Introduction to Personalized Nutrigenomics

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If that gene is not, if it's not functioning optimally and you need that support and we can bring it in to get it functioning optimally, I mean, there are huge benefits.

All of these ultimately hit, I mean, they hit energy, they hit detox, inflammation, your immune system, mood, cognitive function, gut health, body mass index.

I'm a big believer in giving the body what it needs. The body will do what it needs to do naturally. and Code Complex. This is Doctor Talks, real talk from real doctors on the issues that matter to you most.

Hello, everybody. Welcome to another episode of the Recharged Biomedical Podcast. I'm your host, Dr. Edward Park. And today we're very lucky to be joined by Kim Ressler.

Hi, Kim. Hi there, Dr. Park. How are you? Oh, please call me Dr. Edward. Dr. Parks, my dad. So I heard Kim talk amazingly. And so she has done this thing that I think is really going to benefit people.

It's integrated company. They'll make a supplement personalized just for you. And the company's name is SNP NutriGenomics. So we'll go into the whole origin story.

So yeah, I think it's really exciting. I'm getting my first package of supplements guided personally towards my genetic fingerprints. So that's really exciting.

Yeah, it is exciting that we are in the day and age of personalization for the individual. That's right. So we don't have that much time to talk, but let me just describe what your company is doing.

So they will look at, I think, what's 106 genes? 103. 103. And they have actionable genes, which is 20 what? Two. 22, so people have different variations, different abilities.

So whatever you're lacking, they will use the best of current available nutraceutical solution and put it into your custom powder.

Kim Ressleru2019s Health Journey and Discovery of Genetics

So your powder is not gonna be like my powder, Kim's company, Snip Neutrogenomics will send you one and they have like a machine that'll give you exactly what you need for that batch.

So it's incredibly futuristic, personalized medicine, if you can call it that. but it's aimed at compensating for your genetic differences. Is that vaguely the idea?

Yes, that is vaguely the idea. All right. So how long have you been in business? Well, I've been working with the technology for about seven years. I launched SNP Neutrogenomics in 2022. So we've been in business for three years.

Nice. So before we get into the science, tell us about how you got involved in this, please. Well, how I got involved, you know, I was a mom, a mom to four children, very busy, and suddenly it was after the delivery of, well, it was during my pregnancy with my last, I didn't feel well.

First, I saw something interesting in my blood work, but after the delivery, I never, I didn't feel well. And it was, it was almost like this avalanche.

At first, during my pregnancy, they saw some differences in the blood work. And so they brought me in and they were doing my blood work every month. All right.

Well, after, after the delivery, blood work was normal, but I didn't feel good. It was chronically fatigued. It was terrible sleep. And then the symptoms started stacking, stacking, stacking.

I was looking for answers. I was looking for answers in both Western medicine. I was looking for answers with naturopaths. I worked with the Ayurveda provider.

I tried everything. I was throwing darts is what I was doing. Then working with a naturopath and nobody ever One, unbeknownst to me, I'd gone 11 years.

By the time I discovered, I'd gone 11 years undiagnosed, misdiagnosed. So just different things that happened during this whole time. As I said, it was an avalanche.

It was the fatigue, and then it turned into the terrible sleep, and then the terrible digestion, and the constipation. And then it was perimenopausal in my early four.

Again, it was an avalanche and I was desperately looking for what's the answer. And when I learned that your genetics literally can dictate how you absorb nutrients and that you need things in different formats, I was like, I wonder.

And I wonder if that could be the answer to me or for me. And it was. It's had the stay power. I've been addressing my genetic weaknesses now for seven years.

But as a doctor, you were hypothyroid then, but you felt like the nutrigenomic profile was contributing to that? Well, it wasn't just that. So the way I like to explain actionable genes, so I can't change your eye color, right?

But we have genes that impact, they're actionable and they turn on and off, or they have the propensity to turn on and off, or function optimally or not, if we've got variants on them.

So like me, my vitamin D receptor. I am that individual that cannot, I can be out in the sun as much as I am, and my body cannot take and convert the vitamin D from the sun into the bioactive format in my body.

I have to supplement, period. There are genetics that tell us this, just like you hear the conversation of folic acid versus folate. cannot take and convert folic acid to folate.

It impacts, if you start to look at all these genes that these things impact, it's every body system. So if you're not getting the proper nutrition and absorbing it, we're not what we eat, we're what we absorb and we can utilize, then I mean, it impacts inflammation, it impacts detoxification, it impacts our immune system, it impacts That's why nutrigenomics is so powerful.

