Clean Your Genes for Optimum Mood

Guest: Dr Ben Lynch

Niki Gratrix: Hi everybody and welcome to the Trauma and Mind Body Super Conference, and we have our esteemed guest today it's Dr. Ben Lynch. Dr. Lynch, welcome to the Summit.

Dr. Ben Lynch: Awesome to be here, Niki. Thanks for having me.

Niki Gratrix: So a little bit more about your background so people understand your extensive training and education. You are a naturopathic medical doctor, you trained at Bastyr University. I saw you have a Bachelor of Science degree in Cell and Molecular Biology, you're a bestselling author, expert in NutriGenomics and your book was *Dirty Genes*?

Dr. Ben Lynch: Yes.

Niki Gratrix: Excellent. So we've got a fascinating topic because I think a lot of people, especially the psychology community listening, may not realize how much of an impact our genes or certain genes can impact mental health, and that we can do something about that.

So maybe you could expand a little bit on how certain genes could directly be affecting somebody's mood and mental health. But in a way that, yes, we can also change that and can do something about it.

Dr. Ben Lynch: Yeah, absolutely. And you're absolutely right, too. I mean, our genetics, the ones that were born with, absolutely do have an impact on how we're thinking or our thoughts. And the cool thing is, is that we're actually in control of a lot of these genes even though you think that they're controlling you.

They might be controlling you right now because you don't know about them. But once you learn how these genes are acting and what they're doing and what they need from you, then you can make some quick changes. These genes that we're gonna be talking about today or in the book in detail.

So Niki and I will dive down pretty deep and say a few things pretty fast, like, whoa, whoa. But the book will help guide you, but going to give you some solid tools today to give you a solid taste and get you some actionable things that you can do and apply.

Niki Gratrix: Awesome. Because, yeah, just to emphasize that we've been trying to train the community and they're like, no way, our genes do not dictate destiny. We're not a victim of our genes. So we're really talking about epigenetic here aren't we? I wonder if you could just touch on that?

Dr. Ben Lynch: Yeah. So genes, they have jobs to do but they have to be told what to do. Usually not all the time, but our genes for hair color are told to make brown hair for me and they did that. So I didn't really influence that, that just happened.

But in terms of how my digestion is or how I'm thinking right now or how my energy levels are. There are genes that play roles in that and they need input. So our genes are found inside our cells in a little tiny rolled up ball where they're usually not doing anything. And they require a stimulus and that stimulus comes from us, and Dr. Bruce Lipton talks about this all the time, where our perception, the environment is what's controlling our genes on the inside.

So our eyes, our ears, our taste, our sense of smell, our sense of touch. All of these things are really firing our genes and a great example, a few of them is, when you're sleeping and it's dark outside you're good. And then when the sun starts coming in through the window, you start getting the light through your eyelids and it's starting to wake you up. Well there's genetics involved with that. So the light's coming in and it's triggering certain genes to turn on and triggering others to turn off. And if I say lemon or a very sour lemon, what's happening to your mouth right now, Niki?

Niki Gratrix: Yeah, salivating, I could just taste it.

Dr. Ben Lynch: So again you have sight and you have sound and they're triggering things that fast. So your perception, the environment works your genes that quickly and that is epigenetics.

Niki Gratrix: Wonderful. So the beauty is environmental factors affecting our gene expression and we have control over our environment, basically.

Dr. Ben Lynch: Yes.

Niki Gratrix: So this is the good news. So let's talk, we're going to talk about four major genes that have a particular impact and could be affecting somebody. And somebody might be going off and getting EFT and psychology approaches, not realizing that this gene is the key thing that if they knew about, they could change something in their environment and it would improve their mental health. So let's start with the big one.

There's something called MTHFR (methylenetetrahydrofolate reductase), so over to you as the expert on this one. What is that and what are some of the symptoms? If that gene is out of balance, if the expression is you call it dirty. I mean, genes can under or over express, right? But dirty genes. What are the symptoms for people for if they have that imbalance in that gene and it might be an issue for them.

Dr. Ben Lynch: Yeah. So, again, if we go back to defining what a gene is, it's basically we have about eighteen thousand of them in our human body, and MTHFR is just one of them. And if a gene, a dirty gene is a gene that is not functioning very well, it's not functioning at its best.

