Class 3: Thyroid (Part 1)

**Jackie Wicks:** Hi, it's Jackie Wicks with PEERtrainer. And obviously, I'm here with Dr. Sara. Dr. Sara, welcome.

**Dr. Sara Gottfried:** Hi, Jackie. So happy to be with you. Hello, everybody.

**Jackie:** We are here in class two of the Reset Program, reset your hormones. Now, let's just do a tiny recap of the last classes. And you know, it was broken up into part one and part two. If you recall, we were talking about cortisol. The main thing that I do want to emphasize is, if you didn't pick one thing or two things in the Gottfried protocol about what you're going to do to really start to get your cortisol under control, do it now. If you did, write about it in your log. Share it with the team.

Just one thing, whether it was actually buying a tiara, I actually went hunting around my daughter's room to find her, because she has like two or three pink tiaras, to see if that might fit me. You know, I ended up getting some specific Himalayan bath salts to take baths from the last class.

Whatever it is, if you took supplements, just focus on that one thing and that accomplishment and that win, maybe add a couple more things, and really focus on the accomplishments and some of the things and some of the steps you're doing to really start getting this under control.

**Dr. Sara:** I love that. Can I add one quick little thing, Jackie?

**Jackie:** Oh, please, of course.

**Dr. Sara:** So, one big win is that you can actually see your muffin top shrinking. I don't know if we emphasized this enough last time. So, I really hope that everyone measures their belly. You know, the classic thing is to measure it in inches right around your belly button.
**Jackie:** Oh, I'm glad you said that specifically, because I'm always wondering, because I'm doing it at the smallest part of my waist.

**Dr. Sara:** Oh, no question.

**Jackie:** And I've always wondered, am I cheating, when they talk about that? Should it be a little further down? So, I'm glad that you clarified, it's right around your belly button.

**Dr. Sara:** Right where your belly button is. I mean, if you are used to going for the smallest measurement, I certainly understand that. And you could do both measurements if you'd like. But it's amazing, just within a short amount of time, within seven days, you will notice a change in your waist measurement which translates into really big shifts in terms of your metabolism. So, that's a huge win.

I also really appreciate that you're mentioning adding one or two more things, because what happens is that when you start to feel better, when you're less overwhelmed because cortisol is under control, you have this amplified benefit where you feel like you can take on some more. So, I want you to go into that feeling. I want you to really get the amplified reset.

**Jackie:** Mm-hmm. I love that. What happens, obviously, is it starts to build on each other. Is it almost like the sum is greater than the parts when you start to layer on the different things that help with the control of your cortisol?

**Dr. Sara:** Absolutely true. Absolutely true. Can I give you one little case as an example?

**Jackie:** Oh please.

**Dr. Sara:** So, I had a woman that I saw yesterday. 39-year-old woman who has one child, and she came to me because she was feeling like she wasn't able to lose the baby weight. It had always been easy for her to lose weight in the past, she just would make some tweaks to, usually, how many carbs she was having and the weight would fall off, but after having this baby, the weight was not falling off. So we did some testing based on her symptoms. I had a suspicion that she might have an issue with cortisol, and also possibly with her thyroid, because she had some mood issues, and how it is after you have a baby, it's pretty much guaranteed that your cortisol is going to be through the roof, just managing the sleepless nights and so forth.
So we found that her cortisol was high, and her high cortisol was actually dragging down her thyroid, so she had borderline thyroid function, which is one of the things we're going to dish about today, and make it astonishingly simple for you.

When we got her cortisol managed, and we did that with a couple of small tweaks similar to what we've talked about before, phosphatidylserine, fish oil, when we made those small tweaks, it also corrected her thyroid, and she was able to lose weight without the huge effort that she was putting in before.

So that's an example of the crosstalk. You just mentioned this idea that the sum is bigger than the parts, and there's so much crosstalk, or interdependence, between Charlie's Angels, between how cortisol can drag down both your estrogen, and its dance with progesterone, and also your thyroid, so when you correct the cortisol, you get these downstream benefits. All the hormones start to work in your favor again.

Jackie: Well, thank you for sharing that, because I think that's one of the biggest frustrations when it comes to weight loss is that you feel as though you're putting out this tremendous effort, and you're getting back such little result. When you just mentioned some of those tweaks that you did with your patients, she felt like that this is something that's manageable. "The effort that I'm going to put out is going to, hopefully, be more balanced with the results that I'm going to see with my weight loss," because that's really the biggest thing for people.

Dr. Sara: I think it's really important, especially when you see results fast, and I'm not saying that these supplements are miracle drugs, but this woman was done with breast feeding. If you are breast feeding, the fish oil is fine, but we don't have data on the phosphatidylserine. But I think getting into action, and seeing the results, that's what helps people stick with the new habits. I think that's a really important piece.

Jackie: Completely, and I want to talk about, because we've talked so much about cortisol, and we're talking about that crosstalk, I love that word, and how does that... Obviously today, we're going to be talking about the thyroid. I have to just say briefly what we're going to talk about in this class, what it is, how it's affecting your weight loss, what it's doing for your hormonal balance, and most importantly, obviously, is how to start... If the words are "regulating your thyroid," I'm not even sure clinically what you would say, but I want to start the class off with how much confusion there is when it comes to thyroid, even for me. I remember working very closely with a physician who's really respected in the medical community, and he put a stake in the ground and
said, "There's no such thing as thyroid issues. If anyone even talks about a thyroid issue, it's completely fraudulent."

Whereas I have talked to other people who have real certainty that they have issues with their thyroid, and they take traditional pharmaceuticals, and they know, they say, "The reason that I'm gaining weight is 100 percent because of my thyroid." Now, what's interesting is when they talk about their thyroid, I've never heard anyone talk about that in combination with the cortisol, the Charlie's Angels of things that you're talking about.

But the number one that I'd love to focus on first is just getting through the confusing, the misinformation, because again, we all know that confusion leads to inaction, because you sit there frustrated, and say, "Oh, this is just another thing that I'm going to hear that's in complete conflict with the other things that I've heard."

So we're just going to cut through it and get total clarity on the thyroid, what it is, and how it's affecting us. Well, obviously how it's affecting us.

