## Thyroid Hormones and Heart Function

We know that every single cell in our body has a receptor site on it for thyroid hormones, specifically T3 thyroid hormone, because T4 is inactive, T 3 is active.

So T three finds that little receptor side on the cell and attaches to it to do its job. Whether that's giving you a metabolism, lighting up your brain, controlling your heart rhythm, altering your blood pressure, Controlling your lipids, control your insulin secretion and your glucose regulation.

Welcome to the Natural Heart Doctor show. I'm cardiologist Dr. Jack Wolfson. Heart problems don't come from a drug deficiency. They come root causes where cardiologists never look.

On this show, I sit down with experts who challenge the mainstream rhetoric and talk about what actually builds a heart built to last. Get ready for a dose of cardiac longevity.

All right, welcome back to the Heart Attack and Stroke Recovery and Prevention Summit. I am your co-host, Dr. Jack Wolfson, and I've got the pleasure today to bring on Dr Amy Horniman.

And if you don't know Dr, Amy, you're going to love what she has to say. She is known as the thyroid fixer and she is the author of that book, International Speaker.

and host of the top rated podcast in medicine and alternative health, the thyroid fixture. Dr. Amy founded the Better Thyroid and Hormone Institute offering personalized care for thyroid and hormone health across the United States and Canada.

and hormone imbalances and she is just a hormone expert in addition to so many other things that she's just brilliant in. So very excited to have her on.

And really she went down this journey because she had her own thyroid and hormones struggles and conventional medicine was not any help to her. Dr. Amy's mission is to optimize your health and restore your life.

Welcome Dr Amy to the summit. Doctor Jack, thank you so much. I love being here with you. Let's do this. Awesome, thank you. So, you know, we see things alike in so many different ways, so that's what's great here.

But I think, as I look to thyroid and so much people who struggle with thyroid issues, they're on thyroid pharmaceuticals, They're not getting the benefits that they thought that were going to get.

They are seeing conventional doctors. Let's kind of break it down about how important the thyroid is. as it relates to the topic, which is heart attack prevention.

And if you had a heart, attack or stroke, you know, that's why people are here. So let's talk about thyroid and the heart. Absolutely. So we have to start off with the thyroid being the master gland.

And it really does have an impact on all systems of the body.

## Introducing Dr. Amy Horniman

We know that every single cell in our body has a receptor site on it for thyroid hormones, specifically T3 thyroid hormone, because T4 is inactive, T 3 is active.

So T3 finds that little receptor site on the cell and attaches to it to do its job. So whether that's giving you a

metabolism, lighting up your brain, controlling your heart rhythm, altering your blood pressure.

controlling your lipids, controlling, your insulin secretion and your blood glucose regulation. It really does come back to, I mean, in addition to lifestyle factors, you have to look at thyroid function because many times we'll have, and I know you see this as well.

You'll, have someone who is doing all the things they're eating a paleo style diet. They're living that ancestral lifestyle. There really. honed in on their body, doing the biohacking, taking the supplements, and they still have these crazy heart symptoms or wacky numbers, their blood pressure is low, there's blood pressures high, they're insulin is off the chart, insulin resistant, borderline diabetic.

And we go back to the thyroid and go, well, you're in this deep hypothyroid state. Everything is low and slow. And that's basically sending signals to rest of your body to not work properly.

So that why I always like to start with a thyroid when it comes to even something like heart health. We've talked about this boatload, that we'll have patients that have heart palpitations, they'll a low resting heart rate, a rapid heart-rate, AFib, tachycardia, and maybe it is just heart related, but they think it's something else.

They think they need the pharmaceutical and they don't go deep enough to look at that master gland and start there to rule that out or address it. before they go on to doing other things for their heart health, like the pharmaceuticals.

What if your heart could actually get better, not just managed? What of your recovery didn't depend on adding more prescription drugs, but on finally understanding why your is struggling in the first place?

I'm Dr. Jack Wolfson, cardiologist and natural heart doctor, and we believe heart disease isn't random, it's a message. It's the message that inflammation, toxins, nutrient deficiencies, or lifestyle stressors are driving your symptoms beneath the surface.