And so if your MTHFR gene isn't functioning very well, the first thing you need to ask is, well, what job does it do? And MTHFRs job is to make your body's number one form of folate. And that's called methylfolate, that's his job. And 80 percent of the type of folate that's found in your body should be methylfolate. And so many people are told to take folic acid and folic acid is a type of folate yes, but there's no methyl on it. So folic acid has to get a methyl group put onto it in order to be called methylfolate. And that's what 80 percent of your folate in your body is and MTHFR helps put that compound on it. That's its job, is to see a certain type of folate coming through and then it comes to MTHFR. And MTHFR will put this compound on this type of folate and make it methylfolate, that's its job.

So if that gene isn't working very well, then you might not have 80 percent of your body's type of folate as methylfolate. And what happens? You can have increased cardiovascular disease, you get increased thrombus, clots, cardiovascular disease, respiratory disorders. You could have high homocysteine, which leads to those things. But high homocysteine is also not talked about enough in the neurological space or the neurotransmitter mind, mood, mental state. And it's very, very much associated with it because high homocysteine levels really mess up your neurotransmitters. And so if it imbalances your neurotransmitters, it could be almost any type of neurological imbalance or neurotransmitter imbalance or mental disorder that you can think of.

You're like, well, wait a minute, so you're telling me it's associated with anxiety, depression, bipolar, schizophrenia? Yes. Yes, it's because it has such a wide range of impact because homocysteine will dirty your body's ability to make neurotransmitters and eliminate them. And methylfolate helps with the homocysteine, so it's a really, really big deal and folate itself also plays a big role in neurotransmission as well. So it plays a role in basically every type of mental disorder you can think of, which is a pretty bold claim, but it's true.

Niki Gratrix: Yeah. I'm so glad that we're talking about it, it's such an important topic and the beauty is we can do something about that.

So what are the sort of things that we could do that helps clean up that gene and therefore their methylfolate levels go up and then neurotransmitters start to balance out and then anxiety, depression could balance out and go away.

Dr. Ben Lynch: Yeah. So what does the MTHFR gene do? It makes methylfolate, okay. So then you have to ask, what tools does this particular gene need?

So if you start learning about MTHFR and this tickles you and you want to learn about other genes, always ask a few questions. What does it do? What does this particular gene do? What's it needed in order to do it? What does it make? What does it need in order to make it? What makes it go faster and what makes it go slower? That's pretty much all you need to know. And so with MTHFR, what it really needs is vitamin B-2 known as riboflavin. And when you're MTHFR is born dirty, meaning you have inherited a variation in your gene, your MTHFR gene and it's not what's typically found in the environment.

About 40 to 50 percent of us have an altered MTHFR genetic sequence; it's not the exact same as other people's. Mine is, I've inherited an MTHFR sequence where it's about 70 to 80 percent slower than what's typical in the population.

So my MTHFR gene isn't very fast at all, it's slow. So is that a problem? No, I just need to understand that I have a 20 to 30 percent capacity for my MTHFR gene, so what do I do about it? Well, I can take more riboflavin and so I get sufficient riboflavin in my multivitamin, that's usually where I get it, it's usually enough. Or I say, OK, I'm going to eat more salad today because in your leafy green vegetables, you have methylfolate in there.

And the other thing I can do is I can eat more meat or liver, but I can't stand liver, so I'll eat more meat. Why would I eat more meat? Well, there's a relationship with folate in your body and what's found in meat called choline. If you have sufficient choline, you don't need as much folate, if you have a little bit of choline, you're using a lot more folate. So by eating some meat, you need some salad, yes, but you don't need as much and so vegans, vegetarians, you really, really need to be eating your leafy greens a lot or supplementing with choline or riboflavin.

Niki Gratrix: That's great. That's beautiful. You have an art of making it really simple, something that can get very complex, so that's brilliant. Shall we talk about COMT?

Dr. Ben Lynch; Yeah.

Niki Gratrix: Yeah. Let's move on because we'll also talk about. I know it's important, we don't want to just, we want to look at the connection between all of them as well. So what is COMT? What does it do? And what are the symptoms of somebody who is out of balance, especially like mental health symptoms, for example?

Dr. Ben Lynch: Niki, I thought of one more thing to make it easier for people on the MTHFR. And so that question is, what labs can I order to see if my particular gene is dirty?

