

# IHHS Health & Wellness Center

1607 South H Street, Bakersfield, CA 93304  
 Custom Rx Compounding & IV Pharmacy  
 Hormonal, Homeopathic, & Nutritional Services  
 Office (661)-837-0453 FAX (661)-837-0560  
**HRT Patient Information**

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## **Estrogen Dominance (Unopposed Estrogen):**

It is clear that, no matter how valuable estrogen is, when unopposed by progesterone, it is not something wholly to be desired. Stated differently, it is clear that many of estrogen's undesirable side effects are effectively prevented by progesterone. It has been proposed, by J. Lee, M.D., that a new syndrome be recognized: that of estrogen dominance. Whether it occurs as a result of exogenous estrogen given postmenopausally, or during premenopausal anovulatory phase so common these days. It is the custom of contemporary medicine to prescribe estrogen alone for women without intact uteri, and premenopausal estrogen dominance is simply ignored. It is our hope that the following pages will provide some insight into treatment of these conditions.

## **Signs and Symptoms of Estrogen Dominance**

- Water retention, edema
- Breast swelling, fibrocystic breasts
- Premenstrual mood swings, depression
- Loss of libido
- Heavy or irregular menses
- Uterine fibroid
- Craving for sweets
- Weight gain, fat deposition at hips and thighs

<u><b>Estrogen Effects</b></u>	<u><b>Progesterone Effects</b></u>
Creates proliferative endometrium	Maintain secretory endometrium
Breast stimulation	Protects against breast fibrocysts
<b>Increased body fat</b>	Helps use fat for <b>energy</b>
<b>Salt and fluid retention</b>	Natural <b>diuretic</b>
<b>Depression and headaches</b>	Natural <b>antidepressant</b>
Interferes with thyroid hormone	<b>Facilitates thyroid</b> hormone action
Increased blood clotting	Normalizes blood clotting
<b>Decreased sex drive</b>	<b>Restore sex drive</b>
Impairs blood sugar control	Normalizes blood sugar levels
Loss of zinc and retention of copper	Normalizes zinc and copper levels
Reduced oxygen levels in all cells	Restores proper cell oxygen levels
Increased risk of <b>endometrial cancer</b>	Prevents endometrial cancer
Increased risk of <b>breast cancer</b>	Helps <b>prevent breast cancer</b>
Slightly restrains osteoclast function	Stimulates osteoblast <b>bone building</b>
Reduces vascular tone	Necessary for survival of embryo
<b>"Joint stiffness</b> related to peri-menopause"	Precursor of corticosterone production

Above effects and excerpt from NATURAL PROGESTERONE: The Multiple Roles of a Remarkable Hormone by John R. Lee MD

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## **PMS to Menopause**

There is a common misconception that menopause, the cessation of menses, means that a woman no longer makes female hormones, that she needs estrogen replacement and the continual care of a Health Care Professional; that she has a deficiency disease. The truth is that she merely makes less estrogen than is necessary for the monthly preparation of her endometrium for pregnancy. Estrogen does not fall to zero; her body still makes estrogen (estrone) from androstenedione in her fat cells.

Symptoms of low estrogen include, hot flashes (occasionally with dizziness), shortness of breath, palpitations, night sweats, sleep disorders, insomnia, vaginal dryness, dry skin, dry hair, hair loss, anxiety, mood swings, headaches, depression, short term memory loss, and frequent urinary tract infections primarily. These can be dealt with by supplementation with natural human estrogens endogenous to the female body. They should be balanced appropriately in combination with all female hormones that may be out of adjustment. The most common natural combinations include double or triple estrogen, balanced to each person's own needs.

Progesterone levels, on the other hand, do fall to zero, or very close to it, with menopause or even for some time before menopause. Serum levels of progesterone in menopausal women are lower than that of a man's. As we know, progesterone is a major precursor of corticosteroids. There is, however, an alternative pathway via dehydroepiandrosterone (DHEA). In the absence of progesterone, the body can increase DHEA, which leads to androstenedione and on to estrogen and corticosteroid synthesis. As estrogen levels fall with menopause, the androgenic properties of androstenedione become operative, leading to facial and body hair (hirsutism) and male pattern baldness. It has been noted that little old women look like little old men.

