

# Women's Hormone Balance Protocol

Clinical Protocol to Support Female Hormone Balancing\*



## Supporting Healthy Hormone Balance

A women's overall health and physiology are affected by the hormonal balances that change throughout a women's life cycle due to hormonal transition phases, such as menarche, postpartum, and menopause. Hormones orchestrate complex and interconnected aspects of physiology which, if unbalanced, can lead to dysfunction in the presenting patient. The two main sex hormones in women are estrogen and progesterone, which are necessary for female sexual characteristics and reproductive health.<sup>2,3</sup> Balanced sex hormones in women promote healthy menstruation, pregnancy, and lactation. Moreover, they also play a supportive role in cardiovascular, bone, urinary, digestive, cognitive, and immune health.<sup>4,5</sup>

Conditions characterized by hormonal imbalance are common in female patient populations. Perturbations in androgen activity, estrogen metabolism, and hormone detoxification/elimination can result in an array of symptoms and impaired function.<sup>2,3</sup>

Imbalances in hormone synthesis and activity may manifest in a range of conditions for women, including estrogen dominance, polycystic ovary syndrome (PCOS), hirsutism, androgen excess, premenstrual syndrome (PMS), dysmenorrhea, and infertility.<sup>2-7</sup> Inflammation, exogenous stressors, and oxidative stress are associated with hormonal imbalances.<sup>4-6,8,9</sup>

This clinical protocol is designed to support female hormone balance and activity through evidence-based lifestyle, dietary, and nutrient interventions, with a special focus on estrogen metabolism.\*

## Diagnostic Biomarkers and Clinical Indicators of Hormone Balance

- Consider estrogen metabolite/estrogen ratio testing, and monitoring for hypoglycemia, hypothyroidism, adrenal insufficiency, insulin levels, abnormal blood glucose (HbA1c), liver function tests, glutathione (GSH), zinc status (alkaline phosphatase), and homocysteine
- Assess Genomic Spotlight™ for estrogen genomics
- Assess Gastrointestinal Microbial Assay Plus (GI-MAP). A disrupted gastrointestinal microbial environment may negatively affect estrogen metabolism, and vice versa.<sup>5</sup>

## Therapeutic Diet and Nutritional Considerations

- Recommend a high intake of cruciferous vegetables (e.g., Bok choy, broccoli, Brussels sprouts, cabbage, cauliflower, horseradish, kale, kohlrabi, mustard, radish, rutabaga, turnip, and watercress) for consumption of isothiocyanates<sup>10-12</sup>
- Ensure adequate intake of fiber (25 to 30 g/day) to support stable blood sugar metabolism and elimination of hormone metabolites<sup>13-15</sup>
- Recommend patients consume a low-glycemic diet full of antioxidant-rich whole foods<sup>9,16</sup>
- Ensure adequate zinc intake (8 mg/day; 11 mg/day during pregnancy; 12 mg/day during lactation) through rich sources such as oysters, liver, beef, pork, crab, lobster, baked beans, and egg yolks. Zinc plays a role in endocrine function through the metabolism of androgen hormones, estrogen, and progesterone, and a role in the secretion of insulin.<sup>6,7,17,18</sup>
- Advise moderating alcohol and caffeine intake<sup>19,20</sup>

## Lifestyle Interventions

- Recommend stress management techniques to support a healthy hypothalamic-pituitary-adrenal-gonadal axis<sup>2,3,8</sup>
- Promote moderate physical activity; counsel on avoidance of overtraining to prevent impact on cortisol activity and hypothalamic-pituitary-adrenal axis<sup>21-24</sup>
- Counsel avoidance of potential xenoestrogens and endocrine disruptors (e.g., phthalates, bisphenol A, and parabens) through organic foods, personal care products, and household cleaners<sup>25,26</sup>



## Supplement Protocol

Primary Support:



### FemGuard + Balance™

<b>Dose</b>	2 capsules with breakfast and 2 with dinner (4 capsules per day)
<b>Duration</b>	Ongoing as needed
<b>Formula Highlights</b>	FemGuard + Balance™ supports classic herbal hormonal balancing in the form of vitex, polygonum, and black cohosh, along with DIM and chrysin to support beneficial estrogen aromatase activity.* Calcium-D-glucarate promotes the proper elimination of excess estrogens.* Resveratrol and EGCG from green tea are included for maximum antioxidant support.* Vitamins B6, B12, and folate promote proper cell differentiation.* Magnesium and calcium are also included to help support bone and hormone health.*

### DIM-Evail™

<b>Dose</b>	1 to 2 softgels per day
<b>Duration</b>	Ongoing as needed
<b>Formula Highlights</b>	DIM-Evail™ provides 100 mg per softgel of diindolylmethane (DIM), a compound that helps to support healthy estrogen metabolism.* Due to its crystalline structure, absorption of DIM is minimal when given orally. For this reason, DIM-Evail™ has been manufactured utilizing the proprietary Designs for Health Evail™ process, which improves the absorption of DIM. This process utilizes a proprietary blend of MCT oils, non-soy-derived lecithin, and vitamin E without the use of potentially harmful surfactants. Research tells us that a low level of 2-hydroxyestrone and a high level of 16 alpha-hydroxyestrone is not desired. DIM works by helping to increase 2-hydroxyestrone and, therefore, improves the 2/16 hydroxyestrone ratio.*

### BroccoProtect™

<b>Dose</b>	1 capsule per day
<b>Duration</b>	Ongoing as needed
<b>Formula Highlights</b>	BroccoProtect™ is designed to help support detoxification pathways, antioxidant status, healthy estrogen metabolism, and cellular health.* It is a synergistic blend of broccoli seed extract (as TrueBroc®) and mustard seed powder ( <i>Sinapis alba</i> ) concentrate, providing sulforaphane glucosinolate (SGS) and myrosinase enzyme (MYR), respectively, for maximal conversion to broccoli's beneficial compound, sulforaphane (SFN). TrueBroc® is standardized to contain 13% glucoraphanin yielding 24 mg of SGS. The mustard seed extract provides 5 enzyme units of myrosinase per capsule to optimize SFN bioavailability and ensure its conversion.*

### Secondary Support:

### Zinc Supreme™

<b>Dose</b>	1 capsule per day with a meal
<b>Duration</b>	Ongoing as needed
<b>Formula Highlights</b>	Zinc Supreme™ offers chelated minerals by Albion Advanced Nutrition, the leader in mineral technology. These are ideal chelates with a 2:1 molar ratio of two molecules of the amino acid glycine chemically bonded in liquid to one mineral ion of zinc or molybdenum for optimal absorption. These minerals are combined with other nutrients, such as vitamin B6 and taurine, to provide superior results.

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

<https://www.designsforhealth.com/api/library-assets/literature-reference---womens-hormone-balancing-protocol-references>

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Health-care 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. Any product containing botanical substances has the potential for causing individual sensitivities, appropriate monitoring, including liver function tests (LFT) is recommended.

For considerations regarding herb-drug and nutrient-drug interactions, please refer to reliable, evidence-based resources such as the Natural Medicine Database or Stargrove MB, Treasure J, McKee DL. *Herb, Nutrient, and Drug Interactions: Clinical Implications and Therapeutic Strategies*. St. Louis, MO: Mosby-Elsevier; 2008.

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\*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.