## Michael Roesselin:

All right, we're live, another episode of Rebel Health Spotlight. I am here with another of my friends, that's why I like this series so much, I'm just hanging out with my friends, Ms. Jaclyn Downs. Jaclyn, thank you for being here.

## Jaclyn Downs:

Thanks, Michael. I love talking with you at any time.

# Michael Roesselin:

Yeah, it's really fun. And these interviews, I thought, "How can I create really interesting, informative, valuable content that highlights the work of people doing really cool stuff and is entertaining and is quick and easy, that people can listen to while they're walking the dog or doing the dishes or taking the kids to school?" And so they've been really fun and we've managed to fit quite a bit of knowledge into a short amount of time on these interviews, and I think we're introducing them to a lot of interesting stuff that might not be on their radar regarding health, and you're into a couple interesting things.

I'm going to let you introduce yourself a little bit, and I think people here probably know who you are because we've done this a few times. But, in case anybody listening or watching is unfamiliar with you and your work, just a really quick introduction about what you're doing in the world, and then I'll ask you some questions about it.

# Jaclyn Downs:

Okay. Thanks. My name is Jaclyn, and I recently published a book with CRC Press, which is under the umbrella of Routledge, Taylor & Francis, and it is called Enhancing Fertility through Functional Medicine: Using Nutrigenomics to Solve Unexplained Infertility. And so this book, while it's written towards the fertility demographic for both the layperson, the motivated layperson with some fertility challenges, it also is written for the practitioners, as a lot of the biochemical and genetic information is in appendices. And, while it's written towards the fertility demographic, it really looks at common but lesser known root causes of oxidative stress, which as Rebel Health Tribe, people know that that is cellular damage, cellular inflammation, that damages the structure of the cell and the information it contains. And so these are common but lesser known causes of oxidative stress.

I have chapters on iron dysregulation. A lot of people think that anemia is the only issue with iron, but really iron can get stuck in the wrong places and build up in the body and cause a lot of damage. I have chapters on fat utilization. We need to be able to properly digest and use our fats in order to make hormones and absorb our fat-soluble vitamins, that could be why your vitamin D is low, and also to keep our bile healthy. And our bile emulsifies our fats, and that helps also to take toxins out of the liver. Mold, mycotoxins, histamine intolerance, oxalates, blood sugar dysregulation, so there's a lot of different areas that I cover, and all of those can cause oxidative stress and hormonal problems and pretty much gum up all of your pathways. And then I do have a chapter on genetics as well, because that's where my heart and my passion lies is in genetic interpretation. I can go into that if you want me to-

## Michael Roesselin:

Well, that was the last time we talked. We did a webinar. You interpreted my genetic report. We'll link that down below so people can go watch it. I remember when you were outlining the book and you were running into, "Do I make this for practitioners or do I make this for laypersons, or who's it for or what's it ..." and it's really unique that you've managed to figure out a way that you can write the book for patients to

understand, but if there's practitioners out there that are listening, there's a whole bunch of extra stuff in there that would help you in your practice. I'm glad your publishers were on board with doing that joint combination thing.

I think most health books should be written that way, and I've never seen another one that's written that way. And I would buy some when I was working with clients that I would read and be like, "Man, I could have wrote this book. It's really basic." The topic grabbed me and I want to learn more about the topic, but it was written on a really surface level. And then I bought books that were academic literature reviews that you would do in a PhD program, and there didn't seem to be an in-between or any that tied things together in a way that would be the full spectrum, like a choose-your-own-adventure, so I dig that.

And those things that you talked about, the chapters, the things that feed into infertility that you talk about in the book, most of those things are going to affect anyone in a negative way. Now, if it's somebody who's not looking to have kids, there's a lot of other ways it could affect them, but those oxidative stress drivers that you listed are going to negatively impact anyone. The book isn't just for people struggling with infertility. I would recommend anybody check it out that has any complex chronic health issues and really just wants to do optimization. And I'm curious how this book came about. You were doing work with fertility before, right?

