Ovarian Cysts

aka Polycystic Ovarian Syndrome (PCOS)

Polycystic Ovarian Syndrome is a disorder of the menstrual cycle affecting between 6-10% of the population. It causes ovarian follicles to rupture improperly. As a result, eggs are not released during ovulation, but instead build up within the ovaries, forming cysts which can affect the production of reproductive hormones in the body.

Research suggests a link between Polycystic ovarian Syndrome and insulin resistance. It appears that a large number of women with PCOS have insulin resistance problems. When the body becomes resistant to insulin, the pancreas tries to compensate by producing more insulin. Eventually the body will produce too much insulin and this can trigger the production of excess androgens. Androgens, like testosterone, are male hormones, which can interfere with ovulation, reproduction and can lead to PCOS.

- if malignant, surgery is usually immediately done
- cysts often A-symptomatic
May be caused by high levels of estrogens in the body. This is a leading cause of female infertility due to excessive estrogens. Estrogen comes from pesticides, soy, Vit. E. Excessive estrogens are often the result of the liver's failure to eliminate them efficiently - do liver cleansing to strengthen liver.
Chinese boat women who nurse their offsprings from only one breast have a four-fold higher incidence of cancer in the non-suckled breast". This is an indication that stagnation has an important role in tumor or cancer growth.

DIET

- **complimentary nutritional therapy includes high fiber vegan diet of fruits, veg., whole grains, legumes.**
- **foods for ovarian cysts: beets, carrots, artichokes, deep yellow and dark green veg., sweet potatoes, yams, squash, peaches, apricots, citrus, parsnips, dandelion greens, watercress**
- **juices: carrot, spinach, beet, cucumber, lemon juice**
- **oils: omega 3 and 6 have anti-inflammatory effect: flax, borage, rice, evening primrose oil, black currant seed.**
- **avoid foods that stimulate tumor or cysts growth: meat, alcohol, hot sauces, spicy foods, fried foods, fatty foods, salty, synthetic sugar, white flour products**
- **avoid smoking, food additives, food coloring**
- **avoid too much soy products due to content of estrogen-like substances**

VITAMINS/MINERALS
- important vitamins A, B Complex, C, E
- minerals: calcium, copper, potassium, zinc, selenium, magnesium, silicon
- Dr. Jerry Tennant says any cyst situation will be helped with taking food grade iodine daily.

HERBAL
- herbs: echinacea, chaparral, flax seed oil, goldenseal, kelp, chlorophyll, milk thistle, parsley, essiac tea. Wild yam will help control spasm and ovarian pain and can be used periodcally

when needed.
- Liver cleansing herbs.

ESTROGEN DOMINANT

There are several types of estrogen found in the female body. The most abundant and powerful form of estrogen is estradiol (E2). Estradiol is responsible for building up a thick, healthy lining in your uterus in the first half of the menstrual cycle, in preparation for a potential pregnancy implantation. Estrogen promotes strong bones, boosts libido and enhances skin health. Progesterone is secreted in the second half of the cycle, after ovulation. It is responsible for maintaining the uterine lining that was built in the first half of the cycle. Progesterone promotes stable moods, reduces anxiety and promotes restful sleep. Estrogen and progesterone are designed to work like a seesaw - balancing the levels of each other to encourage smooth communication with our brain, ovaries and adrenal glands. When estrogen levels climb too high, or when progesterone levels dip too low, the result is the frustrating symptoms of estrogen dominance.

The balance between estrogen and progesterone can be disrupted by poor diet, stress, lack of sleep, impaired liver function, an unhealthy gut microbiome or exposure to environmental toxins. Estrogen dominance can lead to symptoms of irregular periods, menstrual cramps, migraines, breast tenderness and mood swings.

Dr. Lee writes that a woman may have deficient, normal or excessive estrogen, but is lacking progesterone needed to bring balance to health. We do see many views and approaches to this and over the next 20 years, those will change as more information is forthcoming. This information is representative of current standings on the subject.

How does the body get into this situation of high estrogen level? Firstly the body can create too much estrogen internally or struggle to properly eliminate natural estrogen through the LIVER and BOWEL. Secondly, we can receive estrogen transdermally (through the skin) from xenoestrogens: pesticides, detergents, petroleum products, plastic products, cosmetics, spermicides, vaginal gels, condoms. You will therefore want to avoid drinking from a plastic cup or styrofoam cup or cook with plastic as in microwaving. We are all probably suffering a little from estrogen dominant because these products are so pervasive in our society.

