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# HerbClip™



**File: ■ Cinnamon (*Cinnamomum verum*, Lauraceae)**
**■ Primary Dysmenorrhea**

**HC 081537-530**

**Date: October 15, 2015**

**RE: Cinnamon Consumption Reduces Symptoms of Primary Dysmenorrhea**

Jaafarpour M, Hatefi M, Najafi F, Khajavikhan J, Khani A. The effect of cinnamon on menstrual bleeding and systemic symptoms with primary dysmenorrhea. *Iran Red Crescent Med J*. 2015;17(4):e27032. doi: 10.5812/ircmj.17(4)2015.27032.

Primary dysmenorrhea, or painful pelvic cramps occurring just before or during menstruation, can interfere with daily activities and can negatively impact a woman's quality of life. It is thought to be linked to the production of prostaglandins from the uterine endometrium during menstruation, especially prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$). Pharmaceuticals, nonpharmacological treatments, dietary supplements, and medicinal herbs have been used to treat primary dysmenorrhea. Cinnamon (*Cinnamomum verum*, Lauraceae) has been used to treat diarrhea, dyspnea, impotence, vaginitis, rheumatism, and neuralgia, among other ailments. These authors conducted a randomized, double-blind trial to assess the effects of cinnamon on menstrual bleeding and systemic symptoms in Iranian college students suffering from primary dysmenorrhea.

For the 2013-2014 study conducted at Ilam University of Medical Sciences in Ilam, Iran, 76 subjects aged between 18 and 30 years with moderate primary dysmenorrhea and regular menstrual cycles were enrolled. The healthy subjects all lived in governmental dormitories and had a body mass index between 19 $kg/m^2$ and 26 $kg/m^2$. Baseline characteristics of the subjects were similar. The use of oral contraception and analgesics during the trial was not allowed.

Thirty-eight subjects received placebo capsules containing starch, and 38 subjects received capsules containing 420 mg of dried cinnamon bark powder. They were instructed to take 2 capsules 3 times daily during the first 3 days of their menstrual cycle. No other information was provided regarding the cinnamon capsules.

A visual analogue scale was used to determine the severity of pain and nausea. The number of vomiting episodes was counted daily, and daily menstrual bleeding was measured by the number of saturated pads. Pain severity was recorded at 1, 2, 3, 4, 8, 16, 24, 48, and 72 hours after the study intervention; at 24, 48, and 74 hours after treatment, mean duration of pain, nausea severity, vomiting, and amount of bleeding were assessed.

The mean pain severity score and the mean duration of pain were less in the cinnamon group than in the placebo group at all measured intervals ($P<0.001$ for both severity and duration of pain) after treatment. Overall, the amount of bleeding decreased significantly at various intervals in the cinnamon group ($P<0.001$) but not in the placebo group. The mean amount of excessive menstrual bleeding (≥4 pads/day; n=12 in each group) in the cinnamon group decreased significantly compared with the placebo group at 24 hours ($P=0.037$) and at 48 and 72 hours ($P<0.001$ for both).

The mean severity of nausea significantly decreased in the cinnamon group at 24 hours ($P=0.01$) and at 48 and 72 hours ($P<0.001$ for both) compared with the placebo group, which had significant reductions ($P<0.05$) at various intervals. The number of vomiting episodes in the cinnamon group was significantly fewer ($P<0.001$) than in the placebo group with its reductions ($P<0.05$) at all measured intervals. No adverse side effects were observed.

Results of this study suggest that cinnamon significantly reduces pain, menstrual bleeding, nausea, and vomiting associated with primary dysmenorrhea, without any adverse side effects. "Cinnamon can be regarded as a safe and effective treatment for primary dysmenorrhea," the authors conclude. While the authors provide information regarding the dosage of cinnamon, they do not provide any information as to how the capsules were manufactured or if the cinnamon was standardized. More detailed information regarding the cinnamon capsules should have been included.

—*Shari Henson*

Referenced article can be accessed at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4443385/.