

ESTROGEN DOMINANCE

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TULSA NATURAL

Health Spa

What is Estrogen Dominance and what are the causes?

Estrogen and progesterone work in synchronization with each other as checks and balances to achieve hormonal harmony in both sexes. It is not the absolute deficiency of estrogen or progesterone but rather the relative dominance of estrogen and relative deficiency of progesterone that is main cause of health problems when they are off balance.



In the past 40 years, we have seen a dramatic increase in female-related health problems never before seen in history. Today, we see the age of puberty dropping precipitously to as low as 10 years of age, endometriosis afflicting 10 percent of all perimenopausal women: Premenstrual Syndrome (PMS), rising and afflicting close to 30 percent of perimenopausal women, uterine fibroids affecting close to 25 percent of women from age 35 to 50, and breast cancer afflicting close to 10 percent of all women.

Many physicians have ignored the importance of hormone balance. Recent research has revealed the common thread (estrogen dominance) in many female hormone diseases such as those mentioned above. The underlying problem is a relative excess of estrogen and an absolute deficiency in progesterone. In the west, the prevalence of estrogen dominance syndrome approaches 50 percent in women over 35 years old.

Below are some typical complaints from women suffering with estrogen dominance:

- My breasts are swollen and getting bigger
- I can't put on my rings
- I am moody and impatient
- I am getting cramps again like when I was young
- I don't have a period
- I miss my periods regularly
- I have PMS
- I have fibroids
- I have endometriosis
- I have a cyst in my breast
- I am tired all the time

CAUSES OF ESTROGEN DOMINANCE

Our body normally functions in perfect homeostasis. With the advent of society and industrial state in the past 70 years, our body has been subjected to **unprecedented insults from environmental estrogen-like hormones**. In less than one hundred years, we have managed to turn our diet from whole fruits and whole food to fast and processed food. In the past, cattle were raised on grass and natural organic feed and chickens were allowed to run free. This is in stark contrast to the commercialization of cattle and poultry farms of today where animals are in cages most of the time. Worse, yet, feeds laced with pesticides and hormones, both of which have estrogen-like activities, are routinely given to animals, which in turn is passed to humans.

Women in non-industrialized cultures whose diets are whole food based and are untainted with modern processed foods and pesticides seldom suffer a deficiency in progesterone and the signs of estrogen dominance manifested as menopausal symptoms.

12 OF THE MOST COMMON REASONS:

1. Commercially raised cattle and poultry. These animals are **fed estrogen-like hormones** as well as growth hormone that are passed onto humans. It takes 60 pounds of grain, feed, and hay to produce one pound of edible beef. On the other hand, it only takes one pound of feed to produce one pound of edible fish. Deep-sea fish such as halibut, sardines, cod, and mackerel are good to consume. Young ones are often less contaminated than older fish, and smaller fish are better shielded from contamination than larger fish like sharks and swordfish. Avoid all coastal fish and shellfish, which are high in contaminants. Fish are far superior to beef or chicken in terms of hormone load. It is interesting to note that one-half of all antibiotics in the United States

are used in livestock - 25 million pounds a year. These **antibiotics can contribute to hormone disruptor exposure.**

The use of antibiotics is especially prevalent in poultry farms. It only takes 6 weeks now to grow a chicken to full size (down from four months in 1940). Up to 80,000 birds may be packed into one warehouse. **Feeds used contain a myriad of hormone-disrupting toxins including pesticides, antibiotics, and drugs to combat disease when so many animals are packed closely together.**

2. Commercially grown fruits and vegetables containing pesticides. If you eat in any developed countries, you are taking in pesticides from fruits and vegetables, many of which are known hormone disruptors. Approximately 5 billion pounds of pesticides, herbicides, fungicides, and other biocides are being added to the world each year. In the past 100 years, several hundred billions pounds of pesticides have been released into the environment.

