
# Episode 105: How to Beat Anxiety and Resolve Panic Attacks with Targeted Amino Acids

Child: Welcome to my Mommy's podcast.

Katie: Hello, and welcome to the Healthy Moms Podcast. I'm Katie from wellnessmama.com, and I'm here today with food and mood expert, Trudy Scott. She's a certified nutritionist and she's on a mission to educate and empower anxious women so that they can find natural and nutritional solutions for their anxiety, panic attacks, and stress. And I've gotten a lot of questions about this and I'm so excited to have her here to shed some light on those. So she's known for her expertise in the use of amino acids, specifically for a lot of different anxiety related conditions that we're really going to delve into. She's also the author of "The Antianxiety Food Solution: How the Foods You Eat Can Help You Calm Your Anxious Mind, Improve Your Mood, and End Cravings" and the host of "The Anxiety Summit." And both of those will be linked in the show notes, of course. I'm really excited. I know I've got a lot of questions about this topic and she's gonna provide the answers. So Trudy, thank you so much for being here and welcome.

Trudy: Thanks so much. I'm excited to be here, Katie.

Katie: Well, you have a very specific expertise in this and if it's okay, I'd love for you to start by sharing your own story because you've experienced the results firsthand from what I understand.

Trudy: Yes. I actually got into this because of my own anxiety and panic attacks. And it's quite funny because I am a world traveler, I'm a rock climber, I've done some crazy things on Ledges and Zion National Park, I've done ice climbing. So I would never have considered myself an anxious timid kind of person, but in my late 30s, I started to get increasingly anxious, and I would wake with this feeling of doom, I would wake with this fear that something was gonna happen and had no idea what it was. And there was nothing in my life that was causing it other than stress. I was working in Corporate America. I was working really long hours, I was really stressed out. And I was going through hormonal changes, going into perimenopause, and it was a call at this perfect storm. I was eating a vegetarian diet, I was eating gluten, I had a mouthful of mercury fillings, I had all of these things that were contributing to causing this biochemical imbalance in my body and as I got a little bit older, I was getting more and more anxious. I had developed social anxiety which was crazy because I consider myself a social butterfly. And all of these things were going on and upward. Where on earth is this coming from? And I grew up in South Africa and we didn't go to the doctor a lot. We had, probably, had you know, a bottle of cough syrup in the cupboard and maybe some diaspora. It was called diaspora in those days, and there was it. And we never ever took medication. So I look to nutritional solutions. I just thought there's got to be something biochemical going on here. And I ended up working with a wonderful nurse practitioner and a naturopath and started to figure out that it was my adrenals that were burned out, that I had gluten issues that I needed to get rid of my heavy metals, and all of these factors were causing what I later discovered, low zinc was causing no GABA, was causing both serotonin which was causing my anxiety. And eventually, it took many years to find all the answers and I sort of put all these puzzle pieces together, but I discovered I had low GABA. And GABA was an amino acid which was amazing for me. It completely stopped the panic attacks and the anxiety, but I still had to get to the root cause of all these other things that were contributing to why I had low GABA in the first place. But long story short, I no longer have anxiety. I do have to look after my nutritional status, I have to watch my stress levels, but I was so amazed by all of this that I went back to school to become a nutritionist so I could learn more firstly for myself. And then as I learned the power of food and nutrients, I thought, "Oh my gosh, I need to share this information." And I gave up my computer job and became a nutritionist and wrote my book and now I educate women about this because so many women at this age start to notice this increasing anxiety. And even if...you know, and I'm seeing it in women younger and

younger, but it's very common to see it as women are going into perimenopause. And I just love that I get to help other women put all the puzzle pieces together because I mentioned a few of my root causes, but the root cause can be different for each individual person.

Katie: Yeah, that's...your story is really powerful. And before we go deeper, because you have such deep knowledge on this, I wanna make sure we define terms for anybody who's not familiar. So, you mentioned anxiety and stress and worry and even panic attacks and how those are related to low GABA and low serotonin. So, before we go any further, can you define what GABA and serotonin are for anyone who may not be familiar?

Trudy: Yes. So, those both are neurotransmitters, and GABA is the main calming neurotransmitter. And GABA's also actually happens to be an amino acid that you use to raise GABA levels. And then serotonin is another neurotransmitter that we think of...we often associate with depression, but we can also be anxious when we have low serotonin. And the difference between the types of anxiety that you may have when you have low GABA versus low serotonin, with low GABA you have physical anxiety. So you'll feel this tension in your body. A lot of my clients will be sitting there with this tension in their shoulders, their shoulders may be hunched and you can physically feel it in your gut or you may feel it in your shoulders. With low serotonin anxiety, and you may also have the depression, you may have winter blues, you may have insomnia. So there's a lot of symptoms that go with both the low GABA and the low serotonin. So, the low GABA is in physical but the low serotonin is in the mind. So it's the worry, it's the ruminating thoughts, it's the reprocessing, it's the negative self-talk, "Who am I to be doing this kind of thinking." So that's the difference between the low GABA and the low serotonin. So I mentioned that with the low GABA, there's an amino acid called GABA which raises your GABA levels. With low serotonin, there's two amino acids that are very effective. The one is tryptophan and the other one is 5-HTP.

