

# USANA Technical Bulletin

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## Black Cohosh Standardized Extract

### Technical Background

- Black Cohosh (*Cimicifuga racemosa*) is a member of the Ranunculaceae (buttercup) plant family and is native to the woodlands of the eastern United States and southeastern Canada.<sup>1</sup>
- Black Cohosh has long been used to treat menopausal symptoms in women, and is currently a popular alternative to hormone replacement therapy (HRT). In Germany, where it has been studied and used in clinical research for approximately forty years, it is prescribed to treat premenstrual syndrome (PMS) and difficult or painful menstruation.<sup>2</sup>
- Clinical trials involving more than a thousand women have investigated the effects of black cohosh root in treating menopausal symptoms. Improvements were seen in many symptoms, including hot flashes, night sweats, headache, palpitations, and vaginal atrophy (thinning of vaginal tissue).<sup>3</sup> In one study, black cohosh was proven to be as effective as synthetic hormones in decreasing the symptoms associated with menopause.<sup>4</sup>
- The most recent studies have found black cohosh to be non-estrogenic.<sup>5,6</sup> Unlike estrogen, black cohosh has no effect on prolactin and follicle stimulating hormones (FSH). Instead, black cohosh may help to lower levels of luteinizing hormone (LH), which at high levels contributes to menopausal symptoms, mostly likely through a direct action on the pituitary gland.<sup>7</sup>
- Recent studies have found that black cohosh may decrease proliferation of breast and prostate cancer cells.<sup>8</sup> However, using black cohosh as a supplement to cancer treatments can be dangerous,<sup>9</sup> so you should always talk to your doctor before taking it.
- In general, studies show that black cohosh has few adverse effects and is a safe alternative to estrogen therapy.<sup>10</sup>

### Sources and Recommended Intake

- No Recommended Dietary Allowance (RDA) has been established for black cohosh.
- Black cohosh is generally considered safe and is tolerated well when used as intended. The current recommended dose for treating menopausal symptoms is 40-80mg/day.<sup>3</sup> Recent studies indicate that when taken in large doses, black cohosh may not be healthy for the liver,<sup>11</sup> and may cause gastrointestinal disturbances.
- At the present time, no long-term safety studies have been completed on black cohosh. For this reason, the Germany Commission E Monographs recommend limiting the continuous use of black cohosh to six months, though it has traditionally been used for long periods of time without evidence of adverse effects.

- Black cohosh is not recommended for use during pregnancy because of its ability to stimulate uterine contractions.<sup>2</sup>

## Abstracts

**Pockaj BA, Loprinzi CL, Sloan JA, Novotny PJ, Barton DL, Hagenmaier A, Zhang H, Lambert GH, Reeser KA, Wisbey JA. Pilot evaluation of black cohosh for the treatment of hot flashes in women. *Cancer Invest.* 2004;22(4):515-21.** BACKGROUND: Hot flashes cause significant morbidity in postmenopausal women, including women with breast cancer. We undertook a pilot study to estimate the effectiveness of black cohosh to reduce hot flashes. METHODS: Women who reported significant hot flashes (> or = 14 per week) were enrolled. Black cohosh was given in the form of the commercial product Remifemin. The first week was a no-treatment baseline period, and therapy was given for the subsequent 4 weeks. Hot flash data were collected by daily questionnaires during baseline and treatment weeks. Adverse effects were recorded. RESULTS: Twenty-one women completed the study. Their mean age was 56 years (range, 38-80). Thirteen patients had a history of breast cancer. Six patients were taking tamoxifen or raloxifene. Patients reported an average of 8.3 hot flashes per day during the baseline week. The reduction in mean daily hot flash frequency was 50% (95% CI, 34%-65%), while weekly hot flash scores were reduced 56% (95% CI, 40%-71%) at completion of the study. Overall, patients reported less trouble with sleeping, less fatigue, and less abnormal sweating. No patients stopped therapy because of adverse effects. CONCLUSIONS: Black cohosh appeared to reduce hot flashes and had a low toxicity. The efficacy found in this trial seems to be more than would be expected by a placebo effect (20%-30% hot flash reduction in previous trials). These results suggest that further evaluation of this black cohosh preparation with a phase III randomized trial is indicated.

## References

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- <sup>4</sup> Lehmann-Willenbrock E, Riedel HH. Clinical and endocrinologic examinations concerning therapy of climacteric symptoms following hysterectomy with remaining ovaries. *Zen bl Gynakol* 1988;110:61.
- <sup>5</sup> Mahady GB. Black Cohosh (*Actaea/Cimicifuga racemosa*) : Review of the Clinical Data for Safety and Efficacy in Menopausal Symptoms. *Treat Endocrinol.* 2005;4(3):177-84.
- <sup>6</sup> Ruhlen RL, et al. Black cohosh does not exert an estrogenic effect on the breast. *Nutr Cancer.* 2007;59(2):269-77.
- <sup>7</sup> Mayo JL. A Natural Approach to Menopause. *Clin Nutr Insights* 1997; 5(7): 1-8.
- <sup>8</sup> Jarry H, Thelen P, Christoffel V, Spengler B, Wuttke W. Cimicifuga racemosa extract BNO 1055 inhibits proliferation of the human prostate cancer cell line LNCaP. *Phytomedicine.* 2005 Mar;12(3):178-82.
- <sup>9</sup> Rockwell S, Liu Y, Higgins SA. Alteration of the effects of cancer therapy agents on breast cancer cells by the herbal medicine black cohosh. *Breast Cancer Res Treat.* 2005 Apr;90(3):233-9.
- <sup>10</sup> Dog TL, Powell KL, Weisman SM. Critical evaluation of the safety of Cimicifuga racemosa in menopause symptom relief. *Menopause.* 2003 Jul-Aug;10(4):299-313.
- <sup>11</sup> Cohen SM, O'Connor AM, Hart J, Merel NH, Te HS. Autoimmune hepatitis associated with the use of black cohosh: a case study. *Menopause.* 2004 Sep-Oct;11(5):575-7.