Introduction to Estrogen Recycling

But your gut microbiome contains a collection of bacteria called the astroblome. These are the bacteria that influence how much estrogen gets reabsorbed versus eliminated.

And this is how it works. After your liver packages estrogen for elimination, which is done with bile, the estrogen with the bile goes into your intestines.

Beneficial bacteria helps shuttle it out. But certain bacteria produce an enzyme called beta-glucuronidase, Which actually unpacks that estrogen and sends it back into circulation.

If you have dysbiosis in the gut and imbalance in your gut bacteria, then you'd have more beta-glucuronidase activity, which means more estrogen recycling.

This is why gut health is foundational to hormone balance and why got health, is a big piece of what we're doing with our endocrine disrupting and detoxification protocol.

I'm Jared St. Clair. I grew up in a health food store and spent over 40 years now figuring out what works and what doesn't, so that you can make confident, informed decisions about nutrition, supplements and your health.

Welcome back to Vitality Radio. I'm Jared and I am here with my wife, Jen. She's my co-host today. Today we're deep diving into one of the most misunderstood hormonal imbalances affecting both men and women.

That is something you've probably all heard of, estrogen dominance.

What Estrogen Dominance Really Means

Now, before we get started, I want to be clear about something. Estrogen dominance isn't about having too much estrogen in an absolute sense. It's about the relationship between your estrogen and progesterone levels.

And this is where so many people, including some healthcare practitioners, get it wrong. And that is exactly why we wanted to do this episode together.

I will be covering more of the women's side, the symptoms, birth control controversy and lifestyle factors that affect us daily. And then Jared will dive into the technical side the biochemistry and especially the male perspective, which hardly anyone talks about.

As you may know from previous episodes, Jared and I have been writing a book about endocrine disruption, cleansing and revitalization. This episode is a pretty big peek into what that book and protocol are all about, and it pairs nicely with episodes 588 and 589. In the first quarter of 2026, we will be launching the book, giving you all of this information in a much more comprehensive way, but we are also determined to get this out there, here on this podcast as well, one show at a time.

As Jared has called it, this is the hidden epidemic and we aim to shine a big light on it. Today we're going to break down what estrogen dominance really is and what it isn't, the root causes that nobody's talking about, why your liver health is the missing piece of the puzzle, and most importantly, what you can actually do about it.

So let's get into it! First off, estrogen is fundamentally a ratio problem. It occurs when you have too much estrogen relative to progesterone. regardless of whether your absolute estrogen levels are high, normal, or even low.

Think about it like this. If you have a seesaw with estrogen on one side and progesterone on the other, estrogen

dominance happens when that seesaws is tilted too far towards the estrogen side.

This can happen in several ways, high estrogen with normal progesterone, normal estrogen, with low pro gesterones, low estrogen. With even lower progesterone.

The most common scenario, or even slightly low, estrogen but significantly depleted pro gesterones. This is especially true in women in perimenopause or under chronic stress.

So I'm going to talk to you about some of the symptoms that people don't necessarily connect to estrogen dominance. Let me walk you through what that looks like in real life, starting with women, because I can tell you from my own personal experience and from Jared and I talking to probably thousands of women these symptoms are everywhere.

So some of the symptoms for women are heavy, irregular, or painful periods, PMS that feels like you're a different person, breast tenderness and fibrocystic breasts, weight gain, especially around the hips and thighs, water retention and bloating, mood swings, anxiety and depression, brain fog and difficulty concentrating, thyroid dysfunction, decreased libido, headaches and migraines, and hair loss.

And for men, yes, men do get estrogen dominance as well. And it's becoming increasingly common. Loss of muscle mass, despite training, increased abdominal fat, low libido or erectile dysfunction, or both, fatigue and low energy, mood changes and irritability, prostate issues, and even gynecomastia, which is breast tissue development or also known as man boobs.

Here's what's fascinating. Many people are walking around with multiple symptoms from this list and have never considered that hormones, especially the estrogen progesterone imbalance, could be the underlying cause.

Before we dive into root causes, you need to understand something crucial that most people have Not all estrogen is created equal once your body starts to metabolize it and break it down.

When your liver metabolizes estrogen in phase one detoxification, it converts it into three different metabolites. The pathway your bodies favors makes a massive difference in your health outcomes.

the three pathways are known as 2-hydroxyestrone or 2OH.

Estrogen Metabolism Pathways

That's considered the good pathway. 4-Hydroxylestron, 4OH, which is considered a bad pathway, and 16A hydroxyestrone or 16OH, which is known as an ugly pathway.

Think of these three like different exit routes. Your body has to pick one and where you end up matters. The 2OH pathway is your friend. 2-hydroxyestrone pathway is what we want dominant.

These metabolites are weak estrogens. They don't strongly activate estrogen receptors. they're easily eliminated and research shows that high 2OH levels are associated with reduced breast cancer risk.

Think of 2 OH as estrogen that's been defanged. It's lost most of its hormonal punch and it's ready to leave the body peacefully. The 4-OH pathway is a problem.

The four hydroxyestrone pathway, is where things get concerning. These metabolites are potent estrogens that cause DNA damage through oxidative stress.

They form quinones, highly reactive molecules that combine to DNA and cause mutations. This pathway is associated with increased risk of estrogen-dependent cancers.

If 2-OH is the peaceful exit, 4- OH is a destructive one. The 16-hydroxyestrone pathway creates very potent, long-

acting estrogens that strongly stimulate cell proliferation.

When elevated, these contribute to fibrocystic breasts, endometriosis, fibroid, and increased cancer risk. Think of these like three different exit routes.

Your body has to pick one and where you end up matters. The 2-OH pathway is your friend. This pathway, is what we want dominant in both men and women.

These metabolites are weak estrogens. They don't strongly activate estrogen receptors. they're easily eliminated. And this is the protective pathway. Think about 2 OH as estrogen that's been defanged.

