Introduction to Trudy Scott and food-mood connection

I'm Dr. Ken Sharlin, and welcome to the Parkinson's Solutions Summit. I am very honored today to introduce Trudy Scott from the other side of the planet, Australia.

It's so exciting to visit across the world. Trudy and I have known each other for some time and she is a food mood expert, a certified nutritionist who educates individuals about the relationship between anxiety and food.

I'm so excited to learn about your area of expertize and solutions you can offer patients with Parkinson's disease because aside from the movement component Trudy, Mood is such a huge part of what Parkinson's sufferers deal with.

Anxiety a huge problem. Welcome. Welcome to the Parkinson Solutions Summit. Thanks, Dr. Sharlin. It's a real pleasure to be here today and I'm excited to be talking about amino acids, which are supplements that we use and how they can support neurotransmitters.

And this is going to be relevant for, as you say, Parkinson's patients because there's anxiety, there's mood issues is insomnia, the movement issues with Parkinson's patients.

But also what I'm going to be talking about is how a lot of these amino acids are really relevant for the caregiver and then also for practitioners who are working with Parkinson's patients.

So it's an area that's near and dear to my heart because of my own issues with neurotransmitter imbalances. It's how I got into this work. I was in my late thirties and I had hormonal changes happening and a lot of stress, and I discovered that I had issues with gluten and heavy metals and hormone imbalances, and it turned out that my neurotransmitters were totally out of balance.

And I discovered the very powerful connection between food and mood. Specifically for me, it was anxiety and panic attacks and insomnia and terrible, terrible PMS.

But as you as you'll hear today, these amino acids that we're going to talk about, GABA, tryptophan and five HDP have wide ranging applications. And long story short, once I addressed my biochemical imbalances, addressed the toxins, changed the dietary dietary aspects, added quality protein.

I was actually a vegan at the time, but making those changes, adding in the amino acids completely turned around. My anxiety got rid of my panic attacks and a number of other symptoms that I had and I changed careers.

I was actually working in corporate America at the time. I went back to school to become a nutritionist and now my mission is sharing the power of food and nutrition, specifically how these amino acids can help with so many symptoms.

And hopefully what we talk about today is going to help the caregiver practitioners working with Parkinson's and then also Parkinson's patients. Absolutely.

This is really a problem that affects, you know, everyone around. Right. You bring up such an important point about caregiver burden, about family that how, you know, these diseases, whether you had Parkinson's and Alzheimer's and ALS is really something that reaches beyond the person is affected.

Yes, they are at the center. And yes, this is about their condition, their health, their disease. But how we experience is how we support those individuals, how we support ourselves as part of that journey is so critical.

I really love the title of your book, The Anti Anxiety Food Solutions. How Foods Can Help You Calm Your Anxious Mind. And you know, we truly we often talk about kind of comfort foods, but what you're talking about is something completely different.

Amino acids as neurotransmitter support

And it may not really be intuitive to a lot of people that this food as medicine ties directly into our mood. Can you kind of walk us gently into that?

And, you know, you talked about amino acids and kind of explain to people exactly what amino acids are as well. Yes. So amino acids are building blocks of protein.

And if, for example, if you ate a piece of grass fed red meat, you're going to digest that meat. It's going to break down into amino acids. And then that is used as a building block for making, you know, used in the body and many different ways.

But one of the ways that it's used is to make neurotransmitters and these neurotransmitters or brain chemicals are our feel good chemicals that help in many ways as we're going to hear today.

It helps with mood, it helps with sleep, it helps with feeling good. It helps with confidence. It gives us resilience, it helps with pain. And there's very, you know, variety of different amino acids that we're going to talk about.

But each one has specific symptoms that are related, that are associated with when they are out of balance. For example, if you've got low endorphins, you'll have, you know, more physical pain and more emotional pain.

And then there's an associated amino acid that we use to raise those levels. And the exciting thing about the work that I do with amino acids is that we use a symptom questionnaire to figure out what symptoms you have, and then we pick the amino acid that is associated with that neurotransmitter imbalance.