Katie: Great. So let's go a little bit deeper with those. I know that this is very much in your specialty, using specific amino acids. And I also think that's an area that is not as widely known. I think people are coming around to the importance of, for instance, vitamin D and the importance of omega-3s, but amino acids still kind of stump a lot of people. So let's talk about that. What are targeted amino acids and how could a person figure out, based on their own type of anxiety, which one they might need to look at?

Trudy: And this is why the aminos are so amazing because they are targeted. So the way I do it is I'll have someone do a questionnaire. So let me just go through the symptoms for low GABA and low serotonin, and then I'll share with you what targeted amino acids mean. Because we wanna target it to our unique needs. And you mentioned vitamin D. Just like you test your vitamin D levels, that'll tell you that you've got low levels and you need to supplement with vitamin D, then you'll retest and see that your levels have come up. With the amino acids and the low neurotransmitters, I find using a questionnaire is the best way to assess the fact that you may have low GABA and you may have low serotonin. Then you do a trial of the amino acid based on your unique needs, and then you redo the questionnaire and you see how things have changed. So, if we look at low GABA, we have the physical anxiety, we have stiff and tense muscles. So, as I said, you put this physical tension in your body. And then the other aspect with the low neurotransmitters as well as the anxiety is the cravings aspect. So with each of these neurotransmitters deficiencies, you'll have the anxiety or the mood symptoms and in the craving. So with low GABA, you'll have the cravings for something sweet or something to calm you down. So you would...let us go through the low serotonin as well. So with low serotonin, you have the mental anxiety, the worry, the depression, the insomnia, the PMS, the pain issues, you may have TMJ or you may have fibromyalgia issues. And then with the low serotonin, the symptoms are afternoon or evening

cravings. That's the big clue that it could be low serotonin. So you would do the questionnaire, write your symptoms on a scale of 1 to 10, and then do a trial of one of the amino acids. And what I mean by that is that you take the lowest amount of each of the amino acids, if we're looking at GABA, it would be 125 milligrams of GABA. If we're looking at tryptophan for the low serotonin, it would be 500 milligrams, and you trial it. So you will say, "What are my symptoms right now and on a scale of 1 to 10, and then you try the amino acid, and then you see how the symptoms change. That way you will know exactly how much you need. If you get a big relief, if it's helping you a lot, that's a good starting dose. If you're not getting relief immediately. And when I'm saying immediately, I'm meaning it within five minutes. You will see an impact within five minutes, then you would increase your dose, and so you're finding the targeted amount for you.

Now, I mentioned earlier that I had many root causes for my anxiety. Looking at low GABA and low serotonin, which we're gonna talk about today, is just one particular area. So there could be other factors: low zinc, it could be the gluten, it could be thyroid condition can cause anxiety. So, we're just looking at one particular area, but if you use targeted individual amino acids to raise those levels, then you're addressing one particular area. And the deficiency of GABA and serotonin can have multiple causes. It could be just a genetic thing that you're born with low, you know, you've inherited from your mom or your dad, and women also make less serotonin than men, for example. So there's many reasons why you may have low serotonin or low GABA, but if you use these targeted individual amino acids based on your unique need, you can see results very quickly within five minutes, and then over the course of the next few weeks you should be seeing results very quickly. A lot of my clients will say, "I'm not seeing any impact, should I keep trying, you know, how long should I be aiming for." The thing that, about the amino is that are so amazing, is that you get results right away. If you don't get results, it means it's not enough or it means you don't need it. Its not...the anxiety is not caused by low serotonin or low GABA.

Katie: That makes sense. And I would assume, at least, that if you don't need it, it would be not wise to continue taking it.

Trudy: Yes. Correct. Because if you... And this goes to if you're taking too much, it can actually cause opposite effects. So, if you're taking too much, it can actually make symptoms worse. So that's why doing the trial is very beneficial because then you can figure out what your ideal amount is. And some of my clients are called "pixie dust" clients, and they need a very small amount. So I mentioned 500 milligrams for tryptophan as the starting dose for low serotonin, but if you are a super, super sensitive person, and I'll notice because on the questionnaire, when I'm working with someone, they'll tell me, yes, they react very strongly to medications or they, you know, responded to supplements. You know, supplements have been super effective or maybe too effective in the past, then I'll say, "Let's have you start in a very small amount." And in that case, you can actually open up a capsule and just wet your finger and take a dab, and that can be enough to mitigate some of the low serotonin symptoms or the low GABA symptoms. So it's very, very individualized. And that's why doing the trial is really important. You know, a lot of people would hear me do these interviews and say, "Oh my gosh, that sounds like me. My anxiety is so bad. I'm gonna go and, you know, 500 milligrams is definitely not enough. My anxiety is so bad I'm gonna take 1500 milligrams." And that's too much for a lot of people. So, always do on the side of caution, start low and then see how you respond during that trial, and then increase based on how you respond, if you need to increase. So you always wanna be taking the minimal amount to create the most benefits.

Katie: That makes sense and that's such a wise piece of advice for so many aspects of life. I feel like... So, from what I'm understanding, something like vitamin D that's very...you can get empirical data, you can test to

know exactly what your levels are, but with these, the approach in some ways is actually easier because you can do the questionnaire with you and figure out potentially which amino acid to start with and then try it right away. Is that right?