**Dr. Sara:** Yes, absolutely. Total clarity, and I'm really glad that you raise, Jackie, the controversy, because you're right, there's not a single drum beat when it comes to thyroid. In fact, I think thyroid is right up there with estrogen in terms of how people respond to it. You just get people who are very extreme in one direction or another, and whenever that happens, what I say is, "Show me the data." The good part there is that I have reviewed 2,000 studies in the past year to write my book on thyroid, and I want to make it so simple for you today, so that you know how to optimize your thyroid, and you have a really clear picture of what you need to do to do that.

**Jackie:** Well, I'm glad that you said that, because that's been the major thing. As a lay person, you know that the studies matter so much, but I wouldn't even know how to interpret it or analyze it. So let's dive right in. This is fantastic.

**Dr. Sara:** Absolutely. I just wanted to say one other quick thing about thyroid. Here's something I see in my practice all the time. I have women who come to see me, and as you know, the women who come to my office typically are in their 30s through their 50s, sometimes 60s and 70s, but for the most part, they are kind of in that 35 to 50 age range. They tell me, when they come in with the weight gain, and the crankiness, moodiness, and maybe some hair loss, they tell me that they thought it was thyroid. They asked their primary care physician to run a thyroid panel, and they basically got dismissed.
They got patted on the hand and just sort of said, "You're getting older. That's what it's like to get older. It's normal to feel more fatigued, and unsexy, and fat, and cranky. That's just how it is. You've got to accept getting older," and I just want to call...Can I say "bullshit?"

**Jackie:** Yeah. [laughs]

**Dr. Sara:** I just want to call bullshit on that, because it's really important to say...Just check the thyroid. We don't need to dismiss these symptoms. We can get objective information and move forward. So don't settle for being dismissed. That's my short version.

**Jackie:** I love it, and 100 percent, you are your best caregiver. You are living with your body 24 hours a day. My grandmother said this to me, my mother said this to me, so from a very young age, if I thought something was important, and the physician that I was interacting with didn't think it was important, I said, "OK, they just have a different viewpoint, different set of information, and I will find a physician that will listen to me." And so, always, always, always, trust your own gut when it comes to these things.

**Dr. Sara:** Totally agree, and I would take it one step further. I would say you're not only your best caretaker, you are your best physician. The idea is that you find clinicians who are part of your team, who work as partners with you so you can take this information that we're going through. Today, we're really going to unpack the thyroid and talk about what is normal, what is optimal, which is different than what is normal. And you'll be able to take that information and really have a sense for whether your thyroid is normal or optimal, because I want your thyroid to be optimal.

**Jackie:** I love it. I'm excited myself... [laughter]

**Jackie:** ...because I have no idea, even through your notes. Of course, again I read the notes, and as a layperson...and I keep saying, "a lay person," but I'm around this stuff all the time. For me, it's just so much information, and I'm already most of the time in a state of overwhelm that I just want it made so clear, which is what you do perfectly. So I'm pretty excited about this class.

**Dr. Sara:** I'm excited, too, and just one little comment about that is it's normal to feel overwhelmed with the science, especially when you're in perimenopause. It's just a set up to feel like you get overwhelmed easily so we're going to make it super simple for you today.

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**Jackie:** Great. So first thing -- what is it? How is it affecting me?

**Dr. Sara:** Yes. So your thyroid is this beautiful gland in your neck. It is the biggest endocrine gland you have. It's got a butterfly shape. What does it do? It is the master of your metabolism, and I know people on PEERtrainer understand that metabolism is pretty complicated. It's not that there's any one thing, but thyroid is really the engine behind your metabolism, and what I mean by that is the rate at which you burn calories. So if you want lasting weight loss, if you want an easeful relationship with your body, with your weight, you've got to manage your thyroid gland.

There are lots of other symptoms that thyroid can cause when it's high or low. I'm going to focus on low thyroid function today, because that's the most common problem that we see. The triad of the most common symptoms that we see for someone with low thyroid functions are, number one, fatigue, number two, weight gain, and number three, mood changes -- usually mild depression.

So those are the three classic symptoms that you see when the thyroid is low. Some people even call this, "thyro-pause," because it's so common in women. It can be up to 20 times more common in women than men, which is why I'm especially sensitive to women getting dismissed for having symptoms of low thyroid function.

**Jackie:** And is it sometimes when you go to the physician someone just says that you have like chronic fatigue syndrome, or they're misnaming some of these symptoms -- not misnaming, but categorizing them into a different diagnosis?

**Dr. Sara:** Yes, I mean I would say that fatigue is the number one symptom that primary care physicians see, and there's a workup that most physicians learn when they go through their conventional training for what to do when you have a client in front of you with fatigue. The way we're trained as physicians is to look at the diseases, the conditions, that are the most worrisome, and the hard part when it comes to thyroid is that there are so many people who are undiagnosed with low thyroid function that it drags down the normal range that laboratories use.

So, that's what makes it so hard, but, yes, you're right. I mean a lot of people get labeled with conditions that are not very specific, like chronic fatigue system, or the one I mentioned earlier, you're just getting older, which is not true. It's not something that is part of aging to get tired. It's really something that we want to understand and turn around.
Now, there are a lot of other symptoms, too. I can just mention some of the highlights. Hair loss is a really common symptom with low thyroid function, not just head hair, but you can actually lose eyelashes. Classic is the outer third of your eyebrows. If you ever see a picture of me, you'll notice my outer third is a little thin.

Jackie: What is the outer third? Where is that?

Dr. Sara: So meaning that normal eyebrows go all the way past the side of your eyes, right, toward your temples, and people who have low thyroid function, they are just super thin or don't have any hair at all in the outer third of their eyebrows. So the inner two thirds are normal, and then they just sort of stop. [laughs]

Jackie: And I mean that's a common place where people are even plucking their eyebrows or getting them shaped so sometimes they won't even know or notice that is my gut -- or maybe not.

Dr. Sara: It's true. I mean most people don't pluck the outer third. It's something that you can really notice. You were making a joke earlier, Jackie, about how you were diagnosing people with high and low cortisol...

Jackie: Right. [laughs]

Dr. Sara: ...because you've been learning how to do that, and I do the same thing. I mean I look at people, and one of the first things I notice is what's going on with the outer third of their eyebrow.

