

# Maximizing Exercise in Breast Cancer Survivors

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Regular physical exercise can maximize physical, mental, and social well-being during and after treatment in breast cancer survivors. An exercise program following cancer therapy is facilitated by instilling a positive attitude toward exercise, confidence in conquering barriers, and a supportive social environment. The purpose of this article is to describe the benefits of moderate exercise in breast cancer survivors and propose a comprehensive approach for the cancer care team in maximizing survivor efforts to improve their physical strength and endurance after completion of adjuvant therapy for breast cancer (surgery, chemotherapy, and/or radiation). A moderate exercise program can help most survivors become more physically and mentally fit and energetic. Understanding factors that prompt the initiation of healthy lifestyle choices among breast cancer survivors is critical to encouraging an attitude of healthy living.

**B**reast cancer remains the most common cancer diagnosis among women in the United States, with approximately 192,370 diagnosed annually and 40,170 women estimated to die of breast cancer in 2009 (American Cancer Society [ACS], 2009a). The lifetime risk of developing breast cancer is one in eight, and the disease risk increases significantly with age. Ninety-five percent of breast cancer cases are diagnosed in women older than age 40 years. The age-adjusted mortality rates since the late 1990s have decreased with early detection and improved treatments. The five-year relative survival for breast cancer is approximately 85%, indicating most women will survive many years after initial diagnosis and treatment. Given the statistics, nurses need to recognize the benefits of exercise for women with breast cancer and promote the established guidelines and precautions from ASC or the American College of Sports Medicine (ACSM) for exercise after breast cancer therapy (Courneya, Mackey, & McKenzie, 2002; Doyle et al., 2006). Cancer care teams should keep in mind these are only guidelines, in which a specialized physical activity prescription can be developed.

A literature review of post-cancer exercise published by *Physician and Sports Medicine* included studies examining aerobic and resistance training designed to improve cardiovascular function and muscular strength (Courneya et al., 2002). The review cited 20 studies, 8 of which examined exercise after breast cancer treatment. Depending on the study, some participants started the exercise program immediately after completing breast cancer therapy and others were almost four years after therapy. The studies presented evidence that exercise benefits a wide variety of biopsychosocial factors. Factors include cardiovascular fitness, body composition, self-esteem, mood states, and fatigue during and after breast cancer treatments. Ninety percent of the 20 studies supported beneficial

## At a Glance

- ◆ Current research supports the psychological and physiologic benefits of exercise for breast cancer survivors.
- ◆ Nurses can incorporate exercise after treatment for breast cancer survivors in the cancer care plan by instilling a positive attitude toward exercise, confidence in overcoming barriers, and a supportive social environment.
- ◆ Oncology nurses are critical in maximizing an interdisciplinary, individualized exercise plan in breast cancer survivors.

changes in at least one biopsychosocial outcome. Even during adjuvant therapy, breast cancer survivors can adhere to a moderate exercise prescription. Special precautions may be necessary after chemotherapy in relation to altered blood counts or other physical conditions accompanying treatment. Determining the optimal exercise prescription for breast cancer survivors in the future is essential (Courneya et al.).

Hsieh et al. (2008) recently reported the effects of a supervised exercise intervention study on recovery from treatment regimens in breast cancer survivors. The results showed moderate intensity and individualized, prescriptive exercise maintains or enhances cardiopulmonary function with simultaneous reductions in fatigue despite treatment type. The authors concluded that symptom

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