That's why our approach goes far beyond the band-aid, typical cardiology approaches. What we do is if we want to prevent, treat, reverse cardiovascular disease, we help you develop a natural evidence-based plan to help your heart recover.

So if you're ready to move past fear, past confusion, and past just take this and wait, you deserve real answers. Visit naturalheartdoctor.com forward slash discovery and get the answers you've been searching for.

The answers that can help you achieve your best heart health. Your next chapter with a simple free discovery call should start now. I totally agree that root cause approach is so, so important.

And, you know, when we talk about, women and having heart attacks and certainly men having hard attacks, maybe, delve into what you think are some of the main reasons why people are having these events.

Yeah, so I think it does come down to lifestyle. And I know you and I are very big, strong believers in having that base foundation for a person's nutrition, their lifestyle, Are they eating well, are they living well?

Are the emotionally in a good place? Because all of that matters. So as much as the thyroid is the master gland, and I love to look at it obviously and optimize it, we can't blame everything on the thyroid.

If someone does have a cardiac event, that's one thing to looks at. 100% that is one of my best employees. She was a patient before she became an employee.

## Root Causes of Heart Attacks and Strokes

Before she was patient, she On metropolol, she had AFib. She had a full ablation of the heart. And she goes, you know, I'm so angry because I know it was my thyroid.

So for her, it did come back to the thyroid, but for everyone else, yeah, let's look at the fire. But let us look your lifestyle. Let us at that base layer of what you are eating and how you're living and are you moving and where is your stress level.

Because that directly impacts not just thyroid function. It does. I mean, if you're living a crappy lifestyle, it's going to come back and kick your thyroid's butt, but it is also going affect your heart and set you up for an increased risk of heart disease or cardiac events.

So the people listening, and maybe they've been told they got hypothyroidism, they're on pharmaceuticals, now we go back to root cause. First of all, let me say, is there an opportunity to get people off of thyroid medication?

Sometimes there is. So I get this question a lot. And it really depends on the individual and how far down that destructive pathway they are. And what I mean by that is 95% of all hypothyroidism is Hashimoto's.

So this is the autoimmune form of hypothyridism where your body thinks your thyroid is a bad guy and it goes out and attacks it. If you want to think of rheumatoid arthritis, your is attacking your joints.

Same thing, Hashimoto's, your body is attacking your thyroid. So after years and years of being in this war, Your thyroid gland gets really beat up and jagged and small.

And when it's all messed up and beat up, and jagged. It's just not producing the T4 and T3 that it once did when it was plump and healthy and not under attack.

So it really depends on how far down that pathway someone is. And we can look at an ultrasound, we could look their numbers, of course. But if we're catching it in the beginning, this is really the message to everyone to get that full thyroid panel, do not rely on conventional medicines testing of your thyroid because it's just going to be TSH, maybe T4, people have to working with someone like yourself to get that full panel because you know what to test, you what know to look at.

When you're looking at that whole panel and you are catching things early enough, then yes, we have that opportunity to someone off of the pharmaceuticals.

Now the flip side of that is at the same time, if we're using that bioidentical hormone replacement, i.e. thyroid medication, to replace hormones that are just no longer being properly made by your body.

Your thyroid's been under attack for years. It's teeny tiny. it's not doing its job. have a place because they're literally going to give you your life back.

So in that scenario, I would say, okay, in lieu of you gaining another 50 pounds as we try to get you off of the medication, let's just optimize that medication.

Let's optimize the hormones that we're giving you to be in the right combination that's right for you, where it puts you in a perfect balance, eliminates your symptoms so you can live the best life ever.

Really depends on the person. Now, the advanced thyroid testing you talk about, we're talking about TSH and FreeT3 and freeT4 and reverse T3. But then we check those thyroid antibodies.

So let's say someone is on thyroid hormone. Numbers look good, but they still have a lot of antibodies that are there. What problems does that pose? And then how can we reduce the number of thyroid.

Antibodies that were there? unpack that thyroid antibody story. Yeah. I love it. So those antibodies, I loved using an analogy so people can get it, think of those the antibodies as soldiers.