Pesticides that are banned in the US, such as DDT, are being used in some other countries freely. Illegal pesticides are being used on crops that we eat everyday. It is estimated that a person eats illegal pesticides 75 times a year just by following USDA's recommendation of five servings of fruits and vegetables a day if these are purchased in regular supermarkets. Vegetables grown in developing foreign countries such as South America and Africa find their way back to our dinner table in this global community.



Pesticide residues have chemical structures that are similar to estrogen. These are eventually passed onto humans. Produce with the most pesticides reported in *A Shopper's Guide to Pesticides in Produce* include **strawberries (contain vinclozolin, a known endocrine disruptor), bell peppers, peaches, apples, apricots, and spinach.** Foods with the least amount of pesticides include avocados, corn, onions, sweet potatoes, bananas, green onions, broccoli, and cauliflower. If you are eating non-organic fruits and vegetables, peel and wash them well with diluted vinegar. This will help to reduce pesticides on the surface. Needless to say, this will not help to rid of the pesticides inside. Discard the outer leaves of leafy vegetables, and trim fat from meat and skin from poultry and fish that tend to collect residues.

3. Exposure to xenoestrogen. When a female embryo develops in the womb, 500,000 to 800,000 follicles are created in the embryo, each enclosing an immature ovum. **These fragile ovarian follicles are extremely sensitive to the toxicity of environmental pollutants.** When the mother is exposed to toxic chemicals that resemble estrogen in its molecular structure, she may experience no apparent damage outwardly. However, the baby is more vulnerable to these toxins that may damage its ovarian follicles and make them dysfunctional. **This will not be apparent until the baby reaches puberty some 10 to 15 years later,** when symptoms of incomplete ovulation or insufficient progesterone production can be noted.

Petrochemical compounds found in general consumer products such as creams, lotions, soaps, shampoos, perfume, hair spray and room deodorizers. Such compounds often have chemical structures similar to estrogen and indeed act like estrogen.

Other sources of xenoestrogen include car exhaust, petrochemically derived pesticides, herbicides, and fungicides; solvents and adhesives such as those found in nail polish, paint removers, and glues; dry-cleaning chemicals; practically all plastics, industrial waste such as PCBs and dioxins, synthetic estrogens from urine of women taking HRT and birth control pills that is flushed down the toilet and eventually found its way into the food chain and back into the body. They are fat soluble and non-biodegradable.



4. Industrial solvents. A common source of industrial xenoestrogens often overlooked is a family of chemicals called solvents. These chemicals **enter the body through the skin, and accumulated quickly in the lipid-rich tissues such as myelin (nerve sheath) and adipose (fat).** Some common organic solvents include alcohol like methanol, aldehydes like acetaldehyde, glycol like ethylene glycol, and ketones like acetone. They are commonly found in cosmetics, fingernail polish and fingernail polish remover, glues, paints, varnishes, and other types of finishes, cleaning products, carpet, fiberboard, and other processed woods. Pesticides and herbicides such as lawn and garden sprays,

indoor insect sprays are also sources of minute amounts of xenoestrogens. While the amount may be small in each, the additive effect from years of chronic exposure can lead to estrogen dominance.

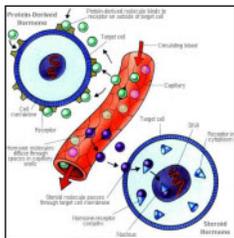
5. Hormone Replacement Therapy (HRT). HRT with estrogen alone without sufficient opposing progesterone such as the drug Premarin should be banned.



This increases the level of estrogen in the body. Premarin, an estrogen only drug commonly used in the past 40 years, is the mainstay of estrogen replacement therapy (ERT).

It is a patented, chemicalized hormonal substitute that is not the same as what you have in your body. It contains 48% estrone and only a small amount of progesterone, which is insufficient to have an opposing effect. The indiscriminate and over-prescription of Premarin to many who may not need it is the problem. Symptoms include water retention, breast swelling, fibroid cysts in the breast, depression, headache, gallbladder problems, and heavy period.

