Introduction and Bryan Johnson's Background

Well. Hello, everybody. Reversing Heart Disease Summit 2.0 is back. This is a guest we did not have last year. But unless you sleep under a rock, you have read articles about him everywhere, literally.

I have a Bryan Johnson alert on my email list and ten times a day this man is in the news for all good reasons. He's actually just bending the envelope, teaching us about health and longevity and a serious effort to share with all of us for free is what he does program that he has the ability to fund some of the most amazing, you know, self-interest.

So this is Bryan Johnson, B R Y A N J O H N S O N And thank you for being here, Bryan. Thanks for having me, Doctor. Everybody needs to truly, you know, I don't know if there's bad stuff about you on the Web. There's bad stuff about everybody.

You know, you need to read about them. And I just want to say a few times, I'm not sure if it's the best protocol.bryanjohnson.com or maybe just bryanjohnson.com What's the best URL?

Yeah, that's the protocol.bryanjohnson.com is all the information that I, I just acquired dot com after trying out my BryanJohnson.com for 15 years. I just got it.

Well, I'm glad somebody gave it up. Literally everybody listening. This is a free website. It's incredibly well organized as a Bryan Johnson, who is an Internet specialist would do.

If you want recipes, plant based, if you want meal plans, supplements, sleep aids from a world leader, you want to go over there and read through it. It'll take you quite a while.

I love it. I love it. I love it. So Bryan is a serial entrepreneur in the tech world. He has a company, at least one right now called kernel.com. You're going to make our brains amazing wearing that helmet you've got and we won't dive into that today.

You've got an investment agency, right? That's right. Can I send you $50 and you'll multiply it 10x this year? Yes. We got a little bigger minimum than that.

Send it on over. Well, that's right. It's kind of you and you got some other entrepreneurship. But I have to ask one business question. Is it true I read this, that in 2012 you acquired Venmo for about 26 million and you flipped it in a year for 800 million with Braintree.

Is that true? I mean, that's what the media says. Yeah. I mean, I was building Braintree for five years. We acquired Venmo. Then two years later, eBay bought us for a hundred million in cash.

Yeah, the whole they about the whole enterprise. That's a all of you entrepreneurs out there. You were waiting for the Bryan Johnson how to do a business book, but he's giving us the health and longevity book.

So particularly interested. I mean, there's no doubt we could talk for hours about sleep, fitness, supplements, nutrition in mind body because you you share all of that with all of us.

And that's one of the, you know, go over to Instagram, 500,000 followers and go over to Twitter, I don't know, close to 200,000 followers. And I know you're on other media, too.

I assume you're on YouTube. I just you're on YouTube? Yeah I am. Yeah, I just I personally find it hard to watch videos with crazy schedules. I watch all the other things.

But in this quest, it started in 2021 to challenge convention, that you could measure your aging, halt your aging, and actually reverse your aging and maybe match your 18 or 19 year old son.

In terms of serious scientific measurements of aging. I mean, the cutting edge of aging measurements you chose or your team chose because you got a wonderful team.

Dr.

Blueprint Philosophy and Evidence-Based Health

Zolman, hopefully plant based diet that you post on, that you are allies added you know many, many of my patients are cooking your recipe. So tell us about that.

I mean, what was your diet before the Blueprint project and a little bit about now and sort of why why of all the other choices for a longevity program?

Yeah, I mean, the but actually trying to solve is like I was a typical person trying to be in good health before reading blogs, listening to podcasts, reading books and trying to piece together the challenges that everyone disagrees.

If you give the same papers to the same scientist to a certain type of scientist, you get different answers. And it's very, very hard when the debate is as vigorous it is on that.

Not people not having consensus on what to do. Meanwhile, people like myself and my parents, we just want to know what to eat for breakfast. And so what I was really trying to solve is the practical problem we all face on a daily basis is while the scientific community debates among themselves why doctors disagree among themselves, how can I decide what to eat for before breakfast?

And that's when we tried to say, basically, instead of my mind trying to do this, let's just look at the data and let's implement a protocol and let's follow the evidence.

And so that's what we've done for the past few years. We've made all of it public. So my entire journey has been shared and we have been tried it. We tried to be careful to say we have no we're not trying to prove any point with any given methodology.

