Chronic Pain Explained: The Role of Nutrition, Hormones and Movement Transcript

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Introduction and Guest Background

Welcome to Energize and Revitalize with Dr. Amy. I'm Dr. Amy Cooper-Smith, a doctor-prepared nurse practitioner, and this show is about empowering you to live a radiant, healthy, and balanced life.

I'm very excited to introduce today's guest, Stacy Roberts. Stacy is a physical therapist and holistic registered nurse from New You Health and Wellness out of Wisconsin.

She has over 30 years of experience in helping patients achieve their health goals. And she is also the author of The Pain-Free Formula. Welcome and thank you so much for being here.

Oh, thanks for having me, Dr. Amy. So good to be here. So what first caught my attention about your profile is that you're also a nurse. So how did your background as a nurse help you in becoming a physical therapist?

It was actually the other way around. I was a physical therapist first and I wanted to expand my scope of practice. So I went back to get my MSN for nursing and I just have to find time to do my clinicals now before I can be a nurse practitioner.

But it was about just expanding my practice and being able to help more people. Well, that's such a perfect combination so that you can really treat people holistically.

Absolutely. So how did you, in your physical therapy journey, you really do treat people holistically. How did your path kind of lead you there to understand why that was so important?

So when I first started in physical therapy in the 90s, I was into sports medicine, lots of athletes, things like that. But then as more people became older and wanted to stay more active, I started seeing a different population.

And some of that population, with the exercises and with the manual therapy that we did way back then, weren't getting better. And I knew they're probably still following through with what I was saying.

It wasn't just about them not doing what I suggested. So that intrigued me to go, okay, well, the musculoskeletal system is part of it, right? But what else can it be?

And then my own experiences with pain, when I know as a physical therapist, I'm doing everything that I can, all of a sudden turned into an issue for me.

you know, having not being able to get rid of that pain. So then I started looking to gut health, hormones, stress, how all those things impact our pain as well.

And when people aren't getting better, when they think they've done everything, what else they might be looking at, what they can look at outside of the musculoskeletal system alone.

I really love that. I think that's missing a lot in traditional medicine where we're really not looking at the root cause. No, yeah. And sometimes the root cause is just simply a muscle strain or sprain or arthritis in a joint.

Excuse me. And sometimes there's more to it, right? So it's for those people that way back when, in those early 90s, that kind of made me scratch my head.

Gut Health and the Root Causes of Pain

It's for those people who we go, OK, there's got to be more to the story. And as you know, and I know people are more than just their diagnoses, right?

Absolutely. So you mentioned the gut. How can gut health contribute to pain? So this is a relatively new area of research, which is really exciting. While I was doing my book, I knew that there were correlations with it because if you look at the history of celiac disease and look at the research there, you do find that people with celiac disease have more joint pain, muscle pain, things like that.

And then we've got patients with fibromyalgia having the same issues with muscular pain. And when you look beyond those areas and I would treat both of those people and they wouldn't necessarily get better until they started addressing their gut.

So I knew it intuitively and anecdotally, but Now, in the research in the last probably five to maybe 10 years, if we're lucky, we do see more research on how the gut impacts the joints.

So if the gut lining is too permeable, meaning leaky gut, which some of your listeners may have heard before, things are getting into the body that shouldn't necessarily get into the body.

And one in particular is called lipopolysaccharides. It kind of attaches itself to a bacteria. Once that gets in the system, it's in the gut, which is fine when it's in the gut, but once it really gets into the system in large amounts from a leaky gut, a gut that doesn't have optimal levels of good bacteria in the gut, that can actually settle in all different places of the body.

There's even research showing that if LPS is found in the brain, those people have a higher chance of having anxiety or depression. So then if it's also found at higher levels in the joint, that can actually degrade cartilage.

It can actually be one of the reasons that people develop arthritis and other inflammation and joints outside of just wear and tear. That is fascinating.

So what kinds of things do you find that's contributing to leaky gut? So it kind of, it always will depend on the person, but generally if somebody's in perimenopause or menopause, the changes in the hormone levels will significantly affect the microbiome, right?

