

Dr. Keesha (<u>00:01</u>):

Welcome back to the Reverse Autoimmune Disease Summit 3.0, or The Autoimmune Brain, everybody. I'm really excited to introduce you to a new friend of mine, Dr. Amber Krogsrud, who is a licensed naturopathic doctor at MetroMD Institute of Regenerative Medicine in Los Angeles, California. She's trained in regenerative medicine, detoxification protocols, hormone testing and treatment, bioidentical hormone therapy, peptide therapy, and IV nutrient therapy. We're going to kind of focus in on that peptide therapy. Welcome to the summit, Dr. Amber.

Dr. Amber (<u>00:34</u>):

Thank you, Dr. Keesha. It's so good to be here. I'm honored and peptides are kind of a new, novel therapy. So maybe a lot of people haven't heard about them yet, so we'll get to talk about it.

Dr. Keesha (<u>00:47</u>):

Yeah. So let's talk about what a peptide is.

Dr. Amber (<u>00:50</u>):

Yes. So the easiest analogy that I like to give to patients is that—so when we eat something like a protein, like a piece of chicken, what our body does, it will break that down into—from that protein into peptides, which is essentially like a chain of amino acids, amino acids being the smallest sub unit, or like a box car on a train. So the peptide is literally just a chain of a bunch of amino acids. Think of it like box cars in a chain. What peptides do is our entire body works through cellular signaling, so peptides send a cellular signal. They work through signaling in the body, just like the food that we eat. When you eat a piece of chicken, it does send a message to your body saying, "Hey, let's build, let's break down. What do we do with this?" Food is information to our body and so are peptides. There's lots of different forms that we can administer peptides, therapeutically. Many people think of collagen peptides, like the supplement, many people think of the peptides that are in skincare, like the GHK-Cu peptides. But we're really talking about—there's 7,000 peptides. Up until recently 70 of them have been FDA approved, which is a very small subset of all of the peptides that exist. There's peptides for all sorts of uses. We can inject them, we can apply them topically, we can compound them, we can put them in [inaudible]. We can do things to make them transdermally absorbed. So there's all sorts of formats where we can administer peptides, but essentially what they do is they send a message to the body. It's a signal pathway that we either want to happen, or that we want to prevent from happening.

Dr. Keesha (02:51):

This is really interesting because you also do bioidentical hormones, and so do I. I teach at the Academy for Integrative Medicine and I teach health coaches to really understand some of these mechanisms so



that they understand what's going on in the body. And if you look at a steroid hormone pathway—it's often called chicken wire when we're in medical training—under the molecular structures of hormones and all the paths that they can take. It's very, very fascinating because anything can actually divert the train track to go to a different direction. We start with cholesterol and then that converts into pregnenolone and then pregnenolone can actually go in a couple of different directions, including cortisol production if you're constantly stressed out, which then makes you not manufacture your own progesterone. So when we think about peptides, I think about them in the same way that there are a number of different train tracks that actually can be pulled. What we're trying to do is help create like, "Go this way, go this way, come on." [Laughing] Right? We're trying to coax your body into going in the way that we would like toward homeostasis and balance and healing. Right?

Dr. Amber (<u>04:09</u>):

Absolutely. Yeah. That's a great word. We're trying to direct and coax the body almost like a director.

Dr. Keesha (<u>04:15</u>):

Yeah. Yeah. Because in autoimmune disease, the body's immune system, I always think needs to be coaxed and not hammered into shape. Right? I think about the immune system in an autoimmune situation is kind of a dog with rabies where it's biting before asking questions. And it never asks questions. It just bites. Right? And it can be deadly and that we actually want a dog that is nice and cuddly and snuggles you until such time that it's required to defend you. And in this case, it's going to take direction from you and it's actually going to ask questions first and then it will attack if it needs to. So we have to retrain that immune system to ask questions, not bite first. [Laughing] So I think about peptides is one of those mechanisms that we can use to kind of do that retraining and that coaxing, right?

Dr. Amber (<u>05:11</u>):

Yeah, absolutely. Yeah. It's really redirecting the body through—We understand that our body works through communication. The cells communicate to each other. So we have done so much research on understanding what are the receptors? What is happening inside the cell? What can we signal to protect the cells from oxidative damage? And that's where the whole world of peptide therapy is just, it's expanded in terms of what we know is possible in redirecting some of those pathways and autoimmunity, when we have the body attacking itself, when we get into a state of where the dog does end up biting us instead of the foreign invader.

Dr. Keesha (<u>06:03</u>):

Right.



Dr. Amber (<u>06:03</u>):

So yeah, it's a powerful therapy and there's these few peptides that are very specific for that immune benefit.