Symptoms of low progesterone include, headaches, low libido, anxiety, moodiness, fuzzy thinking, depression, food cravings, irritability, swollen breasts, water retention, edema, weight gain, irregular menses, and other premenstrual syndrome (PMS) symptoms primarily.

Supplementation with natural progesterone is obviously the treatment of choice.

To reiterate, estrogen levels do not fall to zero at menopause. If this is so why do some women suffer from vaginal dryness, uterine fibroids, an increased risk of breast and uterine cancer, hot flushes, and dry wrinkly skin when menopause occurs? The answer lies in a number of factors, not the least of which has to do with progesterone.

One of the paradoxes in female hormone physiology is that estrogen and progesterone, though mutually antagonistic in some of their effects, each sensitize receptor sites for the other.

A peculiarity of industrialized societies is the prevalence of uterine fibroids, breast and/or uterine cancer, fibrocystic breast, PMS, and premenopausal bone loss as well as a high incidence of postmenopausal osteoporosis. If estrogen loss is the major hormonal factor in female osteoporosis, why should significant bone loss occur during the 10 to 15 years before menopause? It is a fact that, in the U.S., peak bone mass in women occurs in the mid-30's age and that a good percentage of women arrive at menopause with osteoporosis well underway. Further, it is known that uterine fibroids atrophy after menopausal decline of estrogen. It is known that 1.) Uterine fibroids and fibrocystic breasts are made worse by estrogen supplementation and easily treated with progesterone; 2.) That breast and/or uterine cancer risk is increased by estrogen and largely prevented by progesterone; 3.) That PMS can often be treated successfully by natural progesterone. The common thread running through all these conditions is estrogen dominance secondary to a

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relative insufficiency of progesterone. How can this happen in menstruating women? It happens when women have anovulatory cycles. As we have seen, progesterone is produced by the corpus luteum, itself formed at the time of ovulation. Anovulatory cycles may be regular or irregular though often the women discern a different pattern in the menstrual flow, i.e., heavier or longer. If anovulation is suspected (and usually it is not), testing for low serum progesterone levels during days 18 to 26 of the menstrual cycle can reveal it.

The point of this is that low premenopausal progesterone, as a consequence of anovulatory cycles, can induce increased estrogen levels and lead to symptomatically significant estrogen dominance prior to menopause. The most common age for breast or uterine cancer is five years before menopause. The hypothalamic biofeedback mechanisms activated by this lack of progesterone as a woman approaches menopause, leads to elevation of GnRH and pituitary release of FSH and LH. Potential consequences of this are increased estrogen production, loss of corticosteroid production, and intracellular edema. Heightened activity of the hypothalamus, a component of the limbic brain, can induce hyperactivity of adjacent nuclei leading to mood swings, fatigue, feelings of being cold and inappropriate responses to other stressors. Not uncommonly, hypothyroidism is suspected despite normal thyroid hormone levels.

Around age 45 to 50, sometimes a little earlier or later estrogen levels fall and the menstrual flow becomes less and/or irregular and eventually ceases. Estrogen levels have fallen below that necessary for endometrial stimulation. In most other cultures menopause is otherwise symptomless. In the U.S. menopause is relatively symptom-free in 50 to 60% of women. The rest experience hot flashes, mood swings, vaginal dryness, and a distressing growth of facial and body hair. During the months when menses were merely irregular, FSH levels tend to rise and fluctuate considerably. This is called the perimenopausal stage. With actual menopause, FSH and LH become tonically elevated as the failure of ovarian estrogen production eliminates the negative feedback effect on the pituitary. Ovarian failure may occur at any age, but menopause prior to age 40 is considered premature.

The failure of the ovary to respond to GnRH is due to a final depletion of oocytes and the surrounding follicle cells. Of the millions of oocytes present before birth, approximately 300,000 are present at menarche (puberty). Subsequently hundreds vanish every cycle, including the cycles induced by hormonal contraception. Eventually, at menopause, the supply is reduced to only about 1000 follicles, which is insufficient to sustain the cyclic hormonal process necessary for menstruation. Thus, it is the disappearance of oocytes and follicle cells rather than age, per se, that causes menopause.