Trudy: Yes, that's right. And when you're doing it on your own and even when I'm working with someone one on one, I'll have him do one at a time because then you can gauge which is, you know, what their effects are. So you don't wanna say, "Well, I've got low GABA and I've got low serotonin based on the questionnaires. I'm gonna try both of them." Do one at a time, that way you can figure out, "Okay, my worry, my negative self-talk, that's a nine out of 10. You know, I just can't stop thinking about this discussion I had with someone and I don't think I'm good enough to be doing what I'm doing." You know, some of the other symptoms that we think about with low serotonin. Sydney, with the women that I work with, is self-doubt, perfectionism, imposter syndrome. You know, I'm an imposter, I'm actually speaking on stage or I'm at work and I'm doing something and people are gonna find out that I'm not as good as I really am. It's a common sign of low serotonin. So rate your symptoms on a scale of one to 10. So, "Ah, I'm a nine out of 10 for all of those, and I've got these terrible cravings in the afternoon or the evening for carbohydrates. I have to have something for dinner or you know, late afternoon. My symptoms are nine out of 10." Take 500 milligrams of tryptophan or less if you're the pixie dust person and see, okay within five minutes I'm not feeling so negative. I'm feeling like I could smile, I'm not that worried that I heard about that person in the discussion we had. That's gone. Okay, my symptoms have gone from a nine out of 10 to maybe a six out of 10, that's a really good sign. So then, you would start on 500 milligrams. And what I didn't mention is with the timing of the amino acids. With tryptophan, it's 500 milligrams, mid-afternoon and evening because that's when our serotonin takes a dip. And then with GABA, it's throughout the day. So you could take it first thing in the morning, mid-morning, mid-afternoon, and evening. And the amino acids need to be taken away from protein, so in between meals. So they're not competing for absorption with the protein that you may be eating at a meal.

Katie: That makes sense. So in your own scenario when you were having anxiety and panic attacks, how did you target the, you said, GABA and 5-HTP you were taking? How did you target those specifically, and how did you know they were working for you?

Trudy: So, I didn't know about any of those. I didn't know about doing a trial, I didn't know about using the smallest amount, and I didn't really know much about serotonin at the time. I discovered GABA through the work of Julia Ross. So, Julia Ross is the author of "The Mood Cure." She's a mentor of mine. I actually worked in her clinic for two years and, you know, I always like to give her credit. She is a pioneer in the use of the amino acids, and I had a book and had read about GABA and... It was a long story. Initially, when I had the anxiety when I had my first panic attack, which was terrible. I felt like it came out of nowhere and I didn't know what it was. A lot of women don't know what it is. A lot of women will end up in the ER because I think they're having a heart attack. That's how bad it is. You've got this racing heart, you can't breathe, you've got palpitations, you've got the clammy skin and you just don't know what it is. So, the first time it happened, I had no idea what it was. And I remember I was with my husband and this sort of came out of the blue and I was absolutely exhausted afterward. And he spent all night on the computer trying to figure out what it was and what the solution might be. And he came up with theanine, which is similar to GABA. I considered GABA the Rolls-Royce of the amino acids for helping with low GABA levels. I consider the theanine maybe the BW. You know, it's a smaller, lower, less effective version. Some people do really well with theanine, but I tried theanine, it didn't really help. Then I remembered what I'd read about Julia Ross's work and tried GABA. And I actually use GABA Calm which is a Source Naturals product that you can buy over the counter and used that and it completely stopped the anxiety and the panic attacks. So it was really miraculous. And this is what I see

with my clients, you get results right away and then you can, firstly you feel hope, now you think, "Oh my gosh, I'm okay. I'm gonna survive and now I need to start looking for the solutions." At the time, I didn't realize there were all these other underlying factors that were an issue, but as I started to dig deeper I found out... So down to your question, I used the GABA initially and then as I started digging a little bit deeper, then I discovered low serotonin was a factor because although the GABA helped with the physical anxiety and the panic attacks, I still had this perfectionism issue. I remember working in that computer job and being called up to do an appraisal. And they told me I was too much of a perfectionist and I needed to let go a little bit. And I was... I couldn't believe anyone could think that was a bad thing, you know. So it was interesting how, as you start to implement some of these, you start to realize some of these other things that you may think is just a personality thing or it's just me, it's just the way I am. You realize that some of these things can be related to biochemical imbalances.

Katie: It makes sense. And I think I have friends who have experienced a lot of those. And some have turned to the more conventional route and done the drugs and others have really looked at the amino acid thing. I'm curious because if you just start like researching amino acids, you get all kinds of interesting warnings and dangers and just things to be aware of and especially related to, maybe, pregnancy and breastfeeding. But are there any precautions or contraindications when you're dealing with amino acids? In my mind, I think like amino acids are protein essentially, but you've got them in an isolated and concentrated form. So are there things to be aware of there?

