

## Personalized Parenting: How Genetics is about to change how you raise your children

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The way we parent today is obsolete. We take all these trial and error one-size-fits-all options and try and apply them to our kids, but we know our kids are all different. They're individual, they're not all the same, yet they're all doing the same thing. So I would argue that if we can get personalized, we would be doing a much better job, but how do we get personalized? Inside of our human cells there's an instruction manual, a blueprint, literal human blueprint that tells each and every cell what to do. If you can read that blueprint, you then understand how this child is wired. Imagine being handed an instruction manual for your kid and saying, 'Here's what's going on.' When it comes to development, athletics, academics, when it comes to what they should eat, how they behave, all of this stuff can be decoded, especially since yesterday we just got the news that the human genome is now complete.

We know everything about the map. We just need to read it. I'll tell you about my own kids. A common problem we have, homework, discipline. Everybody has this problem. My two sons, I had the same problem with them, but for different reasons. And the usual suspects of you're not disciplined, you're not trying hard enough, you don't care, this is how you start when it comes to get your homework done, and I realized I have their DNA. We run a research company. We look at genetics for the purpose of health, but we can dive a little deeper. I said, what's going on here, 'cause they're both doing this, but for different reasons? So the first one, the elder one. When I looked at his genetics, I realized that his mood and behavior chemicals, the dopamine which drives pleasure and reward, this important chemical that molds who you are as a person and

how you strive for reward, which is so important when you're doing homework to achieve that reward, he had the maximum density of the receptor, DRD2 is the name of the gene, that allows you to experience dopamine. So he was constantly pleased. It was very easy for him to experience pleasure. He also had a very slow version of the enzyme that clears the dopamine with. So not only was it easy for him to experience pleasure, it would last a long time. So he would get lost in it. What did this mean and how did it translate to his work? He didn't care. He was always pleased. When it came to here's your list of five things to do, we'd look at the list and he'd go back to his video games 'cause he felt satisfied already.

There was no need for reward. But the thing that he actually enjoyed that gave him that elevated amount of pleasure when he got into it, because his clearance was slow, he would get lost in it and binge. And now all of a sudden you have this child for whom you don't do your homework, it's no, there's a certain way he needed to do it. Meaning that he needed to derive pleasure from the work that he was getting or that he was doing, and then he would do a much better job than anyone else. And this is what happened in his work. We started to see specific projects, pushing him towards what he actually was good at and what he wanted to do, that he would Excel. But we still know that the things that he is not interested in, we have to focus on and support him in that work.

And it goes from, you don't do it, to you do 80% really, really well now and there's 20% where we need to focus on, and that's where you need to get to. Then I look at my other son. Completely different problem. Daily, one day after another, after another, after another, it was a crisis. He was a little younger at the time. He was about five years old, just getting started. It was a complete crisis every time. Drama queen, crying on the floor, didn't wanna do it. So again, look back at his genetics and trying to understand what's actually going on here 'cause it didn't make sense that this was every day. There was never a mood to get it done. And what I realized was this, it wasn't actually a mood and behavior issue. When I looked at his metabolism of certain macro and micronutrients, he didn't metabolize starch as well. And there's a specific gene that will tell you how well you convert starch, rice, pasta, bread, into glucose, which is the fuel your body then

needs to create energy. He also had a really bad insulin response. So the hormone that regulates your glucose levels and keeps you at where you're supposed to be didn't do that so well. His homework time was right after dinner daily. That's when the family would sit down, open up the books, and get to work. Being of South Asian ancestry, there was rice, there was naan, a nice form of bread, the constant overload of this one thing that he wasn't capable of metabolizing which would cause him to crash right before homework time. There was a tweak done there and then all of a sudden there was no problem. So we went from, why don't they care? Why aren't they interested? Why aren't they motivated? They don't have a good attitude.

To there was one dial that needed to be turned up or down because we were able to personalize what they needed, not the one-size-fits-all answer. So the thing that really got me thinking about all this is something that happened to my niece. So, I got a call from my mother. My mother and my niece and my sister lived together. And she said, "It seems like your niece is having an anxiety attack. Can you come over here? We need some help." So I got over there and as any concerned parent/uncle would do, I called a pediatrician that was a friend and I said, I need your advice. And he said, "What you're talking about sounds like an anxiety attack. And just let it pass, it sounds like it's over. It's typical for a young teenage girl to have these types of issues." Okay. Some weeks go by and it happens again.