## Jaclyn Downs:

Yes. My previous career was in birth work. I apprenticed with a home birth midwife. I've attended over 100 births. I had a doula collective, I'm a prenatal and postpartum yoga instructor and placenta encapsulator and all those things, but I also have always had an interest in nutrition. My dad was a nutritional biochemist, and I got a job being a research assistant for a local naturopath about 10 years ago almost researching MTHFR. And it's just funny to me that it's just MTHFR back then. But then, with that research, it just quickly evolved into the whole methylation pathway and then how this pathway interacts with other pathways.

I gave a talk, I called it MTHFR as a Gateway Gene, to my local hospital for a nursing grand rounds talk for CEUs. And then I was like, "Well, I'm going to turn this into an ebook or something," and then I started writing and then I was like, "Well, let me take all of my fertility information that I know and all of that," and it just evolved and came full circle, and all my knowledge and experience got put into that book. It did take a couple years to write, for sure, but it was worth it.

# Michael Roesselin:

Cool. And it allows you to tie in the work you were doing with the work that you're doing now. Was that naturopath that you did the internship, was that Bob Miller?

## Jaclyn Downs:

Yes. Yeah. I still subcontract and work affiliated with Tree of Life as well.

## Michael Roesselin:

Yeah, and his company's the one that created the software that does the genetic testing interpretations, which, again, we'll link down below. We have a really cool webinar where Jaclyn reviewed my own genetic test and found a whole bunch of interesting stuff in there. And then she does this, so you can buy packages where she breaks down your genetic nutrigenomic ... Let's talk about this just for a second. People hear genetics and they think, "Oh, I have this gene." I just interviewed somebody last week who's a cancer expert, and they were talking about how women who are having mastectomies because they have this certain gene or other people are having these really invasive elective surgery procedures or I'll call them preventative

procedures because they have a certain gene. Now what kind of information do these reports utilize that you work with, and is that different than something like that or ...

Jaclyn Downs:

Yes, absolutely.

#### Michael Roesselin:

Say that somebody out there hears genetics, they hear terms like genetics, epigenetics, nutrigenomics, they hear all these terms, but they don't know what the hell we're talking about. Can you just give us the overview of what you work with?

## Jaclyn Downs:

Yeah. What I do is I look at a whole bunch of genes rather than just testing for isolated genes. I do not recommend testing for isolated genes because unless it's an actual genetic mutation, like muscular dystrophy, no gene works in isolation. There's always genes that affect functioning upstream and downstream. And so it's called a polygenic risk score. And I explain it in my interpretations like there's a scale and each gene has sometimes hundreds of SNP. MTHFR, for instance, has two really popular ones, but there are other genes that have dozens and hundreds of other SNPs for the same gene. And so each of those SNPs can be like placing a marble on the side of the scale for things to maybe be problematic. I like looking at a lot of the genome rather than isolated genes, and functional genes, genes you can actually do something about.

Nutrigenomics is the intersection, essentially, between how nutrition affects our genes and how genes affect our nutrient capacities, whether it's transporting nutrients or degrading them or utilizing them, getting them into the cell. And so we can see genetic predispositions for all kinds of things, for specific nutrients, for specific neurotransmitters, for detoxification pathways, including methylation, your iron dysregulation. Also, there's a lot of stuff related to your gut. There's histamine-related genes, there's oxalate related genes, so we can really see a whole bunch. But because the software that I use in the test kit that I prefer is there's hundreds of thousands of SNPs on there. A SNP is a single nucleotide polymorphism. It's basically what version of a genetic variant you might have, and I'll be here for months if I'm trying to interpret that.

That's why I have a very, very meticulous intake so that I can find out what your top health concerns are, what your previous diagnoses are, your previous environments, your current environments, all kinds of stuff. It asks about your poop, your periods, your sleep, the water you're drinking, and so based on that, I can know where in the software I want to focus and where there might be issues. And, also, the way that the software is laid out is it's based on metrics. It compares you to the 55,000 other people in the software so I can see where you may have more variation in a certain pathway or certain genes. And so that really allows me to really jump in with more precision rather than just giving the canned response of, "Oh, you do have this gene."