It is found that many who suffer from estrogen dominance also have an acid/alkaline imbalance, hypothyroidism, and adrenal stress. Many are overweight. One form of estrogen – estrone, is secreted largely by fat tissue which means overweight women are more likely to experience increased levels of natural estrogen in their bodies. Hormonal imbalance can also impair your ability to lose weight, esp. stomach, thighs and hips. When one hormone is out of balance, it can cause a flow-on effect to other key hormones. Experiencing imbalances in other hormones can therefore contribute to estrogen dominance symptoms. This is especially true of progesterone imbalances.

Imbalanced gut bacteria can also cause estrogen dominance. Higher levels of bad vs. good gut bacteria which ae responsible for breaking down estrogen (estrobolome) can cause more estrogen to be reabsorbed, rather than eliminated via the bowel.

Also, insulin resistance can promote increased estrogen production. Especially in PCOS (polycystic ovary syndrome). Hormones don't work in isolation, they are all communicating with one another to create a harmonious communication with key organs like ovaries, brain, adrenals.

Most women are concerned about the possibility of Estrogen Dominance (Excessive estrogen) because of breast cancer, ovarian cancer etc. but it has been linked to many other symptoms:

Acceleration of the aging process
Allergies, including asthma, hives, rashes, sinus congestion

Autoimmune disorders such as lupus erythematosis, thyroiditis,and Sjoegren's
Blood sugar imbalances
Breast cancer
Breast tenderness and fibrocystic breasts
Cervical dysplasia
Clots in your period
Cold hands and feet as a symptom of thyroid dysfunction
Copper excess
Decreased sex drive
Depression with anxiety or agitation
Dry eyes
Early onset of menstruation
Endometrial (uterine) cancer
Fat gain, especially around the abdomen, hips and thighs
Fatigue
Fibrocystic breasts
Fluid retention (feeling 'puffy')
Foggy thinking
Gallbladder disease
Hair Loss
Headaches, migraines, esp. premenstrually
Hypoglycemia
Increased blood clotting (increasing risk of strokes)
Infertility
Irregular or heavy menstrual periods
Irritability
Insomnia
Magnesium deficiency
Memory loss
Mood swings esp. premenstrually (teary, frustrated, irritable)
Osteoporosis
Painful periods
Polycystic ovaries
Premenopausal bone loss
PMS
Sluggish metabolism
Storing fat around hips, stomach, thigs
Thyroid dysfunction mimicking hypothyroidism
Uterine cancer
Uterine fibroids
Water retention & bloating
Weight gain or difficulty losing weight
Zinc deficiency

Here are some of the results reported from those symptoms:

Endometriosis
Blood Clots
Elevated Blood Pressure
Fibroid Breasts
Infertility
Irregular Menstrual Flow
Uterine Fibroids
Breast Tenderness
Mood Swings

Uterine Cancer
Hair Loss
Depression
Weight Gain
Migraine Headaches
Spotting
Breast Cancer Risk
Insomnia
Inflammation
Abnormal Pap Smears
Fluid Retention
Cramping
Vaginal Dryness
Thyroid Imbalances
Decrease in Memory
Low or No Sex Drive

Once your body has created natural estrogen and it has exerted its effects in the desired tissues in the body, it needs to be metabolised and eliminated. Estrogen is broken down via two steps.
The first step takes place in the liver where natural and synthetic estrogen-like substances are broken down. The second step takes place in the gut where the metabolised estrogen is packaged up and eliminated via our stool.
If either or both of these processes is not functioning optimally, estrogen can be reabsorbed into circulation rather than eliminated, contributing to high levels of estrogen.
The breakdown of estrogen in the liver requires several nutrients including B-vitamins, magnesium, glycine and selenium. Deficiency in these nutrients can slow or impair liver breakdown of estrogen and other hormones. Liver function is further impaired by high intake of alcohol, caffeine and pharmaceutical drugs.
The second part of estrogen metabolism happens in the gut. This requires a healthy gut bacteria (the "good" guys in our bowel), as well as regular bowel movements. Having an unhealthy ratio of bacteria in your gut can cause estrogen to be reabsorbed rather than broken down and eliminated. Similarly, if you are suffering from constipation or infrequent bowel movements, there is more time for estrogen to be reabsorbed, contributing to estrogen excess.
Exogenous sources of estrogen-like toxins
Exogenous sources of estrogen are often referred to as 'xenoestrogens'. 'Xeno' means foreign, so this term refers to synthetic substances which mimic natural estrogen in our body, but are slightly different biochemically.
Hormonal birth control (like the pill) and hormone replacement therapy (HRT) can contribute to estrogen dominance. The ethinylestradiol (a synthetic estrogen) in your pill is a type of xenoestrogen that is stronger than natural estradiol. This can contribute to poor ability to clear natural estrogen in your body as well as damage intestinal bacteria, further impairing your body's ability to eliminate hormones.
Other sources of xenoestrogens include:

