

COLON CANCER

WHAT IS COLON CANCER?

Nearly 17,000 Australians are diagnosed with colon cancer each year; almost 90% of people diagnosed early will be disease-free five years after their diagnosis (1, 2). Exercise plays an important role in the treatment of, and recovery from, colon cancer, through reducing the number and severity of treatment-related side effects and symptoms (such as pain, fatigue, sleep disturbances, and cognitive impairment), as well as improving or maintaining function during and after treatment (3). Substantial observational evidence also shows that being physically active (that is, participating in 150+ minutes of moderate+ intensity physical activity per week) after a colon cancer diagnosis is associated with reduced risk of recurrence, reduced risk of developing other chronic diseases, and better overall survival (4).



- Aerobic and supervised, resistance (muscle strengthening) exercise is safe and beneficial. Findings suggest that individuals should be encouraged to participate in their preferred exercise unless contraindicated (e.g. if there is an increased risk of fractures or infection). If a colostomy has been undertaken, avoiding increased pressure in the abdomen is recommended to reduce risk of herniation.
- Moderate-intensity exercise (enough to “puff” or the ability to “talk but not sing”) is recommended. Those who are currently sedentary or engage in irregular and/or low levels of weekly physical activity, should be encouraged to take up regular exercise by starting with sessions of short duration (that is, less than 20 minutes) and low- to moderate-intensity, and to progress gradually (increase duration and/or intensity slowly and according to symptom control and fitness and functional adaptations). For those who are already regularly exercising and have good symptom control (or no disease- or treatment-related side effects or symptoms), exercise at high-intensity is also likely safe (assuming appropriate progression to this intensity has occurred) and beneficial (can lead to greater fitness and functional gains); importantly, it need not be discouraged (5).
- Current guidelines recommend maintaining or building up to 150+ minutes of exercise each week. Exercise can be done in sessions as short as 10 minutes and should include either or both aerobic- and resistance-based exercises. It is best to spread exercise sessions out across the week (e.g. 30 minutes on 5 days of the week). Depending on the intensity of the resistance-based exercise, it may be necessary to avoid doing resistance-based exercises on consecutive days. Additional benefits may be gained by exercising for up to 300 minutes each week, but it is important to progress towards this amount gradually.



- Being diagnosed and treated for colon cancer presents additional barriers to participating in regular exercise. Fear of worsening symptoms (for example fatigue), discomfort from wigs, gastrointestinal changes requiring constant access to a bathroom, balance problems, increased pain from peripheral neuropathy, or discouragement from not seeing improvements represent just some of the barriers to participating in regular exercise. However, with discussion and support from health professionals, research has shown that barriers can be overcome through goal setting and problem solving. Further, appropriate exercise prescription leads to reduction in number and severity of side effects. In contrast, a sedentary lifestyle can increase frequency, duration and severity of side effects.
- The supervision required depends on exercise history, the timing with respect to diagnosis, and the presence and intensity of treatment-related side effects. Whilst many can safely exercise during or following treatment for colon cancer without supervision, support from a qualified health professional (e.g. Physiotherapist/Accredited Exercise Physiologist) may help in successfully commencing and maintaining a safe exercise program. Behaviour change strategies, and advice regarding modifications to account for exercise preferences, contraindications and barriers may be particularly important during active treatment when the frequency and type of side effects are likely to fluctuate. Those who have a preference for a particular exercise type or intensity outside of the general guidelines are encouraged to discuss the need for any risk management with a health or exercise professional.

The body of evidence in support of exercise post-cancer is consistent and overwhelmingly positive. All those diagnosed with colon cancer should be encouraged to integrate exercise as part of their short- and longer-term treatment and given as much support as is needed to enable this to happen (whether that be referral to an exercise specialist, standard questioning as part of follow-up care regarding their weekly physical activity levels, and/or ongoing encouragement and support to become and stay physically active during and beyond their treatment for colon cancer).



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If you have any concerns about the safety of your patient in commencing an exercise program, please consider referral to a Sport and Exercise Physician.

Find a Sport and Exercise Physician www.acsep.org.au/

Exercise is Medicine Australia www.exerciseismedicine.org.au

Exercise Right www.exerciseright.com.au

Find a Physiotherapist www.choose.physio

Find an Accredited Exercise Physiologist www.essa.org.au

Bowel Cancer Australia www.bowelcanceraustralia.org

RELATED INFORMATION AND REFERENCES

1. Australian Institute of Health and Welfare (AIHW), (2017). Cancer in Australia 2017. Cancer series no. 101. Cat. no. CAN 100. Canberra: AIHW.
2. Australian Institute of Health and Welfare (2017). Australian Cancer Incidence and Mortality (ACIM) books Colorectal cancer. Canberra. AIHW. [Accessed October 2017].
3. Cramer, H., et al., (2014) A systematic review and meta-analysis of exercise interventions for colorectal cancer patients. Eur J Cancer Care. 23(1): p. 3-14.
4. Van Blarigan EL, Meyerhardt JA. Role of physical activity and diet after colorectal cancer diagnosis. J Clin Oncol. 2015 Jun 1;33(16):1825-34.
5. Devin, J.L., et al., (2016) The influence of high-intensity compared with moderate-intensity exercise training on cardiorespiratory fitness and body composition in colorectal cancer survivors: a randomised controlled trial. J Cancer Surviv. 10(3): p. 467-79.