## Hashimoto's, Antibodies, and Gluten

Whenever you look at your TPO, thyroid peroxidase or TGA, thyroglobulin, you're going to have a number next to it some people have it in the thousands, some, people will have couple hundred.

But those are the amount of soldiers that you have that are literally going out and attacking your thyroid. Now, what we know about autoimmune is auto immune begets autoimmune.

Where we see one, we seem more than one. So when those soldiers go out and they attack your thyroid, you know, for lack of a better, this is not a deep medical science based analogy, but you they look over and You know, there's some joints over there.

Let's go over and attack. And now this person has rheumatoid arthritis. They attack your skin, you have psoriasis, they start attacking your small intestine.

Oh, look, here's celiac, which that is very, very common with Hashimoto's to see multiple autoimmune conditions together. So the goal in reducing those antibodies or literally putting Hashimoto's into remission The goal there is not just to protect your thyroid.

I mean, yeah, that's a huge bonus, but it's to the rest of your body from future attacks and turning into other autoimmune conditions. Now, there are some really simple things that we can do.

Number one, gluten-free. It is NOT a fad. I talk about this all the time. Based in science, we know that the protein molecule called gliadin that makes up gluten You know, we always use the term gluten, gluten-free products, all of this, but it's really that protein molecule, gliadin, that looks exactly like the thyroid gland in chemical structure.

We call it molecular mimicry. So what happens, going back to the analogy of soldiers, those soldiers you eat gluten. Those soldiers say, you know what, there's something coming in the system here that it looks like, the thyroid gland.

we know the Thyroid gland is a bad guy. Now we have another invader coming in. It's time for war. So those soldiers go out and they literally launch an attack in your body.

This is what we call an autoimmune flare. They launch this attack to where, yes, they're attacking your thyroid, They're trying to get rid of the gluten that you just consumed or that your consuming on a daily basis.

And with that, their going to build their army. Their going find other places to attack, hands down. Just by eliminating gluten, we can see a massive reduction in thyroid antibodies and that autoimmune flare.

Other natural things like black cumin seed oil, oh my goodness, the studies on black cumin is amazing, especially as it relates to Hashimoto's, but specifically all auto immune conditions.

It lowers inflammation. I have seen a 200, 300 point drop in antibody numbers just from using black human seed, oil paired up with going gluten free. controlling our stress, supporting our immune system.

All of those things are vital if we're really looking at knocking down that autoimmunity and putting your auto immunity into remission. But I thought all seed oils were bad, yet you just said that black cumin seed oil is good, which I say that right tongue in cheek because I'm not one of these people who's on the seed, oil bandwagon.

Like you and I don't eat a lot of and consume a a seed of oils anyways, but it's interesting that there are like hundreds of studies on Nigella sativa, black human seed.

And it benefits there as it relates to these antibodies. Talk me through leaky gut and essentially, let's say leky gut, lekey thyroid, right? Where it's just like this gland is just messed up.

So, and you talk about all those different antibodies that are there and like that leakey gut panel. Let me go even further back on that. Talk to me about gut microbiome, Leaky Gut and thyroid.

Okay, Let's piece this together. The gut. I mean, if you're listening to this, you've definitely heard at some point of time that immunity starts in the gut And beyond that with the thyroid, the gut is actually one of the places where conversion happens.

So what I mean by that is that T4 inactive thyroid hormone has to be converted to T3, going back to what we said in the beginning, your cells have a receptor site on it for T three.

so that conversion has happen. T four, you could take all the T for you want, Your thyroid can produce all T 4 at once. If it does not get converted into T3, it literally does nothing in your body.

It's inactive. So a lot of that conversion actually happens in the gut. We take someone with leaky gut, which is a really general term, but if you think of any kind of gut issues from H.

pylori, dysbiosis, diverticulitis, divertaculosis, and really just if you think about the bombardment on our gut from the garbage that we eat and then even beyond that, things that can't even control like our environment, the air that breathe as much as possible, right?

Our gut takes a beating. It takes beating. Let's add on top of that, eating gluten. That's a huge leaky gut contributor, literally tearing down the walls of the gut so things like lipopolysaccharides, or in a nutshell toxins, can actually permeate the good lining and get into the system.