Niki Gratrix: I was going to ask you that at the end. And people might be asking, but we could get to that end because we can test all of these four and we can talk about that.

We'll get to it because that's the first thing they're going to ask, isn't it?

Dr. Ben Lynch: OK. Perfect. So I'll hold off on that. So COMT. When we're saying all these letters, when you hear Niki and I talking about MTHFR and COMT, we're just sparing you big fancy scientific biochemical lingo. That's it.

COMT stands for catechol-O-methyltransferase and MTHFR methylenetetrahydrofolate. Who cares? So it's just an abbreviation for that and it tells scientists what the gene does, that's what's in the name, it tells you it's function and where it works and what it does. So COMT's job again is you always want to know what it does. COMT helps your body get rid of a certain type of estrogen. So it helps break down certain estrogens and then also helps break down your dopamine, norepinephrine and epinephrine out of your body.

So like, well, why would I want to eliminate my estrogens and why would I want to eliminate my dopamine, norepinephrine and epinephrine, why would I want to do that? Well, if you're constantly high estrogen, that's great for fertility, it's great for your skin. It's great for your focus and awareness and your bones and your growth and your repair of your cells, it's wonderful for all that.

But if it's always high, then it can interfere with your moods. It can interfere with your cycles. It can interfere with your cell division in a negative way. It could lead to cancer. So estrogen, that's why women get more breast cancer, uterine cancer, cervical cancer, these areas are really rich in estrogen. And so if this particular gene is dirty and it's not working as fast as it needs to be, then you have estrogen sensitive cancers that are very not very prone, but increased susceptibility to them.

So it's really very, very, very important for women to have this gene balance. And then why would you want to eliminate dopamine, nor-eppy and eppy? Well it's great during the day when you want to be type A, driven, focused, listening to this and learning things. So it's great for learning, it's great for your mood for being happy and outgoing. But when you want to just relax on the beach, you don't want to have to be just type A there on the beach. Or maybe you want to go to sleep every day, these genes have to clear this stuff out. So COMT will clear it out so you can fall asleep and so that's what COMT does and so it's very useful. And there's two types of COMT that I talk about in the book.

There's a fast type and there's a slow type. And the fast type means it's clearing out the estrogen really quickly, it's clearing out the dopamine and nor-eppy and eppy really quickly. And I tell stories about my son and other people about a faster COMT type. So a faster COMT type is more susceptible to addictions and shopping, or sex, or gambling, or alcohol, or excessive amounts of exercise because exercise increases your dopamine. So if COMT is working too fast it's clearing out you dopamine, you're going to seek things which increase your dopamine like cigarette smoking or alcohol or shopping or sex. Or if you know that it's going to clear out, you dopamine quickly, you can do things like eat more protein or take tyrosine supplements, which will keep supplying the COMT gene so it can provide dopamine for you, or maybe you need more folate.

So it's very cool once you know oh yeah, I've a faster COMT type. Yeah I am more ADHD today, I'm more unfocussed, I'm lazier, I'm sitting on the couch watching Netflix, I have no drive and in fact I'm getting kind of depressed. So eat some more protein, maybe have a tyrosine supplement or inositol and go do some exercise, get a hug, hugs will increase dopamine too, so that's really handy.

Now, if you're a slow COMT, you're type A, you're driven, you're focused, you're more prone to irritability. And when that time around comes, that time comes during the month where it's your menstrual cycle, that PMS hits you like just wham! And a lot of people make fun of that and it's not a laughing matter because you don't want to be acting like that. And then you know it's affecting your family, it's affecting you, it's a real thing and COMT has a huge, huge role in PMS. So if you have a really bad PMS like symptoms where you feel like, oh my God, yeah, I'm turning into that person right now, I'm like The Incredible Hulkess, and I got a call down.

You're COMT is dirty, so what do you need? Well, magnesium is wonderful for your COMT gene, that's what it uses. So magnesium and most people are magnesium deficient so find a place where you can lay on those, what you call those float tanks, so those Epsom salts float tanks. I learned and I haven't seen the research on this, but I've learned that if you lay in a float tank for one hour, it's almost equivalent to like three weeks or three months worth of supplementation and magnesium.

Niki Gratrix: Wow, did not know that. That's amazing.