And we do a trial and we see how you respond. So it's a really powerful way for for getting feedback, immediate feedback, and to see if something's going to work, and then also to figure out how much you may need, because we all have our own unique biochemistry and someone may need a very small amount.

Someone may need more than just the starting dose in order to get a response to, you know, improvement in some of these symptoms. So it's it's it's amazing.

And typically, we want to focus on real whole food and eating quality protein, making sure our digestion is good, removing foods that are problematic, like gluten, removing foods like sugar and caffeine, which can increase anxiety and deplete us of nutrients, adding in things like organic fruits and vegetables, fermented for fermented vegetables like sauerkraut and fermented drinks like kombucha possibly.

But doing all of that as our baseline. But then we need to use these amino acids as supplements to to boost our low levels. And then ideally in the long run and having that foundational dietary that the dietary factors in place means that you may need less of those and that neurotransmitter support.

But what we need to keep in mind is, for example, if you are a caregiver or if you have a chronic illness like Parkinson's disease, you are under a lot more stress.

So you are more depleted. So you may need some of these. Add this neurotransmitter supports longer term and that's fine too, as long as you are benefiting from using these amino acids and you seeing resolution of your symptoms, that's a clue that you're on.

You know, you're onto the right track. Oh, yeah. So these amino acids that really serve many functions in the body and structure and making hormones and enzymes and things like that, you know, the human body can synthesize certain amino acids, but it turns out my correct that other amino acids must come through food or targeted

supplementation, as you're saying.

In other words, if we're not eating the right things, we're not we don't have the building blocks to make what our bodies actually need. Absolutely. And then they are also cofactors that are needed to help make the neurotransmitters.

So, for example, zinc and vitamin B6 are important cofactors for making those neurotransmitters. Magnesium is important as well, and those nutrients are commonly depleted when you are under a lot of stress.

If you're eating a lot of sugar, if you've got gluten issues. So it's a it's a if you've got adrenal issues, thyroid problems, you know, so we've got to look at the whole picture.

But certainly having that that dietary aspect as a foundation is really, really important. But that being said, you know, I've talked about getting off caffeine.

I've talked about getting off sugar and gluten. And a lot of us know that those are not good for us. But it's hard to to stop. You know, we self-medicate with these foods in order to feel good.

The great thing is the amino acids help with getting off of these these bad foods because they addressing the low neurotransmitter levels that are driving that need to self medicate.

So they are every single neurotransmitter imbalance we're going to talk about today. We're going to talk about low endorphins. We're going to talk about low serotonin and low GABA.

They all have a cravings aspect. And when we address the neurotransmitter imbalance with the targeted individual amino acids as supplements, as well as addressing some of the pain and the insomnia and the mood and the anxiety, it's also helping with those cravings.

So it makes it easier to make those dietary changes. So when I'm working with someone, I'll have them start on the dietary changes. But on day one, we start with neurotransmitter support.

Well, that is fantastic. Well, why don't we dove into this and start with the one that you've mentioned first, and that is endorphin support. And I know what endorphins are, but I want to make sure our audience does so help with that and and take kind of take it away.

Okay. So I want to just talk about endorphin codes today about for building resilience in the caregiver. And I've got a case study, not a case study, but feedback from someone in my community.

But I feel that this could also be applicable for practitioners who are working with Parkinson's patients, because we need that resilience when we, you know, working with people with chronic illnesses like Parkinson's.

So endorphins are the body's natural pain relievers and mood boosters, so they help with both emotional pain and physical pain.

Endorphin support with DPA for resilience

And there's an amino acid called DPA D Fennel Alanine, and it's used as a supplement. And we use it to boost or support low levels of endorphins. And as I mentioned, I use the symptoms questionnaire with my clients and that helps us know do we need endorphin supports?

And then we do a trial of the amino acid. In this case, we use DPA. So some of the symptoms we would look at to determine if endorphins are low. Does do you have physical pain?

Do you have emotional pain? And the emotional pain that we see with low endorphins is we penis and crying or tearing up a lot? So maybe you'll see an advert on TV and then you'll feel very emotional.

And maybe as you are working with your caregiver, you're working with someone. If a loved one with Parkinson's, you'll feel very, very weepy, more so than than than you'd expect to possibly.

