



Transcript – These Ain't Your Neighbor's Stem Cells with Dr. Tami



Warning and Disclaimer

The statements in this report have not been evaluated by the FDA (U.S. Food & Drug Administration).

Information provided here and products sold on bulletproofexec.com and/or upgradedself.com and/or betterbabybook.com are not intended to diagnose, treat, cure, or prevent any disease.

The information provided by these sites and/or by this report is not a substitute for a face-to-face consultation with your physician, and should not be construed as medical advice of any sort. It is a list of resources for further self-research and work with your physician.

We certify that at least one statement on the above-mentioned web sites and/or in this report is wrong. By using any of this information, or reading it, you are accepting responsibility for your own health and health decisions and expressly release The Bulletproof Executive and its employees, partners, and vendors from from any and all liability whatsoever, including that arising from negligence.

Do not run with scissors. Hot drinks may be hot and burn you.

If you do not agree to the above conditions, please do not read further and delete this document.

Dave: A quick question for all you hardworking entrepreneurs putting in the hours while summer beckons. Has dealing with your day to day paperwork ever brought about feelings that resemble anything close to joy, satisfaction or ease? I didn't think so. If you're ready for that to change, my friends at FreshBooks are inviting you to try the ridiculously easy cloud accounting software that is a totally joy to use and yes, I just use the words easy, joy and accounting in the same sentence.

Using FreshBooks, it takes literally about 30 seconds to create and send a polished professional looking invoice. You can link your FreshBooks account to your credit and debit cards so next time you expense that business lunch or tank of gas, it will show up automatically in your FreshBooks account. With 2 clicks, FreshBooks can set you up to receive payments online which can seriously improve how quickly you get paid.

To see all the ways FreshBooks can bring the joy by changing the way you feel about your paperwork, they're offering all Bulletproof Radio listeners an unrestricted 30-day free trial. To claim it just go to freshbooks.com/bulletproof and enter Bulletproof Radio in the how did you hear about us section, that's freshbooks.com/bulletproof and enter Bulletproof Radio.

Speaker 2: Bulletproof radio, a state of high performance.

Dave: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is about testosterone. It's unexpectedly a secret equalizer in love not just sex but elevated levels of it can have too much influence over marriage. Studies show that when us guys fall in love, our testosterone levels lower but when women fall in love, their testosterone levels go up but studies that show men who have higher testosterone levels usually end up single or divorced. It's important for us married folks to get our testosterone level measured and hacked, which means you can do things like eating egg yolks, maybe butter things like that and other things like looking out for getting enough sleep and things like that.

I can tell you from personal experience that if you are guy with low testosterone, I had less testosterone than my mum when I was 26. That sucks and I can also tell you that if you're with a woman who is low in testosterone, it sucks for the woman and also sucks for the guy so testosterone is important stuff. Before we get into today's show, I've figured it out. I've discovered the key to an amazing shave. It's simple. That's exactly what dollarshaveclub.com does and why I'm a happy member like millions of others.

Dollarshaveclub.com delivers amazing razors right to my door for a third of the price of what the greedy razor corporations charge. That means when you join the club you can afford to shave with a fresh blade anytime you want which feels fantastic. I did a first class shave when I used the executive blade and that's without even hurting my wallet and when I use the executive with their Dr. Carver's Shave Butter, the blade just gently glides for the smoothest shave ever. It's not your average shave cream, it has high quality ingredients to make your skin feel soft, smooth and moisturized.



In order to get the most amazing shave possible, take it from me, use a fresh DSC executive blade and Dr. Carver's Shave Butter. Those are the 2 reasons you should join Dollar Shave Club today. Head on over to dollarshaveclub.com/bulletproof today. That's dollarshaveclub.com/bulletproof. If you haven't tried Bulletproof CollaGelatin you need to know about this stuff because it's awesome. If you ever made a dessert with gelatin and there's a lot of stuff in the Bulletproof diet, the Bulletproof cookbook where we use gelatin in order to get a cheesecake consistency in order to make just amazing creamy desserts that you want to eat.

Gelatin's really good for you. The problem is if you use enough of it to get protein, your kind of are eating those Knox Blox, it's like banging on a piece of rubber, it's not very delicious so CollaGelatin solves that problem. It gives you half the amount of gelatin as normal adults. You get twice the protein per meal when you do that and you can always add more of the Bulletproof Collagen if you want but this is a way to just go to any recipe you already have and you can use just twice as much of the stuff in order to get the really good gelatin into your body.

That's called Bulletproof CollaGelatin. It supports healthy hair, healthy bones, healthy skin and the cool thing about collagen and about gelatin is that it goes into your cells and it goes around in your cells and in your cells and it forms this scaffolding but it also holds water for hydration and when you have water present in your skin you can carry electrons, those acupuncture meridians that 15 years ago the science trolls were saying it doesn't work because it can't work despite all the evidence that it does work but now we've just flat out proven it using this thing called science. We can measure electron flow over these meridians in the skin and guess what? You need hydration and you need collagen for them to flow optimally which is cool. You can find this stuff, the Bulletproof CollaGelatin on Bulletproof.com. Check it out. Today's guest is Dr. Tami Meraglia also known as Dr. Tami. Dr. Tami welcome.

- Dr. Tami: Thank you. It's because I married an Italian and nobody can say or spell Meraglia with a G in the middle.
- Dave: Wait, did I say it wrong? I always said it with a G.
- Dr. Tami: I know.
- Dave: It's Mer-al-ia?
- Dr. Tami: Mer-al-ia.
- Dave: With a silent G? I know you for 3 years, I introduced you on stage at the Bulletproof conference the wrong way and you're just telling me now.
- Dr. Tami: I know. I went through residency and I had my attending physician called me Dr. Myalgia which actually means pain in the muscle and I thought he was saying I was in pain in the butt as a joke and like on the last days are you kidding me, I've been saying your name wrong for these many years? I said "yeah."
- Dave: I am so calling you Dr. Myalgia from here on. I'm sorry Dr. Tami.

Dr. Tami: I'm a pain in the butt.

Dave: That is awesome. All right. Tami is a friend and she's a double board certified doctor in Cosmetic and Naturopathic and Integrative Medicine, a lecturer, a teacher. She gave one of the keynotes at the Bulletproof Conference last year. She's a regular key note speaker at the American Academy of Anti-Age Medicine which has a bit of trivia. I met my wife Dr. Lana there about 2004, about a dozen years ago we met at the A4M Conference in Vegas.

Dr. Tami: I did not know that.

Dave: Yeah, totally. Dr. Tami is also the founder of the Vitality Medispa, Med Spa. How do you say that? Is there a silent G in there?

Dr. Tami: MediSpa, We work on people's insides to make them feel great and then we use procedures and products that work in harmony with your body to also make you look good because they're linked.

Dave: What's the difference between a Med Spa and a MediSpa?

Dr. Tami: Nothing.

Dave: I've never been able to figure that out either. I hear people say but I don't know. I've always figured they were the same. Okay. Cool. Okay but here is the another cool thing. Aside from the MediSpa side of things, I just found out as we were sitting down, if you're watching on YouTube you'd already noticed that we're live on the set at Bulletproof Labs from Vancouver Island because Tami is from Seattle so she caught the clipper over here. Tami you're not looking green at all even though?

Dr. Tami: Oh my gosh, I lost my lunch.

Dave: It was a rough ride over here.

Dr. Tami: You asked if I had lunch and I said "No I lost it."

Dave: Apparently there's some rough weather on the ocean so Tami you ...?

Dr. Tami: I'm looking a little peaked, it's not because ... But you know the Bulletproof Coffee you gave me revived me.

Dave: Yeah. We definitely give you a while to settle in because it's not good to get sea sick on a way into an interview but you're doing great. I found out aside from the fact that Dr. Tami, Dr. Meraglia, Dr. Myalgia lost her lunch. Did you name either of your children Fibro?

Dr. Tami: Oh no.



Dave: Fibromyalgia, I'm sorry.

Dr. Tami: Dave, You're awful.

Dave: Bad jokes.

Dr. Tami: Terrible.

Dave: By the way, my daughter's name is Anna and Lana would not allow me to give her the real name Conda because that would have been so cool. All the good Anna, Analogue, no, Annapurna, no she wouldn't give ... None of the good stuff. I tried.

Dr. Tami: Shot down.

Dave: I tried.

Dr. Tami: Yeah I bet you did.

Dave: Let's see, where is it going. You opened a stem cell clinic in Seattle?

Dr. Tami: I did. One of the most exciting things. I like to do a big thing every year and last year was my book the Hormone Secret and this year it's the stem cell clinic but I've been thinking and planning and training and working other places and before I finally decided to do my own and I'm part of a national clinical trial. It is available for patients from all over. One of my first patients actually flew in from Taiwan.

Dave: Wow.

Dr. Tami: Yeah and it's just transformational. Unbelievable. It's like Star Trek medicine.