Dr. Keesha (06:12):

So let's talk about that. In a world of the body is at war with itself, and I always say, when you're at war with you, there's no winner. That's a no win situation. The name of the summit is specifically The Autoimmune Brain. What we want to deal with is what's happening in our signaling that's our brain is telling the body what to do next? So what's the role of peptide therapy in taking a brain on fire and allowing it to come back into balance?

Dr. Amber (<u>06:49</u>):

Yeah. So, there's a few peptides. Let's just talk about the immune response and what kind of happens when we get an autoimmune situation happening. So we have this gland, it's called the thymus gland, and it produces peptides. It produces these Thymosin peptides, so Thymosin alpha, Thymosin beta, are the main ones that people who are listening have heard of just the name of those. When we're young, our thymus gland is functioning at a high level. So it's producing a lot of those. As we age, and by the time we're 30, our thymus gland involutes. So it becomes less effective at making those Thymosin peptides that are naturally produced in the thymus, but they decrease with age. So this could be a reason why we see around that age of 30, the increase incidents of autoimmunity later on in life, where we get that immune dysregulation and self attacking self. So some of the potential signs of deficiency—that we're deficient in these peptides like Thymosin alpha, are chronic infections, slow wound healing, joint pain and injury, we're not recovering in the same way. It could manifest in an autoimmune condition. If we have any chronic infections like Lyme, we're not mounting the proper immune response to them. So Thymosin alpha is one of those peptides that really helps with creating T cells. We learned that in med school that the T cells are really—like the dog analogy that you mentioned—they help to attack those foreign invaders, but then they end up attacking our own tissue. So Thymosin alpha is one of the injectable forms of peptides that can really help to redirect that immune response through the T cells. It actually is an FDA approved drug in some countries, here you can get it through a compounding pharmacy, Thymosin alpha. And then we can talk about the Thymosin beta peptide, too. That's another Thymosin peptide that can be really supportive for tissue healing and regulation of those regenerative pathways in the body.

Dr. Keesha (09:29):

So when we're in a time of COVID, and we're not seeing patients the way that we used to be, are people able to give themselves injectables?



Dr. Amber (09:42):

Yes. So I am still able to work with patients. It's an injection that they can do from home. It's actually fairly easy. So it's just a subcutaneous injection, which is even easier than giving a B12 shot. It can be done just a little pinch of the fat tissue. It's a really small amount, 0.1 milliliters. It's so tiny. Most people, their first experiences, they're just shocked at how painless it actually is to take these peptides. So yes, it's [inaudible].

Dr. Keesha (<u>10:18</u>):

Then what can people expect when they go on peptide therapy for let's say different kinds of autoimmune diseases? 'Cause of course, peptide therapies, not peptide therapy across the board. So they're going to be specific peptides that are helpful for specific regions of the body and things that are going on.

Dr. Amber (10:36):

Yeah. So the Thymosin alpha is very specific for the thymus peptides. We use it in autoimmune conditions. We use it in some of those chronic infections, like Lyme, EBV, in allergies, chemical sensitivities, anytime somebody has an immune deficiency. So it's actually been used in cancer as well. So yeah, those are some of the main indications of that specific peptide. I have heard in some patients that it almost—sometimes they get worse before they get better. If they have multiple autoimmune conditions and then they start on Thymosin alpha and their immune system is in such a depleted state, and then we increase those peptides right away. Most people respond really pretty well. They end up feeling better. I've seen food allergies, food sensitivities resolve, skin issues, individuals who are just reacting to everything in their environment, from fragrances to soaps, to food, every food. I've seen the Thymosin alpha really just reregulate their immune system and they end up not reacting to those after using a course of Thymosin alpha.

Dr. Keesha (12:02):

How expensive is it to do an ongoing and how long is a protocol for that?

Dr. Amber (<u>12:07</u>):

Yeah. So I like to do a 2 to 3 month protocol and usually it's in the range of—it depends on the peptide. They're usually about 300 to 400 a month for the vile that comes with the insulin syringes. It's something that is patient-specific, so it's packed for that patient. We can ship it to their house. Usually at my first office visit we'll walk through that process of how to inject it, when to take it, really what are the indications? What would they expect? Then I send them home with it and they can do it from home,



which adds such a convenience element to the treatment. It's like two minutes a day for such a big therapeutic value.

Dr. Keesha (12:57):

So, one of the things that I have been experiencing in the last couple of weeks and many of our colleagues have been, I haven't specifically gotten this mailed to me yet, but a bunch of our colleagues have is the FTC coming down and saying, "If you have anything on your website about COVID, then they're actually threatening to shut down your practice." Which is very interesting. Talking about COVID from any natural standpoint is now the FTC is going after people. I also heard that the FDA is starting to do the same thing around peptides. So, what's happening out there right now?