So when we have those changes in hormone levels, what we don't often think about is changing our diet, doing things differently than we did in the first few decades of life to accommodate and get ready for that change.

Because when our estrogen, progesterone, testosterone levels decrease, we have significant changes to the microbiome. But we don't necessarily eat differently, and we probably even maybe drink more alcohol as we get older and things like that.

go out more because if we have more disposable income, we have that opportunity, right? So then we're kind of putting, you know, we're making the situation even worse when we're having less protection or if the hormone level is decreasing, we're actually adding more things in that can significantly impact the gut.

So that's one of the reasons why as we age that difference. But then there can be those people who just don't eat well. They don't eat things that are rich in fiber, which helps feed the gut.

They don't eat your vegetables and salads, processed foods, all those things that we probably know now based on all the information that's out there. There's still people that are doing that.

And I even have children now that I'm seeing that they've been to PT, acupuncture, chiropractor, and nothing is helping their joint pain, even the modalities at our clinic called SoftWave, and it a lot of times goes back to what they're eating, right?

So kids now eat very differently than potentially you and I ate in high school, you know, when we were going to

school. So one particular, she has a lot of coffee.

I mean, I didn't have coffee until I was, you know, I don't know, 40s, something like that. But she's 14. So adding things like that to the system and not, oh, coffee is bad.

I'm not saying that, but they're definitely eating things differently than what we did growing up for sure. And I think a lot of the young people too, they're drinking coffee, but it's kind of the Starbucks special, like loaded with the syrups and sugar.

So not only are they getting that caffeine, but all that sugar, which we know is really inflammatory. Absolutely. And not tall. You don't usually see people getting the tall glass at Starbucks.

They're walking away at the Vente, right? You know, these big, huge hits of sugar and caffeine and the syrups and the chemicals and things in there as well, too.

When I got my doctorate, I focused on childhood obesity, and I really did a deep dive into how children are eating. And you're right, it's just different than it was when we were kids.

There's the processed food, of course, and just, you know, I hate to say it, I feel so old when I say it, but we had to eat what was put in front of us.

It wasn't, no, I prefer the chicken nuggets. It was like, no, this is what you're eating. Yeah, exactly. There's people in China that are starving. We would hear that all the time.

Finish your plate, you know, that type of thing. Yeah, absolutely. But you know, maybe our parents knew what they were doing. Exactly. Yeah. So you mentioned good bacteria in the gut.

How do we increase our good bacteria? So eating those things that we talked about, eating the raw foods, the plants, the vegetables, the salads, the fruit, all those things have the prebiotics that help improve the overall gut health and the good bacteria in our gut.

So it's always going to be starting with that. Adding in a probiotic, if they can't tolerate a probiotic, if it's a good probiotic, it's usually not the probiotic's fault.

It's usually a sign that the gut needs a little bit of extra support and try to kind of gradually wean those things in. There may be too much bad bacteria versus good bacteria.

But that is secondary. Any supplements should do just that, supplement the diet. So we should be looking at what we can do. The less processed, the better.

The closer we can get to what Mother Nature intended, the better. That's going to feed our gut as well. Sometimes over the years, and even when those hormonal changes happen, we need extra support.

So there are certain herbs that are called mucilage herbs that can help to improve the healthy mucus in the gut.

Hormones, Aging, and Injury Risk

I tell my patients that it's kind of like putting aloe on a sunburn when you have these types of herbs that are out there that can help like oat straw and and even marshmallow and different types of herbs that can help with that.

inducing that kind of healing process in the gut as well too because that mucus is really important it helps feed the good bacteria so if we don't have the mucus in the gut we those bacteria look for other sources of food and sometimes that source of food is is in between the tight junctions in the gut lining so if you imagine a picket fence and in in between the fence slats let's say there's glue in between those But if we're not giving the body what it needs to produce that, that healthy mucus, they will, the bacteria will start to actually utilize that as a food source

and break that down so that those tight junctions who are kind of monitor what goes into our body, into the bloodstream and what doesn't actually become more worn out, if you will, or more permeable so that those things like LPS and other things that shouldn't be getting into the body are getting there.

