

## Part 6

### Are You Feeling Fat, Fatigued and Flippin' Burnt Out?

Dr. Sara: We're talking about your thyroid today, and I find that this is one of the most important Charlie's Angels, especially if you're struggling with weight, mood, hair loss, or energy. It's one of those hormones of metabolism. You may wonder how long that list is, of the hormones that have to do with metabolism: here's the complete list, just so you have all of them. There are 10: Thyroid, insulin, cortisol, along with its sidekicks the neurotransmitters epinephrine and norepinephrine, testosterone, DHEA, Vitamin D (we know that most women are low in vitamin D, so know your level! Make sure it's in the metabolic range). Next are leptin, ghrelin, estrogen and growth hormone.

Question: You say that our thyroid is our metabolic thermostat. What do you mean?

Dr. Sara: The thyroid secretes hormones that regulate the activities of pretty much every cell in your body. It controls the body's sensitivity to other hormones such as estrogen, and cortisol, as well as many of the ones that I listed earlier. It also regulates how quickly we burn calories, and this is how it's involved with metabolism. This is why weight control is such a problem when your thyroid is out of whack. Today we're talking about how to go from out of whack to back on track. Your thyroid is your body's metabolic thermostat. It basically helps you control how fast or how slowly you burn calories. And what I find is that we have an epidemic of sluggish thyroids here in the US. It sets you up for poor mood, weight gain, and the slow downward spiral towards losing your memory and having brain fog, cognitive decline, even Alzheimer's disease.

Here's what it looks like when your thyroid is working properly: You feel energetic. You're upbeat. You feel buoyant. You're clear thinking. You have an easy relationship with your weight. You don't step on the scale and gasp and then create radical make drastic resolutions every Monday. Your bowel movements are regular, and move along at a normal pace. That means that food goes from your mouth to pooping in the toilet over 12 - 24 hours. If it's longer than that, there's a chance that your thyroid is off. You don't wear socks to bed or outline your eyebrows with a pencil. The outer third of your eyebrows indicate whether you're low in thyroid or not. So you can see the struggle that I had with my thyroid in my thirties by looking at my eyebrows! Your cholesterol is normal – not too high and not too low. You've heard me talk about how cholesterol is important when it comes to making the sex hormones, for making pregnenolone, and progesterone and cortisol. When your thyroid is low, you might actually have high thyroid. In that situation I think it's a good idea to improve your thyroid as a function of working with your cholesterol rather than being in a mad rush to start a statin. Your hair stays on your head. One of the most common reasons people lose weight is because of their thyroid. Those other hormones can impact hair loss, and we also know that 30% of women at age 30 have hair loss, as do 50% of women age 50. But I feel like this is a sanity issue, not a

Fast Track Your Hormone Cure

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vanity issue. This is something I've written about in my book quite a bit, because I think it's important to interpret the messages our bodies are giving you, like not keeping hairs on your head the way you used to. Your skin is also affected by your thyroid. When your thyroid is working properly, your skin is moist and your nails aren't dry. Your sex drive is strong and your memory is crystal clear – there's none of that brain fog.

Question: What happens if I have low thyroid?

Dr. Sara: I think about low thyroid as having three main symptoms. There's a list of probably 100+ in other resources, but here are the top three: Number One: You feel tired, sluggish, run down. Number Two: You have weight gain, no matter what you try to do. Number 3: You have mood issues. In fact, we know that 20% of people with low thyroid function have depression. And what makes me crazy is that they're often not tested with their thyroid before they start their thyroid medication.

Some of the less-commonly-known symptoms include constipation, and I can tell you that at Harvard medical school I was taught that constipation was when you go more than three days without a bowel movement. I can't even imagine that! What you want is a bowel movement ideally every morning, maybe twice a day, even better is after every meal. If it's less than that, you want to think about your thyroid as well as what you're eating. Maybe you feel cold or achy all the time. You can have a puffy face, and you can even have increased menstrual bleeding.

Question: What are T3 and T4 and more importantly, what do I need to know about them?

Dr. Sara: There are several different hormones that are made in your thyroid. The ones that are known the best are T4 and T4. Because this is Fast Track Your Hormone Cure, I want to be careful about getting too granular about this, but T4 is basically the inactive form of thyroid hormone. I think of it as the "storage" hormone, because when you need it it's a precursor to the more important form, which is T3. So T4 is like a lame duck. It's waiting in the wings to be converted into T3 and that's where the action is. T3 is the catalyst for your weight loss, for feeling warm, and for having a cheery mood. T4 is actually 90% of your thyroid hormones, but it has to be made into T3 before it can be used and I often find that women who come to see me in my practice are treated only with T4 – synthroid or levothyroxine, and they're not so good at making T3 out of the T4. We know that a lot of your thyroid hormones, in fact 99% are soaked up by binding proteins – thyroglobulin. It's almost like a sponge that soaks up your free thyroid hormones. And what we want to know is not just the total amount of T4 and T3 in your body; we also want to know the amount of free amount, the amount that's unattached to the sponge, to thyroglobulin. So when people get tested, I want them to look at their free T4 and free T3 for this reason. Because that's the form of the thyroid hormone that's biologically active.