It's lost most of its normal hormonal punch and is ready to leave peacefully. In women, high 20H levels are associated with reduced breast cancer risk, better hormonal balance, and easier elimination.

In men, this pathway is associated lower prostate cancer risks, supports healthy testosterone levels, helps maintain lean body composition, And is less likely to stimulate prostate tissue growth.

This is a pathway you want dominant, regardless of your gender. The 4-OH pathway is where things get concerning for everyone. These metabolites are potent estrogens that cause DNA damage through oxidative stress.

They form quinones, highly reactive molecules that can bind to DNA and cause mutations. In women, this pathway associated with increased risk of estrogen-dependent cancers.

particularly breast cancer. In men, the DNA damage from quinones affects prostate tissue, is associated with increased prostate cancer risk, can contribute to BPH or benign prostatic hyperplasia, and the oxidative stress can actually impair testosterone production, particularly concerning for men over 50. If 2-OH is The peaceful exit, 4-OH, is the destructive one for both sexes.

Now, 16- OH is a pathway that creates very potent, long-acting estrogens that strongly stimulate cell proliferation in both men and women. In women, when elevated, these contribute to fibrocystic breasts, endometriosis, fibroid, and increased cancer risk.

And men, this proliferative estrogen stimulates prostate tissue growth and are strongly linked to BPH and enlarged prostate. They can also contribute to gynochemastia, breast tissue development.

They may accelerate male pattern baldness and create that soft, puffy look that comes with high estrogen in men. Whether you're male or female, you want this pathway minimized.

And the ratios matter. Functional medicine practitioners tend to look at a 2 to 16 ratio, ideally 2.0 or higher, meaning twice as much protective 2 OH as proliferative 16 OH.

And you want 4 OH to be minimal due to the DNA damaging potential. The Dutch test shows exactly which pathways your body favors and how well you're completing phase two detox.

This transforms estrogen dominance from a vague concept into a specific addressable biochemical reality. However, if you look at the list of symptoms that we're sharing with you, in both men and women, it's fairly easy to tell if you're dealing with any of these estrogen dominant issues.

So the Dutch test is more of a confirmation of that if your not sure and certainly can be a very useful thing, but we don't necessarily consider it necessary.

Now, the good news is these pathways are modifiable through diet, supplements and lifestyle. They're not permanent and you have tremendous control over which route your estrogen takes.

Okay, so we're going to talk about something a little more controversial on the topic of hormone health right now, and that is birth control. Women are really getting caught in the middle and getting conflicting information that's leaving us a So I'm going to be pretty direct on this.

This is where conventional medicine and functional medicine are in a complete standoff. Hormonal birth control works by suppressing your natural hormone production, whether it's the pill, the patch, ring, shot, or a hormonal IUD.

Here's what happens. First, ovulation is suppressed or prevented. Without ovlation, You don't get the healthy rise in progesterone that should occur in the second half of your cycle.

No ovulation equals no corpus luteum equals minimal pro testosterone production. Number two, synthetic hormones are not the same as your natural hormones.

The progestin in birth control is a synthetic form of pro testosterone. It doesn't act the way in your body, it can bind to pro-gesterone receptors, but it doesnt provide the protective, calming, anti-anxiety effects that natural proesteroin does.

In fact, progestins can actually worsen estrogen dominance symptoms. Even though ovulation is suppressed, your ovaries are still producing estrogen. Meanwhile, Progesterone production has tanked.

The result? A growing estrogen-progesteron imbalance. your liver burden increases. Your liver has to process both your natural and the synthetic hormones from birth control.

Over time, this creates additional burden on your livers detoxification pathways, making it even harder to clear estrogen.

Birth Control and Hormone Imbalance

Nutrient depletion accelerates, birth control deplets, critical nutrients needed for hormone metabolism, B vitamins, especially B6, B12 and folate, magnesium, zinc, selenium and vitamin E.

These are the exact nutrients you need to metabolize estrogen properly. So the thing that nobody's talking about and that makes this so frustrating is that birth control is often prescribed to treat the symptoms of estrogen dominance, heavy periods, painful periods bad, PMS, hormonal acne, but it's not treating anything.

It's masking symptoms while making the underlying problem worse. The pill keeps estrogen levels artificially steady so you don't feel the hormonal fluctuations.

Your symptoms seem to disappear, but the root cause, the inability to properly produce and metabolize hormones, is not only unaddressed, it's actually getting worse.

Then when you come off birth control, whether that's in one year or 10 years, the symptoms come roaring back and they're often worse than they were before you went on.

This is what's being called as post-birth control syndrome. So why do doctors keep prescribing it? Most doctors aren't trying to do harm. They're working within a system that they're kind of stuck in.

I actually had a conversation today with a friend that's dealing with the doctor that is very stuck very willing to step outside of that norm. So they offer very few non-hormonal options for period problems.

They don't have time to get to the root cause work that functional approaches require. And they're just trained to manage symptoms and not really investigate underlying dysfunction.

Birth control is very effective at preventing pregnancy because that's what it's designed for. but it doesn't come

without a trade-off in consequences.

So it's up to you to decide if the benefits outweigh the risks and side effects. So, let me address one specific myth. The hormonal IUD is different because the hormones are local, not systemic.

This is technically true. Lower dose means less circulates throughout your body. But the Iud still suppresses ovulation in many women. And if you're not ovulating, you are not producing progesterone.

A local projestin in your uterus doesn't make up for the systemic proesteroin deficiency. So what about non-hormonal options? There are alternatives. Copper IUD, but it can cause heavier periods, it doesn't affect hormones.

Fertility awareness methods require diligence but are hormone free. Barrier methods like condoms or diaphragms. And then there are permanent options like tubal ligation and vasectomy.

Each has trade-offs. The point isn't to demonize birth control, it's to make an informed choice with full awareness of the hormonal implications. And if you're going to stay on birth control, at a minimum, you need to support your liver with the nutrients we'll discuss, supplement with methylated B vitamins, magnesium and zinc, prioritize your gut health and minimize other sources of estrogen exposure.

