

Breast cancer and exercise

What is breast cancer?

Breast cancer is the most common cancer in women, with more than 13,500 cases diagnosed in Australia each year. While survival rates after breast cancer vary, almost 90% of those diagnosed will be disease-free five years after their diagnosis (1). There are nearly 160,000 breast cancer survivors in Australia today (2). Common treatments for breast cancer are surgery, chemotherapy, radiotherapy, hormone therapy and specific drug therapies. The side effects of treatments depend on the extent of any surgery, and on the dose and type of adjunct therapy.

How does exercise help?

Most of the studies on exercise and cancer have focused on women with breast cancer. These studies suggest:

Moderate-intensity exercise is recommended. If the exercise routine lapses, exercise intensity should be lowered again when restarting.

Accumulating at least 30 minutes of daily exercise on at least three days each week can lead to benefits. Build up to, and then maintain, at least 30 minutes of exercise per session, accumulating at least 150 minutes of exercise over one week.

Aerobic and supervised resistance (weights) training are safe and beneficial. Most sports and specific activities, other than walking and gym-based exercise, have not been well evaluated for safety or efficacy. However, participation is encouraged unless clearly contraindicated (e.g. if you have a risk of fractures or infection).

A diary to record exercise sessions and the frequency and severity of treatment-related side effects is useful.

What are the solutions to common concerns about exercise?

Fear of worsening symptoms: Women who exercise regularly are less likely to experience these symptoms and, if they occur, the symptoms are typically less severe. Inactivity has been associated with the onset and worsening of these side effects.

Lymphoedema: This side effect is experienced by about 20% of women. Many prevention guidelines suggest avoidance of repetitive use of the arm on the treated side of the body, which creates confusion among women about the safety of exercise. However, several studies have shown that exercise does not cause or worsen lymphoedema, and some evidence suggests that exercise may play a role in its prevention.

Trouble exercising during treatment periods with intense side effects: Breast 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.

Discomfort from wigs: Exercising without wearing a wig is best, because wigs can prevent heat loss during exercise and may feel uncomfortable. If you prefer to wear a wig, exercising in well-ventilated areas and staying hydrated may help.

Discomfort caused by radiation 'burns': Radiation to the breast area can cause 'burns' to the skin, which makes wearing a bra uncomfortable. This creates issues when women find exercising without breast support uncomfortable or embarrassing. A firm-fitting singlet may provide sufficient support without the discomfort. Alternatively, a modified exercise program may be necessary.

Discouragement from not seeing improvements: Women need to have progress and success appropriately defined. Without a structured exercise program, women may experience a decline in physical function during periods of active treatment. Actual improvements in function may occur for some women who exercise during treatment. At the very least, exercise can minimise or prevent typical treatment-related declines.

General barriers to exercise: Survivors of breast cancer still need to overcome all the usual exercise barriers experienced by women without breast 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 breast cancer experience.

References and further information

Exercise is Medicine Australia www.exerciseismedicine.org.au
 Find an Accredited Exercise Physiologist www.essa.org.au
 Exercise Right www.exerciseright.com.au

1. Australian Institute of Health and Welfare (AIHW). (2012). Cancer in Australia 2012: An overview. Cancer series no. 74. Cat. no. CAN 70. Canberra: AIHW.
2. Australian Institute of Health and Welfare and Cancer Australia 2012. Breast cancer in Australia: an overview. Cancer series no. 71. Cat no. CAN 67. Canberra: AIHW.
3. Schmitz KH. Balancing lymphedema risk: Exercise versus deconditioning for breast cancer survivors. *Exerc Sport Sci Rev* 2010; 38(1): 17-24.
4. Exercise & Sports Science Australia www.essa.org.au
5. National Breast Cancer Foundation www.nbcf.org.au

For more detailed information, please read the full version of this factsheet at www.exerciseismedicine.org.au

