

## HORMONE RESET PROGRAM

With: Sara Gottfried, MD

### Class 4: Thyroid (Part 2)

**Jackie:** That's great. OK. Now we are going to move on to the solution. What do we do? Hit us.

**Dr. Sara:** Yes. Number one, I want to talk about some of the lifestyle tweaks. We did this with cortisol, too. We know that giving up gluten actually helps you with thyroid function. There's a whole back story here that we're not going to get into including testing for any problems with gluten intolerance or gluten allergies. Especially if you have antibodies to the thyroid, giving up gluten is really important. We know that it improves your thyroid function. If you have antibodies to the thyroid, if you have Hashimoto's thyroiditis or autoimmune thyroiditis if you give up gluten it helps your thyroid normalize. Another crucial piece with lifestyle is vitamin D. Vitamin D. We haven't talked about vitamin D yet.

It has so many jobs in the body and one of the jobs is it helps you make thyroid hormone very efficiently. If you're like one of the 80 percent of Americans who is low in vitamin D, this may be one of the reasons why your thyroid is not supporting you.

**Jackie:** Do you have different numbers for vitamin D than maybe...

**Dr. Sara:** Yes.

**Jackie:** If you could just give those numbers because we're in the number discussion and we briefly talk about numbers sometimes. Again, for everybody listening, we'll do it on the worksheet. It would be great if you just give what in your range is optimal.

**Dr. Sara:** This is where I put on my physician scientist hat. There's a lot of controversy about vitamin D. The pendulum swings back and forth, back and forth. Here's what we know. The best data we have in terms of breast cancer prevention is a vitamin D of about 52 or higher. The best data that we have on metabolism, including thyroid function, is for a vitamin D level of somewhere between 52 and 90. A toxic level is when it's above 150. What's important when it comes to vitamin D is that if you're low, if you're less than 52, and you start taking some vitamin D I think it's important to track your level. Here's why. There's not a linear relationship between your blood level and vitamin D and

the dose that you're taking. The relationship is a little bit more complicated mathematically.

Don't let your eyes glaze over, Jackie.

**Jackie:** They just did. I'm glad you just said that. They just did. We have almost, I would say, two subgroups in PEERtrainer. One is like me and one is completely captivated by everything that you're saying. I'm glad that we're really serving both markets here. If you're the ones that just glazed over, I wonder if Dr. Sara caught you as well because she just caught me.

**Dr. Sara:** Are you busted? Yes. Here's the deal. Here's the deal. You don't have to be a math geek like I am to appreciate this. Instead of a straight line between your dose and your level in your blood, if you plot that out in a graph, it's an S-shaped curve. What that means is that say I have a patient who came to me who had a level of about 20 on her vitamin D and so I started her on vitamin D about 2000 international units a day.

We checked her again in six weeks and her level went up to 30 so she needed more vitamin D, but we had to keep tracking her because she was low, low, low and then all of a sudden it jumped up because it's an S-shaped curve, it's not a linear relationship. The main takeaway is just to track over time so that you can figure out what's the right dose for you.

One more lifestyle tweak that I want to mention is, as you know from us talking about the Gottfried protocol, the first step in these progressive steps is that we're doing lifestyle tweaks and then we're filling in any nutritional gaps. Let's talk about those nutritional gaps because there are a lot of them when it comes to your thyroid.

One nutritional gap is copper. There are a number of different minerals and nutrients that are essential to your production, your factory in your neck of making thyroid hormones. They are copper, zinc, selenium, iron, and vitamin A. All of those you want to have in your sweet spot. Not too high, not too low.

Here's a quick story about me. When I was 36 years old my thyroid function was low and I got started on some thyroid medication and as I learned more about it, and I told you I turned myself into a guinea pig, as I learned more about it I figured out I had two reasons for low thyroid function. Number one, I was low on copper. I actually need to take a multivitamin that has two milligrams a day of copper. That's what I need for my thyroid to be working properly.

The other thing that I found was that my fondness for sushi, for sashimi in particular, was working against me.

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**Jackie:** I just figured this out on my own three months ago. Pardon me, again, you've heard me call this an interrupting chicken because that's what they say to my daughter in her class. I was suspecting that was my issue a few months ago. I cannot wait to hear how that affects things.