There's a lot of people that come to me with reports from other interpretation services, and they're like, "Can you help me make sense of this? I'm way more confused. There's dozens and dozens of pages here, and this one's telling me to do this, and this one's telling me not to do it, and take this supplement, but don't take this supplement." And so my personal service is helping to weed out all of that, so you don't need to be confused. I do a typed summary, and then I walk through the software with a video and I pair it, and then I make a video for you showing you specifically, which you guys can see. If you want to watch the video that I did with Michael, you'll see what the software looks like. You'll see the things that I'm talking about. It's really, really personalized. There's no automated canned responses, and I've gotten a lot of five-star reviews on this service, so I feel really confident about it.

## Michael Roesselin:

Yeah, it's super, super cool and thorough and covers so many different areas of potential pitfalls with health. And I like your analogy you used, it puts a marble on the scale. Just somebody has a certain gene, it doesn't mean that they're definitely going to have a problem there. I know I now take a couple different enzymes, a couple different vitamins that I wasn't taking before, and I think one other thing based on my genetics, because I did have symptom presentations that aligned with the genetics, but it's what got my attention, like, "Oh, I might have joint pain because of this," or, "I might have issues here because of this." I take the enzymes for the superoxide dismutase and catalase and vitamin E, a vitamin B complex, and I don't remember, something else that came out of my report.

And I'm sure there's a lot of aha moments for people that have been through the wringer with lab tests and different kinds of testing and trying to make sense of their symptoms and what's going on, and then they get one of these reports and it says like, "Oh, I have really inhibited ability to detoxify XYZ or to produce XYZ hormones or to break down fats to be able to make hormones." It really helps put the pieces together. I really think it's a missing link that a lot of health practitioners aren't utilizing. And, if you're a practitioner and you're watching this, reach out to Jaclyn she can help you with that too, because you can do some consulting with practitioners and enable them to utilize this in their practice, right?

## Jaclyn Downs:

Yes, absolutely, because a lot of practitioners know that they should get on board with genetics and genetic testing, but they don't know where to start or they don't have time to-

# Michael Roesselin:

The learning curve's a little steep.

## Jaclyn Downs:

Oh, yeah. It's like drinking from a fire hydrant. I can help them, and I actually have an affiliate program too, where I can share their client's results, or the client can share it with the practitioner, but basically it's like, "These are the areas you want to look at. These are the genetic predispositions. These are the things I recommend, and you guys can talk about them." And that gives you way more tools in your toolbox and places that you can look that you might not have thought to look before.

## Michael Roesselin:

Yeah, it's very, very valuable, and I think, yeah, like I said, it's a missing link. The genetic testing ties into the fertility because it helps people find the holes or the sand in their gears potentially, right?

## Jaclyn Downs:

Yeah. You can have inflammation, but knowing your genetics will tell you where the inflammation is likely coming from. Do you have a low antioxidant status, which you can figure out in functional lab testing with 8OHDG and other stuff like that. But your genetics will tell you, "Okay, so your antioxidants are low. Is it because you're genetically predisposed to just not producing them as efficiently, or do you have a lot of inflammation coming from some other things that are generating inflammation and burning through your antioxidants?" And the great part is that this is one test. You won't need to retest. You don't need a baseline and a follow-up. This is just one test that is never ever going to change. I think that this is the most cost-effective test that you can use as a framework for any other testing or protocol that you do in the future.

## Michael Roesselin:

And what do you most enjoy about doing this? Is it the aha moments that people have or their excited responses, or where's your joy in it?

## Jaclyn Downs:

Yes. Yeah, because I get like, "Oh, well, that makes so much sense why this supplement backfired or didn't do anything," or, "Nobody's ever brought that point up before, and that's something I'm really excited to investigate." Yeah. I definitely get a lot of feedback about the aha moments and the things that just weren't presented to them by another practitioner.

Michael Roesselin: It's kind of Sherlock Holmes-y.

Jaclyn Downs: What'd you say?

Michael Roesselin: It's kind of Sherlock Holmes-y.

#### Jaclyn Downs:

Yes. Yeah, the genetics definitely help you to be able to lift the hood, so to speak.