Dr. Ben Lynch: It is amazing. And there's all sorts of little tips that you can do for that. But COMT is extremely important for depression, and anxiety, and irritability, and PMS, and your focus, your lack of focus, your drive, your motivation, your addictive behaviors. And once you put all that together and you start learning about it, it's really freeing and exciting and empowering.

Niki Gratrix: Yeah. And life changing, potentially absolutely life changing. Yeah. Brilliant. So we've got two more. The next one is MAOA and MAOB. Tell us about that.

Dr. Ben Lynch: Yeah. So these genes work very, very much together. In fact, all genes, not all genes, but all the genes that we've talked about so far, we'll get into that later, but they all work as a team as well. But MAOA and B work on supporting the elimination of serotonin, converting it to melatonin. And they also help in eliminating dopamine, norepinephrine, epinephrine as well, and they also work in eliminating histamine. So these are all very similar to what we talked about with COMT, but with also the added, we're excluding, well, they play a role in dopamine elimination too, but let's focus on the serotonin.

So serotonin everybody talks about that as the, if you have low serotonin, you're going to be depressed. Well, it's not that simple, if you're low dopamine you're gonna have no drive for sex. Again, it's not that simple, they work together and it's really not that cut and dry. But MAOA and B, serotonin, melatonin, big relationship here.

So if you're MAOA gene is working too fast, you're MAOA is going to be limiting your serotonin quickly, but you need serotonin for melatonin. So what might happen if your MAOA gene is working fast is you might fall asleep beautifully, especially if you're COMT is working fast too.

Your clearing out all those neurotransmitters you fall asleep like a baby, head hits the pillow, gone. Problem is, you wake up a few hours later. You don't have sufficient melatonin on board to keep you sleeping. And that's especially a problem as we age, because the curve from melatonin, as we age. When we're young, we have melatonin levels up here and as we get older, our melatonin levels naturally drop. And melatonin is also an antioxidant it protects our brain and it protects a lot of other tissues as well. So if it's working too quickly, you could be eliminating your serotonin too fast. If it's working too slowly it's very susceptible to migraines, and headaches, and irritability, and a lack of focus. And maybe a lack of focus in a different way, a lack of focus because you're anxious.

And this is what my son has and it took me a long time to figure this out where we did a brain scan with him. We took him to Aman clinic and did as a SPECT scan and when he is actively engaged, learning, his whole brain is lit up like it's overworked. So he's working too hard, he's overthinking it and he has too much serotonin and dopamine in his head. So we actually need to calm him down, remove some of these excessive amounts of neurotransmitters and then he can focus. That's really weird, you're thinking you need to clear some neurotransmitters?

Yeah, because if you're anxious, you can't focus either. So it's important to understand that you don't always need stimulants like Ritalin to improve focus. That would actually be a nightmare for some kids and some adults, you actually need to calm them down. So that's a big one MAOA and B and the nutrient needed for that is riboflavin.

Niki Gratrix: Brilliant. And let's touch on the last one as well, because these are the four important ones. It's so good just to go through and actually demonstrate what we're talking about so that people can actually go, wow, that could directly be me, you just described me.

That's what people are going to get from this and then they might find a solution that they just haven't found up to now, so brilliant. Last one, DAO which is another one you cover in the book, and it's important implications for mental health.

Dr. Ben Lynch: Oh massive. Massive. So DAO's job is to help get rid of histamine from food or drink or the bacteria that's living in your digestive system, in your small intestine, large intestine, your stomach. These are areas where you're like, well, why would I have bacteria in your stomach? Well, you shouldn't, but if you're low stomach acid, you might. And if you have SEBO, you could have a huge amount of bacteria, small intestinal bacterial overgrowth, in your small intestine and that's not good either.

So bacteria can produce huge amounts of histamine especially if you have one called Blastocystis hominis. And Blastocystis hominis is at least here in the United States is extremely common, it's found in drinking water, it's found in food. And I had it, so I phoned the lab and I called doctors there and I'm like, man, what's this? And they said, "man that's so pervasive. We don't even know if we should call that normal flora anymore because everyone has it." I said, "so what was the problem with it?" He goes, "it makes a ton of histamine."

Niki Gratrix: Yep.

Dr. Ben Lynch: And I was like, oh, that makes so much sense because I struggled with irritability, sweaty feet, eczema, headaches, sensitive to drinking wine, I can't touch wine and leftover foods, fish, citrus, chocolate.

