designs for health®

WOMEN'S HEALTH*

FemGuard + Balance™

*Supports Healthy Female Hormonal Balance**

GLUTEN FREE FORMULA
DAIRY FREE FORMULA
SOY FREE FORMULA
VEGAN FORMULA
NON GMO GMO INGREDIENTS

FemGuard + Balance™ supports hormonal balance with a blend of herbs and nutrients that promote healthy estrogen metabolism including diindolylmethane (DIM), chrysin, and the traditional herbs, black cohosh and chaste tree.* Calcium-D-glucarate promotes the proper elimination of excess estrogens.* Additional nutrients and phytochemicals are included to support the body's antioxidant status and normal detoxification.*

DIM: Promotes the production of the more beneficial estrogen metabolites over the potentially toxic estrogen byproducts to support estrogen balance and optimal health.*

Black Cohosh: Supports hormonal balance, especially during menopause, and supporting the normal production of neurotransmitters, including serotonin and dopamine, which also support healthy mood.*

Calcium D-glucarate: Promotes the clearance of estrogen and its metabolites, including the more potentially toxic byproducts to support estrogen balance.*

Chrysin: Supports estrogen metabolism by inhibiting aromatase activity, an enzyme that synthesizes estrogen from testosterone. Chrysin also supports bone health.*

Chaste Tree Extract: Supports estrogen and progesterone levels and promotes dopamine metabolism.*

FemGuard + Balance™ also features nutrients and phytochemicals to further support overall health and estrogen metabolism, including **B vitamins, magnesium, resveratrol, epigallocatechin gallate (EGCg), and broccoli seed extract.***

Benefits*

- Promotes healthy female hormonal balance
- Supports healthy estrogen metabolism
- Promotes a healthy inflammatory response
- Supports normal detoxification

Recommended Use

Take 4 capsules per day or as directed by your health-care practitioner.

Warning: Do not use if pregnant, nursing, or trying to conceive.

TrueBroc® is a registered trademark of Brassica Protection Products LLC.

Highlights

- 100 mg of DIM to support healthy estrogen ratios*
- 100 mg of black cohosh extract standardized to contain 2.5% triterpene glycosides
- 50 mg of broccoli seed extract standardized to contain 13% sulforaphane glucosinolate
- 100 mg of green tea extract standardized to contain 95% polyphenols and 45% EGCg
- 200 mg of chaste tree extract standardized to contain 0.5% agnusides
- Methylated vitamin B12 and folate for enhanced bioavailability
- 400 mg of calcium D-glucarate to support estrogen clearance*

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To contact Designs for Health, please call us at (860) 623-6314, or visit us on the web at www.designsforhealth.com.

Consult with your health-care practitioner about your specific circumstances and any questions you may have about this product.

FemGuard + Balance™

*Supports Healthy Female Hormonal Balance**

By David M. Brady, ND, DACBN, IFMCP, FACN and Colleen Ambrose, ND, MAT

FemGuard + Balance™ supports hormonal balance with a blend of herbs and nutrients that promote healthy estrogen metabolism including diindolylmethane (DIM), chrysin, and the traditional herbs, black cohosh and chaste tree.* Calcium-D-glucarate promotes the proper elimination of excess estrogens.* Additional nutrients and phytochemicals are included to support a healthy antioxidant status in the body and normal detoxification.*

Benefits*

- Supports healthy estrogen metabolism
- Promotes a healthy inflammatory response
- Supports hormonal balance

Ingredient Highlights

- DIM and black cohosh to support healthy estrogen metabolism and 2:16 hydroxyestrone balance
- Standardized broccoli seed extract (as TrueBroc®) containing 13% sulforaphane glucosinolate, plus mustard seed extract with 5 enzyme units of myrosinase, to support maximal conversion to broccoli's beneficial compound, sulforaphane
- Green tea extract and resveratrol to support antioxidative status and normal detoxification
- Chaste tree extract to promote a healthy estrogen/progesterone balance
- Methylated B vitamins for enhanced bioavailability and to support methylation and detoxification pathways*
- Calcium in the form of calcium D-glucarate to support estrogen clearance*

