

LEF Magazine June 1998

On The COVER

MENOPAUSE

Stopping The Symptoms Before They Stop You

Women are no longer limited in their choices between enduring menopausal symptoms, or risking the side effects of estrogen drug therapy. Nature offers a happy alternative.

By William Faloon

Women face a perplexing dilemma starting around age 45 to 50. The amount of estrogen naturally produced by their bodies dwindles, causing a wide range of menopausal miseries, including hot flashes, depression, vaginal dryness, anxiety and forgetfulness. The menopausal decline in estrogen production is a direct cause of premature aging.

Forty-five million women are menopausal in the United States today, and another 3.5 million women will become menopausal this year. Based on life expectancy trends, women face the prospect of spending the last one-third to one-half of their lives in a state of hormonal imbalance. The quality and quantity of life for these women will be determined by how well they (and their doctors) manage their hormone-replacement needs.



But there's a problem. While estrogen's benefits make it desirable for most menopausal women to maintain youthful levels of this hormone, Food and Drug Administration-approved estrogen drugs have been documented to increase the risk of cancer. The most conclusive report, based upon data from the famous Nurses' Health Study conducted at Harvard Medical School, showed that women taking estrogen and a synthetic progestin had a 32 to 46 percent increase in their risk of breast cancer (New England Journal of Medicine, June 15, 1995).

The answer to this dilemma-how to obtain the anti-aging benefits of estrogen without increasing the risk of cancer, arterial blood clots and a host of nasty side effects-may well be found in nature. A review of the published literature reveals some interesting findings about how plant-derived estrogens can provide safe and effective female sex hormone replacement therapy, and help alleviate such menopausal symptoms as depression, anxiety, insomnia and vaginal atrophy.

Brightened Outlooks

The most impressive study on black cohosh and its impact on menopausal symptoms (Gynecology 1, 1982 14-16) was carried out by 131 physicians on 629 menopausal women. This study showed that black cohosh extract produced clear improvement in more than 80 percent of patients within six to eight weeks. Both physical and psychological symptoms improved. Most patients reported noticeable benefits within four weeks. After six to eight weeks, complete resolution of symptoms was reported in a high number of patients. Here were the results on specific menopausal symptoms:

SYMPTOM	Percent of women who became symptom-free	Percent of women who showed improvement
Hot flashes	43.3 percent	86.6 percent
Profuse perspiration	49.9 percent	88.5 percent
Headache	45.7 percent	81.9 percent

Vertigo	51.6 percent	86.8 percent
Heart palpitations	54.6 percent	90.4 percent
Tinnitus	54.8 percent	92.9 percent
Nervousness/irritability	42.4 percent	85.6 percent
Sleep disturbances	46.1 percent	76.8 percent
Depressive moods	46.0 percent	82.5 percent

The most widely studied plant component used to treat menopause is a standardized extract from the black cohosh plant, whose scientific name is *Cimicifuga racemosa*. This black cohosh extract is approved by the German Ministry of Health for the treatment of menopausal symptoms related to estrogen deficiency. Standardized black cohosh has been trademarked under the name Remifemin, and not only alleviates hot flashes but also aids depression, anxiety, vaginal atrophy and a host of other menopausal-related disorders.

In addition, phytoestrogens from soy have been documented to reduce hot flashes and protect against such age-related diseases as osteoporosis, heart disease and cancer.

Another natural therapy, this one an extract of licorice root, glycyrrhetic acid, is a safe source of natural estrogen, as supported by numerous studies. The Chinese have successfully used licorice extracts for more than 3,000 years to treat menopausal disorders.

And dong quai extract, a traditional Chinese medicine, also has been successfully used to alleviate pre-menstrual syndrome and menopausal symptoms by helping to normalize hormone levels.

Let's take a look at each of these natural approaches to treating menopausal symptoms, and the reasons why scientists-and women-have reason to be optimistic about finding alternatives to prescription therapies.

A fascinating study involved 60 women given either standardized black cohosh extract, Valium or Premarin (conjugated estrogens) for menopausal symptoms. The women in the black cohosh group were relieved of depression and anxiety more effectively than the women in the Valium or Premarin group. This study was published in a German language medical journal (*Med Welt* 1984, 36 871-874).

Is it any wonder that the pharmaceutical industry tries to keep natural European therapies off the American market? Premarin and Valium have been among the best-selling drugs on the U.S. market for decades, yet produce terrible side effects (see the story on the following page). European women, on the other hand, have been using a safe, natural herbal extract that's been shown to work better in alleviating depression and anxiety than these two widely prescribed FDA-approved drugs.