**Dr. Sara:** Yes. Here's the deal. I had a medical office that was right near a Japanese restaurant and I was eating too much sashimi and I became mercury toxic. I was having it maybe twice a week and I became mercury toxic and that was slowing down my thyroid function. It was one of the reasons why I had low sex drive and hair loss and not as much energy as I should have had at 36. When I got rid of the mercury and I also got my copper where it needed to be I didn't need any thyroid medication anymore. That's why I like to start with really looking at what are some of the gaps that could be causing a problem. What some people can do is they can just take a potent multivitamin, a high potency multivitamin, that helps to fill these gaps. That's one way to deal with it or you can test, which is a little more complicated. If you want the easy version, you could just take a potent multivitamin.

One other quick lifestyle tweak I want to mention is that there are certain foods that actually slow down your thyroid function. They have a funny name. They're called goitrogens. Have you heard that word before, Jackie?

**Jackie:** I haven't before, but I'm all ears. Food that slows down your thyroid function.

**Dr. Sara:** Yeah. It's funny because they are food that you are often told are just the best super foods in the world and you should just eat them up every day. This includes the brassica family so that means broccoli and kale and brussel sprouts, those green things that we're always telling people to eat, low glycemic index vegetables. If you eat them raw, they can slow down your thyroid function. They're good for your estrogen. We're going to talk next time about how they're good for your estrogen, but they can slow down your thyroid function. If you just steam them lightly, if you cook them a little bit, you get rid of most of that thyroid problem. The other goitrogens to know about is soy. Isoflavones.

This is interesting. I just reviewed a study looking at one serving of isoflavones can reduce your 3TC by up to seven percent.

**Jackie:** When you're saying isoflavone is that the soy as we know it, soy sauce?

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**Dr. Sara:** Yes. There's some controversy about this, but the best study I could find showed a seven percent effect. That's modest, but if you have a thyroid issue I think it's important to stay away from soy. There's the whole GMO conversation, too, that I think we're not going to get into today.

**Jackie:** Absolutely. Also, to reiterate, too, because I know many people at PEERtrainer take different information and put it together, remember in Japan when they're eating soy they're eating it completely as a condiment, as a side thing. I know when people go vegan one of the issues is that they start to substitute all their meats and their animal proteins for almost all soy based alternatives. That's a study. Again, many people get rid of soy altogether and it's very controversial. Just to reiterate, in many of these cultures that soy is the condiment. It doesn't become the main part of the meal by any means.

**Dr. Sara:** That's right. We know from really great research looking at the Japanese, they have the lowest rates of breast cancer and prostate cancer on the planet. They're a cold spot for breast and ovarian and prostate cancer. One of the things that happens there is not only do they eat it as a condiment, it's usually fermented and they have it over their entire lives. They have it when they're in utero, they have it when they're babies. It's not like what we tend to do in the US where we suddenly start eating a lot of it in our 30s or 40s or 50s. It's a very different exposure from what you see in Japan. I think that's a really valid point.

**Jackie:** Great clarification. That's something I actually didn't know. We'll talk about this as an aside, but maybe the difference between fermented soy versus regular. I think everyone understands hey there's this study, if you already have high levels here remember it's always a layered approach. The sum is greater than its parts. You never just want to say one thing but as you start to peel these things away and make small changes in a lot of these different areas you get a completely different result.

**Dr. Sara:** That's right. I think it's important to move away from that either/or paradigm that we see so much of in nutrition and in medicine. Not that I'm saying everyone must stay away from soy. What I'm saying is limit yourself to two servings per week and, if you can, choose the fermented type.

**Jackie:** I'm so unfamiliar. I actually, personally, don't have soy just because I never really liked it to begin with and when I have sushi now I never dip it in soy sauce. I don't even dip it in gluten free sauce. I make my own mix of lemon and wasabi, and when I first did it, I thought... I did this because my husband had so many gluten issues, and I

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didn't really feel like making him jealous of me being able to just eat whatever I wanted, so we started to come up with all of these different alternatives. For me personally, it's just not something I even have substitutes of. I just don't eat it because I never cared for it to begin with.

**Dr. Sara:** Yes. I really don't have it either, but the other word I was trying to think of was tempeh, so tempeh is another form of fermented soy.

**Jackie:** Yes.

**Dr. Sara:** Anyway, that's kind of the first part, Gottfried protocol part one, which is first the lifestyle tweaks, and then the nutritional gaps that you're filling in, and then we're adding in that little piece about heavy metals such as mercury. You may want to consider testing if you have any symptoms of mercury problems. The interesting thing when it comes to thyroid, it actually keeps the solutions a little bit shorter. When it comes to step two, which is to use proven herbal therapies, proven botanicals, none of the botanicals that I found, and that I was prescribed, mostly by Ayurvedic physicians over the years, none of them have been proven to be effective in humans, and proven to be helpful for the thyroid.