There's so much here to unpack. Number one, if you have this bio, If you've a leaky gut, your T4 to T3 conversion is gonna go down. Your reverse T three is going to go up.

And what that does is it puts your body in survival mode. We don't want you to have elevated reverse t three. number two, you haven't leaki gut toxins are going into your bloodstream directly affecting thyroid function.

So now the poor thyroid gland is getting beaten up by these toxins. It can't work properly whatsoever. Those toxins stimulate the immune system to launch, stimulate your soldiers to lunch another attack.

## Gut Health and Thyroid Conversion

So now we have another autoimmune flare. And really, I mean, we'll hear from people that let's take gluten again, for an example. You know, when we clean up somebody and we get them to eliminate gluten and then they go on vacation.

And then they go, you know, yeah, I went way off my diet. I absolutely consumed bread and pasta and all the gluten containing foods. And wow, i felt inflamed.

That's because you were inflame. Your whole entire body was inflames. Then we'll hear people say I literally gained five pounds. Yes you did. Because your body is inflam.

You're holding on to water. shut down your thyroid function. You weren't converting your T4 to T3 anymore. Your poor thyroid gland is on the struggle bus trying to produce hormones.

So yes, absolutely what you do and what consume affects your gut, affects leaky gut and that has widespread consequences throughout our whole body in a variety of different ways.

When you talk about the gut, I think that gut health so much starts with the Gut Microbiome and everything plays with everything. But any data you can think of specifically that would relate to something like probiotic supplementation and improvement in thyroid antibodies or thyroid function?

I have not, no, you'll have to let me know if you've seen that data. I've not seen a direct correlation with let's say different probiotic strains or probiotics in general and their effect on antibodies.

It's more of that indirect. So when we're looking at the gut, I like to use different types of probiotcs and different kinds of strains, like prebiotics as well.

Like people to take breaks from their probiotix because what drives me crazy are these people that got on the Activia train. And they're like, well, I take probiotics every day because I eat an Activa yogurt.

It's like no, no. No, you're feeding. I mean, maybe if you were lucky, your feeding a billion of your gut bacteria, but there are trillions and trillions that are still in there starving for some support.

So I really like using a more comprehensive approach when it comes to the gut. But I would be interested, like I said, if there were certain strains of probiotic that would directly affect autoimmunity and then specifically the Hashimoto antibodies.

Yeah, it's not that I'm aware of that. I just like to throw random questions out at brilliant people and see what their response is. That was fun. Well, now we're going to look it up.

So I'll have to get back to you on that? Well I think your answer certainly is a good one, obviously. And whether or not there is data, you and I can both look at it and say, well, of course, if you nourish the gut microbiome and support the Gut Microbiome, then all the downstream effects, including thyroid health, et cetera, are going be great.

All right. So, you know, anyone who's on a thyroid issues, obviously they would be perfect to link up with you. But also one of your areas of expertise is testosterone.

Let's talk about your take on testosterone, not only for men, but for women as it relates to heart attack, and stroke prevention. A lot of times, testosterone is given a bad rap.

And candidly, I think what the problem lies is that if you take a sickly male, for example, who's eating McDonald's cookies and cupcakes, his testosterone's a little bit low.

He's got symptoms around low T, which may or may not be from the T. But you throw that person on testosterone, and that's the guy who winds up having a myocardial infarction, heart attack, or stroke in the next couple of months.

So talk me through testosterone, why it's important for men and women in heart-attack prevention. Yeah, and you know, I'll say this first. It's a shame because it's those people, it is those individual cases that then cast the shadow in the conventional medicine world onto these doctors' brains that all testosterone is bad, testosterone will cause a heart attack, myocardial infarction, all of that, without really looking at that individual's lifestyle and nutrition.

Testosterone, I call it the GSD hormone, get stuff done hormone. I mean, it does so much and as it relates to both male and female, It is vital. Now, the wall that ladies kind of run up against is that Conventional medicine still puts testosterone into a male category.

