## Therapeutic Diets & BioIndividual Nutrition for ADHD & Autism

Julie Matthews, CNC



**Rebekah Kelley:** Welcome to the Humanized podcast, all about personalizing your health. I'm your host, Rebekah Kelley, and I'm so excited to have a great guest today, Julie Matthews. Our topic is going to be Therapeutic Diets and BioIndividual Nutrition for ADHD and Autism. And before I introduce Julie, I want to remind everyone to subscribe, to get all of our variety of casts in audio, video and transcription at HumanizedHealth.com. I'd also like to thank our lead sponsor, Village Green Apothecary at MyVillageGreen.com.

A little bit about Julie Matthews – she is a certified nutrition consultant and published researcher specializing in complex, neurological, digestive and immune conditions, most notably autism. She is the author of the award-winning book, *Nourishing Hope for Autism* and co-author of a study, "Proving the efficacy of nutrition and dietary intervention for autism," published in the peer reviewed journal *Nutrients*. Julie's approach is based on personalized nutrition needs of each person and stems from her 20 years of clinical nutrition experience and research. Her work with a wide range of disorders for adults and children improves health and healing. Julie has a private nutrition practice in San Francisco, California, and supports families and clinicians from around the world with her nutrition learning tools and professional training courses. You can visit NourishingHope.com and BioIndividualNutrition.com to find out more.

Welcome, Julie, it's so great to have you.

Julie Matthews: Thank you, Rebekah. I'm excited for our conversation today.

**Rebekah Kelley:** So I just want to jump right in and learn more, and I would like to know of course, right away, how do food and nutrition impact ADHD and autism?

Julie Matthews: Well, when we look at, I think the best place to start is what is underlying ADHD and autism. Cause a lot of times we hear food and diet make no difference for these conditions. And that's absolutely not true. And if we understand what's going on underneath the system, it'll make a lot more sense.

So ADHD and autism are neurological conditions. They're not psychological disorders, they are neurological conditions where the body, the biochemistry of the body affects the brain. I like to think about it as whole body disorders, where, when we understand what's happening with the biochemistry of the whole body, we can influence what's happening in the brain. So they're not these kind of behavioral disorders necessarily, or these mysterious brain conditions, they're really whole body conditions.

And so when we look at it that way, we know that their digestion is affected. We know that their microbiome is different, and often in a negative way that influences their brain. Their immune system can be either weak in certain ways or hyper-reactive in certain ways. And when we look at that, there are things that we can do by addressing food and nutrients to influence and improve their learning, their behavior, and their overall health, as well.

Rebekah Kelley: Wow. So, what is bio-individual nutrition and how does it help?

Julie Matthews: So bio-individual nutrition is a term that I use for the type of nutrition that I practice, and it's really personalized nutrition. And I developed it from really decades of working with families with autism and ADHD, but also related disorders. A lot of family members have depression or anxiety, or auto-immune conditions, or digestive disorders. And I realized as I was working with the child with autism, let's say, it started to help the mother that was 70 pounds overweight, or the father that had an autoimmune condition, or the uncle or sibling who had an auto-immune or some other type of digestive issue, or whatever it might be.

And so really, it's understanding that each of us are unique and we all have unique dietary and nutritional needs. And so, there are interesting studies done looking at this and seeing that even in identical twins, the way we processed foods is only about 50% influenced by our genes and then 50% influenced by our environment, and factors like sleep and stress and things.

So there's a couple things there. One, if you're in the same family and you have similar genetics, you're going to find that similar diets probably do help. But even within that, you might find that even individual family members might need slight tweaks or changes to their diet, and certainly, what helps one child with autism is going to be very different than the diet that helps another child with autism. And so I discovered as I was working with families that this, the diet of the day, I could tell you from the beginning, it was first, it was gluten-free and dairy-free, and then it was a low salicylate diet, and then it was, maybe a grain-free diet, like a specific carbohydrate diet.

Now these are all great diets because they help certain people significantly, based on what was going on biochemically for them. But what would help one client really turned out to be maybe even not only not helpful, but maybe a problem for somebody else. And they needed a different approach, but they would go on to, let's say some of these social media forums and the advocates of the diet would say, well, you're just not doing it good enough. You're not doing it hard enough. You're not doing it right. You need to do it more strictly. And then they would try even harder and cause major stress in the process. But also, it wasn't the right diet for them, so they would be getting NOT better. Sometimes they would be getting worse.

So I started to realize, after about 20 years of working with families, what symptoms are common with which food compound, which underlying biochemistry was common and affected the ability to process certain food compounds, and which diets did different people need. And I created this body of knowledge that I now refer to as the practice of BioIndividual Nutrition.

**Rebekah Kelley:** Love that. Perfect for our online podcast. So what is good nutrition for ADHD and autism? Obviously, there's going to be some individual differences. But is there like a base?