If you are coming off of birth, control you to expect transition period. Give yourself three to six months of intensive nutritional support, focus on liver support nutrient repletion, gut health, and be patient with your body as it relearns how to produce hormones naturally.

This isn't about judgment, it's about education. You deserve to know how these medications affect your hormonal health so you can make the best choice for your situation.

All right, now let's talk about something. I talk quite a bit on the show. The seed oil, I'll say it is a debate because there is debate out there, but in our book it pretty solved.

But we'll give you the perspective kind of of both sides here. charged topics in health, especially after 2024. But even before that, you got people on social media calling them toxic sludge and other people saying they're perfectly fine.

I'm 53 years old, Jen's 52. And for most of our lives, we were told that canola oil and safflower oil were the healthy oils. These are the ones that had low cholesterol or no cholesterol and were really good for the body.

We should be avoiding things like butter. We didn't even talk about tallow, right? Tallow is like this new thing that's one of the oldest and best fats in the world that nobody was talking about back then.

I remember when coconut oil wasn't on the market, so things have changed a lot with this, but there is something known as the hateful eight seed oils.

That's canola, corn, cottonseed, soybean, sunflower, safflower, grapeseed and rice bran oil. And one thing is really concerning and frankly frustrating when we're shopping for our own health foods, Jen and I, and we are looking at packaged foods that are organic and quote unquote clean.

Oftentimes we see high oleic sunflower oil in there. And yes, it's organic, but it is not healthy for you. Now, thank goodness things are shifting. You can now buy potato chips that aren't fried in tallow or olive oil or avocado oil.

Not the potato chips are probably ever that good for you, but at least they're a better option, right? So things are shifting, But we have to be really cautious with this.

And this is why, because there are four mechanisms where seed oils create hormone problems. One of those is phytoestrogen content, particularly in soybean oil.

These are plant compounds that can weakly mimic estrogen in the body. While the effect is mild, it adds to your total estrogenic load. Also, plastic contamination.

Here's what most people miss. Many seed oils are in PET plastic containers. In fact, almost all. If you look at them on the shelf, they're in a plastic container, not a glass container.

And of course, plastics are loaded with phthalates and plasticizers that are potent endocrine disruptors. The oil itself leaches these chemicals from the packaging.

So you're not just getting the oil, you are actually getting Zenoestrogens from what is packaged in. Now this is important when it comes to the healthy oils too.

We can buy coconut oil and avocado oil. and olive oil All in plastic, depending on what brand you're choosing and where you are getting it from. We highly recommend seeking out glass containers when it comes to your oils.

Seed Oils and Endocrine Disruption

Even if you were choosing to buy a seed oil, get it in glass. But optimally, we're going to recommend the healthier oils and we are going stay away from those hateful 8. The other thing about these oils is that they are loaded with Omega 6s.

And omega-6 fatty acids are not inherently bad, but ratio, just like what we talked about with progesterone and estrogen, matters. Most of us are getting way more omega 6s than we are omega 3s, and we need a balanced ratio of those.

So, if we're overdoing omega sixes, then we' re creating more inflammation in the body and more information creates impaired liver function, increases aromatase activity.

That means that you're going to convert more of your testosterone, both in men and women, to estrogen. and disrupts overall hormonal balance. Another thing to consider is the oxidative stress.

Polyunsaturated fats in seed oils are prone to oxidation, especially when heated. This oxidated stress can push your estrogen metabolism toward the harmful 4-OH pathway rather than the protective 2- OH pathway.

Now there's a debate out there. Teat oil lobby, the big food lobby is constantly trying to do as much as it possibly can to convince you that their foods are healthy.

Have you seen the cereal boxes that say made with whole grain, right? 100% whole-grain, like that's this healthy thing. Neuro-cholesterol like, that is a healthy things.

There's always marketing involved and there is always studies involved. But the studies are funded by companies that are specifically looking to convince you that what they sell is good for you.

And so the counter argument from everything I've read and everything, I have seen simply doesn't hold up that counter-argument being that seed oils really aren't that bad.

They're actually healthy for, and this whole thing is overblown. If you look at the dominance of seed oils in the American culture compared to almost anywhere else in The world and especially over the last 50 or 60 years and you Look at Americans getting fatter more diabetic more metabolically Unhealthy higher heart disease higher cancer basically one of the sickest cultures in America seed Oils are a major factor in that and And we believe that regardless of the hormone aspect, which of course is what this show is focused on, there are issues all across the board with these oils.

And as you start to make changes in your diet, if you haven't already made this change, this is one of most powerful changes that you can make. So there is middle ground though, because look, Even my lovely wife and I

still come across seed oils from time to time.

And we are like so adamant about not getting seed oil. Like we don't bring them into our home, but we eat out sometimes. We travel a lot. When we travel, sometimes they're unavoidable.

Now that's okay. That's the whole thing about, I say this all the time on Vitality Radio, and if you're a regular listener, you've heard this, so I won't belabor the point.

You do the best you can without being overwhelmed by the things that you cannot control. And if you could eliminate the vast majority of these seed oils from your body, you are going to be much, much healthier for it and your bodies going be resilient enough that when you get some, it's not that big of a deal.

The big thing, there's a few things to basically consider. minimizing fried foods or at the very least fried, foods that are fried in these seed oils, which almost all fried.

Foods are, I just mentioned tallow potato chips. I have a bag at home right now. They're actually kind of yummy. Don't recommend them every meal, but for an occasional stack snack, it's not a bad thing if you can afford them.

Kind of expensive. So maybe you can only afford to have an occasional snack with pallow potato chips. Occasionally you'll find that, but for the most part, fried foods, not good.

Reading the label matters. Again, elimination of seed oils is optimal, reduction is critical. If you're looking at the first five or six ingredients on a food label and seed oil like safflower, sunflower, soybean oil are in there, probably good to move on to the next package and find something that has less or none.