Dr. Amber (<u>13:46</u>):

Yeah. So what happened is there's a really big compounding pharmacy that was a main supplier nationwide for a lot of clinics and a lot of practitioners, a lot of patients, and they occupied a space, their pharmacy, that used to be a veterinary compounding pharmacy apparently. It's in Kentucky. There were some reports to the FDA that they were producing veterinary peptides and then using them in humans. So the FDA went in and investigated and everything was cleared because they, of course, weren't doing that.

Dr. Keesha (14:27):

They weren't doing that, yeah. But because of the location—it's right in Kentucky, where they have all of the—

Dr. Amber (14:34):

-Horses-

Dr. Amber (14:36):

—Horse racing. So, peptides got under scrutiny of the FDA after that point. And they are expanding, there is so many practitioners, I was trained by A4M in peptides and bioidentical hormones. But they're really—doctors are catching on, learning about them, patients are experiencing benefit. So it became an opportunity for the FDA to come in and say, "Hey, we need to put some standardization and really regulate this more."

Dr. Keesha (15:13):

[Inaudible] that ever a bad thing.



Dr. Amber (<u>15:14</u>):

Yes. There is a lot of places that you can buy peptides online that are really unauthorized sources shipped in from China, not tested once they arrive in the United States. My whole philosophy is I'm so adamant about what I put in my body, as far as food and supplements. I want to make sure it's really high quality and don't inject anything into my body that I don't know where it came from, it would just be worrisome. So it really is important to work with a doctor and source them through a compounding pharmacy who tests everything, who tests every batch, and really does their due diligence and making sure they're sending you a quality—it's a medication, right?

Dr. Keesha (<u>16:07</u>):

Right. I'm in the process of getting trained right now because it was so compelling looking at it. Now, one of the things that I really, really emphasize is when we start talking about, there's a difference between your brain and your mind, right? So the autoimmune brain is led from the autoimmune mind. So the mind being, "I perceive myself as unsafe or people in the world are trustworthy". Always kind of feeling like you're in a fight or flight response sets that nervous system pathways. It doesn't matter how many peptides you inject. That's not gonna do that. So really doing this in addition to the work that is healing your trauma, making sure your digestive system is getting healed, making sure that we're looking at toxic load and all of the things. Everyone always looks for a magic bullet and I've kind of seen the autoimmune community go, "Peptides! Something I can just inject and then I can eat whatever I want?" So I'd love to have you address that.

Dr. Amber (17:11):

Yeah, I use [inaudible] with lots of other therapies. So many times I'll run a hormone panel, a gut panel, a stool panel, and then we can find things like candida overgrowth in the gut. There's very specific—there's actually a peptide that's very specific for that, that improves the immune system's ability to kind of flag down and eradicate candida from the gut. It's a peptide called LL-37. Unfortunately it's one of the ones that's kind of on the chopping block, but it is really amazing for gut infections. I use that in tandem with diet changes and adding in some really amazing antimicrobial herbs and doing a gut healing protocol, if they have leaky gut. It really fits into the whole picture. The way that I approach my practice and patients is kind of, pillar one is looking at sleep, stress, lifestyle, hormone regulation, cortisol rhythm, melatonin, everything that's happening that we can kind of control with diet and lifestyle. Adding in things like sauna and red light therapy. I have a red light box thing behind me here.

Dr. Keesha (18:33):

I just got out of the sauna a couple hours ago. [Laughing]



Dr. Amber (18:38):

Yeah. To start your day or end your day. Then peptides are really a next level therapy. So after we've addressed those pillars, then we're looking at, okay, what can we add in that's really going to support that system? But going straight to peptides without looking at all those other pieces, it's kind of nebulous, we're missing so many things that we could really support the body to do better at its job without adding in a peptide. But they can be really amazing as a part of our protocol.

Dr. Keesha (<u>19:14</u>):

I think that's such an important—I really appreciate you talking about that because the way that we're raised inside of our culture and our cultural story is that there's a magic bullet, right? There's one reason I'm sick and there's one way I can get better. And that is just a myth. It does not work that way. I call it critical mass. There's a whole bunch of stuff that got loaded onto that scale before it finally tipped and taking those off as fast as we can, what can we do to bring you back into balance peptide therapy becomes one of those things that we can do to bring balance back. But it's never going to be just like taking turmeric or stopping gluten. Like people will say, "Yeah, I stopped eating gluten for a couple of weeks. It didn't do any good." I say, "Oh, that's 'cause that's not the only thing." [Laughing].