Fertility is also a function of the number of follicles. Regardless of coital frequency, the monthly probability of a 38-year old woman conceiving and carrying to term is only about  $\frac{1}{4}$  that in a woman under age 30. Further it is a fact that contraception after the age of 35 or so is attended by an increased likelihood of congenital deformities, e.g. Down's syndrome, secondary to imperfect gamete (ova) production. It should be clear that a proper nutrition and avoidance of toxins damaging to oocytes should be high on anyone's list of priorities in life.

We have now come to the crux of the problem. Healthy, well-nourished follicle cells produce a health balance of estrogen and progesterone. Follicle cell dysfunction from any cause, especially from intracellular nutritional deficiencies and/or toxins, will lead to progesterone deficiency and estrogen dominance combined with elevated FSH and LH levels and hypothalamic hyperactivity. The net result

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is the gamut of hormone imbalance symptoms seen in perimenopausal and menopausal women daily in Health Care Professional's offices. Women's self help groups, menopause books, and lay magazine articles attest to the prevalence of this disorder. The question now is what ought to (or can) be done about it?

The answer, of course, is good nutrition, avoidance of toxins, and the proper supplementation, when indicated for hormone balance, natural progesterone. Response to therapy will require saturation of the bodies hormonal receptors. Certain kinds of pesticides can block these receptors. Women with low body fat percentages will excrete their hormones more quickly and obese patients will excrete more slowly and adjustments in therapy should be made accordingly.

Good nutrition means plenty of fresh vegetables, whole grains, and fruit eaten as unprocessed as possible and uncontaminated by insecticides, artificial coloring agents or preservatives or other toxic ingredients.

Given the present methods of meat production, these should be minimized. Eggs are probably fine, as well as modest servings of ocean fish and fowl (most insecticides are fat soluble and found primarily in the skin of fowl and fish).

Vegetable and seed oils obtained by high pressure squeezing should be avoided because of the problem of trans-fatty acids. Olive oil does not require such high pressure squeezing and is ok. Flaxseed oil, walnut oil, borage oil, and pumpkin oil are all especially nutritious because of their complement of essential fatty acids (linoleic and alpha-linoleic acid). These fatty acids help stimulate production of prostaglandins and estrogen that may aid in relief of menstrual cramping, breast pain, water gain, increased menstrual clotting and menopausal complaints. Excess estrogen is sent to the liver where it is complexed and then excreted in the colon. Thus proper bowel function is essential for proper elimination of estrogen.

Due to the pervasiveness of our processed food diet, a number of nutrients should be supplemented in the general population, but even more so peri and post menopausally.

Not all vitamin, mineral, herbal, and glandular supplements are created equal. There is no Federal law to require manufacturers to put what is on the label, in products that are not prescription. It is for this reason that at In-Home Health Solutions we attempt to validate the quality of our retail products by asking and receiving; Certificates of Analysis (CA) on raw products and finished products. We only use products that are within 5% of their labeled strength. This is 3 times more stringent than the FDA requirement on Manufacturer's. We also receive dissolution studies on tablets we sell, to make sure they will dissolve in a normal intestine and are absorbed. It is for these reasons that our nutritional products can make such a difference.

Suggested Dietary Guidelines to follow:

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## Diet:

Restrict or avoid carbonated beverages or "soda" and limit red meat to 3 or fewer times per week. Choose whole grains over refined flour. Limit alcohol use. Estrone levels can increase 300% for up to 5 hours after ingestion of alcohol. Dairy products are not necessary. Cheese is OK. Avoid sugar, refined carbohydrates, and refined fats, choosing instead plenty of fresh vegetables of all sorts particularly broad leafy greens, and ensuring a good intake of the essential fatty acids as from olive oil, flaxseed oil, fish oil, or Black Currant oil.