It's a female hormone. Well, I mean, yes, men have more of it, but women also have it. And especially in menopause, where women are more prone to cardiovascular disease.

testosterone is actually the most abundant hormone in a woman in menopause. Now, that doesn't mean that it's surging high or that she's, you know, becoming a bodybuilder in Menopaus.

It just means that takes over because estrogen and progesterone drop. So now testosterone will become the more abundant, but that does not mean it is optimal.

We always want to get both sexes into their individual optimal ranges and do it the right way.

## Testosterone for Heart and Hormone Health

And to your point, there are so many clinics hormone clinics popping up on every corner because literally

menopause has become the latest buzzword is I think it's taken over biohacking in our world and And there are hormone Clinics popping of everywhere to where you can go in and get your testosterone They can put a pellet in your butt if they want to they'll give you shots.

They'll get you creams. they will send you on your way They will not retest you you and I have both had these patients come to us and that are just literally being thrown out the door with this hormone, this very beautiful but very potent hormone and they're confused how to use it.

No one's checking their levels, no one is asking how they are feeling, No ones following up on them and that is where we see problems occur. And no-one is going deep into their diet and their lifestyle and the way that they live.

Are they eating cookies, cakes, donuts and drinking some alcohol on top of it? Which is gonna set them up for greater risk of Myocardial infarction or anything, anything that comes from throwing on excessive amounts of testosterone and not looking at the individual.

But when used properly, we know that the data supports a decreased risk in cardiovascular disease. We can kind of lump that in, you know, all the different heart things that can go on like Dr.

Jack knows. all the different heart things can be lumped into a category of we see a reduction in all of this when we properly use testosterone and get someone into that sweet spot optimal range.

Not too high, not crazy like bro gym dude levels, but in that suite spot range that is protective. And the other thing that testosterone does, linking it back to Hashimoto's and antibodies, It lowers antibodies.

It helps reduce inflammation in the body. So when we have a male or a female with Hashimoto's, we normally see low testosterone, especially in men, because men get hit so much less with autoimmune conditions than women do.

Why? Because you guys just in general have more testosterone. Even if your T is low, it's still higher than ours. So you have this beautiful protective layer of testosterone that helps to lower autoimmune antibodies and literally protect the body.

Whenever I have a male patient with Hashimoto's, I go right over to his testosterone level and I say, yep, that's low. And it totally makes sense. There's such a correlation there.

Yes, yes, us men, we got all the advantages. I get it, totally. And by the way, Dr. Amy was a former bodybuilder, just in case you didn't know that, so.

Figure, figure, not big bulky body builder, I was just lean and pretty still. Okay, well I have been around Dr Amy and I would not want to mess with her by mistakenly making the comment, So I apologize for that.

Yes. Not big, bulky, close. So what levels are we looking at where we would want to start in men? Because the company line, I think is men is like 350, is that cutoff.

I mean, there's also been some legal ramifications where men were started on testosterone above 350 and the doctors kind of came under the scrutiny of their medical board.

But tell me about some of those numbers for men. And I'm much more familiar with men as the cut off. Women, I think a lot of times, very post-menopausal women, their testosterone is undetectable.

And you're saying like, that's just not gonna work. Right, right. You know, honestly, both sexes really get left behind when it comes to the standard lab value ranges on those labs.

So we'll start with men. Yes, men standard value range on your blood work for total testosterone will normally start at like a 250 to 85. And then more recently, when I actually look at the cutoff, I normally don't.

I'm just looking at them, the number of the value that that person has. But when they happen to glance over at that lab, value, range, What I'm seeing even with LabCorp now is they brought that down to 900. So a man is actually getting flagged high if he's 1000 or 1100 with his testosterone.

Where I really, now this is definitely age dependent and unique to each individual. But in general, a man is not going to feel his best if he's under 500, 600 for his testosterone.

I mean, he is just not. And then we will see, in addition to him being more depressed, possibly having sexual dysfunction, Increased adipose tissue, growing man boobs, all the things.

We'll also see an increased risk of cardiac disease and stroke. Will see abnormal lipid panels, will see high blood pressure where he's being thrown on a BP med, thrown a statin, then for his lipids panel.

