People living with or after cancer have to deal with the physical, psychosocial, and economic consequences associated with the disease and its treatments (Spoelstra, Given, von Eye, & Given, 2010). Increased life expectancy also brings with it the potential for increased doses of treatment, magnifying side effects and adverse outcomes of such treatments. One potential sequela of cancer is an increased risk of accidental falls, compounding the age-related decline in physical capacity that negatively affects the ability to maintain balance. This may be a direct pathophysiologic consequence of the disease or a side effect of its treatment.

Some cancers directly involve bone, muscle, and nerves (either peripheral nerves or the central nervous system), all of which play an important part in the maintenance of balance and prevention of falls. Physical activity restrictions of survivors are well documented, initiating deconditioning processes that subsequently may increase fall rates (Deimling, Sterns, Bowman, & Kahana, 2007). Fatigue and pain are common in survivors and also may reduce the amount of physical activity that people with cancer undertake, compounding the deconditioning effect.

Physiologically, treatments for cancer can exacerbate fatigue, pain, loss of aerobic endurance, and limitations in neuromuscular function, resulting in a major impact on everyday life (Gilliam & St. Clair, 2011; Schmitz et al., 2010).