Jackie: I'm not a physician, but I play one after a class with Dr. Sara. [laughs]

Dr. Sara: Exactly. Exactly. You can diagnose all your friends. You can get a lot of entertainment out of this.

Jackie: Well, I mean, it is a fantastic toolset to learn about what the symptoms are with cortisol and low cortisol, and that's what I'm so excited about learning with the thyroid, because you're giving me real markers. They're real visual markers that I can say immediately, "OK, something is going on with my levels in my body."

Dr. Sara: Yes, absolutely, and I think it's so important, that message of empowerment that you just mentioned, because so many women are used to turning over their power to their physicians, especially their gynecologist. You know, you ask, "Could you run a..."
thyroid panel?” and they say, “Oh, no, I don’t think you need that,” and, actually, you do. So I think that message of empowerment is really important.

**Jackie:** OK, you were going over a couple of the other symptoms. You were saying the outer third... but I’m glad I actually asked, because I wouldn’t have understood.

**Dr. Sara:** So, here are some of the other symptoms that your thyroid is not working on your team. Besides the hair loss, you can have dry skin. Your hair can be dry. In fact, it can tangle easily. There’s even something called thyroid hair that hairdressers will talk about where it’s very straw-like. You can have thin and brittle fingernails. It’s also common to have some fluid retention, especially in your ankles. Another piece that you can see beyond just gaining a few pounds, or 20 pounds, is that some of the laboratory tests that you get can become abnormal. We’re going to talk about the thyroid hormone test in a moment. But, your cholesterol can actually start to climb. Another common symptom is constipation. I know you get a little uncomfortable, Jackie, talking about bowel movements. Can we talk about bowel movements...

**Jackie:** I’m OK...

**Dr. Sara:** Can I have your permission?

**Jackie:** ...now. I’ve been indoctrinated by all of you.

**Dr. Sara:** OK. Good. So, here’s the interesting thing. I was taught in medical school that constipation is when you go for more than three days without a bowel movement. That is just not true. I mean, it’s normal to have a bowel movement every day. There are many cultures where they have a bowel movement after every meal. So, I really consider it, if you don’t have a bowel movement everyday, to be abnormal. So, for me, constipation is if you’re not able to have a bowel movement everyday. And let me make one little caveat there. I see so many women who are used to pushing themselves hard, like we talked about in the last session. And they have a cup or two of coffee every morning, and that’s what triggers the bowel movement. That’s not necessarily a normal thyroid symptom in that case because the coffee is raising their cortisol and that often will make you have a bowel movement.

So, we just want to be a little careful about that one. Headaches are...

**Jackie:** That is wildly interesting. I want you to repeat that because in other classes in PEERtrainer, we talk about that. I’d love you to clarify something because it triggered...
something in my own head. Are you suggesting that if you actually go to the bathroom a lot because you drink a lot of coffee, that might be because of cortical, and that's not necessarily that your body is functioning the way that it should?

**Dr. Sara:** That's right. So, if you have any of those symptoms that we talked about last time related to your cortisol being off, either too high or too low, I really think it's a good idea for you to detox off of caffeine. You are absolutely right. We know that caffeine, especially, coffee is a laxative, so it raises cortisol. I think of it as a high interest loan that you end up having to pay back. It's not a real source of energy to drink a cup of coffee. I'm not saying that no one should drink coffee because there are definitely some benefits associated with it. But, if you have problems with cortisol, I think it's important to back off because of the interdependence between cortisol and thyroid. So, I think it's really important to be careful about how much coffee you're consuming, why are you consuming it, and is that why you're pooping.

**Jackie:** I've never heard the connection before so I'm really happy that you said that because we have so many questions and answers, obviously, on PEERtrainer. And all of you listening, you understand this. And we've had a lot of people say, "Well, you've taken away my coffee because that's a good thing in terms of detoxing. Suddenly, I can't go to the bathroom regularly."

**Dr. Sara:** Yeah.

**Jackie:** So, I'm glad that you're clarifying this.

**Dr. Sara:** Yeah. I think it's a real important point. If I could have a little science moment here...We know that low thyroid function is incredibly common. Borderline function is even more common. This is one of the most frequent reasons I see for women who are not having a bowel movement everyday. So, I think it's really important to assess in a very thorough way, how many symptoms you have that would count toward low thyroid. So, this is a really important one. And you can't really judge your bowel moments if you're having coffee every day.

**Jackie:** Excellent. Are there any other small symptoms you should go over? Or, does that kind of cover 80 to 90 percent of the people that come into your practice?

**Dr. Sara:** A few more symptoms I want to mention, cold hands and cold feet, that's classic. There are a lot of people who are wearing socks to bed. That is not normal. That can be a sign that your thyroid is not working. Decreased sweating. Sometimes people
have muscle or joint aches. You feel like an old lady way before your time. You can have tingling in your hands and feet. I often will see women 35 to 50 with headaches, especially migraines related to their thyroid. Brain fog, we talked a little bit about that earlier. It can make your speech a little more slow. It can give you a hoarse voice. I have thyroid issues. So, you can sometimes hear it in the hoarseness of my voice. We talked about fatigue.

When you do an examination as a doctor, the reflexes are sluggish, like you don't kick when we tap on your knee the way you normally do. Then, another really important one that I like to mention is in women especially, it can contribute to low sex drive. A couple of other important points for women only is that it can make your period heavier. It can also be associated with infertility or difficulty getting pregnant. It's also linked to miscarriage.

And here's a really interesting part. Physicians test the thyroid on every single woman who has a miscarriage or has difficulty getting pregnant, meaning that it takes six months or longer to get pregnant. They will test every thyroid hormone at the drop of a hat in that situation, and they also use a very tight narrow range for what's considered normal in those women. They use a different range and they are also reluctant to order thyroid testing in women who are not trying to get pregnant or are not having miscarriages. So, I feel like there's a double standard that we just really want to be careful about going forward.

**Jackie:** So, if you're having trouble with your physician and you love your physician, and having trouble with them giving you a thyroid test, the only thing you have to say is, "Well, I didn't want to tell you this, but I've been trying to have a baby for six months and I can't."...