Trudy: Yes. There definitely are. So let's look at... If we're looking at low serotonin, if someone is wanting to do a trial of the tryptophan or the 5-HTP and they are currently using an SSRI, which is, you know, something like Prozac, one of the antidepressants. I will have them talk to their doctor and make sure that the doctor's on board with them trialing the tryptophan or the 5-HTP. And the reason being is there is this theoretical concern about serotonin syndrome which means too much serotonin can cause adverse effects. Too much coming, you know, because of the fact that you're taking this antidepressant and now you're adding a tryptophan on top of it. I have not seen an issue with it. There is no actual research showing that taking an SSRI with 5-HTP or tryptophan has caused serotonin syndrome. And there are actually one or two studies that show that taking these aminos with an SSRI makes it more effective. So, but there is this precaution and we just wanna be careful. And certainly, when someone's on medications, I always want to work with their doctor because it's not something as a nutritionist that I, you know, it's out of the scope of the work that I do. So I'll have them tell their doctor that they would like to do this. If they're doing the SSRI at night, they'll switch the SSRI to the morning and we'll make sure that the tryptophan is taken six hours away from the SSRI. And their doctor, you know, I say always work with your doctor. You may get a doctor saying, "This is not gonna work." You may have a doctor saying, "No, I don't want you to do this," or you may have a doctor saying, "Look, I'll defer you to your nutritionist and yes, that's fine. And I just wanna be informed on what you're doing."

And then if someone is wanting to taper off their medications, and this is where a lot of people are wanting to work with me because they are on SSRI, and they do want to taper it, we want to...we don't, you know, a lot of people say, "Oh my gosh, I wanna get off the meds. I've heard about these amazing amino acids." And they just start to taper on their own or they stop cold turkey. So firstly, you never wanna stop cold turkey on any of these medications. They do need to be tapered really slowly. And what I like to do is build up my clients' levels with the amino acids, with the dietary changes, with the lifestyle changes before they even consider of doing a taper. So get the gluten out of their diet, build up serotonin levels, build up GABA levels, look at zinc levels, look at vitamin D, look at all of these other factors. Get them as nutritionally sound as they can be. And then, we work with...I work with them and their doctor to do a taper. So that was the one precaution that I wanted

to mention. The other is, you mentioned, breastfeeding and pregnancy. None of the aminos have been studied in pregnancy and breastfeeding. So, I would, you know...I don't recommend anyone take them during pregnancy. And it's a difficult advice for me to give because I know that there are so many issues with SSRIs during pregnancy, but you know, because we don't have the research, it's not something that I can recommend, but just because we don't know what the causes could be. I always say to women, if you are prone to anxiety or you've had anxiety, get that sorted out before you get pregnant. I know, that's easier said than done. A lot of women find themselves, you know, they really want to get pregnant or they are pregnant and then they realize that they've got the anxiety. So that's a very difficult situation. Once you've had the baby, if you are having really bad anxiety, obviously you've got to talk to your doctor and make sure that they are okay with it taking the amino acids right after nursing and then waiting six hours before nursing. It is one way to do it. And then monitoring the baby to make sure that they are okay. And there were actually two studies that came out recently showing that certainly tryptophan and tyrosine, which is another amino acid which we haven't really talked about, it doesn't seem to be an issue in breast milk. So, I think it's still early days. Hopefully, we're gonna see more research, but it is a precaution. Now, some of the other aminos have other precautions. GABA can be an issue if you have low blood pressure. I haven't really seen it to be an issue, but it is a precaution to watch for. We haven't talked about tyrosine except for what I've just mentioned. Tyrosine is an amino acid which helps to raise the catecholamines, and when you've got low catecholamines, you're gonna have low motivation. You may also have depression. You're gonna have poor focus. With tyrosine, the precautions are more serious. You cannot take them if you have melanoma, if you have high blood pressure, if you have Graves disease, and if you have migraines, you wouldn't want to take tyrosine. So, I think it's really important. You know, I'm always saying this when...if you hear me talk about this and you're excited about it, educate yourself before you jump into just taking these amino acids. They are therapeutic, they have very powerful effects, and make sure that you know what you're doing before you just jump in and take them. Work with a nutritionist if that's the way that you wanna do it. Do a program if that's, you know, you find that's an easier way to do it or read my book or you know, read my blog. I've got tons of information on the blog. Just be well informed before you start jumping into using some of these amino acids.

Katie: Again, I think that's advice that's good in a lot of areas of life. Like you said, hopefully, there will be studies on pregnancy and breastfeeding. I know that those are very difficult areas to study, but hopefully, we'll eventually have better options than the current ones. But are there any food sources or anything someone could do foundationally to support if they are already pregnant or nursing and can't take these amino acids like they would like to, are there other things they can do until they're able to that would help support the body's natural process with those?

Trudy: Yes. So, absolutely. And this is what I'm teaching is eat real food, and I know this is, you know, something that you advocate for. I love your website and I love everything that you blog about. It's just amazing and it's, you know, getting rid of the toxins in your environment because if you've got exposed to, you know, fragrances, if you're exposed to BPA, if you're exposed to all of these chemicals that can lower your serotonin levels, it can lower your zinc levels and zinc is needed as a co-factor to make some of these amino acids, some of these neurotransmitters. So certainly, cleaning up your home and getting rid of all the toxins in your environment. And then I just mentioned eating real whole food. If you're eating quality animal protein and you've got good stomach acids, you're gonna break down that protein into the amino acids which then become the building blocks of your neurotransmitters. I just mentioned zinc. Now zinc has actually been studied during pregnancy, and I would definitely look at low zinc levels, and as I said, zinc is a co-factor to make GABA, it's co-factor to make serotonin. And you know, all of my clients that I've worked with anxiety have low zinc levels. So it's something that I would consider being a factor in anyone who has any kind of

anxiety. When you've got low zinc, you'll have high copper and that can make you anxious. And a lot of postpartum anxiety, not a lot, but it is a very common cause of postpartum anxiety and depression, is the low zinc and high copper. And once you take zinc levels, that pushes your copper out. So, those are, you know, some factors. If you have really bad depression and the anxiety and certainly if you notice that you have more anxiety in the winter time and you have the winter blues, life therapy could be good. So using full spectrum light would be beneficial. We know that exercise raises your serotonin levels, so getting some exercise when you're pregnant. GABA is raised by doing yoga and Tai Chi and meditation. So you could use all of the lifestyle factors to raise your serotonin and your GABA levels in that way.