Dave: It is a whole new level. People who follow me on Facebook and if you're listening to this and you don't follow the Dave Asprey public profile page on Facebook, you're missing out because I live streamed, I Facebooked lived my stem cell procedure so I'm literally answering questions from people and you can see ...

Dr. Tami: The fainting?

Dave: No I didn't faint in this one. I fainted in the first one. I should have had that Nitrous Oxide but they were literally jamming one of those big lipo bone needles into my back because they do liposuction without the vacuum just to get enough fat out to pull stem cells.

Dr. Tami: 50 cc incisions, not much.

Dave: Yeah just a little bit and that said it was amazing to be holding the camera up and seeing this needle going and I'm like ... People are turning green on Facebook. Anyway ,3000 people saw my butt and I actually walked through the procedure which is really mean.

- Dr. Tami: Very cool.
- Dave: They're transformational because I've had them done and it's cool now that there's a clinic up in Seattle I didn't know about that.
- Dr. Tami: Yeah, yeah we have people fly from all over. It's a 3-hour procedure and people can go right home, it's no down time it's amazing. There's only 3 criteria that you're not allowed in to our clinical trial and that's active cancer, a dental infection, those bugs in our mouths are much worse than we know about and the other is pregnancy.
- Dave: Yeah, how do you know if someone has a dental infection if they are going to go for stem cells?
- Dr. Tami: They know.
- Dave: You have to have a big abscess and a swollen face kind of thing?
- Dr. Tami: Yes. Dental infections hurt.
- Dave: Okay got it.
- Dr. Tami: Pretty quick.
- Dave: What about cavitations? I've looked at those for 20 years where you get these smoldering infections under usually a root canal, they affect you really dramatically and the nervous system level and organ level, do those affect stem cells?
- Dr. Tami: Not that we've seen and we have over 5000 cases that we've followed so it's cool to have all that data.
- Dave: Can anyone go to your stem cell clinic and just get stem cells just inserted wherever the heck they want or is just clinical trials right now?
- Dr. Tami: No, they can go and do wherever they want I just can't tell you the statistical data because we're only following about 6 procedures. You are allowed to do it but if somebody says "okay where is your success rate for knee osteoarthritis?" I can't say "Well its part of our clinical trial." I can because it is but if you say "Oh what's your success rate for improving eyesight?" Don't know.
- Dave: Don't know.
- Dr. Tami: We can do it but I can't say what the success rate is because it's not part of our database.
- Dave: Okay. I hear you. There is so much regulation in the food industry not that food does anything at all so they go. Would other than food goes into the body you're always taking a risk there and in medicine same thing?

- Dr. Tami: We're not allowed to make any claims and it's true. This is cutting edge medicine. We do not ...
- Dave: Where else would you want to be like old school medicine? Oh yeah we've been doing this for 50 years, we just cut your leg off. It's nuts.
- Dr. Tami: Well that's what our friend Daniel Amen he's like "Can you believe we're still treating an organ without looking at it?" The brain?
- Dave: I read Daniel Amen's first book and it completely changed my life because I got a SPECT scan and he showed me that I had control of my brain. It wasn't that I was weak or that I had moral failing it was that my brain was damaged so I went and I fixed it.
- Dr. Tami: Yeah. That's the most important thing. That a lot of this stuff is fixable and it's so cool that we have stem cells that isn't from embryonic, isn't from placenta, it's your own stem cells and they're doing rejuvenation.
- Dave: We should talk about that. They are people listening to us right now who are right now enraged because they think that we're taking abortion tissue and using it. This is my own fat coming out of my own fat ass although I will say the last doctors doing it they said I didn't have enough fat back there. I'm like as a former 300 pounder I said "Okay."
- Dr. Tami: Oh darn, I'm too thin.
- Dave: I'm like "Oh say that louder. I'm record it." I felt pretty good about that. I was like "Wow."
- Dr. Tami: Not bad, that's awesome.
- Dave: These are your own and ...
- Dr. Tami: Yeah, turns cell fat is an awesome reservoir and you can isolate and we actually count the number of living stem cells before we deploy them.
- Dave: Oh that's cool.
- Dr. Tami: We actually have quantitative evidence that we're not allowed to deploy unless we have a minimum of 10 million in our studies.
- Dave: Can you just grow them anyway?
- Dr. Tami: Well, there is. It's called Cells on Ice kind of Disney on ice but different and we actually ...
- Dave: Why wouldn't they not be called Frozen I'm just thinking ...?
- Dr. Tami: Well we ...

- Dave: No, in Disney movies come on. It was a great joke, give me a laugh?
- Dr. Tami: Oh I'm sorry way over my head sorry. Yeah, well because I get so excited. We actually, once we see that's it working we can actually have you come back, we can expand your cells, duplicate them and go freeze them. It is just the craziest thing and we have the Seattle Stem Cell Clinic in Seattle and anybody can call us or email us.
- Dave: If you had said the Seattle Stem Cell Clinic in Fresno I was going to get really confused.
- Dr. Tami: That's true. Well, there's some people who have online businesses that don't really know where they are.
- Dave: That's a fair point. It's in Thailand, but it says it's in Seattle. I hear you there. That's actually an important question. There are things that you can't legally do in the US and there's all sorts of questions right now about the regulatory status but there's hundreds of thousands of stem cell places popping up everywhere and the regulatory cat's out of the bag although they really can't undo that but there's also people who fly to Germany or Thailand?
- Dr. Tami: Bahamas.
- Dave: Bahamas. What do you do in Seattle and what do you do in the Bahamas? Why would you go out of the country? Do you get alien stem cells? What's the difference?
- Dr. Tami: It's hard for me to know. I know a lot about a lot of the group that are out there. What our group is doing differently is that we're doing things with such scrutiny because we have to submit it to the government and because we have this reproducible data and so the safety protocol is there. As an MD first do not harm and so we can honestly say that there's the potential that a stem cell treatment might make somebody worse but in over 5000 treatments it hasn't so far and we know that because we've been doing the exact same thing over and over and over and over and submitting it and analyzing it. We have an IRB number so it's a really above the board's safety thing.
- Dave: There was an article recently in the New York Times about someone who went to a stem cell clinic and had a big mass grow in his spine of blood vessels and all sorts of knurly stuff. What's going on there?
- Dr. Tami: There's a lot of amniotic and fetal derived, we've studied these and those stem cells do go rogue and we chose just to do fat just because of that plus it's easier and everybody's got fat.
- Dave: What about bone marrow?
- Dr. Tami: Bone marrow is good too. We decided to do fat not because it's better or worse we had to just pick something and it's a heck of a lot easier procedure for the patient.
- Dave: Yeah. My first time, I've had 2 stem cell procedures and I'll be going to a lot of detail with people who did them at the Bulletproof Conference. If you're interested in learning about hacking in a

human body, this is not hundreds of thousands of dollars this is roughly, starts about 3000 dollars if you have an injury and you want not to have a knee replacement, hip replacement or you have problems with your spine ...

Dr. Tami: Ours is a little bit more expensive because it's such a ... But it's less-

Dave: I was going to ask you what's yours right now?

Dr. Tami: Yeah. It's 8900 dollars. We do interest-free financing for people so that we can make it accessible but we have a lot of expenses given if it's a clinical trial.

Dave: If it's a clinical trial and also you're ...

Dr. Tami: It's not pharmaceutical funded.

Dave: You can do banking as well right?

Dr. Tami: That's much less expensive. That's about 3000.

Dave: What I found is if you go to an affordable place and you're going to do one injection side without banking, that's where it starts but generally the numbers that I hear all over the place are from 3 to 10000 dollars and it also depends on the experience of the physician doing it and you're very experienced and not a lot of people are key note at the American Academy of Anti-Aging Medicine that's very prestigious.

Dr. Tami: Well, I was a liposuction surgeon many years ago.

Dave: You're good at getting fat out too. Yeah so that's part of it, is that just getting the fat in a way that you want to get ... The fat's got layers to it and each layer of the fat has a different viability and a different concentration and so in our studies but again I'm so biased because I love all these data, data geek. The stuff at the surface, that's the stuff that can make people look like they have davits afterwards if you don't know what you're doing so that's why there's a lot of us who used to do liposuction, because we know how to get these stuff out without making you look like you've got to hide afterwards.

Dave: When you do lipo from stem cells you take out very differently than you would if you were just doing like sculpting? I didn't notice the reduction in ...

Dr. Tami: Well such a small amount.

Dave: I have bumps because it's still healing from the last one like it actually feels weird but the fat came out to be like a full reduction and you suction normally but you don't use suction with this?

Dr. Tami: Yes. It's Just a manual suction.