I have any of this type of stuff I sweat, or get irritable, or I get hot, or I get itchy skin and bumps, I get those red little bumps on my skin, I get headaches. And I was actually flying to London once for a conference and I was like, screw it, I'm going to have some red wine and get me tired so I can fall asleep. I took one sip of that red wine and I got a nosebleed like that.

Niki Gratrix: Wow.

Dr. Ben Lynch: Yeah, just too much histamine. And so if the DAO gene is not working, you get this huge flux of histamine that's in your digestive system, but you absorb the histamine. And now it plays a role with your headaches, your migraines, your irritability and your inability to fall asleep, your seasonal allergies go up and your skin starts itching and so on. And that leads to depression and anxiety because now you've got to cover your skin up because you're embarrassed.

So and if you take certain probiotics or eat kefir or yogurts, or certain cheeses, or you go to a wine and cheese party, that's like the worst thing you can do for this thing. And then you go sailing as well or you get nauseous in the car, you can't read in the car at all, that's car sick, sickness and you get dizzy and ringing in the ears, these are all related to histamine. And an interesting fact is pigs have a huge amount of this particular gene in their digestive system.

And, why would they do that? Well they're eating like nasty leftover food. Lions also have a huge amount of DAOs because they're eating rotting flesh all the time. So they have adapted to have this huge amount of this gene in their digestive system so they can process the histamine. And they for some reason, somebody decided to do a test on pigs and see if they got seasick. Pigs don't get seasick.

Niki Gratrix: That's amazing factoid. Wow.

Dr. Ben Lynch: If you don't learn anything, learn that. And then for pregnancy, this is a really, really important one, too, because histamines associate with pre-eclampsia, infertility, placenta previa, it's a lot of things. So what do you do about it? Well, you support your microbiome, limit histamine ingestion of various foods or drinks, and you take probiotics which actually degrade histamine like, Lactobacillus plantarum, Bifidobacter types of probiotics. You kill the Blastocystis hominis with various anti-microbial and good probiotics.

Good probiotics also kill bugs so by taking probiotics, you're also killing the bad ones. So prebiotics, probiotics are very, very important here and I would avoid the fermented foods as well, and some of the Lactobacillus fermentum and Lactobacillus bulgaricus are also histamine producing.

So if you're taking a probiotic and actually feeling worse, spin your bottle around, look at the supplement facts, if it says Lactobacillus fermentum and Lactobacillus bulgaricus you should probably not be taking that anymore. And because you can get irritable, anxious and headaches from that.

Niki Gratrix: OK. So with the DAO gene, if that is not functioning properly, that means that it's not breaking down histamine as much.

So was there anything else someone could do to change the expression of that or do they just need to limit all the histamine from the diet.

Dr. Ben Lynch: Yeah. So by fixing the microbiome, by taking the Bifidobacter probiotics is very helpful because that's going to push down the Blastocystis hominis probably. You want to identify infections in your gut. So lab testing, which will get to. You can also take an enzyme called DAO and you can actually buy a DAO enzyme supplement and you can actually take what that gene makes.

And I just was talking to a builder today who came to our house to fix something and he goes Ben I recommended someone take your histamine block. What was their problem? Oh, super itchy skin like hot, horrible, itchy skin. So I gave him the histamine block and he goes it was life changing for him.

So he just shared with me that story today. And the other guy he knew made that recommendation because a builder, another builder was here and he had really red, puffy eyes. I mean, really bad and he goes, well, I need to leave early to go to the doctor. And I said, well, what for? They're just gonna give you steroids. So what's up with your eyes? That looks like a chemical reaction and he goes, "yeah, we actually had some scented soap that was so bad. We got this dove scented soap and I washed my face and I got eczema. I got really puffy eyes. My daughters were affected throughout the house, but we're still struggling." I said, "we'll take this DAO enzyme along with some other vitamins and minerals like B-2 and Copper." Copper is also needed for this particular gene, I believe calcium, too.

And it cleared him up within, he noticed improvement within about an hour and a half, and after a whole day, he was back to normal again.

Niki Gratrix: Brilliant. So this is the power of knowing one's genes. And how they're affecting us.

Dr. Ben Lynch: It removes the guesswork.

Niki Gratrix: Yes, it's like the light goes on and suddenly you've got agency over your own mind. Right?

