Randomized Pilot Test of a Simultaneous Stage-Matched Exercise and Diet Intervention for Breast Cancer Survivors

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Breast cancer and its treatments often are associated with adverse effects that can persist for years and decrease health-related quality of life (QOL) (Ahn et al., 2007; Vallance, Courneya, Plotnikoff, Yasui, & Mackey, 2007). In addition, survivors are at increased risk for developing secondary cancers and other morbidities, including cardiovascular disease, diabetes, and osteoporosis (Aziz & Rowland, 2003; Brown, Brauner, & Minnotte, 1993; Hewitt, Rowland, & Yancik, 2003). Evidence suggests that lifestyle behaviors such as regular exercise and a healthy diet can improve health-related QOL and relieve symptom problems and mood disturbances (Basen-Engquist et al., 2006; Blanchard et al., 2003; Courneya, Mackey, et al., 2003; Daley et al., 2007; Darga et al., 2007; Demark-Wahnefried, Rock, Patrick, & Byers, 2008; McBride, Emmons, & Lipkus, 2003; Pinto, Frierson, Rabin, Trunzo, & Marcus, 2005; Tangney, Young, Murtaugh, Cobleigh, & Oleske, 2002; Vallance et al., 2007; Wayne et al., 2006). Healthful lifestyle behaviors also reduce comorbidities, the risk of recurrence, and cancer-specific mortality (Chlebowski et al., 2006; Demark-Wahnefried, Aziz, Rowland, & Pinto, 2005; Demark-Wahnefried, Pinto, & Gritz, 2006; Hewitt et al., 2003; Hewitt, Greenfield, & Stovall, 2005).

Few studies have tested theoretically based interventions that can alter lifestyle behaviors. One such model, the transtheoretical model of change (TTM), is based on the idea that people’s readiness to change behavior progresses in stages. According to the TTM, individuals adopting a new behavior progress along the following continuum of five stages of change: precontemplation...