Choosing of course, the better oils, that's going to be olive oil, avocado oil coconut oil grass-fed butter, ghee, grass fed tallow. These types of things are going be far, far better than the seed oils.

And I mentioned, don't obsess over it. Just be aware of it, Don't create more stress in your body because guess what? You start obsessing over this. Stress disrupts hormones, probably even more than seed oil does because stress, we're going talk about it here in just a minute, actually impacts that progesterone in a significant way.

And then focus on what you add, not just what your remove. Increasing your omega-3s, one of the reasons they're part of vital five, can make a huge difference in balancing that inflammatory effect.

Now, let's talk a little bit about some root causes of estrogen dominance itself. I talked in episode 595 with Lisa Smith about something called the astroblolm.

In 594 episodes, I had never mentioned the Astrobalm before. So it's about time I got to it, but check out 595 because it is actually a really helpful episode.

But your gut microbiome contains a collection of bacteria called the astroblome. These are the bacteria that influence how much estrogen gets reabsorbed versus eliminated.

And this is how it works. After your liver packages estrogen for elimination, which is done with bile, the estrogen with the bile goes into your intestines.

Beneficial bacteria helps shuttle it out. But certain bacteria produce an enzyme called beta-glucuronidase, which actually unpacks that estrogen and sends it back into circulation.

If you have dysbiosis in the gut and imbalance in your gut bacteria, then you'd have more beta glucurontidases activity, Which means more estrogen recycling.

This is why gut health is foundational to hormone balance and why Gut Health is a big piece of what we're doing with our endocrine disrupting and detoxification protocol.

So, Liver detoxification is next. We live in a pretty dirty world. I think you're well aware of that. And even if you are not drinking a lot of alcohol, which we always think of, that was, you know, liver toxicity and liver damage, or you not taking a bunch of Tylenol, Which is a big factor with the liver.

we just live a dirty word and we're bringing in things on a regular basis that our liver has to process and try and get rid of. Phase 1 liver detox converts estrogen into metabolites, the 2OH, 4OH and 16OH we talked about.

Gut Health, Liver Detox, and Xenoestrogens

Phase 2 conjugates these metabolite so they can be eliminated. If phase 1 is working but phase 2 is sluggish, you get a build up of estrogen metabolitie.

that can't leave the body. Phase two requires a few things. It requires that glucuronidation, meaning everything we just talked about with the astroblome.

That's a big deal. And it requires methylation, which can be a real problem if you have MTHFR or other genetic variants, Which we're going to go into much, much more deeply in future episodes in the next few months.

And it requires what's called glutathione conjugation, which supplements like NAC, selenium, and sulfur compounds can be very useful for. So if the liver's not doing its thing, if a gut's doing it's thing then we tend to really struggle and those can both be root causes for estrogen dominance.

So another root cause that can cause a lot of problems for people are xenoestrogens. And these are synthetic chemicals that basically mimic estrogen in your body.

I'm sure most of you have heard Jared talk about these. They're everywhere. This one can feel a little overwhelming sometimes. But if you're not aware, some of the places that you can find these are in plastics, like you talked about with seed oils, the BPA, phthalates, and other plasticizers.

Our personal care products are loaded with them, with parabens and triclosan. Pesticides sprayed on our food, atrazine, glyphosate are two of big ones that wreak havoc.

Household products that have flame retardant on them or nonstick coatings are cleaning supplies. And then artificially scented candles, air fresheners, sprays, and then receipts.

That's a big one that we all probably handle every day. And we unfortunately handle them here at work on a regular basis. Our receits are BPA free. I don't know what else is on them that's terrible.

But most thermal papers, unless they're intentionally like we are trying to avoid B. P. A., are full of B P A. So what happens are these compounds bind to estrogen receptors and they contribute to your total estrogenic load.

The problem is they're persistent. They don't break down easily and the accumulate over time. So the best thing you can do is try to reduce your exposure.

Now, as Jared's mentioned before, you could only eliminate about 40% out of your life if you're being very intentional because the rest of it is just in the air and pretty unavoidable.

But some of the things you can do to reduce exposure is store your food in glass or stainless steel, avoid plastic, and never microwave food and plastic.

Use the EWG's Skin Deep Database for personal care products. If you don't know what E-W-G is, that is the Environmental Working Group. They rate things on a scale of from toxic to non-toxic.

It's a very good database to look at. You can also use it to Look at your food. They write what they call their dirty dozen, the foods that are most laden with pesticides and chemicals.

If you're trying to clean up your Food, but you can't afford to do it all at once by going organic, just look At that list and go organic that way. Filter your water and this will help remove atrazine, herbicides and pharmaceuticals.

There's a lot of birth control in our water these days, which is a little frightening. And then don't take your receipt or handle them very minimally.

If you don' t need it, don t take it. Now, I mentioned that I was going to get into this and it has to do with the whole stress connection when it comes to endocrine disruption.

There's something known as the progesterone steel. Under chronic stress, your body prioritizes cortisol production over progeterones. This also happens with testosterone.

Both are made from a hormone called pregnenolone, which is considered more of a master hormone or a mother hormone. But cortisol gets first dibs. And this is called the progesterone steel.

So if you have high cortisol, it's going to equal low pro testosterone, which is then going contribute to estrogen dominance. This is why stress management isn't optional.

It's actually biochemical. If you're chronically stressed, you are biochemically depleting pro gesterones. Also, insulin resistance, this is the metabolic link.

High insulin levels increase aromatase activity and that is enzyme that converts testosterone to estrogen. This is why PCOS and estrogen dominance go hand in hand.

Weight gain worsens hormonal imbalances. Blood sugar management is critical for hormone health. When you improve insulin sensitivity through diet, exercise, and lifestyle, you reduce aromatase activity and restore hormonal balance.