- Dave: It's just a needle.
- Dr. Tami: In liposuction you're trying to liquefy the fats that you can take large quantities of so this is just a vacuum-assisted manual evacuation and the fat's beautiful.
- Dave: It totally is but why these videos of it. At the conference we're going to do that. I've got to plug the conference. September 23rd through 25th.
- Dr. Tami: I'm going to be there.
- Dave: I was just going to say cool.
- Dr. Tami: I'm so excited.
- Dave: You're going to be there and let's see you'll be ... I actually don't have ...
- Dr. Tami: Teaching a workshop?
- Dave: Yeah, you're doing a workshop. Cool. We also have, if you're interested in stem cells, coming there we have the other two people who have done procedures on me. Harry Adelson from Utah and Christie Camilla from Florida are going to come and talk about different things so I've had stem cells done in all my sights of injury, my face, my hair, down there and I've also had them injected into my brain and every time I say brain like a zombie because it's cool like Frankenstein anyway I did some stem cells in the brain so you'll learn a lot about these and it's one of those things where it's accessible and its cheaper than being in pain all the time and it's cheaper than a lot of the other anti-aging therapies frankly that you could do.
- Dr. Tami: Well and it's cheaper than the medical expenses. My husband Rocco, we did his shoulder. He was told that he needed a shoulder replacement.
- Dave: Wow that's bad. That's a really bad joint to replace.
- Dr. Tami: We're not very successful at doing it it's like "Well we hope it works and we hope you have your full range of motion. It was a catch 22, he would sleep on his back and he would snore at night and I'd push him and then he would sleep on his shoulder and it would hurt, he would wake up and he couldn't play with the kids and he works out and he's a fireman. It was really affecting his quality of life and then how do you take work off for a joint replacement? That's the expense. Nobody tells you about that
- Dave: Just having a screw in my right knee after 3 knee surgeries. The last time I was 23.
- Dr. Tami: Are you serious?
- Dave: I have a screw in there yeah. Oh my god it's a bone pain that's so intense, you're not going to be able to go to work and be sane.

- Dr. Tami: The stem cell procedure is next day. It's the future of medicine.
- Dave: I'm on board with that and there's many other amplifying procedures that you can do along with it. They do give signaling molecules along with it.
- Dr. Tami: NO, the Nitric Oxide yeah it's really great.
- Dave: Yeah, let's talk a little bit about that because Nitric Oxide is something that listeners I've probably done a show on it by now but it's pretty well known in athletic circles that or in cardiac circles nitroglycerine gives a little bit of ...
- Dr. Tami: Diving.
- Dave: Yeah, diving but the idea is when you get Nitric Oxide as a signaling molecule on the body it causes better blood flow if you want to get vasodilation like say for having happy time in the bedroom.
- Dr. Tami: Viagra.
- Dave: Yeah, Viagra or immune acid, there's ways to increase these as well as eating beets or taking a beetroot supplements you actually are giving people nitric oxides supplements as part of stem cell recovery so the stem cells will go where they're supposed to go. What do you do there?
- Dr. Tami: When people come to us and people can reach us at the Seattlestemcellclinic.net and we evaluate you because there're some things we know are going to make your stem cells juicy. People who have really terrible vitamin D levels, don't have the best stem cells and it's not part of our clinical trials it's just me I'm just wanting people to get the best outcome so we do this analysis first then you have your procedure and then things like the NO is so powerful. Just think about why would you want to go on a windy hot road with obstacles in the way, why would you want to go on a big wide highway if you're a stem cell. That's basically what's it's doing. It's creating this big wide highway so that the stem cells can get to where they want to go.
- Dave: You get the tiny capillaries to open up so that you can get through them. It's something that I think we're just exploring. If you get a tan your vitamin levels, go up but if you get light exposure it changes the water in your so the water actually will pull cells from micro capillaries by changing a structure and it was cool to interview the guy who figured that out Gerald Pollack was on Bulletproof Radio.
- He's actually speaking also at the Bulletproof conference around how changing the structure of water into what they call the fourth phase of water or inclusion zone water how that affects how your cells make energy and how vegetable juice and how tree sap and why water sometimes goes through things that it shouldn't go through like how our blood cells get through capillaries that are only 20% big enough for it to go through. Something sucks them through, it turns out this phase of water does that and this guy is very, very credentialed. University of Washington, head editor of Water the journal.



- Dr. Tami: Oh yeah.
- Dr. Tami: That's cool and so I suspect we're going to see a lot more being done with infrared light and red light and things like that in conjunction with stem cell procedures and there's people doing laser activation. Are you doing that now?
- Dr. Tami: I was going say, yes.
- Dave: Okay. Gosh you read my mind.
- Dr. Tami: I was going to say we do this in cosmetic medicine all the time and it's interesting that the red light is very powerful for your collagen and your elastin and has lots to do with hydration and the building in it. It actually promotes fibroblastic activity and the blood flow. It's amazing.
- Dave: Here is a question for you. I haven't actually asked Christine this or Harry. If red's light good for these things what is blue light?
- Dr. Tami: Well you know we use blue light in cosmetic medicine as well. We use it to kill things.
- Dave: Yeah. If you're exposing yourself to lots of blue light during a stem cell procedure, what's going to happen? I believe that it's about time that doctor's offices got rid of LED lighting entirely.
- Dr. Tami: I have natural light in my clinic.
- Dave: Beautiful. What do you use halogen or incandescent?
- Dr. Tami: Incandescent.
- Dave: There you go. There's very few clinics who do that.
- Dr. Tami: Well, I own my building.
- Dave: There you go.
- Dr. Tami: I'm in control.
- Dr. Tami: We have a boatload of windows.
- Dave: It's critically important to do that and I believe even more so with stem cells. Imagine this, you're stem cells are out, you hold them up in a vile and you look at them ...
- Dr. Tami: A Citra vile.
- Dave: You expose them to the light, that basically stops mitochondrial actions so we know that the red light helps and we know that blue light actually stresses, in fact we know it stresses the eyes, we know it stresses the brain and it stresses stem cells.

- Dr. Tami: It's a treatment for acne. It kills the bacteria.
- Dave: Yeah. It does and it creates the opposite of structured water so I don't like it when I go into a stem cell clinic and they have LED lights around because I think it's going to affect the procedure. I don't know how, someone do some data on that.
- Dr. Tami: Why risk? It's a big deal. It's a onetime deal.
- Dave: Why do you want in your back and stare at some nasty LED lighting that's making your brain tired and those pathways they are on my new book. We know exactly how that works.
- Dr. Tami: We know we've got Himalayan salt lamps in the room.
- Dave: I see you run a hippie clinic. I didn't know that.
- Dr. Tami: Yeah.
- Dave: Tell me about Himalayan salt. There's one over there by the way I'm just making fun of myself?
- Dr. Tami: I don't know about the claims but I'm going to do everything I can with the science that I know how to do if it's not going to harm it.
- Dave: I have seen people say oh these salt lamps make ions, I can't find any science about that?
- Dr. Tami: Allergies. I can't find any science about it either.
- Dave: I heard if you just meditate in front of them you can grow the third eye? People will make up all sorts of weird stuff and some of it, who knows may be someone experienced a sort of cool thing. I will say that I like the light that comes out of them
- Dr. Tami: It's that light that's easy on the eyes.
- Dave: Yeah. It's very gentle. When my kids are in they like to lick it because it tastes like salt, it's like a Salt Lake for my kids.
- Dr. Tami: When my kids were little that was their night light because they don't want the plug in lights.
- Dave: Beautiful. Who would have thought. People doing stem cells injections off Himalayan lamps. Are you a bio hacker or are you just special?
- Dr. Tami: I'm an odd MD I know.
- Dave: It's actually the right kind of MD to be. Now speaking of the types of MDs, we didn't really talk about your other little thing you do. You're a national bestselling author on The Hormone Secret and you talk about depleted testosterone levels, bouncing hormones, losing weight and do you

have a new audio version that came up?

Dr. Tami: It's coming about in paperback.

Dave: Oh cool.

Dr. Tami: Simon and Schuster is the publisher and it will be coming out in December.

Dave: In December?

Dr. Tami: Yes.

Dave: The Hormone Cure?

Dr. Tami: The Hormone Secret. I know you're so ...

Dave: I'm just going to say this. Sara Gottfried is a good friend and she was a Hormone Curer.

Dr. Tami: Of mine too.

Dave: We hang out at the same conferences, right? You guys have similar names and it's the same thing with the Bone Broth Diet, right?

Dr. Tami: Yeah, Kellyann.

Dave: Kellyann has the Bone Both something and the other one is the Bone Broth something else and I do not keep them straight.

Dr. Tami: People always ask me what's the difference? Sara's a fantastic brilliant physician and amazing author and she has a great overview and she talks a tiny tiny bit about testosterone. I talk a little bit of the overview and how all the hormones are a symphony and they need to work together but I think that testosterone is the unsung hero and nobody is talking about it and there's a boatload of evidence and so that's what my book The Hormone Secret is because it's a secret because nobody's been talking about it.