Katie: That's helpful. Another question that I've had myself and I know others may be wondering as well, it's great that with these amino acids you're able to get such an immediate result, but with, for instance, SSRIs those are kind of a long-term sentence. Like once you start taking them, you're pretty much on those if you want to keep getting the effect. Is the same true with the amino acids or if not, how long does a person typically actually need to take them?

Trudy: It's varied. So the typical thinking is maybe a month to 12 months, and it can vary depending on each situation. Let me give you a few examples. I had one woman that I worked with. She had this depression anxiety. She was on an SSRI. She had terrible, terrible eczema all down the side of her face and on her arm, and she just was totally addicted to chocolate chip cookies. And she had tried to give them up in the past and hadn't been able to do it and we figured out that it was likely gluten that was a factor causing the eczema, possibly contributing to the anxiety and the depression. And we did a trial of both GABA and tryptophan and she responded to both. And the great thing was that the GABA and the tryptophan helped with the cravings that she had for the chocolate chip cookies, the gluten. Because gluten sugar can be as addicting as a drug. So, the amino acids helped her get off the cookies which allowed her to get off the gluten and her eczema started to heal within a week or two of being off the gluten which was amazing. The wonderful thing was she didn't need the amino acids long term. She just needed the amino acids to help her quit the addiction. It gave her immediate relief, so she felt this hope, she felt calmer, she felt happier. But once she got off the gluten, then she was able to stop the amino acids in a few months. And then, later on, she actually cut off the SSRI. So it was the, you know, we needed to get to the root cause and in her instance, the root cause was the gluten. So, once you get off the gluten and we got her healing her gut a little bit and she started to do better. In that way, that she was able to stop the amino acids. Now there's some people who stay on them three months, four months. Certainly when I see a woman with any kind of hormonal imbalance, if there's PMS going on, if the perimenopausal symptoms, the amino acids start to balance off the hormones and usually within two or three cycles, we'll start to see PMS diminish and hormonal balance starts to come back. So in that situation, maybe three or four months. We've also got to make sure that we are addressing the root cause. So, if someone just takes the amino acids and they don't address getting, you know, eating real food, they don't add back, you know, quality animal protein, they've also got an MTHFR defect that they're not addressing, then that's gonna take longer. When I worked with Julia Ross, we would say, you know, maybe 12 months. Since then, I've learned a lot more about genetic defects. We now know that Lyme disease, heavy metals, some of these deep-seated issues that's take longer to address can also impact serotonin and GABA levels. Lyme disease can affect your zinc levels, and as I mentioned, zinc is really important to make these neurotransmitters. So, it's very different, but typically, assuming you're addressing all the underlying causes, I would say up to a year maybe. And then there are some people who are more prone to low serotonin. Say in the winter time. So if you are more prone to low serotonin in the winter then you may do a top-up through the winter months.

I've actually been working with a gentleman on tapering off his SSRI. And before he worked with me, he would

notice, you know, he tried to taper off his SSRIs and was having a really hard time. Once he started working with me and we worked on the diet, and we added in the amino acids, the taper process has been easier for him. But what he'd noticed in the past is that winter time he couldn't make any changes because the serotonin took such a big dip in the winter time that he couldn't change anything. So what we did is, while we were tapering, and keep in mind that this taper process with this gentleman, we've taken a year to do his taper. So these medication tapers can take a long time for some people. So what we did is the first six months that I worked with him, we addressed all the dietary changes, we added in the amino acids and slowly but surely tapered, but through the winter we stopped the taper. He didn't do any tapering of the medication because he knows things get worse in the winter form. So it really it depends on each individual. That was a long answer. I hope it answered your question.

Katie: It did. And the thing I love so much about your approach is that it's very concrete and very actionable because having seen friends go through some of these struggles, it feels like, to them, it can feel like it's all in your head or that just something is wrong with you because you can't just like snap out of it. And even just to realize that there's a physical cause and there's something actually concrete going on that's not an emotional fault or something that you need to just willpower through, I think that alone is hugely helpful to people to think of. And you mentioned genetic defects and MTHFR in passing, but I would love to go a little deeper on that. Have you seen a connection or more of an incidence of things like anxiety and depression in someone who has an MTHFR defect?