Oh my goodness, it's all tied together. So you mentioned the raw foods. So if we cook our vegetables, are we losing the benefits to the gut? it to an extent, right?

So if you can have it raw, that's great. But sometimes they're more difficult to digest. So if you can't have foods that are, you know, like cruciferous vegetables, broccoli, cauliflower, those types of things, you know, bok choy that are more difficult to digest, then cooking them to break some of those things down to it can be more beneficial for the thyroid.

People have thyroid issues as well, too, because it breaks down the goitrogens in those foods as well. Although you need to eat a significant amount of them to impact it.

So the way I look at it is raw is best if we can do raw, but if not, then we just need, if we're cooking it, we're still getting some good nutrition from that.

Microwaving is another story, but gently steaming the vegetables would be better than actually cooking them or frying them, things like that. Air frying probably is also good as well too in comparison to those other things.

So what happens when we microwave them? I mean, lose a lot of the nutrient content, right? I'd have to go back. I was probably about 10, 15 years ago that I stopped utilizing the microwave because I read a few articles about what happens to the nutrient density and it just really destroys it, right?

So that would be, again, a very last resort if you have to utilize a microwave. But now there's so many of those smaller convection ovens, the air fryers, that you really can get away with not having a microwave these days.

Very interesting. So you've mentioned hormones a couple of times, and we deal with a lot of hormone issues in my clinic as well. So how do our changing hormones affect our pain and recovery?

Yep, so I learned this kind of the hard way. I was at a wedding with, I think it was my niece's wedding in 2021, and I was out there dancing the polka with my son because I was like, oh boy, he's not doing a very good job of that, so I need to show him.

He was about 21 at the time. So I went out there and was dancing and I had knee surgery on my knee. Oh gosh, it was 1986. So we're coming up on 40 years, right?

So that was about 35 years ago from the time that I was dancing. And when we were dancing, all of a sudden I heard this big pop in my knee and I was like, oh my God, what was that?

And I literally couldn't put weight on it. Tears kind of going down my face. My son was really concerned. I had to hobble off the dance floor, take myself back to the hotel.

It swelled up like a balloon. Right? And my son had to get crutches for me at 2 a.m. in the morning because I couldn't walk at all. So what happened in that whole story is one of the reasons why I wrote my book because of the situation that I came into when I wanted to try to find out what that pop was.

And the surgeon basically said, well, you need a knee replacement. And I was like, what? I came here to find out what the pop was and they're like, well, your knee is full of arthritis.

Well, I had a bunch of arthritis in my knee, but I never had pain. So that was a big light bulb moment for me that you can have arthritis, but not necessarily not have to have pain.

But the other aspect of it to me was at that point in time, why did that happen at that point in time? Well, My

estrogen progesterone levels were significantly decreasing.

And you lose when our estrogen progesterone and ferment testosterone, when they lose that, we lose an anti-inflammatory aspect of our system. That's just natural.

We don't even think about it as we're growing older. But as we lose that, we lose some of the protection, right? So the things, again, going back to diet, going back to what we're putting in our body, the stress that we're under, If we're not changing those things as we go into those hormonal changes, then what can happen is when we lose that anti-inflammatory effect, if we want to stay active and healthy, then when we get up and try to do something and it's a little bit higher intensity like the polka, I'm telling you that can be pretty high intensity, then you're putting yourself more at risk for areas of your body that are more susceptible to that.

So I had a prior injury even though it was 40 years ago, and surgery. So that's where it showed up for me. And then, you know, probably a year later, I had some issues with my shoulder that I'm like, what the heck, this is coming out of nowhere, right?

So that's when I took a deep dive into hormones, because I was able to get through perimenopause and most of menopause without utilizing any hormones, just by changing my diet, exercising, and my mom had a terrible menopause.

So I know that the lifestyle changes that I made probably got me through. But then when I got to kind of post-menopause about seven, eight years, that's when all these things started happening.

So did my deep dive on hormones, and now I balance both. I utilize a little bit of estrogen progesterone after doing some testing to see where that was at, and then still do the natural things that I would typically do with my supplementation diet and herbs that I take.