Dave: I like testosterone so one of the things that I talked about a few years ago on the podcast that I had some people going "You're not supposed that," was that I used to use topical testosterone, I went off to testosterone about 4 years ago for a couple of years, actually for about 3 years and about a few months ago my levels were down again. I'm 43 so I started sampling again just to keep my levels where I want them not the crazy ...

Dr. Tami: Yeah when you do a lot of travelling your adrenals go up and down.

Dave: Sure. I consider using any hormone to be the right thing to do if that's what you want your biology to be so I'm really open about that stuff and when I used to use the cream though, a doctor in the bay area told me "Well just try putting a little bit on the labia and watch what

happens.” When I first told you about that you had a great name for this.

Dr. Tami: Scream Cream.

Dave: That’s right. You heard it here scream cream. What happens when a woman gets a tiny tiny dose of testosterone on topically down there to use the medical term for the vagina.

Dr. Tami: It’s increased sensitivity and so the sexual experience is heightened in almost every way so increase sensitivity, increase in climax, increase in duration, increase in frequency, increase in ease of getting a climax so it’s called scream cream for a reason.

Dave: Why the massive vasodilation? That means blood flow if you’re not into medical terminology. There is a certain amount of blood flow that happens and then there’s the scream cream version and you’re like impossible.

Dr. Tami: Well and then scream cream from the prescription perspective has testosterone in it but it also has some vasodilators.

Dave: Okay, I’ve noticed the vasodilators with just my plain testosterone in life, 10%.

Dr. Tami: You can do that as well, absolutely.

Dave: You’re doing some naught things in there then.

Dr. Tami: Yeah. We really want to get it done right.

Dave: I didn’t know you roll that way so that’s cheating.

Dr. Tami: Yeah, you combine that with some inter-nasal oxytocin and there’s your honeymoon when you’re married 20 years.

Dave: I’ve been talking recently about oxytocin. I’d had my levels tested. I was moderately low and I tried lozenges and I didn’t really notice any effect from oxytocin lozenges. In fact, ...

Dr. Tami: Because you’re swallowing it. I don’t care what anybody says about those lozenges.

Dave: I sucked on it for a while.

Dr. Tami: Yeah it’s supposed to go through the mucus membrane but it’s going in the gut and the liver is like addict going ...

Dave: I tend to think that was what happened. In fact, that isn’t announced. I have one of the rock stars of oxytocin as a surprise speaker at the Bulletproof Conference.

Dr. Tami: Women?

- Dave: No, it's man.
- Dave: That one.
- Dr. Tami: The flamboyant one?
- Dave: He's pretty darn flamboyant.
- Dr. Tami: With his outfits?
- Dave: No, not that one. This guy will hug the crap out of you. You'll know who I'm talking about.
- Dr. Tami: Oh yeah, yeah I do.
- Dave: Then there's another top expert who will come who is ... We aren't going to announce that yet but yeah, another one who's written multiple books about it. Oxytocin is one of those hormones ... It's hard to take. I haven't tried intranasal but I think I might know someone who can hook up.
- Dr. Tami: Yes. I might know her too.
- Dave: Yeah exactly. I know some people who've actually injected it. I have a doctor, same as you do it, you get all sorts of weird stuff you don't tell people about. What would happen if someone uses ...? This is different than oxycodone which is flat out very addictive, bad stuff. What happens when you get a little bit of oxytocin?
- Dr. Tami: Oxytocin is natural so it's a hormone we all have anyway. It's your connect, feel good, scrumptious hormone. There's a really famous anti-aging physician, a third generation interventional endocrinologist Dr. Herzog from Belgium. The Dr. Herzog Sign is his grandfather's and it's in all of our medical textbooks. It's when the lateral 2/3 of your eyebrows are thinning, that means your thyroid is in trouble.
- Dave: Oh. You guys say that? That happened to me when I was a teenager. By the way if in your car or at work and you didn't see that because you're listening to the audio. I've had this pretty much my entire adult life. I've had thinning of the outer parts of my eyebrow and it doesn't respond to anything.
- Dr. Tami: Well and it could be now that that's just the way it is. When you catch it early on its more often than not a sign of hypothyroidism.
- Dave: I had Hashimoto hypothyroidism and I got rid of Hashimoto I have no antibodies to it and I'm down about to a 1/3 of the thyroid hormone I used to take but I still take thyroid because well this has happened since I was probably a teenager I've had thyroid issues. I got rid of them when I was 30 but I'm 43 now and I still don't have my eyebrows back. I was thinking I should get some tattooed up there like red ones?
- Dr. Tami: Put Latisse on it.

- Dave: All right. Let's just go straight for the anti-aging stuff. Latisse is designed for women to grow longer eyelashes.
- Dr. Tami: Do you know it wasn't created for that.
- Dave: What was it created for?
- Dr. Tami: It's a glaucoma medication.
- Dave: Oh how funny.
- Dr. Tami: Then they're like, "Grandpa, your eyelashes are so long." This big old pharmaceutical company called Alagon was like "Hmm." They tested it and yeah. In our clinic we actually give it away to patients who've undergone chemotherapy.
- Dave: That stuff is expensive. It's like 300 bucks a box. It's huge.
- Dr. Tami: Yeah, but when you have no eyebrows and no eye lashes.
- Dave: It's interesting. I'm actually an investor in a company called Thrive Cosmeceuticals and Thrive gives away a thing of makeup to a cancer victim, one with cancer for everyone that's purchased and the founder of Thrive used to work for me. She was at Bulletproof and decided to go do that with my full support because that same thing, it's so different when you're like, "I don't have my hair." As a woman especially, it changes things. I love it that you give that away. That's really cool.
- Dr. Tami: A lot of medicine comes sideways and that's what ... To come full circle, that's what happened with testosterone for women is that we had this ... We go in phases and medicine and we're thinking women aren't feeling well. Okay well let's give ... They're having hot flushes and feeling terrible. Let's give them estrogen because they've had a hysterectomy. Well, that's not balancing the symphony. Okay, well let's give them estrogen and progesterone. Well there's still so much not correct with leaving everything else out.
- That's what happened in my own life. I was a resident. I had a newborn baby and I was pregnant again. Then I had my second baby and I was down to my original weight because I was working all the time and I had looked at my hormones and I replaced my progesterone, felt better but still not the energy. Still not the muscle. Still not the blubber that just covered even though I was the same weight. That made me look holistically at my own bloodwork and I thought, "Oh. I don't have any testosterone. None. No free testosterone."
- Dave: What would happen if every new mother got screening for testosterone?
- Dr. Tami: They would be fantastic because that bounce back and we can reboot your adrenals to make it. You don't have to take testosterone when you're young. There's so much we can do. I have so many patients who we measure their blood levels every 3 months and saliva and urine. Their

levels have tripled without taking testosterone.

Dave: Just from dietary changes.

Dr. Tami: Dietary, fat's a big part of testosterone. They're very specific things that the adrenal glands want in order to produce testosterone. You know what's really cool and I think you'll love this is that lifestyle hacks affect production of hormones. Did you know there's a study out of Harvard?

Dave: You have to say Harvard.

Dr. Tami: Yes exactly. Standing in the Wonder Woman pose, for 2 to 3 minutes increases your testosterone.

Dave: Yeah the power poses.

Dr. Tami: Yes. Cool.

Dave: That is so cool. I do the Wonder Woman pose. Actually, I have the whole Wonder Woman outfit to go with it.

Dr. Tami: I'm going to wear that to Bulletproof. With my cape flying down the hall.

Dave: That'd be awesome.

Dr. Tami: No.

Dave: Totally.

Dr. Tami: I'm going to.

Dave: Well we'll get some lighters for you so you can fly in.

Dr. Tami: Oh that'd be awesome.

Dave: By the way have you seen the trailers for the new Wonder Woman movie?

Dr. Tami: No.

Dave: There's a new one and she's pretty strong in terms of just flying around, basically kicking guys in the balls all the time. There's a scene that made a lot of my team laugh because ... she's from the Amazon or somewhere in this movie and she comes in and the guy who brings her to New York says, "This is my secretary." She goes, "What is a secretary?" The secretary says, "Oh it's when ... He basically tells me where to go and tells me what to do." Wonder Woman looks at her and goes, "We have a word for that where I'm from. It is called a slave."

Dr. Tami: I love it, oh my gosh.