We're just trying to find the evidence in the data and we'll follow it wherever it goes. So we've really tried to have evidence data first and, you know, justification should not be a part of our decision making.

Okay. And and again, when you sat down and have has I think you recently increased the number of calories a day in your program, is that correct? Yeah, I was at 1977. Now I'm at 2250.

I got a little skinny on the 1977. Okay. And you know again on their website protocol. BryanJohnson.com the new URL for example you got nutty pudding and I know that's a rage people are making the recipes there, nutty pudding all over the world.

Yeah. Almond macadamia milk, walnuts, ground, flaxseed, cocoa, sunflower, lettuce and cinnamon cherries. Whip it all up and put some pea protein in it.

That's pretty much your staple in the morning. Yeah, actually, I eat my vegetables first thing in the morning. I ate that nutty pudding for second meal the day.

I mean, what we tried to do is as a team, we said, okay, if we look at every health span of life span people are ever been published, we try to look at all the evidence and then we say we want to design the perfect diet and we have this stringent requirement where every calorie has to fight for its life. What does that look like?

And that's what we have today, is that if you look at the mills, we have the supplements, every single molecule has

had to justify its existence first from evidence and now from data from my body.

So there's nothing that's culturally trendy. There's nothing that's cool that I think that sounds great. It has to justify its existence by a measurement.

And so when you look through nutty putting in all those ingredients, every single one of those things is tied to a biomarker of the body. And I've become the most measured person in history.

And so we have more evidence on myself on this diet. And so I tongue in cheek say that blueprint is the best health protocol ever built in history. You know, prove me wrong with your data.

Now, if somebody wants to come along and just and, you know, achieve better results with an alternative plan, amazing. That's a that's a great outcome.

So what I'm really trying to do is elevate the conversation to say, let's move the field forward. Right now, we're in constant paralysis. Let's move forward with data.

Well, that's amazing because, you know, I follow a lot of people on social media in the health field, some with M. D., Ph. D., some not, and self-appointed.

And, you know, it's usually a six pack war. Who's got the best six pack? Yeah, there's something to be said for the physical appearance of a person and no doubt probably being significantly overweight and the visual appearance of being elderly does correlate with probably internal aging and all.

But you're measuring you're measuring an epigenetic nutritional. I mean, how many times a week do you get blood drawn? We have blood about once every two weeks.

Yeah, but I'm right. I'm I'm measuring. We basically said we're measuring or aging on the scale of every organ in the body. So over 70 organs and then plus all the biological processes.

And so we're looking at this from an organ organ basis. And that's what we want to say is if you're assessing, I give a protocol or therapy, tell me what it's doing to every organ in the body, not just your six pack.

So you're exactly right. It's not just what the eyes can see because most the majority of society uses their eyes and they say, I can determine whether a person is healthy or not by looking at them, which like there's some truth, you know, there's some good evidence to support that.

But the eyes are not as sophisticated as a bunch of other tests we can do now and, you know, looking on our insides. And so we really have use measurement in a way that is that has allowed us to figure out how to optimize for every organ in the body.

Okay. I mean, there's a trend in the last two years, too, among longevity experts and doctors that a longevity. muscle, excuse me. Organ, maybe the longevity organ is muscle.

And then the next part, which I don't think many would disagree with that having some lean body mass and not being frail. Yeah, is a good plan for longevity, although, you know, you don't see a lot of people in the blue zones lifting weights.

They're just, yeah, they're living. And that's not the only model longevity, but it's one frequently mentioned. But yeah, the next part of that statement is very often, if you want to build muscle for longevity, you have to eat muscle, you have to eat flesh.

And you've been at this, you know, two plus years and you're not eating fish and you're not eating chicken and you're not adding grass fed organic red meat.

You've kept it in all plant based diet, which in my 46 years of being vegan, you know, warms my heart. Of course, you do supplement intelligently with things like creatine, but, you know, you're seeing results that suggest your diet is on the right path.

Yeah, exactly right. I think we have demonstrated something that was contrary to cultural norms. I am vegan with the exclusion of 20 grams a day of college of peptides, which I'm trying to find a vegan version of otherwise entirely vegan.

