

## Table of Contents

Estrogen Dominance .....	2
<b>What It Is:</b> .....	2
<b>Common Symptoms:</b> .....	3
<b>How to diagnose it:</b> .....	4
<b>Common contributing causes:</b> .....	5
<b>How to correct or help prevent it:</b> .....	10

# Estrogen Dominance

For a variety of reasons, more and more women have an estrogen imbalance situation known as “estrogen dominance”, as either the cause of their chronic health problems, or at the very least it is a significant component of it. This booklet was written to help you better understanding (5) five things about **Estrogen Dominance**:

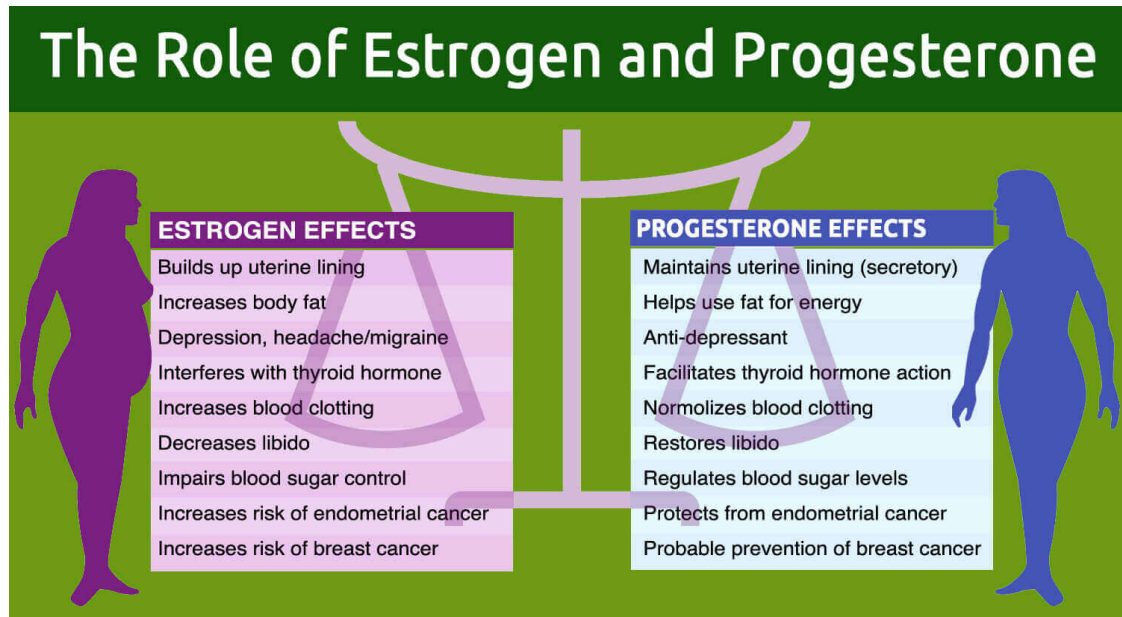
1. What it is
2. Common Symptoms
3. How to Diagnose It
4. Common Contributing Causes
5. How to correct or help prevent it.

## What It Is:

Hormones are very important chemical messengers and having just the right amount of them is critical...*too little OR too much is a problem*. With estrogen, there are some unique challenges to achieving just the right amount in women:

- A. Estrogen needs to be balanced **in relation to** the progesterone levels. In other words, the **ratio** between the two hormones is very important, and an estrogen dominance situation can exist even when the overall levels of estrogen on a lab test are normal. This can happen when either the progesterone levels drop, and/or the

effectiveness of progesterone is impaired (a “functional” drop of progesterone)



In modern society, and with the Standard American Diet (SAD), it has been rightly said that we “swim in a sea of estrogen”. This means that there are multiple sources of estrogen from our outside environment (ie...”xenoestrogens”). These can be either from our food sources (a specific type of xenoestrogen referred to as “phytoestrogen”), or from other things which will be discussed in the “Common contributing causes” section.

## **Common Symptoms:**

Because of the importance of estrogen, the symptoms related to a dominance situation are numerous. Also, there very rarely is a estrogen

dominance situation all by itself...it is usually accompanied by a variety of other metabolic issues such as: thyroid problems, gut dysfunction, blood sugar irregularities, just to name a few. Having said that below is a list of some common symptoms which an estrogen dominance can cause:

- ▶ Bloating
- ▶ Infertility
- ▶ Heavy/painful/irregular periods
- ▶ Fibroids



- ▶ Moodyness
- ▶ Decreased libido
- ▶ Endometriosis
- ▶ Weight gain/inability to lose weight
- ▶ Breast tenderness
- ▶ Gall bladder problems

## **How to Diagnose It:**

There are actually three forms of estrogen: Estrone (E1), Estradiol (E2), and Estriol (E3). The main type of estrogen in a menstruating woman is E2 and at day 20 of the cycle the correct ratio is to have progesterone be 200-300x that of E2....this can be measured with a one day salivary hormone test (on

day 20 of the cycle of course). Another way is to perform a full 30 day salivary hormone profile, checking the total amount of both estrogen and progesterone. Either of these tests would be familiar to a functional medicine doctor.

