

HORMONE RESET PROGRAM

With: Sara Gottfried, MD

**Class 5: Estrogen (Part 1)**

**Jackie Wicks:** Hi, this is Jackie Wicks of PEERtrainer, and we are on part three of the PEERtrainer Hormone Reset Program. And of course, I'm here with Dr. Sara. Hi.

**Dr. Sara:** Hi, everybody. Hi, Jackie. Nice to be with you today.

**Jackie:** Absolutely. So we've learned so much about cortisol. We've learned so much about the thyroid. And now we are moving on to the third part of, as you aptly call, the "Charlie's Angels." And we're going to talk about estrogen. And it's interesting because, of course, I've heard about estrogen, I've heard about levels, and if you're on birth control, it's doing stuff with your estrogen. But I'm really excited about this class and excited to learn about how estrogen and the levels can be affecting, obviously, my weight loss and just my general sense of OK-ness. So, welcome.

**Dr. Sara:** Definitely. Definitely. I'm so excited to dish about estrogen, too. I think it's exciting that we're finishing with estrogen, Jackie, because estrogen is the most ancient of all the hormones we deal with. It's what really makes you feminine in many ways, but it can also work against you. So I'm glad we're going to unpack it today.

**Jackie:** Well, me too, because obviously I've been hearing about this, and I know everybody has really started to digest some of the changes that you're going to make when it comes to cortisol and when it comes to thyroid. And as you say, this is all interconnected. So I'd love to just dive right in. What is estrogen? How is it affecting me? How does it change? And also, if you could just talk about the profile, just like you did with cortisol, of maybe what it looks like in your 40s versus 60s and what our problems might be based on what part of life we're in.

**Dr. Sara:** Sure. Estrogen has many jobs in the body. I'm just going to hit some of the highlights. You don't have much estrogen until you hit puberty. But once you hit puberty and, oh my gosh, this is so in my face, because I've got a 12 year old right now... All she cares about is begin with her girlfriends. She's got her breasts and her hips starting to grow. She is spending an hour and a half getting ready for school in the morning. I spend five minutes maybe brushing my hair before I go out the door and take my kids to school. An hour and a half she is spending, on blow drying her hair, doing the hot rollers.

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This is what estrogen does to you. It makes you care about your appearance. It makes you feminine. It makes you flirt. It makes you have your menstrual cycle, especially that first half of the menstrual cycle, where you grow some shag carpeting in your uterus. And then the second half is when progesterone comes in.

So estrogen has a lot of different jobs. But just like with cortisol, just like with thyroid, you want to be in that sweet spot, where it's not too high and not too low. The profile of it being out of balance is that, for women, especially between the ages of 35 and 50... If you have too much estrogen, it will make you cranky, have PMS, maybe have a tendency towards depression, just feeling like the glass is half empty.

And it can also make you have a lot of resistance to weight loss. It can just make it hard to lose weight no matter what. Then after 50 is when your ovaries don't make much estrogen anymore. That's when you start to have dryness, globally. Dry mouth, dry eyes, dry vagina. Your joints are not as lubricated as they used to be.

You might have more injuries as a result of that. You can have hot flashes, night sweats. Sex may be the last thing on your mind. You're going to start to hear some symptoms that overlap with cortisol and thyroid, because of the cross talk. But estrogen is really that main sex hormone in your body for women.

**Jackie:** You're saying, when it's too high, you're not interested in sex? You're not interested in making yourself look good? Is that what you mean?

**Dr. Sara:** The interesting thing with estrogen is that, when it's right where you want it to be, when it's in that Goldilocks position that I talk about...When it's right where you want it to be, you care just the right amount and your weight is easy to maintain. It might be worthwhile to talk about what it looks like when estrogen is in balance and then compare it to these other states. Would that be worthwhile? Shall we do that?

**Jackie:** Absolutely.

**Dr. Sara:** So when it's in balance... I have a few women in my practice who actually have estrogen imbalance and I pay a lot of attention to them. When it's in balance you feel feminine. You feel content. Your mood is steady. Your face is clear. Your body is well rested. You feel like your breasts are relatively normal in size. They're not too big. They're not painful. If you have too much estrogen they can feel cystic. They can feel like one is bigger than the other or they've grown recently. If you don't have enough estrogen, they can feel droopy or like pancakes. If you are still having your menstrual cycle...You make it through your menstrual cycle when estrogen is in balance barely noticing ovulation.