Trudy: Yes, definitely. So the MTHFR methylation circle feeds into the BH full circle. If you know the biochemistry, there's, you know, the methylation cycle where you need the methyl-folate and then that feeds into another cycle which actually makes serotonin and some of the other neurotransmitters. So, if you've got a defect there, you'd think of this cog and you've got this other cog and it's not feeding the right nutrients into the BH4 cycle which is making serotonin and other neurotransmitters, it's gonna impact your anxiety levels and your depression levels as well. So, addressing that is really important. There's also the COMT gene which affects your catecholamines. You know, there are other genes that can have an effect. The most research is on the MTHFR gene obviously. And the other factor is the MTHFR gene and if you've got one of the polymorphisms, you will have less ability to...your detox capabilities are less effective. And I mentioned earlier the importance of getting all of these environmental toxins and the toxins from your home out of your, you know, out of your system and out of your life. And if you've got this defect, you're less able to detox. So in that way, it can cause an issue. Also, we haven't talked about social anxiety very much but there's this social anxiety condition called pyroluria and this is a deficiency in zinc and vitamin B6. And when you have the pyroluria and you're under a lot of stress, you dump zinc and B6, and your social anxiety gets worse, but now I'm seeing a very strong correlation between people with pyroluria and the MTHFR gene. So, you know, they all seem to interact.

And I mentioned earlier how zinc is really important to make GABA and to make serotonin, but vitamin B6 is crucially important as well. So I will see that once we start to address the pyroluria with the zinc and the vitamin B6, and then evening primrose oil is also part of that protocol because that helps zinc absorption. And often with people with pyroluria, they have low levels of this particular omega-6. And once we start to address that, that helps with serotonin production, it helps with GABA production, and I mentioned earlier how the neurotransmitters are tied to hormonal imbalance and PMS. The pyroluria protocol also helps with PMS top symptoms. And then there's a very interesting connection with introversion. A lot of people say, "Well, I'm an introvert, I don't really like socializing, I like to stay home, I like one-on-one interactions." And this is exactly

what pyroluria is. It's, you know, one-on-one interactions. You don't like big crowds. And I've had a lot of clients get on the pyroluria protocol and they say, "Well, I'm more able to socialize. I don't feel so uncomfortable in social settings. I can mix with people." So going back to what I said earlier, we think some of these are things that we're born with, that it's our personality, but often we can find a biochemical underlying cause.

Katie: That's really fascinating because certainly like social anxiety or being an introvert is not something someone would immediately connect with an imbalance like that. But that's really fascinating that there is a physical connection. And also about the MTHFR, that was something...I delved into that world after finding out that I was heterozygous for one of those mutations and it makes sense now. It actually made sense in hindsight a lot with why I always felt terrible if I took folic acid and why I needed the methylation forms, but realizing of course, if it makes sense, if you have a kind of a broken link there and your methylation cycle in your body is not able to break down these nutrients, obviously it's gonna affect you physically, but also it would make sense that it would affect the mind as well because those are so intertwined.

Trudy: Yes. Yes. And I'm glad you mentioned the folic acid because we definitely don't wanna be taking folic acid and the methylfolate is beneficial, but I do wanna just mention, in an interview that I did with Dr. Ben Lynch on one of the anxiety summits, and I asked him if he could talk on this specific topic because I had been seeing this as an issue a lot. A lot of people will test their genes and say, "I've been diagnosed with MTHFR." So firstly, you're never diagnosed with MTHFR. You may find out that you've got one of those defects. That doesn't mean, firstly, that it's causing an issue. So you may have the defect and you may be handling it well with the diet that you're eating and the fact that you're taking a B-complex and that you are taking a good multivitamin and you may not have any issues. There are some people who then have, you know, find out that they've got the MTHFR defect but it is expressing. So it is causing problems, and that's probably what you've found and then taking the methylfolate is beneficial. But then another level that we need to think about is how much do you need? And I've had a lot of people contact me or come and work with me or comment on my blog saying, "I'm working with my doctor, I've been diagnosed with MTHFR, and I've been told to take Deplin, for example, which is a very high dose of methylfolate. And it's often too much for a lot of people. So, you know, you may only need 800 micrograms of the methylfolate. You may do well with a thousand, you may do well with 2,000 or 3,000, but just saying well, I've got the defect and now I need to take 5,000 or even 10,000, you can actually become more anxious, and you can start to feel agitated and it can affect your sleep. So, I just wanted to put that out there because I've been seeing quite a few questions on that topic recently.

Katie: That makes perfect sense and I found that out as well. From my personal experience, I know I do better for sure when I eat lots of leafy greens which are a natural source. But also, I don't need very much. I think it's about the 400 micrograms is kind of my perfect range, but I do need slightly more when I'm pregnant which again also kind of makes sense with the hormone thing going on. Another thing that...it seems like is linked and I know you've written about is low blood sugar. And so, sometimes it seems like, and from what I've read in your work, people may think they actually have anxiety and they're just not managing blood sugar well. Can you talk about that and what the other solutions may be there as well?

Trudy: Yes. So this is something that we, you know, we want to look at all the different possible causes. And low blood sugar can definitely make you feel anxious. And the biggest thing that I will say is have breakfast, obviously. Have protein at breakfast. So, if you're not having animal protein at breakfast and you're noticing that mid-morning you're starting to feel shaky, you need some sugar, you feel like you need some food, well, you're the kind of person a lot of my clients will say, "I'm just a witch if I don't get to eat every few hours."