- Dave: I thought that one was kind of funny. Of course the secretary is like, "I like her. You should keep her."
- Dr. Tami: Absolutely.
- Dave: There you go. You can get the new Wonder Woman.
- Dr. Tami: There you go. I need one.
- Dave: You're going to need a little bit more testosterone to get that look though because it's the most buffs are Wonder Woman or-
- Dr. Tami: That's the thing a lot of women are afraid of testosterone but we're not talking about getting you to that buff level.
- Dave: It doesn't do that. Yeah.
- Dr. Tami: We're talking about replacing what you've lost to go back to that energetic self. I find my patients tell me, "I'm a shadow of who I used to be. I'm not sick but I'm not feeling myself." It is testosterone. I want to create a hormone revolution with this book. I want to wake women up to say, you know what? Your 40s, your 50s and your 60s can be the most energetic, the most strong, the most amazing, engaged connected time of your life.
- Dave: You're on to something there. I've never met a woman who was on testosterone who wasn't grateful for it. Not once. Oh I couldn't handle it.
- Dr. Tami: It's a life changer.
- Dave: None of them have goatees.
- Dr. Tami: I know.
- Dave: None of them wear like tons of ... It's not that.
- Dr. Tami: You have a little bit of muscle but I'm not huge.
- Dave: There's this whole stigma and it comes from this ridiculous Puritanical thing because the US was founded by these Puritans who were anti ... I didn't know they were anti.
- Dr. Tami: Anti strength?
- Dave: Who knows what they were against but there's this ideas like you have to suffer, suffering makes you good. Then we had the 70s where people injected synthetic chemicals that were derivatives of natural steroids and natural things, they got liver cancer and they went in road rage and all these stuff which was overblown by the media anyway. Where we end up today is

people are like, “Testosterone, either that’s cheating or it’s bad.” I’m like, “That’s done.” Your body makes testosterone.

Dr. Tami: For a reason.

Dave: Yeah it’s there.

Dr. Tami: Well and Dr. Daniel even wrote the forward of my book and I was so grateful because he brought to light that the problem is, is that all hormones are depleted at a much earlier stage. I’m finding women who have testosterone and other hormone levels that I used to see in women in their 50s, in their 30s. Our 24/7 lifestyle is draining our ability to keep up from a hormone perspective. There is no borrowing from tomorrow, you are going to be hormonally bankrupt. That’s why we started seeing patients via Skype and phone because there are so few people to help people. We just offer phone appointments for coaching and helping people find out what is going on and bringing to light: You can’t leave out testosterone.

Dave: It’s really interesting because the quality of life that happens when you get in women, you’re thickening of certain issues where you wanted to have thickening and just the zest for life and frankly sex drive. If you’re dealing with young children, it’s very common you’re exhausted. How many people have relationship problems because of that?

Dr. Tami: Well you know it’s a double edged sword. A lot of women, their libido is actually lower on their list because they’re exhausted but their libido, the reason it’s low is because they’re exhausted. Testosterone fixes both. The first thing that happens is you get your energy back.

Dave: I remember that.

Dr. Tami: Then you might just as well ... Now you’re more interested anyways because you’re not exhausted.

Dave: When my testosterone was really low and I’m trying to remember ... I’d have to look at tests from 15 years ago but yeah I had no energy at all. My thyroid was low too. I went on thyroid and testosterone like, “Oh my god I got my life back.” I’m like, “Now I want to get some.” It goes in that order. You’re not like, “Oh I’m really tired but I still want to get some.” You’ve got to fix the energy. Here’s something that you might know this. It’s almost unknown, is that energy is where this comes from. I’m writing a book about mitochondria, I’ve read thousands of weird medical papers on stuff that happens because that’s how the synthesize the knowledge and the story. The synthesis of pregnenolone happens in the mitochondria.

Dr. Tami: Pregnenolone’s, it?

Dave: Now people throw the word pregnenolone, what does it become?

Dr. Tami: We give people pregnenolone just so that they can make their own testosterone sometimes.

Dave: Exactly.

Dr. Tami: It's it. You can look at the bio chemical pathway. I actually have it laminated and I show patients.

Dave: Exactly.

Dr. Tami: It's like see.

Dave: Here's what's missing from your chart unless we only have the chart like it the world is that before pregnenolone is mitochondrial function. If you cannot make energy in your cells, you will not make pregnenolone and then you want to have all these other hormones. If those hormones are at too levels, they cause your mitochondria to become misshapen. Then you have misshapen mitochondria that can't make energy very well so you can't make pregnenolone.

Dr. Tami: That makes sense because the mitochondria is the factory.

Dave: It's the factory and it responds to hormones, if you have especially thyroid. Your mitochondria don't work right so then you don't have enough energy. It's actually not just a hormone cascade, it's an energy cascade that influences hormones.

Dr. Tami: That's why it makes so much sense. Your energy goes up first when you reboot your testosterone naturally.

Dave: Yeah. Who would have thought? They don't teach that.

Dr. Tami: They don't teach it in medical school because I graduated top, top 2% of the license exam in the United States and I didn't know any of it. I had to do a whole fellowship.

Dave: That study was from 2014.

I've been hacking my mitochondria since 1996. I don't have enough energy. When I really started spending these hundreds of thousands of dollars, I'm tired all the time. I felt my mitochondria had been poisoned. They had, it was toxic mold. I went through everything that you could possibly do to make your mitochondria work better. I'm like, "I'll do all of it." It turns out I did not know and they did not know the quantum biology things we know now that mitochondria are super conductive. The mitochondria, the way the they make electrons wasn't fully elucidated. The fact that they change shape the way they do in response to hormones wasn't known. Some of this was even after I started the show.

Like, "I can't believe the rate of change here." For your patients that's why you give them testosterone and it changes their energy production which then like you said, it reboots or kick starts the energy front. I'm blown away by how effective it is because you feel it in your brain first.

Dr. Tami: Oh yeah and for women it's interesting. It's not just that sharpness, the brain fog goes away and your ability to multitask returns or our thought that we can multi task. It's confidence. It's interesting that women get older and older and older they get more sensitive to their doing

things for other people, they're second guessing themselves and they perceive that as wisdom. Yes, it's good to become more sensitive and more aware and more accommodating but there's a fine line between that being the way it is and second guessing yourself because you have no more confidence or not enough confidence. That's what's crazy.

Dave: The brain fog makes you second guess yourself?

Dr. Tami: Yes. You think to yourself, when I was in my 20s I would not be taking this long to make this decision and thinking about the third and the fourth and the fifth and the sixth possible outcome. I would make a decision.

Dave: In fact, the idea of mommy brain is well known. You have children. Lana, my wife, a physician, she's smarter than I frankly and I just don't say that, I know her numbers.

Dr. Tami: She's wicked smart.

Dave: She's pretty smart.

Dr. Tami: I get to laugh, she's a good friend.

Dave: She doesn't like it when I say that but when especially the first couple of years after both kids, she couldn't really remember anything. It was like her brain was just not on. Some of that is probably hormonal and we addressed that stuff as well. Some of it is this energy thing you're talking about that without the hormones, if I can remember the frustration really clearly our kids are 7 and 9 now. It's less of an issue but the first couple of years she was really frustrated because what was easy to do mentally, she never had a calendar, she remembers all these stuff. Now she has a calendar and things like that were admitting weakness or something like that in a way that she never had before.

Dr. Tami: Yeah, absolutely.

Dave: What do you see in your patients? What do you see in yourself when you do testosterone or thyroid or whatever they need? How quickly does that change?

Dr. Tami: Oh sometimes in less than a week. It's crazy.

Dave: That was my experience. When I get testosterone and thyroid I was like, "Holy crap. This is how I'm supposed to feel."

Dr. Tami: Sometimes depending on ... You can't take someone from here to optimal overnight so sometimes it's 3 months is how long the cells live. Sometimes you need at least 1 cellular turnover so it's a 3 to 6 month. I always tell people "If you're going to bother trying to reboot your biology by changing your nutrition or implementing a supplement program, don't waste your time, energy or money unless you're going to do it for at least 3 months because you need information for these new guys and let the old guys die." Sometimes it's 3 to 6 months.

- Dave: It makes sense in fact. What's the half-life of blood cells, it's somewhere like 4 months if I remember right?
- Dr. Tami: Yeah. It's so crazy. In medical school you learn all this information and everybody remembers the lifespan of a red blood cell. It's like 162 days. It's crazy.
- Dave: Yeah I don't why. Get a blood test about often. That would be right.
- Dr. Tami: That's the way to the hemoglobin A1C. The diabetes know this because that hemoglobin A1C is your red blood cell and how much sugar's been shoved onto it and lives about 3 months. It's a picture of your sugar control for about 3 months. The diabetics know that.
- Dave: Basically if you're going to in for your medical insurance, life insurance thing, just be good for 3 months before your and test will be fine.
- Dr. Tami: Exactly.
- Dave: Right.
- Dr. Tami: yeah.
- Dave: I have 2 more questions for you that I promised I'd get in. One of them is a personal biohack. I want to get your opinion on something. The other one is about the last time you were on the show. One of our listeners commented and said that you spoke about adrenal health and coffee a little too close together. Tell me about coffee. We both tend to think it's a super food. Let's talk adrenal health and coffee because there's stuff about it that you know.
- Dr. Tami: Yes. Coffee without good fat in it is terrible for the adrenals.
- Dave: I tend to agree although ...
- Dr. Tami: It's not neutral.
- Dave: I like it. Black coffee.
- Dr. Tami: It's not neutral. It's like saying to your adrenal glands and slapping them across the face to wake them up.
- Dave: Okay. Is this true for people who are healthy? Your saying no to the back coffee?
- Dr. Tami: No. No this is people who have real severe adrenal fatigue.
- Dave: Yeah, okay, right, which I did have, right.
- Dr. Tami: They wake up feeling like they have lead sown into their skin, more tired than when they went to bed. The butter in the coffee actually does blunt that slap and so it can give you enough of a

boost to get through your day without abusing your adrenals.

