

This material is protected by U.S. copyright law. Unauthorized reproduction is prohibited.  
To purchase reprints or request permission to reproduce, e-mail [reprints@ons.org](mailto:reprints@ons.org).

## Risks and Benefits of Soy Isoflavones for Breast Cancer Survivors

Shaojung A. Hu, RN, MSN, OCN<sup>®</sup>, and M. Tish Knobf, RN, PhD, FAAN, AOCN<sup>®</sup>

**Purpose/Objectives:** To present state-of-the-art information about the risks and benefits of soy isoflavones for breast cancer survivors.

**Data Sources:** Published research articles, pertinent articles and books, and computerized databases.

**Data Synthesis:** Some epidemiologic data suggest that soy isoflavones play an important role in preventing breast cancer in Asian women and promoting women's health in a variety of ways. However, the use of soy isoflavones in women with breast cancer is controversial. Risks and benefits exist regarding the use of soy isoflavones by breast cancer survivors.

**Conclusions:** The use of soy isoflavones to promote health in breast cancer survivors remains controversial because of scant scientific data.

**Implications for Nursing:** Nurses should not only provide updated information to the public but also interpret research results carefully. More clinical trials need to be conducted on a longitudinal basis with the enrollment of breast cancer survivors.

### Key Points . . .

- ▶ As a complementary therapy, soy has the potential to prevent breast cancer and may alleviate menopausal symptoms in women.
- ▶ The use of soy isoflavones to promote health in women with breast cancer remains controversial.
- ▶ Nurses have the responsibility to interpret research results carefully, provide updated information, and educate the public about soy.

### Goal for CE Enrollees:

To enhance nurses' knowledge about the current research related to the risks and benefits of soy isoflavones for breast cancer survivors.

### Objectives for CE Enrollees:

- On completion of this CE, the participant will be able to
1. Identify the proven and proposed health benefits of soy isoflavones.
  2. Describe the results of research related to the effects of soy isoflavones on menopausal symptoms.
  3. Discuss the current research related to the use of soy isoflavones by breast cancer survivors.

Soy has the potential to alleviate menopausal symptoms (Boon et al., 2000; Burstein, Gelber, Guadagnoli, & Weeks, 1999; Burstein & Winer, 2000) and has been explored as an alternative to HRT for women with breast cancer. However,

*Shaojung A. Hu, RN, MSN, OCN<sup>®</sup>, is a clinical nurse at the University of California, Los Angeles, Medical Center, and M. Tish Knobf, RN, PhD, FAAN, AOCN<sup>®</sup>, is an associate professor at Yale University and American Cancer Society Professor of Oncology Nursing in New Haven, CT. (Submitted September 2002. Accepted for publication May 1, 2003.)*

Digital Object Identifier: 10.1188/04.ONF.249-263

**B**reast cancer is the most common malignancy and second leading cause of death for American women (American Cancer Society, 2004). In 2004, an estimated 215,990 American women are expected to be diagnosed with breast cancer and more than 40,000 will die from the disease (American Cancer Society). As a result of improvements in early detection and advances in cancer therapy, the number of breast cancer survivors and their life expectancy has increased (American Cancer Society; Beckmann et al., 2001; Vassilopoulou-Sellin & Theriault, 1994).

Breast cancer survivors are a unique population with different concerns and perspectives than women without cancer. Physical effects of breast cancer and treatments may persist up to 10 years after therapy has been completed (Ganz et al., 2002). Fear of cancer recurrence is a dominant issue that influences survivors' psychological well-being (Carter, 1993; Dow, 1999; Ferrell et al., 1996; Wyatt, Kurtz, & Liken, 1993). Breast cancer survivors who undergo premature menopause associated with adjuvant chemotherapy may experience vasomotor symptoms that are more frequent or severe (Burstein & Winer, 2000; Carpenter, 2000; Ganz, Rowland, Desmond, Meyerowitz, & Wyatt, 1998; Knobf, 2001). Hormone replacement therapy (HRT) generally is contraindicated for women with breast cancer (Poniatowski, Grimm, & Cohen, 2001; Vassilopoulou-Sellin & Theriault, 1994). The benefits of HRT on menopausal symptom distress are well established, but breast cancer survivors must explore alternative options for menopausal symptom relief.