Then start thinking about whether low blood sugar can cause the anxiety, it can cause anxiety, panic attacks, depression, shakiness, the jitteriness, a feeling like I've gotta have something, I've got to get something and, you know, if you're that kind of person definitely add in that protein at breakfast. And I'm not a fan of coffee and I'm not a fan of coffee in lieu of breakfast so a lot of my clients will be just having coffee and not having breakfast. So that's an issue. If you still wanna stay on the coffee, have breakfast first then, you know, we'll have the coffee discussion later. And we do need to have the coffee discussion as much as my clients don't wanna hear it because coffee definitely is a factor when it comes to anxiety and there are subsets of people who are more prone to the effects of caffeine. So certainly those people need to be getting the coffee out of their lives and, in the meantime, make sure it's organic and not loaded with sugar. So, you know, we can talk about coffee in a second, but going back to the low blood sugar symptoms, that protein at breakfast is really important, having protein at each meal is important, but there's an amino acid called glutamine which is calming for a lot of people. Some of it converts together, but it helps to stabilize your blood sugar. And using it in between meals as a supplement or something that I'll have my clients do initially when they start to work with me. It's also very healing for the digestive system. Starts to heal the leaky gut. So we're getting those benefits as well.

And the other thing that I just wanted to say about low blood sugar is that we've also got to think about the adrenals because if you've got adrenal dysfunction, you've got low cortisol or high cortisol, that can definitely affect your blood sugar level. So, while, you know, initially we'll have someone add an egg protein at breakfast, we'll get them on the glutamine, but then we'd, you know, continuing with the workup to figure out what the other root causes may be. And it may be adrenal issues. We may need to support the adrenals. You know, something we haven't talked about is adrenal issues. If you've got high cortisol, that can make you anxious as well. So we are putting all of these little puzzle pieces together trying to figure out what the root causes are, but in the meantime, we're using GABA and tryptophan and glutamine. There's another amino acid I use, DPA which is great for the comfort eating, the reward eating, that "I deserve it" kind of cravings. And then we talked about tyrosine earlier.

Katie: Yeah. So I'd love to talk about the adrenals a little bit more and then even the coffee conversation although I am dreading that personally. I don't have anxiety but I wanna cover my ears and say, "La-la-la." But let's try to talk about the adrenals first because I think it's a kind of confusing and controversial topic because for a long time it was ignored and then a like a lot in the natural health community, there was a raising awareness of this and then there was also the medical pushback of this is not a real thing. So there's a lot of confusion when it comes to the adrenals. So, from what you're seeing clinically, what impact do the adrenals have especially related to things like anxiety depression, but overall in relation to health as well.

Trudy: Yeah, it's interesting that you say that, you know, the...studied the literature synopsis and the articles and heard... Khrisa talk about saying, "We don't wanna call it adrenal fatigue anymore, we wanna call it HPA dysfunction or adrenal dysfunction." So it's an imbalance and we can end up with low cortisol if we are overly stressed, if we're exposed to toxins that can affect adrenals and we can end up with very low cortisol, sort of, flatline and then we're fatigued and we can't get anything done. It makes us more prone to food sensitivities and digestive issues. We talked about the low blood sugar. You can also end up with cortisol that's too high. So you go go-go-go-go and you just over, you know, you've got this adrenaline rush going all the time. This can be a lifestyle thing that can cause high cortisol. It can also be food sensitivity. So we've got this vicious cycle going on. You can be overly stressed and affect your adrenals and it makes your digestion worse then you end up with food sensitivities. Parasites can actually cause high cortisol, can contribute to high cortisol toxins in the environment. So there's many root causes as to why you may have cortisol or adrenal imbalances. But

addressing those are really important. And I wanted to just talk a little bit about high cortisol because if you have high cortisol, you can feel like you've had an adrenaline surge. A lot of my clients will say, "I just feel like I've got the surge of adrenaline going on all the time." And that can make you anxious. So we've talked about low GABA and low serotonin. If you do a trial of those amino acids and they're not working, maybe it's not a low serotonin or low GABA issue. Maybe it's high cortisol. So you've got to look at, you know, I call these the anxiety types. What is the type, what type of anxiety do you have? Do you have low GABA anxiety? Do you have learned serotonin anxiety? Or do you have high cortisol anxiety? And then you need to address that.

And I wanted to just mention my favorite nutrient for high cortisol, and it's a product called Seriphos by Interplexus. And it's phosphorylated serine. So a lot of people will recommend phosphatidylserine. I have found phosphorylated serine to be the most effective for reducing the high cortisol as well as getting to the root cause of why it's high in the first place. But I wanted to just put this out there because last year, the company, Interplexus, actually changed the formulation and a lot of people were buying it. The labeling looked the same. They did not change the label and a lot of people were using it and suddenly finding that it wasn't working. And a bunch of people contacted me and I looked into it and I read some blog posts about it and I looked to try and find if there were a bunch of alternatives because suddenly a lot of people seem to have chronic high cortisol that they manage with a nutrient blockers, and you know, of course, we've got to get to the root cause of why it's high. And for some reason, you know, I think it may be that some of these people are on Benzodiazepines, they're on other medications, they may have some other underlying issues that are causing this chronic high cortisol. But long story short, the product was changed, people weren't getting results, they tried some of the alternatives they weren't working. Due to a lot of consumer complaints, the company brought back the original formula and now I'm waiting to get feedback from people. It's been about three months now, and I haven't heard any complaints that it's not working. So I think it's working. But there was, you know, you've got to really look at the...if you've got a favorite product that you're using and suddenly it stops working, don't forget to look at whether they've maybe changed the formula and haven't told anyone.