Supplement Facts

Serving Size 4 capsules
Servings Per Container 30

Amount Per Serving		% Daily Value
Vitamin B-6 (as Pyridoxal-5-Phosphate)	30 mg	1765%
Folate (as Quatrefolic®[6S]-5-methyltetrahydrofolate, glucosamine salt)	680 mcg DFE	170%
Vitamin B-12 (as Methylcobalamin)	400 mcg	16667%
Calcium (from Calcium D-Glucarate USP)	50 mg	4%
Magnesium (as Di-Magnesium Malate)	50 mg	12%
Calcium D-Glucarate USP	400 mg	*
Chrysin	200 mg	*
Chaste Tree Extract (*Vitex agnus castus*)(fruit) [standardized to contain 0.5% agnusides]	200 mg	*
Green Tea Extract (*Camellia sinensis*)(leaf)[standardized to contain 95% polyphenols and 45% EGCg]	100 mg	*
Diindolylmethane (DIM)	100 mg	*
Black Cohosh Extract (*Actaea racemosa*)(root)[standardized to contain 2.5% triterpene glycosides]	100 mg	*
Broccoli Blend [Broccoli Powder Extract (*Brassica oleracea L.*)(seed) (TrueBroc®), Mustard Powder (*Sinapis alba*)(seed)]	50 mg	*
Trans Resveratrol (Veri-te™)	20 mg	*

*Daily Value not established.

Other Ingredients: Cellulose (capsule), microcrystalline cellulose, sunflower lecithin, silicon dioxide, vegetable stearate.

Diindolylmethane (DIM) is derived from the primary plant indole found in cruciferous vegetables, indole-3-carbinol (I3C).[1] DIM supports the expression of the enzyme CYP1A1 over other enzymes in the CYP family, which play a role in estrogen metabolism. CYP1A1 metabolizes estrogen to the less harmful 2-hydroxy estrogens. This supports an increase in the 2:16 ratio without increasing 4-hydroxy estrogens. Studies show that a healthy 2:16 ratio may benefit autoimmune conditions.[2-6]

In addition to directly acting on estrogen metabolism, DIM has also been found to support a normal inflammatory response. Studies demonstrate it inhibits nuclear factor kappa B, tumor necrosis factor-alpha, and transforming growth factor-beta–associated pathways.[7-9]

One prospective human clinical trial found that taking one year of DIM supplementation led to a significant decline in fibroglandular tissue in BRCA gene carriers compared to a control group.[5] DIM supplementation has also been found to improve bleeding patterns in endometriosis, especially when used as an adjunct therapy.[10]

Black Cohosh (*Actaea racemosa*) has a long history of medicinal use, especially for supporting menopausal symptoms.[11] Research supports the potential for black cohosh to help during menopause, but the probable mechanism(s) remains under investigation. A long-standing hypothesis is that the triterpenes in black cohosh may have mild estrogenic activity with the potential to selectively inhibit luteinizing hormone secretion without affecting the follicle-stimulating hormone. More recent research does not support estrogenic properties. Instead, it postulates that the benefits of black cohosh may stem from its effects on neurotransmitters, including serotonin, dopamine, GABA, and μ-opioid.[11-15] One animal study also found that black cohosh attenuated cortisol secretion after acute stress by interacting with the hypothalamic-pituitary-adrenal axis and sympathetic adrenomedullary system.[16]

Clinical studies demonstrate the potential for black cohosh supplementation to benefit menopausal symptoms, including hot flashes (both severity and number of episodes), night sweats, sleep disturbances, psychological symptoms (e.g., depression and anxiety), and quality of life.[12,13,17,18] Studies have also found black cohosh to be beneficial as an adjunct therapy to support increased pregnancy rates in individuals with polycystic ovary syndrome (PCOS).[19,20]

Long-term black cohosh treatment in an animal model of menopause improved glucose metabolism and insulin sensitivity.[21] The researchers determined it has the potential to reduce the risk of metabolic disorders such as diabetes. Because of the role of estrogen in metabolic homeostasis, there is an increased risk of developing diabetes during menopause.[21]