You'll notice that we're talking about a lot of lifestyle stuff here, even though we are a podcast that focuses very heavily on supplements, because these two things really do go hand in hand.

you've got to tackle this from both angles and supplements alone will not do the job. Now we'll not going to go into deep detail here. But we do have to at least mention what are known as genetic variants or genetic mutations, also known a SNPs.

Some of you have genetic variance that make estrogen metabolism more challenging. There's a doctor named Ben Lynch who popularized the concept of dirty genes when he released his book called Dirty Genes, which has been a really helpful place for us to study what's going on with the genetic variations, particularly in Jen and in her family because we're convinced now that she's got some of these very specific things, including one called MTHFR and another one, called COMT.

Now, the good news, and this is really, really important if you don't already understand this concept, genes load the gun, but lifestyle pulls the trigger.

You're not doomed by your genetics. you just need to support those pathways more intentionally if, you understand that you've got these genetic variants.

As we've been studying this over the last probably, what, three years now, MTHFR and these kinds of things, we'd been digging deeper and deeper into it.

And the truth is it's been a topic that I've wanted to just kind of leave for the doctors and whatever podcast you might be listening with functional medicine doctors or things like that.

But what I'm finding is that there are more and more people coming in every day to Vitality asking about these things that really don't have much understanding.

They, they kind of know what MTHFR is. They may even know they have Mthfr. I had a client that came in just about four or five days ago and he said, I've got two different variations of MThr.

My wife has a couple as well. We're sure our kids have them. And I said okay, so what do you know about that? And he says, nothing. So he knew that they had them, he new that there were creating issues for them but he didn't have an understanding of what they were and what he could actually do about it or how he might be exacerbating the problem through that lifestyle pulling the trigger part.

So based on that and based our research with what we've been trying to determine to optimize Jen's health and the health of her kids, We have decided that we are going to tackle these genetic variants on some very comprehensive podcast episodes in the very near future.

In fact, the next episode that will be doing on that topic or the first episode we'll be going on the topic, we're going diving into vitamin B12 and folate.

slash folic acid. We're going to talk about the different forms of B12, the difference forms folate and why that matters. And we're also going giving you some tips in those shows on how to determine if you may have some of these genetic variants, even if haven't yet decided to take a test to determined that.

Stress, Insulin Resistance, and Genetics

So let's just go into very briefly a few of the genetic variance that impact estrogen metabolism. But again, this is not going be a deep dive. This is pretty shallow stuff, but we just want to make sure that you understand that they are a factor here.

So MTHFR, that's the one most people have heard of. And what it does is it converts folate into methylfolate for phase two methylation. It appears that 40 to 60% of people have at least one variant that is related to MTHFR, and that can impair phase two detoxification, it can slow estrogen clearance support, because methylfolate and methylgobalamin are a big factor, a huge factor in methylation and detoxication.

And I noticed I mentioned methylfolate and methylcobalamin, not folic acid and cyanocobalamine. So different forms really, really matter, especially if you're dealing with MTHFR.

And methylation, the most important thing to understand about it in this conversation is that it plays a major role in detoxification across the body, but in particular with getting rid of these estrogens.

There's also one known as COMT. And COM-T gets a little confusing too, so we're going to hit that hard in these coming episodes because you can have what's called slow COMt or you could have fast COM t and COM T is literally C-O-M-t.

I'm not even going read what it actually is called because I can barely read it. But what is does is it breaks down what are known catacol estrogens. That's the 2-OH and the 4-0-H metabolites.

Slow COMT means metabolites hang around longer and that can impact you in more dramatic ways. Prolonged exposure to estrogen metabolite, specifically the 4-OH, can be a real problem and slow COM T impacts that.

DAO, which is known as diamine oxidase, that's another variant and that is how your body breaks down histamine. Reduced DAo activity leads to histamines intolerance and the impact is that histamin and estrogen creates a vicious cycle.

High estrogen increases histimine, high histiamine increases estrogen. This genetic variant can also create a lot of issues for you. There are a lotta things that you can do to address all of these things, but again, we wanted to go just kinda surface level here.

We will get into these and other variants in future episodes. The key takeaway here is that if you've been following

a hormonal protocol or you've tried lots of different things to try and balance hormones addressing your thyroid addressing, your adrenal glands addressing.

Your sex organs and trying to optimize your reproductive system. And you're not having success then genetic testing could actually reveal why. It's not that you're broken.

It just that, you need a more targeted approach. And again, as we dig into this more and we start to discover things in Jen specifically, it's really interesting the position that we find ourselves in here at Vitality because, for those of you who've heard Jen's story, and if you haven't heard her story you got to go back and listen to Jen story because it is a story of thinking you're broken and figuring out that you are not and that this stuff can all be fixed and resolved if you get those answers.

But over the last couple of years, and I'll let Jen speak to this a little bit, what we've determined is that we're two people who try pretty hard. Jen in particular, like she really has put a heavy focus on what she doesn't put in her body and what does put it in your body.

What's in the house and whats not in house, what food is stored in and all the other things and yet you don't feel like your health is optimized yet, right?

Right. Like, way better than it was, but not where you want it to be. If you were a, you know, one or two when I met you or whatever you are, maybe you're a what, seven or eight now, that you really want to a ten?

Is that safe to say? Six, Seven, somewhere in there. I'd like to closer to nine, ten. But what she's doing should get her at a 10. And what I hope by sharing that with you, and we're going to talk about this a lot in the B12 and the full eight show that's coming up next, But what I hope you hear is that if you're one of these people who feels like you are doing it all right or doing a lot of it right and you don't feel like your getting the results, it's just digging a little deeper.

You can get there and as we make these adjustments, Jen continues to see bigger and better improvements and she continues, continues the climb the scale.

And would you say right now you feel more hopeful than you have in quite a while again, now that we've been looking into this genetic stuff? Yes, and for me, it's kind of almost become fun in a way.

It's a puzzle. I love puzzles. And so I've loved learning about the genetic SNPs and seeing how that applies to my life and family members. and it gives me actually a lot of hope that there are plenty of things I can do to turn some things around that I'm not liking at the moment.