Katie: That's a good tip and something, probably a lot of us would not think to do. And I know that happens more often than people would think. It's kind of shocking actually. But let's have the coffee conversation. I know that obviously there are concerns related to caffeine and other things, but you have an interesting take on caffeine and coffee. So, why are you anti-coffee?

Trudy: So, for a number of reasons. Firstly because of the fact that if it's causing you anxiety and it's causing you insomnia, why keep taking something that's, you know, causing a problem. And we self-medicate. You know. Just like we self-medicate with sugar and while we self-medicate with cookies or whatever it is. We use coffee as a drug. It is a drug. It makes us feel good. So, I always say, well, why do you need it? Are you needing it because you're not getting enough sleep? Are you needing it because you do have adrenal issues? Are you needing it because you have low iron? One of my clients was drinking six cups or nine cups of coffee a day because she had very low iron and once we addressed that, she didn't feel like she needed it. Do you have low catecholamine? These are the neurotransmitters that make you feel motivated and have focus and feel happy. So, addressing the root cause, firstly you know, why do you feel like you need it. That's what we definitely wanna be doing. Because we're masking something by using the straw, coffee, to make us feel good, to give us this focus, to give us as this energy, but then the underlying issues is, is it contributing to the anxiety, the insomnia. We know it affects hormone levels, we know it's dehydrating. We just talked about low blood sugar when I interviewed Dr. Ellen Christensen on one of the anxiety summits. She shared that caffeine extra slack soda in the body and in terms of affecting our blood sugar level. So, we are causing all of these issues that we're trying to address. Then we've got the pesticides coffee. It's really really highly sprayed with pesticides.

So that's something that we wanna think about as well. So those are some of the reasons why I would say, you know, think about coffee.

And I heard you're, you know, you didn't really want to talk about it and it's not unusual. It's the thing that most of my clients will hold on to the longest. They'll say, "Yes, I'll get off the sugar. Yes, I'll get off the gluten. I'll make these dietary changes, I'll take these supplements, I'll do the amino acids, but please don't take my coffee away." So it's not uncommon for people to really wanna hold on to it. And a lot of my clients will say, "It's my one vice that I've got left. It's my ritual. I get up in the morning, it's quiet, I've got the smell of coffee brewing. I really, really love it." And there's other ways that we can get that ritual. You know, you could do this Cochino which is a wonderful coffee substitute. Carob is wonderful, mixed with some water and coconut oil or coconut milk. There's herbal teas, rooibos tea. I'm, you know, South African and rooibos tea is actually been shown to help with modulating cortisol levels. So you're getting all the antioxidant benefits from rooibos tea similar to what you would get from green tea. And you're also getting some support for your adrenals, it helps with blood sugar balancing as well. So there's many other options out there.

Katie: This is true and a lot of them are really, really good. I wanna make sure I respect your time, but before we end I wanna make sure people can find you especially if, for instance, someone is hearing the symptoms and hearing your story and it's resonating with them and I certainly don't wanna, if someone's struggling with anxiety, give them any more anxiety being overwhelmed with what to do. So, where would you recommend that someone starts and how can they find you and find the resources on how to do that?

Trudy: So, there's many ways to do it. My website is everywomanover29.com and I've got a blog. And I sent out a newsletter and I've got a very engaged community who ask me great questions on the blog and I answer all the questions on the blog. So, you're someone who, you know, wants to read blog articles and get your, you know, get reading and see if this is what resonates with you. That's one way to connect with me. I've got my books "The Antianxiety Food Solution". I wrote it, so you can pick it up and you can run with it. And a lot of people just do that on their own and get great results starting off with the food and then the amino acids afterward. A lot of people will make the food changes and feel like they need a little bit of support with using the amino acids and certainly, if you are the...are the low serotonin type and you feel fearful, a lot of people with low serotonin are fearful to actually try the amino acids on their own. And if that's the case, getting support, you know, working with me one on one. I've actually got a waiting list at the moment that I'm about to expand with more people on my team. So I'm hoping to be able to help more people one-on-one. But I've also got a home study program, a group program where I walk you through how to do it if you feel like you need that support with, you know, getting someone walking you through it orally so you can listen to someone telling you what to do. It's the Amazing Aminos For Anxiety program. And then I've got the anxiety summit where I have interviewed various different experts on different topics. All we've talked about really today is food, coffee, the neurotransmitters, but lyme disease can be affected, mold can be affected. We haven't even talked about the Benzodiazepines which are commonly prescribed for anxiety. And I've got some great interviews with various different people on Benzodiazepines and MTHFR and you name it. So, depending on where you are in your journey, you know, maybe you've made the dietary changes, you've tried some of the amino as you're getting some relief but you are looking for deeper root causes then maybe the Anxiety Summit is for you. And that's at the anxietysummit.com.

Katie: Wonderful and of course, I'll have links to those in the show notes so that people can find you. And I have a few of your posts that I'm going to link to it as well that relate to what we've talked about. But Trudy, thank you so much for the work that you're doing and for sharing your story and your research with us, and I

hope that anyone who hears themselves in your story, we'll be able to find you and find answers on their own.

Trudy: Well, thank you. Thanks so much for having me, Katie and thanks for all the great work that you do and sharing wonderful resources. I think you do a really great job.

Katie: Thank you so much. And thanks to all of you for listening and I'll see you next time on the Healthy Moms Podcast.

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