And it really comes back to, hey, what if we just Use testosterone properly, right in the right amount. We're not jacking him up into two thousands, but let's get that number up out of the basement so he feels better and we protect his heart at the same time.

So yes, there's that lab value range. I really, I would say if I had a really sweet spot, it'd be 800, 900, something like that. But again, age dependent.

Now we come over to the ladies. Oh ladies, did you know that the bare bones minimal that I have for an optimal testosterone. This is total now, not free.

Total testosterone is a 50. I see my ladies needing to be at least at a total testosterone of a fifty or slightly above. Some women do better when they're close to a hundred.

They tell me, don't take my testosterone. This is where I'm a rock star. But at the least above a 55, LabCorp cut you off at 48. So if you're actually coming in optimal, you are getting flagged high.

And yes, to your point, Dr. Jack, if a post-menopausal woman, you know, it cracks me up on the labs, they actually have a separate range for post menopause, as if, like, If you're here, You can have no hormones, and that's totally normal.

Well, I mean, guess it is normal, but it sure as hell isn't optimal. So for Post-Menoposal ladies, that I have literally seen no detectable testosterone, less than one, Less than three, And they're being told by their doctors that that It's fine because you know it's in the post-menopausal range and these poor women are just suffering.

I mean they have no libido, they had excess body fat, their losing muscle, there losing strength even if they're at the gym trying to live that healthy lifestyle.

They're like, you know, I'm working with a trainer, kicking my own butt, doing CrossFit, whatever, and I am weak. I see no muscle definition whatsoever.

## Finding Dr. Amy and Closing Remarks

It starts affecting their brain, it starts effecting motivation, their drive to just get through the day. And that, not even aside from that their heart health.

So I love testosterone, i think it is a vital hormone for both sexes, for not just looking, feeling and performing your best, but also for protecting your heart.

And then how do we decide when to add in the estrogen progesterone? Can we sometimes just do things alone with testosterone? And I know this is, again, it's a very difficult thing and each one is individualized, but is there an opportunity for testosterone by itself?

You know, age-dependent, so we're all seeing testosterone being used in and of itself and having benefits. Really, in a woman's 30s, 40s as testosterone starts to decline then, we can use testosterone alone therapy.

And then as the years go by, perimenopause and menopausal starts happen, that's when we will bring in the estradiol and progesterone. Progesteron also helps with AFib, so I've actually seen that help calm a person down or if they're having heart palpitations.

That sometimes, and I'll defer to you as well on that topic, progesterone really helps with that as, well helps, with anxiety helps. With sleep, it's anti-proliferative, protects against cancer.

So all the different hormones have their benefits. But yes, to your point, your question, we can use testosterone alone to start and bring the other hormones in later.

Excellent. All right. Dr. Amy, so much to unpack there, you know, as well. And I think, um, You know. Hopefully people learned a lot about how important thyroid hormone is about the thyroid antibodies and what is known as Hashimoto's.

and then of course the testosterone story as Well. So tell us how can people find out more about you and your work and Your book and anything else about Dr Amy?

Absolutely. So you can go to drami.com, so that's D-R-A-M-I-E. And then you could also dive into the Thyroid Fixer podcast. Dr. Jack was a guest on that.

We have 460 episodes in there. You can pick and choose which topic you want to deep dive in to. Then our Facebook group is the Just Fix Your Thyroid Facebook Group.

In there, you actually post your labs and we will give you feedback just kind of telling you what direction that you really need to go and what questions you need ask your doc.

Fantastic, fantastic. Dr. Amy Horniman, thank you so much for being on this episode inside of the Heart Attack and Stroke Recovery and Prevention Summit.

It's a long mouthful of words, but that's the way that it goes because we're trying to reach all those people that are affected. Again, thank you so much, Dr.

Amy. We'll see you back with another show in the summit. Thank you. Thanks for listening to the Natural Heart Doctors show. If this episode challenged what you thought you knew about heart health, make sure you follow the show so you don't miss what's next.

And if you're ready for a deeper personalized approach, you can schedule a complimentary discovery call at naturalheartdoctor.com forward slash discovery.