivors are involved in the process of selecting correct choices for them. This will be somewhat dependent on the types of programs available in their community whether through hospital/university based programs, the YMCA/YWCAs, local community centres, or private clubs. Examples of physical activity programs could include group-based supervised programs, home-based walking programs, supervised individualized exercise prescription including upper and lower body weight training, self-selected activities such as yoga, Tai Chi Chuan, dragon boat racing, dance therapies, self-management and telephone support, and/or supervised full-body resistance and aerobic exercise programs. What motivates older adult cancer survivors may not motivate someone else, so get involved in assisting them with their choices. Remember also that being physically active offers older adult cancer survivors an opportunity to meet, make and be friends, and to create a healthy social routine.

Other Healthy Choices

In addition to being physically active other healthy choices will contribute to the quality of an older adult cancer survivors’ life. These include choosing a healthy balanced diet, smoking cessation (if applicable) and weight management.



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The Physical Activity Readiness Questionnaire (PAR-Q) - a questionnaire for people aged 15-69 to complete before becoming much more physically active. Copyright © 2008 Canadian Society of Exercise Physiology. Available on-line at <http://www.csep.ca/forms.asp>

The Physical Activity Readiness Medical Questionnaire (PARmed-X). Copyright © 2008 Canadian Society of Exercise Physiology. Available on-line at <http://www.csep.ca/forms.asp>

Note: A background paper was written, which reviews the literature available on the topic of older adult cancer survivors and exercise following treatment. Over 200 abstracts were initially screened and short listed to 80 potentially relevant articles. Subsequently, 49 published articles were selected for use in the writing of the background paper. The primary purpose of the paper was to provide the scientific evidence to support two other publications. The document for physical activity practitioners who could work with cancer survivors (post-treatment) in the fitness centres across Canada, and also a consumer document for older adult cancer survivors. The information included in the background paper does not represent an exhaustive review of all literature on older adult cancer survivors but rather papers selected at the discretion of the reviewer for the purpose of the Active Living Coalition for Older Adults (ALCOA) project.

The background paper may be downloaded from the ALCOA website, (Cancer Project tab), at www.alcoa.ca, or contact the office.

Ce document est également disponible en français.

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