Dr. Ben Lynch: Yeah.

Niki Gratrix: Again, that's the power of what we're talking about. So let's talk about, do you want to talk just briefly about connections between things and how they affect each other. Or might be fun to talk about some of the types, like if you're your homozygous MTHFR.

Some of the combinations as well as it could have some interesting personality traits coming from that as well.

Dr. Ben Lynch So I had a lady. She was in my genetics Facebook group. She used our report and then she asked a question, "does this genetic stuff really work?" And she goes, I've been struggling with lifelong anxiety and panic attacks. And she showed her genes and I looked at her genes and I commented, "oh, yeah."

Niki Gratrix: There's the explanation.

Dr. Ben Lynch: Yeah. And so what her genes were, she had a slow MTHFR, quite slow. So she was homozygous, meaning she inherited a copy of MTHFR that was slower from her mom and also her dad, so it reduced its performance. And she also inherited a slower COMT gene and she also inherited a slower MAOA gene.

And I look at that, it's like, wow, your neurotransmitters are stuck in your head and you probably don't fall asleep very well, you probably get bad PMS and you're probably really driven type A personality. She goes, oh, my God, how did you know all this?

Niki Gratrix: Magic. Yes, it looks like intuition, it's not its pattern recognition, actually, which is full of intuition but, yeah.

Dr. Ben Lynch: Yeah. And I always equate this to The Matrix in the movie when the guy is staring at the screen and all those things are falling down and he's telling them where to run and do that.

You can look, when you get really good at genetics and you get really interested. First, you get really interested in it, then you get really good at it. You can't get really good at something you're not interested in. So if you're not interested, don't worry about it. But if you get really interested like I am and you start diving into it, it's like The Matrix.

You can read that all those characters coming down and know exactly what's going on. Just like I did with this lady. But what was interesting with her is I didn't recommend a bunch of supplements and I didn't recommend, do this, do that. I evaluated her environment, I evaluated her zip codes and what I learned was.

She lived in a toxic environment her whole life and she, well actually not a whole life for like the last 20, 30 years because she was following her husband around who was in the oil industry. And so they were very exposed to certain chemicals, which increases anxiety. They affect your neurotransmitters, they dirty your genes. And so I told her you need to get an air filter, you need to close your windows and you take glycine and get rid of this, I think it was benzene. And she lived in the town, I mean, the actual town that had the highest benzene levels out of all of them in America.

Niki Gratrix: Amazing. So that's an example of something in the environment. Benzene and chemicals like that, can they basically dirty all the genes?

Dr. Ben Lynch: Well, I would say yes, but they really have an affinity for certain genes. If you dirty one gene, it's going to have an effect. So, like, we have keyboard's in front of us, we have twenty six letters on our alphabet here on our keyboard and if the A key is dirty, that's going to affect how I'm typing all the other letters. So if there's if it's stuck, if there's some honey on it or something, it's going to affect the whole rest of the thing, might slow it down, what have you, because they're working together.

And I also told her to consider riboflavin, you need to do some more meditation, reduce your protein intake in the evening, because if you eat more protein, you're making more tyrosine, you're getting more tyrosine, you're making more dopamine. So have just a salad at night and a light snack and that will allow your neurotransmitters to clear because you have a slower ability to clear your neurotransmitters.

So don't have protein in the evening or just very little and then don't do things that are stimulating at night, don't exercise at night, don't have sex at night, go for a walk or do some calming things in the evening, maybe some yoga or a stretching or something meditative to calm you down.

So once you learn these things like, oh, when I go for exercise or I play soccer in the evening with my team, I come home, I'm all wired, I can't fall asleep for two hours. Well, you might be programmed this way and you need to alter it and I'm programmed that way, not as significantly as she was or is. But if I went and I played soccer, I couldn't fall asleep for a couple hours because I was so wound up.

Niki Gratrix: Yes, it's so interesting. Before we talk about testing, are there any other recommendations that you'd make, which are just generally good things, that would apply across the board like to clean genes, is that relevant?

Dr. Ben Lynch: I always like to talk about something that is very simple and not commonly practiced, and that is avoidance. So I really want people focusing on reducing things in their life, not adding to complexity.

I don't want you taking another supplement, I don't want you to add on exercise, I don't want you adding do this or do that. I want you to remove things from your life.