And if you look at my markers, my total. Bone. Mineral density is in the top 99.8 percentile for 30 year olds, which is age me up for the test. My cardiovascular capacity is the top 1.5% of 18 year olds.

My my muscle is in the top 95.

Diet, Calories, and Plant-Based Nutrition

No, 99.5 percentile using MRI. So if you just go down and look at my biomarkers on my cardiovascular or my muscle on my bones, every marker I'm almost off the charts.

And so if you and if you look basically, say, a vegan can't be strong or a vegan can't be athletic or a vegan can't be. And also I've been on a caloric restricted diet do all these things.

And so I think we've disproved some. The idea is that what a vegan cannot become is just not true. Absolutely. And for people that are listening, that are unfamiliar with you, I will celebrate the upcoming one.

But August 22nd, 2023, your turn. 46 So when you're talking about metrics for an 18 year old, you know it's because you're setting the bar so high for your project.

You know, if you were in the top 1%, a 46 year old would be amazing. But you're comparing itself to, you know, a whole generation in your son's generation.

And you're still you're crushing it, which is incredible. And what you know of the I don't want to go too far, deep into the weeds of the supplements you use, because that's another hour.

And I'd love to do that. But what supplements do you think particularly are present? Because it's a plant based diet. Obviously, everybody's listening, going to shout out vitamin B12.

But what are the a few others you've added taurine is in your program you think taurine you know difficult to get on a plant based diet I think that's true.

Yeah yeah that you nailed a few and we try to round out the others. So I do take quite a few supplements. But the the important thing to know on my supplementation is we are trying to push the scientific like I wanted to say if I'm Ferdinand Magellan or Lewis and Clark or Ernest Shackleton or any other explorer of previous times, and we say I exist in 2023 and my endeavor is to explore the possibilities of slowing down my speed of aging and health in 2023. That's what we're trying to do.

So. Blueprint Many things are applicable to people on an everyday basis, but really I'm out there on the very, very edge to say what is possible with today's science.

And so people don't have to follow my supplementation. Exactly. It can be a lot, but I think the basics are true and like you're identifying some of these things like B12 and taurine are great.

And so just basic, I'm saying a blueprint is accessible. You don't have to do exactly what I do and the gist will get you the the majority of the benefits.

Right. I know that in your program is pea protein. I think people would be interested. You said that goes in the nutty

pudding and you know, it's 29 grams a day is not 200 grams a day.

Now, that's another controversy in nutrition, obviously, is optimal protein. I introduced you to Dr. Valter Longo's team down the street from you in Southern California.

And, you know, the total grams of protein a day you think you reach. I know you probably got this measured. Exactly. Yeah, I think about 107 grams a day right now.

And we've been modulating that based upon liver markers and bond and a whole bunch of things. So we've really dialed it in. But yeah, I'm substantially lower.

So if you basically say, look at my I exercise one hour a day and I consume 107 grams of protein, that it would not be possible for me to be in the 99 point fifth percentile for muscle.

And but we've been able to do it and so these are, I guess. Most of your proteins from Whole Foods other than a pea protein powder. So. That's right. Yeah.

I want people also because everybody is hungry and everybody loves recipes. And there's a portion of Bryan's website that's called Third Meal Options ten.

Gorgeous, incredible recipes. They're all 500 calories. So those of you that are looking to watch your your diet, I mean, they're great, great, great ones to try.

And I think they'd be pleasing. I mean, my favorite is the roasted veggie lettuce wrap, which everybody can go over and take a look at. So there's so much to learn from what you're doing.

I mean, do you think this is a lifelong plan? And again, that lifelong might be a very long life? Yeah. Yeah. I think I find most energizing about this is like in the past month, I bet most of us have looked both ways before we cross the street, buckled our seatbelts, and maybe change a battery in a smoke detector.

We do those things on a daily basis to not die. So we play the game. Don't die every day. The future is just getting really, really, really good at not dying.

And so I measure myself, you know, we've found hundreds of ways my body dies on a daily basis and we try to minimize so I die less per day. And so it's been a fun project to say, you know, how far can we push the envelope to slow our speed of aging?