How SNP Nutrition Works

It's not the end all be all, but if we've got these weaknesses in our genetic makeup and we know specifically the plant-based nutrition, vitamins, minerals, micronutrients in the right format, in the right dose to give you, wow, that's the foundation of you.

Well, let, let's give people a primer into genetics just so they can understand what we're talking about. Cause the value proposition is understood, but so, you know, it's funny.

You have what I did when I met your company at the, at their conference, I took a blood test and you sent it. Oh,

I'm sorry, cheek swab. So all they need is DNA from the buckle swab.

And so they'll do it in, I guess, like a next generation sequencer or something like that. And they'll figure out how my genes are. So just, I'll give a 40 second recap to people.

So genes are. sequences of four nucleotides that code the protein. So we're mostly 90 something percent similar to each other into chimps. But every once in a while, if you believe in evolution, I just believe in, you know, imperfect copying.

So a letter will get switched. And so the function of that protein might get switched. It might be better, but usually not as good as the wild type. So mom gave you one gene, dad gave you another gene, and for most of our genes, we have two wild types.

When you only have one, you're called heterozygous. When you're two, you're homozygous. If you have a homozygous polymorphism or single nucleotide polymorphism, that's SNP, then you got two bad kidneys, so to speak, and you're in kidney failure.

So, but a lot of people, I heard one of the founders of a genomic company say, oh, I know this, I'm not a doctor, I'm not a scientist, but your genomics stays the same your whole life.

And I said to myself, well, two out of three ain't bad because actually in the problem with having one good gene is when for some reason, that only good gene deletes, then now you're back to a disease state.

So in fact, there are about one error in every three copings of the DNA, but it's very error proof, but not perfect. So throughout the course of history, people have polymorphisms.

So this can lead to disease, but usually it doesn't. So what you're looking at, unlike the dry earwax of 23andMe and all that stuff that's not actionable, You're trying to find stuff that people genuinely need and then give it back to them in their nutritional packing monthly.

That is correct. Okay. All right. So those are genes. Now everyone's up to speed. Hey, for fun, we could talk about my genes. Andy, the expert nurse yesterday told me that I have three bad ones.

I have five heterozygous, which is one good, one slightly different than wild type. But generally, I'm pretty happy with my report. So yay. It said that she was trying to explain to me, we didn't have that much time, but that there were kind of clusters of metabolic ones, you know, for B vitamins, for methylation, yeah, you've got the folate thing.

And then there's inflammatory ones, which we know from the APOE4 and the way that you react to pathogens and inflammation. So tell me what comes to mind when I say to you, you know, like a horoscope, okay, Cychrome P450-11b2.

FUT2 and NTRR. Those are my three bad ones. What would you tell me? Those are your three reds? Yeah. Well, I mean, talking friend to friend, ultimately, that CYP11B2 gene has to do with, it's a healthy blood pressure gene, but it also has to do, it's part of the P54 family.

So without getting too technical, it's truly how your body balances fluid, the fluids, right, in your body. Think fluid balance, adrenals, right? I'm also red on that one.

I'm homozygous on that one. Literally for about a year and a half, I worked with a naturopath and she's like, you've got adrenal gland fatigue.

Understanding Actionable Genes and Genetic Variants

Anyway, I hear it all the time. That gene, so that's a heart. It comes in the heart panel, right? So then you also said your FUT2. Yeah. FUT2 is gut-brain connection.

It's vitamin B12 in the right format. But you need the co-factors. So we see people that have markers on that gene, their guts can tend to get in dysbiosis easier.

Ah, okay. And ATRR? Homo assisting healthy heart. That's another heart marker. Yeah. And you want to keep that inflammation down. It's the right proper B vitamins, et cetera.

So you sound, you've got some similar markers to me. Okay. So anyway, the ones that are heterozygous were C-reactive protein, FTO, GSTP1 and PON1 and VDRAPA1.

I'm not going to worry about heterozygous. Okay. But, but those are some detox pathways. Your GSTP-1, your master glutathione, your PON-1 is how you, it ultimately encodes of how you detox the bad cholesterol.

So, you know, in all in all, I mean, you're still, you would still, you're going to get support based on your genetic variant there. Sure. So I was over at Asprey's house in November, Dave Asprey doing a podcast.

And he lets the show guest his pantry and there's like 300 or 500 supplements there. So a lot of people are, like you said, in a place where they're throwing darts.