My mother calls me and says, "This time she actually fell over, so you need to get over because we need to take her to an emergency room. It seems like she may have hurt herself or even broken her leg." So I get over there, and like my mother said, she couldn't walk. So I had to pick her up, throw her in the car, take her to the emergency room, called by same pediatrician friend and said, please get me in quickly 'cause she's in a lot of pain. So we spent the entire day there. It was a good six or seven hours. And we were told, "If it happens again let us know." There was tests, there was questions, there were scans, there was blood work, and that was the answer. And at that point I knew what that meant. That meant, "If it happens again, we're gonna diagnose her with an anxiety issue and we're gonna give you a pill." So again, taking a step back, I said, this is not what I want for my family. I'm gonna look at her genetics. Now, silly me, I didn't get the job

done because I was busy with my business. So another few weeks go by and my mother calls me again. She said, "This time there's a note on the table and your niece has run away from home." Completely out of character the sweetest, most innocent girl would never do this. There's nothing precursor to this that you would think that this is gonna be the result. All of a sudden she's gone. So I said to my mom, don't realize, and I said to my sister, don't worry about this, she's there. She's just hiding somewhere. There's something going on, we're gonna figure it out. So I get to my mom's building, she lives in an apartment building, and my niece is downstairs. As we thought, she's not gonna go very far. I said, what are you doing? Is it social media? Is it a bully? What's actually happening.

She said, "I don't know. I just needed to get out of there." And that's when I realized she was actually running away from herself, this feeling, She didn't even know what the feeling was about. She just needed to be out of that space and try something new. So I took her in the car, we drove around, and we started to talk about it. And then I remembered I was supposed to look at her genetics, and I did. And the thing that I saw was her hormone levels, when you talk about what the pediatrician told me, this is typical for young teenage women. Why? Why is it that young teenage women keep talking about anxiety issues and depression issues and mood and behavior problems that don't seem to be resolved outside of taking a pill? Well, in the monthly cycle, the female menstrual cycle, it's not a straight line.

There's a circadian rhythm to how the hormones flow. There's highs and lows for both testosterone and estrogen. And what I saw on my niece that low right before the cycle starts, she had this deep valley where people just sort of have a speed bump. Genetically, we can determine this. How you actually produce hormones. To what degree, to what speed? What happens with those hormones? And so now I go a step further and I ask my mom, can you tell me about her menstrual cycle? Can you tell me what was going on in those days? And she said, "You know what? You're right. Every time this happened, her cycle is just about to start," which was during that valley that I was talking about. So I thought, okay, why did this happen now? Because she's 13 1/2 it's been going on for some time, this happened three times now. So we started to look at

her environment, because remember, genetics is what you're capable of, but then you have to consider the context. Just like my two sons, they were capable of doing great work if they had the right context. If I was giving my son the pleasure he needed, he would Excel and do good work. If I wasn't, he would fail. So same thing with my niece. Why was this happening now? Well, that was happening now because in winter 2022 in Toronto where we live, because COVID was at peak, she was being homeschooled. She was indoors for several months. Literally hadn't been outside. What happens? Zero vitamin D. That doesn't sound important, vitamin D, I don't even take vitamin D. It's just a vitamin that I may decide one day, but no. Of the 22,000 genes in your body, 2000 require vitamin D to function.

So now imagine if 10% of your biochemistry is dependent on this one micronutrient and you don't have it 'cause you're not going outside and there's zero sun. It's already winter, so there's already a drag in lack, but you're not even going outside. Her genetics behind vitamin D metabolism makes it even worse. When you go to the doctor, you get a blood test and they'll tell you your vitamin D levels are X, whatever they are. That's where it starts. The metabolization, there's three genes involved. One, to take it out of the sun, get it into the blood where you use it, which is what we measure medically, but that's not where it stops. There's a whole other gene that transports it to the cell where it's actually used, and you may not do that so well. There's a whole other gene that then binds it at the cell where you're actually utilizing it.

And if you're not doing those two other things well, you can have as much as you want in the blood, but you're not using it. And now again, you have this scenario where 10% of your human biochemistry is dependent on this one micronutrient and you don't have enough, and that's what happened to her. So all of a sudden that hormone issue, which was there and buzzing, and you see that in certain times of the month the mood of a woman will change. For her it got highly exaggerated. Now, why did it lead to anxiety? Well, unlike my son who had the maximum dopamine expression, she had the absolute minimum. So what did that look like? When it came to pleasure and reward, it was very difficult for her to experience. So not only was she in this place where she wasn't seeing her friends, she wasn't getting the vitamin D, it was this week of

the month where the hormone levels are low, she also was getting zero pleasure. And that was the trigger. The combination of these three things together took us away from, "Your niece has an anxiety issue, let's find the pill," to here's the biochemistry behind how this child is suffering, and what you exactly need to do. And guess what, since that day, since this code was cracked, she has not had the issue once, why? 'Cause we knew exactly what to do. We knew what supplements to give her, which food she needed to eat, what levels of vitamin D she needed. Has not happened once since then. This translates into so many other health issues that our kids experience. And I would argue that the most important place where you can apply this type of thinking is in health.