**Dr. Sara:** Even if you're 65.

**Jackie:** ..."Oh, you should have told me. I'll get the thyroid test." [laughter]

**Dr. Sara:** "Oh, didn't I tell you that. Yeah. I'd like to check my thyroid please..."  

**Jackie:** "Yes, I know I've always said to you that I'm done, but, you know, I need you to..." I understand what you're saying in terms of that...the markers...And I do think as a physician you have so much going on and so many things to diagnose. And you have to be on for so much of the day. I understand why you might start to just categorize certain things to just make it easier and just make it almost a functionally moving office because
you have so much going on. And you have the 10 minutes sometimes. And you can't take all that time to be able to understand the nuances of your patient and what might be going on.

**Dr. Sara:** OK. That may be the case, but I am not going to accept that as an answer. I mean, I really appreciate you rushing to the defense of physicians who are reluctant to do more testing. But, I just feel like women who are not able to rock their mission because their thyroid is not working, we need to know that information.

**Jackie:** Yeah. Well, I'm glad...

**Dr. Sara:** I don't care how busy you are.

**Jackie:** Well, I'm glad you're saying that. I do tend to see both sides of the equation when it comes to this because I just sort of hear the frustrations from everywhere. But again, it's true what you're saying is...And that's why, again, I do just want to say to the audience, that's why I've always been insistent myself. I've never said, "OK. Well, that's not something that you want to do." I remember before Internet -- trust me, before the Internet -- I had interstitial cystitis. I was sure I had it because I did all the research in the library about it because I had a problem for two years. No one was able to tell me what was wrong. What was interesting is within four months, I had figured it out myself. I took it to the physician and the physician goes, "No. That's definitely not what you have." And, I said, "What do you mean that definitely not what I have? How do you know it's definitely not what I have? I just did the research. This is really inline with my symptoms." And the physician said, "That's not it."

I know it takes work. I know it's frustrating. But, I really went to physician after physician until I found a specialist, I think it was five doctors into it, that said, "Yes, this is completely aligned." And I was able to work on my own stress levels because that was a major part on interstitial cystitis where...

**Dr. Sara:** Yeah.

**Jackie:** I completely cured myself in a sense. But, if I hadn't taken such ownership, I could probably still be struggling for a long period of time. So, I do agree with you in terms of that you're not accepting that. As women, we have to get our thyroid checked. I will tell you, as you've gone over the symptoms, I never understood why suddenly my hair became tangled.
Dr. Sara: Yeah. Isn't that interest? It didn't tangle much in my twenties or when I was a teenager. Then, suddenly, in my thirties it started tangling. So, I think that's such an important point. And I just wanted to echo your sentiment, which I think is very important, which is doctors are well-intentioned but often they're either under informed, or for whatever reason, they don't know the latest normal ranges. They don't know the latest optimal ranges. They trained 10 years ago. So, I think it's important not to blame the doctors, but instead, to really focus on empowering patients, empowering women to step forward and say, "Actually, I need this test. And if you won't order it, I'm happy to go to this other lab where I can order it myself."

Jackie: Exactly. I'm so glad. And I think if the take away here, the key concept here is what Dr. Sara just said, you are your own physician. That's the biggest takeaway here is that go with your gut. If you need something, this is about you, and you come first.

Dr. Sara: Yes. Beautifully stated.

Jackie: OK. So, now we know symptoms. I'm shocked about my tangled hair. That actually just happened in the last year. So, I'm kind of happy that that only happened in the last year. So, I'm hoping that this is only gone undetected for a shorted amount of time than a longer amount of time. So, now I'm wondering... 

Dr. Sara: Well, now that your cortisol is better, Jackie, we're probably going to be good with your thyroid. You tangles are just going to start falling. You won't have those tangles anymore.

Jackie: I'm wondering if some of you listening are saying, "Oh, yeah, I definitely feel that." You start the realization of "Maybe it's not that I have two kids and I'm just getting older, or maybe it's not that I work really hard. Maybe this is something I can start to work on," and obviously let's go to the next step. What do we do if you answered "yes" to a lot of those symptoms you just said?

Dr. Sara: Yes. Let's talk about what to do next. I'm a big fan of testing the thyroid. I think you probably have assumed that from what I've said already.

Jackie: Yes.

Dr. Sara: This is the one hormone where it's especially important to enunciate that point you made, that it's not a moral failing. It's not just that you're the overwhelmed, depleted mom and everyone else seems to be coping just fine. This is one of those places where
it's biology. I really recommend testing. I think testing is so important, and I want to really make the testing super-simple, so that you can really understand what is optimal, what is the normal range maybe that they see at your local laboratory, and what is definitely abnormal or low thyroid function.

Jackie: OK, and we're going to give everybody just a second pause here to write this down. Now, of course, we're going to have handouts there too, but sometimes when you have handouts you say, "OK, well, I'm going to go get those afterwards," or, "I'm listening to this in the car, so let me just make a note of that when I get home." This is a really important thing. If you are listening to this and you're in front of a computer where you can write or you can take notes on your cell, or you can get a pen and start writing this down, this will really help the information seep even more into your brain.

Dr. Sara: Yes. If you're struggling with your thyroid, often you have brain fog, and it just makes it hard to hear these numbers and make any sense out of them. We are going to make this super-simple for you.

Jackie: OK.

Dr. Sara: There are three tests that I think are essential. Those three tests are, number one, your TSH, T-Thomas, S-Sara, H-Harry. Thyroid Stimulating Hormone, TSH. Second test is your Free T3, F-R-E-E, T-Thomas, three. Then the third test is your Free T4, T-Thomas, the number four. The details don't matter quite so much, but let me just pause here for another quick science moment. Your body makes thyroid hormone in that butterfly-shaped gland in your neck. What it does is it makes a storage hormone. It takes T4, and the four refers to the number of iodine atoms on the thyroid hormone. Your body makes this storage hormone that basically just waits in the wings for when you need it for your metabolism, so say you're running a marathon. You're going to need to make more of the thyroid hormone, and so your storage hormone, your T4, is going to get converted into T3.

One of the iodine atoms gets taken off in the biochemical reaction. You make Free T3. Free T3 is the really important hormone, because that is what drives your metabolism. It's what makes you feel carefree. It's what keeps your mood stable. It's what makes you have an easeful relationship with your weight. It keeps the hair on your head and on your eyebrow line and keeps your hair from getting tangled.