Question: How do I know if I have low thyroid?

Dr. Sara: We went through some of the symptoms. The top ones, as I mentioned, are fatigue, weight gain and mood changes, especially mild to moderate depression. By the way, we know that mild to moderate depression is not successfully treated by an antidepressant. It's only severe depression that has been effectively treated with some of the SSRIs like Prozac and Zoloft and Paxil.

This is where I need for you to step up as an educated consumer. I want you to request a blood test and review the results, comparing them to the optimal ranges. I want you to know your numbers. I told you about T3 and T4. One of the labs that most conventional physicians will order if you ask for a thyroid test, is something called TSH – Thyroid Stimulating Hormone. Now, it's not just my opinion that we've got an epidemic of slow thyroids. Many other folks believe this as well. As a result, we've been making the normal range for TSH smaller and smaller. In 2003 the American Association of Clinical Endocrinologists changed its recommendations for the normal target range of TSH to 0.3-3.0 milli international units per liter. We also have evidence, from looking at people with normal thyroid (called "euthyroid" in the parlance of medicine), those people have an upper limit on their TSH of 1.5 milli international units per liter. What I believe is that we've got to look at a range of thyroid function that best supports people. And that range, the upper limit is 1.5-3.0, and I usually determine that range together with the clients that I work with. That's something you'll want to determine with your clinician, but if you have a level of 2.5 or 3.0 and above, that's a sign that something is wrong with your thyroid.

Question: What causes this?

Dr. Sara: The most common causes of problems with your thyroid, and we're talking here about too-little thyroid hormones. Just a reminder, because this confuses everybody, your TSH actually goes up when you have low thyroid function. Your brain makes TSH. You make it in your pituitary. And when your thyroid hormones are low, when your free T3 and free T4 are low, your body senses this and starts increasing your TSH so your pituitary is sending the message to your thyroid to perk up. As a result, it goes up. This is a bit counter intuitive.

If you have a slow thyroid, the most common causes are autoimmune thyroiditis, also known as Hashimoto's Thyroiditis. This is where your autoimmune system is attacking your thyroid. Another common reason is stress. Another is the environment, or how different endocrine disruptors like your mattress which contains flame retardant, or your couch which, unless it's organic, also contains flame retardants, the cans of food you eat which might be lined with Bisphenol A...all of these things are endocrine disruptors that can slow down your thyroid.

Goiters are another one. I'm not going to get into a lot of detail here. Genetics is common, if you have a parent who has thyroid problems that may be the issue. There's something called Goitrogens. There are also certain foods that can slow down your thyroid. Now, this is pretty modest. Certain foods, like the cruciferous vegetables that are so good for your estrogen balance, can sometimes slow down your thyroid, especially if they're raw. Think about that if

you're someone who has a green smoothie every day, and if you puree your kale. Cancer treatments can also do it, as can vitamin D deficiency, and gluten. If you have a sensitivity to gluten this can impact your thyroid although the details are not as well worked out as they are for folks who have Celiac. Folks who have Celiac disease, which is a permanent intolerance to gluten, have a much bigger issue with thyroid problems.

Question: Can you tell me a little bit more about the role that food plays?

Dr. Sara: Celiac, as I just mentioned, is a permanent intolerance to eating gluten. It triples your risk of having low thyroid function. Gluten plays a big role here. If people who are predisposed genetically to have Celiac, we know that when they eat gluten it causes inflammation, and problems to the lining of their gut, their small intestine. This makes it hard to absorb nutrients crucial to your health. Some of the symptoms are diarrhea, belly pain, bloating, fatigue...but this is one of those great masqueraders where people often have a problem with gluten intolerance and don't know it. So I want you to have a high index of suspicion and ask your doctor for a test if you wonder if this is a problem.

In some folks who don't have a permanent intolerance, folks like me, who have gluten intolerance but it's developed over time. It's not genetic and it probably developed when I was a stress case in my 30s. For people like that, we definitely know that it seems to be better if you drop gluten. We don't have the best evidence to support this, but I can tell you that it's made a big difference in my life and with my TSH levels. I definitely have found that in many of the folks that I work with. But it hasn't been proved in a study. That doesn't mean it's not true, but we're still debating that whole piece.