They're not sure what's working. So, but this is all science based. This is not whack-a-doodle horoscope stuff. This is like what your genes are. And by and large, this is your destiny to a small extent.

Probably the attributable disease risk to most of these things is less than 10%. But it's something that is very exciting. You usually don't have this animal and personalized medicine.

You're treated like everybody else. And so you have a way to kind of tip the scales and supplement back. So why did you choose those 21 actionable or 22 actionable genes?

Because they are very commonly found in the human population with genetic variants. They impact us. As you said, I'm not going after diseased genes. I'm going after genes that impact adult onset disease.

So if you think about it, cholesterol, heart health, body's ability to detox, I'm looking at things that science has proven, just like if you look at the MTHFR gene and you look at what the symptoms are of having that, if that gene is not, if it's not functioning optimally and you need that support, and we can bring it in to get it functioning optimally, I mean, there are huge benefits.

All of these ultimately hit, I mean, they hit energy, they hit detox, inflammation, your immune system, mood, cognitive function, gut health, body mass index.

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But just as you said, you opened up that door and it's like, oh my gosh, how much stuff can one person take? We age because our telomeres shorten and our stem cells deplete.

But what if we could support both? I've been taking TA65 for 17 years. It's the only supplement I trust to support better mood, better sleep, and exercise recovery.

And at age 57, I don't have any gray hair and I don't need reading glasses. TA65 is available now. Go to rechargebiomedical.com slash TA-65 and enter promo code RECHARGE10 to save 10% off.

This is somebody's foundational formula. From here, if you wanted to add in, oh, you know, I do have a lot of heart markers. And for me, I need a really good complex omega.

My product is either powder or veggie cap. I'm not going to be the most complex omega. Let me just back it up for people who are lay people. So in Mexico, we get maybe a couple hours of nutrition.

It's mainly like nutritional deficits that cause disease. That's the definition of a vitamin. But there are many other pathways that are important to the body's functioning.

And this kind of education is not really mainstream in orthodox medicine. So we leave it to the alternate people and to the people like yourself to understand and interpret.

And so, you know, I had a friend who is a karaoke buddy and she was a nutritional supplement formulator. And she told me, yeah, for the last almost 20 years, people have known that vitamin D, which people think is good for you.

is can be involved with pathological calcification if it's not given with K2. So again, knowledge, new knowledge, better knowledge, disseminates very slowly through the orthodoxy, if ever at all.

So, you know, the people who are going to provide you the cutting edge personalized genomics are not going to be your doctor in general. I mean, if you have a very known genetic disorder, then you go through geneticists, that's a little different, but most doctors don't even understand nutrition.

But let's talk about methyl tetrahydrofolate reductase, because I did have a family in Dallas and they had some, half of them had the gene that was deleted, right?

So they weren't detoxifying as well. And so they had terrible long COVID and the other half did not. So there can be that sort of reaction to genetic, I mean, inflammatory insults.

And I've heard many anecdotes of parents that thought after the MMR ended up having problems with their kids.

MTHFR, Detox, and Childhood Health

So perhaps that is one of the missing links in terms of vaccine complications is people with MTFR deficiencies. What do you think? I would absolutely agree with you.

This is one thing that's driving me and the passion of this entire… We are in the day and age and we have enough science and we understand and we know.

Why is it not being implemented? I believe if you knew your genetics, if you were a young parent and you knew your genetics or you knew your child's genetics, You may choose to do an alternative vaccine schedule if you knew your child's genetics, just like you just said, that MTHFR.

It's not just the MTHFR, but if you understood that and you understood that that child may struggle with that detox of that, you're going to do something different.

Just like that MTHFR, if you Google it, anxiety, depression, schizophrenia, bipolar, women in childbearing years can't get, okay, the list goes on and on.

I don't need to name it all. If you thought about that, this is how I learned about genetics. One of my best friends called me up. She told me her son had been diagnosed with ADHD.

She refused to put him on medication. She thought it was a gene. What gene was it? It was the MTHFR. They addressed the MTHFR. They looked at some of his other genetics, and they saw that gluten could possibly cause a problem.

Yep, we have a gene that tells us that gluten could possibly cause us more inflammation. They took the child off of gluten. They addressed as in THFR, night and day different.

The kid didn't need ADHD. This is why, because we know that ADHD leads to anxiety, leads to depression, et cetera. I've made it my mission to truly educate people for better health outcomes of understanding the research is there.

We do it simple, but people need to understand their genetics, Again, our lives, your genetics aren't your destiny, but understanding where your strengths and weaknesses are tells you where to put your time, energy, focus, and get to a better, like I said, a better health.