And then the other thing is, as I mentioned, there's this cravings aspect. So with learned orphans, you seek comfort food as a reward or a treat. So you say I deserve it's my last tough.

You know, it's really hard. I've had a long day caring for my loved one. At the end of the day, I'm going to indulge in a huge bowl of ice cream because I deserve it.

It's my reward or my my treat. The problem is that doing that you are further depleting yourself because of that, possibly a food sensitivity or you depleting the zinc and the B ice and the other nutrients that are needed.

So we want to we want to address that. And we we, we look at the symptoms that I've just mentioned and we write them on a scale of 1 to 10, you may have physical pain, you may feel this emotional pain is like a nine out of ten.

And yes, you really want those comfort foods. And the big clue that the comfort food is learned often related is that if I said to you you had to stop right away, you would feel this sort of emotional, visceral connection to this food, and how can you take it away from me?

And a lot of my clients will get this sort of little tear and they are this is this is my reward. I deserve this. So what we do then is a trial of DPA and 500 milligrams is a typical starting dose.

And then if someone notices that the emotional pain, so it's a nine out of ten, they'll take the DPA opened onto the tongue. That's the most effective way to do a trial.

So we open the capsule onto the tongue, take it away from protein, and within 5 minutes, they should be able to say, I feel comforted. I could call it a hug in a bottle.

It's like getting that big hug because it's raising your endorphins. So within 5 minutes you should start to notice that quick effect because it's getting in through the blood vessels in the mouth.

And then if if you can say my emotional pain went from a nine out of ten to maybe a six out of ten, that's a good start. And no, I don't I was thinking about that comfort food that I'm going to have later on, but now I don't need it right now.

I feel fine. I don't feel like I need that that reward that's gone down from like a, you know, ten out of ten to maybe even an eight out of ten. That's a clue that that you're going to benefit from the DPA and then we'll increase as needed.

So we start low, increased as needed, and DPA can be used three or four times a day. And sometimes I'll have clients need to go up to 1000 milligrams, three or four times a day, but 503 or four times a day is is a typical dose that seems to work.

That's a little bit different from DLP. A lot of people are familiar with DL, Fennel, Alanine that works on endorphins and dopamine with DPA just works on supporting endorphins.

It when you're doing your symptoms questionnaire so 1 to 10 is there a threshold like I might say. Well, you know, occasionally I might have some pain, you know, two or three is that enough for me to use the phenylalanine or do you say, well, you're a six or seven, we've really got a problem, or maybe you're a four and we want to focus on food and other things.

But if you're an eight, that's the time to supplement. How do you how do you break that down. If there's any any symptom, whatever the rating is, and you do the trial of the DPA and it improves out, then you're on to a good thing.

So if you've only got one, if you if the if you. So this is one category of symptoms we're looking at. This is the low endorphins. We're also going to talk about low serotonin and low GABA and pain features and all areas.

So we might look at a cluster of symptoms. Is it just physical pain without the emotional pain? Then we might go to one of the other neurotransmitters first and it doesn't really matter where you start.

I'll have my clients do that the entire questionnaire, and we'll go through the other symptoms in a second, and then we pick the area that they say is the area that's causing the most problems.

So so say, for example, the emotional pain and the weakness is a big driver in how they're handling life and how they're handling being a caretaker. Then we would start there.

If we happened to start with low serotonin and came back to endorphin support, that's fine too. There's no sort of hard and fast rule. But your question about, you know, is it episode two and it improves with, you know, with the endorphins support that that's good as well.

And yeah, any other questions? And then I wanted to just share some feedback from actually a caregiver in my community about how to actually help to. Yeah, let's do a case for sure. Okay.

So this is just someone I've got a very active blog and I write a lot of articles every week. I have a new article and I happened to have an article about DPA.

And I have an amazing community and they're always giving me feedback on how the amino acids are working with them. And this was a woman in my community.

She's a caregiver, and she shared how DPA helped her with improving her emotional resilience and keeping it. So let me just read what she shared. I had not investigated DPA as I'm a joyful, happy person.

