PROSTATE CANCER & EXERCISE

PUBLIC

WHAT IS PROSTATE CANCER?

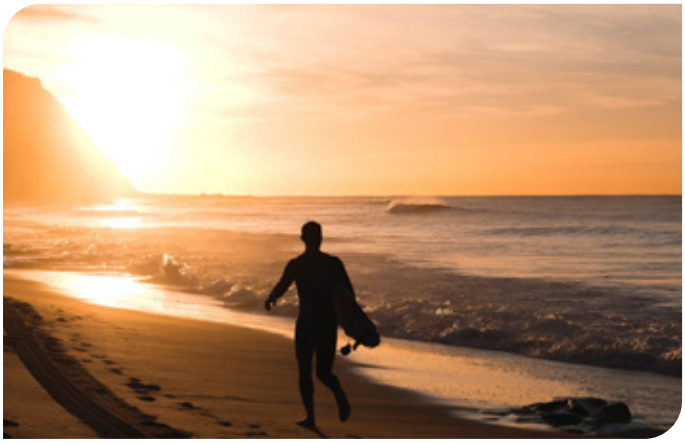
Prostate cancer is the most common cancer in Australian men; it is estimated that 16,500 cases are diagnosed each year. While survival rates are influenced by type of disease and stage at diagnosis, 95% of men will be disease-free five years after their diagnosis (1). Common treatments for prostate cancer include surgical removal of the cancer, radiation therapy, androgen suppression therapy (AST), chemotherapy, and targeted drug therapies. The side effects of treatment depend on the extent of surgery and on the dose and type of the adjunct therapy. Possible side effects include urinary incontinence, reduced sexual desire, erectile dysfunction, fatigue, diarrhoea, muscle and bone loss, increased body fat, anxiety and depression, and increased risk of other chronic diseases.

HOW DOES EXERCISE HELP SURVIVORS OF PROSTATE CANCER?

Exercise plays a role in the treatment of, and recovery from, prostate cancer, through reducing the number and severity of treatment-related side effects and symptoms (such as fatigue, muscle loss, and anxiety and depression), as well as improving or maintaining function during and after treatment. There is also evidence that men who are physically active after a prostate cancer diagnosis have reduced risk of recurrence, reduced risk of developing other chronic diseases, and have better overall survival (2-4).

Evidence derived from studies that have included men with prostate cancer suggests:

- **Aerobic- and resistance-based (muscle strengthening) exercise is safe and beneficial.** A whole range of exercise types have been studied, including walking, cycling, soccer training, jumping and high impact exercises, as well as a variety of resistance-based exercises (5). Findings suggest that individuals should be encouraged to participate in their preferred exercise unless clearly contraindicated (e.g. if an individual has severe osteoporosis or if the cancer has spread to the bones, a modified program is best for reducing risk of fractures). Importantly though, an exercise program should not exclude exercises which load the skeleton as this strategy will exacerbate bone loss. Rather, prudent exercise and load selection used in a controlled environment under the supervision of a Physiotherapist/ Accredited Exercise Physiologist is advised.
- **Moderate-intensity exercise (enough to "puff" or the ability to "talk but not sing") is recommended.** The level of exercise required to make someone puff is influenced by fitness and the presence of cancer-related symptoms. When feeling unwell or unfit, slow walking may be enough to make someone puff (that is, be moderate-intensity exercise). However, as fitness improves or treatment-related side effects are less, a faster walking pace (or different exercise type) may be required to exercise at moderate-intensity. For those not already regularly exercising, it is recommended they start at low- to moderate-intensity and progress gradually. For those already regularly exercising, it is likely safe to exercise at high-intensity, but it is important to progress gradually up to this.



- **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-based exercise and resistance-based exercise (including exercises that target all major muscle groups). It is best to spread exercise sessions out across the week (e.g. 30 minutes on 5 days of the week). However, depending on the intensity of the resistance-based exercise, it may be necessary to avoid doing resistance-based exercise on consecutive days. Additional benefits may be gained by exercising for up to 300 minutes each week, but it is important to gradually progress towards this higher amount as symptoms allow.

- **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 men can safely exercise following prostate cancer without supervision, support from a qualified health professional (e.g. a Physiologist/Accredited Exercise Physiologist) may help individuals to successfully commence and maintain an exercise program. Behaviour change strategies, advice regarding modifications to account for exercise preferences, contraindications, barriers, and teaching motivational techniques 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 type or intensity of exercise outside of the general guidelines are encouraged to discuss the need for any risk management with a health or exercise professional (e.g. General Practitioner or Physiotherapist/Accredited Exercise Physiologist).

WHAT ARE THE SOLUTIONS TO COMMON CONCERNS ABOUT EXERCISE?

Fear of worsening symptoms (e.g. fatigue, pain, nausea)

Those who exercise regularly are less likely to experience these symptoms and, if they occur, the symptoms are typically less severe. In contrast, inactivity has been associated with the onset and worsening of these side effects. Using a diary to monitor exercise and side effects is an effective way to demonstrate that exercise, at the very least, does not worsen existing side effects.

Trouble exercising during treatment periods with intense side effects

Prostate cancer survivors may find they cannot perform their usual exercise routine in the days immediately after a cycle of chemotherapy, or when symptoms are particularly intense. Instead of avoiding exercise altogether at these times, preparing a separate exercise program for 'bad days' may be useful. Encouraging some exercise on 'bad days' helps maintain the habit of exercising as well as preventing or reducing functional declines associated with treatment.

Discouragement from not seeing improvements

Progress and success through exercise needs to be appropriately defined. Without a structured exercise program, declines in physical function during periods of active treatment are likely. While improvements in function through exercise during treatment are possible, at the very least, exercise during treatment can minimise or prevent typical treatment-related declines. Having realistic expectations regarding changes in function may assist prostate cancer survivors to stay active during and beyond the treatment period.

General barriers to exercise

Survivors of prostate cancer still need to overcome all the usual exercise barriers experienced by men without prostate cancer (e.g. affordability, time constraints, lack of interest, or motivation). Depending on individual circumstances, these barriers may either be increased or decreased as a result of the prostate cancer experience.

RELATED INFORMATION AND REFERENCES

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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
Prostate Cancer Foundation of Australia www.prostate.org.au

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