

PMS Support†
With BioResponse DIM®

DESCRIPTION

PMS Support† is a combination of specific nutrients, including BioResponse DIM®, Chaste Berry extract, magnesium and B vitamins, specially formulated for support of normal premenstrual symptoms in healthy women. BioReponse DIM®, a bioavailable form of diindolylmethane, and Chaste Berry extract support normal prolactin levels, hormone balancing and healthy reproductive function in women†.

FUNCTIONS

Research shows premenstrual symptoms are associated with high estrogen and low progesterone levels in the luteal phase. DIM works in conjunction with chasteberry extract to resolve the dominance of estrogen over progesterone.† Diindolylmethane (DIM) is one molecule known for the supportive role it plays in stimulating natural detoxification enzymes and supporting normal hormone metabolism.† As a natural component derived from indole-3-carbinole and cruciferous vegetables, DIM has shown in studies to support the 2-hydroxylation instead of 16-hydroxylation of certain estrogen metabolites. This favors the production of 2-hydroxysterone over the more deleterious 16-hydroxyestrone, resulting in healthy estrogen levels.† An increase in 2-hydroxysterones can help free up testosterone from SHBG without increasing total testosterone levels. BioResponse DIM® is the only diindolylmethane with proven absorption and activity demonstrated in independently performed clinical studies. BioResponse DIM® contains pure DIM, microencapsulated in particles complexed with a vitamin E derivative and phospholipids to aid absorption from our intestinal tract.

Chaste berry extract, or *Vitex agnus-castus*, is a plant extract with active constituents from the fruit of the Chaste tree that play a role in hormone and neurotransmitter activity. Studies show *Vitex agnus* supported PMS symptoms in some women.† PMS symptoms may be due to high physiologic prolactin levels due to stress or deep sleep phases. *Vitex agnus-castus* contains dopaminergic compounds that have been shown to suppress the release of prolactin.†

Vitamin D3 is a fat-soluble vitamin that plays a role in numerous health functions, as well as aids in intestinal magnesium absorption. There is scientific evidence for vitamin D supporting cyclic fluctuations during the menstrual cycle that may help explain some features of PMS. Magnesium has been noted to fluctuate across the menstrual cycle and is involved in many cellular pathways and neuromuscular activities which effect PMS. Magnesium may support cramping and bloating.† Several clinical trials showed that B vitamins, especially vitamin B-6, support symptoms of PMS, especially mood and behavioral symptoms.† Folate, supplied as the bioavailable methylfolate in PMS Support, is recommended while taking oral contraceptives due to folate interactions. Iron supplementation is helpful in menstruating women to support the maintenance of healthy iron stores. Ferronyl® is a carbonyl form of iron that is bioavailable and well tolerated.

INDICATIONS

PMS Support is indicated for women who desire healthy hormone levels and support of normal PMS symptoms.†

FORMULA (#201715-60X)

Serving Size 2 Vegetarian Capsules

Vitamin D-3	1,000 IU
Thiamine (as Thiamine HCl)	25 mg
Riboflavin (as Riboflavin-5-phosphate).....	25 mg
Vitamin B-6 (as Pyridoxal-5-phosphate)	25 mg
Folate (as L-methylfolate, Metafolin®)	400 mcg
Iron (as Ferronyl®).....	18 mg
Magnesium	200 mg

PMS Support[†] With BioResponse DIM®

(as Magnesium amino acid chelate)

BioResponse DIM®

diindolylmethane complex100 mg

(complex of starch, diindolylmethane, d-alpha tocopheryl succinate, phosphatidylcholine [soy] and silica),
(standardized to contain 25% diindolylmethane)

Chaste Berry Extract100 mg

(*Vitex agnus-castus*, fruit)(standardized to 0.5% Agnuside and 0.4% Aucubin)

Other Ingredients: Hydroxypropyl methylcellulose (capsule),cellulose, vegetable stearate, and silica

SUGGESTED USE

Adults take 2 capsules daily with a meal or as directed by your health care professional.

WARNING: Avoid this product if pregnant or lactating.

Chaste Berry extract may interfere with oral contraceptives or oral hormone replacement therapy due to potential hormone modulating activity. If taking dopamine agonists, please consult a physician prior to use.

SIDE EFFECTS

Harmless changes in urine color may occur if less than recommended daily water intake is consumed.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

Zeligs MA, Diet and estrogen status: the cruciferous connection. J of Medicinal Food 1998 Nov 2; 1: 67-82.

Zeligs MA, Jacobs I, Facilitated absorption of a hydrophobic dietary supplement. Controlled Release Society Proceedings 1999: in press.

Bradlow HL, et al., 2-hydroxyestrone: the 'good' estrogen. J Endocrinol. 1996 Sep; 150 Suppl:S259-65.

Bradlow HL, et al., 16a hydroxylation of estradiol: a possible risk marker for breast cancer. Annals NY Acad. Sci. 1986; 464: 138-151.

Wuttke W, Jarry H, Christoffel V, Spengler B, Seidlová-Wuttke D. Chaste tree (*Vitex agnus-castus*)--pharmacology and clinical indications. Phytomedicine. 2003 May;10(4):348-57. Review.

G.Sharma. Luteal Phase Estradiol and Progesterone levels in Relation to Symptom Severity in Patients with Premenstrual Syndrome. JKScience Vol. 13 No.4, Oct-December 2011

Hammarback S, Damber JE, Backstrom T. Relationship between symptom severity and hormone changes in women with premenstrual syndrome. J Clin Endocrinol Metab. 1989; 68: 125-130.

Loch EG, Selle H, Boblitz N. Treatment of premenstrual syndrome with a phytopharmaceutical formulation containing *Vitex agnus castus*. J Womens Health Gend Based Med. 2000; 9: 315-320.

Milewicz A., Gejde E, Sworen H, et al. *Vitex agnus castus* extract in the treatment of luteal phase defects due to latent hyperprolactinemia. Results of a randomized placebo-controlled double-blind study. Arzneimittelforschung 1993; 43: 752-756.

Susan Thys-Jacobs, MD. Micronutrients and the Premenstrual Syndrome: The Case for Calcium. Journal of the American College of Nutrition, Vol. 19, No. 2, 220-227 (2000)

Katrina M Wyatt, Paul W Dimmock, Peter W Jones, P M Shaughn O'Brien. Efficacy of vitamin B-6 in the treatment of premenstrual syndrome: systematic review. BMJ VOLUME 318 22 MAY 1999

For more information on PMS Support, visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by
Douglas Laboratories
600 Boyce Road
Pittsburgh, PA 15205
800-245-4440
douglaslabs.com



**You trust Douglas Laboratories.
Your patients trust you.**