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Barely noticing right before your period starts. If estrogen is out of balance, especially if it's too high, your period's more likely to be painful. You're more likely to have PMS. Maybe some symptoms around ovulation. You're more likely to have cysts. Ovarian cysts. I mentioned the breast cysts. You can have painful, heavy periods. Too much estrogen is linked to fibroids, endometriosis, which are some of these diagnoses that you can have. You also can have trouble with libido on either side. Most women will have a normal sex drive when estrogen is in the right balance. When it's too high or too low, you just either feel too cranky for sex or you just don't have any interest. That's respectively, too high and too low. Especially, when estrogen is too low, there's less lubrication, there's less blood flow to your lady parts, your genitals. You just don't have that kind of youthful arousal or respond sexually the way that you used to.

**Jackie:** When it comes to weight loss and estrogen, is it that same muffin top that you talk about with cortisol? Does it mimic that?

**Dr. Sara:** No. Good question. When you have estrogen dominance and you're struggling with weight, the classic thing with someone who has estrogen dominance is that they look a little zaftig. This is kind of one of those Yiddish terms where you're kind of round and plump, not purely muffin top, not belly fat, the way that cortisol makes your store belly fat for your next crisis. When you have too much estrogen, it's more on your breast, in your hips, in your butt.

**Jackie:** OK.

**Dr. Sara:** It's distributed a little bit differently. It's more in those feminine places. So, rather than the central apple, it's more like the pear shape. And...

**Jackie:** Now...

**Dr. Sara:** ...more women notice that they gain weight in their breast too. I think that's an important one. I hear that a lot from women, that their cup size has gone up, or they feel like their breasts are bigger, and more painful than they used to be.

**Jackie:** What's the dangers of being out to the "Goldie Locks" position? I'd love to talk about the high estrogen and then go to the low estrogen.

**Dr. Sara:** Sure. High estrogen has a couple of long term risks associated with it. As you might imagine from what I've described already, if you have breast cysts, if you have

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tender breasts, it definitely means that you are making more estrogens in the breast tissues than you would be if you were in that "Goldie Locks" position. The thing about estrogen, it's actually a family of hormones. You're making too many of the not so good estrogens compared to the good estrogens, the protective ones. One of the risks is that there's a higher chance of breast cancer associated with being estrogen dominant. This is very well proven. We know this inside and out. It's something that they even use at UCSF to help people with figuring out what their risk for...when they're going through menopause...and try to figure out, "OK, do I take hormone therapy, or not?" Breast cancer is one. Another risk is endometrial cancer. This is from stimulation of the uterine lining. Then, there's some of those mental health things that we mentioned, higher chance of depression, higher change of PMS, of issues with mood.

Then, on the low estrogen side, if you just don't have enough estrogen to kind of keep everything lubricated and running properly, there's the risk of osteoporosis. There's also the risk of loss of cognitive function. Let me break this one down a little bit more. For some women, they're just really sensitive to losing estrogen. Estrogen is a key hormone for them.

Starting sometime around 45 or 50, they will notice that their executive functioning, their ability to have that steel trap memory that they've always been know for, or their ability to problem solve and be creative, it's just starting to slip. They're just not on their game the way they used to be.

That's one of the risks of not enough estrogen is that executive functioning can start to decline. Otherwise, for women who are feeling kind of on the dry side, like a dry vagina, dry joints, dry eyes, those sound like maybe not serious problems, but they can have some pretty important consequences. If your vagina is dry and you're not having sex because it's painful, that can really affect a marriage. That can really affect your ability to enjoy your sex life.

**Jackie:** How do you know if you're not...how do you know the difference, for example, you're just dehydrated versus you have an estrogen problem?

**Dr. Sara:** Well, one easy way to discern is that it's not going to get better with hydration. I mean definitely many of us run around slightly desiccated. I think that's our tendency, especially busy women. But this doesn't get better with hydration. You know, I have a woman I saw recently who's 49, and she's planning her 50th birthday party with her husband, and she said to me, "You know, I went and saw this other physician, and she was telling me I need to take hormones at this really high dose for the rest of my life, and

that doesn't feel right to me, but I've been going to yoga, and I just was diagnosed with a frozen shoulder."

And so she's got this really painful shoulder condition that's keeping her from being able to do her beloved yoga class, and it's low estrogen that is causing her to have this injury.

**Jackie:** Really.

**Dr. Sara:** So it's combined with this other...you know, she's got sort of this two-for-one. She's got the on the verge of turning 50 low estrogen, and then she also has a very active lifestyle where she uses her shoulder a lot. But we definitely know that frozen shoulder has a huge uptick in the frequency of diagnosis right around the time that women go through menopause. So that's not going to get better with hydration, right? She can drink all the water she wants, and it's not going to help her shoulder.

**Jackie:** And so what ages do your patients tend to be on the high estrogen scale, or is this an overlap, because you're mentioning low estrogen as somewhere around 45 to 50?