Yeah, so I guess what we're really getting at in this section is, again, probably longer than we wanted to talk about genetics, but we'll go deeper on it.

So stay tuned. There's going to be some great stuff, and we are going do our very best to make it as actionable as possible. What we don't want to do is talk over anybody.

We want really deliver in very simple terms the most actionable steps that you can take to really make these improvements. There are some really, really cool answers and some of them are really simple once you really understand what's going on in your body specifically.

Okay. So let's talk a little bit more. I'm going to turn it back over to Jen here. The seven steps to address estrogen dominance naturally. All right, so let's talk about what will actually work.

First, I just really want to stress this is not a quick fix. It has to be a comprehensive approach and address multiple root causes simultaneously. is that you have to support liver detoxification like Jared talked about before.

Liver is doing all of the heavy lifting when it comes to metabolizing estrogen. So you need to supported with B

complex vitamins. Methylated forms are best for everyone, but especially if you haven't MTHFR variant.

Magnesium is absolutely required for phase two detoxication and this is one of reason these are found in our vital five. many reasons they're now Vital 5, but this is one of the big ones.

Also, DIMM and Indo-3 Carbonyl. This helps shift metabolism toward the protective 2-OH pathways. Calcium Deglucarate, this helps block beta-glucurondase to prevent estrogen recycling.

Milk thistle can be really good to help with liver protection and regeneration, and NAC for glutathione production for phase two conjugation. And all of those are in our liver vitality and our endocline formulas.

So step two would be to optimize the strobilome. Support your gut's ability to eliminate estrogen rather than recycle it. Gut healing nutrients like L-glutamine, GDGL, slippery elm are all great additions to help with that.

Adding fiber into your diet, 25 to 35 grams daily at a minimum, that will help feed beneficial bacteria and that binds estrogen for elimination. And this can be very helpful, especially if you have leaky gut.

probiotics with spores and other supportive strains that support healthy estrogen metabolism and digestive enzymes to ensure complete breakdown of food, which is what our Back on Track is designed to do.

Step three, as I mentioned before, reduce your xenoestrogen exposure, and we went through the ways you can do that earlier. And then, of course, you want to actually support progesterone production.

You can't just lower estrogen because, again, it's that balancing act, right? We talked about the seesaw earlier. you've got to also support Progestero.

Many essential vitamins and minerals play a role here, which is why I talk the Vital 5 all the time and why a great multivitamin is part of the vital five because it covers vitamin C, It covers Vitamin E, covers zinc, some of these really key elements that play role in proper hormone production And one thing that we alluded to a little bit on a couple of shows, episode 588, 589 in particular, are some things that are coming in the first part of next year.

Our endoelevate formula for men and our endoelevate for women are going to address some of the key elements that really, really critical for optimizing hormone production across the board, including progesterone and testosterone, which will then help to counterbalance some this estrogenic activity that were all dealing with.

And then of course, stress management is huge, as we said, because cortisol competes with progesterone and testosterone. And so we need to learn to de-stress and that might sound like the hardest thing of all.

because stress comes at you you're not probably seeking it out necessarily I don't know maybe you are some people do I think but for the most part it's coming at You and learning how to manage that stress is a really really big deal and of course supplements can play a role there but also so many different lifestyle things everything from grounding to getting proper sleep to learning how to manage how much time and where you're spending your time on your phone and other devices, what you are choosing to watch on TV and so on and forth.

There's a lot of things that we can do, breath work and some many different aspects of that. But stress management is a big deal here. And then balancing blood sugar is number five.

Watching how we, not just how eat as far as bloodsugar goes, but also looking at symptoms of insulin resistance. because high insulin drives aromatase activity and aromatase again is that enzymatic process that converts testosterone to estrogen.

So how do we work with that? We eliminate refined carbohydrates and sugar or at least decrease them significantly. Increase our protein intake because protein helps to stabilize blood sugar.

Strength training is huge for two reasons. One is it improves insulin sensitivity for sure, but it also increases

testosterone production. Strength training is a major factor there.

We already talked about fiber, fiber also plays a role in glucose, slowing glucose absorption and possibly considering intermittent fasting. That's not appropriate for everyone and it's appropriate not for every age.

Women in particular need to be a little bit conscientious of how they choose to intermittent fast. definitely would recommend educating yourself on that before you do it but it can be an extremely beneficial tool for sure.

Seven Natural Steps to Rebalance Hormones

Optimizing your vitamin D is huge and vitamin d is actually a hormone not a vitamin and of course we love vitamin b from the sun it's the best place to get vitamin B but here we are recording this in Utah in December and it is not that easy to give vitamin in utah in december and many of you are in a similar position And so why though?

Because vitamin D, this is an interesting thing is we're talking about developing our protocol because Jen and I have been working on this protocol for over a year now.

We weren't going to include vitamin d in the protocol, but as we were looking at it and figuring out, okay, what are the really key factors here? Vitamin D plays a massive role in all of this.

It supports progesterone production, it supports testosterone production and improves insulin sensitivity by reducing aromatase it reduces inflammation so there's all these things that vitamin D does it's a major factor here and most people need probably four to five thousand units a day and of course we always pair vitamin d3 supplementation with vitamin k2 i've talked about that in detail so we won't belabor that here but it's a big deal and it is why our Vital D3 and K2 exist on the market now because as I mentioned in the show where we talk all about that, there's plenty of Vitamin D 3 products on market.

Plenty of good quality Vitamin products in market but there are very few Vitamin d3 products that actually have a realistic dose of vitamin k2. Our Vital d 3 k 2 have really optimized doses of both.

along with the silica and boron, and silico and Boron play a role in hormone optimization as well. And then number seven is supporting methylation. We'll be going deeper, like I said, on MTHFR and all these other variants, And we're going to do that show next on vitamin B12 and folate, but supporting methylation is absolutely huge.