The excessive estrogen from ERT also leads to increased chances of DNA damage, setting a stage for endometrial and breast cancer.



6. Over production of estrogen. Excessive estrogen can arise from ovarian cysts or tumors.

7. Stress. Stress causes adrenal gland exhaustion and reduced progesterone output. This tilts the estrogen to progesterone ratios in favor of estrogen. Excessive estrogen in turn causes insomnia and anxiety, which further taxes the adrenal gland. This leads to a further reduction in progesterone output and even more estrogen dominance. After a few years in this type of vicious cycle, the adrenal glands become exhausted. This dysfunction leads to blood sugar imbalance, hormonal imbalances, and chronic fatigue.

8. Obesity. Fat has an enzyme that converts adrenal steroids to estrogen. The higher the fat intake, the higher the conversion of fat to estrogen. Overeating is the norm in developed countries. A population from such countries, especially in the Western hemisphere where a large part of the

dietary calorie is derived from fat, has a much higher incidence of menopausal symptoms. Studies have shown that estrogen and progesterone levels fell in women who switched from a typical high-fat, refined-carbohydrate diet to a low-fat, high-fiber and plant-based diet even though they did not adjust their total calorie intake. Plants contain over 5,000 known sterols that have progestogenic effects. People who eat foods that are more wholesome have a far lower incidence of menopausal symptoms because their pre- and post-menopause levels of estrogen do not drop as significantly.

9. Liver diseases. Liver diseases such as cirrhosis from excessive alcohol intake **reduce the breakdown of estrogen.** Taking drugs that can impair liver function may also contribute to a higher level of estrogen.

10. Deficiency of Vitamin B6 and Magnesium. Both of these are necessary for the neutralization of estrogen in the liver. Too much estrogen also tends to create deficiency of zinc, magnesium and the B vitamins. These are all important constituents of hormonal balance.

11. Increased sugar, fast food and processed food. Intake of these leads to a **depletion of magnesium.**



12. Increase in coffee consumption. Caffeine intake from all sources was linked with higher estrogen levels regardless of age, body mass index (BMI), caloric intake, smoking, alcohol, and cholesterol intake. **Studies have shown**

that women who consumed at least 500 milligrams of caffeine daily, the equivalent of four or five cups of coffee, had nearly 70% more estrogen during the early follicular phase than women who consume no more than 100 mg of caffeine daily, or less than one cup of coffee. Tea is not much better as it contains about half the amount of caffeine as compared to coffee. The exception is herbal tea like chamomile, which contains no caffeine.

In absolute terms, those who live in the developed world are bathed in a continuous sea of estrogen and do not know it. Yes, we all have hormonal imbalances, and specifically - estrogen dominance.

ESTROGEN DOMINANCE CONTINUUM

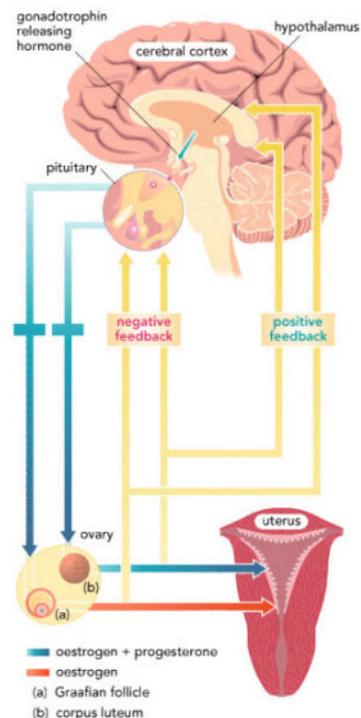
It is clear that **estrogen dominance is the underlying common denominator for a variety of illnesses and syndromes that were previously regarded as unrelated entities.** They in fact represent different expressions of the same illness in different cell settings. The continuum is a state of excessive estrogen throughout one's lifetime, with different manifestation at different times.

