

Nutrition, Supplementation and Lifestyle Considerations for Women Age 45 and Older

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As women approach menopause, a number of hormonal changes set the stage for the development of menopausal symptoms, along with increased risk for heart disease, osteoporosis and breast cancer. Studies reveal that several important factors related to nutrition, supplementation and lifestyle can help to combat menopausal symptoms naturally, slow various aspects of aging, and help reduce risk of heart disease, osteoporosis and breast cancer during the perimenopausal, menopausal and postmenopausal years.

This article provides an overview of the important physiological changes women face at age 45 and older, and the evidence-based lifestyle practices that have been shown to help maintain and improve quality of life and reduce the risk of several common degenerative diseases.

Combating Perimenopausal and Menopausal Symptoms Naturally

When a woman enters menopause, estrogen levels drop by up to 90%, progesterone by up to 66%, and testosterone by up to 50%. These hormonal changes accelerate the aging process of the skin and reproductive tissues, facilitate the loss of calcium from bone, and trigger a constellation of menopausal symptoms (hot flashes, night sweats, mood changes, concentration ability, insomnia, etc).

Clinical studies have shown that the estrogen-like substances found in black cohosh, soy isoflavones and gamma-oryzanol (found in rice bran oil) can significantly reduce menopausal symptoms; support skin health and integrity of the female reproductive tract and other tissues; help prevent loss of calcium from bone; and improve the feeling of well-being. Recent studies have shown that the use of hormone replacement therapy increases the risk of breast cancer, heart disease and stroke. Thus, providing women with safe and effective natural alternatives to hormone replacement therapy is much-appreciated, timely information.

Note that red clover, angelica species (*dong quai*) and licorice root also can reduce menopausal symptoms, but these herbal substances may increase risk of internal bleeding (bleeding disorder into the brain, under the skin, etc.), due to the presence of coumarins contained in these herbal substances. Licorice root also may elevate blood pressure. Thus, the safest combination of natural agents to support female well-being during and after menopause, in my view, includes black cohosh, soy isoflavones and gamma-oryzanol.

Heart Disease

After menopause, women become less able to clear cholesterol from their bloodstream, which contributes greatly to the fact that heart disease is the number-one cause of death in postmenopausal women. During the premenopausal stage of life, high circulating estrogen levels increase the production of LDL-cholesterol receptors, which enable cells to extract LDL cholesterol from the bloodstream and use it for various purposes. The dramatic drop-off in circulating estrogen levels in menopause reduces the ability of cells to produce LDL-cholesterol receptors. As a result,

there is a strong tendency for cholesterol to accumulate in the bloodstream, stick to the walls of the arteries, and cause narrowing of coronary blood vessels, leading to heart attack.

As a diet high in saturated fat is the main culprit in raising LDL-cholesterol levels, postmenopausal women should adjust their diet to lower their saturated fat intake, in order to keep blood cholesterol levels below 5.2 mmol/L (200 mg per dL). This implies that one should choose lower fat, protein foods consisting of chicken, turkey, Cornish hen and fish, and ensure that all milk and yogurt products consumed are nonfat or 1% varieties. This also suggests that no cheese above 3% milk fat should be consumed, and that butter, ice cream, whipping cream, regular chocolate products, items containing coconut or palm oil, and deep-fried products of all types should be avoided or reduced significantly.

Increasing soluble dietary fiber intake also can reduce blood cholesterol levels by dragging cholesterol out of the body, as well as bile acids, which can serve as precursors (building blocks) to the synthesis of cholesterol in the liver. Soluble fiber is found in most fruits and vegetables, oat bran, psyllium husk fiber, ground flaxseeds, and beans and peas. Remaining physically fit and at or near one's ideal weight are other important lifestyle factors in preventing cardiovascular disease in the postmenopausal years. Soy products and the herbal agent gamma-oryzanol also have been shown to reduce blood cholesterol levels, in addition to their role in helping to alleviate menopausal symptoms.

Osteoporosis

The decline in estrogen levels that accompanies the menopausal years also permits calcium to leak out of bone into the bloodstream, where it will eventually become filtered by the kidneys and exit the body in urine. This, of course, can lead to osteoporosis, which increases risk of fractures. Osteoporosis is reaching epidemic proportions in our society, largely due to insufficient calcium intake and accumulation in bone (especially between the ages of 11 and 24), and loss of calcium from bone during the menopausal years. It should be noted that Canadian statistics indicate complications from osteoporotic hip fractures (e.g., the development of pneumonia) result in more deaths each year than the combined mortality rate from breast and ovarian cancers. The lifestyle recipe to help prevent osteoporosis during the menopausal years is as follows:

1. Ingest 1,500 mg per day of calcium. This can be through a combination of calcium from food and supplements. Note that a high-potency multivitamin/mineral should provide 400-500 mg of calcium as a starting point.
2. Supplement with 600 to 1,000 IU of vitamin D. For general health reasons, women should consider taking a high-potency multiple vitamin/mineral that contains 400 IU of vitamin D throughout adult life. Studies show that postmenopausal women ingesting an additional 200-400 IU of vitamin D per day may reduce their risk of hip fractures by approximately 50%. As we age, our kidneys reduce their ability to convert 25-hydroxyvitamin D to 1,25-dihydroxyvitamin D, which is twice as powerful a form of vitamin D than 25-hydroxyvitamin D. However, studies indicate that by increasing blood levels of 25-hydroxyvitamin D through the intake of vitamin D supplements (600-1,000 IU per day), a postmenopausal woman can compensate for the drop-off in 1,25-hydroxyvitamin D synthesis, and thereby, significantly reduce her risk of osteoporotic fractures.
3. Perform weight-bearing and/or resisted exercises four to seven times per week. Weight-bearing exercise (such as walking or jogging) and weight-training exercises place increased stress on the spine and hips, which respond by holding their calcium in bone to help withstand the physical stresses acting on the bone structures. The groundbreaking study performed at Tuft University by ME Nelson, et al. (*JAMA*, 1994) showed that postmenopausal women can increase their bone density, without using hormone replacement therapy, by simply ingesting more calcium and performing a specific series of five weight-training

exercises, twice per week on a year-round basis. The five gym-based exercise stations included: hip extension machine, back extension machine, abdominal flexion machine, knee extension machine, and lateral pull-down cable station.

Breast Cancer

It is well-documented that women who are overweight during their postmenopausal years have approximately a three-times-greater risk of developing breast cancer. This is likely due to the fact that as fat mass increases, there is a greater conversion of the hormone androstenedione to estrone within fat tissue. Higher circulating estrone hormone (one of three types of estrogens made by the female body) levels are associated with increased risk of breast cancer, as estrone is known to increase the cell division rate of breast cells. In turn, this leads to a greater chance of potentially cancerous genetic mutations occurring. This is exactly the same mechanism through which hormone replacement therapy has been shown to increase breast cancer risk. Thus, postmenopausal women are advised to attain and maintain an ideal body weight.

Summary

As women approach the menopausal years, holistic health practitioners should provide them with scientifically-based nutrition, supplementation and lifestyle advice aimed at helping them manage the perimenopausal and menopausal period with natural alternatives to hormone replacement therapy, and build up their defenses against heart disease, osteoporosis and breast cancer, which account for a high percentage of morbidity and mortality during the postmenopausal years.

Editor's note: For a list of references/resources associated with this article, contact Dr. Meschino at jim@renaisante.com.

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