Dave: Thank you for saying that. There are a group of physicians who say, “Your adrenals are bad, don’t do coffee.” Here’s the thing as a person who had adrenal fatigue like really bad adrenal fatigue, in Silicon Valley, doing hundreds of millions of dollars’ worth of deals, putting food on my family’s table, you know what? You want me to go without coffee? There’s one thing I could tell you, “Kiss my ass.”

Dr. Tami: Everybody avoid you.

Dave: It doesn’t work. You feel like crap all the time. You’re really tired. Abusing coffee, drinking coffee every 2 hours like I used to do because I didn’t understand why I was crashing all the time from it, that’s harmful.

Dr. Tami: Right. That’s another good point. That’s another good point. There’s coffee and then there’s the American version of 5 gallons all day long in substitution of feeding your cells. It’s not a black and white question that adrenals who are severely fatigued do not like plain coffee without a buffer and the good fat is a buffer. That’s actually in my book. You are in my book. We talk about this in *The Hormone Secret*. Yeah.

Dave: I didn’t know but thank you.

Dr. Tami: Yes. I interviewed you and you’re in my book.

Dave: I remember the interview but I didn’t know it was written in there so thank you.

Dr. Tami: Well I put you in.

Dave: Here’s the thing like personally, I went without coffee for 5 years and then I fixed my adrenals and because I felt feeling really jittery and weird when I drink coffee which is the mold thing way I make special coffee beans that don’t have these jitter things in them. By the way, those mold toxins are associated ... In a study with adrenal autoimmunity towards the adrenal cortex in one study.

Dr. Tami: They also screw up your hormone production.

Dave: The mold toxins?

Dr. Tami: You can’t have it with the mold.

Dave: There’s estrogens right?

Dr. Tami: I get people to test their house when I can’t increase their hormones.

Dave: It’s critical.

- Dr. Tami: I'm like, it must be mold." They're like "No I don't have mold."
- Dave: Yes, you do.
- Dr. Tami: Well I say, "You have to prove it to me. Go take this petri dishes and put them in your house."
- Dave: That's why the documentary is so important because the mold will trigger Hashimoto's. It'll trigger ...
- Dr. Tami: It's so sneaky.
- Dave: Hypothalamic autoimmunity. That's because in the chain of things, your hypothalamus controls the pituitary gland. The pituitary gland controls hormone excretion.
- Dr. Tami: Including from the adrenals.
- Dave: Yeah because I lived in a moldy house. Let's see adrenal dysfunction, thyroid dysfunction. My FSH, which is another sex hormone, did I say thyroid? My LH, luteinizing hormone off, my testosterone's off, my estrogen was too high. All of that stuff.
- Dr. Tami: Cortisol, cortisone, your ratio of inflammatory adrenal production hormones to ...
- Dave: Oh and some neurotransmitters my epinephrine to norepinephrine ratio was 47.
- Dr. Tami: You were messed up.
- Dave: That was a mic drop look if you are not watching on YouTube. She just gave me this look of, "Are you insane?" Yeah when they saw the results they were like, "Jesus man."
- Dr. Tami: What have you been doing?
- Dave: You live in a house with black mold and you eat the wrong foods because you're trying to lose weight and you can't. This is what happens and why am I really passionate about what I do is, there's no excuse for any of that to happen. It was simply that the system didn't work to take care of it.
- Dr. Tami: No and I love your coffee for that reason. I know this isn't a plug about your coffee and I don't need to plug your coffee and you don't need me. The 2 most common causes of mold toxicity in my experience and you have more experience in mold than I do is peanuts and coffee.
- Dave: I said, "Never eat peanuts and be really selective on the coffee."
- Dr. Tami: We're in agreement.
- Dave: Well and look at the studies.

- Dr. Tami: You just go, what is mold like? Warm, moist environments. What do they do with coffee beans? They put them in piles and they literally steam. They just sit there.
- Dave: If they steamed with steam temperatures I'd be happy. They just let them sit there and rot basically.
- Dr. Tami: For long periods of time yeah. Same with peanuts.
- Dave: It blows me away that the knowledge is there but there aren't laws. There are for peanuts but for coffee in the US there's no regulations at all about this. Which is why if it gets rejected from Japan or Europe, it literally gets sent to the US and we drink it. What happens to people who are not as mold sensitive as I was or just as sick as I was, they drink it. They just get a sugar craving and they get a little cranky. For me I'm like, "I need to take a nap now. That just ruined my day." I feel ...
- Dr. Tami: Dull.
- Dave: Yeah. It turns off my brain. I became really religious about it. Even before I discovered this stuff, when I was dealing with mold toxicity, 1 cup of coffee with fat in the morning, when my adrenals weren't working would give me enough energy to feel good. This has to do with what caffeine in low doses does to cyclic amp. Do you want to talk through that? Are you familiar with that?
- Dr. Tami: Cyclic AMP? Yeah. It's a whole Krebs Cycle and the whole entire production of energy as required. I love that you have a protein that you put in your coffee as well because that's the only other thing that I love for people who have adrenal fatigue is to get that protein in the morning. So many people don't want to eat in the morning. They just want to have their cup of coffee and that's fine. Put your protein in your coffee. You got to get it in. You got all of that. The cyclic AMP is part of the club cycle. You can't have energy for the day without that whole cycle.
- Dave: The Bulletproof Collagen Protein works really, really well because you can't taste it. Whey protein doesn't work very well because it gets heated up and it's more sensitive the molecules in are more sensitive to the blending. I noticed especially women like that a lot and they're people who just want to eat breakfast. Eggs are good for you that's fine if you're not sensitive to them. For the rest of us or if you're in a hurry ... My kids drink Bulletproof Coffee with collagen in it. It's not the only thing they drink but they get about 1 or 2 ounces every morning and with the oil the brain octane, they actually focus better. They feel better. They're calmer. I'm okay with that.
- Anyway just to go full circle on that treating an adrenal dysfunction patient in such a way that they don't get their life back because they're tired all the time because you're preventing them from having something that increases their ability to convert wasted energy back into energy is not okay. That's what this Cyclic AMP does in their Krebs cycle and caffeine has this effect.
- Dr. Tami: Yeah thus the cyclic.

- Dave: Yeah cyclic. What happens in people who have mold, people who have thyroid dysfunction or anyone who has mitochondrial dysfunction, which by the way 48% of people according to some of the research I have, have early-onset mitochondria dysfunction and anyone over 50 has mitochondria dysfunction, they call it aging. It just happens.
- Dr. Tami: If you talk to Terry Wahls, she believes every autoimmune condition on the planet has mitochondria dysfunction.
- Dave: So do I.
- Dr. Tami: I agree.
- Dave: There're one and the same. If it's autoimmunity, its mitochondrial. Your body is basically a bunch of bacteria. These bacteria are called let's see ... These bacteria are called mitochondria. They're actually source for mitochondria. These mitochondria came from bacteria hundreds of millions of years ago and they stuck into our cells. That's how we make energy from the world around us.
- Dr. Tami: They haven't changed that much.
- Dave: No and guess what's been fighting bacteria since back then? Fungus. There's always a fight between fungus and bacteria. That's where antibiotics comes from. We've been poisoning ourselves all this time and people who have this dysfunction, some of the electrons, some of the energy that's supposed to go into your brain, into your cells, into making sex hormones, it basically leaks out. It's supposed to be from ATP to ADP then back to ATP. If you're into biochemistry that's cool, if not you're basically you use ATP and when it's used it doesn't have a T anymore. Then you have to put that thing back on there.
- One of the problems that we can have is that it leaks out and it turns to AMP and unless you have an enzyme that helps you make AMP go back into that cycle, it's like every time the motor in your car turns over, you spill a little of gas into a special tank that you carry around with you but you can't burn it anymore. Guess what caffeine does in low does? It helps you with that problem. That's why I always feel better when I had 1 cup of coffee without mold in it, with fat in it, when I had extreme adrenal dysfunction.
- I keep telling people, "No, 1 is good. 5 is not good. 2 is probably not good but it gives you your life back along the way." It's so mean to take someone who's just barely putting one foot in front of there and saying, "No. No coffee for you either. Here and have some chelation therapy for your mercury and just feel like a zombie and don't get fired and be nice to the kids."
- Dr. Tami: Do a liver cleanse at the same time.
- Dave: Yeah. It's not nice. Anyway I'll go off my soap box about that. This is one of Mother Nature's original smart drugs. Coffee, caffeine and me we're friends.