So as soon as we're done talking with you right now. I want you to just get up, don't watch the next video. Get up and go remove something from your home or from your to do list, or a person who's toxic, or unfriend somebody on your social media who's just constantly hammering you. Or if your boss is constantly asking you to do things on the weekend or late at night, next time they ask you to say, hey you know what, I appreciate that you're really confiding in me and I'm your go to person. But you're really wearing me out in my performance is going to go down and you're gonna lose me as someone to confide in. So you need to find someone else who wants the work and who can handle it for you, so I just want my normal hours for work.

So avoid the load, because remember, genes do work. The less work you have to do, the less work your genes have to do, which means they're going to be more ready when you give them another task. If you overwork yourself, you're overworking your genes, you add onto their jobs. They might fail you and then you get symptoms. So do less, do less.

Niki Gratrix: Okay, that's great. That's a lot of people cheering from that. It's given them guilt free, I can stop doing things. Lovely. So all important, shall we talk about testing and how can people actually start assessing their genes? If you want to share.

Dr. Ben Lynch: Yeah. And before I do that, I just thought of a quote, "the hardest thing to do is nothing."

Niki Gratrix: That's great. Yeah, that's so true.

Dr. Ben Lynch: Right.

Niki Gratrix: Yes. I have to meditate for three hours just to try and do that. That's very true.

Dr. Ben Lynch: And there's a lady in the Facebook group who commented, and she also has a very, very slow COMT. And she goes, "I move to the country. Once I found out that I was programmed for all this panic stuff and anxiety stuff, and I had it my whole life. I moved out of the city. I have an orchard, a mini little orchard, and I'm with my dogs and my cats and some little animals." And she goes, "I'm great. I'm perfect now." So it's, sometimes you have to put in some drastic decisions and I've positioned myself to survive and thrive based upon how I know what I need. I'm surrounded by nature and I can't stand big cities and I need to be outside a lot, I need to look at nature.

So you have to find out what really resonates for you. And so lab testing is very, very useful when done right. And what I also want to say is, is genetic testing isn't necessary. If you read the book, it is going to be more accurate for you to read the book and do the quizzes than it is to do your genetic test. Because genetic tests might say that you have a slower COMT, but in actuality you have a faster one. And if you do lab testing it's also going to show you a faster one. So genetic testing is like, well I have a slower COMT? Yeah, but you're epigenetics or altering, telling your genes what to do, right? So it's not set in stone. So a lot of people say, "your book is so wrong. I took your quiz and I have a slow COMT and did labs and well actually I didn't do labs. But I did the laundry list in your book.

I have a slow COMT but your genetic test is fast." How's that? Do a lab test and find out. Well, what lab test do I do? You can do a salivary hormone test and do a urinary hormone test and do blood hormone tests. And the cool thing is in the appendix, I have a whole thorough appendix in the back just for lab testing.

I have general labs and then I have for each gene I have specific labs, then I talk about which specific labs you would do, what lab to order them from, at least in the USA. And then I say what might be off and what you do about it to correct that lab marker. So for MTHFR you want to look at homocysteine. And if your homocysteine is greater than basically eight, nine micromoles per liter, then it's a bit dirty. There's normal range for homocysteine here in the United States is greater than fifteen.

So that is almost double where I want you. I would love you to be around a seven or eight, six, seven or eight. But the lab is saying anything greater than 15 is bad. No, no, no greater than eight, nine needs some work. And so and I walk you through how to do that. COMT, if you look at your estrogen levels on your hormone tests and you find out that you're catechol estrogens are high, that means you're not able to methylate those estrogens. And those catechol estrogens are very damaging and cancer promoting and that's a great one to look at. And if you catch that, you are really reducing your estrogen type risk of cancer, so it's a beautiful one and hormone testing is great at that.

So do that one for MAOAs you can look at neurotransmitter metabolites. You can look at 5-HIA or 5-HIAA urinary metabolites, but it's not so cut and dry it gets kind of confusing. I walk you through it in the book but I don't want to go in and now I'll just lose you. And then with the DAO that is not really a lab. I mean, you can look at tryptase, you can look at histamines, but histamine isn't really great.