Wonderful. I'm going to have you hold that thought. We're going to pause for a break from our sponsor. You're listening to Energize and Revitalize with Dr.

Amy. Don't go anywhere. We'll be right back. Welcome back to Energize and Revitalize with Dr. Amy. I'm Dr. Amy Cooper-Smith, and my guest today is Stacey Roberts, physical therapist, MSN nurse, and the author of The Pain-Free Formula.

Before the break, we were talking about the different things that impact our joint and muscle health, including nutrition and hormones. So we talked about how declining estrogen, progesterone, and testosterone can increase our pain.

You mentioned that we lose our anti-inflammatory abilities and we're more likely to become injured. So I experienced that myself. Again, declining estrogen and I like to do stuff and all of a sudden I was playing on monkey bars and I took a swing and just kind of ripped something in there and gosh, when you get older, it takes a long time to heal.

Do you find that that's hormone, you mentioned your hormones, just with aging as well, are we just more likely to become stiffer and injured? Potentially, right?

It depends on genetics plays a role for sure, but also what we're putting in our bodies will play a role. But specifically to hormones, not only were they anti-inflammatory when they're at that kind of Goldilocks level sweet spot that we'd have when things were going well and we could run around and do what we wanted.

The Pain-Free Formula and Treatment Alternatives

but they also decreasing estrogen also affects how like the ligaments and connective tissue can stretch and then go back to normal like when you take a rubber band you stretch it goes back to normal but as that rubber band ages keep stretching it or even if you leave it laying around You try to stretch it again, and then all of a sudden it

breaks.

So a very kind of similar thing to what our connective tissue can do in our body as we age. Again, giving it what it needs to minimize the effects of that.

Because as we age, our immune system can change as well, too. And that affects our gut, and that affects our hormones. So it's all connected. We can talk about these all individually, but there is a link to each of them from each other.

It's definitely more common, especially if we're trying to do the same things that we did 20 years ago without actually preparing our body to do that.

I talk to my patients, I'm like, you have to consider yourself an athlete. An athlete doesn't go out and play that football game after sitting around for five days on the couch.

They're practicing, they're weightlifting, they're watching their nutrition, they're doing all the things they need to do so they can perform. So if we want to stay active, then we have to do the things that we need to do to put the nutrients in our body to help manage and also the probiotics and things like that to help manage that inflammation better so that we can still stay active for longer and minimize the risk of injury.

Yes, I've definitely come to respect the warm up. So we can't just go and do stuff. We have to get the body ready to move and then you can then you can do it all.

And that's why pickleball is keeping me in business. I'm telling you what I bet it is. Nobody warms up for pickleball or I don't see I'm warming up for pickleball.

So they jump right in and they've got muscles that are shortened from years of inactivity or not stretching and muscles that are weak from not giving them resistance training, things like that.

And then you jump out on the court and you're reaching up over your head where your shoulder hasn't been and I don't know how long and something pops, right?

So it's kind of that rubber band principle that shortens and starts to shorten, then you stress it and there's much more of a chance that you're going to injure that tissue, especially doing things that you don't typically prepare for.

And I think we're becoming better about talking about these things because one of the worst things to say to someone is, well, you're too old to do that.

No, you're not. You just have to do it different. Exactly. Exactly. Make adjustments and put the time in to prepare yourself so that you can do those things, right?

And not just think you can jump off the couch like you did when you were 16 or 22 and do a pickup basketball game or go skiing. I don't know, even getting in and out of a boat, if you're in Florida, getting in and out of a boat, it can be stressful in the system if you don't usually take care of your balance and things like that.

So all those things we really need to do, yoga, Pilates, stretching, strengthening, really utilizing our body to help to continue to lubricate those tissues in our system.

So earlier when we were talking nutrition, you mentioned probiotics. And something I like to ask all my experts is, should they be refrigerated? So there are certain types of probiotics these days that are made for non-refrigeration, and they still maintain their live probiotics within them.