#### Michael Roesselin:

Yeah. We'll link everything below that you say right now. Is there website, social media? Where can people go to learn more about what you're offering? We have a link for the genetic testing we'll stick below. We have the webinar that we did where you go over mine, and anybody who's interested in this should totally watch it. I had to watch it. I've had mine interpreted by yourself and another person from the team there, and I have videos of both, and I've watched both twice. Technically, I've watched my own interpretation four times because it's so much. It's so much information and so I needed to pause it and rewatch it and stop and take notes. That video's there. If you're interested, definitely check that out. And then, as far as anything else for educational stuff, the book, is it all in one spot or is there multiple places they should go?

#### Jaclyn Downs:

I just have it right there front and center on my website, so you can order it there, which is just jaclyndowns.com. You can find information about genetic testing. You can book with me there. I can do oneon-one consultations, whether or not you want genetic testing. I have some clients that do both, and I have some clients that just do the genetics, and I have some clients that haven't done the genetics yet, but we're doing some other things to address just whatever their health concern may be. And then you can find me on Instagram at functionalfertilitysolutions.

#### Michael Roesselin:

Yeah, I see your videos there. It gets in my feed, well, for a while, I saw you reading from your book, different passages and things, and I saw another video the other day. It's totally random, it seems, how Instagram decides what I see or don't see, but it goes in waves. And Jaclyn puts up really good informative content

there where you can learn a lot just by following the Instagram. And we'll link the website, we'll link the book, we'll link the Instagram, we'll link the video with the report, the link to the reports, and then, before we leave, I'm going to ask you to share a couple needle movers maybe from your book or practices that you recommend to clients, whether or not it's for fertility improvement. See, I went through this phase, and I think functional medicine did as a whole, where everybody wanted to get really specialized, like, "Oh, I help this person do this thing," or, "I help people with this problem," like insomnia or fertility or hormone imbalance or you name it.

But what I've learned as I've learned more, what I've realized is that the Venn diagram that overlaps of which things cause problem X almost are identical for almost every health condition. You can put a fertility label on it, you can put a heart disease label on it, you can put a cancer label on it, you can put whatever labels on things, and the factors that contribute to the development of problems in that area, you may move the ranking of them a little bit, but they all overlap. If this is a practice that is in your book for fertility, or a couple practices that you'd recommend, I think it could apply to anyone, yeah?

Jaclyn Downs:

100%, more than 100%, yes. Yes, a resounding yes.

Michael Roesselin:

What do you got for us? What should they start doing?

Jaclyn Downs:

Okay. Yeah, this is regardless, if you don't know your genes and you don't know where to start, these are things that, no matter what, for all humans, and I have a whole chapter on this, these are things that you can do to optimize your health no matter what your biochemical or genetic profile is. And so the first is going to be make sure you're pooping every day. A lot of people are just going and they're trying to do a liver detox, but if you're not pooping, you're mobilizing those toxins from the liver and they are just getting recirculated in the body and they're not actually getting out.

## Michael Roesselin:

Do you have any common troubleshooting for people who are not?

#### Jaclyn Downs:

Oh, absolutely, yeah, increasing your magnesium intake or doing whole-foods-based vitamin C. I like camu camu because it is the lowest oxalate whole- foods-based vitamin C. Also just adding more chia seeds or warm water and lemon in the morning, all of those things can help, but also getting your bile moving and flowing is going to help everything move down and out much more smoothly. Any time somebody says they have constipation, immediately, I think we got to make sure that the bile is flowing, and there's all kinds of signs and symptoms of poor bile flow.

Michael Roesselin:

And genes.

#### Jaclyn Downs:

There's a whole profile, there's a lot, yeah, and I could nerd out on that. I actually just gave a podcast talk specifically on bile, and it was almost an hour.

Yeah, so make sure you're pooping every day. Make sure your bile is flowing. And so you can do something simple as eating more bitter greens or taking bitter herbs, like digestive bitters, before your meals. And then you can get a little more supplement heavy and take some phosphatidylcholine, which is my favorite supplement across the board, no matter what you have going on, pretty much, almost, not going to say every single time, but our bile is primarily composed of phosphatidylcholine, and so some people aren't producing the bile, some people are not making the phosphatidylcholine based on some genes.