Those are the three hormones, and I can dish about what's going to be the normal for each of those. One quick caveat here is that if you get a physician, a conventional
physician, to measure your level, often they will only measure your TSH, and they're not going to measure these other two.

**Jackie:** That first test, the TSH, Thyroid Stimulating Hormone.

**Dr. Sara:** Uh-huh, Thyroid Stimulating Hormone. You want all three, because there are situations where you can have a normal TSH but one or two of the other hormones are off, and you can miss a case of hypothyroidism, of low thyroid function, in that situation. I find very commonly...and I told you about all these women who come to see me who have symptoms of low thyroid, and their doctor tested them and told them they were normal. Lo and behold, we test them, we find that their Free T3 is low, they're not making enough Free T3. We start them on the Gottfried protocol, and they become better within a short amount of time. Sometimes seven days, sometimes six weeks. It depends on what the underlying problem is. It's really important to get all three of those tests.

**Jackie:** I know if you're going for the A-plus, which all of us like to, you're going to get these three tests. I do want to ask you, just for the people in the audience who really feel so overwhelmed, they're just not there, that they feel like, "I'd love to go to my doctor, I'd love to do all these things, but is there a way to go for the B-plus here if I can't get these three tests done, if it's going to take me a couple months just to even get that done?" Is there something you can do without knowing the exact levels of those numbers, or do you feel that strongly that you have to do this, this is not something that you can put off?

**Dr. Sara:** When it comes to cortisol, I think you can actually step into some of the lifestyle changes. When it comes to thyroid, I think it's really important to know one way or another because of how common low thyroid function is. I think establishing your baseline is really important. I can give you a couple of options here. For instance, if you go to your doctor and he or she says, "I'll do your TSH, I'm not willing to do those other tests," go ahead and do the TSH. You're at least going to have a baseline TSH, and that is a great first start. Another option is that you can test yourself. There are a number of labs where you can actually do a home test, so it's not a big production of going out to the lab.

**Jackie:** I'm glad you just said that. These are the other options you can do, rather than saying, "I just don't have time. I don't have a doctor I like, like they keep talking about. Where are these physicians that are going to completely listen to me the first time and I don't have to worry about it?" I'm glad that we're just giving options of, hey, if your doctor
says, "Well, we're not going to do all three," at least get the number one, that TSH for your baseline, or you can go to a lab and get these done yourself.

**Dr. Sara:** That's right. That's right, and maybe we could mention on the worksheet some of the labs that you can go to, but that's really valuable. For a lot of women, especially if you're working and you're busy and it's hard to get off to go see your physician, do some home testing. It's a lot easier. You can do it on a weekend. You're going to have a baseline, you'll have feedback. It'll be a great way to get into action. I think that baseline is really important because of how common it is. If you just started doing some of the lifestyle changes or you've started doing some of the supplements that I'm going to get to in a moment, you may not know where you were when you started. We know that what you measure changes, so I'm a big fan of measuring, especially when it comes to the thyroid.

**Jackie:** This is great. I'm glad that you said that, because that convinced someone like me, who is...and I'm sure this also speaks for some of you, where I'm like, "Ah, doesn't this sound great, but my last physician I went to did do a little bit. Really listened to me, but also said, 'Oh, Jackie, you're 40 now, and things just start to change,' and I just said, 'Oh, gosh, I don't really feel like fighting with that physician.'" Not fighting, but I didn't really feel comfortable enough and had a good enough relationship to start insisting on things. I thought, "Oh, OK. Well, now I'm going to have go find another physician." I need to know, I need to hear this from you, Dr. Sara, is this a must-have or a nice-to-have? I'm glad to hear that this is a must-have, because then it really goes into a different category of things that I have to do.

**Dr. Sara:** It does, and I'm really glad that you raised that point because one of the key symptoms of low thyroid function is that when your doctor says to you, "You're 40 now, Jackie," and you feel like, "Oh, I don't want to be the squeaky wheel, this is not a fight that I want to rev up for," that desire not to rev up is a symptom of low thyroid function. I think it's really important to say, "It's a symptom, honey," so let's just make that point. Another important one, especially for the moms who are listening, is that it's very common for women, after having a baby, to have problems with their thyroid. What makes me insane is that they feel fatigued, they can't lose weight after having a baby, maybe they have depression. They go see their doctor, and they get started on an antidepressant without checking the thyroid.

We know, 20 percent of the time with depression, the problem is your thyroid is low. Especially after having a baby, if you're struggling with weight, if you're struggling with
fatigue, we know what it's like to be sleep-deprived after having a baby, but your thyroid is going to connect how bad it is, if it's low.

**Jackie:** I'm also glad that you said that because I know that some people listening...I think with physicians, there are certain markers that you look at. When someone looks at me and says, "Well, you're relatively thin, you seem to have so much energy," because I happen to be a pretty just high-energy person to begin with, but I know I'm not myself. That physician doesn't really have a baseline of who I really am unless I've been to them for, what, 10 years maybe. I'm really glad that you just said that, because maybe just when someone's looking at you from the outside, they don't really see any markers or there's no fire, there's nothing that goes off in their head of, "Oh, got to make sure that...there's something that could be wrong."

Again, I'm just glad that you clarified that, because I know that that's what a physician usually says to me. "Oh, you have two kids. You're 40, you have a husband, you have a business, you have so much going on." What happens in your brain is you say, "Gosh, I really do."

**Dr. Sara:** Well, it's true. You do have a lot going on.

**Jackie:** You think to yourself, "Well, yeah, and I shouldn't be so hard on myself," and you start to question your own gut. Like, "Yeah, I do have all that, and maybe I should cut myself a break. Yeah, I am a little tired and I am turning 40," so really stop yourself from maybe listening to those reasons that do seem so plausible.

**Dr. Sara:** I think that's crucial. Before you buy the fat clothes, before you start to accept that the new normal is that you're 20 pounds heavier than you were five or ten years ago, you are crankier and snippety and feel bitchy most of the time, or you don't have the energy to have sex, before you start to accept those things, just check your thyroid. Do me a favor, just check your thyroid before you go there. I just think that's a very important point. One other thing I wanted to say about the physician who doesn't have the base case, who doesn't know how vital you were, Jackie, 10 years ago, they are comparing you to themselves. Here's the interesting thing about physicians. We know that the rate of burnout is really high for physicians. We know it's somewhere between about a third and a half of physicians.