And it's a really fun game and these tools of measurement get us there. But, you know, this is this is where the future is and can right now, we think death is inevitable, but that's going to change.

So I hope that this is a a something that a lot of people jump on to that really is it's here right now. So I've learned a lot, you know, following you for about a year now.

And I want you to share with people because people may be skeptical. There's so many people claims about health and longevity. It's so hard to know. But you're doing the measurements, so you're using a test, among many others from a company called True Diagnostics dot com t are you diagnostics and they have a test called true age.

True a g that's your pace of aging. And tell us what your results are and how they compare to others. You know that do the test. Yeah. I slowed my speed of aging the equivalent of 31 years.

So I now accumulate aging damage slower than 88% of 18 year olds. I've dramatically reduced it. Like one way to say it, an oversimplification is for every 12 months the pass I get September, October, November, December for free.

I've dramatically slowed how fast I age and we're just getting better at it. And so I think in the future people will

know, you know, their weight, how many social media followers they have and what their speed of aging is.

It would become a household norm. People will know, it will modulate around, it will build around it. And this is the thing about Blueprint is I have so many data points on me.

If you want to dismiss one, there's 20 others that will take their place. It's just irrefutable that I'm in really good health. I'm from all these different perspectives. So like you're saying, a lot of people are skeptical.

But this it's very hard to argue against the collective results that we've generated. And I want to just touch one last thing in this nutrition aspect of interviewing you and sharing with people.

I mean, you eat a majority of your calories earlier in the day and you're done by noon, which is, you know, not a common program.

Muscle, Supplements, and Biomarkers

But it's still consistent with that old saying breakfast like a king, lunch like a prince, dinner like a popper. Except you've compressed that in about 6 hours, right?

That right. That's exactly right. Yeah. Okay. By done by noon. And then you have that prolonged period where the rest of the world is doing that pyramid upside down, skipping breakfast, maybe even skipping lunch and putting it all into, you know, sometimes 2000 calories at 5 p.m.

and doing the one my day diet, you've flipped it upside down, which my reading of the science says is the healthier way to diet and to do. It may take a while to get used to that, or it's just old hat by now.

So I did this to optimize for my sleep. Sleep has become my most my number one priority in life. And I found that when I finish eating around 11 a.m., by the time I go to bed at 830, my resting heart rate's around 46.

And if I eat late the day, five or six, my resting heart rate is going to be around 65 or so. And if my heart rate of 46 and I have a perfect night's sleep, if I'm 65, it's going to be awful.

And so those around me, I've been careful to say, look, this is just me, you may be different. So do your thing and do your trials. Person after person after person has basically come back and said it works like that. Earlier in the day I ate the better.

I sleep at night and so they rigorously track it. So maybe that's nothing to be true. Like others will maybe find different circadian rhythms. But in my experience, getting high quality sleep is the single best thing I can do for life.

And eating that regimen has been the very best thing for me to get that squared away. All right. And if anybody's wondering, and I think I'm saying this actor, they have the variety of sleep devices out there.

You're using a whoop band, correct? Yeah, I hope. And I also have an elite bed and I just did something that I don't think any human in history has done.

I just posted six months of perfect sleep, 100% sleep score every night for six months using woohp people have have that device potentially for, you know, two or three years.

They've never posted a single life for 100%. And it's almost like a four minute mile. Yes, you can achieve high quality sleep. That's, you know, reliably good every single night.

And that I mean, I think everybody listening wants to know about that. And I will say you are on board with the same thing I do. You take 0.3 milligrams of melatonin at night and a lot of people listening are saying, wow, I take six or ten or yeah, eight or four.

I mean, the human body makes about 0.3 milligrams of melatonin. So I'm on board with you that that is a very attractive dose. I take a little different brand than you.

There is a plant based melatonin that I'll email you about if you haven't seen. And I just like the data on the antioxidant and anti-inflammatory power of what they call phyto melatonin from alfalfa, rice and gorilla.

I suppose I read that, but All right, Bryan, we get a chance to just dove into one more topic. And I'm going to tell you, I wanted to bring this topic up at this summit.

We didn't do it last year. And you may or may not be aware, but in the plant based medical world, dietitians, PhDs and MDS endorsed the topic of olive oil is a war.

