

Proven Supplements for Menopause and PMS

A Research Review

by

Dr. James Meschino, D.C., M.S., N.D.

Scientific evidence has confirmed that appropriate attention given to nutrition and the daily use of specific dietary supplements can help support women's hormonal balance and improve the management of menopausal symptoms, premenstrual syndrome, fibrocystic breast disease, osteoporosis and possibly uterine fibroids and endometriosis.

Menopause

By age 50 most women experience a significant decline in estrogen and progesterone levels (estrogen 90% decline and progesterone 66% decline), which triggers a host of menopausal signs and symptoms such as hot flashes, profuse sweating, mood disturbances, headaches and aging of the skin, hair and reproductive tissues. Loss of calcium from bone leading to an increased risk of osteoporotic fractures may also occur if certain safe guard measures are not put into practice. Many postmenopausal women know that hormone replacement therapy can improve menopausal symptoms and help to prevent osteoporosis, but it also has been shown to increase the chances of developing breast cancer by approximately 2.3% per year (23% increased risk with 10 years of use, 46% increased risk with 20 years of use). (1,21,22,23) As a result, many women today are seeking a more natural method to manage menopausal signs and symptoms and prevent osteoporosis, or are looking for ways to help reduce their risk if they are presently using hormone replacement.

As a natural alternative to hormone replacement therapy, the standardized grade of Black Cohosh, Soy extract and Gamma-oryzanol have demonstrated a proven ability to control menopausal signs and symptoms, maintain sexual function, support bone health and even lower cholesterol levels (heart disease is the number one killer of postmenopausal women) in postmenopausal females.

Natural Alternatives

Four major clinical trials using **Black Cohosh Extract** have demonstrated that it effectively reduces hot flashes, profuse sweating, headaches, dizziness, nervousness/ irritability, sleep disturbances and mood changes in women suffering from menopausal symptoms. In three of these studies, Black Cohosh out-performed estrogen replacement (0.625 mg CEE), valium or a placebo (dummy pill). Improvement was noted within 6-8 weeks in most cases, with as many as 80% of women reporting significant improvement. This is primarily because the natural triterpene compounds found in Black Cohosh exert a mild estrogen-like effect and can also be converted by the body into progesterone (the only compound that can raise progesterone naturally). This may be why objective studies reveal that Black Cohosh can maintain the normal integrity and secretions of the vaginal lining in these women, thereby preserving sexual function.

Soy isoflavones have also been shown to reduce hot flashes and reverse vaginal dryness in postmenopausal women. At least three clinical studies support this application. Soy isoflavones are classified as phytoestrogens (plant-based estrogens) and are known to exert mild estrogen-like effects when the body's estrogen hormones have declined after menopause. An additional benefit is that soy ingestion can also lower blood cholesterol levels by 9-12%, a major factor in heart disease prevention.

Gamma-oryzanol (derived from rice bran) is an all-natural supplement that is used as a prescription medication for the treatment of hot flashes in Japan. It is extremely safe and effective in this regard. The only important side effect is that it also lowers cholesterol and triglyceride levels (8-12% reduction), helping to reduce risk of heart disease.

Conveniently, the estrogen-like effect of Soy isoflavones and Black Cohosh Extract have also been shown to help support bone density in studies involving postmenopausal women and under experimental conditions. The need for adequate calcium, Vitamin D, magnesium and other bone building nutrients is also important to help prevent osteoporosis (as is physical activity) throughout a woman's lifetime.

In summary, the combination of Black Cohosh, Soy isoflavones and Gamma-oryzanol (at the therapeutic dosage and grade of each nutrient) is an effective alternative to hormone replacement for many postmenopausal women (who do not have existing osteoporosis) or can be used in conjunction with hormone replacement therapy (to help tone down the over stimulation to breast and uterine tissues) in women who have advanced osteoporosis. Anecdotal evidence suggests that this nutrient combination can also be used to help control uterine fibroids, fibrocystic breast disease and endometriosis. (1–20, 48,49). Adeeva's Women's Hormonal Balance contains black cohosh, soy isoflavones and gamma-oryzanol, at the therapeutic doses outlined above. If you are suffering from menopausal symptoms you may wish to try this product, or one of similar composition, to help manage your symptoms safely and effectively.

Premenstrual Syndrome

PMS affects approximately one-third of all pre menopausal women. Common symptoms include mood swings, irritability, anxiety, fatigue, abdominal bloating, cramping, breast tenderness, headaches, backache and swelling of fingers and extremities. One of the main underlying causes of PMS has been shown to be a high estrogen to progesterone ratio (too much estrogen and/or too little progesterone) As such, natural interventions to correct this imbalance have proven to be successful in the management of PMS. Specifically, the use of Soy isoflavone and Black Cohosh Extract supplementation have yielded very favorable results. These ingredients tone down the effects of the body's estrogens (or birth control pills) by binding to estrogen receptors on various tissues, blocking their over stimulation by the body's more powerful estrogens. Additionally, the triterpene compounds in black cohosh provide the building block from which the body can synthesize progesterone to help balance the estrogen to progesterone ratio. Thus, the use of *Women's Hormonal Support* (Adeeva) or comparable products have been utilized with good success for this purpose.

