

# MENOPAUSE

Menopause is the cessation of menstrual cycles, occurring for most women between the ages of 47 and 55 years. During perimenopause, as estrogen levels decrease, women often experience hot flashes, night sweats, vaginal dryness, and mood swings. While some women experience debilitating symptoms, others transition through this time with few complaints. Unless precipitated by surgery or illness, menopause is part of the natural aging process. As such, women should be reminded to consider this time as an opportunity to celebrate their beauty, strength, and vitality by recommitting to a healthy lifestyle.

## DIAGNOSIS

Menopause is a retrospective, clinical diagnosis made after 12 months of amenorrhea, resulting from the cessation of ovarian follicle production. At this time, follicle-stimulating hormone (FSH) levels rise significantly in an attempt to stimulate follicle production. Although an elevated FSH level is diagnostic of menopause, FSH levels are not routinely checked, as the level varies greatly in the months leading up to menopause due to irregular and missed menstruation. Clinicians should consider checking FSH and estradiol levels for symptomatic women less than 40 years old with missed periods, in whom premature ovarian failure is suspected.[1-3]

Controversy exists regarding the practice of measuring hormone levels for the diagnosis, treatment, and monitoring of menopause and its symptoms. Testing may not be reliable depending on the source (serum, saliva, or urine) and the method of hormone replacement administration. Because of the lack of research, routine testing is likely unnecessary for most women.[4] The diagnosis of menopause should be made based on clinical findings; treatment is based on symptoms.

## A HEALTHY, COMPREHENSIVE APPROACH TO MENOPAUSE

Before addressing specific symptoms, clinicians should review the importance of a comprehensive approach to wellness during the menopausal transition. Cardiac and bone health should be addressed because of the increased risk of coronary artery disease and osteoporosis.

## DIET

A healthy diet is always important, especially during menopause.

- Review a healthy diet to maintain an optimal body weight. For many, this diet incorporates whole, unprocessed foods consisting of primarily fruits and vegetables; whole grains, and low-fat protein. For more information, refer to "[Food and Drink](#)," a Whole Health overview.

- Encourage foods high in calcium, with the goal of 1,000-1,200 mg daily as recommended by the Institute of Medicine.[5] If possible, encourage calcium intake from dietary sources. Refer to Table 1.
- Consider adding sources of phytoestrogens, including soy and flax, for their health benefits and possible improvement in menopausal symptoms. For more information, refer to "[Phytoestrogens](#)" Whole Health tool.

**TABLE 1. FOODS HIGH IN CALCIUM**

<b>Food</b>	<b>Amount of calcium (mg/serving)</b>
Yogurt, low-fat, 8 ounces	315-415
Mozzarella, 1.5 ounces	330
Sardines, canned 3 ounces	325
Cheddar cheese, 1.5 ounces	300
Cow's milk, 8 ounces	250-300
Orange juice, calcium fortified, 6 ounces	250
Tofu, with calcium sulfate, ½ cup	140-250
Salmon, canned, 3 ounces	180
Cottage cheese, 1 cup	140
Kale, 1 cup	100
Almonds, 1 ounces (22 almonds)	75
Flaxseed, 1 tablespoon	25
Broccoli, ½ cup	20

## SUPPLEMENTS

**Note:** Please refer to the [Passport to Whole Health](#), Chapter 15 on Biologically-Based Approaches: Dietary Supplements for more information about how to determine whether or not a specific supplement is appropriate for a given individual. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Although many supplements can be beneficial during menopause, assessing for adequate vitamin D supplementation and omega-3 fatty acid intake is especially important during this time.

**Vitamin D.** The Institute of Medicine recommends 600 IU daily for women <70 years and 800 IU daily for women >70 years.[5] Consider checking a 25-hydroxy vitamin D level or supplementing with higher doses of 1,000-2,000 IU daily for women at higher risk of deficiency (northern/southern climates, darker skin, elderly) to support bone health.

**Omega-3 fatty acids.** The American Heart Association (AHA) recommends eating two, 3.5-ounce servings of fatty fish a week because of the health benefits of the omega-3 fatty acids DHA (*docosahexaenoic acid*) and EPA (*eicosapentaenoic acid*). In those with documented coronary heart disease, the AHA recommends consuming 1 gm of combined EPA and DHA daily, either through fish or in supplement form. Assess dietary intake of fish and omega-3 fatty acids, considering supplementation for those with difficulty obtaining omega-3s through their diet. Other great sources include walnuts, ground flaxseed, and leafy green vegetables.

## MOVEMENT

Prescribe moderate exercise for at least 30 minutes on most days of the week. Exercise should include muscle strengthening, weight-bearing activities, and yoga or tai chi to strengthen the mind-body connection. A 2011 Cochrane review found that non-weight-bearing, high-force activities such as progressive resistance strength training was most effective in increasing femur neck bone density,[6] whereas combinations of aerobic activity and weight-bearing and resistance exercises improved bone density of the spine.

## LIFESTYLE

Everyday behaviors, patterns, and choices influence how we feel.