So that kind of goes to your question, Dr. Sharlin, she didn't she didn't sort of think of herself as needing DPA, but she said recently, I have been so depleted and when I get depleted enough, I get weepy, not sadness, just from being physically drained.

She says, Wow, I used far a 500 milligrams dose of DPA in the afternoon, and that has made a startling difference. I have more resilience now, more buffer and the caregiving work I do, and just the officers of Laugh, which I love, that the phrase the offices of Laugh.

She also shared that she's been greatly helped in the past by using GABA five HDP. She says five HDP seems to work better for her than tryptophan. And we're going to talk about that coming up.

And then also tyrosine. So a lot of people will benefit from a number of the amino acids. A Sara unusual to have deficiencies in all the areas and when we trialing the amino acids, it's best to trial one at a time.

Getting that baseline, figure out what the optimal doses are, then move on to the other one. So you know what is working because sometimes, as I said, there can be overlapping symptoms.

But we're going to talk about Gabe. I'm going to talk about five HDP and tryptophan coming up. But I just feel we know that DPA is going to help caregivers.

Tryptophan and 5-HTP for serotonin support

You know, it's going to help and help practitioners who may need that emotional resilience. Very, very good. Well, shall we segway into tryptophan in five HTP?

Certainly. So what what these amino acids do help. They help support low serotonin and they they're different and I'll explain how they different and for that people a lot of people know what serotonin is.

They know that it's a feel good brain chemical we typically associate with depression. But there's a lot more research and I'm going to share some of the symptoms that you'll see are relevant when it comes to caregiving and practitioners and then I'll share a little bit later how it can actually help patients with Parkinson's as well.

So when it comes to caregivers, they may have anxiety. The anxiety may be worse in winter. We know the depression is worse. And winter, if you've got low serotonin, we know that is the winter blues.

But we also have more anxiety in the winter as well. You could have panic attacks or phobias. You feel worried or fearful, perfectionism or being overly controlling.

As a caregiver, you may feel like you've got to control everything and that's good, but it can get to the point where it's too much and it's too draining and it's it becomes exhausting.

So it helps with, you know, supporting serotonin helps with that. You can also have irritability, you can be negative, you can have excessive self-criticism.

Am I doing the best job that I could be doing for my loved one? You can have low confidence, you know. I'm sure I should be doing something better. I don't feel very confident about what I'm doing.

And you can actually have anger and rage issues as a as a as a result of low serotonin. And then, of course, the classic with low serotonin is insomnia and disturbed sleep.

And as a caregiver, you need your sleep. So it's really important to address the low serotonin so you're not going to have these symptoms. And then unrelated to caregiving.

But these are also symptoms that we see with low serotonin and is PMS, menopausal mood swings, digestive issues, pain issues, TMJ. And then of course, there's this afternoon cravings aspect.

As I said, with all the neurotransmitter imbalances, there's a cravings aspect with serotonin, it's afternoon and evening. So that's when you'll want to have chunk.

So you may have a need for chocolate after dinner. You may find that you need cookies in the afternoon. And if those you have the all these other loci returning symptoms and those cravings for carbs at that time in the afternoon or evening, that's a clue that it could be low serotonin.

So that's the amino acids that we use to support the symptoms. And again, we're looking at them and rating them on a scale of 1 to 10. So we may say I've got this anxiety. I'm worried and fearful about what's going to happen with my loved one.

And I'm don't feel confident in my ability to be a caretaker. And then I actually feel anger and rage and I feel guilt that I have this anger and rage.

But if it's biochemically driven, we can address it with using an amino acid like tryptophan or five htp. So the amino acids that we use tryptophan 500 milligrams away from protein and the typical timing is it afternoon and evening because that's when serotonin starts to take a dip, which is why it affects our sleep.

We know that serotonin is used to make melatonin, which helps us sleep. So if we're taking tryptophan mid-afternoon and evening, it's going to help support those serotonin levels and help us make melatonin.

And then some people do better on five HDP. And it's really a matter of trial and error. I typically start with tryptophan. If someone is not doing getting the results we would expect, then I would say let's try five HTP and the dosing for five HDP is 50 milligrams as a starting dose.