**Dr. Sara:** Yes, so when it comes to high estrogen we know that somewhere around 75 to 80 percent of women actually have estrogen dominance between the ages of 35 and 50. 75 to 80 percent, so this is a huge number of women.

**Jackie:** So this is eight out of 10. So if you are one of these lucky two that have it I guess in the Goldilocks position, or might you even be in the low estrogen position? But I mean you're saying eight out of 10, almost eight out of 10 people this is affecting.

**Dr. Sara:** That's right. That's right. And it depends on how you measure it. Of course, I like to use really sensitive measures. I've got a questionnaire. I've got a number of ways I measure it in saliva or in blood. But what we know is that this is what your ovaries do starting at 35. This is one of the reasons why women become less fertile at age 35. You start to make less progesterone and more estrogen, and it's combination, it's the tango between those two hormones, the progesterone and estrogen, that make you estrogen dominant.

So very common, and then when it comes to women starting around age 50, we know that somewhere around 50 to 75 percent of women will have hot flashes, night sweats, and it will disrupt their sleep. We know about 40 percent of 40-something's, and 55

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percent of 50-somethings and older will have vaginal dryness. So these are very common, these symptoms of low estrogen starting around menopause.

**Jackie:** With the thyroid class you gave pretty specific numbers for people to be aware of. Are there numbers in the estrogen profile, or I guess how it also relates to progesterone, to be aware of?

**Dr. Sara:** Well, you know me very well, so you know I love to go back to the data. So, yes, I like to define estrogen dominance in a very specific way. So you can measure...if you're still cycling, you can measure your day 21 estrogen and progesterone, and what you want is the ratio of progesterone to estrogen to be about 300. Estrogen dominance is defined as a ratio of estrone to estradiol or estrogen that is less than 100. So the idea there, because I can feel your eyes starting to glaze over, Jackie, the idea there is that you want at least 100 times more progesterone molecules running around your blood stream than estrogen molecules at that point in your menstrual cycle. Now if you finish menstruation...you know estrogen starts to decline the last one to two years before your last menstrual period. So if you're 55 or 60 and your period have stopped you still want the same ratio. You just don't have to time it with your menstrual cycle.

**Jackie:** Do people sometimes confuse cortisol issues with estrogen and, you know, meaning when it really comes to weight loss and moods?

**Dr. Sara:** Well, there is some overlap. If you can't tell if your belly fat is worse than the amount of extra weight that you're carrying on your hips or your bottom, then, yes, it can be a little difficult to discern, and that's where testing, I think, comes in. That's where testing can be helpful to figure out, OK, I've got cortisol that's too high, and I have estrogen dominance, or I have one or the other. So this is helpful to figure out do I have one, two, or three of the Charlie's Angels that are out of balance.

**Jackie:** And usually I have to ask you, because you've been doing this for so long. Can you almost visually look at a patient and somewhat know what might be wrong in terms of the Charlie's Angels, or are you always going to...and then getting validated by the tests? Or do you go straight to relying on the testing?

**Dr. Sara:** So I can tell from looking at somebody and also from talking to them, but mostly from looking and listening and kind of hearing the subtext. I can tell about 95 percent of the time what the labs are going to tell me.

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**Jackie:** It sounds like...and forgive me if this is just making this too simple. It sounds like if you have that thing of, "I just can't deal," it's more cortisol, and if you have this thing of, "I just don't feel like getting ready. I just want to...I don't feel like putting on makeup. I don't feel like flirting. I'm not interested anymore," then it could be more estrogen. Is that true?

**Dr. Sara:** I think that is true, but here's the complicating matter. When you're in perimenopause, and as we've been talking about, that happens for women sometime between 35 and 40. It starts to happen then, and it goes on for about 10 years. So if you're in perimenopause, there's a good chance that you have a problem with all three Charlie's Angels, because that's when the perfect storm hits where even if you're taking good care of yourself, your stress resilience goes down by half. And so some of these metrics that we're talking about...like another ratio that I like to track if you can bear with me for one other little math thing [laughs] .

**Jackie:** No, this is great. Numbers speak volumes.

**Dr. Sara:** OK.

**Jackie:** You can't argue with numbers. The one thing I just want to say that I love that you completely focus on data and you're numbers driven is because you can't really come up with the excuses in your head. Other things you can say, "Yeah, well, I do work so hard," all those excuses we were talking about. But when you see numbers there's nothing you can make up in your head. It says the data, and you have to listen to it.

**Dr. Sara:** That's right, which is both a blessing and a curse, right?

**Jackie:** Yes.

**Dr. Sara:** It gives you this objective information that you can't argue against.

**Jackie:** Right.

**Dr. Sara:** But it also means no more blaming yourself, no more making excuses. You've got to move forward when you see those numbers.