- Assess for substance use or misuse, including tobacco, drugs, and excessive alcohol intake.
- Support a healthy sleep-wake cycle. For more information, refer to the Whole Health overview "[Recharge](#)."
- Encourage use of light, loose-fitting clothing in layers to adjust to changing body temperatures.
- Evaluate for healthy stress management. The body's stress hormone, cortisol, is made from precursors that include progesterone. With an increasing need for cortisol production because of high stress, progesterone levels may decrease, disrupting the balance of estrogen and progesterone in the body. Review approaches for decreasing stress, in addition to coping techniques, relaxation exercises, and mind-body practices.

## POWER OF THE MIND

Encourage exploration of the mind-body connection to bring awareness to menopause as a life transition.

- Explore helpful tools including breathing exercises, mindfulness meditation, yoga, tai chi, or Guided Imagery. For more information, refer to the Whole Health tools “[Breathing](#),” “[Meditation](#),” “[Yoga: Looking Beyond 'The Mat'](#),” and “[Guided Imagery](#).”
- “Mastering Menopause,” a CD by Belleruth Naparstek, includes Guided Imagery practices to help with sleep, reinforce self-esteem, and redefine beauty and aging.

## SPIRITUALITY

Encourage a connection in life that gives a greater sense of meaning and purpose.

- Explore helpful tools including journaling, meditation, or connecting with religious or spiritual communities.
- Suggest connecting with wise, older women who have transitioned into and through menopause.

## APPROACHES TO TREATING MENOPAUSAL SYMPTOMS

Although hormone replacement therapy (HRT) is an effective treatment for many menopausal symptoms, it is also associated with potential risks. Many therapies, including botanicals and lifestyle changes, offer alternative approaches that may improve symptoms with less risk. For a more thorough discussion on hormone replacement, refer to “[Hormone Replacement Therapy](#)” Whole Health tool.

## HOT FLASHES

Many women experience hot flashes during perimenopause and menopause. For some, they can be debilitating, and for others, they are better tolerated when viewed as a surge of heat or power. In some cultures, no word even exists for hot flash.[7] Experiences may vary based on diet, lifestyle, or cultural perception.

**Black cohosh** (*Cimicifuga racemose*) is an herb with estrogenlike properties. Results are inconsistent for the effects of black cohosh on menopausal symptoms, with significant variation among the herbal preparations studied. A Cochrane review in 2012 concluded that the evidence for use of black cohosh for menopausal symptoms was insufficient; however, “there is adequate justification for conducting further studies in this area.”[8] The most conclusive evidence is for a commercial product Remifemin, containing 1 mg of triterpenes per 20 mg tablet. Studies show it significantly reduces menopausal symptoms and hot flash frequency when compared to placebo.[9] The standard dose is 40 mg once or twice daily. Side effects are rare; the most common is mild gastrointestinal discomfort.

Because a small number of women have experienced liver problems while taking black cohosh, consider monitoring liver function tests with prolonged use and avoid use in

women with liver disease. The use of black cohosh for longer than 6 months has not been well-studied. More information is available in the Whole Health tool "[Top Supplements for Every Clinician to Know.](#)"

**Phytoestrogens** are plant compounds with structures similar to estrogen, resulting in the ability to cause estrogenlike effects on the body. The North American Menopause Society's Isoflavones Report from 2011 concluded, "there are mixed results of the effects on midlife women. Soy-based isoflavones are modestly effective in relieving menopausal symptoms." [10]. The variation in therapeutic effects of phytoestrogens in the treatment of menopause may be influenced by a woman's intestinal bacteria and its ability to metabolize phytoestrogens into therapeutic substances in the body (i.e. converting daidzein into equol). [11]

Multiple meta-analyses have documented improved frequency of hot flashes with use of isoflavones in doses ranging from 50-100 mg daily. [11-15] Refer to the "[Phytoestrogens](#)" Whole Health tool for increasing dietary intake. For more information on the use of soy, a particular type of phytoestrogen and its use in breast cancer, refer to the Whole Health overview "[Cancer Care.](#)"

**Red clover** (*Trifolium pratense*) contains isoflavones, a type of phytoestrogen. A systematic review of 10 trials concluded that red clover supplementation of 80 mg daily improved frequency of hot flashes and improved vaginal dryness, with more significant effects in women with severe hot flashes (>5/day). [16] Side effects are rare.

**Regular exercise** has significant benefits for overall health and well-being. However, a Cochrane review in 2007 concluded the evidence was insufficient to determine the effectiveness of exercise on hot flashes. [17] In a recent study, regular exercise did not alleviate hot flashes, but did result in improved sleep and mood. [18]

**Acupuncture** has been shown to reduce the frequency and severity of vasomotor symptoms in perimenopause and menopause, both individually and as adjunctive treatment. [19] Research also supports its use in reducing sleep disturbances caused by menopause-related symptoms. [20]

**Yoga** studies suggest that it is effective in reducing menopausal symptoms. Yoga was superior to other exercise for treatment of vasomotor symptoms. [21,22]

**Other therapies** some women find significant benefit from include alternative therapies and approaches such as energy work, traditional Chinese medicine, or Ayurveda for treatment of their menopausal symptoms, although extensive research has not yet been done. Use of mindfulness, meditation, and hypnosis have not shown improvement of menopausal symptoms. [23] Tai chi has been shown to improve overall general health, vitality, and bodily pain. [24] One must consider potential side effects and risks when considering these therapies.