If you think about cardiovascular diseases, cancers, if you think about something as prevalent as autism, which we're gonna talk about. Imagine being able to arm your child with seeing what's coming down the road and preventing it. Or if they're in something right now, like my niece, reversing it. So let's talk about something a little more controversial, the one that I mentioned, autism. There's a huge argument that is consistent behind the vaccine made, and I'm not talking about a COVID vaccine, I'm talking about that regular vaccine that young children get before they go to school. There's an argument in the autism community. The parents say the autism came from the vaccine.

That's what's being said. Pharmaceutical are absolutely correct, that all the tests around safety and efficacy around the active molecules in what's delivered there's proven to be no problem. There's proven to be no side effect. There's no direct correlation from here's this ingredient, to you now have autism. The parents are also right, that, "That's the day my kid changed. Went to the doctor, everything was fine. They no longer behaved the way they used to behave the day before. What happened?" There's key genes in your body that help you detoxify. We all know that when you drink alcohol, you send it to the liver to metabolize and you get rid of it. This is why if you drink too much you can get alcohol, fatty liver syndrome. Those genes have a unique attribute to them where unlike a variation or a snip as they're called, a mutation in a gene, a letter is off and so all of a sudden it's not functioning the same, you can be absolutely missing it.

It's called a copy number variation, a type of variation where you're literally, a page of a human instruction manual is torn out. Some of these kids have that problem. The key detox genes that are required to clear heavy metals, chemicals, mold, other things they may be exposed to, they don't have the genes to get rid of that stuff. Once you've cleared things, the thinking is that you're healthy. But if you haven't like these kids, well, then there's another process called methylation, which fights the inflammation caused by toxic insults. Some kids don't do that so well. Now what's going on is in that injection, yes, the active molecules are safe and tested to be proven so. Meanwhile, there's a serum, an adjunct, that has heavy metals in it in order to deliver that active molecule.

And what happens is, you used to have one in 10,000 kids was I autistic, if you go back a few generations ago, you then had one in 500, today it's one in 60. The kids haven't changed. Our DNA is 250,000 years, years old. We're the same as people from a quarter million years ago. What's changed is what we now have to cope with. Our environmental exposures, the stress levels, the social media levels, the poor sleep levels. We have changed in our habits. We haven't changed as people. And so there are some kids that were not designed to take in a shot or several shots of heavy metals into their bloodstream that they cannot detoxify because they're missing it in their genetic code, that they cannot fight the inflammation for because they're missing it in their genetic code, and for which they then experience neurological inflammation because that's where they're the most underdeveloped and susceptible.

And this is why when you look at most chronic conditions, you're not born with them. You're not born with diabetes, hypertension, cholesterol problems, breast cancer. They happen later in life, 'cause it takes that many years of making the wrong choices, mismatched your genetic legacy to have a problem. Now imagine if you have access to this. Imagine if you could dip into your child's instruction manual and give them the gift of better health. Give them the gift of understanding their mood and behavior. Give them the gift of knowing exactly what they need to eat. We're reading all these blogs and articles and watching YouTube videos saying, "I'm gonna try the vegan diet. I'm gonna try the paleo diet. I'm gonna try being on keto." There's specific genes that

actually metabolize or produce the enzyme, sorry, that help you metabolize beans, lentils, legumes, chickpeas. If you don't do that so well, you're not gonna do well as a vegan. Meanwhile, there's some people that do really well there and you wonder why I don't feel good. I have migraines. I have eczema. My gut doesn't feel right. These are the things our kids complain about, because the habits that we provided them are mismatched to their genetic legacy. Some people re feel really good on a keto diet. Let's go on a high fat diet. You're gonna get into ketosis and your brain will feel sharp and you're gonna burn fat.

What if your genes from metabolizing fats are suboptimal and you have the bad version? Then all of a sudden what was supposed to be great experience, it might start off well. You're gonna burn fat in the beginning, becomes highly over underwhelming. So the key to personalization is understanding the blueprint. It's first starting at asking the right questions. Not, what do I do for kids? What do I do for my kid? What career choice? What sport choice? How should they study? What do I feed them? When it comes to puberty what should I be worried about that can see in the future what's coming and prepare for it now so that they have a better time? When it comes to how they work with their peers, when it comes to something as simple as discipline.

There're some kids when you yell at them and scream, for two days they can't look at you straight. And there're some kids that have no problem and they're right back to doing the thing you told 'em not to do five minutes ago, 'cause the genetics of being able to imprint trauma are different for different people. So for this, I would argue that, again, any parent that wants to do the best for their child, the answers aren't one-size-fits-all, the answers aren't trial and error, the answers are personalization. And the beauty of everything that I'm saying today, it is now available and there is nothing preventing you from accessing it.