And I actually talk about that in my, I have a freebie, the big three most impactful genes, and so I do talk about some bile-related genes there. And then, if you don't have a gallbladder especially, I recommend making sure you're getting Ox Bile or Tudka or something like that with every meal. I do recommend those to people with gallbladders, but not for long-term, because they're animal-based, and I want your body to make them not take them. I use them just in the beginning to get the wheel spinning and get things moving. And then just all of the daily avoiding the toxins, getting outside every day, moving your body, boundaries. Knowing when to say no is going to be huge on your stress levels and your hormones and your oxidative stress and all of that. Those would be my top recommendations.

## Michael Roesselin:

Perfect. And I think those would go for anyone. I take the Tudka a lot of the time. I've noticed my body responds to that pretty well as far as bile support, and I think we have the fancy phosphatidylcholine right now, the one in the blue, the-

Jaclyn Downs:

Is that the BodyBio one?

#### Michael Roesselin:

... BodyBio one. I think somebody sent me a bottle of that, like, "You have to try this," but it costs twice as much as any other phosphatidylcholine, so I'm not certain as to the why, but I haven't investigated it, but-

#### Jaclyn Downs:

Yeah. Well, it's liposomal. It's maybe a couple dollars cheaper than my other favorite brand that's liposomal, their whole product suite is liposomal, but they are very spendy, but I think they're-

## Michael Roesselin:

Which brand is that?

#### Jaclyn Downs:

That's Quicksilver Scientific. Yeah. I think they're a great, great company with a lot of integrity, but you are spending more for it. Them, their Pure PC, and the BodyBio PC are both liposomal. I really like the liquid form because a lot of people are taking supplements and they're not really digesting or utilizing them. That's why I recommend liposomal because it just gets right into the cells.

#### Michael Roesselin:

Gotcha. Cool. Well, thank you for the tips. Thanks for what you're doing.

Jaclyn Downs:

Oh, one-

Michael Roesselin:

Oh, go ahead. One more?

# Jaclyn Downs:

One more important one is, if you haven't taken phosphatidylcholine before, I do recommend taking it about 60 to 90 minutes before or after a binder, and the binder should be taken on an empty stomach because, like I said, your bile pulls toxins from the liver and exports them into the gut. If you start mobilizing your bile or moving your bile, you're going to be mobilizing toxins, and so having a binder on board will help to bind those toxins and make sure they get excreted from the body.

## Michael Roesselin:

Good tip. I'm taking notes. Thank you. Well, thanks, Jaclyn, and everybody seriously check out the testing and the book. There's mountains and mountains of info you can learn in both avenues. We'll link everything down below. Maybe we'll have you come on and do another live reading at some point or something for the genetic testing, because I just actually find it fun, and I think people really like to watch that, because you learn so much by watching and you hear yourself in the conversation a lot of the time too. It helps people identify like, "Oh, that's me," or, "Oh, I have that issue. Maybe I have this genetic polymorphism, so maybe I should test this." It's really cool work.

## Jaclyn Downs:

I can tell people that I do genetic interpretation or read people's genes and nobody knows what that means. It's not that commonplace yet. Seeing it in action and what all can be discussed and looked at and investigated. We had overwhelming response when we did that webinar back in May. It was proof that people really need to see [inaudible 00:25:06]-

# Michael Roesselin:

Five months later and Jaclyn's still getting reports and working them through. It's a lot of people were very interested in it, and the reviews have been super positive. We'll try to share some of those. Let's gather them, and I'll share them down below on this too. We can get them before we publish this so people can check out some of the reviews on this page too. T.

Thank you, Jaclyn. I know you got an appointment and we got to run, and these are short, so somebody should be done driving or walking or doing what they're doing now, and I'm sure we'll connect again in the future to talk more about these things.

# Jaclyn Downs:

I look forward to it. Thanks, Michael.