But for some people, what's good for the goose is not good for the gander. Some supplements might really not work with them. So you need to have a little personal knowledge.

And unfortunately, 23andMe, other than finding missing step siblings, It's not that useful for actionable items. So you've taken it to another. Or the propensity.

I think there's one. Or unibrow. Yeah, the unibrow. I know. So most of this stuff, you already know if you have dry earwax or unibrow, but you know, it is funny stories I've heard about.

brothers. But you know, people don't really understand it. My own sister was like, she called me sheepishly. It's like, why are we only 25%? And I had to explain to her high school genetics and meiosis, you know, because you only share 25% of genes with your sibs because it comes from four grandparents.

Anyway, so people can go to SNP Nutritionomics and they can get us in. Oh, I'm sorry. SNP Nutrition. It's SNIPNutrition.com. Yeah, Nutritionomics is too hard to spell.

It's a general term. Yeah, I'm sorry. So then they'll swab their cheeks, send it in and within six or eight weeks, they'll have a personalized report and a personalized meeting over zoom with your expert.

And, and they'll send you a supplement. Now my supplement I might not take because I have a tropical fruit allergy. So, we'll see. My friend who has an exosome company says if you take the exosomes, and I'm not recommending this for anyone, but if you take them while you're exposed to the allergen, it can desensitize.

So, my… I was going to say, that's one thing that we've seen that's really been… We do microdosing in our supplement, and we've seen, as long as it's not anaphylactic, but we have seen multiple people that will go from, we had a lady that literally was eating a clean cooked chicken breast and seen broccoli.

That's the only thing she could eat. Now she can eat everything, everything except for dairy and sugar. She can eat anything. It's like that's life changing.

And that was the way her life was for 25 years. Yeah, I know. People, they become semi-expert in their little area of nutritional aberration. And then they do these, you know, elimination diets.

It can be a full-time job in identity. It's kind of a drag. You know, my son just is staying with me. He bakes some sourdough. We're looking at the gluten strands and the fact that I can just gobble that down and not have any problem is great.

But I know a lot of people live and die by their, their dietary choices and it can be life-changing, but wouldn't it be great to be an omnivore? So as I'm scanning the folder that you guys sent me, I'm looking at, boy, it's about 15 or 16 reports.

So people will get a summary report and they'll go through all 103 genes or whatever. I don't know how you infer this other stuff, healthy, cognitive, gut, immune, inflammatory, heart.

But yeah, I guess it's all based off the AI understanding of what the genes do. Those weren't done by AI. Those were done by humans. And yeah, we haven't used AI.

Supplement Personalization, Absorption, and Tracking Results

The code report stands for cellular optimization of DNA expression. Anyway, the code report lines out and mirrors and matches what your, if you see, what your code complex would be.

Nice. You're trying to set a little optimized robots here. Yeah. I'm looking through my code report and there's the red X and the green check and the yellow, whatever that is.

So, you know, these are real things and there's other companies in this space that do this, but you have a quite a amazing array of the greatest hits here.

So that's basically the value proposition. People can get a very affordable supplement. I used to make supplements and it's a monthly subscription, but unlike the Columbia Record House, you're not going to want to return it.

And you know, who knows? If you feel good, you might think, wow, this was worth it. But it is kind of an interesting thing. People are very obsessed with their health as they should be.

And to know what exactly you're missing is a little better than taking your GNC multivitamin with iron. I think it's probably a little more precise. Do you have any questions about how it's absorbed?

Or I guess you can get powder or capsules. I mean, nothing is absorbed perfectly. You know, you have the different enzymes. You have the little, you know, the gut will swallow little bits.

But is this all very deliverable into the bloodstream and then into the cells? Or what's just all of that? Well, what we've had, what we've seen a lot of people do is just like I was sharing with you right before we launched is regular standard common blood work and neutral evals, a CMP, CBC.

They'll do it before and then after and watch and watch with their nutrition, you know. What it what it changes so I think that in Western medicine a lot of times we just look at blood work We don't always listen to the symptoms remember that was me for 11 years I have symptoms, but my blood work was looking normal.

So let's not look any further. It must be in your mind anyway, so I think you've got to track symptoms. How are you sleeping? What's your energy like when you wake up?

Are you, are you feel refreshed? What's your digestion? I mean, these are all, those are just regular standard, like symptom trackers. And then you can also match and pair it with your blood work.