## Daily recommendations:

Vitamin D	350-400 I.U. daily.
Vitamin C	1 to 2 grams twice daily.
Vitamin E	400IU twice daily
Selenium	150mcg twice daily
Betacarotene	25,000iu/day (and/or Vitamin A 20,000IU/day).
Zinc	15 to 30 mg a day.
Calcium	Seek to obtain 800 to 1000mg/day by diet and supplements
Magnesium	400 to 800mg/day supplement.
Essential Omega 3 and 6 Fatty Acids,	Flax seed oil, borage oil 1000mg 2 to 3 x daily.
Acidophilus cultures	15-17 billion cultures per dose 2 times a day for 25 days
Proanthocyanadins (Grape seed extract or pycnogenol)	30mg to 60mg a day

Pycnogenol is an antioxidant that potentiates vitamins A, E, and C. (It has been shown in some studies to shrink tumors, improve rheumatoid arthritis, asthma, multiple sclerosis, and other autoimmune disorders. Dosage should be increased in autoimmune cases to 50mg, four capsules bid.) Antioxidants can help prevent and/or slow the progression of Alzheimer's disease, arthritis, cancer, cataracts, diabetes, heart disease, all forms of hepatitis, immune weakness, inflammatory disorders, macular degeneration, and Parkinson's disease.

## Suggestions for better nutrition try,

### Potency Guaranteed Supplements Beginning with;

1. **Meno Support or PMT Support or Executive Support** are super potency multi-vitamins, mineral, trace mineral preparations in a herbal based designed to assist in whatever stage of life one is in. Take 2 tablets 2 times a day
2. **Grape seed extract and proanthocyanadins** are antioxidants that are 20 times more powerful than **Vitamin C** (1 gm 2xd), 50 times stronger than **Vitamin E**(400IU 2xd) and, that potentiates **Vitamin C, E, A,** Betacarotene, and **Selenium** (200mg) as well. Take 1 or 2 Grape seed extract 100mg daily.
3. **Osseopatite Plus** is Microcrystalline **Calcium** Hydroxy apatite the most absorbed form of calcium that has been shown to increase bone density by itself. Take 2 tablets daily.
4. **Omega 3 fish oil,** Flax seed oil, Evening Primrose Oil, or Borage oil contains essential free fatty acids. Take one 1000mg capsule 2 to 4 times a day.
5. **Magnesium** Citrate a calming mineral that tend to be deficient in the American diet. Take 300m to 800mg every day.
6. **Acidophilus Bifidus** to promote healthy functioning of the gut which is necessary for appropriate excretion of endogenous excess estrogen.

## Available by contacting;

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Supplementation with natural progesterone is a clinical decision based on signs and symptoms of estrogen dominance as listed at the beginning of this document. A short period (4 to 7 days) of not using the hormone tends to maintain receptor sensitivity. Postmenopausal women receiving cyclic estrogen supplement should reduce their dosage to one-half when starting progesterone due to progesterone increasing the sensitivity of estrogen receptors. If they do not, they are likely to experience symptoms of estrogen dominance the first 1 to 2 months of progesterone use. Progesterone should be used during the last 2 weeks of estrogen use for the cycle and both hormones discontinued for 4 to 7 days each month. Diet recommendations have been stated.

Many postmenopausal women do not need estrogen supplements. Not only does a woman's body continue to produce some estrogen but also she is ingesting phytoestrogens (estrogenic substances found in plants) and is exposed to xenoestrogens (estrogenic substances of petrochemical origin in the environment i.e. plastics, styrofoam, pesticides, milk, paper and other products). The addition of progesterone enhances the receptors of estrogen and thus the "need" for estrogen may not exist. If neither vaginal dryness nor hot flushes are present after 3 months of progesterone therapy, it is unlikely that estrogen supplements are needed.

Hot flushes are not a sign of estrogen deficiency, per se, but are due to heightened hypothalamic activity (vasomotor liability) secondary to low levels of estrogen and progesterone, which, if raised, would produce a negative feedback effect to the pituitary and hypothalamus. Once progesterone levels are raised, estrogen receptors in these areas become more sensitive, and hot flushes usually subside. A woman having a hysterectomy can also induce this. Measuring FSH and LH levels before and after adequate progesterone supplementation can test the validity of this mechanism. Hysterectomies and other physiological changes may also induce skin changes that will take up to 8 to 16 weeks to appear after the event. As time goes on the skin changes will normally resolve as the body adjusts to the changes.

