

Nourished Androgen Blocker Plus

Scientific Evidence and Medical Review*

DR ZORA GRANDPRE

*Note: Dr Degrandpre has been paid by Nourished Natural Health to write this medical review, however she received no instruction on what to include or exclude. Her original text has only been modified to design this PDF. The opinions expressed here are those of Dr Degrandpre and not of Nourished Natural Health.



About the independent author of this formula assessment:

Dr Zora DeGrandpre

Dr. Zora DeGrandpre practices naturopathic medicine in Washington and is a professional medical and scientific writer and editor, specializing in naturopathic, functional, botanical,

and integrative medicine.

Dr. DeGrandpre has degrees in drug design, immunology and natural medicine and has extensive research experience in cancer and molecular immunology.

She has written textbooks in AP Chemistry and Biology as well as textbooks in botanical medicine and the interactions between botanical medicines and pharmaceuticals. She has written grants, curricula and articles in naturopathic, functional and integrative medicine and is currently writing a textbook chapter on the effects of nutrition on epigenetic changes and the pathophysiology of chronic disease.

Dr. DeGrandpre specializes in formulating rational, evidence-based supplements and has served as a grant reviewer for the National Institutes of Health (NIH) and as a scientific consultant for legal and nutraceutical questions.

OVERALL FORMULA SAFETY

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As a general rule, anyone taking any supplement should first consult with a knowledgeable healthcare provider and a trusted pharmacist. They know your specific condition or conditions and can give you the best advice. The herbs used in this formulation have solid safety records when used according to the directions given. Anyone who is on the following medications should be cautious and separate the ingestion of the supplement with their medication by 2-3 hours or take the advice of their healthcare provider/pharmacist:

Copper bisglycinate is well-absorbed and well tolerated. Copper is an essential trace mineral necessary for the production of red blood cells and the health of both the nervous and immune systems. Copper also acts as an antioxidant and is needed for efficient iron absorption from the gut and for energy production. It is added to this formulation because zinc can reduce the absorption of copper from all sources.

- Statins to lower cholesterol
- Estrogen-containing drugs
- Anticoagulant/anti-platelet drugs to control bleeding.

The amounts of each herb and mineral included in this formulation have been carefully designed to produce positive health effects safely and with minimal unwanted effects. Saw palmetto, nettle, green tea, reishi and peony have been safely and effectively used in traditional medicines for years—in some, for hundreds of years.

What is PCOS?

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PCOS or Polycystic Ovary Syndrome is a complex endocrine disorder found in women of reproductive age. It is characterized by excessive androgen production, most commonly with fluid-filled cysts in the ovaries. The cause is unknown. The most common symptoms include:

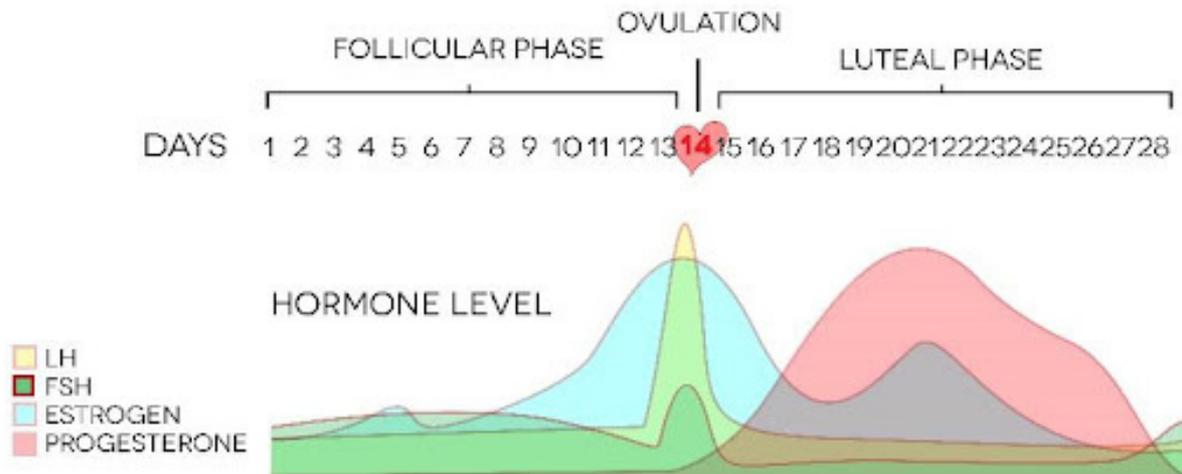
- Irregular periods with associated infertility or difficulty in getting pregnant.
- Cystic or enlarged ovaries.
- Excess body hair (hirsutism), often appearing in a “male pattern” eg. on the belly, chest, back, and face. “Male-pattern” baldness may occur as well.
- Increased abdominal obesity, weight gain.
- Acne
- Skin tags
- Darkened patches of skin on the neck, armpits, and under the breasts.
- Insulin resistance, diabetes, metabolic disorders.
- Elevated serum levels of cholesterol and lipids