Another study on black cohosh extract involved women under the age of 40 who produced very little natural estrogen or progesterone because their ovaries had been removed (hysterectomy). One group received estriol (a weak but safe form of estrogen), the second group received Premarin, the third received Premarin and a progestin drug (an agent that causes the uterus to mimic pregnancy conditions), the fourth black cohosh extract, and the fifth group was given a placebo.

This 24-week study rated women according to symptoms that included hot flashes, irritability, heart palpitations and other post-menopausal symptoms. The results of the study showed that women experienced a 30 percent improvement in all groups receiving different forms of estrogen-progestin or black cohosh extract. There was no improvement in the placebo group. At the conclusion of the study, the majority of women receiving the estrogen drugs or black cohosh extract were symptom-free. The women receiving the black cohosh extract, however, reported fewer side effects. This study was published in the German journal *Zent bl. Gyna kol* (1988, 110, 611-618).

How does black cohosh work? A placebo-controlled study published in the German journal *Planta Med.* 57 (1991) pointed out that hot flashes correspond closely with a surge of luteinizing hormone released from the pituitary gland in response to estrogen deficiency. Black cohosh was shown to suppress increased luteinizing hormone secretion in menopausal women, and this effect was specifically linked with a reduction in the incidence of hot flashes.

Black cohosh extract has shown estrogenic effects within the body in several studies, but it does not elevate estrogen levels in the blood. It appears to bind to estrogen receptors in order to mimic the hormonal effects of the weak estrogen estriol. Estriol has been shown to protect against the types of cancers that more potent forms of estrogen (estradiol and estrone) appear to cause. Black cohosh extract has been referred to as being "estriol-like" because of the rejuvenating effect it exerts on the vaginal, rather than the uterine lining.

Because of the impressive safety record of standardized black cohosh extract, it is an effective natural alternative to FDA-approved estrogen drugs that can cause uterine bleeding, gallbladder disease, pancreatitis, uterine fibroids, fibrocystic diseases and certain hormone-induced cancers.

While black cohosh has attracted its share of attention, a soy extract that provides at least 50 mg of soy phytoestrogens also can be a key ingredient for effective natural estrogen replacement therapy. There are compelling research findings showing that soy phytoestrogens may be just as effective as-but safer than-FDA- approved estrogen drugs.

Kenneth D. Setchell, Ph.D., of Children's Hospital and Medical Center in Cincinnati, Ohio, confirmed the estrogenic activity of the principle soy isoflavones daidzein, genistein and glycitein. Setchell conducted research on the chemical structure and metabolism of soy phytoestrogens, and concluded that consuming modest amounts of soy protein results in relatively high blood concentrations of phytoestrogens, which could have a significant hormonal effect in many individuals.

In a study in the American Journal of Clinical Nutrition (1994, 60, 333-340), 27 women with an average age of 56 years were studied to assess if supplementation with soy phytoestrogens could reduce the frequency of hot flashes. These women were given 80 mg of soy phytoestrogens or placebo for two months. The authors concluded that soy phytoestrogens demonstrated estrogenic hormonal activity and reduced hot flashes, compared with placebo.

At a 1996 conference in Brussels, Belgium, titled "The Role of Soy In Medicine," there were numerous clinical studies presented showing that soy phytoestrogens in doses ranging from 40 mg to 160 mg a day produced rapid and significant reductions in menopausal symptoms. Other studies presented showed that, in countries where soy is a major constituent of the diet, women do not suffer discomforting menopausal symptoms the way Western women do.

Dr. Paolo Fanti of the University of Kentucky in Lexington studied the effects of genistein from soy on bone loss in female rats whose ovaries had been removed in order to mimic the conditions of post-menopausal women. Dr. Fanti found the protective properties of genistein seem to lie in the stimulation of bone formation, rather than estrogen's effect of suppressing bone resorption. Although both estrogen and genistein protect against bone loss after cessation of ovarian function, genistein reduces both trabecular and compact bone loss.

A six-month study on 66 post-menopausal women was conducted at the University of Illinois at Urbana-Champaign to investigate bone density and bone mineral content in response to soy therapy. In this study, post-menopausal women received on a daily basis either phytoestrogens derived from soy protein or milk-derived protein that contained no phytoestrogens.

Scientific studies show that soy phytoestrogens increase bone density, and that this might help to prevent osteoporosis.

The results showed significant increases in bone density and bone mineral content in the lumbar spine among the women receiving the phytoestrogens derived from soy protein diets, compared with the control diet. Increases in other skeletal areas also were noted in the women on the soy diets. The scientists concluded that soy isoflavones, the weak estrogen contained in soy, show real potential for maintaining bone health.