It's a war. No war. It's a research war. It divides families. It's like blue families and red families in politics. And you have, you know, a very carefully crafted diet, to say the least.

And correct me if I'm wrong, about 15% of the calories in your diet every day is olive oil. Mm hmm. Okay. That's right. It's exactly what it's about. 17.

I say 15, but it's like 17. 18. Yeah. Okay. So, I mean, it's you have chosen you. There's so many things. It could be broccoli sprouts and it could be other things you've chosen.

And I will say, you know, this is a seven where we're allowed to mention product names. And I think for a second, as many people do, I think I have my filter function and I'm going to take it off.

This is a nearly empty bottle because it's the one I have in my kitchen blueprint with your name on it. This is not a coincidence. You make this ultra premium, extra virgin olive oil and it comes in an insanely beautiful box that has your name and you in front of a red light panel.

So it's the whole, whole package.

Sleep Optimization and Daily Routine

Tell us a little bit about, you know, olive oil in your program and why you actually have gone commercial, because anybody listening right now can purchase it's olive oil, it's on the website and it's yeah, I'm just going to give a shameless plug.

It's the best and tell us about it. Yeah. Thanks for that. Yeah, I would say tongue in cheek, that extra virgin olive oil is more powerful than ozempic resveratrol and our enemy in cold plunges, sauna.

And your favorite podcasts. Wow, wow, wow, wow. That is such a statement you just made. I mean, everybody did you guys hear that? You're premium listeners?

I mean, that was fast cold plunge sun and then and all these other supplements that people are doing, extra virgin olive oil is in your hierarchy more powerful, more essential for your longevity plan.

It is. I do a tablespoon with every meal as a 45 milliliters a day, maybe even one more up to 60 milliliters. And if you look at the evidence of the benefits, it's overwhelmingly positive.

It's just yeah. So I see it's a staple of my diet. And so I, we made the line. I started Blueprint never with the intention of starting the business. It was simply a scientific journey.

And then it blew up and people were like, Make this easy. I don't want to think about it. I don't want to go out and look for stuff. I just want it to be done.

And olive oil was something that was routinely hard for us because it has to be it has to meet specific criteria in

order to achieve the health benefits.

And there's a very small fraction of the world's olive oil that meets the criteria. And so it became too hard for us to solve it. We started sourcing it for both hemispheres, and I started providing to friends and family, and it just became a thing.

I was like all right, we'll just make a saying generally available. So we created a supply chain. But yeah, I mean, it's, it is a superfood among superfoods.

And so, I mean, I fully share to everyone, even if you don't buy my stuff, I tell you how to buy high quality extra virgin olive oil. So this is not ashamed to push my stuff.

I will help you buy someone else's stuff. Just incorporate it. You diet. I don't think you're probably planning your financial future on your olive oil enterprise. You've got. Yeah, exactly.

You've got a few other things going on that have worked out pretty well for you over the years. But it's a passion for you. And I mean, this particular blend, you know, you've done the third party testing, you know, do you think it's the oleic acid?

Do you think it's the polyphenols? Do you think it's just the whole package? Could you have do you think you have I mean, it's a high polyphenol olive oil.

Yeah, it's fair to say the highest or among the highest anybody combined worldwide. Yeah. I mean, it's basically this batch you're drinking right now.

You're consuming as 526 poly milligrams per kg. The like acid is 73%. So and then there's a bunch of other things you want to look at, but it basically is in the top, top percentile for olive oils.

You can of course, find higher polyphenol count. But basically the specs we have achieve the objectives and it's associated with weight management, with cardiovascular health, with no health like it just is all body.

And that's why I think most of the trends right now in health and wellness that are common do not deliver the benefits that Evo does. So again, I think it should be a staple in everyone's diet between 30 and 60 milliliters a day.

That's between two and four tablespoons per day, like, for example, not one tablespoon. So it's a yeah, even up to ten milliliters of of extra virgin olive oil, less than a tablespoon will reduce blood sugar spikes by 60%, post a meal, which is, you know, try to find, you know, other things that can do that.

It's pretty powerful. Yeah. Incredible. Do you do? I mean, there are people that do olive oil shots. There are people that obviously added on top of their food.