Diagnosis usually includes physical exam, imaging studies of the ovaries, and blood testing and is based on the [Rotterdam diagnostic criteria](#). Treatment may include lifestyle changes (for example, switching to a healthier diet), hormone therapy such as combinations of estrogen and progesterone/progestin, or progesterone/progestin alone.

Anti-estrogen treatment such as clomiphene can be taken during the follicular phase of the menstrual cycle and may be used to induce ovulation.

Alternatively, letrozole, an anti-breast cancer agent, can stimulate ovulation. Gonadotropins may also be used.

Complications of PCOS may be treated with metformin (both to increase insulin sensitivity and to stimulate ovulation), contraceptive hormone treatment (to decrease androgen levels, and to control hirsutism and acne), spironolactone (an androgen blocker), and electrolysis to remove unwanted hair.



The incidence of PCOS varies in different ethnic groups, with the highest rates in Asian women, but globally, it affects 4-12% of women of reproductive age.⁴ In addition to elevated testosterone levels, elevated levels of luteinizing hormone (LH) along with decreased levels of follicle stimulating hormone (FSH) are often seen, disrupting the menstrual cycle. The cause(s) are unknown, but have been linked to dietary habits, environmental toxins, stress, and genetics.

- There are some significant adverse effects associated with some of the current treatment methods. Alternative treatments have been sought and have included lifestyle modifications, herbal medicines, acupuncture, vitamin supplements, and meditative practices such as Tai chi, qigong, and stress reduction techniques.
- This formulation is based on evidence-based herbs, mushroom supplements and mineral supplementation designed to support hormonal health and balance in women with PCOS.

HERBS

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Saw palmetto fruit (*Serenoa repens*)

Serenoa repens, commonly known as the saw palmetto, is native to the West Indies and the SE coast of North America. It is generally well-tolerated, with mild and infrequent [adverse effects](#), including abdominal discomfort, changes in bowel habits, nausea, and vomiting. It has moderate interactions with estrogen-containing drugs and may interact with anticoagulant/anti-platelet drugs.

The fruit extracts exhibit inhibition of alpha-adrenergic signals and has antiandrogenic effects, preventing the conversion of testosterone to dihydrotestosterone (DHT). The extracts also contain estrogenic activity, thought to be due to a high beta-sitosterol content. It also has been shown to inhibit [hirsutism](#). In animal studies, the extract has been shown to normalize the prolactin-dependent suppression of follicular maturation, ovulation, and the cyst formation seen in [PCOS](#).

Green tea leaf (*Camellia sinensis*)

Green tea leaf is a variety of tea, prepared by steaming and pan-frying. It should not be taken with statins, reducing the blood levels, and decreasing efficacy of the statins. It should also not be taken with ephedrine and nadolol. Other potential interactions are mild-moderate with various levels of evidence.

- Green tea has been shown to reduce insulin resistance, a common finding in PCOS. It has also been shown to normalize ovarian morphology and reduce the volume of [ovarian cysts](#).