- Dr. Tami: I'm married to an Italian. There's coffee in our house in the morning and that's where we came up with, "Okay yeah we're also going to do ... We've got to put the protein in the coffee because you've got to ..." If you've got adrenal dysfunction, you got to get that there with the good fat. Protein and good fat. Those are the 2 things that your adrenals are wanting first thing in the morning, to just get a solid grip on the day.
- Dave: Have you ever tried just throwing a couple ounces of just grass-fed beef liver in the blender with it?
- Dr. Tami: No.
- Dave: Don't. Don't try that.
- Dr. Tami: Have you tried it?
- Dave: No. Just don't, it's bad.
- Dr. Tami: Oh it sounds revolting. I have a question for you. I know it's your interview but what do you think about the theory that cancer is actually a fungal or a mold ideology that when you open any kind of tumor, it's white?
- Dave: There's astounding evidence that there's a fungal connection to cancer. I believe that some types of cancer are fungal infections flat out. You poke them and they grow more. In fact, the sac fungus ...
- Dr. Tami: With a biopsy.
- Dave: Yeah, you poke a sac fungus and it spreads. There are types of cancer especially brain cancer that are fungal infections and people who do microscopy and you know this from medical school. It's very hard to tell a fungal cell from a human cell some of the time.
- Dr. Tami: Yeah, they are great imitators. That's why there so good at getting undetected because this mimicry and so we don't see them very clearly. Our cells are not catching them as foreign.
- Dave: They are great at mimicking things and that's because they've been fighting, it's the bacteria that we're based on for a long time. There's a tit for tat thing. The cool thing is if you have proper oxidative metabolism means if your mitochondria running at full power, cancer can't live in it. Is cancer a mitochondria dysfunction or is it a fungal dysfunction? Is actually both. Some types of cancer, I believe, are flat out fungal infections other times the fungus damages the mitochondria so they can't use oxygen effectively so they go into anaerobic mode so then you start getting mitochondria dysfunction.
- Dr. Tami: Then it's acidic environment and cancer cells thrive there and yeah.
- Dave: Here is what I'd do if I had any kind of cancer. Immediately do not pass go, I'd go into ketosis. Full on ketosis just like I recommend Bulletproof Diet, I'd be putting anything I could that would

raise ketones as much I could. That basically means you stop eating sugar. It's not that some kinds of cancer can't eat ketones, it's actually possible at least candida can eat ketones which can contribute to cancer. That's going to make a huge difference because it radically improves your ability to make energy and mitochondria. It shifts the ones that are about to turn into cancer back into non-cancer mode.

Then I would be doing intravenous and rectal ozone therapy all the time because it changes the ratio of NAD+ to NADH in the mitochondria. Then I would be doing amphotericin b orally, which is a really horrible anti-fungal drug that's famous for cooking your veins except if you take orally it doesn't. It's very hard to get really. I'd be popping that stuff like candy. Then I'd party. I'd be in the sun all the time because that's very important too.

Dr. Tami: Vitamin D, yeah.

Dave: That would be my personal cancer thing. I'd be doing my hyperbaric oxygen every day and cryotherapy and whatever else I could figure out. That would be the core of my protocol. Do I think all cancer is fungus? No. Do I think there's an undeniable link? Yeah. The guy who pioneered that the most and I'm totally lecturing but this is a hot topic for me.

Doug Kauffman was in Moldy, the documentary that I filmed. Doug's a friend and he runs a website called Know the Cause, so if you're into cancer and that's the one you're paying attention to, Doug's written books about it. The original book about this that really got me on my journey on understanding mold was by a guy who had just died. A.V. Costantini, 17 years of research with the WHO wrote a series of books called Fungal Biotics. When I was first found out about this, you couldn't buy it the US. I called his daughter in Germany and she send me the books like 500 dollars for these 3 books.

It's thousands of references pointing out the connection between fungus and cancer. It is undeniable. Heart diseases, diabetes and cancer all have undeniable fungal connections because the fungal toxins and the fungus themselves, they damage your mitochondria. When they get damaged, you get every disease we know.

Dr. Tami: I find in my desire to get women to have the energy and the bodies that they love and are happy and confident in and the testosterone focus is directly correlated with ... When I am stuck I go "Look for mold."

Dave: It is so common. In fact, the original doctor who helped me figure this out didn't have the full mycotoxin connection down but after he looked at me for a while, he said, "Dave, like I'm a functional medicine guy." We didn't call it functional medicine but then, he's like, "My patients get better." He's like, "I quit being an ENT surgeon at Johns Hopkins because that didn't work. I know what works is because I need to do an AIDS test on you. I do not know what's wrong with you but you're not getting better." I was living in a moldy house and I didn't have AIDs. I had no HIV or anything like that but he did find in a mold allergy panel that I was off the charts allergic to 8 of the top 10 most toxic molds.

Dr. Tami: Well and that's the interesting thing. There are people who actually more sensitive to some of

the toxins from molds. They don't even have to live in a house. They can just work or visit and they can have their sleep disrupted, their hormone production disrupted. Those are the things that are in my book.

Dave: Yeah the canaries.

Dr. Tami: These are all the things that I wanted people ... I feel like there needs to be this awakening of A, you can be the CEO of your own health if you have some great information and some guidance and that's what our phone and Skype appointments are trying to provide some guidance. Then finding these things. Mold and adrenals and nutrition and all of these things that can help reboot our own hormone production because it's possible.

Dave: It is indeed. Which leads to my second question.

Dr. Tami: Okay bring it on.

Dave: Now, being formerly obese, I have man boobs. If you've ever watched me on YouTube, I'm pretty fit but when I get inflamed ... If I fly for a long time and I don't take the right supplements as soon as I eat things or I find I'm in a moldy environment, I still get inflammation. I can knock it down really fast with these stuff I know.

Dr. Tami: You're good at recognizing it quickly.

Dave: Oh yeah you feel it in my brain.

Dr. Tami: We were at some, I remember we were at a outdoor retreat together and you were like, I got to get some charcoal. There was cabins remember?

Dave: I was feeling it. Yeah, yeah the cabins were not good. Sometimes ...

Dr. Tami: When you're flying or ...

Dave: The next morning I'll had man boobs. The inflammation has me right there a lot which is annoying. I remember I met Marshall Goldsmith once, he's a really famous business guy. It is one of the moldiest hotels in San Diego I'd ever been in and I was on a dinner cruise as well. Those cruise ships are always moldy and I was like, "Oh my god. I could barely think straight." In the pictures I have like A cups, it's amazing. These aren't very good pictures with Marshall Goldsmith.

Most of the time I don't have those. Maybe a year ago, I decided I'm going to take some pregnenolone, this hormone precursor so my body can make more testosterone because my levels weren't quite where I wanted them. I take it for about 6 months and I developed some a nice round butt and my man boobs grew. Why is it that even though I actually do all these stuff, why do I keep making estrogen out of all of my hormones precursors. Why isn't my testosterone even though I'm not obese anymore, why does my testosterone keep going to estrogen?

- Dr. Tami: Well your assuming that the enzyme that takes testosterone into estrogen is only in fat.
- Dave: It's obviously my liver.
- Dr. Tami: You're not fat anymore so why is it still happening? It's not just in your fat.
- Dave: Dammit.
- Dr. Tami: I know. You should have picked your parents better.
- Dave: It's called aromatase. This enzyme that this is what converts testosterone to estrogen.
- Dr. Tami: Sometimes we start with nutrition. There's simple things like rosemary that can actually inhibit the aromatase activity.
- Dave: That's interesting.
- Dr. Tami: Sometimes we actually have to go all the way up to a prescription drug because estrogen in a man is bad news.
- Dave: True.
- Dr. Tami: It's not just cosmetically bad news, it's actually ...
- Dave: It's bad for you.
- Dr. Tami: Softly increased, there's some early studies that go, this might be with the problem with prostate cancer. It's not a testosterone thing, it's an estrogen thing.
- Dave: What I used to do when I was in my late 20s and I took testosterone because my LH FSH dropped or were off. I would take testosterone and then I would take Arimidex which prevents ...
- Dr. Tami: That's the prescription that I was talking about but you know you have to be careful. I use that at the end. The studies, there's a great study out of a great urologist. A urologist is studying this stuff and then the study got buried. The study showed that Arimidex actually if you get prostate cancer, if you're taking or have taken Arimidex, it can be more aggressive type so I leave it especially if you're African-American.
- Dave: Yeah. Interesting.
- Dr. Tami: I leave it until the end because estrogen is far worse than this remote small increased risk. You really want to know so much but that's definitely the end solution and I don't know anybody who doesn't have that work.
- Dave: Yeah Arimidex definitely works. I started doing Arimidex-

Dr. Tami: Did you do it like twice a week?