Conditions and diseases linked to this continuum includes:

- Allergies, including asthma, hives, rash, sinus congestion
- Autoimmune disorders
- Breast Cancer
- Copper excess and zinc deficiency
- Endometriosis
- Gallbladder disease
- Syndrome X (Insulin resistance)
- Infertility
- Polycystic Ovaries
- Menopausal Symptoms
- Magnesium deficiency
- Osteoporosis
- PMS (Pre-menstrual syndrome)
- Pre-menopausal syndrome
- Hypothyroid-like condition
- Uterine fibroids

Common Estrogen Dominance Conditions

- Endometriosis
- Premenstrual Syndrome (PMS)
- Fibrocystic Breast
- Pre-menopausal Syndrome
- Polycystic Ovary Syndrome (PCOS)
- Fibroids
- Breast Cancer



LET US NOW LOOK SOME OF THESE IN MORE DETAIL.

A. Endometriosis

Endometriosis is a very common condition. Statistics have it that approximately **10-15% of women in their reproductive years from age 25 to 45 are affected. About 30% of affected women are infertile.** It is a condition where endometrium (the lining of the uterus) is found in locations outside the uterus, such as the ovaries, fallopian tubes, vagina, abdomen, deep inside the uterine muscle, bowel, bladder, utero-sacral ligaments (ligaments that hold the uterus in place), peritoneum (covering lining of the pelvis and abdominal cavity), or other parts of the body. It can grow between organs and cause them to stick together with adhesions.



The causes of endometriosis are not yet fully known. There are quite a few theories, from genetics to toxic environment. Backward bleeding, or "retrograde menstruation" (when bleeding that goes up

into the uterus) is thought to be the leading cause. Endometrial cells are estrogen responsive, and estrogen dominance is the norm in developed society. Many researchers believed that **estrogens and their close relative xenoestrogens (environmental estrogens) play a significant causative role in this disease.** Some have tried to link bleached tampons with pollutants residues as the cause, but these have yet to be proven.

Risk Factors

- **Family history of endometriosis, especially mother or sister.**
- **Late childbearing (after age 30).**
- **History of long menstrual cycles with a shorter than normal time between cycles.**
- **Abnormal uterus structure.**
- **Diet high in hydrogenated fat (trans-fat) such as French fries or cookies.**
- **Stress.**

Symptoms and Diagnosis

Endometrial tissue responds to the same tissue as the uterus. It grows with estrogen, and may bleed during the time of menstruation just like tissues in the uterus. **The most common symptom is pain and cramps that coincide with the menstrual cycle,** and scar tissue can form wherever the endometrial tissue is located as it can interfere with the function of the organs. Other symptoms include heavy menstrual bleeding, pain during intercourse, abdominal pain and or low back pain and diarrhea during menstruation. Sometimes there are no symptoms at all. **The degree of severity of the symptoms does not necessarily correlate with the degree of involvement, as each person reacts differently.** Having **endometriosis increases the risk for uterine fibroids or breast cysts, and may be accompanied by severe fatigue, chronic fatigue syndrome, or fibromyalgia.**

The only way to diagnose endometriosis is by laparoscopy, a surgical procedure where the surgeon places a small scope

inside the pelvic cavity looking for endometrial tissues. This is often not successful, and a diagnosis can take years.

Surgical intervention focuses on the removal of endometrial tissues, while drug therapy focuses on balancing the hormonal picture with birth control pills. Both are not very successful. **More than 500,000 surgeries are performed each year for endometriosis, and there is an upward of 40% of recurrence, continued pain, and disability.** This disease often subsides with menopause when estrogen level is reduced in absolute terms. It also goes away when ovaries are non-functional. This can be surgically induced by the removal of both ovaries, or chemically induced by the use of drugs such on a temporary basis.