Researchers at the Primate Research Center at Bogor Agricultural University in Indonesia stated that one reason estrogen replacement therapy is effective in reducing the risk of coronary heart disease may be due in part to its antioxidant properties. For example, in studies using female monkeys who had their ovaries removed, it was shown that genistein inhibited LDL oxidation by 48 percent. When used in combination with vitamin E this effect was even more pronounced.

There are now enough phytoestrogens in new soy extracts for many women to derive effective estrogen replacement therapy. Unlike estrogen drugs, however, phytoestrogens have a balancing effect on the body. When estrogen levels are too low, their very mild estrogenic effects raise total estrogenic activity. When too high, they compete with estrogen at cell membrane receptor sites, thus lowering total estrogenic activity in cells.

It is important to understand that estrogens are continually being modified as they circulate in the body. They are converted from one form to another and are outfitted with numerous other compounds that cause their biological activity to vary considerably. While it may appear that the combination of standardized black cohosh and soy phytoestrogens can provide complete estrogen replacement, there are other hormonal factors to adjust for if the metabolism of youth is to be maintained or restored.

An extract from the licorice root called glycyrrhetic acid (GA) stimulates the natural conversion of testosterone to estrogen in the body, and, as an antioxidant, is often used to protect the liver and suppress viral activity in hepatitis patients. Offshore cancer clinics prescribe high doses of GA in injectable form to patients because of studies showing that it modulates immune function and suppresses cancer-cell replication.

It is interesting to note that while FDA-approved estrogen drugs can cause abnormal blood clotting, the GA contained in licorice root

inhibits the clotting factor thrombin, thus reducing the risk of a heart attack or stroke. Licorice root extracts have many disease-fighting applications, but for menopausal women the most important factor is that glycyrrhetic acid extracted from licorice is a safe source of natural estrogen. Numerous studies also indicate that GA is an effective estrogen replacement therapy in humans.

Another possible natural therapy for post-menopausal symptoms is the Chinese herb dong quai. Dong quai extract has shown a muscle-relaxant effect, and has been used as an analgesic and anti-inflammatory agent. Scientists believe that one unique mechanism of action of dong quai is to promote natural progesterone synthesis, another hormone whose production declines at menopause.

Progesterone is more important than estrogen for preventing and treating osteoporosis because progesterone is directly involved in the production of bone-forming cells called osteoblasts. Many menopausal women use a topical natural progesterone cream to provide for direct absorption of progesterone into the bloodstream.

Another hormone imbalance that women encounter as they grow older is excessive prolactin secretion from the pituitary gland. Prolactin interferes with the beneficial effect of estrogen and may promote the development of estrogen-induced cancers. Prolactin secretion may be suppressed by a natural extract called vitex agnus castus. In a study in the German medical journal *Arzneim.-Forsch/Drug Res* (43 (II), 7, 1993), vitex agnus castus extract was shown to suppress excessive prolactin secretion and promote natural progesterone synthesis over a three-month period. As with the other plant hormone-modulating extracts, no side effects were observed.

(Editor's note: Prolactin is so dangerous in patients with hormone-dependent cancers that the Life Extension Foundation advocates prolactin suppression drug therapy for breast and prostate cancer patients.)

When the Foundation investigated natural estrogen products sold in health food stores, we found that many companies are not using the standardized plant extracts that had been used in the published studies to treat menopausal symptoms. Phone calls to these companies confirmed that many extracts were one-to-one ratios, which means that relatively little active ingredient was present.

In designing a multi-ingredient phytoestrogen supplement, the Foundation searched the world for the most concentrated pharmaceutical extracts. We were able to identify laboratories that had perfected extraction techniques to produce ten-to-one extracts of herbs that were being sold in the United States at only one-to-one extracts

These highly concentrated extracts offer the best assurance of obtaining a consistent biological activity because the amount of active ingredient from these plants can be precisely controlled.

Menopause is not just an estrogen deficiency. Numerous hormone imbalances threaten the health of menopausal women. As we have seen, the published literature has identified several plant extracts that favorably modulate hormone balance in aging women. Symptomatic improvement and blood analysis of estrogen, progesterone, testosterone, prolactin, luteinizing hormone and FSH hormone by a physician can help determine how well natural hormone modulation therapy is working.

While the evidence appears complex, the good news is that the proper intake of hormone-modulating plant extracts may provide significant health benefits to women entering middle age.

Continuation of this article [Standard Treatments/Standard Side Effects](#)

[Back to the Magazine Forum](#)

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.