- **Bisphenol-A (BPA - found in plastics, lining of tin cans and receipts)**
- **Synthetic fragrances (like perfumes and air fresheners due to the addition of phthalates)**
- **Conventionally-raised meat and dairy (i.e. not organic due to the use of growth hormones)**
- **Non-organic fruits and vegetables (due to pesticide residue)**
- **Regular personal care products (due to the addition of toxic chemicals like parabens, preservatives and artificial fragrances)**
- **The birth control pill (due to the addition of synthetic estrogens like ethinylestradiol)**

Here are some ways you can improve the Estrogen Dominance situation:

- **Use natural bioidentical progesterone (Wild Yam/Dioscorea Villosa). ¼ tsp contains 20mg progesterone. Women are encouraged to put ¼ to ½ tsp of the progesterone cream on the skin (eg. Face, breasts, abdomen, hands) daily for 2-3 weeks prior to onset of period. If the periods**

are irregular use 2% progesterone daily or from the full moon to the dark of the moon.

- **Avoid estrogen enhancing foods.**
- **Avoid xenoestrogens (pesticides, detergents, petroleum products, plastic products, cosmetics, spermicides, vaginal gels, eating or drinking from styrofoam or plastic.. Also avoid clin-wrap and other soft, flexible plastics (use natural beeswax wraps or paper bags as alternative). Reduce consumption of foods from tin cans (choose BPS free labelled cans whenever possible).**
- **Swap out regular clenaing products incl. Laundry powder, febric softeners, with low-tox, natural alternatives.**
- **Lose excess body fat and get regular exercise, especially strength training**
- **Detoxify the liver. The liver detoxes harmful toxins we receive from the environment and those we put into the body. When it works so hard to eliminate toxins like alcohol, drugs, caffeine or environmental agents, the liver's capacity to cleanse the blood estrogen is compromised.**
- **Decrease stress. Perimenopause is when the Estrogen Dominance usually occurs. Take this time to reinvest time and energy in yourself.**
- **Eat a hormone balancing diet is to eat lots of fresh fruits and vegetables, a little protein, and moderate only amounts of healthy fat. Getting enough fiber seems to be important. Estrogen is excreted by the bowel; if the stool remains in the bowel too long, the estrogen is reabsorbed.**
- **B6 supports progesterone production, which is often low in estrogen dominance. Improving the ratio of estrogen to progesterone can be helpful in reducing symptoms of estrogen dominance.**
- **Diindolylmethane (DIM) is a concentrated compound** derived from indole-3-carbinol (found in cruciferous vegetables). This compound is only to be used when working with a practitioner and when estrogen excess has been confirmed, as it is a powerful way of lowering high estrogen levels. In conditions where estrogen levels are not high, DIM can do more harm than good by significantly lowering estrogen, so do not use this supplement without professional guidance.
- **Broccoli sprout extract** is a gentler form of indole-3-carbinol which supports the breakdown of estrogen in the liver. It is less powerful than DIM so may be an appropriate choice if you have milder symptoms or high estrogen levels have not been confirmed through functional testing.
- **Probiotic or spore-based probiotic supplement.** To support a healthy gut microbiome and promote efficient excretion of estrogen through the bowels.
- **Calcium D-glucarate** compound helps to bind to estrogen in the liver and deactivate it. Then, in the gut it prevents unhealthy bacteria from allowing estrogen to be reabsorbed into circulation.
- **Transdermal natural progesterone cream.** If you have confirmed low levels of progesterone, but are still ovulating, transdermal natural progesterone cream can help to boost levels of progesterone in the body, and improve the ratio of estrogen to progesterone. Visit your doctor for a blood test to confirm if you are ovulating and to ask for access to a transdermal progesterone cream which can significantly improve symptoms like breast tenderness, heavy periods and premenstrual mood changes. If you are not currently ovulating, the best way to boost progesterone levels is to start ovulating again, because progesterone is produced naturally after you release an egg at ovulation.