The one caution, Dr. Sharlin and that you've probably seen with five HDP that I do want to mention is that it can raise cortisol levels. So if someone does have high cortisol, they may definitely want to go with tryptophan.

And the way that you'd know that it's causing issues, you might feel a little bit tired or tired when you use five HDP. So it's a matter of doing a trial of one, one or the other and seeing how much the symptoms improve.

And then if we do see symptom resolution, the anger goes down for maybe a nine out of ten to maybe even an eight out of ten. And then we would increase the dose if our confidence is goes up a little bit, one or maybe it's improved three or four notches, then we would earn 500 milligrams and the evening possibly increased to a thousand milligrams twice a day and then even up to 1500 milligrams twice a day.

And so, for example, someone is doing fine in the day, but the insomnia is really a bad thing. They're lying awake, they ruminating, worrying, obsessing about what's going on.

Then we may do just 500 in the afternoon and maybe a thousand milligrams in the evening. So we can mix and match the dosing and the timing depending on symptoms.

Absolutely. And, you know, there's actually a lot of data on what is called the Non-Motor symptoms of Parkinson's, as well as what it's called the premonitory symptoms that may appear before the motor symptoms actually occur.

And much of this revolves around the serotonergic system. So this could be very helpful. I do want to add a note of caution as a physician, because as you know, Trudy, sometimes we are prescribed drugs by our doctors and I think folks need to be aware that they may be on a medicine that influences serotonin.

And so this is, you know, we are offering some general guidance, but of course, please discuss, you know, this with your doctor. If there is any concern that certain antidepressant drugs or what are called MPO inhibitors could potentially interact in such a way to raise serotonin levels to the point that it could become a problem.

There is something called serotonin syndrome. It's not extremely common, but it's common enough. And as a neurologist, I've certainly seen it. So while this may be quite safe for most people, we just want to encourage you to be sure to check with your physician if there is any question.

And in general, we're talking about antidepressant medicines and Mayo inhibitors, perhaps some of the migraine medications, things like that. Absolutely. And I'm glad that you mentioned it.

I was about to mention it, but it's important to be aware of that. There is this potential I'm glad that you say it's not very common and I have seen that myself.

But we do we do have that I have that precaution when I'm working with people to discuss with their doctor. And if I'm working with someone who is on those medications that we I work closely with the doctor to get the doctor's permission and the doctor's monitoring.

And what we typically do is have them use the amino acid tryptophan or 5 to 6 hours away from the antidepressant, but only one antidepressant. But if yeah.

So that is something that I have found to be of value. But always, I agree. Always just go to your comments about the serotonin connection with Parkinson's.

There's actually research that shows that the amino acid five HTP offers benefits for Parkinson's disease patients, certainly in terms of easing depression, but also reducing levodopa induced motor complications.

And this was just I did a blog post about this a few years ago, two separate studies, very small studies, and they considered preliminary, but they were done by the same research team at the University of Cagliari in Italy.

And, you know, based on what I know about the effectiveness of fab HTP for depression and anxiety, insomnia, I think this is a major step forward for Parkinson's disease patients.

And in one of the studies, they just used 50 milligrams of five htp over a four week period and they found significant

improvement of depressive symptoms compared to the the placebo group.

And then the other study, it was also very small, just 12 Parkinson's patients. They had levodopa induced dyskinesia. So this is the involuntary, erratic, writhing movements of the face, arms, legs or trunk.

And they also looked at motor fluctuations and there was a placebo group and then another group that received 50 milligrams of five htp daily over four weeks and they found a significant improvement of the levodopa induced dyskinesia over during the 50 milligram five HTP treatment.

So it's very encouraging to think that these amino acids are being looked at specifically for Parkinson's. Yes, this is a real problem for folks who have Parkinson's disease. And, you know, often they find themselves caught between a rock and a hard place because the drugs that they're using, the leave, a dopa and the dopamine agonist to improve movement sometimes lead to extra movements.

But then if they want to lower their dose to try to ameliorate the extra movements, the dyskinesias, then they find their back in a more rigid state. So it's sort of a catch 22.