So they do not have to be refrigerated. If you kind of want to have an insurance policy, you can always put them in the refrigerator. But if they say not refrigerated, then they should have been prepared in a way to protect them without refrigeration.

I think that's so much more convenient too for people. You can travel with them. Absolutely. Excellent. So let's talk about your book. So The Pain-Free Formula, and you were inspired to write it with your journey and how you recovered from injury.

Right, yeah. So I was at that doctor's appointment that I talked about earlier where I had the knee injury after doing the polka. And when the doctor told me that the only thing they could do for me were two things, total knee replacement or cortisone injection.

And I was like, Wait, what? I didn't have any pain in that knee beforehand. And I mentioned I had that light bulb moment that even though I could see the significant arthritis in my knee, that taught me that you could have significant arthritis.

That wasn't the pop. That just didn't happen during the polka, right? That was going on for years. But I never had any issues with it. Then as we went forward in the conversation, the doctor was saying, well, look at your knee.

You clearly have tons of arthritis and you're going to need a knee replacement. I was like, but what was the pop? And she couldn't answer that question.

She's like, well, that doesn't really matter. You've got all this arthritis in there. And that just kind of infuriated me that they didn't even take the time to really kind of figure out what was going on.

And that even though I was a physical therapist, which she didn't look at until towards the end of the session, what I did, that they wouldn't even recommend strengthening or physical therapy or anything like that.

So when I said, look, I'm not in any way, shape or form going to do a knee replacement. She's like, well, what about the core zone injection? And I said, yeah, no, thanks.

And I was really trying to be a patient. I was trying not to, you know, spout off research and things like that. But she asked me, she said, do you mind if you shared with me why you wouldn't want to do the injection?

And I was like, well, she asked. So I started referring to studies that, and numerous studies now, that show that cortisone injections can deteriorate the cartilage in the knee, in any joint that you're more likely, if you get a cortisone injection in your shoulder, you're more likely to have a rotator cuff tear within three to five years.

I was more than likely to have total joint replacements, more cortisone injections that you get, those types of things. And when I said that to her, she said, you'd have to have a hundred of those shots for that to happen.

And that literally was the end of me being any sort of receptive. I was like, I need to just leave before I say something that I'll regret because it is so not true.

And what really irritated me about it was how many other people had been told that by not just her but you know hundreds of orthopedic surgeons around the country that and that information is just not true and so I am rooted in research as well so I went out researched and put that together in my book to help people understand that there are other options I'm not against you know medications I'm not against surgery I refer people out to surgery if they need it But I am against doing those things as first line when somebody like me, if I got a knee replacement, I'm not guaranteed that I'm going to feel any better than what I felt going in because the arthritis wasn't the problem for me.

So it didn't matter if they took that away. Arthritis wasn't causing me pain. And I knew that, like I said, because I didn't have any pain leading up to that pop.

So that's where I was really motivated to just educate people on not only those things, surgery and injections, but what certain medications can do to actually increase pain when they're supposed to be helping us.

So that's where my motivation was. And that's where in the book I also talk about what you can do instead, right? I love that. How do taking medications increase our pain?

So if you look at the research on opioids, opioids are much more obvious. You see that as a person takes opioids, and this is one of the reasons why they're addicting, you need more and more to get the same result.

But then related to that, when those opioids wear off, you become what's called hypersensitive to pain, right? So your levels of pain are higher than if you wouldn't have had those opioids at all, right?

So you're feeling the pain more. What I didn't realize until I was researching for my book is the same is true for NSAIDs. So NSAIDs that you take them over a period of time chronically because they're really not meant to be taken all the time or preventing, you know, preventatively like some of my patients do.

You can also develop pain hypersensitivity as a result of taking NSAIDs. So the very thing that's trying to help you feel better is actually going to make you feel worse and increase your pain in the long run.

I've mentioned before on the show, NSAIDs in particular, because most of them are over the counter, people just think they're safe. And some people will tell me they take way more than recommended doses.

And I'm like, no, please don't do that. Exactly. Very dangerous for your gut, for your kidneys. You know, Tylenol at excessive doses is terrible for your liver.