B. Premenstrual Syndrome (PMS)

In addition to menopausal symptoms commonly blamed on estrogen deficiency instead of relative estrogen dominance, researchers noted that many women suffer a similar set of symptoms associated with estrogen dominance during the menstrual cycle of each month. **PMS can affect women soon after puberty and all the way to menopause.**

Here are some typical complaints of patients with PMS:

- **My ring finger is getting swollen (indicative of water retention).**
- **My breasts are hot and tender (indicative of breast inflammation).**
- **I feel tired all the time (indicative of fatigue).**
- **I feel nervous and irritable (indicative of emotion instability).**
- **I feel like eating chocolate all the time (indicating an innate magnesium deficiency as chocolate is high in magnesium).**

This syndrome was first described in 1931. It is a well-established syndrome consisting of a host of physical and emotional symptoms that develop after ovulation and before the onset of the periods. The syndrome can range from a few days to two weeks. The intensity can be mild (relieved by an aspirin) or it can be severe and debilitating. Generally, its symptoms intensify as the period approaches. Interestingly, **95% of PMS can be vastly improved if steps are taken to balance the body's hormone.**

Dr. Katherine Dalton published the first medical report on PMS in 1953. She observed that an administration of a high dose of progesterone by rectal suppository relieved symptoms of PMS.

It is important to note that **not all PMS symptoms are caused by progesterone deficiency and estrogen dominance. Hypothyroidism can produce similar symptoms. Stress leading to adrenal exhaustion and low adrenal**



reserve commonly seen in working mothers for example, can also cause similar symptoms. A diet low in fiber can cause estrogen to be reabsorbed and recycled. An excessive intake of

xenoestrogen-laced beef and poultry also contributes to relative estrogen dominance associated with PMS. **Many researchers think that PMS may be linked to xenoestrogen exposure during embryo life, damaging the ovarian follicle.** The damaged ovaries from pollutants, while they are in the womb, could result in infertility and chronic estrogen dominance decades later.

The key dietary adjustments are elimination of:

- Empty calories such as potato chips and other junk foods
- Hydrogenated fats (also called trans-fat) found in such foods as cookies and margarine
- Reduce calcium intake and increase magnesium intake

In addition, elimination of coffee, sugar, and alcohol frequently reduce the symptoms of PMS, together with exercise, refrain from natural progesterone diet high in phytoestrogen or supplementation of DIM, as well as supplementation with dairy products, and one replacement. A toestrogen or supplement isoflavone extract or nutritional supplements high in fatty acids such as evening primrose oil or fish oil to reduce the inflammatory response also helps. Lastly and most importantly, the use of natural progesterone cream should be considered.



C. Fibrocystic Breast

One of the most common reasons why women visit the gynecologist is the discovery of breast lump. Fortunately, not all lumps are cancerous. After needle biopsy and workup, many of these patients are told that they suffer from benign cystic breast disease. The patient is reassured that the lumps are not cancerous for now. However, it is most important to alert these patients that such lumps are the body's cry for more progesterone.

Estrogen promotes the growth and proliferation of breast cells. Breast fibrocysts are an overgrowth of these normal breast tissues. **The primary causative factor is excessive estrogen.** It is an **early warning sign of progesterone deficiency and impending estrogen dominance.**

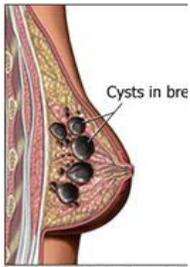
Progesterone cream is a good remedy. Apply 20 mg of progesterone cream from ovulation (day 12 to 14) until the day or two before the period starts. Normal breast tissue will return within 3 to 4 months. In addition to reducing estrogen, supplementing with natural vitamin E (alpha d-tocopherol) and borage or evening primrose oil (omega-6) will help to reduce the inflammatory response. Borage oil is preferred over evening primrose oil as it is more potent.

D. Pre-Menopausal Syndrome

Scientists have also identified a **chronic condition similar to PMS**, which they call pre-menopause syndrome. The symptoms are similar to those of menopause, but they occur often from the mid-thirties to early forties and years ahead of menopause. This may be due to primary ovulation failure and the resultant lack of progesterone output from the ovaries.