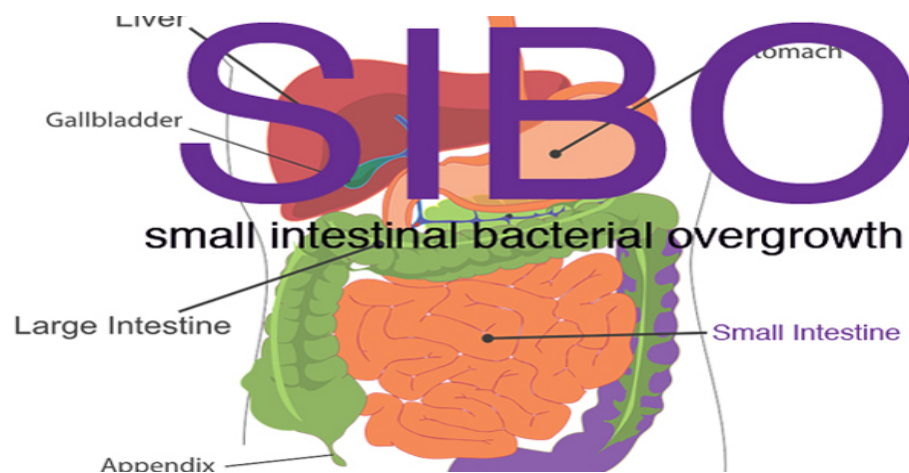
An additional marker is what's called the "**T3 uptake**", which is one of the thyroid markers on our in-depth thyroid panel. Although it's called T3 uptake, it actually has nothing to do with the T3 thyroid hormone, but has to do with the carrying capacity of a blood protein (hormones need carrier proteins to move through the bloodstream). And as the estrogen levels rise, the T3 uptake levels will drop.

## **Common Contributing Causes:**

### **A. Gut Dysfunction:**

Old estrogen that has been processed by the liver is eliminated from the body via the stool. But when the stool material doesn't pass quickly enough, and/or there is a microbiome issue, then the estrogen in the waste material can be reabsorbed back into the bloodstream because of the activity of a substance called **beta glucuronidase**. The following issues can cause this to happen:

- ▶ Low fiber diet
- ▶ Gut infections (which can be present without any gut symptoms)
- ▶ Decreased amounts of "normal flora"
- ▶ "SIBO" (small intestine bacterial overgrowth)



## B. Phytoestrogen Intake:

Phytoestrogens is a term referring to foods that either have estrogens in them...such as products from animals that have been give hormones...or that contain chemical compounds that are estrogen mimicking. Those foods include:

- ▶ Soy
- ▶ Meat (from non hormone-free)
- ▶ Dairy
- ▶ Wheat/grains: grains can contain estrogen-like fungi called “zearalenone”
- ▶ Shrimp: estrogen-like additive used called “4-hexylresorcinol”
- ▶ Items with “propylgallate” such as: vegetable oil, chicken soup base, chewing gum



Soy



Meat



Wheat/Grains



Chewing Gum



Shrimp

### C. Xenoestrogen Exposure:

*Xenoestrogen is a term referring to environmental agents that contain chemicals that can either stimulate our body to produce estrogen, mimic estrogen, or outright contain estrogen. **Some well known Xenoestrogens are:***

- ▶ Birth control
- ▶ Many cosmetics/make-up products
- ▶ Scented candles/air fresheners
- ▶ Certain essential oils (listed under “How to correct or help prevent”)
- ▶ Plastic containers such as water bottles, tupperware etc.
- ▶ non filtered water (see [www.ewg.org](http://www.ewg.org) for review of good water filters)
- ▶ Non-stick cookware
- ▶ Vinyl shower curtains
- ▶ Canned foods



Birth Control



Canned Goods



Scented Candles



Plastic Ware



Makeup

## D. Liver Dysfunction:

As mentioned above under “Gut Dysfunction”, it is the liver which processes the old hormones into a



form which enables our body to then eliminate them via our stools. Specifically, it's the Phase 1 and Phase 2 pathways in the liver which do this, and a below optimal functioning of these pathways can be detected when the liver enzymes AST, ALT, and/or GGT on a standard blood chemistry test are above the functional level of 26.

### **E. Adrenal Gland Dysfunction:**

The adrenal glands are our stress glands, and when they're not working right the levels of the stress hormone cortisol can be either too high (in early stress response), or too low (after prolonged stress response with subsequent adrenal "fatigue").

When cortisol levels are too high, it will block the receptor sites of progesterone, effectively causing the same thing as if the actual progesterone levels were too low. And remember, it's a proper **ratio** between estrogen and progesterone that's needed, so an estrogen dominant problem can exist even when estrogen levels are normal.

Also, when the cortisol levels are too low, due to prolonged stress, then the body will convert progesterone into cortisol causing overall low progesterone levels and again, an estrogen dominance issue.