Foods that Increase Estrogen (avoid)

- **Soy: tofu, soy milk, tempeh**
- **Flaxseed, sesame seeds (tahini), Chickpeas/garbanzo beans, beans (not green beans), alfalfa, bran cereals, barley**
- **Cucumbers, Dairy Foods, Eggs, and Eggplant all have estrogen in them.**
- **Foods that have been sprayed with pesticides or other chemicals.**
- **Coffee (even 1 cup a day can increase estrogen levels, 4 cups raised the level 70% higher than the 1 cup)**
- **Avoid refined sugars, fatty and processed foods.**
- **Dried fruits contain phytoestrogens eg. dates**
- **Commercially raised meats and poultry because they are fed on a diet of hormones, antibiotics and other chemicals mixed in. Their feed is grain which the animal is not able to metabolize.**
- **Alcohol increases estrogen levels in men and women. However, Sardinian and Spanish wines are rich in antioxidants that help remove estrogens. Other good choices: pinot and merlot.**

Foods to help:

- **Eggs, garlic and onions contain sulfur which helps the liver work in cleaning up. Choose organic when possible.**
- **Other foods that aid the liver in detoxing are lemons, limes, spinach, leafy greens and Brussels sprouts. While the cruciferous vegetables such as Brussels sprouts and broccoli help with liver function, they also contain higher amounts of phyto-estrogens, so vary your vegetable intake and have cruciferous vegetables every other day.**
- **Ground flax seeds, sesane seedsm garlic, legumes like mung benas, chickpeas, black beans.**
- **Reduce carbs and fats in the diet of hormones, antibiotics and other chemicals mixed in with their feed**
- **Fresh vegetables, fruits, nuts and seeds. Have several servings a day of green leafy veggies: spinach, celery, parsley, dandelions, swiss chard – raw, in smoothies, in soups and casseroles. Dark green leaves (and wheatgrass/barleygrass) contain Alpha Lipoic Acid which helps detox the fat cells to reduce estrogen dominance.**
- **Eating a carrot a few times a day can help bind the estrogen for removal.**
- **Animal protein that is pastured and grass-fed. Wild caught cold water fish. Small amounts of young cod, sardines, anchovies, macerel, and tuna.**
- **Eggs that are fertile, soy free-free range from foraging hens.**
- **Avocados, sprouts, radishes, asparagus, artichokes, celery, carrots, squashes, tapioca, pineapples, figs, pears, green beans, and fresh corn that is not GMO.**
- **Seaweeds**
- **Sweet potato (natural progesterone stimulant, working on the pituitary gland.**
- **Sunflower seeds (contain Vit. E) inhibits growth of estrogen receptor positive breast cancer**
- **Red peppers, garlic, onions, broccoli, brussel sprouts and oats contain N-acetylcysteine, a powerful antioxidant.**
- **Tomatoes, pink grapefruit, papaya, guava and watermelon contain lycopene, a powerful antioxidant found to help reduce the risk of breast cancer by 36%.**

- **Apples, oranges, broccoli, spinach, and brussels sprouts contain Calcium D-glucarate, detosifier of excess estrogens from the liver.**
- **Cruciferous vegetables (broccoli, brussels sprouts, cabbage, kale, mustard, turnip, bok choy, kohlrabi, rutabaga) are rich in zinc, Vit. A, B, C, D and E and contain Indole-3-Carbinol and DIM (diinodylmethane), naturally occurring compounds that breakdown estrogen to a beneficial metabolite. Sulfurophane from broccoli has been shown to stimulate the body to detox via enzymes.**
- **Dried apricots,dates, prunes**
- **Filtered water – not from a plastic bottle.**
- **Salmon, sardines, walnuts, chia seeds (omega 3's), along with avocado, olive oil, coconut, nuts, seeds.**

Herbs to help:

- **Dandelion greens and roots**
- **Vitex (chaste tree)**
- **Milk Thistle**
- **Green tea shown to improve liver detoxification of estrogen**
- **Rosemary**
- **Thyme and Oregano**
- **Mexican Wild Yam is a source of progesterone**
- **Fresh herbs: parsley, dill, sage**
- **Green tea**
- **Citrus peel**
- **Bitter melon**

Avoid these Natural Health Products With Known Estrogenic Activity:

- **Aletris**
- **Alfalfa**
- **Anise**
- **Beta-sitosterols**
- **Bitter Melon**
- **Black Cohosh**
- **Blue Cohosh**
- **Chasteberry**
- **DHEA**
- **Dong Quai**
- **Evening Primrose Oil**
- **Ginseng (all types)**
- **Fennel**
- **Flaxseed**
- **Hops (which they use to make beer also)**
- **Licorice root**

- **Milk Thistle**
- **Raspberry Leaf**
- **Red Clover**
- **Resveratrol**
- **Scarlet Pimpernel**
- **Tangeretin (flavone found in atngerine)**
- **Wild Yam**

Notice some discrepancies in the herbs that help and the herbs you should avoid? Milk Thistle is on both lists, as is Chasteberry. Our scientists are not in agreement on all of the information we get regarding this problem. In addition, much of the testing has not been done on women, but on mice and so not necessarily validated.

As we said, as the years go on, we will learn more and be better informed.