Other nutritional factors that have been shown to reduce the symptoms of PMS include Vitamin B6 supplementation (50-100 mg per day) and magnesium supplementation (up to 400 mg per day). More than a dozen studies have reported very good results with this approach, although it is likely best to take a complete B50-complex (that includes all the B vitamins), as opposed to taking B6 alone.

Eating less animal fat and consuming more dietary fiber has also been shown to help lower excessive estrogen levels and assist in the management of PMS. Aerobic exercise is associated with a lower incidence of PMS and has been shown to be an important adjunct to the management of this condition as well.

Finally, double-blind studies have indicated that supplementation with 400 IU of Vitamin E per day can further help to reduce many PMS symptoms. Vitamin E, Vitamin B6 and magnesium are all known to affect prostaglandins (mini- hormones), which are involved with many symptoms of PMS. These nutrients help the body make prostaglandin hormones that reduce PMS symptoms in general (24 – 49).

In summary, PMS sufferers have been shown to benefit from supplementation with Black Cohosh Extract, and Soy Extract (e.g., *Women's Hormonal Support*). The use of a high potency multi-vitamin (containing a B50 complex, 400 IU of Vitamin E and 200-400 mg of magnesium) should also be considered. Less animal fat, more dietary fiber (supplementation with ground flaxseed at two tablespoons per day has been shown to reduce fibrocystic breast disease) and regular participation in aerobic exercise are also important pro-active and natural means to combat this problem.

sReferences

- 1 Stolze, H: An alternative to treat menopausal complaints. *Gyne* 3:1416,1982
- 2 Warnecke, G: Influencing menopausal symptoms with a phytotherapeutic agent. *Med Welt.* 36:871-4,1985
- 3 Stoll,W: Phytopharmakon influences atrophic vaginal epithelium. Double-blind study — Cimicifuga vs. estrogenic substances. *Therapeuticum* 1:23-31,1987
- 4 Schildge,E: Essay on the treatment of premenstrual and menopausal mood swings and depressive states. *Rigelh Biol Umsch* 18 (2):18-22,1964
- 5 Bruker,A: Essay on the phytotherapy of hormonal disorders in women. *Med Welt.*44:2331-3,1960
- 6 Murray,M: Remifemin:Answers to some common questions. *AM J Natural Med.* Vol.4 (3), April 1997
- 7 Gorlich,N: Treatment of ovarian disorders in general practice. *Arztl Prax.* 14:1742-3,1962
- 8 Murase,Y et al: Clinical studies of oral administration of gamma-oryzanol on climacteric complaints and its syndrome. *Obstet Gynecol Prac* (12) 147-149,1963
- 9 Ishihara,M: Effect of gamma-oryzanol on serum lipid peroxide levels and climacteric disturbances. *Asia Oceania J Obstet Gynecol* (10), 317, 1984
- 10 Yoshino,G et al: Effects of gamma-oryzanol on hyperlipidemic subjects. *Curr Ther Res* (45), 543-552,1989
- 11 Yoshino,G et al: Effects of gamma-oryzanol and probucol on hyperlipidemia. *Curr Ther Res* (45), 975-982,1989
- 12 Murkies,A L et al: Dietary flour supplementation decreases post-menopausal hot flashes: effect of soy and wheat. *Maturitas* (21), 189-195,1995
- 13 Albertzazzi,P et al: The effect of dietary soy supplementation on hot flashes. *Obstet Gynecol* (91), 6-11,1998
- 14 Cassidy,A et al: Biological effects of a diet of soy protein rich in isoflavones on the menstrual cycle of premenopausal women. *Am J Clin Nutr* (60), 333-340,1994
- 15 Valente,M et al: Effects of 1-year treatment with ipriflavone on bone in postmenopausal women with low bone mass. *Calcif Tissue Int* 1994; 54:377-80
- 16 Tsuda,M et al: The effect of ipriflavone on bone resorption in tissue culture. *J Bone Miner Res* 1986:1:207-11
- 17 Patter,S M et al: Soy protein and isoflavones: their effects on blood lipids and bone density in postmenopausal women. *Am J Clin Nutr* 1998:68 (suppl) 137-9
- 18 Dalais,F S et al: Dietary soy supplementation increases vaginal cytology maturation index and bone mineral content in post menopausal women *Am J Clin Nutr* 1998:68 (suppl) 1519 (abstr)
- 19 Anderson J W et al: Meta-analysis of the effects of soy protein intake on serum lipids. *N Engl J Med* 1995;333:276-82
- 20 Messina,M: Legumes and Soybeans:overview of their nutritional profiles and health effects. *Am J Clin Nutr* 1999 Vol 70 (suppl); 439-50
- 21 Colditz,G A: Relationship between estrogen levels, use of hormone replacement therapy and breast cancer. *J Natl Cancer Inst* 1998;90;11:814-823
- 22 John Hopkins Medical Newsletter:Health After 50,Vol 11,Issue 9 (6-7 Nov,1999)
- 23 Cancer and Nutrition. Simone, B. Avery Publishing Group Inc., 1992:219-23
- 24 Mackay, H.T. and Evans, A.T. Gynecology and Obstetrics. In *Current Medical Diagnosis and Treatment* (Eds. Tierney, Jr., L.M., et al.) 33rd Annual Revision. 1994; Appleton and Large: 589-590
- 25 Murray, M. and Pizzorno, J. *Encyclopedia of Natural Medicine.* (2nd edition). Prima Publishing, 1998; 730-752
- 26 Facchinetti, F., et al. Oestradiol/Progesterone imbalance and the premenstrual syndrome. *Lancet*, 1985; 2: 1302
- 27 Munday, M.R., et al. Correlations between progesterone, oestradiol and aldosterone levels in the premenstrual syndrome. *Clin Endocrinol.* 1981; 14: 1-9
- 28 Chuong, C.J., et al. Periovulatory beta-endorphin levels in premenstrual syndrome. *Obstet Gynecol.* 1995; 83: 755-760
- 29 Wynn, V., et al. Tryptophan, depression and steroidal contraception. *J Steroid Biochem.* 1975; 6: 965-970
- 30 Bermond, P. Therapy of side effects of oral contraceptive agents with Vitamin B6. *Acta Vitaminol-Enzymol.* 1982; 4: 45-54
- 31 Berman, M.K., et al. Vitamin B6 in premenstrual syndrome. *J Am Diet Assoc.* 1990; 90: 859-861
- 32 Goldin, B.R., et al. Estrogen patterns and plasma levels in vegetarian and omnivorous women. *New Engl J Med*, 1982; 307: 1542-1547
- 33 Longcape, C., et al. The effect of a low fat diet on oestrogen metabolism. *J Clin Endocrinal Metab.*, 1987; 64: 1246-1250