I'm just going to mention a couple of them because they're not proven, and I don't want you to take them. One is called bladderwrack. Bladderwrack, I won't even spell it, because I don't want you to take it. They have funny names, because they're Ayurvedic. The other one that I was prescribed was kanchanar guggulu. Kanchanar guggulu. So, neither of those have been proven to be effective.

So, I don't have any herbal therapies that really help you with your thyroid. Which means that we move next to step three of the Gottfried protocol, which is bioidentical hormones for the shortest duration and at the lowest dose to resolve your symptoms.

So, a couple things about bioidentical hormones. I think it's really important to acknowledge individual variation here. This is one of those cases where I think of, when people fill their nutritional gaps and their vitamin D is right where we want it, say it's about 70, and their iron is in the normal range. And copper, zinc, all those things right where we want them. They've cut out the gluten and they're still having a problem with symptoms and with their labs.

That's when I tell people that it's a lot like shoe shopping when you start on a bioidentical for the thyroid, meaning that, it's really hard to nail it the first time you get a pair of shoes. You know, what happens is, about 60 percent of the time, I'll nail it with the first choice

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that I make. I make kind of an educated guess based on the laboratory tests for what to start.

And typically, I'll start with something called natural desiccated thyroid, you probably have heard of this before. There's some controversy about this in terms of it being regulated by the FDA, but the options there include Armour Thyroid, and also Nature Throid. I happen to have a really good experience with Nature Throid.

A lot of women really love this. There are whole thyroid communities, as you might imagine, that have grown up around advocates who are big fans of certain medications versus others. Many women really swear by Armour or Nature Throid. Another option is to get started on T4, and that goes by a lot of different names. Synthroid...

There's a new one called Tirosint, T-I-R-O-S-I-N-T. I like that one, because it's gluten free, and it's also a liquid soft gel, so if you have issues with digestion, it's a little easier to absorb. It's made in Europe, and it just got approved here a short while ago.

Levothyroxine is another name for T4, but for women who have a problem with T3, like their T4 is fine...

I told you about this patient of mine that I saw. Giving her T4 is not going to help her, so in that women, I actually gave her some T3. T3 goes by a couple of different names. There's Cytomel, and then this is one place where I sometimes will compound some T3, so this is where you'd have to see a doctor to prescribe these things, but the Cytomel works really well in some people.

In other people, it's too activating. I told you how the T3 boosts your metabolism, it can make your heart rate go up, it can make your mood good, but for some people, it's just a little too much of a rev, and they have an uncomfortable feeling of their heart racing. When that happens, when they're really sensitive to T3, I'll sometimes compound it into a slow release formula.

Those are the different options for the bioidenticals. Just a reminder, I think you know this, but the bioidenticals are exact replicas of what your body has always made, so it's not anything foreign to your body.

**Jackie:** Just to reiterate, in the step three part of the protocol, these bioidenticals, this is something that your physician prescribes. This is not something that you can ever think about doing on your own, correct?

**Dr. Sara:** That's right. That's right. I wouldn't want you to go to Canada and get your own prescription for this. I think it's very important to be working with a trusted clinician if you're at step three.

So, if you think about that mythical 20-year-old or 25-year-old who's the perfect hormonal specimen. And as long as she doesn't have a family history of thyroid problems and she's not still going with her thyroid. What it looks like is that she has a completely normal, forgiving metabolism. Her weight is stable. She looks at a piece of cake and it doesn't immediately land on her hips. People don't recoil in horror when they shake her hands, because she doesn't have freezing cold hands.

Her hairdresser doesn't stare in alarm at her hair, at the texture, at the part that keeps getting whiter and whiter, at the loss of the eyebrows and the eyelashes. There's not more and more money being spent on mascara.

She's also just feeling that zip in her step. She's, her sex life is normal, it's what she wants. She is really feeling like she's got the buoyancy to move forward with her life's work.

**Jackie:** How do all of you feel when you think of this? I'm listening to this, saying, "OK, you know what, I want to feel like that again. I want to be back to the way I was in my 20s."

**Dr. Sara:** Well, I totally agree with you. It reminds me of a little story, can I share one last little story, Jackie?

**Jackie:** Yes.

**Dr. Sara:** My mother, who lives in Oregon, and she told me it was OK to share this story. So, I got her permission first. My mom is 65, and I did a thyroid panel on her. I did a whole hormone panel on her, because I had some suspicions, as you might imagine. I found that her thyroid function was low, even though she had had her thyroid tested every year with her primary care physician. So, I found that her free T3 was low, her TSH was right in that borderline range of about 2.7.