Julie Matthews: Absolutely. We know from decades of research and study, and also parents and doctors experienced that, for example, artificial ingredients are really a factor in ADHD. We know from studies, even more recent studies done in, I think, 2015 or so, recent studies looking at artificial additives causing hyperactivity in neuro-typical children. So not even children with ADHD that might have an underlying biochemistry or propensity for a reaction, but finding that just your average child will react and get hyperactive from artificial dyes and additives.

So we know that to be a factor. And we know that people with ADHD and autism have underlying biochemistry, such as poor sulfation, and methylation and some other processes, transsulfuration, that affect their ability to process these additives even further. So they're more likely, in addition, to maybe get a little hyperactive, maybe get aggression, irritability, attention issues, all sorts of different things.

So getting out the junk food, the additives, MSG, those types of things, are really important. We also know that pesticides are very commonly a problem. We've seen studies on pregnant women that get exposed to pesticides have higher rates of children with ADHD and autism. And we know pesticides are a neurotoxin. And so if they're going to kill the bug quickly, but they're going to damage our neurological system still, just more slowly. So we want to avoid things like that.

We want to get good, healthy nutrient-dense foods, no matter who we are. I mean, we know that from babies to adults, we want to have healthy food that's going to be rich in vitamins and nutrients.

So those are some of the things that I think apply to everybody. Getting some good quality protein in the diet. Those are all going to be good factors. And then from there, people can go and individualize their diet, depending on what they do.

**Rebekah Kelley:** So what, kind of when it gets to being like a therapeutic diet, are there things that can be done to help improve learning, mood, behavior? And if so, how do you personalize a diet for someone? How do you go about that process of figuring out what's really going to be helpful?

Julie Matthews: Well, that's a really good question. I think there's a couple things we can look at. Let me start with actually, just some of the basics that anybody might look at.

We did a study that was published in the *Journal of Nutrients* back in 2017, looking at what factors influenced and improved people with autism. And so we looked at a multivitamin-

mineral formula and essential fatty acid blend with some fish oil and some other fatty acids, looking at digestive enzymes, a few other nutrients, and a healthy gluten-free, dairy-free and soy-free diet. And we found not only improvements in autism symptoms, digestive symptoms, we found that they improved their ADHD symptoms, their attention, their focus, their mood. We found really amazing changes, including to almost seven points in nonverbal IQ and four and a half times the developmental age improvement.

So let's just start with some of the kinds of things we found, generally speaking. And so this was for autism, but we found improvements in attention, focus, cognitive improvements, anxiety, depression. In these individuals with autism, these similar things can also be found in all children and children with ADHD, as well.

So some things that people can do – getting good nutrients in their diet or getting a multivitamin-mineral formula that's high quality is really a benefit. Getting out the artificial stuff, cause we look at a healthy, gluten-free, dairy-free and soy-free diet. Then of course, removing or looking at removing, gluten, dairy and soy can be really powerful, as well. We know that they're inflammatory to the gut. We know that people with ADHD and autism have more inflammation. They often have inflammation in the gut. They often have dysbiosis in the gut. So these food proteins can really be a problem. And I think that's one of the many reasons why we see improvements.

Also they can be, they can create opiate compounds. So things like, similar to morphine or heroin – those are opiates. They fit in the opiate receptor. They might stimulate them a little bit less strongly, but they stimulate them nonetheless, so they can be very addictive foods. You'll find that kids often gravitate towards all cheese, milk, bread – things that are filled with gluten and dairy – and they can create a lot of symptoms and reactions. So one of the diets I like to look at is a gluten-free, dairy-free and soy-free diet.

And then from there, I mentioned salicylates – or I mentioned, sulfation, early on when we were talking about artificial additives. Well, there's natural phenol compounds too, that are called salicylates and they can occur in things like fruit, like grapes and berries and ketchup. And again, these, especially the berries and things, they can be very healthy foods, but if you don't process them, which we know is a factor in ADHD and autism, the research shows they have poor sulfation and we've known this for many decades. And when they can't process them, they get hyperactive, red cheeks, red ears, irritability, aggression, and a lot of different challenges. And so sometimes a low salicylate diet can be really helpful.

Now, my goal is always to try to address the underlying factors so that we can eat as many of these foods as possible in the future. They have good qualities to them, but in the short term,

or the medium term, until we can get things balanced a bit, it can really make a profound difference.

And then we can't go into all of them today, but things I like to teach parents in my program are looking at low histamine, low ammine, low glutamate, low oxalate, low FODMAP diet. Now not everybody is going to need or could even possibly do all of these diets, but looking at which diet is going to meet the needs of which individual. Grain-free diets – grains can be very inflammatory to the gut. So I like to look at those different diets and then tailor them based on the symptoms they have, what's going on underneath, what underlying factors are happening, what conditions they or family members might have, to help them to tailor a bio-individual diet or a personalized diet for them.

Rebekah Kelley: Thanks, Julie, these are really valuable insights.

Julie Matthews can be found at www.NourishingHope.com. Let me remind you to subscribe and get access to all Humanized videos, podcasts and transcriptions from all of our thought leaders on personalized health@humanizedhealth.com. Thanks for being with us.