More often than not, it is due to luteal failure (failure to produce enough progesterone) in pre-menopausal women. In addition, there may also be stress induced adrenal gland exhaustion leading to a reduction of progesterone output from the adrenal gland. The overall reduction in progesterone level leads to a relative excess of estrogen or estrogen dominance. **Pre-menopausal syndrome may include PMS, fibrocystic breast, uterine fibroids, irregular periods, and endometriosis.**

E. Polycystic Ovary Syndrome (PCOS)



Polycystic Ovary Syndrome (PCOS) is a condition where multiple cysts are found on the ovaries together with other symptoms like anovulation (lack of ovulation), menstrual abnormalities, hirsutism (facial hair), male pattern baldness, acne, and often obesity. It is estimated that **10 to 20 % of women today have PCOS**, and among young women, this figure could be even higher, thus qualifying PCOS as an epidemic.

PCOS takes place when the normal ovulation cycle of a woman is disrupted or stopped. This upsets the normal balance between the glands of the pituitary, hypothalamus, and ovarian axis. Under normal conditions, the hypothalamus regulates the hormone output of the ovaries and synchronizes the menstrual cycle.

PCOS happens when this cycle is disrupted due to unsuccessful ovulation. This could take place for a myriad of reasons, for example, the follicle migrates to the outside of the ovary, but does not "pop" the egg and release it. This follicle thus becomes a cyst and there will be no progesterone production. If for some reason these follicles are also unable to produce a mature egg that can secrete the progesterone, the menstrual cycle is dominated by increased estrogen and androgen production without progesterone. This hormonal imbalance is the main reason behind PCOS.

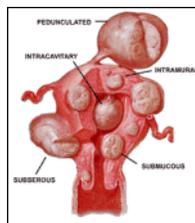


These women may at the same time have different degrees of insulin resistance (Syndrome X) and therefore higher incidence of Type II diabetes, unfavorable lipid patterns (usually high triglycerides, high LDL and low HDL cholesterol), and a low bone density. Laboratory tests often show higher than normal circulating androgens, especially testosterone. Since standard tests usually indicate that a woman with PCOS has plenty of estrogen, and since she is still having periods, there is a danger that the doctor assumes she is still ovulating and producing plenty of progesterone.

F. Uterine Fibroids

Uterine fibroids (uterine leiomyomata) are non-cancerous tumors consisting of fibers or fibrous tissue that arise in the uterus. It is the most common tumor within the female genital tract. **These growths are highly sensitive to estrogen. They develop following the onset of menstruation; enlarge during pregnancy, and decrease, often disappearing after menopause when the estrogen level decreases by half.** They can be as small as a hen's egg, or commonly grow to the size of an orange or grapefruit.

The largest fibroid on record weighed over 100 pounds. It afflicts many women, especially from ages 35 to 50. **One in 4 women in the U.S. have at least some evidence of fibroids.** Discovery is usually accidental, and coincidental with heavier period, irregular bleeding, and/or painful periods.



In cases where the tumor's size compromises other bodily function such as compression on the bladder or excessive bleeding, surgery may be indicated. The most common surgery is hysterectomy where the uterus is removed. Many hysterectomies, however, are performed way

before the patient reaches this stage. In fact, over 500,000 hysterectomies are performed every year in the US alone as mentioned earlier.

Fibrous tissues are sensitive to estrogen. **The higher the estrogen, the faster the fibroid grows.** While a fibroid in itself does not usually lead to cancer or become cancerous, it clearly signals a serious underlying imbalance in the woman's reproductive and hormonal system. Specifically **there is an estrogen dominance and progesterone deficiency.**

Such imbalance does not only affect the uterus, but affects other hormone-sensitive tissues such as breast, cervix, ovaries and the vagina as well. If not taken care of, the consequences can be devastating. The fibroid is clearly one part of a continuum of disease associated with estrogen dominance. The majority of this information was obtained from the following website: www.LamMD.com