Darned if you do, darned if you don't. How about GABA, Trudy? I know that's also really important. Yes. So we didn't really talk about GABA, but let me just quickly recap the symptoms of low GABA and then I'll share what what I've seen in the research about Gabo when it comes to Parkinson's.

So GABA is a stands for Gamma Aminobutyric Acid. It's a an amino acid that we use as a supplement and it supports a low levels of the new GABA. We have physical tension, so with the low serotonin, it's more in the head, the worry, the ruminating, the negative self-talk.

With no GABA, we have this physical tension, so we'll feel it in our body. And we can also have feel worried and fearful, but it's more physical. So we'll feel it in our gut where you have stuff and tense muscles, we'll feel stressed and burned out.

And again, we write those symptoms and do a trial of GABA. I just want to mention with GABA we start really, really low.

GABA support, Parkinson's research, and closing resources

You'll often see products that are 500 milligrams, seven, 50 milligrams, and that's way too high. And my clients start on 125 milligrams and increase from there.

If you take too much, you'll get a flush. You may feel more anxious. But what I have found is that 125 milligrams used sublingual tea or opening a capsule onto the tongue or liposomal.

Or now we've got topical GABA. You'll get the you'll get benefits of know of these symptoms and there's a number of other symptoms not really related to caregivers, but that we see with low GABA and that's a lump in the throat.

When you've got that anxiety, you can have rectal spasms, laryngitis, spasms, tics to read, swallowing issues. You're going to say something? No, I'm just that's just what I mean.

It's terrible to have to deal with all of that. Yeah, it really is. You know, and it's so good to know that there are solutions. I know that you mentioned that there are different routes of administration.

Do you find that some of the non oral routes or perhaps better is absorption better sublingual a through the skin and through the gut? Are there dose adjustments that you have to take into account depending on the route of administration?

I have found that 125 milligrams seems to be the sweet spot as a good starting dose, whether it's opening up a capsule, whether it's using a sublingual, a lack of product that can.

I mentioned a brand name here. To. GABA calm is made by source naturals it's a sublingual doesn't taste bad it's a really easy product to use and it's it comes in 125 milligrams and we start from there and then dosed gaba throughout the day if you've got those physical symptoms, the other thing that we can actually see and then as far as your other question about Liposomal, it really depends on each person.

Some people do really well with the Liposomal and they lack it. Others lack the the gabba. Com. Other people find the gabba com a bit too dry and now there's that, you know, you can use it topically.

And I find starting with that low dose and then just increasing as with all the amino acids until you getting symptom resolution is just the way to go.

And the other thing that I mentioned with all of the neurotransmitter imbalances is that sugar cravings aspect. And with lower GABA, you feel less need to self-medicate with sugar or alcohol in order to relax.

So as a caregiver, that's not a good idea. You depleting your B vitamins and other nutrients. But the other thing that we see with caregivers is these intrusive thoughts and thinking, you know, unwanted thoughts, which is often associated with low serotonin.

But I've seen it happen clinically with GABA as well, and there's research that supports it. But to answer your question about GABA with Parkinson's, so I've worked with a number of people with Parkinson's, mainly as a family member of someone that I'm working with.

So it's someone that I'm working with who has low GABA anxiety and we've used GABA and it's been very helpful for them. And they've said, Look, my husband has Parkinson's, he's got stiffness and pain, he's got this physical anxiety and Nati sort of throws himself around the bed and it's uncomfortable for him and it's uncomfortable for me.

So that's one particular client. She had used GABA extensively and found that it really helped her with her physical anxiety and it helped with, you know, just general muscle stiffness and pain and insomnia.

And she was happy to have her husband take the Gerber, and it did wonders for him. So I've seen it work and that from that aspect I will share that the research is mixed when it comes to Gerber and Parkinson's.

There was a paper published in 2022 called Molecular Imaging of the Gabaergic System in Parkinson's Disease, and they saying that there's an a growing number of neuro imaging studies that suggest a gabaergic role in motor symptoms, gait disturbances, frontal cognition, somatic symptom disorder and hallucinations.

