Breast and Colon Cancer Survivors’ Expectations About Physical Activity for Improving Survival

Kristina Karvinen, PhD, and Jeff Vallance, PhD

Physical activity has become increasingly recognized for its role in improving health-related quality-of-life concerns (e.g., fatigue, pain, mood and sleep disturbances, cancer-specific issues) in cancer survivors, as well as improving fatigue and physical role, and social functioning in on-treatment survivors (Garcia & Thomson, 2014; Mishra, Scherer, Geigle, et al., 2012; Mishra, Scherer, Snyder, et al., 2012). The potential supportive care role that physical activity may play in the lives of cancer survivors has led to the development of physical activity guidelines and recommendations by the American Cancer Society (ACS) (Rock et al., 2012) and the American College of Sports Medicine (ACSM) (Schmitz et al., 2010); such guidelines and recommendations indicate that physical activity is safe for cancer survivors and that survivors should regularly engage in physical activity to maximize benefits to their quality of life and health.

Research has suggested that regular physical activity after cancer diagnosis may also be significant in improving survival outcomes in survivors of breast and colon cancer (Lemanne, Cassileth, & Gubili, 2013). For example, epidemiologic evidence from large-scale cohort studies has shown that participation in regular physical activity after diagnosis can result in as much as a 50% reduction in the risk of cancer mortality in breast and colon cancer survivors (Ballard-Barbash et al., 2012; Clague & Bernstein, 2012). Specifically, walking the equivalent of three and six hours per week after diagnosis has been found to be associated with a significant decrease in the risk of breast and colon cancer mortality, respectively (Lemanne et al., 2013). In addition, several randomized, controlled trials have provided evidence of potential mechanisms that link physical activity to reduced cancer mortality, including improving circulating levels of insulin, insulin-like growth factor 1 (IGF-1), IGF–1 binding proteins, and C-reactive protein and increasing natural killer cell cytotoxicity (Ballard-Barbash et al., 2012). Therefore, although not conclusive, the research to date suggests that physical activity after breast or colon cancer diagnosis could substantially improve cancer-specific survival outcomes.

Given the many possible benefits associated with physical activity among cancer survivors, researchers have attempted to understand motivational factors...