We know that. People aren't educated, though, because you're right. When it's over the counter, it's almost like you're buying a supplement or, you know, candy or something that you can take without any ramifications.

But there are significant ramifications. Absolutely. So what are some of those things that you tell people to do instead of medications and surgery? So the first thing if you're having pain when you come into our clinic, what we'll do is take a look at how you're moving because many of my patients, probably 70 to 80% of my patients have a biomechanical issue, meaning they're moving in an inefficient way because their muscles are tight or weak or they don't have the stabilization, the joint that they need.

So we assess their gait pattern, we assess all those types of things to see how they're moving, how they move and lift their arm up over their head, are their shoulders tight, are weak, etc.

Then we utilize soft wave therapy, which is a type of shockwave therapy. It's an electro-hydraulic broad-focus shockwave device which significantly increases blood flow to the area that we're treating and it gets deeper and wider than any of the other devices on the market.

I didn't think it was going to work when I first heard about it but literally now I use it on pretty much 90% of my patients because it works so well.

So that's bringing that nutrition to the joint that it didn't have before. It's anti-inflammatory so it's decreasing the inflammation and then that extra nutrition helps with the healing as well.

So we do the soft wave and then we get their body moving the way that they should. So we take specific exercises for them, particularly based on how they're presenting.

Not everybody gets a sheet with the same exercises to do. And then we make sure that they're progressing within the exercises. appropriately because I just had a patient yesterday who said she had a bunch of physical therapy but she got worse every time they went because they just kept on increasing the exercises even though she was saying look this is actually causing me more pain which seems very strange.

So it really needs to be specific to that person. If after three to six treatments in our program, they're not 50 to 100% better, then we start looking for other reasons why they could be still hurting, right?

So that's where the hormones, that's where gut health, that's where food sensitivity, looking at their medications, all those things we're talking about from the beginning, but we don't always have to address all those things in treatment.

Going back to that root cause. Exactly. Just wonderful. So we're almost out of time. But if you were to recommend one lifestyle change to our listeners that will help them avoid some of these things, what would it be?

Well, one is that can be very popular.

Lifestyle Changes, Book, and Where to Learn More

One isn't enough, right? Yeah. And one's that can be popular. But I'll say it because a lot of people are doing dry January. So we don't often think of alcohol consumption as being an issue.

But if we think about If those hormone levels are decreasing, our gut health is changing. We really need to look at what we're putting in our body. And alcohol, unfortunately, is an endotoxin that can really impact and mess with our gut.

Now, I'm not saying you have to never have alcohol again or even be a teetotaler, but just really significantly decrease what you're doing in regards to alcohol consumption.

And it can really significantly improve. I treat even men for erectile dysfunction. I have a gentleman right now who just gave up alcohol over January and noticed a significant increase in his ability to obtain an erection.

So the sexual function improved. So it really can have a systemic effect on the system. So even though it's not a popular one thing, that would be someplace to start.

Yeah, I was just listening to a show and they were talking about how inflammatory alcohol is not just to the gut, but to the brain and the body. And he said it's almost as bad as heroin.

He's probably right. But yeah, you're right. It's not very popular. But but, you know, moderation, right? Right. So how can people learn more about you?

And how can they find your book? Oh, thank you for asking. So the book is available, The Pain-Free Formula, Solving the Puzzle of Muscle and Joint Pain Without Surgery, Drugs or Injections, is available on Amazon.

They could also contact us at our clinic if they wanted to copy. And my clinic's name is New You Health and Wellness. And we're at newyouhealthandwellness.com.

They can reach out to us via email or via the website. And I also have a podcast called the pain free formula. So they can also look at Apple or wherever they listen to these wonderful podcasts and jump on some of those to figure out how they can address their pain.

Wonderful. Well, thank you again for joining us today. I really enjoyed our conversation. Oh, me too. It's been an absolute pleasure. Thanks so much. And thank you to our listeners for tuning in to Energize and Revitalize with Dr.

Amy. I'll be back next Saturday morning at 730. Please send an email to radiantpodcast2025 at gmail.com with any questions or any insights you got from this episode.

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