Exercise may be the best and most underutilized medicine we have for cancer rehabilitation and recovery. Science is showing us that exercise can help our body and mind heal from cancer treatment. Solid scientific evidence demonstrates that exercise helps build our bones and muscles, improves heart and lung function, and helps us feel more positive by improving our quality of life.

In 2010 the American College of Sports Medicine published the first exercise guidelines for cancer survivors (Schmitz, 2010). Based on research, these guidelines recommend that cancer survivors at all phases of survivorship get at least 150 minutes of moderate exercise or 75 minutes of vigorous exercise per week.

Fatigue is the most common and relentless side effect of cancer and its treatment. Studies testing the effects of exercise on fatigue consistently demonstrate that moderate or vigorous physical activity effectively reduces this side effect. They have tested exercise programs that lasted from three weeks to over a year, although the typical intervention lasted 12 weeks. The duration and type of exercise varied, but studies have suggested that 20 to 30 minutes of physical activity every other day significantly reduces fatigue (Schwartz et al 2001; Cramp et al 2008).

Exercise studies have demonstrated the benefits of exercise on physical functioning, strength, physical activity levels, quality of life, mood, psychological well-being, immune function, bone density, and body composition (Spence, et al 2010; Knols 2005). There is growing evidence that upper body exercise, specifically resistance exercise, does not pose additional danger to breast cancer survivors with or at risk for lymphedema (Schmitz et al 2010). Evidence from large observation trials suggests that exercise improves overall survival and reduces risk of recurrence (Chen et al 2011).

Social support is important for cancer survivors in initiating and adhering to exercise. Organizing exercise sessions so that family and friends can join in, or using exercise time to walk the dog or spend time with children, may help with adherence and the common problem of time management. Cancer survivors report that they enjoy participating in group exercise with other survivors. Group exercise builds the belief and confidence that the survivor can succeed, not only in the program, but in other aspects of life. An example of a successful and individualized group program is LIVESTRONG at the YMCA.

Examples of Programs

LIVESTRONG at the YMCA is a program that builds on the science of exercise for cancer survivors, and the important social support and goal setting aspects that they demand. LIVESTRONG at the YMCA uses an individualized group approach to offer a program that includes a mix of aerobic, strength, flexibility, and balance exercises. Classes are offered at times that are convenient for the group and structured to meet the needs of each individual. Participants in the 12-week LIVESTRONG at the YMCA demonstrate improvements in leg, upper body and abdominal strength, and aerobic capacity. By the end of 2011, LIVESTRONG at the YMCA will be offered in 86 Y’s around the country. Most of these Y’s offer LIVESTRONG at the YMCA at no cost to cancer survivors. To find out if LIVESTRONG at the YMCA is offered in a community near you, go to www.livestrong.org/ymca.

Exercise does not have to be limited to traditional activities. Equine therapy is an approach to cancer rehabilitation that combines exercise and emotional intervention. Horses are supremely sensitive to the mood and feelings of people and respond as mirrors into the way a person is feeling. To be successful with the activities in a horse therapy program, the individual must quiet their body and mind, and become centered. With minimal help of a therapist, the horses’ response to a person gives the survivor insight into their actions and behaviors that may be limiting their success in life. Horses help survivors attain a state of being that helps people see inside themselves.

Equine therapy has also shown benefits that are similar to outcomes seen in aerobic exercise programs for cancer survivors. A study of 50 cancer survivors in an equine therapy intervention demonstrated significant improvements in aerobic capacity, strength, and quality of life outcomes, including mood, depression, and emotional well-being (Schwartz et al 2001). While not measured in this study, the physical movements of haltering a horse, grooming, and working with horses provide a gentle opportunity to move a limb that may be at risk for or affected by lymphedema.

Conclusion

Exercise is the best medicine we have for cancer recovery. Survivors need to be encouraged to exercise during and following cancer treatment. Programs such as LIVESTRONG at the YMCA can help...
survivors set and meet goals, and develop healthy lifestyles that improve their physical and emotional lives. These programs help them live healthier lives while reducing their risks for recurrence and development of other co-morbid diseases. There is no magic pill that can achieve all the benefits of exercise; exercise is a medicine that takes time and commitment, but yield tremendous benefits.

References