Green tea also has anti-lipemic properties, [reducing](#) low density lipoprotein (LDL), LDL-cholesterol, and triglyceride levels. These are often seen at high levels in women with PCOS.

Nettle leaf (*Urtica dioica*)

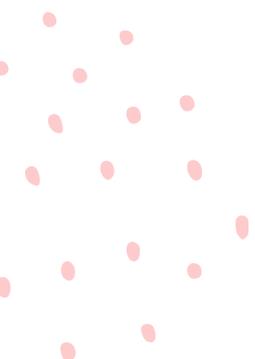
Stinging nettle has been shown to [increase](#) the production of sex hormone-binding globulin (SHBG) and decrease testosterone levels. It is believed that components of the stinging nettle [inhibit](#) the binding of testosterone to SHBG. The stinging hairs of the leaf contain beta-sitosterol which inhibits the binding of SHBG to its receptor. *Urtica* also has anti-inflammatory properties which may lower serum levels of interleukin (IL)-6 and tumor necrosis factor (TNF)-alpha, reducing the systemic inflammatory process seen in [PCOS](#). There is some evidence of moderate interactions with hypoglycemics, diuretics, and warfarin and buyers should be advised to consult with their physicians if they are taking any of these medications.

Reishi (*Ganoderma lucidum*)

Reishi mushrooms have 5-alpha-reductase inhibitory activity, decreasing the synthesis of dihydrotestosterone. In addition, the reishi mushroom has [hypoglycemic](#) effects in animal studies and may improve insulin sensitivity. In addition, the reishi mushroom had anti-inflammatory properties and immune-boosting properties that are thought to be beneficial in PCOS. Recently, studies have determined that ganoderic acids (GAs) derived from the reishi mushrooms bind to androgen receptors and prevent the binding of testosterone to these receptors, suggesting a more direct beneficial [effect](#) of the triterpenoids derived from the reishi mushroom for PCOS. In animal studies, [reishi](#) has been shown to increase insulin sensitivity, reducing inflammation and normalizing gut flora, all of which could positively affect the systemic complications of PCOS.

White peony root/bai shao (*Paeonia lactiflorae*)

White peony root or bai shao has a long history of use in Traditional Chinese Medicine (TCM) in normalizing hormone levels in PCOS. White peony root has estrogenic actions, increasing estrogen production and up-regulating estrogen receptors and has been shown in combination with other herbs used in TCM to be effective in controlling the symptoms of PCOS, helping to regulate hormone levels and to regulate the menstrual cycle. White peony has been shown to stimulate blood flow and reduce uterine fibroids.



MINERALS

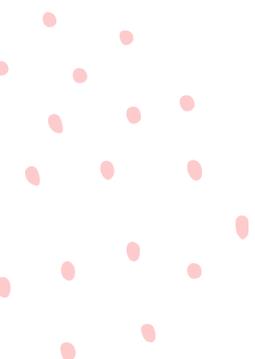
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Zinc (as Zinc bisglycinate)

Zinc is an essential mineral and in a bisglycinate chelate form is well absorbed. Zinc is essential for endocrine and immune support, as well as in hundreds of critical enzyme functions. [Zinc](#) supports healthy growth and development during pregnancy, infancy, childhood, and adolescence.

Copper (as Copper bisglycinate)

Copper bisglycinate is well-absorbed and well tolerated. Copper is an essential trace mineral necessary for the production of red blood cells and the health of both the nervous and immune systems. Copper also acts as an antioxidant and is needed for efficient iron absorption from the gut and for energy production. It is added to this formulation because zinc can reduce the absorption of copper from all sources.



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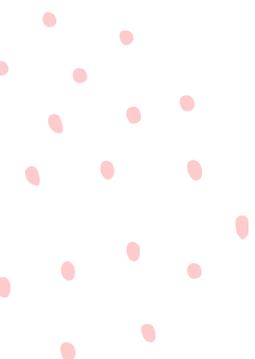
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