What I did was to go through with her how treating her thyroid also helps with prevention of Alzheimer's disease. So, we've got some Alzheimer's disease in my family. I don't want to develop Alzheimer's, I don't want my mother to develop it, I don't want anybody

having it. We know, for people who have a TSH above 2.0, there's an increased risk of Alzheimer's disease.

Anyway, we decided to start her on a very low dose after we did the Gottfried protocol step one, we ended up choosing a very low dose of nature-throid, something called a quarter grain. She found, within seven days, that she was significantly better in terms of her mood, in terms of her weight. She had swelling that disappeared. A lot of the achiness that she had, and some injuries that she had, in joints like her shoulder and her knee got better.

Here's the part that was so thrilling for me. She has a house on the beach in Oregon, and she found herself running up the stairs. She called me and she said, "Oh my gosh, I haven't run up the stairs at my house in 20 years."

**Jackie:** Wow.

**Dr. Sara:** So she ran up the stairs, and she was like, "Oh my gosh, I haven't done that in decades." That's the kind of change that we're looking for here. I talked about getting bounce in your step again. This is literally bounce in your step.

**Jackie:** Wow. Wow, wow, wow. I'm so glad that you shared that, because I do think that people notice when they have those bursts of energy, or something that feels like they used to, and that's going to be a great marker after you start to make these changes, and you go to your physician, you've got your levels done, and just knowing that's something that's possible, that could happen in such a short amount of time... I think many of us are reluctant to doing things because we go, "OK, I guess in a year I'll start to see what happens." So many of the examples that you've given are really short amount of time, and I know you're not promising that'll happen in a short amount of time, but as you keep giving patient stories that's three days, one week, it seems that you're really noticing in terms of a real change that you can grasp onto, and say, "OK, wow, this could work. This is going to be something that I can do."

I am really am so excited to hear from people after they listen to this class. And of course, after they've listened to the cortisol, as well.

Again, this'll be the wrap up of part two of the thyroid class. And next time, we're going to be talking, do you imagine they're actually another part of this, the Charlie's Angels, which we all know there are three. I'm excited to see how much I'm going to learn about how estrogen plays into this and all this cross talk that you're talking about.



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Because I don't know if you're listening, if you sort of felt the same way as I did, but once I heard cortisol I go, "OK, well, gosh, I have, cortisol. When I attack cortisol, I'm going to really feel differently." But knowing that there are all these three parts and they all play together really makes you see the context and how this can, the umbrella over all of these things and how this is going to significantly change your weight loss efforts and how you feel and things like that.

So again, next part will be about estrogen. Please write us, please post in the team. And Dr. Sara, if you have anything to add, be here, otherwise, we will see you in the next class.

**Dr. Sara:** Well, let me add one quick thing. You know I can't resist.

**Jackie:** Which I love. You're always informative. I'm always learning something else.

**Dr. Sara:** Well, I love that you mentioned that sometimes you see quick changes. I know how motivating those are. As someone who's struggled with my own weight until my 30s when I really figured out the hormonal Charlie's Angels, how to get those in place, and when they're place, it's so much easier to manage your weight. When I figured that out, it made all the difference for me, so I do want to enunciate that point about how when you're highly attuned, when you're looking at these symptoms that we're talking about, when you're measuring your waist, gentle reminder to measure your waist, when you're tracking things like, "When was the last time you ran up the stairs?"

It's when you're highly attuned that you really start to notice these changes, and how hormones affect so much of your life. So I think it's important to see attunement, and then also to say that there are some people who can take four to six weeks to really see some progress. For me, for instance, it took me a while to get all the mercury out of my system, but once I did that, and I got my copper fixed, it just made all the difference with my thyroid function.

I just wanted to emphasize that point that you made, Jackie.

**Jackie:** Which I think is fantastic. Again, even just thinking it could be somewhere between three days and six weeks, versus making all this effort that a lot of people make every day, and they're not even seeing anything for three months. I think that is just an important distinction. Again, email us, post in the team, and we will see you in the next class on estrogen. Dr. Sara, thank you so much. This is a fantastic class.

**Dr. Sara:** My pleasure. So happy to be with you, Jackie. Thanks for having me, and thanks everybody for listening.

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**Jackie:** OK. We'll see you next time.

**Dr. Sara:** OK. Bye bye.