The final question to be answered is; why does progesterone deficiency occur? Plant source Phytoestrogens (over 5000 known) make sterols that are progestogenic. In cultures whose diets are rich in fresh vegetables of all sorts, progesterone deficiency does not exist. Not only do the women of these cultures have healthy ovaries with the health follicles producing sufficient progesterone, but at menopause, their diets provide sufficient progestogenic substances to keep their libido high, their bones strong, and their passage through menopause uneventful and symptom free. Our food supply uses many processed foods that are picked days before being sold. Their vitamin (especially vitamin C) content falls and their sterol levels fall. We do not receive progestogenic substances our forebears did. A recent Lancet report of bone mineral density results of bones in bodies buried almost 300 years ago in England showed better bones at all ages compared to our skeletons of today. It is likely that both exercise and diet had something to do with that.

Worldwide the most common source of natural progesterone is the wild yam, grown for the purpose. Yam produces the sterol, diosgenin, which is easily converted to natural progesterone. Diets high in yam consumption provide sufficient progesterone to prevent the sort of problems discussed here. Further, traditional practices among many cultures provide relief of these problems by the use of herbs, such as Dong Quai, Black Cohosh, and Fennel, which contain active estrogenic and progestogenic substances.

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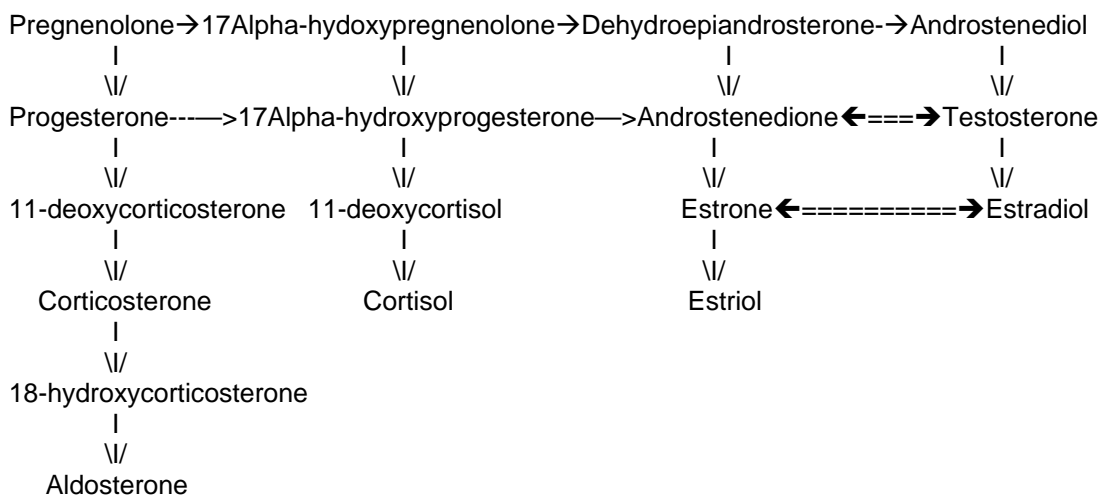
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Most physicians are unaware that their prescription progestins are made from natural progesterone (from yams and soybeans), and that natural progesterone is available, safer than progestins, more effective, and relatively cost effective.

The secret for successful management of menopausal symptoms always includes natural progesterone.

### Steroidogenesis Pathways



(Note: Dehydroepiandrosterone (DHEA) is an alternative pathway to androstenedione and the gonadal hormones.)

### Summary

This presentation is a summary of many informational sources (primarily, J. Lee M.D., Deborah Maragopoulos, MN, RNC, FNP, Sherri Bergamo, BSN, OB/GYN NP, Physicians in A4M, and ACAM) all of which agree natural progesterone is remarkably effective, safe, and relatively inexpensive therapy for a wide range of female disorders resulting from estrogen dominance. However useful, it will be up to individual practitioners to develop their own patient specific criteria for progesterone use as their experience continues.

It is important to find medical practitioners that are experienced in prescribing natural hormonal therapy, and also pharmacists in compounding natural hormones, to maximize results. It is not uncommon to experience failures due to lack of compounding and prescribing knowledge.

Use this information in the absence of more specific or personal advice given you by your health care professional