This is one of the points you were making earlier. They're busy, they don't want to order too many labs, but they're comparing you to how tired and burnt out and how many cups of coffee they're drinking every day. You don't want that comparison. You want to compare yourself versus you in your 20s. That's the important comparison.
Jackie: Excellent point, because isn't that true? Don't we all have our own filters? Isn't that how we see everything?

Dr. Sara: Oh, it's true.

Jackie: It's no different from the physician. It's no different anywhere, and that's just an excellent point you made.

Dr. Sara: It's a really important point. I just want to tell one little dramatic story, if I may, of one woman who got dismissed for years and years. This is a woman who's very public about her story. She's a celebrity, and her name is Gena Lee Nolin. Can we talk about Gena just for a moment?

Jackie: Oh, please.

Dr. Sara: Yeah. Gena was one of the "Baywatch" babes. Now, honestly, I didn't watch "Baywatch" when I was growing up, but she was one of the "Baywatch" babes in the red bathing suit.

Jackie: They were all hot. I definitely watched a couple of the shows.

Dr. Sara: They were all hot, no question.

Jackie: They just were, every single last one of them.

Dr. Sara: The interesting part was that Gena had the hardest time fitting into that red bathing suit, compared to all the other people that were on "Baywatch." She had several children. I think she had three, maybe four. I think three, and after her first child, she started to have symptoms of low thyroid function. She had fatigue, like bone-crushing fatigue. She had difficulty with the weight loss, couldn't fit into that red bathing suit, and she had moodiness. Never had her thyroid checked, got started on an antidepressant. She's writing a book about this with a friend of mine, Mary Shomon, so I've talked to her about this.

With her next baby, she even got started on a heart medicine because she was having trouble with her heart, with the heart rate, because of her low thyroid function. Now, she had something a little bit different, a little bit more complicated than what we're talking
about. She had something called Hashimoto's thyroiditis, which is where your immune system starts to attack your thyroid. Again, it can be affected by cortisol.

This is the same problem that Oprah has. I'm going to come back to Oprah in a moment, but what is so fascinating with Gena Lee Nolin is that she went for years, even as a celebrity, trying to fit into that red bathing suit. She went for years without getting her thyroid diagnosed. So don't let that happen to you. If you can't fit into the red bathing suit, get your thyroid checked.

Oprah really struggles with this same problem, and I thought Dr. Oz put it really beautifully. He framed her problem with her thyroid as a frat party in her thyroid, and that's basically what's happening because her immune system is attacking her thyroid. Even though she takes thyroid medication -- she's very public about this -- her levels of thyroid hormone are all over the place, like a frat party. Sometimes high, sometimes low. When you're under more stress, it can cause what's called a flare, so you have all this variability to your thyroid function. There are ways of trying to manage this so that you're not all over the place with your weight high the way that Oprah is.

**Jackie:** Let's talk about the...oh, please, pardon me.

**Dr. Sara:** One last thing that I wanted to say is that the number one cause of low thyroid function in the U.S. is Hashimoto's thyroiditis. A lot of people don't realize this, and it's one of those thyroid conditions that is passed down through the generations. If your mom struggled with thyroid, it's a good chance that the problem is Hashimoto's. I just wanted to mention that one piece, that this is the number one reason in the U.S. If you look worldwide, the most common reason for low thyroid function is iodine deficiency, but that's not the case in the U.S. anymore.

**Jackie:** I'm glad you said that, because many people have written about having Hashimoto and they haven't put thyroiditis with it. Many people on PEERtrainer have said that they have that.

**Dr. Sara:** Yes, it's super-common, super-common. Some people call it Hashi's, some people call it auto-immune thyroiditis. There's lots of different terms for it, but I actually think it's really important. If you have a thyroid condition, I think it's really important to check something called your antibodies, so that you know whether your immune system is attacking your thyroid. You can actually reverse this. You can get your antibodies down to the normal range.
**Jackie:** Wow. We were talking about those three tests. Do you want to talk about the numbers, of what normal levels versus optimal levels are?

**Dr. Sara:** Sure, oh yes. We're going to put this in the worksheet too, but let me tell you. When I went through my training -- I was at Harvard Medical School in 1989 -- at that point, what was considered a normal TSH, Thyroid Stimulating Hormone, was 0.5 to 5.5. Then in 2002, the American Association of Clinical Chemistry issued new guidelines, and they recommended that the normal range be changed to the following, 0.3 to 2.5 milli-international units per liter. I'm just going to give the units there, because in Europe, they're a little bit different. Then the following year, just one more little update here. The American Association of Clinical Endocrinologists changed the normal target range to 0.3 to 3.0. This is how things get so confusing, because a lot of people will go to a doctor who trained before 2002, and they're using that old range.

**Jackie:** Uh-huh. Wow.

**Dr. Sara:** I mentioned that so many people are not diagnosed with low thyroid function, so that changes the normal range at your local laboratory. If you look at some of the new data that has come out in the past couple of years and you take out all the people who have a problem with their thyroid and you only look at people who have a thyroid that is operating perfectly, the normal range in those people is about 0.1 to 1.5.

**Jackie:** Wow.

**Dr. Sara:** So, that's the optimal range. That's the range that I tend to use in my office. I don't have one number that I use in terms of what's normal for everyone. I like to combine the symptoms that you're having and then look at the numbers, so that we can decide together, does it make sense to move forward with some natural solutions?

**Jackie:** Mm-hmm. So, we're saying against the optimal levels. And of course, you'll have this in your worksheet, but the optimal levels that you're looking at and you're also combining with your systems are 0.1 to 1.5, which is obviously vastly different from someone who hasn't necessarily seen the new guidelines that even happened in 2002. Forget even 2003.

**Dr. Sara:** That's right, and I can tell you a story about a woman I met when I was first in medical practice. I was working at an HMO here in Northern California, and I had a woman who had about five symptoms of low thyroid function. Her name was Linda. She...
was a 49 year-old woman, worked really hard. She had weight gain. She felt like her metabolism was less forgiving than it was in the past. She had hair loss, and cold feet, cold hands. She pooped about every three days, and felt bloated most of the time. So I checked her thyroid, and her TSH came back at 5.3.