**Prescription medications** have been shown to help with menopausal symptoms, particularly hot flashes. Consider a trial of clonidine, gabapentin, a selective serotonin

reuptake inhibitor, SSRI), or a serotonin norepinephrine reuptake inhibitor (SNRI). Evidence specific to medications will not be reviewed here.

## MOOD SWINGS AND IRRITABILITY

Menopause is often a time of transition for most women, and life stressors in combination with changing hormone levels can result in some women feeling more sad and irritable. Healthy eating, regular exercise, and self-care are important to maintaining a stable mood. There are supplements that may also help

**St. John's wort** (*Hypericum perforatum*) is commonly used for depression, and has been shown to improve mood and climacteric complaints in menopausal women. In one particular study, women using the combination of St. John's wort and black cohosh reported improved scores for general menopausal symptoms and depression when compared to placebo.[25] The suggested dose is 300 mg three times daily (standardized to 0.3% hypericin or 4%-5% hyperforin). St. John's wort is generally well-tolerated, but should be used with caution in combination with other medications metabolized through the P450 system.

## VAGINAL DRYNESS

As estrogen levels decrease in menopause, some women may experience vaginal dryness, leading to irritation and painful intercourse. Intravaginal estrogen will significantly improve dryness, but there are many other products and interventions that can help.

**Vaginal moisturizers.** Women with vaginal dryness should use a vaginal moisturizer daily to maintain moisture and flexibility. Women should massage the product in small, circular strokes into the inner vagina and outer vulvar region once a day for five minutes, using a vibrator for internal placement and massage. Waiting two to four weeks after starting a vaginal moisturizing regimen may be necessary before resuming sexual intercourse.

When having intercourse, women should also be counseled to use a lubricant to reduce discomfort from friction. Lubricants with glycerin should be avoided if prone to yeast infections. Avoid petroleum jelly and oil-based lubricants because the vagina cannot clear oils and these substances can dissolve the latex in condoms.

**Herbs and supplements.** A systematic review of 17 trials suggested that soy isoflavones may decrease vaginal symptoms in menopausal women when compared to control.[26] Refer to the "[Phytoestrogens](#)" Whole Health tool for more information.

**Sex and menopause.** Despite hormonal changes, a healthy sex life is possible during and after menopause. Encourage women to actively treat vaginal dryness, to touch and be touched, and to have sex regularly. Weekly orgasms help maintain healthy blood flow and sensation.[27] For more information about sex and menopause, check out the book *Better Than I Ever Expected* by Joan Price.

## RESOURCES

- *Women's Bodies, Women's Wisdom: Creating Physical and Emotional Health and Healing*, by Christiane Northrup, MD. Bantam Books; 2010.
- *Our Bodies, Ourselves: Menopause*, by Boston Women's Health Book Collective. Touchstone; 2010.
- *Better than I Ever Expected: Straight Talk About Sex after 60*, by Joan Price. Seal Press; 2006.
- [A Woman's Touch](#) – Retail and information

## RESOURCE LINKS

- "[Breathing](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/breathing.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/breathing.asp>
- "[Cancer Care](https://www.va.gov/WHOLEHEALTHLIBRARY/professional-care/cancer-care.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/professional-care/cancer-care.asp>
- "[Food and Drink](https://www.va.gov/WHOLEHEALTHLIBRARY/self-care/food-and-drink.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/self-care/food-and-drink.asp>
- "[Guided Imagery](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/guided-imagery.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/guided-imagery.asp>
- "[Hormone Replacement Therapy](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/hormone-replacement-therapy.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/hormone-replacement-therapy.asp>
- "[Meditation](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/meditation.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/meditation.asp>
- [Passport to Whole Health](https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Passport_to_WholeHealth_FY2020_508.pdf): [https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Passport\\_to\\_WholeHealth\\_FY2020\\_508.pdf](https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Passport_to_WholeHealth_FY2020_508.pdf)
- "[Phytoestrogens](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/phytoestrogens.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/phytoestrogens.asp>
- "[Recharge](https://www.va.gov/WHOLEHEALTHLIBRARY/self-care/recharge.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/self-care/recharge.asp>
- "[Top Supplements for Every Clinician to Know](https://wholehealth.wisc.edu/tools/top-supplements-for-every-clinician-to-know/)": <https://wholehealth.wisc.edu/tools/top-supplements-for-every-clinician-to-know/>
- "[Yoga](https://www.va.gov/WHOLEHEALTHLIBRARY/tools/yoga.asp)": <https://www.va.gov/WHOLEHEALTHLIBRARY/tools/yoga.asp>

## AUTHOR(S)

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