Dave: Yeah I forget the dose.

Dr. Tami: It's one milligram.

Dave: It can make one feel a bit dizzy but it seems like it's worth doing. I used it for years and I quit using it around Arimidex a long time because it didn't have much aromatization. Some of the other Bulletproof techniques I've written about for preventing that were definitely working but they weren't working when I was taking pregnenolone that's for sure because I'm like, "Well I got junk in the trunk." It was a very definitive shift. I noticed it at first thanks to a mutual friend of ours J. J. Virgin. One of my-

Dr. Tami: She does not hold anything back. She told me about your junk in your trunk.

Dave: Well yeah it's more my thighs. One of my lifetime goals was to fat shamed by J. J. Virgin and so we're sitting there at a conference there once and J.J. and I are dear friends and she looks at my leg and she goes, "You have fat thighs." She grabs my thigh and I'm like, "Actually my thighs are fatter than they used to be. What the hell." I looked at my hormone levels and okay the pregnenolone is not working. This is biohacking right.

Dr. Tami: It is and there is an upside to pregnenolone and there's a downside because what pregnenolone is, is it's pouring at the top of the funnel and then all the dysfunction that you naturally have has more volume. If you have a tendency to take your testosterone and make it into estrogen and you're taking pregnenolone, then you're going to go more that direction. It might be better just to take testosterone.

Dave: Yeah. I'm more angled in that direction now. It's fascinating because they're a bunch of guys listening to this recording. That was a really long winding explanation and what I'm saying there is, if you're over probably 35, you might want to get yourself tested and if your testosterone levels are not where you want them and things like eating right and doing all kind of exercise don't work, if you want to live to 180 like my goal, you might consider using testosterone. It's just a good idea. Your quality of life will go up even if you don't add a minute to your life. You'll have more energy. You'll have better sex. You'll have a zest for life, your brain works better. It's all good.

Dr. Tami: For men, decreased risk of Alzheimer's.

Dave: Oh yeah that little thing. Weird thing is if you get Alzheimer's when your old at least you won't remember that you had bad sex all the time because you didn't have testosterone.

Dr. Tami: That's true but I do not intend on keeping my patients alive and not have a brain to enjoy it.

Dave: I do, basically, we know now. If you have ketones present, you're probably not going to get Alzheimer's disease. I believe very wholly in a cyclical ketosis diet. Bulletproof Diet is just a

gluco-ketosis diet. If you have ketones a lot of the time, your chances of Alzheimer's go down so dramatically.

Dr. Tami: Well we call Alzheimer's Diabetes type 3, it's all about inflammation and sugar and processed foods. Yeah.

Dave: Well, we talked about all sorts of cool stuff and we're up on the end of the interview and I know that. I just looked at my clock here it's 3:57. Tami, thank you for making all the way up here to Bulletproof Labs Alpha here on Island to do a live interview. It's been a lot of fun. Where can people find out more about your book and all the other stuff you're working on and keeping in mind you can see her at the conference. Aside from coming to Bulletproof Conference and buying a ticket right now to see Dr. Tami, tell me where people find you.

Dr. Tami: DRTAMI.com. D R T A M I and we're going to have our big pre-launch for the paperback starting in November and through December and January. Our goal is to have over 300-dollars'-worth of free bonuses that are just going to bless people's lives and rock their health so that buying a paperback is like yeah, yeah I get a book too.

Dave: How's that going to work? When you buy the book, how do you know they bought the book to give them 300-dollars'-worth of cool stuff.

Dr. Tami: Well there's fancy receipt trackers and you can take a picture of your receipt with your phone, email it.

Dave: They just send you the receipt, cool.

Dr. Tami: Yeah, we want to make it easy. What I really want to do is I want to get people not just getting their own lives but women, I believe, no offense to men but I believe that women are going to be the ones that change the world. Women make decisions that affect their health which in turn make decisions that affect the family's health and the family's health affects the community and the community affects ... It's just is this big ripple and we can't make positive change when we feel like crap.

Dave: Here's the deal and I would support what you're saying there. If women get their hormones under control and particular have enough testosterone, men like it anyway so it's all good.

Dr. Tami: Everybody benefits absolutely. We thought organic food was the trendy little thing but we changed the entire economy based on our decisions. That's what I want to do. I want to create a hormone revolution so don't just buy a book for you, buy 3, its paperback for goodness sake. It's less than 20 dollars and hand it out and get people excited. They can log into Bulletproof and listen to your podcasts and there so much great information that you can be the CEO of your own health.

Dave: Just one more thing I want to add in there, if you're a guy, buy this book for the women. Your life ...

- Dr. Tami: Actually the protocols are the same for the men. We just wrote it in a female voice because it's Simon and Schuster so it's exactly the same for the men.
- Dave: Totally but here's the deal. A low testosterone has a profound effect on guys but if your significant other has low testosterone the effect on you is even worse than you having low testosterone.
- Dr. Tami: Amen.
- Dave: I'm just saying the woman in your life needs testosterone before you get it because then you'll get it. Did I say that right?
- Dr. Tami: I think so.
- Dave: Anyway, that's why this matters for everyone listening. This isn't just a woman thing your book is targeted at women-
- Dr. Tami: Only because women buy more books and the protocol is the same for men and women. 40% of my patients are men.
- Dave: Yeah and when you ask people just a random set of men and woman what's the problem, energy and cravings, women are actually having more energy problems than men. It comes down to hormones. If you're having relationship issues and I don't know how many new parents ... All of my friends when their new parents go through this time when it's like, "You know I remember we used to have a sex life, we used to have a dating life."
- Dr. Tami: We used to talk.
- Dave: Yeah and one of us wasn't tired all the time and all that. It's actually hormonal. It's also mitochondrial, they're energy issues there we talked about. This book can absolutely change that and we talked about ... How long does it take for people to respond to say a thyroid and testosterone, it was?
- Dr. Tami: It could be less than a week.
- Dave: Less than a week.
- Dr. Tami: Or up to 3 months. There's a 30-day plan in the book to just actually reboot all of that so that it's not going to be a peak, it's going to be sustained.
- Dave: Here's a good way to put it. If you are seeing a relationship therapist and you are not both using testosterone, you're wasting money. Did I say that?
- Dr. Tami: I have a number of sex therapists in the city who refer patients to me because if you don't have gas for a Lamborghini the Lamborghini is not going.

- Dave: Yup. That's what it comes down to. That's why I'm a huge fan of hormones and changing my hormones changed my life. Gave me a lot of control back from my biology and I've seen it work in countless clients and just people who post on Facebook and all that.
- Dr. Tami: One of our bonuses for our book, The Hormone Secret launch for the paperback, you may not even know this because you have such an expanse in the impact that you make but we are going to get some Bulletproof recipes that have not been published before that are hormone focused as awarded bonuses.
- Dave: Oh cool yeah we do a recipe guide for you. In fact, I do know about that because you see the kitchen right back there behind the camera, that's actually where I develop those recipes.
- Dr. Tami: My favorite arugula chocolate.
- Dave: Oh the chocolate pear salad? Is that legit?
- Dr. Tami: Oh my gosh.
- Dave: That seems good. I love that salad, yeah.
- Dr. Tami: It's so amazing. It's my signature salad now, you didn't know that?
- Dave: You can have it.
- Dr. Tami: I do give you credit.
- Dave: I appreciate it. We served that at the last Bulletproof Conference ...
- Dr. Tami: Yeah, at our dinner.
- Dave: ... and some of the restaurants. Yeah. Man, here's something about that I don't know what it is.
- Dr. Tami: Its special. Like you. Thank you for having me.
- Dave: 2 thanks Dr. Tami. Thanks for being on and if you enjoyed the show, here's what to do. Go and buy a copy or 2 of Dr. Tami's book and while you're at it, keep drinking Bulletproof Coffee and maybe try one of the 3 new roasts that we have, we have the Original roast, we have French Cake which is dark but not burned and we have the Mentalist which is my new favorite that's slightly darker than what we have now, the original and it's just fantastic.
- Try the different flavors and come see us at the conference. Hang out with Dr. Tami, hang out with me, hang out with about 3,000 other people who totally follow this conversation and are interested. People will teach you things and people you'll probably want to stay in touch with anyway. Join the community, meet some cool people, hear from world class people talking about hormones, mitochondria, energy.



Dr. Tami: Stem cells.

Dave: Alberto Villoldo, stem cells. All the good stuff and then when you're done get some fat taken out and inject those stem cells and you'll be super human before you know it. Have an awesome afternoon. Did you know that Bulletproof is on Instagram? You can find us at Bulletproof Coffee or my personal feed is Dave.Asprey. hope to see you there.