So I'm going just talk for a minute about testing. Testing can be very helpful, especially if you have tried what you feel like is every option and you still feel stuck.

But what we have seen with myself and other people, and we've kind of determined that the vast majority of people can get great results just by addressing lifestyle, diet, detoxification and supplementation.

And as we had done with the Vital 5, we'd done our best to create a protocol that is as universal as possible. Now, if you do choose to test, the Dutch test can be very helpful.

A good functional medicine doctor can help you with that. Any blood testing for hormones can also be useful. I have done plenty of blood-testing to look at my hormones.

We haven't brought up or mentioned HRT at all because I've used HRTs in the past. I have done a lot of standard blood work to look at estradiol levels, progesterone, testosterone, SHBG, the sex hormone binding globulin.

That information can be really helpful to know your numbers and what you need to work with. Like we said, we'll get into some of that in another show.

Looking at your metabolic markers can very useful. like Jared has mentioned, the insulin resistance drives aromatase. And so there's a lot of different things they can look at in that area.

Then the other thing that you can do without having to pay for a test is just track your symptoms. I actually started doing this a few weeks back, trying to keep track of how I was feeling when I woke up, after I took certain supplements, and kind of just kept a journal.

So I would recommend not underestimating the power of tracking. Keep a 30 to 60 day symptom journal. Note your menstrual cycle patterns, your energy levels, you mood, sleep, libido.

You can include what you eat and how you feel after because food can play a big part in this. And then just track which interventions correlate with improvements.

And know that Jen mentioned this already, I think, but this isn't an overnight fix. Hormones take time to rebalance. And it takes time because, well, there's a lot of accumulated toxins in the body.

If you're anywhere near our age, in your 50s, you've been bathing in this dirty pool for a long, long time. Those xenoestrogens are pretty embedded in there.

But what is really, really cool is, and I mentioned on, episode one of the 588 or 589, You can start seeing results pretty quickly. There's some things that you can do, both lifestyle-wise and supplement- wise, where you could see results quite quickly, in many cases, people start to feel better in just a couple or a few weeks after doing some of these things, that we're recommending.

So don't think that, you've got to wait six months to see the results, but don' t also think you're going to get better overnight. It does take time, most people, it's a process, But in the process you are seeing the result, seeing improvements, and month after month, getting better and better results.

You've got to get the detoxification going. You got get to the nutrient stores back up so the body is, um, you know, nourished and has the raw materials that it needs to make the things that are required.

But you got make sure that your gut is back. And if your microbiome was as beat up as Jen's was when I met her, that can take some time as well. you've go to support your liver and the detoxification capacity that has and so on.

You didn't develop estrogen dominance overnight. It took all of your life to get to where you are now. But if you're patient, if your consistent, you trust the process, You can make some incredible improvements.

And like I said, not overnight, but relatively quickly. And some of the things that derail people, let's talk about those for a minute so we can avoid these pitfalls.

Mistake number one, if you do get testing done, doctors tend to want to treat lab numbers and not symptoms. Your symptoms matter more than perfect labs.

You got stuck in that. I did get stuck. When you were doing DHRT, right? Yeah, when I was doing HRT I got very stuck, in the lab numbers versus how I it was feeling.

And so, if you feel better but your labs haven't fully normalized, you're still winning. Right? Symptoms do matter in this case. But conversely, If you are not feeling better, but you labs have improved…

Right. Or your lab, they tell you your labels look fine. Trust yourself. Don't just throw your hands up and say, well, something's wrong with me. Well, there is, so figure it out.

Mistake number two, only addressing one piece. If you're only taking dim alone, you are not going to fix estrogen dominance if your guts miss. If you're chronically stressed or you are storing food in plastic, those things are going to work against you and the supplements are only going go so far.

I have this conversation with my daughter on a regular basis. She does all the supplement stuff really well, but she kind of refuses at this point. she's 22, I can give her some leeway, she refuses to clean up her lifestyle.

for the most part. She's done a few things, she's getting there, but it's a little counterproductive sometimes. Step three would be stopping too soon.

People start feeling better at six weeks, three weeks whatever your feel better point is and they stop doing the protocol or the things that are working for them and then the symptoms return.

So we recommend giving the protocols and the detox part of things three to six months before scaling back. And then mistake number five is not addressing stress.

And again, this one to some people may seem like the impossible one, but as Jared said, cortisol still is pregnant alone from progesterone production.

If you're chronically stressed, your body is biochemically depleting pro testosterone and no amount of liver support or any other supplement can overcome chronic stress, so stress management isn't optional, it's foundational.

Now, I want to say a couple things about what Jen said there, because I think we need to… None of this is… simple. And yet, as much as possible, we want to simplify it for you.

So, let's talk about these different things that she just went over because it matters. We talked about our 22-year-old daughter, and we talked how she's willing to do the supplements, but she hasn't been willing do lifestyle stuff.

But guess what? She's actually improved. She has improved, yes. Right? So supplements make a big difference. Someone who doesn't do supplements and is willing the lifestyle will improve.

All of it makes a difference. So this is where the overwhelmed thing is really, really important. Cleaning up your life in terms of what you're putting into your body or on your, body will make significant improvements over time.

Taking supplements and not cleaning up. Your life will. Make significant. Improvements over. Time. Managing stress and. Not doing the other two things will, make.

Significant improvements. Don't think that you have to do all of. It and all. Of it right now to get. better, you can get better with small, simple steps, moving in the right direction, but also don't think that only doing some of it will ever get you where you really want to be.

This goes back to the conversation we were having just a moment ago, where Jen has made these huge improvements in her health. I mean, if you knew what she was dealing with health wise.

like seeing it every day like I saw it and feeling it everyday like she felt it. And you saw where she was then and you see where he is now, you'd think, oh my gosh, this is a different person.

To a real degree, it is different. She is so much healthier than she is. And she's made all kinds of steps. And it was a process. As we talked through Jen's story, and again, if you haven't heard it, there's five episodes dedicated to it.