What's your typical way when you do it? All the above.

Olive Oil, Data, and Longevity Philosophy

I put the olive oil on my veggies, but then when I eat, might not be put in, which is more sweet. I'll do a shot just before it, and then I'll eat than anybody.

Yeah. And your olive oil has that real peppery burn. Be careful, because you'll cough. And I've heard it said you have good olive oil if it's too goffs because it has so much of a burn on the back of your throat.

And I mean exactly right. It's a pleasing, it's a high quality. It's a desirable burn. It's not it's it's what you want to get out of it. But yeah. And I can see like a roasted bokchoy with Japanese sweet potato there's yeah.

I use burn of EVOO in there. EVOO for those don't know is the abbreviation for extra virgin olive oil which clearly is

the only kind of olive oil you should be looking at.

You should basically commit yourself to never buying it. If it doesn't say EVOO, extra virgin olive Oil and even then it's got to meet a bunch of criteria.

That's why it's so hard. Even if you have that brand name, unless you know the specs, unless it's third party tested, you just don't know. And it's very, very hard to know. Okay.

Well, this has been fascinating. And again, I just bring up because people listening will be scratching their head and saying by now we've been talking for a half an hour, this man seems intelligent and focused and successful.

But Doctor A, B, C, D, E I don't want to call them out because they're all wonderful human beings. Yeah, I have said never and have said no oil and have said oil is nothing but fat that will make you fat.

And I actually think you've read the science correctly for the brain and for the heart and for metabolism and for blood sugar and I think you're spot on personally, and that's why my bottle's almost empty.

Yeah, I mean, this is. This is a thing doctor, I have shared all of my data publicly. I've been measured by tens of thousands of data points. This at this time.

And so whether, you know, opinions, entertainment, entertaining data matters. And so I've been on this protocol for three years now. The data speaks for itself.

And so I remember being in there like you're in the trenches, you're getting whipped around to and fro. Your doctor says one thing, a podcaster says a different thing, and a blog says a different thing.

And you're like, What do I do? It's so confusing. So that's why I'm saying, like, I've tried to punch through that noise and say, Here's my data. Here's me for three years.

So if you want to be influenced by someone else, ask them to share their data. Right? Right. And the data that exists that has fired up the plant based medical community is frankly very small five hour studies and ten healthy volunteers.

And the data that's actually long term and large is nothing but positive. So thank you for, you know, being a voice there and, you know, people do what they want to do, but know that a lot of intelligent people would consider, you know, olive oil to be, you know, food from the gods is pretty much a gave it an endorsement that was powerful.

So thank you very much. And again, I think we've given a shout out to the protocol. BryanJohnson.com I hope people spend a lot of time there I have it's a wonderful site.

I know you're incredibly busy. I just thank you so much for letting us tap into your brain a little bit. Okay. Yeah, my pleasure to join. Thanks for having me there.

Just before we go, you this new logo that you've been using for, you know, in some months in your microphone is someone in front of it, but it's don't die.

And obviously that is quite a awesome goal that came out of you know that your own marketing and logo sense or your team's. Yeah it came up in a conversation.

I was like, you know what? This is probably it. But I think to me, I'll, I'll leave you with this. For me, the most inspiring thing would be to imagine the 25th century.

Looking back on the 21st century, the time you and I are existing right now, and they're acknowledging what they respect that we did with our time and place right now, what did we do?

What did we figure out? What to do? What could we see? That's impossible. And I would put forward that Don't Die is the singular philosophical principle that drives the entire 21st Century.

It was the time where it shifted from Homo sapiens seeing death as inevitable to a point where death was maybe. And then two you know, that we figured out how to not how to not kill our biosphere.

We figured out how to build AI safely in a benevolent fashion. It is the singular philosophy to me that's exciting. How do you see the future and occupy hundreds of years and or to events?

How do you see it and your time and place? And I would submit that this is a candida for the singular insight that matters in the century. Wow. Incredible, incredible insight.

And I know you're very cerebral on this topic. Can you share it with us regularly? So you're a philosopher on top of an entrepreneur, but a serious one.

All right. Thank you again. Peace to your team. And I'm going to sign off there. And we are richer for it. Thank you. Thanks, Doctor.