Dr. Amber (20:05): [Inaudible] [Laughing]

Dr. Keesha (20:10):

Yeah. We actually get a lot deeper than that. There's a very—we live in such a busy culture that people are so busy that they really want to get into it and get it done and not have to think about their bodies again. I think that's sort of like trying to be a parent to a toddler in that way, your toddler is going to have oppositional defiant disorder. [Laughing] So your body gets oppositionally defiant when you categorize it as something that just needs to have like a one and done, and then you don't have to pay attention to it anymore. This is actually the vehicle that carries you through your life. It needs to be talked to every day and listened to every day in a compassionate, collaborative way. If you're cooperating with your body, then it actually will be a lot more gentle with you in the lessons it is trying to teach.

Dr. Amber (<u>21:04</u>):

The principle of autoimmunity is that there's a breakdown in communication. You think about how many other places where that shows up in the world. In relationships, when there's a breakdown in communication, that's when things go awry. Our current world, what's happening in the world, the self attacking the self, maybe that's a manifestation that's showing up in our bodies now. That's really just an



emotional climate that we also have in the world. So it's really—yeah. I think there's a huge psychosocial, emotional picture which is what I love about your approach to medicine and your patients and your summits. It's let's bring that piece to light, absolutely. Let's look at the physiology, 100%. Let's test your gut and your hormones and your transmitters and let's figure out what's going on. But if we only look at one, only your psychology and not your physiology, or only your physiology and not your psychology, we're missing half the picture.

Dr. Keesha (22:16):

Right. That's actually what's gone awry in our medical model is that we try to do that. We try to separate the mind from the body, from the spirit and it doesn't work and we are not that. We are a collaborative whole, and it is that breakdown. I mean, I've been saying for the last three years from stages that we are an autoimmune disease on the planet and now the planet is actually rejected us. [Laughing]

Dr. Amber (22:45): Yeah. [Laughing] Dr. Keesha (22:45):

The planet is like, "You guys are going to time out so I can get cleaned up. Thank you." [Laughing]

Dr. Amber (22:53):

I know, that's really what's happened with the pollution and everything that's changed. Yeah.

Dr. Keesha (<u>22:57</u>):

Yeah. It's working.

Dr. Amber (22:58):

It's working, that's right.

Dr. Keesha (22:59):

If you look at the pollution maps around the world right now, it's amazing. Us being in timeout for three months, what she's been able to accomplish for herself is like, wow. That's remarkable.

Dr. Amber (23:11):

I'm in LA and it actually—Yeah, it's been clearer than I ever remember it being.



Dr. Keesha (23:17):

Yeah. Yeah. So is there anything else that you would like to leave with our audience regarding the autoimmune brain and reversing autoimmune disease, Dr. Amber?

Dr. Amber (23:29):

Yeah. I think it's really—a lot of listeners to this summit are probably individuals who are so curious about learning about their own health. What are strategies—they're like the constant perpetual self-learner, especially about health.

Dr. Keesha (23:48):

I call them summit junkies. [Laughing]

Dr. Amber (23:55):

That's a great term. That's a wonderful piece. The application is really a powerful step. When we're thinking about peptides and applying that to health, or even just seeking out a functional medicine practitioner who can run some of those labs make really appropriate, specific recommendations. My principal with patients is let's test, not guess. Let's figure out really what's going on.

Dr. Keesha (24:24):

I say that too. Test, don't guess. Yeah.

Dr. Amber (24:28):

Then we can just pinpoint what our treatment plan is. So yeah, peptides is one option, one piece of the puzzle, one thing that maybe a lot of listeners haven't heard about, but definitely finding someone who is trained, just like finding someone who is trained in hormones or gut health can be really valuable and getting the appropriate protocol and dosing and everything that's required for using peptides. They can reach out to me. I have some information. I have a Facebook group about peptides called Peptide RX. There's a bunch of PDFs of information. They can read more also on Instagram. They can find me at doctoramber or peptiderx on Instagram. There's a lot more on a lot of the things that I covered today.

Dr. Keesha (25:27):

So you have a free gift for our audience, too, yes?

Dr. Amber (25:29):



I do. Yes. It's called the Pro Peptide Diet. So this is looking at a way to help the body to repair and restore through the diet, aside from using anything injectable, anything compounded, what are things that you could do from home to really support your body healthy cellular turnover, thinking about athletes, adding in healthy collagen for skin repair. So it's a free PDF. They can go find it on the summit page.

Dr. Keesha (26:03):

Yeah, we'll have it here. Fantastic. Thank you so much, Dr. Amber. I so appreciate your knowledge and your time and you sharing it with us.

Dr. Amber (<u>26:11</u>):

Absolutely. Thank you for having me.

Dr. Keesha (<u>26:13</u>):

So I think Sam wants to say hello to everybody here. [Laughing] You can see the little tail wagging in the background. I was laughing. [Laughing] Alright. Until next time everybody, be well.