- Aganoff, J.A., et al. Aerobic exercise, mood states and menstrual cycle symptoms. *J Psychosom Res*, 1994; 38: 183-192
- 34 Steege, J.F., et al. The effects of aerobic exercise on premenstrual symptoms in middle-aged women: a preliminary study. *J Psychosom Res.*, 1993; 37, 2: 127-133
- 35 Limon, L. Use of alternative medicine in women's health. *Am Pharmaceutical Assoc Annual Meeting. APHA* 2000: 1-5
- 36 Dittmar, R.W., et al. Premenstrual syndrome, treatment with a phytopharmaceutical. *Therapiewache Gynakol*, 1995; 5: 60-68
- 37 Albertzazzi, P., et al. The effect of dietary soy supplementation on hot flashes. *Obstet Gynecol.*, 1998; 91: 6-11
- 38 Cassidy, A., et al. Biological effects of a diet of soy protein rich in isoflavones on the menstrual cycle of premenopausal women. *Am J Clin Nutr*, 1994; 60: 333-340
- 39 Patter, S.M., et al. Soy protein and isoflavones: their effects on blood lipids and bone density in postmenopausal women. *Am J Clin Nutr*. 1998; 68 (suppl): 137-139
- 40 Dalais, F.S., et al. Dietary soy supplementation increases vaginal cytology maturation index and bone mineral content in postmenopausal women. *Am J Clin Nutr*. 1998; 68 (suppl): 1519 (abstract)
- 41 London, R.S., et al. Effect of a nutritional supplement on premenstrual syndrome in women with PMS: a double-blind longitudinal study. *J Am Cell Nutr*. 1991; 10: 494-499
- 42 Stewart, A. Clinical and biochemical effects of nutritional supplementation on the premenstrual syndrome. *J Reprod Med.*, 1987; 32: 435-441
- 43 Abraham, G.E. Nutritional factors in the etiology of the premenstrual tension syndrome. *J Reprod Med.*, 1983; 28: 446-464
- 44 London, R.S., et al. The effects of Alpha-Tocopherol on premenstrual symptomatology: A double-blind study. II. Endocrine Correlates. *J Am Col Nutr*. 1984; 3: 351-356
- 45 London, R.S., et al. Endocrine parameters and alpha-tocopherol therapy of patients with mammary dysplasia. *Cancer Res.*, 1981; 41: 3811-3813
- 46 Limon, L. Use of alternative medicine in women's health. *Am Pharmaceutical Assoc Annual Meeting*
- 47 Hardy, M. Herbs of special interest to women. *J Am Pharm Assoc. (Wash.)*, 2000; 40: 234-242
- 48 Israel, D., et al. Herbal therapies for perimenopausal and menopausal complaints. *Pharmacotherapy*. 1997; 17, 5: 970-984