So it's a lot, but we go through each different step. I anticipate we're going to do a sixth and a seventh because as we work through these genetic mutation things, she is going get from that six or seven or eight that she at now health-wise to that nine or 10 that really wants to be.

But it's important to understand that we can make progress with all of these things, one thing at a time, and you can see results one step at time. So don't think that it is all or nothing, it isn't, but also recognize that the more you do, the better you'll feel.

really, really important to think through that. So as we've been digging into this for, like I said, over a year now, we realized that, nope, it isn't simple, but it can be done effectively if you address it in a comprehensive matter.

And we're so excited to introduce to you what we have been learning about. I did episode 588 and 589, we're now

doing this episode. We're going to jump into the episode where we talk about the B12 and the folate and how all that works with methylation.

And we are going bring you episodes on so much more having to do with this. You might be thinking, I don't know, that we will have 10 episodes of this and that might more.

But remember, were writing a book and we're going to be introducing that book to you very soon.

Testing, Tracking, and Final Takeaways

And it's really exciting because it is a manual. Don't think of it like a book that you read. Think of more like workbook where you're gonna have all that information in there.

We have also produced and are producing in the very near future the supplements that we believe are truly game-changing when it comes to optimizing your hormonal picture.

We really do believe that this is the hidden epidemic behind so many of the health issues that people are dealing with and that probably you are in the podcast on these different episodes so that you can listen to it and, and pick up the pieces of information that need there.

And then we're going to deliver something even more comprehensive when it comes to the book. So we are not going leave you hanging on this. What we don't want to be is that podcast that gives you some pretty cool information.

That's intriguing, but doesn't really give you a roadmap. We're really doing our best to give that roadmap over the next few months. and we hope you'll stick with us to get the information you really need.

Alright, so I guess the bottom line for me as we wrap up this episode is that estrogen dominance is real in both men and women. It's common and it's largely misunderstood by conventional medicine.

But the good news is, that it is also addressable through comprehensive and natural approaches that target the root causes. The protocol isn't complicated, we've tried to keep it as simple as possible, but it does require consistency.

And that's why we created these formulas. It's while we're writing the book. So far we have liver vitality, endo cleanse, back on track, and vital D3 and K2.

These work synergistically to address all of these root causes simultaneously. Soon we'll be introducing the endoelevate for men and the indoelevate for women.

And one that we haven't talked about much at all, Endoenergize, which we are super excited to share with you very soon. that those products will round out our protocol and give you what you need from a supplemental perspective.

Supplements that are real tools that will change things in real ways if you're willing to give them a shot and we've already seen such incredible benefits from the things that we developed so far and the customers that have been willing to share their improvements with us and personally using them ourselves.

The next things that we're bringing to you are super, super cool. We can't wait to show them with you. And over the next few months, we are creating dedicated episodes, as we mentioned just before, for specific groups of people, premenopausal women dealing with PCOS, PMS, and other hormonal issues, perimenoposal, menopasal and postmenopsal.

Men struggling with hormone imbalances and even teens navigating their hormonally years. That way you can dive deep into the episodes that speak directly to you and where you are right now.

So some next steps before we let you go on this episode. If the things that we talked about resonated with you, here are some things you could start with.

Jen mentioned tracking your symptoms and that's so valuable. Do it for the next two to four weeks just so you know where kind of your starting place is and so that you see what kind progress you're actually making.

Consider functional testing. If you feel like you need to know right where you're at, and you like the idea, if you are kind of a numbers person, you want to where your at and where at say three months from now or six months now from making these changes, go for it.

The testing can be very, very helpful and give you that objective data. You can also just pick an area of your lifestyle to start with. Maybe it's reducing plastics or getting rid of the seed oils or adjusting your diet in other ways or addressing stress or making sure you're getting that vital seven to eight hours of sleep every night.

Start the 4-product protocol, the four that we just talked about. Commit to that for 90 days and see what that can do. And we really encourage you, this will be actually part of the book when it comes out, but we encourage to track symptoms throughout that 90-days and to see where you're at because I think you are going to some really, really cool stuff.

Give yourself permission to take this seriously and invest in your hormonal health. We truly believe and have seen that you can take control of this and that Your hormones affect everything, your energy, mood, sleep, weight, relationships, libido, longevity.

Getting them balanced is one of the highest leveraged things you can do for your overall health. If you're a woman who's been told your labs are normal but you still feel terrible, like I said earlier, trust your symptoms.

Estrogen dominance is real and you are not crazy. You might feel like it. I got thrown into estrogen dominance with HRT a couple of months back and it was awful.

And I did feel crazy and I think Jared thought I was going crazy her a little bit of time. I've known you were crazy since I met you, baby. So you're not crazy, even if you feel like it, and there are answers.

As always, if found this valuable, If you are able to stick with us, bounce them back and forth here and got the information that was useful for you. Share this episode with somebody.

We are so dedicated to this topic and we certainly don't want to overkill on this, but we really want give you the info that you need. If this has been helpful, share it with somebody.

If you're willing, leave us a review. Tag us on social media. Let us know how this resonated with you. And if you have questions, give us call 801-292-6662.

Reach out on our website, vitalitynutrition.com. We're going to have a bunch of links in the show description, links for the products that we mentioned, If this is the first episode you've listened to on this topic and you haven't heard 588 and 589, please, go back and listen to those because this will all make more sense when you have it all together.

And of course, remember, we're not your doctor. We don't even want to be your Doctor. This is not medical advice. we are just here to do our best to help educate you on what you can do to optimize your wellness through natural means.

Thank you for both me and my lovely wife, Jen, for listening to us, supporting our family business. It's been a beautiful 2025, and we're so excited to bring you more in 2026. I'm Jared.

– I am Jen. Thank so much for watching Vitality Radio. Hello, everyone. I hope you enjoyed this week's episode of Vitality Radio. Just a reminder that this podcast is for educational purposes only.

This podcast has not been evaluated by the FDA. Thank you.