Calcium D-Glucarate is a calcium salt combining calcium and D-glucaric acid. Calcium-D-glucarate potentially inhibits beta-glucuronidase, which is an enzyme involved in phase II liver detoxification. This supports increased glucuronidation to promote detoxification and excretion of potentially toxic compounds including estrogen. This supports increased clearance of estrogen and its metabolites, including the potentially toxic metabolites. Elevated levels of beta-glucuronidase activity are associated with a higher risk of hormone-dependent cancers. Calcium D-glucarate may also exert anti-inflammatory effects.[22-24]

Chrysin is an important bioactive flavonoid found in fruits, vegetables, mushrooms, honey, and propolis.[25,26] It has been shown to benefit estrogen metabolism by inhibiting aromatase and by competing with steroids that bind to aromatase. Although many flavones inhibit aromatase, chrysin has been shown to work best due to the position of its 4-keto group in the C ring and 7-hydroxyl groups in the A ring.[27]

A cell study demonstrated chrysin enhanced osteogenesis and osteogenic differentiation to potentially prevent and treat osteoporosis by activating the extracellular signal-regulated kinase 1/2 pathway. The actions of chrysin may also involve estrogen receptors.[28] An animal model of cerebral ischemia/reperfusion found that chrysin provided neuroprotective effects likely due to its estrogenic effects including binding to estrogen receptor-β. Its beneficial effects on inflammation and oxidative stress also contributed to the neuroprotective effects.[29] In a cell study on endometriotic cells, chrysin led to an increase in apoptosis and a decrease in proliferation in endometriotic cells, but chrysin only slightly reduced the proliferation of normal endometrial cells, which demonstrates its potential to benefit endometriosis.[30] Studies show it may have anti-inflammatory properties and support a healthy antioxidant status.[25,26,31]

Chaste Tree Extract *(Vitex agnus castus)* has a long history of use for balancing estrogen and progesterone levels in individuals to support associated conditions such as pre-menstrual syndrome (PMS), menopause, PCOS, and infertility.[32,33] Research demonstrates that the effects of the chaste tree extract may be due to the impact on the dopaminergic system. Compounds in the chaste tree, including the main bioactive compound of diterpenes, bind to dopamine-2 receptors to inhibit prolactin production by downregulating lactotrope activity. Additionally, the chaste tree contains dopaminergic compounds.[19,32-35] Some of its benefits may also stem from its potential to bind and activate μ-opioid and δ-opioid receptors.[36] Clinical studies have found chaste tree supplementation to support more regular cycles, PMS, cyclic mastalgia, infertility, and menopause symptoms.[19,32-35,37-39]

Other Key Nutrients and Phytochemicals

FemGuard + Balance™ also features nutrients and phytochemicals to further support health and estrogen metabolism.* Vitamins B6, B9, and B12 play key roles in human physiology, including their actions as cofactors in one-carbon metabolism.[40] Magnesium plays many key roles in the body, including the support of enzymatic activity, DNA and protein synthesis, neuromuscular excitability, and bone health. It may also have an inverse relationship with estrogen.[41,42] Resveratrol, epigallocatechin gallate (EGCg) from green tea, and sulforaphane from broccoli support a healthy inflammatory response, antioxidant status, and normal detoxification.*[43-45]

The broccoli seed extract (as TrueBroc®) and mustard seed powder (*Sinapis alba*) included in this formula provide sulforaphane glucosinolate (SGS) and myrosinase enzyme. These two compounds support the maximal conversion of SGS to broccoli's health-promoting, beneficial compound, sulforaphane. Sulforaphane helps promote healthy detoxification pathways and estrogen metabolism, antioxidant status, and overall cellular health.*

Recommended Use: Take 4 capsules per day or as directed by your health-care practitioner.

For a list of references cited in this document, please visit:

https://www.designsforhealth.com/api/library-assets/literature-reference---femguard-balance--tech-sheet-references

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Healthcare practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage.

***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.**

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FemGuard + Balance™

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