## **How to Correct or Help Prevent It:**

Correcting an estrogen dominance problem boils down to a four-fold approach:

### **1. Improve the bodies ability to remove estrogen:**

#### **A. Improve Liver Function**

All hormones need to be removed from the body after a period of time, and it's the liver that does this. So if there is an functional elevation (above 26) of the liver enzymes AST, ALT and/or GGT, then a protocol to detox the liver and improve the phase 1 and phase 2 pathways within the liver will help correct an estrogen dominance problem. A structured functional medicine liver detox protocol can be of great benefit.

#### **B. Improve Gut Function**

It's also very important to have good waste removal from the gut. The conditions listed above under "common contributing causes" can all increase the activity level of a substance called "**beta glucuronidase**". This will cause estrogen to be reabsorbed back into the blood, rather than being eliminated from the body in the stool. Any effort to increase fiber in the diet will help, but the cruciferous vegetables are especially helpful because they also have high amounts of a substance called "I3C" which also helps lower estrogen. These vegetables are:

- ▶ cabbage
- ▶ broccoli
- ▶ cauliflower
- ▶ mustard greens
- ▶ brussel sprouts



Cabbage



Broccoli



Cauliflower



Mustard Greens



Brussel Sprouts

I recommend patients to aim for eating a serving of one of these foods every day when battling estrogen dominance. Of course if there is an actual **infection**, or issue such as **SIBO**, then that would need to be identified with a specialized stool analysis test, and then corrected with a functional medicine intervention.

## **2. Decrease the Intake of “Phytoestrogens”:**

Of the foods mentioned in the “common contributing causes” above, the big four are definitely:

- Soy**
- Meat** (not hormone free)

**-Dairy**

**-Sugar** (sugar isn't estrogen containing, but can lead to both increased body fat, adrenal fatigue, and a variety of other issues which raise estrogen levels)

For more severe or stubborn problems, additional foods (mentioned above in this booklet) would need to be added to the "do not eat" list

**3. Decrease the Exposure to "Xenoestrogens"**

Just as there is a big four foods from the list of phytoestrogens, below are the top four things to avoid to reduce xenoestrogen exposure.

**-Birth control pills**

**-Plastics** (bottled water, tupperware etc. contain estrogen mimicking chemicals that leak into the food or fluid contained within it)

**-Pesticides** (as much as possible eat organic/GMO free produce, as these chemicals can stimulate estrogen receptors)

**-Non filtered water** (estrogen from farm animal waste makes its way into water supply and isn't completely removed in municipal treatment facilities).

Again, if there is a more severe or stubborn dominance problem, efforts to identify and remove other xenoestrogens listed in this booklet (see below) would need to be taken.

#### **4. Correct Adrenal Dysfunction:**

As mentioned under “Common Contributing causes”, adrenal dysfunction results in, among other things, abnormal levels of the hormone cortisol. Either too high or low cortisol levels can lower progesterone, and so oftentimes corrective work on the adrenals needs to be a part of the approach to fix an estrogen dominance problem.

How this is done depends on exactly what stage of dysfunction the adrenals are in, which can be determined with the same salivary hormone test used to measure the estrogen and progesterone levels.

#### **5.Targeted Nutritional Compounds:**

- A. “Adaptogenic” herbs such as *Black Cohosh* and *Dong Quai* can help regulate estrogen levels



- B. Nutritional compounds such as *DIM* (diindolylmethane), and *I3C* (indole 3 carbinol), have been shown to help lower estrogen.

- C. Help raise the levels of progesterone, usually **without** actually taking it. Sometimes taking natural progesterone cream short-term is helpful, but most commonly low progesterone can be helped by correcting the abnormal cortisol levels that go along with adrenal dysfunction, as we've previously discussed in this booklet.



Natragest- natural progesterone cream

## 6. **EXERCISE:**

I always tell patients that there isn't any "cure-all"....BUT, exercise is the closest thing!! **Every** one of the positive effects from the strategies listed above will be magnified by a consistent proper exercise routine....and there are **numerous** other benefits as well!!



Below are some **additional measures** that can be taken for a more aggressive approach to lower estrogen:

- ▶ If applicable, lose weight. Excess visceral fat produces estrogen
- ▶ **DON'T USE** non-stick cookware. Use: **cast iron, stainless steel, glass**
- ▶ Remove, *phthalates*, which are contained in many cosmetics, make-up...**GO NATURAL!**
- ▶ As much as possible avoid scented candles, air fresheners
- ▶ Use stainless or glass water bottles
- ▶ Avoid canned foods...similar chemicals in plastic containers
- ▶ If you're an essential oil user, avoid the following ones: **Jasmine, clary sage, geranium, lavender, tea tree**
- ▶ Alcohol: triggers estrogen levels to increase



Lastly, estrogen dominance is an increasingly common problem, and is a contributing factor to many chronic health complaints. Fortunately, there are many things that can be done to reverse this dominance issue, and return the estrogen/progesterone ratios back to a more normal level, dramatically improving the quality of life of the woman suffering with this hormonal problem.

For any woman wondering if she has this issue, or for any questions, please feel free to contact Dr. Beyer at: 708.478.0690 or [stephenbeyer@att.net](mailto:stephenbeyer@att.net)