Jackie: Wow.

Dr. Sara: So I called her internist, because I'm a gynecologist. I called her internist, and I was new, and I didn't want to step on anybody's toes, and I said, "Hey, I think this woman needs some thyroid medication. What do you think?" He said, "Oh, no. Here at this HMO, we don't treat a TSH of 5.3. We wait until it gets to 10."

Jackie: Oh, wow.

Dr. Sara: So he did not think she needed to be treated. Now, I'm a bit of a maverick, and I treated her anyway, and oh my gosh, all of her symptoms resolved within a few days, but that's the kind of range that you're going to see out there. There are a lot of different behaviors. I'm not pointing blame anywhere, but for some people, they're still using that old range.

Jackie: That's just for the number one test of thyroid stimulating hormones.

Dr. Sara: Correct.

Jackie: These numbers all are...That's the relation, not number two or number three. The free T3 or free T4.

Dr. Sara: That's right. I just want to differentiate between that first test and the other two, because this is a source of confusion for a lot of people. So, if you learn nothing else today, I want you to listen up for the next moment while I tell you about the difference between TSH versus your free T3 and your free T4.

Jackie: And if you're me, you are glazing over. Meaning, I've heard this T3, I've heard T4, I've heard TSH. So, I mean, I've heard these things before. I'm like, T3, who cares, who cares, who cares? This is really important to just, you know, I'm like this. I understand you might be like this. It could be brain foggery, you could just not be interested. But this is really important to listen to. So, we're just going to focus, like, lasers on this next part.
**Dr. Sara:** Yes, good. Focus. OK. So, TSH is not made in your thyroid. This is slightly confusing to some people. TSH is made in your brain. And you can measure it in your blood. But it's basically the control hormone that tells your thyroid in your neck how much thyroid hormone to make. That's why, as we get, in a moment, to your free T3 and your free T4. The free T3 and the free T4 are thyroid hormones made in your neck. They're made in your thyroid gland. They're totally intuitive. If the levels are low, you're not making enough thyroid hormone.

TSH, on the other hand, is counterintuitive, because the TSH goes up if your thyroid is under-functioning. It's as if your brain has to scream louder, and make the TSH higher, to try to get your thyroid to make more thyroid hormone. Did that make sense? So TSH goes up when your thyroid is under-functioning, free T3, free T4 go down.

**Jackie:** Mm-hmm.

**Dr. Sara:** Sometimes more one than the other. Free T3 is more sensitive to what's going on with your thyroid than the T4, because the T4 is the storage hormone.

**Jackie:** Mm-hmm. So the biggest thing here is, remember the first one, for the TSH, it's actually not made in your thyroid, which is pretty interesting, and you were mentioning that it was made in your brain. Now, if you are glazing over and you say, "You know what, Jackie? This is just great, but I'm telling you, I haven't paid my bills. I just realized that something needs to get paid right now, and I can't focus," fine. I understand that, and we're going to give you the numbers and the levels, and you're going to be working with this, but it's good to just circle back when you do have a minute, because I'll tell you something. When I first started hearing about thyroid, and cortisol, and all of those things, I'm going to reveal something -- It made me feel older, and I don't like feeling older.

I want to still feel like I'm in my 20s, and I'm, not free, but I still have that same energy, and those sickness, or those things, or those tests, or those medications, that's like my mother. I don't want to feel like my mother yet, so I try to ignore it sometimes, because I say, "Well, you know what? If I still feel young, and I don't really talk about this, I'm going to sit in my little bubble."

Start to really think, is there an underlying reason to maybe why you're not paying attention to this? Again, the underscoring and the key concept is, remember I asked, "Is this a must-have, or is this, 'You know what? I can probably figure this out on my own. It's nice to have when I get a minute?'" This is the must-have.
These are the things that you have to cut through whatever your belief system is, or whatever your workload is, and say, "This could be so important to me. She just said that patient who she regulated after they took the thyroid, even though that HMO didn't want to, her symptoms cleared up in a few days." That was a really big eye-opener for me, to even think, "Whoa, a few days," not that that's going to happen for everybody, but that should be enough of a reason of, "OK, I'm going to pay attention to this. I understand the levels, and I'm going to figure this out."

**Dr. Sara:** I'm so glad that you said that, Jackie. I think it's so important, because the classic symptom of your thyroid not working is that you don't want to deal with this, so this is a perfect example of...

**Jackie:** See? [laughs] I'm convinced.

**Dr. Sara:** I mean, there are other reasons too, right? There are other things we don't want to deal with, but I think it's really important...

**Jackie:** No, but still...

**Dr. Sara:** Go ahead. You go ahead.

**Jackie:** No, please. I just love that I am taking this along with everyone, because I am really the classic person of, "Well, you know, look at how well I do function compared to other people." You are your own baseline when you are saying, "Your perfect hormonal blueprint," or whatever that was, "...is in your 20s." The most important thing is that you're comparing this to you, and that you're really focusing... I'm going to underscore it again. I sound like a broken record, but repetition, the mother of skill. This is a "must focus on." This is extremely important. This isn't a "nice to have."

**Dr. Sara:** That's right. I love, also, what you said about your mom, because most of us grow up...I'm 45, and I think about myself really as still being in my 20s, and you're right. It's funny, when I wrote my book, "The Hormone Cure," a friend of mine was a reader, and she is 35 years old. When she read it, when she read the thyroid chapter, and also the cortisol chapter, she said to me, "I just don't want to deal with the science at all. I need you to make a section on the science so that I can skip over it. I don't want to hear about the adrenals. I don't want to hear about thyroid gland. I don't want any of that detail. Just tell me what to do."
So I really appreciate that, that it feels like this old lady stuff, but this is the perfect example of how when you're struggling with a thyroid, or when you have a problem with one or more of the Charlie's Angels, with estrogen, cortisol, or thyroid, it is easier to fix the problem than it is to suffer with the misery of being out of balance, and that's especially true when it comes to the thyroid.

**Jackie:** Well, you have me excited, and motivated, and no longer in a state of, "I don't want to deal." So this is possible. When you've made that shift, you can say, "OK, hit me. What's next? How do I get this fixed?"