But have some oranges, drink some orange juice, have a glass of wine and if you tolerate it just fine, you're good. If you have some yogurt or kefir and or you react, or you have this orange and you react. Not so good. MTHFR you have a salad, you feel better. You have folic acid, you feel worse. Well, like you said earlier certain things that just dirty all your genes, folic acid will dirty a lot of them. But I like giving you tricks so you don't really need labs, but labs are very informative to see what your progress is.

So if you have, once you get your starting point, so say you do your homocysteine test and it comes back at sixteen. Do some of the things in the book and you get it down to a seven, that's awesome. And COMT, you can see that your catechol estrogens are high, so it's good to

have a measure of improvement, but there's tricks in the book, too, that I provide you to test it, to see if it's dirty or not.

Niki Gratrix: Awesome. So we do also have your tests, we've got a little link below the video where you can actually find out what particular genes you have and whether they have the particular mutations.

But the point I'm taking from what you said is, don't take that test in isolation. If you're going to do that test, take it in combination with looking at all your symptoms, because it's environmental factors also affect how those genes express.

So if I've got a slow gene but it's expressing really well, I might have no symptoms of that and I'm doing great. Right? But we do have that testing, it is your test, which you can talk about a little bit on that as well if you want.

Dr. Ben Lynch: Yeah. So once you understand the basics of the things that we're talking about. If this is resonating with you and you're excited about it, the next thing to do is to get the book Dirty Genes and really sit down and learn this stuff. And then take the quizzes in the book and make some changes.

And *Dirty Genes* is not a book you curl up with your dog and cat and sit by the fireplace and just read it, it's like a to do thing. And a trick I want to give you is if you find something in that book that really resonates with you, it's like, oh, I want to do that.

Just close the book and go do it. Just close it and go and come back after a month. And read some more and learn something and go apply that. It's too information packed for you to get it all in your head, it's just not possible. I mean, it's my life's work. So just read something that resonates with you. Go implement. Put the book down and do it for a while and then you've improved. Pick it up again, like, OK, what can I implement next? And you can figure out what that is from the quizzes.

So the quizzes will really guide you, so you can skip right to the quizzes if you want and then look at them that way. In terms of the genetic testing, let's say you say, OK, well, I'm not going to get the book. I just want to get my genetic test to know exactly what to do. Well, I know there's this promise out there that from genetic testing companies and genic report companies that say, "if you get our genetic report, you will know exactly what to do. We'll tell you what to do and we'll tell you what supplements to take. What foods to eat. What have you." That's a false promise. It's not possible. If it was that possible, I would have not made our report and I would have not, there would be no doctors around. It would be so easy and frankly, the human species would be extinct because we have a lot of redundant pathways, and processes, and mechanisms, and jobs in our body for backup. And we do not understand all the inherent complexities of our human body, which is beautiful and evolved over who knows how long. And we can't whittle it down to just a couple of sentences on a gene and do this, do this. So you have to think of the big picture.

So genetic testing is wonderful, after you work on the book, after you work at the foundations and think of it like this. I love coaching. I love coaching basketball, coaching soccer, I love coaching in general and coaching now. And if I have a kid on my team who has

never played basketball before and I see this all the time, sometimes I'll be the assistant coach because I don't have the desire to be the head coach. And the head coach will go to these kids. It's OK. We're going to learn plays today and I want you to go to the top of the key, and I want you go to the post, and then you pass him the ball, and you drive down the center, and you do a layup and the kids are like, I don't want to post is, I don't know where the key is, I don't want a layup is, I don't even know how to dribble the ball.

So genetic testing is too advanced, start simple, get foundation first, then move to the genetic testing and the genic reports.

Niki Gratrix: That's brilliant. Thank you so much, Dr. Lynch. That was absolutely brilliant. It was clear and I think there's so much value in what we've just talked about, for people. So share where people can find out more about you, your website, any projects you got coming up?

Dr. Ben Lynch: Yeah, so the best thing is again, the book *Dirty Genes*, and it's available almost everywhere in many languages. And then you can find me on Instagram @DrBenLynch, I'm pretty vocal especially nowadays and @DrBenjaminLynch on Facebook. And then the company is www.seekinghealth.com where you can find genetic testing, supplementation and other educational courses as well.

Niki Gratrix: Wonderful. Thank you so much, Dr. Lynch. That was absolutely brilliant. So thank you, thanks, everybody listening, I hope you got what I got out of that, which is a lot. So take care for now and we'll see you in the next episode.