But they do say more research is needed and they're not sure whether it says it's not been established, whether the changes and GABA are part of the widespread neurodegenerative process and Parkinson's disease or they are compensatory consequence of the dopaminergic dopa dopaminergic degeneration.

So it's right now the you know, the research is mixed, but that's exciting that they are looking at GABA. And basically if you've got those low GABA symptoms and GABA helps, I think it's worth doing a trial or working with someone who can help you do a trial of GABA. And you know, I've mentioned at the serotonin, but there's actually a study that I found looking at serotonin.

It's called the circulatory labels of serotonin beta endorphin and dopamine and their relations to pain perception in people with Parkinson's. And this paper talks about how increasing the levels of these biomarkers could decrease pain sensation in people with Parkinson's.

So I mentioned earlier that we have pain when there's low serotonin, we have pain with low GABA, and then we have pain with low endorphins. So yeah, we've got a research that is not specifically saying let's use these amino acids, but it's showing that these neurotransmitter imbalances are contributing to pain.

So I say let's you know, let's start considering these amino acids for people with Parkinson's and helping the caregivers who may be depleted in these neurotransmitters as well.

Absolutely. And, you know, just going back to some of the mechanisms of the drugs that are used oftentimes are reuptake inhibitors of serotonin nor epinephrine.

Increasing the availability of these at those particular synapses. And we do use what are called gabaergic drugs usually in when we're talking for example, about pain.

Pain is modulated through several neurotransmitter systems, but common things being common at in the US, probably in other parts of the world. Practitioners such as myself turn to gabaergic.

Drugs and pain is a very big part of Parkinson's, often neck pain or leg pain. It's probably some element of dystonia underlying that. And so these can be very helpful potentially and perhaps to many people a much more satisfying approach, knowing that they can take this natural approach as it is, as opposed to solely relying on medication to get some relief.

Absolutely. And I'm I have, you know, a lot of people in my community who've been prescribed benzodiazepines. One of the drugs that you alluding to here, Gabapentin and Head, have had a lot of issues with building up tolerance and needing higher and higher doses.

And then when when, you know, and then having severe withdrawal symptoms, when they do want to taper, obviously, that's another whole topic. Tapering needs to be monitored by the prescribing physician and done really, really slowly.

And then nutritional support helps a lot. But I would love to see we get to the point where people are considering doctors and and the patients are considering some of this amino acid support so they can, you know, not have to deal with some of these other issues which are going to add to what's going on with them already.

So part and truly, this has been a really enlightening and really educational discussion. Sounds like you could help a lot of folks out there with Parkinson's and their caregivers and families.

And if they would like to reach out to you, how do they do that? So my blog post, my blog, everywomanover29.com has all my articles. I say not a newsletter.

Once a week you can sign up there to get my newsletter. My book, The Anti-anxiety Food Solution, covers all the nutrients that we've talked about today.

There's a whole chapter on the amino acids, all the dietary aspects. I've got online group programs, and then I've got the Anxiety Nutrition Institute.

We have trained practitioners and how to use these amino acids. So I was asking and they can go on to that website and would you let us know what that website is?

And I'm assuming that you have a way to search it so they can find practitioners that have been trained by you. There's it's called the Anxiety Nutrition Institute. (anxietynutritioninstitute.com) And at the moment, it's just an opportunity for practitioners to train.

I haven't got the initial training up there. Once we've got the certification in place, then I'll be listing practitioners. So it's not quite there yet, but we'll be we'll get there.

That's wonderful. And your book, where can I find a copy? Amazon anyway online. You can find it in bookstores and it's in most libraries as well. Excellent.

Encouraging folks to pick up a copy, read it, get some great information and apply it in your life. It's going to help a lot of folks, whether you're affected by Parkinson's, whether you're, you know, like if you're a human being, you're going to benefit from this information.

And I, for one, qualify. So Trudy Scott, thank you so much for being part of the Parkinson's Solutions Summit. Dr. Sharlin Thanks so much for having me, and thank you for hosting the summit.

I think it's so important, and I'm really looking forward to hearing from the other experts and sharing this with my community who I know are going to get so much value out of it.

Thank you. Thank you again. Bye bye now.