**Jackie:** Exactly.

**Dr. Sara:** So, yes, it's a really important opportunity, but it also means those old excuses just aren't going to fly anymore.

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So the question in my mind is, is there one that stands out more than the other, because that's where you really want to focus first. But hormonal combinations, having a number of hormones that are out of balance, is a really important topic, and whenever you've got more than one Charlie's Angels that's out of balance you want to try to discern what is the top priority here?

**Jackie:** And just that one thing, but just like we were saying because there is so much information you're giving, and if you don't break it down, you do get overwhelmed, and that is why we deliver these things in a class format, because it is so much to think about and process. And you're absolutely right about the fact that...I mean you're talking about two ratios right now, and then suddenly for me, because I've already listened to your cortisol class, and I've listened to the thyroid class, I can say, "OK, here are the next ratios I might want to focus on." But I love that you said that. Focus first on whatever you think is screaming at you of, "Oh, that just sounds the most like me right now."

**Dr. Sara:** Right. Yes, that's right, and what happened first, also. So if you started to feel like you couldn't deal 10 years ago, and you've been coping with it for 10 years and then the not wanting to change out of your yoga pants and do much to brighten up your appearance in the morning, that came two years ago. So you want to focus on what came first. What came first? What's the primary issue here?

**Jackie:** So interesting. OK, so let's say you haven't gone to the doctor yet, and you don't know if your estrogen dominant, although, of course, eight out of 10 of us are. Is that pretty much all of us as well?

**Dr. Sara:** Well, it's not all of us. I'm just saying it goes down by about 50 percent in perimenopause so it kind of depends on where you started. For some people they're going to be more stress resilient in their 30s than others. For people who have a history of trauma and never processed those emotions, they're going to have a ratio that's not quite the same, so whatever your 50 percent is. It kind of depends on where you started. I'm not going to actually give you strict numbers for that.

**Jackie:** Right. So what can we do? Like if...let's start on the first estrogen dominance thing. What is the Gottfried protocol when it comes to this particular area?

**Dr. Sara:** Sure. Well, I want to start with the place where we usually start, which is what are some of the lifestyle tweaks, what are the nutritional gaps that we want to be thinking about in someone who's got estrogen dominance? And for the most part the problem is



that you don't have enough progesterone to balance the estrogen, and so I'm going to focus on the women who are maybe 35 to 50 first. The first piece you've heard from me before, which is about alcohol. And as I mentioned when we were talking about cortisol, we know that alcohol raises your cortisol, and it also raises your bad estrogens, unfortunately. In fact there was one study looking at the family of estrogens, and if you could bear with me just for one moment as we talk about...

**Jackie:** Oh, no, this is wildly interesting, but you're really...I mean you're pounding this wine thing. [laughter]

**Jackie:** Gosh. If you're listening to this, I do want to bring you back just for one second when Dr. Sara was talking about the cortisol. She's not saying, "OK, we're going to take it away completely." She's just presenting the data so that you really can't argue with it, OK?

**Dr. Sara:** Yes, don't turn off the volume. OK, so there are three main estrogens that I want you to know about. One is called estrone. Estrone. Is has the estrone...it has the "one," in it. The second is estradiol, diol, "di," two. And then the third is estriol, which has the, "tri," three in it. So E1 is estrone. It's not a very good estrogen. It's one that you make more of after you go through menopause. E2, estradiol, is the good estrogen. This is the estrogen that you make during your reproductive years. It's the one that my daughter is making in droves right now, and it's making her use the hot rollers every day.

And then the third one is estriol. That has three different chemical groups in it, and it's the main estrogen that you make in pregnancy so it's very protective. So here's the story. One glass of wine, one serving of alcohol, can raise your estrone by seven percent.

And I mentioned already the study that was published in the Journal of the American Medical Association where they showed that three to six servings of alcohol per week will raise your bad estrogens and will increase your risk of breast cancer.

So we just want to be really careful about this. We want to figure out, OK, if you have a problem with estrogen dominance, having too much alcohol is not your friend. It may seem like your friend, but it's not.

**Jackie:** The loan shark, you said.

**Dr. Sara:** What's that?

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**Jackie:** It's almost like a loan shark. You know you're buying...

**Dr. Sara:** It's like a loan shark, yes [laughs] .

**Jackie:** You know you're buying some energy, or whatever you're buying, the calm, whatever you're looking for, and then, of course, they're taking massive things away from you.

**Dr. Sara:** That's right. It's like this high interest mortgage.

**Jackie:** Right.