**Dr. Sara:** Yes, so you want to do that, or should we talk about the levels of free T3, free T4?

**Jackie:** Let's definitely talk about the levels, and then we're going to go to the next. Again, we'll have this in a worksheet, but just so you...Again, you can't hear this in too many ways. We all learn differently. Some of us learn by sight, some of us learn by listening. It's great when you get all the modalities, so we're just going to be repeating this until you actually understand what you're doing. So yes, let's definitely go to the other levels of the free T3 and free T4.

**Dr. Sara:** Good, so a couple of quick points about free T3 and free T4. What you want is for these levels to be in the top half of the normal range, and the reason for that is, what I've mentioned already, we know there are at least 27 million people in the U.S. who struggle with their thyroid, and at least 13 million of them are undiagnosed, so about half of the people are undiagnosed. There are even some studies to suggest that there may be as many as 60 million people who are undiagnosed. So you want for your free T3, free T4 to be in the top half of the normal range, and that depends on your local lab. It's also really important to measure your free levels, not your total T3, total T4, because those are affected by other hormones.

For instance, if you're on a birth control pill, it will lower your free T3, but it may not change your total T3. It's the free levels, the free T3, free T4, that really affect your physiology.

The idea here is that you want to be in the top half of the normal range. That depends on your local lab, but I can give you an example from a patient that I just saw yesterday. I've got her chart right here and I can tell you. This is a woman who came to see me at 43 years old and she was overweight, had some mild depression, was the kind of person
that just worked really hard as a management consultant and would power through no matter what.

She would give up the exercise, she would give up the good eating, she would power through for work. We found that her TSH was 3.6, we found that her free T3 was low. I'm going to give you the actual number. Her free T3 was 2.1 picograms per milliliter. Normal range at my local lab is 2.3 to 4.2 so I want this patient to be in the top half of the normal range. That means 3.2 to 4.2.

I know that's a lot of mass, but she was low in her free T3 and her TSH was elevated. She has hypothyroidism.

**Jackie:** Just to repeat that, Dr. Sara wants you in your free T3 to be between 3.2 and 4.2, in the top half of the normal range.

**Dr. Sara:** Right. It depends a little bit on your local lab, but you just have to keep in mind how many people are underfunctioning with their thyroid that you're getting compared to. Her free T4 was actually normal. The normal range, again, at this lab is 0.8 to 1.8 so that means I want her to be between about 1.3 and 1.8 and she was 1.4. Her problem was not with T4, her problem was with T3. Never diagnosed by her primary care physician. We started her on a couple of things that we're going to get to in a moment. It significantly changed her mood. She dropped about 15 pounds with very little effort. She got the motivation.

**Jackie:** I'm loving this.

**Dr. Sara:** She then had the motivation to eat better and to exercise more because she wasn't exhausted because her thyroid was better. You get this amplified benefit which is so important for sustaining change. Now we can go to solutions. Should we talk about solutions?

**Jackie:** Yes. Now we can go to solutions. I'm just curious, if you don't mind, as you're listening to this class I want to know, send us an email, post in the team and say have you gotten more motivated? Has Dr. Sara stacked the evidence enough that you really have gone on the way I really believe it's easier to fix this than to live with these symptoms? Just drop us a note, post in the team. I want to know. I'm even finding myself transforming saying this is the first time that I'm not looking at making an appointment with the physician with complete lethargy and why do I have to do this. I'm motivated and
I have a belief that this is going to be easier to fix than live with the symptoms that I have.

**Dr. Sara:** I'm super happy to hear you say that, Jackie, because I definitely want to hear from people about how they're doing and if this is motivating for them. This is another example of the small hinges swing big doors. I say that a lot. This is a teeny, little hinge that you can correct and it just makes all the difference in your ability to get through the day and not fall in bed exhausted at the end of the day.

**Jackie:** A key thing Dr. Sara said here is remember that effort. Do you feel as though it's taking so much effort to get through your day or so much effort to lose your extra weight? We get hundreds of emails a day and it's usually some of the same things and a lot of times this is what we're hearing. It's just taking so much effort that suddenly I just feel like it's not worth it and I'm just going to have to learn how to live a new life with these. This is my new life. This is where I go now. We're going to move to the solution but, again, take a moment, post in the team or just send us an email because I want to know did you get more motivated because I did.

If you're not more motivated, if you're still thinking they're going “I've heard you guys, it all makes sense, but I just still don't feel like it, I just still don't know.” What do you need, what extra support do you need to say that's it, OK, I understand, this is a must-do? Just let us know.

We are going to move on to the solution unless, of course, you want to add anything there. You're the one that made this happen for me so I'm sure you can make this happen for everyone.

**Dr. Sara:** I'm very honored to make it happen for you, Jackie, and I hope that there are others that are motivated. I wanted to say one more quick thing and that is if you're struggling with three to five or more of the symptoms that we talked about at the beginning I do think it's important for you to have a thyroid examination. I don't want you to have the wrong idea that I'm saying I want you to do some home laboratory testing and never go to those evil doctors again. I think it's very important, especially if you are having a lot of symptoms, that you get your thyroid examined because of two reasons. Number one, sometimes you can have a little lump there, you can have a nodule. Nodules are very common. They're seen in up to about 50 percent of people. Nodules can be nothing to worry about at all, but sometimes they can actually be something not so good like cancer.
I certainly hope that is not something you ever have to face, but thyroid cancer, even though it's very rare, is on the rise. We don't know why. We don't know if it's environmental toxicities. I live in Berkeley, California, as you know, and there's a woman that lives here, Arlene Blum, she's a very famous mountaineer, and she is a staunch advocate of understanding how toxins in the environment are disrupting our thyroid.

One of the key disrupters, and then I'll get off this soapbox, is flame retardants. Flame retardants. Sitting on your sofa, you're probably getting exposed to flame retardants. Probably also in your mattress. We know that flame retardants slow down the thyroid at about 10 different levels -- 10 different levels.

That's just one piece that I wanted to mention, that thyroid cancer is on the rise even though it's really rare and I want you to see a doctor who actually lays hands on your thyroid. That's where they put the hand on your neck and they have you swallow so that they can feel your thyroid gland go up and down. You want to make sure that you have the kind of doctor who's able to partner with you, take you seriously, and also examine your thyroid.