Another part that I think is important is that if you do have Celiac, and I hope that doctors have talked to you about this, we know that you're much more likely to have a problem with slow thyroid. The reverse is true too. People who have low thyroid function should be tested for Celiac and gluten sensitivity. If you haven't had that done and you're struggling with thyroid, I want you to ask your clinician for this. We know that removing gluten reverses the thyroid problem. Ask your doctor for a test. There's one doctor in particular who's a chiropractor who's written about this, and he believes that because the thyroid hormones look so much structurally like the gluten molecule that there is a cross-reactivity that happens.

Question: What are the solutions for low thyroid?

Dr. Sara: Number One is that you want to do the lifestyle tweaks and fill in the nutritional gaps. The most common nutrition gaps are the following: copper, zinc, selenium, vitamin A, iron (especially for folks who have hair loss), soy, raw brassica and vitamin D. Let me take each one of these and give you a little bit more detail.

We know that it's important, when we're talking about converting T4 into T3, that you need a sufficient amount of copper, zinc and selenium. You've probably heard my story before about why my thyroid didn't work when I was in my 30s. Number one, I was low in copper. Number

two, I was a complete stress case with PMS and my cortisol was too high, and number three, I was mercury-toxic. I had too much mercury. You want to think about those things first. One of the ways of testing for this is something called the Nutrival, by Genova. There's also a test from Medimetrics you can do to see if you have any of these nutritional gaps that we're talking about. If you struggle with your thyroid this is something I really want you to listen to. I want you to test for this.

Another thing you can do it you can take a multivitamin, like the one I just created and vetted. You can take a multivitamin that fills in these gaps. That's a much less expensive way to do it Vitamin A is also important and we know that soy can sometimes slow down your thyroid function. What we're talking about here is that one serving of soy in one study was shown to reduce T3 by 7%. I often hear people say, like my friend Mary Shoman, who's a thyroid expert and patient advocate, "if you're going to have soy, have whole food soy." Also limit your servings to about 2 servings per week. You want to be careful of raw brassica like Brussels sprouts and broccoli and kale. I mentioned this already; when you eat them raw they can slow down thyroid. If you cook them, they seem to be okay. Vitamin D is also so important! I really encourage people to have a vitamin D level between 75 and 90 – that helps your metabolism. We also have some new data showing that if you have a Vitamin D of less than 52, it's associated with a greater risk of breast cancer.

A lot of folks will recommend herbal therapies when it comes to low thyroid. I even went to an Ayurvedic doctor that I loved who gave me something called "kanchanar guggulu" – not proven to help. I was on the University of Maryland medical site and they recommend a couple of herbal therapies and I found that not a single one was proven in human with the best evidence. Which, as you know by now, isn't good enough for me.

If you're someone who's still struggling with low thyroid, if TSH is still above that 2.5-3.0 range, and the lifestyle tweaks of Gottfried Protocol Number One and Number Two aren't helping, then you want to consider the smallest dose of bioidentical thyroid hormone and for the shortest duration. This is where I really recommend natural desiccated thyroid such as Armor or Nature-throid. I'm a big fan of the type of new thyroid hormone from Nature-throid. They have a new form that has no fillers, and it actually has some MCT (medium chain triglycerides) in it. It's a very pure form of natural desiccated thyroid.

Some of the other things you might have heard of like levothyroxine synthroid, I often find that people are low in T3 when they take those. Make sure you're taking your copper, zinc and selenium, Vitamin D so that you can convert your T4 into T3. I sometimes will prescribe T3 to folks who come to see me who are taking T4 already. There's also a T3-T4 combination like Thyrolar. Or you can get those compounded at a compounding pharmacy. The problem with compounding is that these doses are so tiny it's one of the hardest hormones to compound. Another version of T4 that I like is Tirosint. It's a soft gel that I prescribe pretty often, and this liquid form seems to be a little better absorbed than some of the other thyroid hormones that are out there. Remember: you've got to take this first thing in the morning on an empty

stomach with nothing else to eat or drink for ideally 60 minutes. This may be hard for some people, especially busy moms, but do your best. Maybe you do it on the weekend, and you have 30 minutes before your cup of green tea.

Question: What happens when I'm in balance?

Dr. Sara: I believe that every woman can get her thyroid in balance. Even if you've had surgery, and you're working with a clinician...in fact, this is one of those hormones where everyone should be working with a clinician. At [thehormonecurebook.com](http://thehormonecurebook.com) you can check out the practitioners who have been trained in this method. I believe that you can get your thyroid working for you again. You can boost your metabolism no matter what your age is. You can boost your mood to the levels that are your birthright. And you can have an easier relationship with your weight, and you can do it without the crazy fad diets. The idea if you're in balance, is that your weight is stable. You look at a piece of chocolate cake and it doesn't land on your hips. People don't recoil in horror when you shake their hand – you don't have freezing cold hands any more. You don't have a hairdresser who stares in alarm, who says, "You have thyroid hair." No, you have soft, shiny hair that's not like straw. And you've got that longed-for bounce back in your step, and maybe even your sex life.