I mean, we looked the whole code panel. which we formulate on, literally lines up with the CMV, the CBC, C-reactive protein, vitamin D serum levels, and there's several other different things that it lines up with.

But again, you're going to understand where your strengths and weaknesses are so that, I mean, I just think that we have the ability to get ahead of things.

No, I mean, it makes intuitive sense and you've done the homework. You've been in this space for seven years. You're not doing this out of your, you know, your guest house.

You have alignment with a big, you know, GMP manufacturing facility. So it's all good. So the value proposition is that for, you know, a little over $500, they can swab and get their full, you know, consult for their genetic abnormalities.

If they want to go their own way, they can. But at least they'll know, they'll be armed with that knowledge of what their genetic predilection is. And if they want to subscribe, it's like a buck 79. And instead of like going to the GNC or trying hit or miss, they know exactly what the optimal nutritional supplements will be and it'll be delivered to their door once a month.

Right. And that's, I think, probably a good thing for a lot of busy people. Yeah. Well, it's actually on subscription. It's $159 a month. Oh, fabulous.

Fabulous. All right. Well, congratulations. I think you're doing great work. Any great anecdotes you want to share with us before we go off? I know you didn't want to talk about that kid with the ASD, but so you have, I'm sure a lot

of testimonials, but you know, the reason I kind of came to this podcast, I went last year to a seminar, a three day seminar about childhood diseases.

And stuff kept on coming up, you know, people, a lot of the moms were lecturing were actually had kids with autism or tick disorders. And so the steam kept on coming up was off the gut biome, which relates to the metabolic, which relates to the genetics, which then relates to, you know, all the other stuff.

So I think that there's ways that we can help. And so have you seen that a lot, that testimonials of people after a couple of weeks having behavioral changes?

We actually have a mother, one of the providers that we've partnered with has a patient and the son is about 28, he's 28 years old, autistic, low, not high functioning, not really verbal, single words.

In two and a half weeks on the product, he started speaking full sentences to his mother. Yeah.

Testimonials and Closing Remarks

You know, she says his stance his posture is changed. He's even humming now She's I mean I have to put myself and I get chills and as the mother is describing This child who's never really talked a lot to her and now she's having full convert full sentence sentences with him and she's like I mean imagine being that parent and knowing that you would be taking care of this child forever, but now she's looking at going, what's next for him?

Is there something, you know, is there something more? But then, and then she shared his blood work, his, uh, like I said, the NutriEval blood work and the before and after two and a half, he'd been on the product two and a half, three months.

And it's just wildly drastically different. I mean, I don't know how much, you know, money you make or whatever, but just aside from all that, just to be able to even impact the lives of one family like that.

It's amazing. So well, you know what that is? She will see with us. I want to make this technology. Genetic mapping and nutrigenomics has been around for a long time.

Because usually you're rich and you're famous, spending thousands of dollars to get genetically mapped, then getting on 50, 60, 70 supplements. That can cause liver toxicity.

That can cause problems. I want to make this technology available to the masses. And again, I will always say it is not the end all be all. If you have a specific condition, you may have to do something else additional.

Just like my 17-year-old daughter, she's a high achieving, high stressing a junior in high school prepping for college. She's got that FUT2 gene. We really have to work on her gut health.

In addition, over and above what I can do with the customized, I put her on a couple of very specific things to help with the heel and seal of the gut and the inflammation in her gut.

I think that a lot of people who rely on their doctors, I mean, thank God for the COVID thing, since now people don't necessarily trust their doctors.

But I think this is the medicine of the future. So just be like, well, why didn't we do this the whole time? A lot of it's because we didn't have the technology.

A lot of it's because the authorities weren't slow adopters. But yeah, when you can find those outliers for whom a nutritional deficit and solution is life-changing, that's really amazing.

And so, you know, such a service to mankind. So thanks, Kim. Appreciate you doing all this. No, thank you. It's been great to sit and chat. Yeah. Yeah.

All right. So again, it's not NutriGenois, it's SNIP Nutrition, S-N-I-P Nutrition.com. Correct. And I didn't realize you guys had just launched. I thought you'd been, okay.

Three years ago. I mean, July 22. Okay. Yeah. So you've been, you've got kick the tires and everything's good. Okay. Well, thank you so much for being, and I hope people order a ton of stuff.

And even if they don't buy your supplement club, you know, they're personalized and I don't know why they wouldn't, at least they'll be able to buy what they need and without kind of just guessing.

Right. That's correct. All right. Cool. All right. Have a great day. Thank you. Thank you. Thank you for tuning into Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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